SPECIAL, 11/27/2017 1:30:00 PM

BE IT REMEMBERED that on November 27, 2017, there was begun and holden a SPECIAL session of the Commissioners Court of Jefferson County, Texas, with the following members and officers present and participating except those absent as indicated:

Honorable Jeff Branick, County Judge

Commissioner Eddie Arnold, Commissioner Pct. No. 1 (ABSENT)

Commissioner Brent Weaver, Commissioner Pct. No. 2

Commissioner Michael Sinegal, Commissioner Pct. No. 3

Commissioner Everette D. Alfred, Commissioner Pct. No. 4

Honorable Zena Stephens, Sheriff

Honorable Carolyn L. Guidry , County Clerk

When the following proceedings were had and orders made, to-wit:

Jeff R. Branick, County Judge
Eddie Arnold, Commissioner, Precinct One
Brent A. Weaver, Commissioner, Precinct Two
Michael S. Sinegal, Commissioner, Precinct Three
Everette "Bo" Alfred, Commissioner, Precinct Four

NOTICE OF MEETING AND AGENDA OF COMMISSIONERS' COURT OF JEFFERSON COUNTY, TEXAS November 27, 2017

Notice is hereby given that the Commissioners' Court of Jefferson County, Texas, willmeet at **11:00 AM,** on the **27th** day of **November 2017** at its regular meeting place in the Commissioners' Courtroom, 4th Floor, Jefferson County Courthouse, 1149 Pearl Street, Beaumont, Texas.

Said meeting will be a **Special** for the purpose of transacting the routine business of the County. Persons with disabilities requiring auxiliary aids for services who wish to attend this meeting should contact the County Judge's Office to arrange for assistance.

In addition to the routine business of the County, the subject of said meeting will be the following:

Please join us for the Annual Lighting of the Christmas Tree November 27, 2017, 11:00 a.m., in the Lobby of the New Courthouse Addition.

INVOCATION: Brent A. Weaver, Commissioner, Precinct Two

PLEDGE OF ALLEGIANCE: Michael S. Sinegal, Commissioner, Precinct Three

PURCHASING:

1. Consider and approve specifications for Invitation for Bid (IFB 17-043/JW), Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County. This project is funded by National Fish and Wildlife Foundation Grant and Jefferson County, Texas.

SEE ATTACHMENTS ON PAGES 12 - 300

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

2. Consider and approve specifications for Request for Statements of Qualifications (RFQ 17-046/YS), Professional Engineering and Architectural Design Services for Jefferson County in Response to Hurricane Harvey.

SEE ATTACHMENTS ON PAGES 301 - 316

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

3. Consider and approve award, execute, receive and file a contract for (IFB 17-029/JW), Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport with Goss Building, Inc. for the base bid amount of $426,400.00. This project is funded by the 2015 Port Security Grant and a local match from the Jefferson County Marine Unit.

SEE ATTACHMENTS ON PAGES 317 - 767

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

4. Execute, receive, and file a contract for (IFB 17-008/JW), Cheek Phase V – Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No. 7216231) to BDS Constructors, LLC dba MK Constructors for a Base Bid amount of $161,965.00 and Alternate Bid amount of $43,899.00; for a total of $205,864.00. This project is funded by a Texas Community Development Block Grant from The Texas Department of Agriculture.

SEE ATTACHMENTS ON PAGES 768 - 956

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

5. Consider and approve, execute, receive and file a contract renewal for (IFB 11-045/AW), Term Contract for Snack and Drink Vending Machines for Jefferson County with John Paul's Food Service, LLC for a second one (1) year renewal from November 29, 2017 to November 28, 2018. Proposed price increase for all products is shown on Attachment A and is due to increased cost of products.

SEE ATTACHMENTS ON PAGES 957 - 958

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

6. Consider and approve, execute, receive and file a contract renewal for (IFB 15-023/YS), Term Contract for HVAC Maintenance, Repair, and Emergency Services for Ford Park with Industrial Commercial Mechanical for a second one (1) year renewal from January 9, 2018 to January 8, 2019.

SEE ATTACHMENTS ON PAGES 959 - 959

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

7. Consider and approve inter-department transfer of a 2008 Ford Crown Victoria VIN # 2FAFP71V88X167959 from Sheriff to Service Center as authorized by Local Government Code §262.011 (j).

SEE ATTACHMENTS ON PAGES 960 - 961

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY AUDITOR:

8. Consider and authorize the County Judge to execute a Texas Safety Program Grant Agreement between Jefferson County, Texas and the State of Texas for the STEP Comprehensive Program for the period 10/01/2017 to 09/30/2018.

SEE ATTACHMENTS ON PAGES 962 - 994

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

9. Consider and approve electronic disbursements for the following: 1. $860.48 to Texas Department of Criminal Justice for November insurance reimbursement. 2. $621.48 to Texas Department of Criminal Justice for November insurance reimbursement.

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

10. Receive and file Amended Schedule of Expenditures of Federal and State Awards for the year ended September 30, 2016.

SEE ATTACHMENTS ON PAGES 995 - 997

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

11. Regular County Bills - check #440257 through checks #440477 (November 20, 2017)and check #440478 through checks #440767 (November 27, 2017).

SEE ATTACHMENTS ON PAGES 998 - 1014

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY COMMISSIONERS:

12. Consider and possible approve a Resolution commending Patricia Nantz for 20 years of service to Jefferson County and wishing her well in her retirement.

SEE ATTACHMENTS ON PAGES 1015 - 1015

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

13. Consider, possibly approve and adopt an order levying taxes for Port of Port Arthur Navigation District of Jefferson County, Texas Unlimited Tax Port Improvement Bonds, Series 2017A.

SEE ATTACHMENTS ON PAGES 1016 - 1021

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

14. Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 1 in accordance with Section 312.204, Tax Code.

SEE ATTACHMENTS ON PAGES 1022 - 1024

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

15. Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 2 in accordance with Section 312.204, Tax Code.

SEE ATTACHMENTS ON PAGES 1025 - 1027

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

16. Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 3 in accordance with Section 312.204, Tax Code.

SEE ATTACHMENTS ON PAGES 1028 - 1030

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

17. Consider and possibly approve a Resolution Authorizing the Jefferson County Tax-Assessor Collector to Engage in the Early Turn-Over of Business Personal Property Taxes for Collection.

SEE ATTACHMENTS ON PAGES 1031 - 1036

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

18. Consider and possibly approve a Resolution authorizing Amendment to the Contract for Collection and Assessment Services between Jefferson County and individual Taxing Entities authorizing the Jefferson County Tax-Assessor Collector to conduct necessary activities for the collection of delinquent taxes.

SEE ATTACHMENTS ON PAGES 1037 - 1041

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

19. Consider and possibly approve a Proclamation for the Tzu Chi Foundation.

SEE ATTACHMENTS ON PAGES 1042 - 1042

Motion by: Commissioner Weaver
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

20. Consider, possibly approve and authorize the County Judge to execute a Consent Form for Demolition of Unsafe Structure (a duplex) located at 2460-62 Park St., Beaumont, Texas.

SEE ATTACHMENTS ON PAGES 1043 - 1045

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

21. Conduct a public hearing regarding the establishment of the Dow Chemical Reinvestment Zone pursuant to Sec. 312.201, Texas Tax Code.

OPEN @ 2:20PM NO SPEAKERS CLOSED @ 2:22PM

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

22. Consider and possibly approve an Order to establish the Dow Chemical Reinvestment Zone pursuant to Sec. 312.401, Texas Tax Code.

SEE ATTACHMENTS ON PAGES 1046 - 1088

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

23. Consider and possibly approve a Resolution Authorizing Audits Necessary for the Collection of Delinquent Hotel Taxes pursuant to Sec. 352, Tax Code.

SEE ATTACHMENTS ON PAGES 1089 - 1090

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

24. Consider, possibly approve and authorize the County Judge to execute TxCDGB Contract Amendment/Modification Request A1101 for Contract No. 7216231 to authorize payments for necessary easements.

SEE ATTACHMENTS ON PAGES 1091 - 1093

Action: TABLED

COUNTY TREASURER:

25. Receive and File Investment Schedule for October 2017 including the year to date total earnings on County funds.

SEE ATTACHMENTS ON PAGES 1094 - 1096

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

ENGINEERING:

26. Execute, receive and file Utility Permit 09-U-17 to Cameron Communications Texas for the construction of a 12 pair 22 gauge cable and all appurtenances crossing League Road. This project is located in Precinct No. 4.

SEE ATTACHMENTS ON PAGES 1097 - 1104

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

27. Consider and possibly approve a Minor Plat of Boone Acres a Subdivision out of and part of Lot 7 Jiles Dugat Subdivision, located between State Highway 124 and Dugat Road in Precinct No. 2. This plat is not within any ETJ and has met all of our platting requirements.

SEE ATTACHMENTS ON PAGES 1105 - 1106

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

MOSQUITO CONTROL:

28. Consider and possibly approve a Resolution recognizing Chief Pilot Jerry Hinson for 29 1/2 years of dedicated service to Jefferson County Mosquito Control District and to the citizens of Jefferson County in wishing him well in his retirement.

SEE ATTACHMENTS ON PAGES 1107 - 1107

Motion by: Commissioner Weaver
Second by: Commissioner Alfred
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

SHERIFF'S DEPARTMENT:

29. Consider and possibly approve a Resolution recognizing Deputy William B. Eichelberger for 22 years and 7 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

SEE ATTACHMENTS ON PAGES 1108 - 1109

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

30. Consider and possibly approve a Resolution recognizing Sergeant Paul D. Stephenson for 29 years and 10 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

SEE ATTACHMENTS ON PAGES 1110 - 1111

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

31. Consider and possibly approve a Resolution recognizing Deputy James H. LeBlanc for 33 years and 3 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

SEE ATTACHMENTS ON PAGES 1112 - 1113

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: County Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

Other Business:

Receive reports from Elected Officials and staff on matters of community interest without taking action.

***DISCUSSION ON ANY OTHER ITEM NOT ON AGENDA WITHOUT TAKING ACTION.

_____

Jeff R. Branick
County Judge

JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah L. Clark, Purchasing Agent

1149 Pearl Street, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

LEGAL NOTICE
Advertisement for Invitation for Bids

November 27, 2017

Notice is hereby given that sealed bids will be accepted by the Jefferson County Purchasing Department for IFB 17-043/JW, Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County. **Specifications for this project may be obtained from the Jefferson County website, http://www.co.jefferson.tx.us/Purchasing/main.htm or by calling 409-835-8593.**

Bids are to be sealed and addressed to the Purchasing Agent with the bid number and name marked on the outside of the envelope or box. Bidders shall forward an original and three (3) copies of their bid to the address shown below. Jefferson County does not accept bids submitted electronically. Late bids will be rejected as non-responsive. Bids will be publicly opened and read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Bidders are invited to attend the sealed bid opening.

BID NAME:	**Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County**
BID NO:	**IFB 17-043/JW**
DUE DATE/TIME:	**11:00 AM CDT, Tuesday, January 9, 2018**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department 1149 Pearl Street, 1st Floor Beaumont, Texas 77701**

There will be a **Mandatory Pre-bid Conference at 10:00 AM CDT on Thursday, December 14, 2017,** in the Jefferson County Engineering Conference Room located at 1149 Pearl Street, 5th Floor, Jefferson County (Historic) Courthouse.

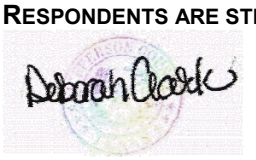
The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

Any questions relating to these requirements should be directed to Jamey West, Assistant Purchasing Agent, at 409-835-8593 or jwest@co.jefferson.tx.us. Bidders may submit technical questions to: Allen D. Sims (PE), Vice President with LJA Engineering, Inc. at 409-554-8969 or asims@ljaengineering.com.

Jefferson County encourages Disadvantaged Business Enterprises to participate in the bidding process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

All interested firms are invited to submit a bid in accordance with the terms and conditions stated in this bid.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.



Deborah L. Clark, Purchasing Agent
Jefferson County, Texas
Publish:Beaumont Enterprise & Port Arthur News – November 29, 2017 & December 6, 2017

IFB 17-043/JW
Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County
Bids due: 11:00 AM CDT, Tuesday, January 9, 2018

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Bid Submissions:

Bidder is responsible for submitting:

- One (1) *original* bid copy to include a completed copy of this specifications packet, in its entirety.
  Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

Additionally, Bidder must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

http://www.co.jefferson.tx.us/purchasing/main.htm

Instructions to Bidders

1. Bid Submission

Bids must be submitted in complete original form by mail or messenger to the following address:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud.

Bidder shall submit bid in a tightly sealed opaque envelope or box, plainly marked "SEALED BID." The outside of the envelope of box shall also include the Bid Number, Bid Name, Bid Due Date, and the Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Late bids will not be accepted and will be returned unopened to the bidder.

All bids submitted in response to this invitation shall become the property of Jefferson County and will be a matter of public record available for review.

2. Bid Submissions During Time of Inclement Weather, Disaster, or Emergency

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the county of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the IFB and urgent County requirements preclude amendment to the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

3. Courthouse Security

Bidders are advised that all visitors to the Courthouse must pass through Security. **Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal.** Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

4. Preparation of Bids

The bid shall be legibly printed in ink or typed.

The County requests that bid submissions NOT be bound by staples or glued spines.

If a unit price or extension already entered is to be altered, it shall be crossed out and initialed in ink by the bidder.

The bid shall be legally signed and shall include the complete address of the bidder.

Jefferson County is exempt from Federal and State Sales Taxes, and such taxes shall not be included in bid prices.

5. Signatures

All bids, notifications, claims, and statements must be signed by an individual authorized to bind the bidder. The individual signing certifies, under penalty of perjury, that he or she has the legal authorization to bind the bidder.

6. County Holidays – 2017:

January 16	Monday	Martin Luther King, Jr. Day
February 20	Monday	President's Day
April 14	Friday	Good Friday
May 29	Monday	Memorial Day
July 4	Tuesday	Independence Day
September 4	Monday	Labor Day
November 10	Friday	Veteran's Day
November 23 & 24	Thursday & Friday	Thanksgiving
December 25 & 26	Monday & Tuesday	Christmas
January 1, 2018	Monday	New Year's

7. Rejection or Withdrawal

Submission of additional terms, conditions or agreements with the bid document are grounds for deeming a bid non-responsive and may result in bid rejection. Jefferson County reserves the right to reject any and all bids and to waive any informalities and minor irregularities or defects in bids. Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

8. Emergency/Declared Disaster Requirements

In the event of an emergency or if Jefferson County is declared a disaster area, by the County, State, or Federal Government, this Acceptance of Offer may be subjected to unusual usage. Contractor shall service the county during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing as specified in this Acceptance of Offer shall apply to serving the County's needs regardless of the circumstances. If Contractor is unable to supply the services under the terms of the Acceptance of Offer, then Contractor shall provide proof of such disruption and a copy of the invoice from Contractor's supplier(s). Additional profit margin as a result of supplying services during an emergency or declared disaster shall not be permitted. In the event that additional equipment, supplies, and materials are required during the declared disaster, additional shipping, handling and drayage fees may apply.

9. Award

The bid will be awarded to the responsible, responsive bidder(s) whose bid, conforming to the solicitation, will be most advantageous to Jefferson County – price and other factors considered. Unless otherwise specified in this IFB, Jefferson County reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of Jefferson County. Any bidder who is in default to Jefferson County at the time of submittal of the bid shall have that bid rejected. Jefferson County reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial nonconformity in the offer, as determined by Jefferson County, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Jefferson County shall consider the qualifications of the bidders, and, where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, Jefferson County may conduct such investigation as it deems necessary to assist in the evaluation of a bid and to establish the responsibility, qualifications, and financial ability of the bidders to fulfill the contract.

Jefferson County reserves the right to award this contract on the basis of **lowest and best bid** in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, and/or to reject any or all bids. In the event the lowest dollar offeror meeting specifications is not a awarded a contract, Offeror may appear before the Commissioners' Court and present evidence concerning Offeror responsibility after officially notifying the Office of the Purchasing Agent of Offeror's intent to appear.

10. Contract

A response to an IFB is an offer to contract with Jefferson County based upon the terms, conditions, and specifications contained in the IFB. Bids do not become contracts unless and until they are executed by Jefferson County, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions is modified by an IFB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

11. Waiver of Subrogation

Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Jefferson County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.

12. Fiscal Funding

A multi-year contract (if requested by the specifications) continuing as a result of an extension option must include fiscal funding out. If, for any reason, funds are not appropriated to continue the contract, said contract shall become null and void.

13. Bid Results

Bid results are not provided in response to telephone inquiries. A preliminary tabulation of bids received will be posted on the Purchasing web page (http://co.jefferson.tx.us/ purchasing/main.htm) as soon as possible following bid opening. A final tabulation will be posted following bid award, and will also be available for review in the Purchasing Department.

14. Changes and Addenda to Bid Documents

Each change or addendum issued in relation to this IFB document will be on file in the Office of the Purchasing Agent, and will be posted on the Purchasing web site as soon as possible. It shall be the bidder's responsibility to make inquiry as to change or addenda issued, and to monitor the web site. All such changes or addenda shall become part of the contract and all bidders shall be bound by such addenda. Information on all changes or addenda issued will be available at the Office of the County Purchasing Agent.

15. Specifications

Unless otherwise stated by the bidder, the bid will be considered as being in accordance with Jefferson County's applicable standard specifications, and any special specifications outlined in the bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of Jefferson County, and should not be construed as excluding bids on other types of materials, equipment, and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid. Jefferson County reserves the right to determine if equipment/ product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of the bid, may be considered non-responsive.

16. Delivery

Bids shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the bidder (<u>in writing on the included Bid Form</u>), prices bid will be considered as being based on F.O.B. destination/delivered freight included.

17. Interpretation of Bid and/or Contract Documents

All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening, in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. Inquiries received that are not made in a timely fashion may or may not be considered.

18. Currency

Prices calculated by the bidder shall be stated in U.S. dollars.

19. Pricing

Prices shall be stated in units of quantity specified in the bid documents. In case of discrepancy in computing the amount of the bid, the unit price shall govern.

20. Notice to Proceed/Purchase Order

The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.

21. Certification

By signing the offer section of the Offer and Acceptance page, bidder certifies:

- The submission of the offer did not involve collusion or other anti-competitive practices.
- The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to any public servant in connection with the submitted offer.
- The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.

22. Definitions

"County" – Jefferson County, Texas.

"Contractor" – The bidder whose proposal is accepted by Jefferson County.

23. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

General Conditions of Bidding and Terms of Contract

By execution of this document, the vendor accepts all general and special conditions of the contract as outlined below and in the specifications and plans.

1. Bidding

1.1 Bids. All bids must be submitted on the bid form furnished in this package.

1.2 Authorized Signatures. The bid must be executed personally by the vendor, duly authorized partner of the partnership, or duly authorized officer of the corporation. If executed by an agent, a power of attorney or other evidence of authority to act on behalf of the vendor shall accompany the bid to become a valid bid.

1.3 Late Bids. Bids must be in the office of the Jefferson County Purchasing Agent before or at the specified time and date bids are due. Bids received after the submission deadline shall be rejected as non-responsive and returned unopened.

1.4 Withdrawal of Bids Prior to Bid Opening. A bid may be withdrawn before the opening date by submitting a written request to the Purchasing Agent. If time allows, the bidder may submit a new bid. Bidder assumes full responsibility for submitting a new bid before or at the specified time and date bids are due. Jefferson County reserves the right to withdraw a request for bids before the opening date.

1.5 Withdrawal of Bids after Bid Opening. Bidder agrees that its offer may not be withdrawn or cancelled by the vendor for a period of ninety (90) days following the date and time designated for the receipt of bids unless otherwise stated in the bid and/or specifications.

1.6 Bid Amounts. Bids shall show net prices, extensions where applicable and net total. In case of conflict between unit price and extension, the unit price will govern. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be interpreted in the favor of Jefferson County.

1.7 Exceptions and/or Substitutions. All bids meeting the intent of the specifications and plans will be considered for award. Vendors taking exception to the specifications and plans, or offering substitutions, shall state these exceptions in the section provided. If bid is made on an article other than the one specified, which a bidder considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany same to permit thorough evaluation. The absence of stated exceptions and/or substitutions shall indicate that the vendor has not taken any exceptions to the specifications and shall be responsible to perform in strict accordance with the specifications. As a matter of practice, Jefferson County rejects exception(s) and /or substitutions as non-responsive but reserves the right to accept any and/or all of the exception(s) and/or substitution(s) deemed to be in the best interest of Jefferson County.

1.8 Alternates. The Invitation for Bid and/or specifications may expressly allow bidder to submit an alternate bid. Presence of such an offer shall not be considered an indication of non-responsiveness.

1.9 Descriptions. Unless otherwise specified, any reference to make, manufacturer and/or model used in the bid specifications is merely descriptive and not restrictive, and is used only to indicate type, style, or quality of material desired.

1.10 Bid Alterations. Bids cannot be altered or amended after submission deadline. Any interlineations, alterations, or erasures made before opening time must be initialed by the signer of the bid, guaranteeing authenticity.

1.11 Tax Exempt Status. Jefferson County is exempt from federal excise tax and state sales tax. Unless the bid form or specifications specifically indicate otherwise, the bid price must be net, exclusive of above-mentioned taxes and will be so construed. Therefore, the bid price shall not include taxes.

1.12 Quantities. Quantities indicated are estimated quantities only and are not a commitment to buy. Approximate usage does not constitute an order, but only implies the probable quantity that will

be used. Commodities will be ordered on an as-needed basis. Bidder is responsible for accurate final counts.

1.13 Bid Award. Award of contract shall be made to the most responsible, responsive bidder, whose offer is determined to be the best value, taking into consideration the relative importance of price. Jefferson County reserves the right to be the sole judge as to whether items bid will serve the purpose intended. Jefferson County reserves the right to accept or reject in part or in whole any bid submitted, and to waive any technicalities or informalities for the best interest of the County. Jefferson County reserves the right to award based upon individual line items, sections or total bid.

1.14 Silence of Specifications for Complete Units. All materials, equipment and/or parts that will become a portion of the completed work, including items not specifically stated herein but, necessary to render the service(s) complete and operational per the specifications, are to be included in the bid price. Vendor may be required to furnish evidence that the service, as bid, will meet or exceed these requirements.

1.15 Addenda. Any interpretations, corrections or changes to the specifications and plans will be made by addenda no later than forty-eight (48) hours prior to the bid opening. Addenda will be posted on the Purchasing web site. Vendors are responsible for monitoring the web site in order to remain informed on addenda. Vendors shall acknowledge receipt of all addenda with submission of bid.

1.16 General Bid Bond/Surety Requirements. Failure to furnish bid bond/surety, if requested, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.17 General Insurance Requirements. Failure to furnish Affidavit of Insurance, if required in these specifications, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.18 Responsiveness. A responsive bid shall substantially conform to the requirements of this Invitation to Bid and/or specifications contained herein. Bidders who substitute any other terms, conditions, specifications and/or requirements or who qualify their bids in such a manner as to nullify or limit their liability to the contracting entity shall have their bids deemed non-responsive. Also, bids containing any clause that would limit contracting authority shall be considered non-responsive. Examples of non-responsive bids include but shall not be limited to: a) bids that fail to conform to required delivery schedules as set forth in the bid request; b) bids with prices qualified in such a manner that the bid price cannot be determined, such as with vague wording that may include “price in effect at the time of delivery,” and c) bids made contingent upon award of other bids currently under consideration.

1.19 Responsible Standing of Bidder. To be considered for award, bidder must at least: have the ability to obtain adequate financial resources, be able to comply with required or proposed delivery/completion schedule, have a satisfactory record of performance; have a satisfactory record of integrity and ethics, and be otherwise qualified and eligible to receive award.

1.20 Proprietary Data. Bidder may, by written request, indicate as confidential any portion(s) of a bid that contain proprietary information, including manufacturing and/or design processes exclusive to the vendor. Jefferson County will protect from public disclosure such portions of a bid, unless directed otherwise by legal authority, including existing Open Records Acts.

1.21 Public Bid Opening. Bidders are invited to be present at the opening of bids. After the official opening of bids, a period of not less than one week is necessary to evaluate bids. The amount of time necessary for bid evaluation may vary and is determined solely by the County. Following the bid evaluation, all bids submitted are available for public review.

2. Performance

2.1 Design, Strength, and Quality. Design, strength, and quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practices. The apparent silence of specifications and/or plans as to any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications and/or plans shall be made on the basis of this statement.

2.2 Age and Manufacture. All tangible goods being bid must be new and unused, unless otherwise specified, in first-class condition, of current manufacture, and furnished ready to use. All items not specifically mentioned that are required for a complete unit shall be furnished.

2.3 Delivery Location. All deliveries will be made to the address(es) specified on the purchase order during normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, unless otherwise authorized by the Purchasing Agent or designee.

2.4 Delivery Schedule. Delivery time may be an important consideration in the evaluation of best value. The maximum number of days necessary for delivery ARO shall be stated in the space, if provided, on the bid form.

2.5 Delivery Charges. All delivery and freight charges, F.O.B. destination shown on Jefferson County purchase order, as necessary to perform contract are to be included in the bid price.

2.6 Installation Charges. All charges for assembly, installation and set-up shall be included in the bid price. Unless otherwise stated, assembly, installation and set-up will be required.

2.7 Operating Instructions and Training. Clear and concise operating instructions and descriptive literature will be provided in English, if requested. On-site detailed training in the safe and efficient use and general maintenance of item(s) purchased shall be provided as needed at the request of Jefferson County. Instructions and training shall be at no additional cost to the County.

2.8 Storage. Bidder agrees to provide storage of custom ordered materials, if requested, for up to thirty (30) calendar days.

2.9 Compliance with Federal, State, County, and Local Laws. Bids must comply with all federal, state, county and local laws, including, but not limited to, all applicable standard safety, emission, and noise control requirements. Any vehicles or equipment shall contain all standard safety, emission, and noise control requirements required for the types and sizes of equipment at the time of their manufacture. The contractor agrees, during the performance of work or service, to comply with all applicable codes and ordinances of Jefferson County or the State of Texas as they may apply, as these laws may now read, or as they may hereafter be changed or amended.

2.10 OSHA. The bidder will certify all equipment complies with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The successful bidder will further certify that all items furnished under this project will conform and comply with federal and State of Texas OSHA standards. The successful bidder will agree to indemnify and hold harmless Jefferson County for any and all damages that may be assessed against the County.

2.11 Patents and Copyrights. The successful vendor agrees to protect the County from claims involving infringements of patents and/or copyrights.

2.12 Samples, Demonstrations and Testing. At Jefferson County's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested at any point prior to or following bid award. Samples, demonstrations and/or testing may be requested upon delivery and/or any point during the term of resulting contract. All samples (including return thereof), demonstrations, and/or testing shall be at the expense of the bidder/vendor.

2.13 Acceptability. All articles enumerated in the bid shall be subject to inspection by an officer designated for that purpose by Jefferson County. If found inferior to the quality called for, or not equal in value to the specifications, deficient in workmanship or otherwise, this fact shall be certified to the Purchasing Agent, who shall have the right to reject the whole or any part of the same. Items and/or work determined to be contrary to specifications must be replaced at the vendor's expense. Inferior items not retrieved by the vendor within thirty (30) calendar days, or an otherwise agreed upon time, shall become the property of the County. If disposal of such items warrants an expense, an amount equal to the disposal expense will be deducted from amounts payable to the vendor.

2.14 Maintenance. Maintenance required for equipment bid should be available in Jefferson County by a manufacturer authorized maintenance facility. Cost for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Jefferson County opts to include

maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

2.15 Material Safety Data Sheets. Under the "Hazardous Communications Act," common known as the "Texas Right to Know Act," a bidder must provide the user department, with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the bidder to furnish this documentation, will be cause to reject any bid applying thereto.

2.16 Evaluation. Evaluation shall be used as a determinant as to which services are the most efficient and/or most economical for the County. It shall be based on all factors having a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Jefferson County Purchasing Department and recommendation to Jefferson County Commissioners' Court. Compliance with all bid requirements and needs of the using department are considered in evaluating bids. Pricing is not the only criteria for making a recommendation. The Jefferson County Purchasing Department reserves to right to contact any bidder, at any time, to clarify, verify or requirement information with regard to this bid.

3. Purchase Orders and Payment

3.1 Purchase Orders. A purchase order(s) shall be generated by the Jefferson County Purchasing Agent to the successful vendor. The purchase order number must appear on all itemized invoices and packing slips. The County will not be held responsible for any work orders placed and/or performed without a valid current purchase order number. Payment will be made for all services rendered and accepted by the contract administrator for which a valid invoice has been received.

3.2 Invoices. All invoices shall reference the Purchase Order number. Invoices shall reference the bid item number or a detailed description for each item invoiced. If an item purchased and itemized on the invoice does not correspond to an item in any of the categories awarded to the vendor, invoice shall reference the item as "N/C" to indicate that it is a non-contract item. This requirement is to assist the County in verifying contract pricing on all invoices. Payment will be made under terms of net thirty (30) days unless otherwise agreed upon by seller and the purchasing department.

3.3 Prompt Payment. In accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S., payment will be made after receive and acceptance by the County of the merchandise ordered and of a valid invoice. Successful bidder(s) is required to pay subcontractors within ten (10) days after the successful bidder receives payment from the County.

3.4 Funding. Jefferson County is operated and funded on an October 1 to September 30 basis; accordingly, the County reserves the right to terminate, without liability to the County, any contract for which funding is not available.

4. Contract

4.1 Contract Definition. The General Conditions of Bidding and Terms of Contract, Specifications, Plans, Bidding Forms, Addenda, and any other documents made a part of this bid shall constitute the complete bid. This bid, when duly accepted by Jefferson County, shall constitute a contract equally binding between the successful bidder and Jefferson County.

4.2 Change Order. No different or additional terms will become part of this contract with the exception of a change order. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing and at the discretion and approval of Jefferson County. No change order will be binding unless signed by an authorized representative of the County and the vendor.

4.3 Price Re-determination. A price re-determination may be requested at the time of annual renewal. All requests for price re-determination shall be in written form. Cause for such request, i.e., manufacturer's direct cost, postage rates, Railroad Commission rates, Federal/State minimum wage law, Federal/State unemployment taxes, F.I.C.A, Insurance Coverage Rates, etc., shall be substantiated in writing by the source of the cost increase. The bidder's past experience of honoring contracts at the bid price will be an important consideration in the evaluation of the lowest and best

bid. Jefferson County reserves the right to accept or reject any/all requests for price re-determination as it deems to be in the best interest of the County.

4.4 Termination. Jefferson County reserves the right to terminate the contract for default if the bidder breached any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Jefferson County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or service within the proper amount of time, and/or to properly perform any and all services required to Jefferson County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days' written notice to either party unless otherwise specified. Jefferson County reserves the right to award canceled contract to the next lowest bidder. Bidder, in submitting this bid, agrees that Jefferson County shall not be liable to prosecution for damages in the event that the County declares the bidder in default.

4.5 Conflict of Interest. Employees of the County are not permitted to maintain financial interest in, or receive payment, directly or indirectly, borrow from, lend to, invest in, or engage in any substantial financial transaction with any individual, organization, supplier, or subcontractor who does business with the County without disclosure. When conflict of interest is discovered, it shall be grounds for termination of contract.

4.6 Injuries or Damages Resulting from Negligence. Successful vendor shall defend, indemnify and save harmless Jefferson County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful vendor, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful vendor shall pay any judgment with cost which may be obtained against Jefferson County growing out of such injury or damages.

4.7 Interest by Public Officials. No public official shall have interest in this contract, in accordance with Texas Local Government Code.

4.8 Warranty. The successful vendor shall warrant that all materials utilized in the performance of this contract shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title.

4.9 Uniform Commercial Code. The successful vendor and Jefferson County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

4.10 Venue. This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in the County of Jefferson, Texas.

4.11 Sale, Assignment, or Transfer of Contract. The successful vendor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of Jefferson County.

4.12 Silence of Specifications. The apparent silence of these specifications as to any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

5. Federal Emergency Management Agency (FEMA) Mandated Contract Clauses

If applicable to the work and services being performed by CONTRACTOR under the parties' AGREEMENT, the following provisions are adopted and form part of this AGREEMENT:

(A) DAMAGES, 2 CFR §200.326 Appendix II to Part 200 (A)

(1) All work to be performed under this AGREEMENT shall be timely commenced. A breach of this AGREEMENT by Contractor would cause substantial delay in the completion of the required services affecting the safety and welfare of the public.

(2) In the event of Contractor's breach of its performance obligations, County shall have all rights and remedies against Contractor as provided by law.

(B) TERMINATION RIGHTS, 2 CFR §200.326 Appendix II to Part 200 (B)

Termination for Convenience: Whenever the interests of the County so require, County may terminate the parties' Agreement, in whole or in part, for the convenience of the County. County shall give Contractor thirty (30) days prior written notice of termination specifying the portions of the Agreement to be terminated and when such termination will become effective. If only portions of the parties' agreement are terminated, Contractor has the right to withdraw from the parties' Agreement, without adverse action or claims. In the event of a termination for convenience by County, Contractor shall be entitled to payment for all work and services performed by it up to the effective date of such termination.

Termination for Cause: The County may, by written notice of default to Contractor, terminate the parties' Agreement, in whole or in part, if the Contractor fails to satisfactorily perform any provisions of the parties' agreement after a period of ten (10) following Contractor's receipt of a Notice of Deficiency provided by County.

(C) EQUAL EMPLOYMENT OPPORTUNITY CLAUSE (2 CFR §200.326 Appendix II to Part 200 (C))

If applicable to the work and services performed by CONTRACTOR under the AGREEMENT, during the performance of the AGREEMENT, CONTRACTOR shall comply with the Equal Employment Opportunity Clause (41 CFR 60-1.4(b)):

(1) CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. 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, 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. AGREEMENTOR 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.

(2) 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, or national origin.

(3) CONTRACTOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other agreement 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.

(4) CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) 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 for purpose of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the CONTRACTOR'S noncompliance with the nondiscrimination clauses of this AGREEMENT or with any of the said rules, regulations or orders, this AGREEMENT 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.

(7) CONTRACTOR will include the portion of the sentence immediately preceding paragraph (1) and the provisions of subparagraphs 1 through 7 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 contractor. 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 CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or contractor 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 interest of the United States.

D. DAVIS-BACON ACT AND COPELAND "ANTI-KICKBACK" ACT, 2 CFR §200.326 Appen. II to Part 200 (D)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(1) Bacon-Davis Act: Applicable to construction or repair of public buildings or public works. see FEMA Public Assistance Program and Policy Guide, Ch.2(V)(G)(2), page 32 (FP 104-009-2/January 2016);

(2) Copeland "Anti-Kickback" Act: In contracts subject to the Davis-Bacon Act, CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (40 U.S.C. §3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that the contractor and subcontractor must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The GOVERNMENT must report all suspected or reported violations to the appropriate Federal agency.

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(a) CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this AGREEMENT.

(b) CONTRACTOR or subcontractor shall insert in any subcontract the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for the compliance by any subcontractor or lower tier subcontract with all of these contract clauses.

(c) A breach of the AGREEMENT clause above may be grounds for termination of the AGREEMENT, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. §5.12.

E. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 2 CFR §200.326 Appendix II to Part 200 (E) (40 U.S.C. 3701-3708)

Contracts in excess of $100,000 that involve the employment of mechanics or laborers shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor and its subcontractors shall compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation: liability for unpaid wages: liquidated damages. In the event of any violation of the clause set forth in paragraph (I) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (I) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (I) of this section.

(3) Withholding for unpaid wages and liquidated damages. The GOVERNMENT shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) The contractor and subcontractor shall insert in any subcontract the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

F. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT, 2 CFR §200.326 Appendix II to Part 200 (F)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT and if the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the GOVERNMENT wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the GOVERNMENT must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business."

G. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT, 2 CFR §200.326 Appendix II to Part 200 (G)

CONTRACTOR shall 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 Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

CONTRACTOR shall include the foregoing requirements in each subcontract exceeding $100,000.

H. ENERGY EFFICIENCY AND CONSERVATION, 2 CFR §200.326 Appendix II to Part 200 (H)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT, CONTRACTOR shall comply with the mandatory standards and policies of the state regulation promulgated in accordance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).

I. DEBARMENT AND SUSPENSION, 2 CFR §200.326 Appendix II to Part 200 (I)

(1) This AGREEMENT is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by GOVERNMENT. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to GOVERNMENT, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C AGREEMENT is valid and throughout the period of performance. The CONTRACTOR further agrees to include a provision requiring such compliance in its lower tier covered transactions.

J. BYRD ANTI-LOBBYING AMENDMENT, 2 CFR §200.326 Appendix II to Part 200 (J)

CONTRACTOR must file with the GOVERNMENT the required certification. Each tier certifies to the tier above 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 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. If not provided with the bid response, CONTRACTOR must complete and submit the Certification Regarding Lobbying Form.

K. PROCUREMENT OF RECOVERED MATERIALS, 2 CFR §200.326 Appendix II to Part 200 (K) and 2 CFR §200.322)

(1) 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-

(a) Competitively within a timeframe providing for compliance with the contract performance schedule;
(b) Meeting contract performance requirements; or
(c) At a reasonable price.

(2) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/.
The list of EPA-designate items is available at http://www.epa.gov/cpg/products/htm.

L. AGREEMENTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (2 CFR §200.321)

Should the CONTRACTOR subcontract any of the work under this AGREEMENT, CONTRACTOR shall take the following affirmative steps: place qualified small and minority businesses and women's business enterprises on solicitation lists; assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources; divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and use 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.

M. ACCESS TO RECORDS

(1) CONTRACTOR agrees to provide GOVERNMENT, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives' access to any books, documents, papers, and records of the Contractor which are directly pertinent to this AGREEMENT for the purposes of making audits, examinations, excerpts, and transcriptions.

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

(3) CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

N. SEAL, LOGO AND FLAGS

CONTRACTOR shall not use the U.S. Department of Homeland Security's seal(s), logos, crests, or reproductions of flags or likenesses of the U.S. Department of Homeland Security's agency officials without specific FEMA preapproval.

O. COMPLIANCE WITH FEDERAL LAW, REGULATIONS AND EXECUTIVE ORDERS

This is an acknowledgement that FEMA financial assistance will be used to fund the AGREEMENT only. CONTRACTOR will comply will all federal law, regulations, executive orders, FEMA policies, procedures, and directives.

P. NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this AGREEMENT and is not subject to any obligations or liabilities to GOVERNMENT, CONTRACTOR, or any other party pertaining to any matter resulting from the contract.

Q. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR'S actions pertaining to this contract.

Special Requirements/Instructions

The following requirements and instructions supersede General Requirements where applicable.

1. Bid Requirement

Each bidder shall ensure that required parts of the bid are completed with accuracy and submitted as per the requirements within this specifications packet, including any addenda.

Bidder is responsible for submitting one (1) *original* bid copy to include a completed copy of this specifications packet in its entirety; and three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

All bids shall be tightly sealed in an opaque envelope or box and plainly marked "SEALED BID." The outside of the envelope or box shall also include: Bid Number, Bid Name, Bid Due Date, Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Jefferson County shall not be responsible for any effort or cost expended in the preparation of a response to this IFB. All protests should be coordinated through the Purchasing Office prior to award recommendation to Commissioners' Court.

2. Vendor Registration: SAM (System for Award Management).

Vendors doing business with Jefferson County are **required** to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is NO fee to register for this site. Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Bid Respondents are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Bid Submission.

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

As of January 1, 2016, per House Bill 1295, the Texas Ethics Commission (TEC) requires **all awarded vendors** to complete a Certificate of Interested Parties (FORM 1295) at time of notification of award. **Awarded Vendors** must visit the TEC website link below, enter the required information on Form 1295, and print a copy of the completed form. The form will include a certification of filing that will contain a unique certification number.

At the time of award, the Jefferson County Purchasing Department will submit a request to the Awarded Vendor to both:

1. Submit FORM 1295 online via the Texas Ethics Commission website link below.

2. Submit a printed copy of FORM 1295, signed by an Authorized Agent of the Awarded Vendor and notarized to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

4. Multiple Vendor Award

Jefferson County reserves the right to award this contract to more than one vendor at the County's discretion.

5. Delivery

If delivery is required, all items must be packaged so as to be protected from damage during shipping and handling. Any item(s) damaged in shipping must be replaced in kind, or repaired, by the contractor, at the discretion of, and at no additional charge to, Jefferson County.

6. Payment

Jefferson County will pay original invoices that clearly itemize the goods and/or services provided as to quantity, part number, description, price, applicable discount (if any), labor charges showing time differential, if applicable and if previously agreed to, and delivery, installation, and set-up costs, if applicable and if previously agreed to. Only charges as stated on the Bid Form(s) submitted as a part of the bid will be considered.

Invoices must indicate Jefferson County as applicable, the address to which the product(s) and/or service(s) were delivered, and the applicable purchase order number. Invoices will be matched to delivery tickets prior to payment; therefore, all delivery tickets should have an accurate description of the product(s) and/or service(s).

Invoices shall be submitted to: Jefferson County Auditing Department, Attention: Accounts Payable, 1149 Pearl Street, 7th floor, Beaumont, TX 77701.

7. Usage Reports

Jefferson County reserves the right to request, and receive at no additional cost, up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this IFB. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by Jefferson County department, description of each item purchased, including manufacturer, quantity of each item purchased, per unit and extended price of each item purchased, and total amount and price of all items purchased.

8. Insurance

The contractor (including any and all subcontractors as defined in Section 9.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
- Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
- Builder's Risk Policy: Structural Coverage for Construction Projects
- Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation	Statutory Coverage (see attached)

9. Workers' Compensation Insurance

9.1 Definitions:

9.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

9.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

9.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly

with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

9.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

9.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 8 above.

9.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

9.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

9.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

9.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

9.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

9.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

9.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

9.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

9.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

9.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

9.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

9.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

9.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

9.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

9.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

9.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

9.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 9.1. – 9.7., with the certificates of coverage to be provided to the person for whom they are providing services.

9.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

9.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

Bidder Information Form

Instructions: Complete the form below. Please provide legible, accurate, and complete contact information. PLEASE PRINT.

Bid Number & Name: (IFB 17-043/JW), Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County

Bidder's Company/Business Name: _____

Bidder's TAX ID Number: _____

Contact Person: _____ **Title:** _____

Phone Number (with area code): _____

Alternate Phone Number if available (with area code):_____

Fax Number (with area code):_____

Email Address: _____

Mailing Address (Please provide a physical address for bid bond return, if applicable):

_____
Address

_____
City, State, Zip Code

OFFER AND ACCEPTANCE FORM

OFFER TO CONTRACT

To Jefferson County:

We hereby offer and agree to furnish the materials or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. We understand that the items in this Invitation for Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract.

The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete, and states that he/she has the authority to submit this bid, which will result in a binding contract if accepted by Jefferson County.

We acknowledge receipt of the following amendment(s): _____, _____, _____, _____.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

_____
Company Name

_____
Address

_____
City State Zip

_____
Signature of Person Authorized to Sign

_____
Printed Name

_____
Title

For clarification of this offer, contact:

_____
Name

_____
Phone Fax

_____
E-mail

Bidder Shall Return Completed Form with Offer.

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR BID.

REFERENCE ONE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE TWO

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE THREE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

Bidder Shall Return Completed Form with Offer.

Signature Page

As permitted under Article 4413 (32c) V.A.C.S., other governmental entities may wish to participate under the same terms and conditions contained in this contract (i.e., piggyback). In the event any other entity participates, all purchase orders will be issued directly from and shipped directly to the entity requiring supplies/services. Jefferson County shall not be held responsible for any orders placed, deliveries made or payment for supplies/services ordered by another entity. Each entity reserves the right to determine their participation in this contract.

Would bidder be willing to allow other governmental entities to piggyback off this contract, if awarded, under the same terms and conditions?..... **Yes** ☐ **No** ☐

This bid shall remain in effect for ninety (90) days from bid opening and shall be exclusive of federal excise and state and local sales tax (exempt).

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price and upon the terms and conditions contained in the Invitation for Bid, Conditions of Bidding, Terms of Contract, and Specifications and all other items made a part of the accepted contract.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

Bidder (Entity Name)	Signature
Street & Mailing Address	Print Name
City, State & Zip	Date Signed
Telephone Number	Fax Number
E-mail Address	

Bidder Shall Return Completed Form with Offer.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

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

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information in this section is being disclosed.**

_____
Name of Officer

This section (item 3 including subparts A, B, C, & D) must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more?

☐ Yes ☐ No

D. Describe each employment or business and family relationship with the local government officer named in this section.

4

_____ _____
Signature of vendor doing business with the governmental entity Date

Adopted 8/7/2015

Bidder Shall Return Completed Form with Offer.

Local Government Officer
Conflicts Disclosure Statement - OFFICE USE ONLY

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

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 employment or other business 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 **AFFIDAVIT**

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

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, 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

Adopted 8/7/2015

Good Faith Effort (GFE) Determination Checklist

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions: In order to determine if a "Good Faith Effort" was made in soliciting HUBs for subcontracting opportunities, the following checklist and supporting documentation shall be completed by the Prime Contractor/Consultant, and returned with the Prime Contractor/ Consultant's bid. This list contains the **minimum** efforts that should be put forth by the Prime Contractor/Consultant when attempting to achieve or exceed the goals of HUB Subcontractor participation. The Prime Contractor/Consultant may extend his/her efforts in soliciting HUB Subcontractor participation beyond what is listed below.

Did the Prime Contractor/Consultant . . .

☐ Yes ☐ No 1. To the extent practical, and consistent with standard and prudent industry standards, divide the contract work into the smallest feasible portions, to allow for maximum HUB Subcontractor participation?

☐ Yes ☐ No 2. **Notify** in writing a reasonable number of HUBs, allowing sufficient time for effective participation of the planned work to be subcontracted?

☐ Yes ☐ No 3. **Provide** HUBs that were genuinely interested in bidding on a subcontractor, adequate information regarding the project (i.e., plans, specifications, scope of work, bonding and insurance requirements, and a point of contract within the Prime Contractor/Consultant's organization)?

☐ Yes ☐ No 4. **Negotiate** in good faith with interested HUBs, and not reject bids from HUBs that qualify as lowest and responsive bidders?

☐ Yes ☐ No 5. **Document** reasons HUBs were rejected? Was a written rejection notice, including the reason for rejection, provided to the rejected HUBs?

☐ Yes ☐ No 6. If Prime Contractor/Consultant has zero (0) HUB participation, **please explain the reasons why.**

If "No" was selected, please explain and include any pertinent documentation with your bid.
If necessary, please use a separate sheet to answer the above questions.

Printed Name of Authorized Representative	Signature
Title	Date

Bidder Shall Return Completed Form with Offer.

Notice of Intent (NOI) to Subcontract with Historically Underutilized Business (HUB)

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions for Prime Contractor/Consultant: Bidder shall submit this form with the bid; however, the information below may be submitted after contract award, but prior to beginning performance on the contract. Please submit one form for each HUB Subcontractor/Subconsultant with proper signatures, per the terms and conditions of your contract.

Contractor Name: _____ HUB: p Yes p No

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____

Prime Contract Amount: $ _____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Printed Name of Contractor Representative	Signature of Representative	Date
Printed Name of HUB	Signature of Representative	Date

NOTE: NOTHING ON THIS NOTICE OF INTENT FORM IS INTENDED TO CONFER ANY RIGHTS, EXPRESSED OR IMPLIED, TO ANY THIRD PARTIES.

Pre-Approval for Subcontractor Substitutions must be obtained from the Jefferson County Purchasing Agent's Representative. The "HUB Subcontractor/Subconsultant Change Form" must be completed and faxed to 409-835-8456.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Prime Contractor: _____ HUB: ☐ Yes ☐ No

HUB Status (Gender & Ethnicity): _____

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____ IFB/RFP No.: _____

Total Contract: $ _____ Total HUB Subcontract(s): $ _____

Construction HUB Goals: 12.8% MBE:: _____ % 12.6% WBE: _____ %

Sub-goals: 1.7 African-American, 9.7% Hispanic, 0.7% Native American, 0.8% Asian American.
Use these goals as a guide to diversify.

FOR HUB OFFICE USE ONLY:

Verification date HUB Program Office reviewed and verified HUB Sub information Date: _____ Initials: _____

PART I. HUB SUCONTRACTOR DISCLOSURE

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Texas Bldg & Procurement Comm. ☐ Texas Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

HUB SUBCONTRACTOR DISCLOSURE

PART I: Continuation Sheet **(Duplicate as Needed)**

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

All HUB Subcontractor Participation may be verified with the HUB Subcontractor(s) listed on Part I.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PART II: STATEMENT OF NON-COMPLIANCE FOR NOT MEETING HUB SUBCONTRACTING GOALS

Please complete Good Faith Effort (GFE) Checklist and attach any supporting documentation.

Our firm was unable to meet the HUB goals for this project for the following reasons:

- ☐ All subcontractors to be utilized are "Non-HUBs." *(Complete Part III)*
- ☐ HUBs were solicited but did not respond.
- ☐ HUBs solicited were not competitive.
- ☐ HUBs were unavailable for the following trade(s):
- ☐ Other: _____

Was the Jefferson County HUB Office contacted for assistance in locating HUBs? ☐ Yes ☐ No

PART III: DISCLOSURE OF OTHER "NON-HUB" SUBCONTRACTS

The bidder shall use this area to provide a listing of all "Non-HUB" Subcontractors, including suppliers, that will perform under this project. A list of those "Non-HUB" Subcontractors the bidder selects, after bid submission, shall be provided to the Purchasing Office not later than five (5) calendar days after being notified that bidder is the apparent low bidder. A list of those "Non-HUB" Subcontractors that are selected after contract award must be provided **immediately** after their selection.

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PAGE 4 OF 4

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

I hereby certify that I have read the *HUB Program Instructions and Information*, truthfully completed all applicable parts of this form, and **attached any necessary support documentation as required**. I fully understand that intentionally falsifying information on this document may result in my not receiving a contract award or termination of any resulting contract.

Name (print or type): _____

Title: _____

Signature: _____

Date: _____

E-mail address: _____

Contact person that will be in charge of invoicing for this project:

Name (print or type): _____

Title: _____

Date: _____

E-mail address: _____

Bidder Shall Return Completed Form with Offer.

Residence Certification/Tax Form

Pursuant to Texas Government Code §2252.001 *et seq*., as amended, Jefferson County requests Resident Certification. §2252.001 *et seq*. of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

☐ I certify that _____ [company name] is a Resident Bidder of Texas as defined in Government Code §2252.001.

☐ I certify that _____ [company name] is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____ _____ (city and state).

Taxpayer Identification Number (T.I.N.):	
Company Name submitting bid/proposal:	
Mailing address:	
If you are an individual, list the names and addresses of any partnership of which you are a general partner:	

Property: List all taxable property owned by you or above partnerships in Jefferson County.

Jefferson County Tax Acct. No.*	Property address or location**

* This is the property amount identification number assigned by the Jefferson County Appraisal District.

** For real property, specify the property address or legal description. For business property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored as a warehouse or other location.

Bidder Shall Return Completed Form with Offer.

Bid Affidavit

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the specifications and the Notice to Bidders.

STATE OF_____ COUNTY OF_____

BEFORE ME, the undersigned authority, a Notary Public in and for the State of _____,

on this day personally appeared _____, who
(name)
after being by me duly sworn, did depose and say:

"I, _____ am a duly authorized officer of/agent
(name)
for _____ and have been duly authorized to execute the
(name of firm)
foregoing on behalf of the said_____.
(name of firm)

I hereby certify that the foregoing bid has not been prepared in collusion with any other bidder or other person or persons engaged in the same line of business prior to the official opening of this bid. Further, I certify that the bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities bid on, or to influence any person or persons to bid or not to bid thereon."

Name and address of bidder:_____

_____

Fax: _____ Telephone#_____

by: _____ Title:_____
(print name)

Signature:_____

SUBSCRIBED AND SWORN to before me by the above-named
_____ on

this the _____ day of_____, 201 .

_____
Notary Public in and for
the State of _____

Bidder Shall Return Completed Form with Offer.

PROJECT MANUAL

PROJECT MANUAL

Siphon Control Structures
At
Oilcut Ditch and Salt Bayou
At The
Gulf Intracoastal Waterway
For

Jefferson County
1149 Pearl St., 5th Floor
Beaumont, Texas

The following requirements and instructions provided within this Project Manual supersede General Requirements provided (Pages 1-33), where applicable.

GENERAL INFORMATION:

- Instructions to Bidders
- Notice of Requirements for Affirmative Action to Ensure Equal Employment Opportunity

CONTRACTOR'S BID SUBMITTALS:

- Bid
- Contractor's Bid
- Contractor's Qualifications

CONDITIONS OF THE CONTRACT:

- General Conditions (Including Supplementary Conditions)
- Agreement between Owner and Contractor
- Performance Bond
- Payment Bond
- Contractor's Progress Payment Affidavit
- Contractor's Final Payment Affidavit

TECHNICAL SPECIFICATIONS:

- General Notes
- Wage Rates
- Special Provisions
- Special Provision 000-001 Schedule of Liquidated Damages
- Special Provision 000-002 Nondiscrimination
- Special Provision 000-004 Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
- Special Provision 000-005 Standard Federal Equal Employment Opportunity Construction Contract Specifications
- Special Provision 000-008 Special Labor Provisions for State Projects
- Technical Specifications
- Item 100 Preparing Right of Way
- Item 110 Excavation
- Item 132 Embankment
- Item 164 Seeding for Erosion Control
- Item 400 Excavation and Backfill for Structures
- Item 403 Temporary Special Shoring
- Item 618 Conduit
- Item 2000 Filter Fabric
- Item 8000 Dewatering
- Item 9000 Articulated Concrete Mats
- Item 9010 Vinyl Sheet Pile
- Item 9020 Siphon Structure (Installed)
- Item 9030 Breakwater

GENERAL INFORMATION

INSTRUCTIONS TO BIDDERS

1. BID PROCEDURE

Bids must be submitted in TRIPLICATE upon the prescribed forms, or copies thereof, in sealed envelopes plainly marked. Bids shall be prepared in compliance with the requirements of the NOTICE to BIDDERS, these instructions and the instructions printed on the prescribed forms. All blank places on the Proposal form must be filled in as noted, in ink, in both words and figures, with amounts extended and totaled, and no changes shall be made in the phraseology of the forms or of the items mentioned therein. In case of any discrepancy between the written amounts and the figures, the written amounts shall govern. Any bid may be deemed irregular which contains any omission, erasure, alteration, addition, irregularity of any kind or item not called for, or which does not contain prices set opposite to each of the several items in the Proposal form, or in which any of the prices are obviously unbalanced, or which shall in any manner fail to conform to the conditions of the published Notice to Bidders. The Bidder shall sign his Proposal in the blank area provided therefore. If the bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be shown, together with the name and address of the partners or officers. If the bid is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers thereof accompanied by Corporate Seal. In order to ensure consideration, the Proposal must be enclosed in a sealed envelope plainly identified by the name of the project and addressed to the OWNER as prescribed in the Notice to Bidders.

Withdrawal or modifications to bids are effective only if written notice thereof is filed prior to time of bid opening and at the place specified in the Notice to Bidders. A notice of withdrawal or modifications to a bid must be signed by the CONTRACTOR or his designated representative. No withdrawal or modifications shall be accepted after the time for opening of proposals.

2. BID SECURITY

Bids shall be accompanied by a bid guarantee of not less than five percent (5%) Check or Cashier's Check payable without recourse to Jefferson County, or a bid bond with corporate surety authorized to conduct business in Texas. Said security shall be submitted with the understanding that it shall guarantee that the Bidder will not withdraw his bid within sixty (60) days after the date of the opening of the bids; that if a bid is accepted, the Bidder will enter into a formal Contract with the OWNER, furnish bonds and insurance as may be required and commence work at the specified time, and that in the event of the withdrawal of said bid within said period, or the failure to enter into said Contract, furnish said bonds and insurance and commence work within the time specified, the Bidder shall be liable to the OWNER for the difference between the amount specified in the bid amount for which the OWNER may otherwise procure the required work. Checks of all except the three lowest responsible Bidders will be returned when award is made; when the Contract is executed, the checks of the two remaining unsuccessful Bidders will be returned; that of the successful Bidder will be returned when formal Contract, bonds and insurance are approved, and work has commenced within the time specified.

The Bidder to whom the award is made shall execute and return the formal Contract with the OWNER and furnish Performance and Payment Bonds and required insurance Documents within ten (10) days after the prescribed forms are presented to him for signature. Said period will be extended only upon written presentation to the OWNER, within said period, of reasons which, in the sole discretion of the OWNER, justify an extension. If the Contract, bonds and insurance Documents

are not received by the OWNER within said period or if work has not been commenced within the time specified, the OWNER may proceed to have the work required by the Plans and Specifications performed by any means at its command, and the Bidder shall be liable to JEFFERSON COUNTY for any excess cost to the OWNER over his bid amount. Further, the bid guarantee shall be forfeited to JEFFERSON COUNTY as liquidated damages and Bidder shall be liable to JEFFERSON COUNTY for an additional amount of five percent (5%) of the bid amount as liquidated damages without limitation.

The OWNER, within ten (10) days of receipt of acceptable Performance and Payment Bonds, Insurance Documents and Contract signed by Bidder to whom Contract was awarded, shall sign and return executed duplicate of the Contract to said party. Should OWNER not execute the Contract within such period, the Bidder may, by written Notice to OWNER, withdraw his signed Agreement.

It is hereby understood and mutually agreed by and between the Contractor and Owner that the date of beginning and the time for completion as specified in the proposal are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the Work embraced in this Contract shall be commenced on a date to be specified in the "Notice to Proceed". The Contractor agrees that said Work shall be prosecuted regularly, diligently and uninterruptedly at such a rate of progress as will insure full completion, in an acceptable manner thereof, within the time specified.

The Contractor affirms that the time for completion of the Work described here is a reasonable time for completion of the Work and that he has sufficient plant, equipment and manpower to accomplish the Work within the specified time for completion. It is further agreed that TIME IS OF THE ESSENCE of each and every portion of this Contract and of the Specification where in a definite and certain length of time is fixed for the performance of any act whatsoever, and where under the Contract an additional time is allowed for the completion of any Work, the new time limit fixed by such extension shall become the essence of this Contract.

3. PAYMENT & PERFORMANCE BONDS

If the Contract exceeds Twenty-five Thousand Dollars ($25,000.00), a Payment Bond shall be furnished, and if the contract exceeds One Hundred Thousand Dollars ($100,000) a performance bond also, shall be furnished on prescribed forms in the amount of one hundred percent (100%) corporate surety duly authorized to do business in the State of Texas. Attorneys-in-fact who sign Bonds must file with each Bond a certified and effective date copy of their Power of Attorney.

4. NOTICE TO PROCEED

Notice to Proceed shall be issued within ten (10) days of the execution of the Contract by OWNER. Should there by any reasons why Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between OWNER and CONTRACTOR. If Notice to Proceed has not been issued within the ten (10) day period or a period mutually agreed upon, CONTRACTOR may terminate the Contract without liability on the part of either party.

5. INSURANCE

All insurance must be written by an insurer licensed to conduct business in the State of Texas, unless otherwise permitted by OWNER. The CONTRACTOR shall, at his own expense, purchase, maintain and keep in force insurance that will protect against injury and/or damages which may arise out of or result from operations under this Contract, whether the operations be himself or by any Subcontractor or by anyone directly or indirectly employed by any of them. (No insurance policy or

certificate of insurance required by contract shall contain any aggregate policy year limit unless a specific dollar amount [or specific formula for determining a specific dollar amount] aggregate policy year limit is expressly provided in the contract which covers the particular insurance policy or certificate of insurance).

6. EQUAL OPPORTUNITY EMPLOYMENT & PREVAILING WAGES

Bidder is hereby advised that the work shall be subject to equal employment opportunity requirements, local prevailing wage rates, and Executive Order No.11246 as amended. In conformance with applicable statutes, the general prevailing wage rates in the locality in which the work is to be performed shall be minimum paid for labor employed upon this project.

Minimum paid wage rates as predetermined by the Secretary of Labor and State Statue have been included at the end of this section.

7. TAX EXEMPTIONS

The Owner is a sales tax exempt governmental entity. A sales tax exemption notice will be issued to the Contractor when the contract is awarded, in order that he does not have to pay sales taxes on labor and/or materials utilized in or consumed in connection with the Owner's project.

The Contractor performing this contract must issue to his suppliers an exemption certificate in lieu of the tax, said exemption certificate complying with all applicable State Comptroller's rulings, along with a copy of the sales tax exemption notice issued to him by the Owner.

END OF INSTRUCTIONS TO BIDDERS

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of $10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
	22.6 %	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.
The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is:

State of TEXAS

County of JEFFERSON

City of BEAUMONT

CONTRACTOR'S BID SUBMITTALS

BID

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____ doing business as _____ _____*.

To the_____ _____ (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of _____ in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within _____ consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of $ 1,000.00 for each consecutive calendar day thereafter as provided in section 15 of the General Conditions.

BIDDER acknowledges receipt of the following ADDENDUM:

_____

_____

*Insert "a corporation", "a partnership", or "an individual" as applicable.

CONTRACTOR'S BID

Jefferson County Engineering Department
1149 Pearl St., 5th Floor
Beaumont, Texas 77701

Having carefully examined the Bidding and Contract Documents for Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway in Jefferson County, Texas, as well as the premises and conditions affecting this work, and all other contract documents, the undersigned proposes to furnish all labor, equipment and materials necessary to complete the work for the following prices:

SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY								
Item No.	Spec No.	Alt	Description	Estimated Quantity	Unit	Unit Price	Unit Price (Written)	Total
100	001		PREPARING ROW (DITCH)	3.10	AC		and /100 Dollars	
110	001		EXCAVATION (DITCH)	14,048.00	CY		and /100 Dollars	
132	001		EMBANKMENT (TY D)	789.00	CY		and /100 Dollars	
164	001		SEEDING FOR EROSION CONTROL (DITCH)	6,304.00	SY		and /100 Dollars	
400	001		EXCAVATION FOR SIPHON STRUCTURE	157.00	CY		and /100 Dollars	
400	002		EXCAVATION FOR ARTICULATED CONCRETE MAT	2,508.00	CY		and /100 Dollars	
400	003		CEMENT STABILIZED BACKFILL	315.00	CY		and /100 Dollars	
403	001		TEMPORARY SPECIAL SHORING	4,136.00	SF		and /100 Dollars	
500	001		MOBILIZATION	1.00	LS		and /100 Dollars	
618	001		HIGH DENSITY POLYETHELENE PIPE (36" HDPE)	32.00	LF		and /100 Dollars	
618	002		HIGH DENSITY POLYETHELENE PIPE (36" HDPE)(HDD METHOD)	6,520.00	LF		and /100 Dollars	
2000	001		FILTER FABRIC	18,564.00	SF		and /100 Dollars	
8000	001		DEWATERING	1.00	LS		and /100 Dollars	
9000	001		ARTICULATED CONCRETE MATS (6")	2,046.00	SY		and /100 Dollars	
9010	001		VINYL SHEET PILE (SG-425)	2,220.00	SF		and /100 Dollars	
9010	002		VINYL SHEET PILE (SG-825) WITH WALE SYSTEM	3,500.00	SF		and /100 Dollars	
9020	001		SIPHON STRUCTURE (HEIGHT=9.0')/ W STUB-OUT	8.00	EA		and /100 Dollars	
9020	002		SIPHON STRUCTURE (HEIGHT=5.0')/ W STUB-OUT & FLAP GATE	8.00	EA		and /100 Dollars	
9020	003		SIPHON STRUCTURE (HEIGHT=6.0'))/W STUB-OUT & FLAP GATE	2.00	EA		and /100 Dollars	
9030	001		BREAKWATER (INSTALL)	408.00	CY		and /100 Dollars	
9030	002		BREAKWATER (REMOVE)	110.00	CY		and /100 Dollars	
							SUBTOTAL	
							GRAND TOTAL ALL ITEMS	

The undersigned shall include herewith security in the form of a bid bond, certified check, or cashier's check for an amount not less than five percent (5%) of the total amount of the bid to beawarded by Owner. To ensure adequate bid bond, Bidders should calculate bid bond based on the total amount of all Base Bids plus all Additive Bids (if any). The Bid Bond will be returned to or forfeited by the undersigned in accordance with the Bid Bond provision in the Instructions to Bidders. The undersigned further agrees that this Bid Bond is the appropriate measure of liquidated damages that the Owner will sustain by the failure of the undersigned to execute and deliver said contract and required documents.

The undersigned agrees that when written notice of bid acceptance is furnished by the Owner within 60 calendar days after the bid opening date, the undersigned will, within ten (10) calendar days from receipt of such notice, execute and deliver the contract and all required bonds and certificates of insurance to the Owner.

The undersigned agrees that this bid will not be withdrawn for a period of 60 calendar days from the date set for the bid opening, and the undersigned further agrees that the Bid Bond will be forfeited in the event this bid is withdrawn before expiration of said 60 calendar days.

By the signature hereon affixed, Bidder certifies that neither the Bidder, nor the firm, corporation, partnership, or institution represented by the Bidder, or anyone acting for such firm, corporation, or institution has violated the antitrust laws of this State, codified in Section 15.01 et seq., Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business.

By the signature hereon affixed, Bidder certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal or State department or agency.

By the signature hereon affixed, Bidder acknowledges that Bidder has not received compensation for participation in the preparation of the specifications for this project.

By the signature hereon affixed, Bidder certifies he is not currently delinquent in the payment to subcontractors or material suppliers of any franchise taxes owed the State of Texas under Chapter 171, Tax Code. Making a false statement as to corporate tax status is a material breach of contract.

By the signature hereon affixed, Bidder affirms that he has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted bid.

Signing this Bid with a false statement is a material breach of contract and shall void the submitted bid or any resulting contracts, and the Bidder shall be removed from all Owner Bid lists.

Bidder acknowledges receipt of the following addenda:

_____ _____

By_____

Name of Contracting Firm | Authorized Signature | Date

_____ _____

Address | Printed Name

_____ _____

City | State | Zip | Title

_____ _____

(Area Code) Phone Number | (Area Code) Fax Number

_____ _____

Email Address | (Area Code) Cell Phone Number

THIS FORM MUST BE COMPLETED AND SUBMITTED WITH BID

CONTRACTOR'S QUALIFICATIONS

Required as a statement of qualifications to Jefferson County prior to contract award for Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway.

CONTRACTOR:

Firm: _____

Address: _____

City: _____ State: _____ Zip Code _____ Tel. (_____) _____

____ Individual ____ Partnership ____ Corporation incorporated under the laws of the State of _____

With principal place of business in: City_____, State _____

OWNERSHIP

Bidder must provide in the spaces provided below, the name of and individual owner, a sole proprietor and all partners, shareholders, or owners with an ownership interest of at least twenty five percent (25%) of the business entity entering into this contract.

Name	%
Name	%
Name	%
Name	%

FIRM HISTORY:

List firm history including any other business names used.

From_____ to_____ Firm Name _____

Address _____ City_____ State _____

From_____ to_____ Firm Name _____

Address _____ City_____ State _____

From_____ to_____ Firm Name _____

Address _____ City_____ State _____

Has firm, under its current or former name(s), ever failed to complete a project, defaulted on a contract, or been engaged in litigation over a contract?

□ Yes □ No - If YES, state particulars of most recent occurrence on separate sheet(s) and attach to this form.

CONSTRUCTION CAPABILITIES:
List construction experience of principle individuals of your organization.

Name	Present Position or Office	Years Experience
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

FIRM'S WORK VOLUME: Indicate average annual construction volume $_____

Indicate percentage of this volume by construction categories:

Utility Plants ….	_____ %	Concrete ……	_____ %	Marine …….	_____ %
Utility Lines …..	_____ %	Site Work ….....	_____ %	Other ..…….	_____ %
Electrical…….....	_____ %	Highway / Roads	_____ %		
Plumbing.....	_____ %	Earthwork …….	_____ %		

BONDING REFERENCES:

Indicate agency through which bonding requirements will be obtained.

Agency _____ Address _____

City _____ State _____ Zip _____

Agent's Name _____ Tel. (_____) _____

Agent(s) with Power of Attorney from Bonding Company (name(s) _____

_____. Expiration Date of Power of Attorney _____

BONDING COMPANY: _____ Address _____

City _____ State _____ Zip _____

Bonding Company representative to contact for verification:

Name _____ Tel. (____)_____

CONSTRUCTION PERFORMANCE RECORD:

List three projects that are at least 30% complete or have been completed within the last two years

1. Project Title or Description _____

   Project Location _____

   Project Number _____ Contract Amount $ _____

   Project Owner (Firm or Agency) _____

   Address _____ City _____ State _____

   Owner / Owner's representative familiar with details of the project (name) _____

   Telephone (____) _____ Project percent complete ____% if completed, date completed _____

2. Project Title or Description _____

   Project Location _____

   Project Number _____ Contract Amount $ _____

   Project Owner (Firm or Agency) _____

   Address _____ City _____ State _____

   Owner / Owner's representative familiar with details of the project (name) _____

   Telephone (____) _____ Project percent complete ____% if completed, date completed _____

3. Project Title or Description _____

   Project Location _____

   Project Number _____ Contract Amount $ _____

   Project Owner (Firm or Agency) _____

   Address _____ City _____ State _____

   Owner / Owner's representative familiar with details of the project (name) _____

   Telephone (____) _____ Project percent complete ____% if completed, date completed _____

I hereby certify that all the information provided above and attached is true and correct.

Name of Firm	Signature of Owner or Officer
Title of Person Signing	Date

CONDITIONS OF THE CONTRACT

JEFFERSON COUNTY

GENERAL CONDITIONS,
Including SUPPPLEMENTARY CONDITIONS
For

SIPHON CONTROL STRUCTURES
AT
OILCUT DITCH AND SALT BAYOU
AT THE
GULF INTRACOASTAL WATERWAY

GENERAL CONDITIONS, Including SUPPPLEMENTARY CONDITIONS

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ARTICLE I. CONTRACT DEFINITIONS

Whenever the following terms are used in these General Conditions or in the other Contract Documents the intent and meaning shall be interpreted as follows:

1.1 CONTRACT DOCUMENTS: The Contract Documents consist of the Owner-Contractor Agreement, The Conditions of the Contract (General, Supplementary General and Special Conditions), the Advertisement to Bid, Instructions to Bidders, Drawings, Specifications, and all addenda issued prior to bidding and any Change Orders issued after execution of the Contract. The Contract Documents do not include Bidding documents such as sample forms, unless specifically enumerated in the Owner-Contractor Agreement or the Supplementary General Conditions.

1.1.1 The Contract Documents form the CONTRACT, which represents the entire and integrated agreement between the Owner and the Contractor and supersedes all prior negotiations, representations or agreements, either written or oral. The Contract Documents are complementary, and what is required by any one document shall be as binding as if required by all.

.1 (Suppl) The intention of the documents is to include, except as specifically excluded, all labor, plant, materials, facilities and services necessary for the proper execution and completion of the work.

1.1.2 Supplementary General Conditions are the standard procedures and contract administration requirements of the Owner and alter or expand upon matters covered in the Uniform General Conditions.

.1 (Suppl) Supplementary General Conditions for Jefferson County project are included in this printing within the body of the Uniform General Conditions, in bold font with a (Suppl) notation preceding the text.

1.1.3 Special Conditions relate to a specific project and are peculiar to it.

.1 (Suppl) "Special Conditions" where used herein refers to all sections in Division I – General Requirements of the Specifications.

1.2 OWNER: The Owner is Jefferson County. Hereinafter, the term "Owner" refers to the Agency responsible for the execution of this contract.

1.3 ENGINEER: A person registered as a licensed professional engineer pursuant to Article 327a, T.C.S., or firm employed to provide professional engineering services and having overall responsibility for the design or production of documents for a project or a significant portion thereof.

1.3.1 (Suppl) Project Manager: The person designated as the Owner's Representative who is responsible for the general administration of the Contract.

1.3.2 (Suppl) Project Inspector: The person designated as the Owner's Representative who is responsible for ascertaining the correctness of the work and conformity with the Contract Documents.

1.3.3 (Suppl) Project Engineer: The person or company designated as the Owner's Representative responsible for the engineering design of the work provided for the Contract.

1.4 CONTRACTOR: The individual, corporation, company, partnership, firm or other organization that has contracted to perform the work under the contract with the Owner.

1.5 SUBCONTRACTOR: A person or organization who contracts under, or for the performance of part or all of, the contract between the Owner and the Contractor. The Subcontract may be direct with the Contractor or with another Subcontractor.

1.6 PROJECT: The term “Project” shall comprise the Work defined by the Contract Documents.

1.7 WORK: All labor, plant, materials, facilities, and all other things that are required by the Contract Documents.

1.8 DAY: Wherever the word “Day” is used in the Contract Documents, it shall be interpreted to mean a calendar day, unless otherwise specifically stipulated.

1.9 CONTRACT SUM: Is the total compensation payable to the Contractor for performing the Work as originally contracted for or as subsequently adjusted by Change Order.

1.10 CONTRACT DATE: Contract Date is the same as the date of the Contract Award Notice issued by the Owner.

1.11 NOTICE TO PROCEED: Notice to Proceed is the written notice provided to the Contractor by the Owner which establishes the date for commencement of contract work and the date for completion of the contracted project or work

ARTICLE II. LAWS GOVERNING CONSTRUCTION

2.1 COMPLIANCE WITH LAWS: In the execution of the contract, the Contractor must comply with all applicable State and Federal laws, including but not limited to laws concerned with labor, environment, equal employment opportunity, safety and minimum wages. The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State and Local laws, ordinances and regulations which in any manner affect the conduct of the work, and shall indemnify and save harmless Jefferson County and its official and/or contractual representatives against any claim arising from violation of any such law, ordinance or regulations by himself or by his Subcontractors, or suppliers at any tier, or his or their employees.

2.1.1 (Suppl) The Contractor shall cooperate with applicable city or other government officials at all times where their jurisdiction applies. The Contractor shall make application for any permits and permanent utilities that are required for the execution of the contract.

2.1.2 (Suppl) Disclosure of Information: If any good or services are purchased under this contract with federal grant funds, the Owner, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives shall have access to any books, documents, papers and records of the Contractor which are directly pertinent to this specific grant program for the purpose of making audit, examination, excerpts, and transcriptions. All pertinent records will be maintained for at least six (6) years after final payment is made and all other pending matters closed.

2.1.3 (Suppl) Security Information: Jefferson County may be in possession of confidential information and material which require protection under applicable laws, rules and regulations, as well as policies and procedures of Jefferson County. Confidential information and material obtained within or from Jefferson County shall not be discussed, communicated, copied, extracted, or used in any manner by the Contractor or the Contractor's personnel. Magnetic media, program source code, program and system documentation or copies thereof shall not be permitted to be removed from the Owner's possession unless specifically authorized in writing by Jefferson County. If so released, the Contractor and Contractor's personnel shall comply with any stated terms of release and return of materials.

The Contractor shall ensure information about Jefferson County's clients will be kept confidential.

2.1.4 (Suppl) Applicability of the Texas Open Records Act: Jefferson County is a governmental agency under the Texas Open Records Act, TEX. Govt. Code Chapter 552.

.1 (Suppl) Information submitted by Contractor is subject to release by Jefferson County as public information unless the information or specific parts thereof can be shown to fall within one or more of the exceptions listed in the Act. If Contractor believes parts of their information are exempt from disclosure under the Open Records Act, they shall specify those parts and exceptions that they believe apply, with specific detailed reasons. Vague and general claims to confidentiality are not acceptable. Jefferson County shall have sufficient information to give to the Attorney General if his opinion is requested. The Attorney General has previously ruled that the exception pertaining to advantage to competitors of Contractors generally does not apply after the contract has been awarded.

.2 (Suppl) Once a Contract has been awarded, information will automatically be considered public information unless a detailed explanation giving basis for a claim for exemption from disclosure is presented by Contractor.

2.1.5 (Suppl) Civil Rights: By this reference, the Contractor agrees to comply with Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and all amendments to each, and all requirements by the regulations issued pursuant to these Acts. In addition, the contractor agrees to comply with Title 40, Chapter 73, of the Texas Administrative Code. These provide in part that no persons in the United States shall, on the grounds of race, color, national origin, sex, age, disability, political beliefs or religion be excluded

from participation in or denied, any aid, care, service or other benefits provided by federal or state funding, or otherwise be subjected to any unlawful discrimination.

2.1.6 (Suppl) Immigration Reform: By this reference, all requirements to comply with the immigration Reform and Control Act of 1986 regarding employment verification and retention of verification forms for any individuals hired on or after November 06, 1986, who will perform any labor or services under this contract are incorporated.

2.1.7 (Suppl) Texas Business and Commerce Code: All sections of the Texas Business and Commerce Code which protect the Owner are hereby incorporated by reference.

2.1.8 (Suppl) Governing Law: Any contract resulting from the information submitted shall be construed in accordance with the laws of the State of Texas without reference to any choice of law principles that would result in the application of the law of any state other than the state of Texas.

2.2 WAGE RATES: The Contractor is required to pay not less than the wage scale of the various classes of labor as shown on the "Prevailing Wage Rates Section" provided by Owner. The specified wage rates are minimum rates only, the Owner will not consider any claims for additional compensation made by any Contractor because of payment by the Contractor of any wage rates in excess of the applicable minimum rate contained in the Contract.

2.2.1 Contractor shall forfeit as a penalty to the Owner sixty dollars ($60.00) for each laborer, workman or mechanic employed, for each calendar day, or portion thereof, such laborer, workman or mechanic is paid less than the said stipulated minimum rates for any work done under said contract, by him, or by any Subcontractor under him. The Contractor and each Subcontractor shall keep, or cause to be kept, an accurate record showing the names and occupations of all laborers, workmen and mechanics employed in connection with the work, and showing also the actual per diem wages paid to such workers, which record shall be open at all reasonable hours for the inspection by the Owner.

.1 (Suppl) Payroll records shall be maintained and available for inspection by Owner's Representatives at the job site.

2.3 STATE SALES AND USE TAXES: The Owner qualifies for exemption from State and Local Sales and Use Taxes pursuant to the provisions of the Texas Tax Code (Title 2, Chapter 151, Subsection 151.309).

The Contractor shall comply with applicable provisions of Chapter 34, Rules 3.291 and 3.357 of the Texas Administrative Code, or other procedures as may be prescribed by the State Comptroller of Public Accounts regarding tax exemptions.

2.4 ANTITRUST CLAIMS: The contractor shall assign to the Owner any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States, 15 U.S.C.A. Secs. 1 et. seq.

2.4.1 (Suppl) The Contractor shall assign to the Owner any and all claims for overcharges associated with this contract which arise under the antitrust laws of the State of Texas, TEX.BUS. & COMM. Code Ann. Sec. 15.01, et. seq. (1967).

2.5 VENUE OF SUITS: The exclusive venue of any suit brought for breach of contract for this project shall be in any state court of competent jurisdiction in Jefferson County, Texas.

2.5.1 (Suppl) The exclusive venue of any suit brought against Contractor's bonds shall be in the county in which the project is located.

ARTICLE III. CONTRACT DOCUMENTS AND BONDS

3.1 COPIES FURNISHED – DRAWINGS AND SPECIFICATIONS: The Contractor will be furnished free of charge the number of complete sets of Contract Drawings and Specifications as provided in the Supplementary General Conditions. Additional complete sets of Drawings and Specifications, if requested, will be furnished at reproduction cost to the one requesting such additional sets.

3.1.1 (Suppl) Unless otherwise called for in the Special Conditions, up to two (2) sets of drawings and specifications will be furnished to the Contractor free of charge.

3.2 OWNERSHIP OF DRAWINGS AND SPECIFICATIONS: All Drawings, Specifications and copies thereof furnished by the Owner or the Architect/Engineer are and shall remain property of the Owner. They are not to be used by Contractor on any other project, and with the exception of one (1) contract set for each party to the contract, are to be returned to the Owner upon request following completion of the work.

3.3 DRAWINGS AND SPECIFICATIONS AT THE SITE: The Contractor shall maintain at the site one (1) copy of all Drawings, Specifications, Addenda, approved Shop Drawings and Contract Modifications, in good order and marked to record all changes made during construction.

3.3.1 (Suppl) The Contractor shall also record the exact locations of buried utilities, concealed work, and all facilities designated by Contract Documents to be located in the field by Owner.

3.3.2 (Suppl) Recorded changes shall be made with the same accuracy of dimension and/or scale as shown originally by the Contract Documents.

3.3.3 (Suppl) All records prescribed herein shall be made available for reference and examination by the Owner's Representatives. The Contractor shall update the "Record Drawings" a minimum of once monthly prior to submission of periodic partial pay estimates.

3.3.4 (Suppl) Upon completion of all the Work and prior to final acceptance and final payment by the Owner, the Contractor shall furnish a complete set of "Record Drawings" to the Owner.

3.4 PERFORMANCE AND PAYMENT BONDS: Payment or Performance Bonds are not required on contracts of $25,000.00 or less unless otherwise stipulated in Supplementary General Conditions. If the total contract price exceeds $25,000.00, but is less than $100,000.00, the contractor shall execute in accordance with the provisions of Article 5160, Texas Civil Statutes, a Payment Bond in the amount of the total contract price, solely for the protection of those supplying labor, materials and/or equipment in the prosecution of the contract. If the total contract price exceeds $100,000.00 the Contractor shall execute a Payment Bond and a Performance Bond in the amount of the total contract price conditioned upon the faithful performance of the contract. The Performance Bond shall be solely for the protection of the Owner.

3.4.1 (Suppl) A "Payment Bond" herein refers to a deposit, pledge, or contract of guaranty supplied by the successful Contractor to protect the Owner against loss due to the contractor's failure to pay material suppliers, laborers and subcontractors.

3.4.2 (Suppl) A "Performance Bond" herein refers to a deposit, pledge, or contract of guaranty supplied by the successful Contractor to protect the Owner against loss due to the Contractor's inability or failure to complete the Contract as agreed.

3.4.3 (Suppl) Acceptable forms of Payment Bonds and Performance Bonds are: cashier's check or irrevocable letter of credit issued by a financial institution subject to the laws of Texas; a surety or blanket bond from a company chartered or authorized to do surety business in Texas; United States Treasury bond, or insured certificate of deposit.

3.4.4 (Suppl) Each bond shall be executed by a corporate surety or corporate sureties duly authorized to do business in the State of Texas, and those acceptable to the Owner, and on forms approved by the

Attorney for the Owner. If any surety upon any bond furnished in connection with the Contract becomes insolvent, or otherwise not authorized to do business in the State, the Contractor shall promptly furnish equivalent security to protect the interests of the Owner.

3.4.5 (Suppl) Each Bond shall be accompanied by a valid Power-of-Attorney (issued by the Surety Company and attached, signed and sealed, with the corporate embossed seal, to the bond) authorizing the agent who signs the bond to commit the company to the terms of the bond, and stating (on the face of the Power-of-Attorney) the limit, if any, in the total amount for which he is empowered to issue a single bond.

3.4.6 (Suppl) The Owner will consider Performance and Payment Bonds from Surety Firms qualified to do business in Texas which have approval listings in the current United States Department of Treasury Circular 570, "Companies holding Certificates of Authority as acceptable Sureties of Federal Bonds and Acceptable Reinsuring Companies", Sections 9304 through 9308 of Title 31 of the United States Code.

.1 (Suppl) The Owner will accept only, sureties licensed to do surety business in the State of Texas, in lieu of Article 3.4.3.

3.4.7 (Suppl) Contractor's obligation to furnish the required bonds is one of the initial requirements of the contract that must be accomplished before a Notice to Proceed will be issued. If the bonds are not provided within ten (10) calendar days after Contractor's receipt of Notice of Award, then, at Owner's option, the Contract will be terminated and Contractor's bid bond forfeited.

3.5 INTERRELATION OF DOCUMENTS: The interrelation of the Specifications, the Drawings and the Schedules is as follows: the Specifications determine the quality of the several materials: the Drawings establish the quantities, dimensions and details; and the Schedules give the locations. Anything mentioned in the Specifications and not shown on the Drawings or Schedules, or shown on the Drawings or Schedules and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.

3.5.1 Should the Drawings disagree one with another, or with Specification, the better quality or greater quantity of work or materials shall be performed or furnished. Figures given on Drawings govern over small scale drawings, and large scale drawings govern over small scale drawings.

.1 (Suppl) Figures given on drawings shall govern over scaled measurements from drawings.

3.5.2 The "Scope of the Work", placed in the front part of each Section of the Specifications, is intended to designate the scope and locations of all items of the work included therein, either generally or specifically. It is not intended to limit the Scope of Work should plans, schedules or notes indicate an increased scope. Inadvertent omission of an item from its proper section of the specifications and its inclusion in another section shall not relieve the Contractor of responsibilities for the item specified.

ARTICLE IV. CONTRACT ADMINISTRATION

4.1 GENERAL ADMINISTRATION: Unless otherwise provided for in the Contract Documents, the Architect/Engineer will provide general administration of the contract and will be the Owner's representative during construction and until final payment. The Owner assumes no responsibility for any understanding given or representation made orally by its agents prior to the execution of this Contract, unless such understanding(s) or representations(s) are expressly stated in the Contract. The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor. Any failure by the Contractor to become acquainted with available information will not relieve it from responsibility for properly estimating the difficulty or cost of successfully performing the work or mutually agreed changes thereto.

4.1.1 The Engineer has the authority to act on behalf of the Owner to the extent provided for in the Contract Documents, unless otherwise modified by written instrument that will be shown to the Contractor. The Engineer will advise and consult with the Owner, and the Owner's instructions to the Contractor will generally be issued through the Engineer, except that the Owner reserves the right on appropriate occasions to issue instructions directly to the Contractor through other designated representatives.

4.1.2 All instructions affecting Contract Sum, Contract Time or Contract Interpretation, shall be confirmed expeditiously in writing with copies furnished to the Engineer, the Owner's designated representatives, and the Contractor by the party issuing the instruction. No instruction affecting the Engineer's professional design liability shall be issued without his prior written consent.

.1 (Suppl) The Engineer will be the interpreter of the requirements of the Contract Documents necessary for the proper execution and progress of the Work. All interpretations and decisions of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents.

4.1.3 The Engineer shall have the authority to reject work performed by the Contractor which, in the opinion of the Engineer, does not meet the requirements of the Contract, and to order such work removed and replaced in accordance with paragraph 5.11.

4.2 ACCESS TO AND INSPECTION OF THE WORK: The Contractor shall provide sufficient, safe and proper facilities at all reasonable times for the observation and/or inspection of the Work by the authorized representatives of the Owner. The Engineer and the Owner will make periodic visits to the site to familiarize themselves with the progress and quality of the Work and to determine if the Work is proceeding generally in accordance with the Contract Documents.

4.2.1 (Suppl) INSPECTIONS: Inspection by Owner's Representative in no way relieves the Contractor from his obligation to supervise and direct the Work, to follow the plans and specifications implicitly, and to provide the designated quality and quantity of materials and workmanship for all job stages. The Inspector will be present on the site as frequently as the Owner deems necessary to explain project requirements and to judge whether the quality and quantity of the work complies with the Contract Documents. The Owner, acting through either the Project Inspector or the Project Manager, has the authority but not the duty to stop the Contractor from beginning or completing any portion of the work that in any way fails to conform to the drawings and specifications.

4.3 SEPARATE CONTRACTS: The Owner reserves the right to award other contracts in connection with other portions of the project under these or similar conditions of the contract.

4.3.1 When separate contracts are awarded for different portions of the project, "the Contractor" in the Contract Documents in each case shall be the Contractor who signs each separate contract. This Contractor shall properly connect and coordinate his work with the work of other Contractors. If any part of this Contractor's work depends for proper execution or proper results on the work of any other separate Contractor, this Contractor shall inspect and promptly report in writing to the Engineer any discrepancies or defects he may find in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute and acceptance of the other Contractor's

work as fit and proper to receive his work, except as to defects which may develop in the other separate Contractor's work after the execution of this Contractor's work.

4.3.2 Should this Contractor cause damage to the work or property of any separate Contractor on the project, this Contractor shall, upon due notice, endeavor to settle with such other Contractor by agreement. If such separate Contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify this Contractor who shall defend such proceedings and pay all costs in connection therewith, and if any judgment against the Owner arises there from, this Contractor shall pay or satisfy it.

4.3.3 This Contractor shall afford the Owner and/or other Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and shall properly connect and coordinate his work with theirs.

4.4 CONTRACT TERMINATION:

4.4.1 Termination by Contractor: If the work is stopped for a period of thirty (30) calendar days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the work under a contract with the Contractor, then the Contractor may, upon ten (10) additional days written notice to the Owner and the Engineer, terminate the contract and recover from the Owner payment for all work executed and for any loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and overhead associated with such work or losses and reasonable expenses resulting from such termination. If the cause of the work stoppage is removed prior to the end of the ten (10) day notice period, the Contractor may not terminate the contract under the provisions of this section 4.4.1.

4.4.2 Termination by Owner: If the Contractor persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, pay his Subcontractors or Suppliers, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, or fails to so prosecute the work as to insure its completion, within the time, or any extension thereof, specified in this Contract, then the Owner may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, ten (10) days written notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor. Should the surety fail to respond within fifteen (15) days following such notice and fail to pursue completion of the work with diligence acceptable to the Owner, the Owner may arrange for completion of the work and deduct the cost thereof from the unpaid contract sum remaining, including the cost of additional Engineer services made necessary by such default or neglect, in which event no further payment shall then be made by the Owner until all costs of completing the work shall have been paid. If the unpaid balance of the contract sum exceeds the costs of finishing the work, including compensation for the Engineer's additional services made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor or his surety shall pay the difference to the Owner. This obligation for payment shall survive the termination of the Contract.

4.4.3 Termination for Convenience of Owner: Prior to, or during the performance of the work, the Owner reserves the right to terminate the contract for unforeseen causes not limited to court orders, loss of funding, acts of the federal government to discontinue the work, etc., that may occur. Upon such an occurrence, the following procedures will be adhered to:

.1 The Owner will immediately notify the Engineer and the Contractor in writing, specifying the effective termination date of the Contract.

.2 After receipt of the Notice of Termination, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due at that point in the Contract.

a. Stop all work.

b. Place no further subcontracts or orders for materials or services.
c. Terminate all subcontracts.
d. Cancel all material and equipment orders as applicable.
e. Take action that is necessary to protect and preserve all property related to this Contract which is in the possession of the Contractor.

.3 Within sixty (60) days of the date of the Notice of Termination, the Contractor shall submit a final termination settlement proposal to the Owner based upon costs up to the date of termination, reasonable profit on work done only, and reasonable demobilization costs. If the Contractor fails to submit the proposal within the time allowed, the Owner may determine the amount due to the Contractor because of the termination and shall pay the determined amount to the Contractor.

.4 If the Contractor and the Owner fail to agree on the settlement amount, the matter will be handled as a dispute through administrative procedures as established in the Supplementary General Conditions.

4.5 WRITTEN NOTICE: Written notice shall be considered to have been duly given if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail to the last business address known to one who gives the notice.

4.6 DISPUTED MATTERS: Disputed matters, and protests, shall be handled through administrative procedures as established in Supplementary General Conditions. Such matters shall be referred to the Owner's established administrative review process prior to resort by either party to judicial redress through courts of law.

4.6.1 (Suppl) Any dispute concerning a question of fact arising under this contract, not disposed of by agreement between the Engineer and Contractor, shall be appealed by the Contractor to the Owner. Such decision shall be final and conclusive unless, within thirty (30) calendar days, from the date of receipt thereof, the Contractor mails or otherwise furnishes to the Owner a written appeal. The Contractor shall be afforded an opportunity to be heard and to offer evidence in support of this appeal. The decision of the Owner will be final and conclusive. Pending final decision of the dispute hereunder, the Contractor shall proceed with the performance of the contract in accordance with the Owner's decision.

.1 (Suppl) This disputes provision does not preclude consideration of questions of law in connection with decisions provided for in this Article. Nothing in this contract, however, shall be construed as making final the decision of any Jefferson County administrative official or representative on a question of law.

4.6.2 (Suppl) The dispute resolution process provided for in Chapter 2260 of the Texas Government Code must be used by the Owner and Contractor to attempt to resolve all disputes arising under this contract.

ARTICLE V. CONTRACT RESPONSIBLITIES

5.1 OWNER'S RESPONSIBILITIES: The Owner shall furnish all surveys, describing the physical characteristics, legal description and limitations, site utility locations and other information necessary to the Contractor which is under the Owner's control. Communication with the Contractor shall be in accordance with paragraph 4.1.1. Necessary actions of the Owner, including processing of payments to the Contractor, shall be accomplished with reasonable promptness.

5.2 OWNER – CONTRACTOR OBLIGATIONS: The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the Owner.

5.3 CONTRACTOR'S RESPONSIBILITIES: The Contractor shall supervise and direct the work using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, safety, sequences and procedures, and for coordinating all portions of the work under his contract.

5.3.1 (Suppl) Correcting Deficient Work: In the event the Owner issues a Deficient Work Order, the Contractor has the duty to rework as necessary and complete that portion in a manner that conforms to the drawings and specifications and has no right to assert a claim for damages attendant to such order.

5.4 CONTRACTOR'S SUPERINTENDENT: The Contractor shall employ a competent Superintendent who shall be in attendance at the project site during the progress of the work. The Superintendent shall be satisfactory to the Owner, and shall not be changed except with the written approval of the Owner unless he leaves the employment of the Contractor. The Superintendent shall represent the Contractor and shall have full authority to act on his behalf. All communication given to the Superintendent shall be as binding as if given to the Contractor. All oral communication affecting Contract Time, Contract Cost and Contract Interpretation will be confirmed in writing.

5.4.1 (Suppl) The Contractor shall, as soon as practicable after receipt of Notice of Award and before commencement of the work, submit to the Owner the name of the person designated as Project Superintendent.

5.4.2 (Suppl) Subcontracts: As soon as practicable after receipt of Notice of Award and before commencement of the work, the Contractor shall submit to the Owner for approval, a list of all Subcontractors he and his major Subcontractors propose to use in the construction of the project. The Contractor shall not employ any Subcontractor to whom the Owner has a reasonable objection. After the execution of the Contract, a substitution for an approved Subcontractor or addition of a new Subcontractor shall be made only with the written consent of the Owner.

5.5 ACTS AND OMISSIONS: The Contractor shall be responsible for acts and omissions of his employees and his Subcontractors, their agents and employees.

5.5.1 (Suppl) The Contractor agrees to bind every Subcontractor to the terms of the Uniform General Conditions, Supplementary General Conditions, the Special Conditions, and the Drawings and Specifications of the Contract. The Contractor shall inform his Subcontractors, prior to executing an agreement with them, that they will be required to perform their work in conformance with related documents and to submit cost estimates and Change Order proposals in sufficient detail when so requested. The Contractor shall indemnify the Owner for any Subcontractor's claim that may result from the Contractor's failure to incorporate the provisions of this contract in agreements with any of his Subcontractors.

5.5.2 (Suppl) Removal of Employees: The Owner will, in writing, require the Contractor to remove from the Work any employee of the Contractor or a Subcontractor who the Owner finds careless, incompetent, or otherwise objectionable. Owner has no duty to make any such objection, and failure to do so shall not relieve Contractor from any obligation under the Contract.

5.6 CONDITIONS AT SITE OR BUILDING

5.6.1 The Contractor is responsible for having visited the site and having ascertained pertinent local conditions such as location, accessibility, and general character of the site or building, the character and extent of existing work within and adjacent to the site, and any other work being performed thereon at the time of the submission of his bid. Any failure to do so will not relieve him from responsibility for successfully performing the work without additional expense to the Owner.

5.6.2 If, in the performance of the Contract, subsurface, latent or concealed conditions at the site are found to be materially different from the information included in the bid documents, or if unknown conditions of an unusual nature are disclosed differing materially from the conditions usually inherent in work of the character shown and specified, the Engineer shall be notified in writing of such conditions before they are disturbed. Upon such notice, or upon his own observation of such conditions, the Engineer, with the approval of the Owner, will promptly make such changes in the Drawings and Specifications as he deems necessary to conform to the different conditions, and any increase or decrease in the cost of the work, or in the time within which the work is to be completed, resulting from such changes will be adjusted by Change Order, subject to the prior approval of the Owner.

5.6.3 (Suppl) Existing Improvements: The Contractor will protect from damage improvements, vegetation, and utilities at or near the site of the work.

.1 The approximate location of existing underground improvements and utilities is shown on the Drawings according to the best information available to the Owner; in addition, the Contractor will make every effort to establish the exact location of such underground improvement or utility by contacting Owners of same and by prospecting in advance of all trenching and subsurface excavations.

.2 The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site of work which is not to be removed and which does not unreasonably interfere with the construction work. Any limbs or branches of trees broken during construction shall be trimmed with a clean cut and painted with an approved tree pruning compound as directed by the Owner. Care will be taken in removing trees authorized for removal to avoid damage to vegetation to remain in place.

.3 If the Contractor damages any existing improvements, utility, or vegetation, the Contractor shall repair such damage without delay and without cost to the Owner. If the Contractor fails or refuses to repair such damage promptly, the Owner will have the necessary repairs performed and deduct the cost thereof from money due or to become due the Contractor.

5.7 INSURANCE:

5.7.1 The Contractor shall not commence work under this contract until he has obtained all the insurance required hereunder and certificates of such insurance have been filed with and accepted by the Owner. Insurance coverage shall provide for a thirty (30) day notice of cancellation or material change to the policy coverage and or limits. Acceptance of the insurance certificates by the Owner shall not relieve or decrease the liability of the Contractor.

.1 (Suppl) Contractor shall furnish Certificates of Insurance to the Owner within ten (10) days after receipt of Notice of Award and prior to Owner's issuance of Notice to Proceed. If Contractor fails to provide Certificate of Insurance within such time, the Owner will terminate the contract, and in the event of such termination, Contractor's bid bond will be forfeited.

.2 (Suppl) Contractor shall furnish to the Owner a copy of Owner's Protection Liability Insurance Policy naming the Owner, its employees, and the Engineer as insured, and Contractor shall furnish a copy of endorsement to Builder's Risk Insurance Policy, if required, naming his Subcontractors and the Owner as additional insured.

5.7.2 Unless otherwise provided for in Supplementary Conditions, the Contractor shall provide and maintain, until the Work included in this Contract is completed and accepted by the Owner, the minimum insurance coverages that follow, provided that the limits of liability may be met in part by the use of umbrella or excess policies, and further provided that the limits of liability stated below are reduced by fifty percent (50%) if the contract sum is $25,000 or less:

.1 (Suppl) Minimum insurance coverages for this project shall be as follows:

Type of Coverage	**Limits of Liability**
.1 Worker's Compensation …….. Statutory	
.2 Employer's Liability	
Bodily Injury by Accident …….	**$1,000,000 each Accident**
Bodily Injury by Disease ……	**$1,000,000 each Employee**
Bodily Injury by Disease ……	**$1,000,000 Policy Limit**
.3 Comprehensive General Liability.....	**$3,000,000 Aggregate**
Combined Bodily Injury ……	**$3,000,000 Products – Completed Operations**
Property Damage ……	**$3,000,000 Personal & Advertising Liability**
.4 Comprehensive Auto Liability ……	**$1,000,000 Combined Single Limit**

.5 Owner's Protective Liability Insurance Policy: The Contractor shall obtain at his expense an Owner's Protective Liability Insurance Policy naming Jefferson County and its employees as named insured, and the Engineer named as Additional Insured with the following limits:

.1 Bodily Injury	**$3,000,000 each Occurrence**
	$3,000,000 Aggregate

.6 Builder's All Risk Insurance: The Contractor shall obtain at his expense on an all risk of physical lost basis, Builder's Risk Insurance coverage including workmanship acceptable to the Owner, n the amount of insurance equal at all times to 100% of the insurable value of materials delivered and labor performed. The policy shall have endorsements as follows:

"This insurance shall be specific as to coverage and not considered as contributing insurance with any permanent insurance maintained on the present premises."

.7 Flood Insurance when specified in Supplementary General Conditions.

.1 (Suppl) Flood insurance will be maintained at same level of coverage as Builder's All Risk Insurance.

5.8 SAFETY PRECAUTIONS AND PROGRAMS:

5.8.1 It shall be the duty and responsibility of the Contractor and all of its Subcontractors to be familiar and comply will all requirements of Public Law 91-596, 29 U.S.C. Secs. 651 et. seq., the Occupational Safety and Health Act of 1970, (OSHA) and all amendments thereto, and to enforce and comply with all of the provisions of this Act. In addition, on projects in which trench excavation will exceed a depth of five (5) feet, the Contractor and all of its Subcontractors shall comply with all requirements of 29 CFR 1926, Subpart P, "Excavations", OSHA Safety and Health Regulation for Construction, which are more fully described in the Special Conditions and shall require a pay item classification, pursuant to paragraph 7.1, for the particular safety system to be utilized by the Contractor.

.1 (Suppl) Before commencing any trench excavation which will exceed a depth of five (5) feet, Contractor will provide Owner with detailed plans and specifications regarding the safety systems to be utilized. Said plans and specifications shall include a certification from a registered professional engineer indicating full compliance with OSHA provisions, 29 CFR 1926, Subpart P, excavations. Additional provisions, if required, are addressed in Article 7.1.1 and will be stated in the Special Conditions.

5.8.2 In any emergency affecting the safety of persons and property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor resulting from emergency work shall be considered in accordance with Article VI for Contract Changes.

5.9 MATERIALS AND WORKMANSHIP: All work shall be executed in accordance with the Contract Documents, complete in all parts and in accordance with approved practices and customs, and of acceptable finish and workmanship. Unless otherwise specified, all materials and equipment incorporated in the work under the contract shall be new.

5.9.1 (Suppl) Materials shall be unused and of current production.

5.10 TESTS: If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be inspected, tested or approved, the Contractor shall give the Owner and the Engineer timely notice of its readiness and of the date arranged so the Engineer may observe such inspection, testing or approval. In addition, the Owner or the Engineer may require special inspection, testing or approval of material or work for compliance with the requirements of the Contract Documents. Upon direction of the Owner and Engineer, the Contractor shall promptly arrange for such special testing, inspection or approval procedure. Should material or work fail to comply with the requirements of the Contract Documents, the Contractor shall bear all costs of the testing, inspection or approval, as well as the cost of replacement of unsatisfactory material or work as provided by paragraph 5.11; otherwise, the Owner shall bear such costs and an appropriate Change Order shall be issued. The costs of routine testing shall be borne by the Owner, but the Contractor shall be responsible for the cost of material tested. When directed by the Owner, material compliance with the Specifications shall be made by one of the following:

a. Manufacture's Certificate of Compliance
b. Mill Certificate
c. Testing Laboratory Certification
d. Report of Actual Laboratory Test from the Owner's laboratory or from a laboratory satisfactory to the Owner. Samples tested shall be selected by or in the presence of the Owner and the method of testing shall comply with the professional society's standard specifications.

5.10.1 (Suppl) The Contractor shall notify the Owner's Representative, sufficiently in advance of other work so as to prevent delays, when work is ready for testing. Unless otherwise stated in Special Conditions, the Contractor shall bear all costs for testing which is implemented in the absence of the Owner's Representative.

5.10.2 (Suppl) All tests shall be scheduled to start and terminate during normal work hours on normal workdays. No testing will be scheduled on holidays or weekends unless approved by the Owner's Representative.

5.10.3 (Suppl) The Contractor has the right to have tests performed on any material at any time for his own information and job control and at his own cost. The Owner does not assume responsibility for costs of such tests or for giving them consideration when apprising quality of materials.

5.11 REMOVAL OF DEFECTIVE WORK: If any materials furnished under this contract are condemned by the Owner and/or Engineer, the Contractor shall, after having received notice from the Owner and/or Engineer to that effect, proceed to remove from the grounds or buildings all condemned materials, whether worked or unworked, and to take down all portions of the work which the Owner and/or Engineer shall be by written notice condemn as unsound or improper or as in any way failing to conform to the Drawings and Specifications, and shall make good all work damaged or destroyed thereby.

5.12 ROYALTIES AND PATENTS: The Contractor shall pay all royalties and license fees, and defend all suits or claims for infringement of any patent rights and shall save the Owner and his representatives harmless from loss on account thereof, except that the Owner shall be responsible for all such royalties and license fees and loss when a particular design or process, or the product of a particular manufacturer or manufacturers is specified; provided, however, if the Contractor has reason to believe the design, process or product specified constitutes an infringement of a patent, he shall be responsible for such royalties, license fees and loss unless he promptly gives such information to the Owner and the Engineer.

5.12.1 (Suppl) Patent or Copyright Infringement: The contractor will defend at its own expense any action brought against Jefferson County to the extent that it is based on a claim that the items supplied by Contractor infringes a United States patent, copyright or other legal claim, and the Contractor will pay those damages finally awarded against Jefferson County in any such claim, but such defense and payments are conditioned on the following:

.1 (Suppl) That the Contractor shall be notified promptly in writing by Jefferson County of any notice of such claims.

.2 (Suppl) The Contractor shall indemnify, defend and hold harmless Jefferson County, its officers, agents and employees from any and all claims and losses occurring or resulting to any and all consultants, subcontractors, suppliers, laborers and any other person, firm or corporation furnishing or supplying work, services, materials or supplies in connection with the performance of the Contract, and from any and all claims and losses occurring or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of the Contract and against liability, including costs and expenses, for violation of proprietary rights, copyrights, or rights of privacy, arising out of publication, translation, reproduction, delivery, performance, use or disposition of any data furnished under the Contract or based on any libelous or other unlawful matter considered in such information. The Contractor is not an employee of Jefferson County. Any employees or agents utilized shall be agents or employees of the Contractor. Jefferson County does not have any control, direction of dominion over the Contractor or its agents and/or employees. The Contractor shall solely be responsible for providing and certifies that it can provide the necessary expertise and qualification to perform the services needed hereunder and that the services shall be conducted in strict accordance with currently approved practices.

5.13 EQUAL MATERIALS: It is not the intent of the Specifications to limit materials to the product of any particular manufacturer. Where definite materials, equipment and/or fixtures have been specified by name, manufacturer or catalog number, it has been done so as to set a definite standard and a reference for comparison as to quality, application, physical conformity, and other characteristics. It is not the intention to discriminate against or prevent any dealer, jobber or manufacturer from furnishing materials, equipment, and/or fixtures that meet or exceed the characteristics of the specified items. Substitution of materials shall not be made without prior written approval from the Owner and the Engineer.

5.13.1 The Contractor shall be responsible for any additional costs or delays resulting from having furnished materials, equipment or fixtures other than those specified, and shall reimburse the Owner for any increased design costs resulting from unauthorized substitutions.

5.14 SHOP DRAWINGS AND SAMPLES:

5.14.1 Shop Drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrates some portion of the work.

5.14.2 Samples are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to assist in the establishment of standards by which the work will be judged.

5.14.3 The Contractor shall submit, with reasonable promptness and in orderly sequence, all Shop Drawings and Samples required by the Contract Documents, or subsequently required by the Engineer as covered by contract modifications. The Contractor shall review and approve them for compliance with Contract Documents and shall certify that he has done so by stamp, or otherwise, affixed to each copy thereof. Submittal data presented without such certification will be returned without review or other comment, and any delay resulting there from will be the Contractor's responsibility.

5.14.4 Shop Drawings and Samples shall be properly identified, as specified or as the Owner and/or the Engineer may require. At the time of submission, the Contractor shall inform the Owner and the Engineer in writing of any deviation in the Shop Drawings or Samples from the requirements of the Contract Document.

.1 (Suppl) Each sample shall be marked with Contractor's name and address and requisition number.

.2 (Suppl) If not destroyed in examination, samples will be returned to the Contractor, on request, at Contractor's expense

5.14.5 By submitting Shop Drawings and Samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog number and similar data, or will do so, and that he has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and of the Contract Documents and he shall so certify as required by Paragraph 5.14.3.

5.14.6 The Engineer, or the Owner if required by Supplementary General Conditions, will review and approve the Shop Drawings and Samples with reasonable promptness, but only for conformance with the design concept of the project and with the information given in the Contract Documents. The approval of a separate item shall not indicate approval of an assembly in which the item functions. The approval of the Shop Drawings or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Owner and the Engineer in writing of such deviation at the time of submission and the Owner or the Engineer has not objected to the specific deviation. The approval shall not relieve the Contractor from responsibility for error or omissions in the Shop Drawings or Samples.

.1 (Suppl) All submittals will be subject to review and approval by the Owner. Review procedures shall be stated in the Special Conditions.

5.14.7 The Contractor shall make any corrections required and shall resubmit the required number of corrected copies of the Shop Drawings or new Samples of materials until approved. The Contractor shall direct specific attention in writing to any new revisions other than the corrections requested on previous submissions.

5.14.8 No work requiring a Shop Drawing or Sample submission shall be commenced until the submission has been approved. All such work shall be in accordance with approved Shop Drawings and Samples.

5.15 CLEANING:

5.15.1 The Contractor shall at all times keep the premises clean and free from accumulation of waste materials or rubbish caused by the Work under his Contract.

5.15.2 Upon completion of the project, and prior to the final inspection, the Contractor shall have the premises in a neat and clean condition.

ARTICLE VI. CONTRACT CHANGES

6.1 CHANGE ORDERS (PURCHASE ORDER CHANGE NOTICE): A Change Order is a written order to the Contractor signed by the Owner and the Engineer, issued after execution of the contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including any adjustment in the Contract Sum or the Contract Time.

6.1.1 The Owner, without invalidating the Contract, may order changes in the work within the general scope of the Contract consisting of additions, deletions or other revisions, and the Contract Sum and the Contract Time will be adjusted accordingly. All such changes in the work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. If such changes cause an increase or decrease in the Contractor's cost of, or time required for, performance of the contract, an equitable adjustment shall be made and confirmed in writing in a Change Order.

6.1.2 It is recognized by the parties hereto and agreed by them that the Specifications and Drawings may or may not be complete or free from errors, omissions and imperfections or require changes or additions in order for the Work to be completed to the satisfaction of the Owner and that accordingly, it is the express intention of the parties, notwithstanding any other provisions in this Contract, that any errors, omissions or imperfections in such Specifications and Drawings, or any changes in or additions to same or to the work ordered by Owner and any resulting delays in the work or increases in Contractor's costs and expenses, shall not constitute or give rise to any claim, demand or cause or action of any nature whatsoever in favor of Contractor, whether for breach of contract, quantum meruit, or otherwise; provided however, that Owner shall be liable to Contractor for the sum stated to be due Contractor in any Change Order approved and signed by both parties, it being agreed hereby that such sum, together with any extension of time contained in said Change Order, shall constitute full compensation to Contractor for all costs, expenses and damages to Contractor, whether direct, consequential or otherwise in any wise incident to, arising out of, or resulting directly or indirectly from the work performed by Contractor under such Change Order.

6.1.3 Procedures for administration of Change Orders shall be established by the Owner and stated in Supplementary General Conditions.

.1 (Suppl) Change in the Construction Contract shall be formally initiated by a Change Order Request detailing requirements of the proposed change for pricing by the Contractor. Except for emergency conditions defined in Article 5.8.2, written acceptance by the Owner will be required for authorization to proceed with the work being changed. The Owner will not be responsible for the cost of such changed work performed by the Contractor without prior written approval, and the Contractor shall be required to remove work so installed if not subsequently approved by Owner.

.2 (Suppl) Contractor's proposal for Change Order Work must be supported by itemized accounting of material, equipment and labor prices in sufficient detail to permit analysis by the Engineer and Owner. Photocopies of Subcontractor and significant Contractor proposals shall be furnished when requested by the Owner.

.3 (Suppl) The Change Order cost shall be determined by (a) price of materials, equipment and labor necessary for performance of the changed work, and (b) overhead and profit on material, equipment and labor cost.

Overhead and Profit shall include bonds, insurance, field and office supervisors and assistants, use of small tools, incidental job burdens, and general home office expenses; and no separate allowance will be made therefore. Maximum allowable percentage for Overhead and Profit shall be as follows:

a. For work performed by the General Contractor's own forces, fifteen percent (15%) of the first $10,000.00 of material, equipment and labor price of the changed work,; ten percent (10%) of the next $10,000.00; and seven and one-half percent (7 ½ %) of the balance over $20,000.00.

b. For Subcontracted work, the Subcontractor shall figure his price and overhead and profit as described for General Contractor's work, and to that total price the General Contractor will be allowed to add a maximum of ten percent (10%) of the first $10,000.00 for materials, equipment and labor price of the changed work; seven and on-half percent (7 ½ %) of the next $10,000.00; and five percent (5%) of the balance over $20,000.00

c. For a change resulting in a deduction from the Contract Amount, the credit to be given by the Contractor may be net, and the Contractor may retain his Profit and Overhead calculated at the percentages stated in paragraphs (a) and (b) above.

d. On changes involving both additions and deletions, Profit and Overhead will be allowed only on net additions.

.4 (Suppl) <u>Unilateral Change Order</u>: A Unilateral Change Order is one issued by the Owner without the full or timely agreement of the Contractor. A Unilateral Change Order shall be issued when the Owner requires a change in the Work within the scope of the Contract and it is impractical for any reason to obtain a price proposal from the Contractor within a reasonable time.

.1 A Unilateral Change Order will state Owner's estimate of the Change Order cost. Upon completion of the change-ordered work, the Contractor shall submit to Owner documented records of the costs incurred by Contractor in Performance of the work, and the final Change Order cost shall be determined by the Owner from such records in accordance with Article 6.1.3.3.

.2 When a Unilateral Change Order has been issued it will have the full force and effect of a contract modification.

.3 If the Contractor objects to a Unilateral Change Order, he shall state in writing his specific objections or points of disagreement within ten (10) calendar days of receipt of such order.

.4 The issuance of a Unilateral Change Order will not prejudice any of the Contractor's rights to make claims or to appeal disputed matters under other applicable provisions of this Contract.

6.1.4 If a Contractor intends to assert a claim for an adjustment of cost or time over and above any adjustment already being granted in a Change Order, he must within fifteen (15) calendar days after receipt of a written Change Order, or oral or written order to proceed with a proposed change under paragraph 6.1, or the furnishing of a written notice under paragraph 6.3.1 submit to the Owner a written statement setting forth in detail the nature and monetary extent of such claim. The fifteen (15) day period of time for the submission of such claim, maybe extended only a by written agreement signed by the Owner. Except for claims based on defects in Specifications furnished by the Owner, no claim for any change under 6.3.1, shall be allowed for any costs incurred more than twenty (20) days before the Contractor gives written notice as therein required; provided that, in the case of defects in Specifications furnished by the Owner, the adjustment in cost shall include only those increased direct costs reasonably and necessarily incurred by the Contractor as a result of such defective Specifications and shall not include Profit or Overhead.

6.1.5 Except as provided above, no order, oral statement, or direction of the Owner or his duly Appointed Representative shall be treated as a change under this article or entitle the Contractor to an adjustment there under.

6.1.6 The Contractor agrees that the Owner or any of its duly Authorized Representatives shall have access and the right to examine any directly pertinent books, documents, papers, and records of the Contractor. Further, the Contractor agrees to include in all its subcontracts a provision to the effect that the Subcontractor agrees that the Owner or any of its duly Authorized Representatives shall have access to and the right to examine any directly pertinent books, documents, papers and records of such Contractor relating to any claim arising from this contract, whether or not the Subcontractor is a part to the claim. The

period of access and examination described herein which relates to appeals under the "Disputes" article of this Contract, litigation, or the settlement of claims arising out of the performance of this Contract shall continue until final disposition of such claims, appeals or litigation.

6.2 UNIT PRICES: If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of work proposed will cause substantial inequity to the Owner or the Contractor, the applicable unit prices shall be equitably adjusted as provided in the Supplementary General Conditions.

6.2.1 (Suppl) Each unit price bid by the Contractor shall include all costs applicable to the work, including but not limited to mobilization, labor, material, equipment, plant, supervision, overhead and profit.

6.2.2 (Suppl) Equitable adjustment shall be made upon demand of either party and shall be based upon an increase or decrease in cost due solely to the variation above one hundred fifteen percent (115%) of below eighty five percent (85%)- of the originally specified quantity.

.1 Contractor shall make claim for additional time in accordance with Article VIII.

6.3 CLAIMS FOR ADDITIONAL COSTS:

6.3.1 If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Owner and the Engineer written notice thereof within fifteen (15) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with paragraph 5.8.2. No such claim shall be valid unless so made. If the Owner and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by administrative procedures as provided by Supplementary General Conditions. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

6.3.2 If the Contractor claims that additional cost is involved because of, but not limited to, (1) any written interpretation of the Contract Documents, (2) any order by the Owner to stop the work pursuant to paragraph 4.4.2, where the Contractor is not at fault, (3) any written order for a minor change in the work issued pursuant to paragraph 6.5, the Contractor shall make such claim as provided in paragraph 6.3.1.

6.3.3 Review of Contract Document and Project Conditions: The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner pursuant to Article 1.1 and shall at once report to the Engineer errors, inconsistencies or omissions discovered.

.1 Should the contractor or his Subcontractor fail to report to the Engineer known errors, inconsistencies or omissions, and proceeds to perform construction incorporating known error, inconsistency or omission, the Contractor shall assume appropriate responsibility and shall bear appropriate attributable cost for the performance of such construction.

.2 The Owner may assume an intent to circumvent competitive bidding for necessary corrective project work where the Contractor proceeds to perform the Contract and fails to report to the Engineer known errors, inconsistencies, and omissions. In such case, the Owner may choose to award a separate contract for the corrective work.

.3 Claims for time extensions or for extra cost resulting from delayed notice and/or reports of Contract Document errors, inconsistencies or omissions will not be considered by the Owner.

6.4 CLAIMS FOR ADDITIONAL TIME: The Contractor shall make claims for additional time in accordance with Article VIII.

6.5 MINOR CHANGES: The Engineer, with concurrence of the Owner, will have authority to order minor changes in the work not involving an adjustment in the Contract Sum or an extension of the Contract Time. Such changes shall be effected by written order that the Contractor shall carry out promptly.

ARTICLE VII. CONTRACT PAYMENTS

7.1 CONTRACT PRICE BREAKDOWN: Upon execution of the contract by the Owner and the Contractor, the Contractor shall submit to the Owner and the Engineer for approval a breakdown of the Contract Price, itemizing the various classification of the work. The breakdown will be used as the basis for the progress payments of the Contract.

7.1.1 (Suppl) Pursuant to Paragraph 5.8.1, a separate pay item shall be included in the job cost breakdown when a trench safety system is to be utilized by the Contractor.

7.2 PROGRESS PAYMENTS: Payment will be made to the Contractor upon monthly certificates as provided hereinafter for the work performed, and materials in place or on the site, suitably stored and protected or on other sites agreed to by the Owner and the Contractor.

7.2.1 Once each calendar month, the Owner shall make a progress payment to the Contractor on the basis of the certified estimate, approved by the Engineer, of the work performed during the preceding calendar month under this Contract, including an affidavit that all payrolls, bills for labor, materials, equipment, or other indebtedness connected with such work have been paid or will be paid within thirty (30) days after receipt of the progress payment, or within the period of time required by Article 601f, Texas Civil Statutes; but to insure the proper performance of this Contract, the Owner shall retain not less than ten percent (10%) of the amount of each estimate until final completion and acceptance of all work covered by this contract. After Substantial Completion of the work, the Owner shall, upon application by the Contractor approved by the Engineer, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance of work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as provided in Article III, such payment shall be made under the terms and conditions governing final payment, and shall not constitute a waiver of claims. Final payment shall be made after completion of the work by the Contractor in accordance with the Contract Documents.

.1 (Suppl) The provisions of Article 601f of Texas Civil Statutes apply to payment under this Contract.

.2 (Suppl) The Contractor shall, in accordance with Article 601f, Texas Civil Statutes, provide a properly signed Contractor's Progress Payment Affidavit with each requested progress payment.

.3 (Suppl) The Contractor shall reference the Purchase Order number, as supplied by the Owner, on each Progress Payment request.

7.2.2 In preparing estimates all material delivered and labor performed shall be included in the progress upon which payment is based.

.1 (Suppl) If requested, the Contractor shall provide documents sufficient for Owner to determine quantities of materials for which payment is requested.

7.2.3 The Owner may withhold or, on account of subsequently discovered evidence, nullify that part of any certificate to such extent as may be necessary to protect the Owner from loss on account of:

.1 Defective work not remedied.
.2 Damage to work of another Contractor.
.3 Failure to maintain scheduled progress.
.4 Receipt of written notice by the Owner of unpaid bills, as stipulated in Sec. 53.232, Property Code, T.C.S., if the Contractor has not provided a payment bond and if the contract sum does not exceed $25,000.00. Any funds so withheld shall be released to the Contractor if he furnishes a bond for release of lien as provided in Section 53.236, Property Code, T.C.S.
.5 Failure to maintain a current record set of "As-build" documents on site.
.6 Failure to maintain or to allow Owner's inspection of payroll records at the job site.

When the above grounds are removed, payment will be made for amounts withheld because of them.

7.2.4 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all the terms of the Contract.

7.2.5 Payments to the Contractor shall not be construed to release the Contractor or his surety from any obligations under this contract.

ARTICLE VIII. CONTRACT COMPLETION TIME

8.1 NOTICE TO PROCEED: The contract time will begin on the date designated in the Notice to Proceed issued by the Owner and the Contractor is required to complete the work in the time that is stated in the Contract.

8.2 WORK PROGRESS SCHEDULE: Within three (3) weeks after receipt of a Notice to Proceed, if requested by the Owner, the Contractor shall submit in duplicate to the Owner and the Engineer for review an estimated progress schedule for the work in relation to the entire project. This schedule shall indicate the dates for the starting and completing the various classifications of construction.

8.3 DELAYS AND EXTENSION OF TIME:

8.3.1 The Contractor may be granted an extension of time because of changes ordered in the contract.

.1 (Suppl) Normal inclement weather for this project location shall be considered to be zero days per year for contract time extension purposes.

8.3.2 Claims for extensions of time must be made in writing within fifteen (15) calendar days after the occurrence of the delay. All time extension claims shall be supported by sufficient written evidence to justify the claim. In the case of a continuing cause of delay, only one claim is necessary. Claims for extensions of time shall be stated in numbers of whole or half calendar days.

8.4 FAILURE TO COMPLETE WORK ON TIME / LIQUIDATED DAMAGES: The time set forth in the Contract for the completion of work is an essential element of the contract. Contractor's failure to complete the work within such time will cause damage to the Owner.

8.4.1 (SUPPL) THE WORK IS CRITICAL TO THE OWNER'S SECURITY AND SAFETY REQUIREMENTS, AND DELAY DAMAGES ARE INCAPABLE OF BEING EXACTLY DETERMINED. THE PARTIES AGREE THAT THE SUM OF $1,000.00 PER CALENDAR DAY THAT THE WORK IS NOT COMPLETED BY THE CONTRACT TIME IS A FAIR, REASONABLE AND NON-PUNITIVE AMOUNT TO BE CREDITED TO OWNER AS LIQUIDATED DAMAGES FOR SUCH DELAY.

ARTICLE IX. CONTRACT TIME

9.1 **The Contractor shall be allowed 120 calendar days to complete the project.**

9.2 CERTIFICATION: Should the Owner wish to use or occupy a structure, or part thereof, prior to final completion, and the Owner determines that the work, or a designated portion thereof acceptable to the Owner, is Substantially Complete, the Contractor shall prepare for submission to the Engineer a list of items to be completed or corrected. The failure to include any item on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents. When the Engineer on the basis of an inspection determines that the work is Substantially Complete, he will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion; shall state the responsibilities of the Owner and the Contractor for maintenance, heat, utilities, operation of permanent equipment, and insurance; and shall fix the time within which the Contractor shall complete the items listed therein. The Certificate the Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to each of them in such Certificate.

9.3 ADDITIONAL INSPECTION COSTS: Contractor shall be charged with any cost for re-inspection resulting from substantial differences between the Contractor's list of items to be completed or corrected and the list of items resulting from the Engineer inspection.

ARTICLE X. CONTRACT FINAL ACCEPTANCE AND PAYMENT

10.1 NOTIFICATION: When the work is completed, the Contractor shall notify the Engineer in writing that the work will be ready for final inspection on a definite date. Upon verification by the Engineer that the work is ready for final inspection and acceptance, the Owner will within ten (10) calendar days make a final inspection and, when the work is found acceptable under the Contract Documents and the Contract is fully performed, make a final payment to the Contractor within thirty (30) calendar days after Section 10.2 is complied with by Contractor.

10.2 FINAL PAYMENT DOCUMENTATION: Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Engineer for transmittal to the Owner:

1. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work for which the Owner or his property might in any way be responsible, have been paid or will be paid or otherwise satisfied within thirty (30) days after receipt of final payment from the Owner, or within the period of time required by Article 601f, Texas Civil Statutes, (T.C.S.); and

2. If required by Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify him against any such claim.

10.3 FINAL PAYMENT: The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

1. Faulty or defective work appearing or discovered after Substantial Completion;
2. Failure of the Work to comply with the requirements of the Contract Documents; or
3. Terms of any warranties required by the Contract Documents.

Acceptance of Final Payment shall constitute a waiver of all claims by the Contractor against the Owner except those specifically enumerated in writing at the time of final payment.

ARTICLE XI. CONTRACT WARRANTY AND GUARANTEE

11.1 ONE YEAR WARRANTY: Except as otherwise specified, the Contractor warrants and guarantees all work against defect in materials, equipment or workmanship for one (1) year from the date of Final Acceptance by Owner.

11.2 CORRECTION OF DEFECTS: Upon receipt of written notice from the Owner of the discovery of any defects, the Contractor shall remedy the defects and replace any property damaged there from occurring within the Warranty and Guarantee Period. If the Contractor, after notice, fails to proceed promptly and remedy within fifteen (15) calendar days or within another period of time which has been agreed to in writing by Owner in compliance with the terms of the Warranty and Guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expenses incurred.

AGREEMENT BETWEEN OWNER & CONTRACTOR

STATE OF TEXAS

COUNTY OF JEFFERSON

THIS AGREEMENT, made this _____day of _____, 2018 by and between **Jefferson County**, hereinafter called the OWNER, and _____ _____ , hereinafter called the CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter described, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete certain project described as

SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY

for the use and benefit of the OWNER as described in the Bidding and Contract Documents prepared by LJA Engineering, Inc. which together with the Contract Documents are made part of the Contract.

The consideration to be paid by the OWNER to the CONTRACTOR for furnishing all the materials, supplies, machinery, equipment, tools, labor, superintendence, insurance, and other accessories and services necessary to complete the said project in accordance with the Contract Documents is the sum of _____ _____ Dollars ($ _____)

The exclusive venue of any suit brought for any breach of this contract is hereby fixed in and state court of competent jurisdiction in Jefferson County, Texas. All payments under this contract shall be due and payable solely in Jefferson County, Texas.

Sample

The said parties for themselves, their heirs, successors, executors, administrators, and assigns, do hereby agree to full performance of the covenants herein contained.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in two (2) counterparts, each of which shall be deemed an original, in the day and year first above written.

CONTRACTOR:	**OWNER:**
_____	**JEFFERSON COUNTY**
By: _____	By: _____
_____	_____
Title	Title

PERFORMANCE BOND

STATE OF TEXAS

COUNTY OF JEFFERSON

KNOW ALL MEN BY THESE PERSENTS:

That we, _____ as **PRINCIPAL**, and _____ as **SURETY(S)**, are hereby held and firmly bound unto the State of Texas in the penal sum of

_____ Dollars ($_____) for the payment, whereof, the said **PRINCIPAL** and **SURETY(S)** bind themselves, their heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the **PRINCIPAL** entered into a certain contract dated _____ _____, 2018, hereto attached, and made a part hereof, with Jefferson County, to commence and complete certain public works described as **SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY.**

NOW THEREFORE, the conditions of this obligation are such that, if the **PRINCIPAL** shall faithfully perform the contract in accordance with the plans, specifications, and contract documents, and shall fully indemnify and save harmless Jefferson County from all cost and damage which Jefferson County may suffer by reason of the **PRINCIPAL'S** default or failure to do so and shall fully reimburse and repay Jefferson County all outlay and expense which Jefferson County may incur in making good any such default, then obligation shall be null and void, otherwise it shall remain in full force and effect.

Provided further, that if any legal action be filed upon this bond, venue shall lie exclusively in the county in which the project or work, or any part thereof, is situated, and that the said surety(s) for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed there under, or the Specifications accompanying the same, shall in anywise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alternation or addition, to the items of the contract or to the work or to the Specifications.

In the event **PRINCIPAL** is in default under the contract as defined herein, **SURETY(S)** shall within fifteen (15) calendar days of determination of such default take over and assume completion of said contract and become entitled to the payment of the balance of the contract price.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____, 2018. The name and corporation seal of each corporate party being hereto affixed and these present duly signed by its undersigned representative pursuant to authority of its governing body.

PRINCIPAL	**SURETY**
By: _____	By: _____

PAYMENT BOND

STATE OF TEXAS

COUNTY OF JEFFERSON

KNOW ALL MEN BY THESE PERSENTS:

That we, _____ as **PRINCIPAL**, and _____ as **SURETY(S)**, are hereby held and firmly bound unto the State of Texas in the penal sum of

_____ Dollars ($_____) for the payment, whereof, the said **PRINCIPAL** and **SURETY(S)** bind themselves, their heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the **PRINCIPAL** entered into a certain contract dated _____ _____, 2018, hereto attached, and made a part hereof, with Jefferson County, to commence and complete certain public works described as **SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY.**

NOW THEREFORE, the conditions of this obligation are such that, if the **PRINCIPAL** shall promptly make payment to all claimants as defined in ARTICLE 5160 REVISED CIVIL STATUTES OF TEXAS, 1925, as amended, supplying labor and materials in the prosecution of the work provided for in said contract and any and all duly authorized changes to said contract that may hereafter be made, notice of such changes to the SURETY(S) being hereby waived, then, this obligation shall be null and void, otherwise it shall remain in full force and effect.

Provided further, that if any legal action be filed upon this bond, venue shall lie exclusively in the county in which the project or work, or any part thereof, is situated, and that the said surety(s) for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed there under, or the Specifications accompanying the same, shall in anywise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alternation or addition, to the items of the contract or to the work or to the Specifications.

This bond is made and entered into solely for the protection of all claimants supplying labor and materials in the prosecution of the work provided for in said contract, and all such claimants shall have a direct right to action under the bond as provided in ARTICLE 5160 REVISED CIVIL STATUTES, 1925, as amended.

In the event **PRINCIPAL** is in default under the contract as defined herein, **SURETY(S)** shall within fifteen (15) calendar days of determination of such default take over and assume completion of said contract and become entitled to the payment of the balance of the contract price.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____, 2018. The name and corporation seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

PRINCIPAL **SURETY**

By: _____ By: _____

CONTRACTOR'S PROGRESS PAYMENT AFFIDAVIT

STATE OF TEXAS

COUNTY OF JEFFERSON

BEFORE ME THE UNDERSIGNED AUTHORITY, on this day personally appeared _____ who being duly sworn, on oath, says that he/she is a duly authorized representative of _____ CONTRACTOR, and all terms of the contract for the completion of certain public works described as **SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY** have been satisfactorily completed to the extent indicated on the attached voucher and that ALL sums of money due for payrolls, bills for material and equipment, and other indebtedness connected with the work for which OWNER or its property might in any way be responsible, to the best of his/her knowledge and belief have been paid or will be paid or otherwise satisfied within ten (10) days after receipt of the requested payment from the OWNER, or within the period of time required by V.T.C.A., GOV. CODE, Section 2251.023.

Affiant agrees to indemnify and hold OWNER harmless from any liens, debts or obligations that arise as a result of labor or materials provided by or through Affiant to the project. Affiant further agrees to indemnify and hold harmless all real property on which the improvements were constructed and all interests in such property, including leasehold interests, from any liens, debts, or obligations arising from any labor or materials provided by or through Affiant to the project.

_____
Signature

_____
Title

Sworn and subscribed before me this _____ day of _____, 2018

Notary Public in and for
_____ County, Texas

(SEAL)

Instructions:

Affidavit must be signed by an individual owner, a partner in a partnership, or by a person authorized by bylaws 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 joint venture in which a corporation is a party, separate affidavits must be executed by each corporation and by each individual owner or partnership.

CONTRACTOR'S FINAL PAYMENT AFFIDAVIT

STATE OF TEXAS

COUNTY OF JEFFERSON

BEFORE ME THE UNDERSIGNED AUTHORITY, on this day personally appeared who being duly sworn, on oath, says that he/she is a duly authorized representative of Contractor, and that all terms of the contract for the completion of certain public works described as: **SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY** 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 which OWNER or its property might in any way be responsible, to the best of his/her knowledge and belief, have been paid or will be paid or otherwise satisfied within ten (10) days after receipt of final payment from the OWNER, or within the period of time required by V.T.C.A., GOV. CODE, Section 2251.023. Payments not made in full at the date of this affidavit are listed below.

Affiant hereby waives all claims against the OWNER. (List any exceptions, if "NONE" so state)

Affiant agrees to indemnify and hold OWNER harmless from any liens, debts or obligations that arise as a result of labor or materials provided by or through Affiant to the project. Affiant further agrees to indemnify and hold harmless all real property on which the improvements were constructed and all interests in such property, including leasehold interests, from any liens, debts, or obligations arising from any labor or materials provided by or through Affiant to the project.

_____
Signature

_____
Title

Sworn and subscribed before me this _____ day of _____, 2018

Notary Public in and for
_____ County, Texas

(SEAL)

Final payments pending as of the date hereof are: □ none pending; □ as listed below:

Individual or Company Name	Mailing Address	Amount Owed

Instructions: Affidavit must be signed by an individual owner, a partner in a partnership, or by a person authorized by bylaws 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 joint venture in which a corporation is a party, separate affidavits must be executed by each corporation and by each individual owner or partnership. In the event subcontractors, laborers, or material-men have not been paid in full, CONTRACTOR shall list hereon the amount owed and the name and address of each subcontractor, laborer, or material-man to whom such payment is owed. Add additional pages if required.

TECHNICAL SPECIFICATIONS

General Notes

General Notes

The Contractor shall have full responsibility for testing all materials incorporated in the project at his sole expense.

Contractor shall assume ownership for all designated construction waste material and dispose of it at a place off of Jefferson County property, as approved by the Engineer.

Contractor shall procure all the necessary city and/or county permits and licenses.

The responsibility for the construction surveying on this contract will be the Contractor's responsibility. No additional compensation will be paid the Contractor for surveying on this project.

Working days will be charged Sunday through Saturday, including Holidays, regardless of weather conditions, material availability, or other conditions not under the control of the Contractor.

All items not specifically covered in these General Notes and Specifications shall be governed by the TxDOT Standard Specifications Manual, 2014 Edition.

Item 100 Preparing Right of Way

Prepare the right of way and designated easements for construction operations by removing and disposing of all vegetation and organic material or anything that would hinder the construction of this Project. All materials removed shall not be reused in the embankment or any part of the construction of this project.

Item 110 Excavation

Excavate areas as shown on plans or as directed by the Engineer to the lines, grades, and typical sections on the plans. All excavation, except grass and other organic matter to be disposed of shall be used as fill on this project.

Item 132 Embankment

Compaction shall be "Ordinary" compaction and maximum lift thickness shall be 8" loose.

Item 164 Seeding for Erosion Control

Provide and install a mixture of 2500 pounds per acre of cellulose fiber mulch, 3 pounds of pure live Bermuda grass seed per acre, fertilizer at a rate of 100 pounds of Nitrogen per acre and enough water to make the mixture sprayable to the areas to be seeded. Fertilizer shall be subsidiary to this Item.

Item 400 Excavation and Backfill for Structures

Cement stabilized backfill shall be cohesionless sand with 3 sacks of cement / C.Y. based on dry weight of sand.

Item 403 Temporary Special Shoring

Furnish and place temporary shoring for excavations deeper than 5 foot. Provide vertical or sloped cuts, benches, shields, support systems, that provide the necessary protection in accordance with OSHA Standards and Interpretations, 29 CFR 1926, Subpart P, "Excavations".

Item 618 Conduit

Conduit pipe shall be high density polyethylene (HDPE) and have a minimum pressure rating of 100 psi.

HDPE installed by the Horizontal Directional Drilling (HDD) method shall have a 12° entry and exit angle and 720' radius on curve.

Item 2000 Filter Fabric

Furnish and install filter fabric in areas shown on the plans and according to the manufacturer's recommendations. Filter fabric shall conform to DMS-6200, "Filter Fabric", Type 2.

Item 8000 Dewatering

Contractor shall submit a dewatering plan to the Engineer prior to the beginning of construction.

Item 9000 Articulated Concrete Mats

Articulated concrete mats shall consist of open-cell blocks. Weight of blocks shall be 40 to 50 pounds per square foot with a nominal thickness of 6 inches. Articulated concrete mat shall be ArmorFlex Class 50-S or an approved equivalent. Articulated mats shall be butted up against the ends of the structures leaving no gap for erosion to occur.

Item 9010 Vinyl Sheet Pile

Vinyl Sheet Pile constructed with 9 foot structures shall have an allowable moment capacity greater than 7,000 foot pounds per foot. Sheet pile shall be ShoreGuard SG-825 or an approved equivalent.

Wale System shall be installed on Vinyl Sheet Pile SG-825. 4"x6" timber wales shall be constructed where indicated on plans. Installation and materials needed for installation, including timber wales, tie back rods, hardware and anchor blocks, shall be subsidiary to Item 9010 with no extra compensation.

Vinyl Sheet Pile constructed with 5 foot structures shall have an allowable moment capacity greater than 2,700 foot pounds per foot. Sheet pile shall be ShoreGuard SG-425 or an approved equivalent.

All Sheet Pile layout and orientation shall be submitted to Engineer for approval prior to construction.

Wale System shall be installed on Vinyl Sheet Pile SG-825. 4" x 6" timber wales shall be constructed where indicated on the plans. Installation and materials needed for installation, including timber wales, tie back rods, hardware and anchor blocks, shall be subsidiary to Item 9010 with no extra compensation.

Item 9020 Siphon Structure (Installed)

Siphon Structures shall be built and installed according to plan details. Any variation from the plan drawings must have prior approval from the Engineer. Siphon Structures have front side tabs that the vinyl sheet pile shall be attached to with ¾" stainless steel bolts, UV resistant polymer washers (both sides) and nuts at a spacing of 1 (one) foot apart. The rear side tabs shall be attached to 6" x 6" treated timbers that are driven a minimum of 4 feet into the ground at each tab location. The rear tabs shall have the same size bolts and bolting pattern as the vinyl sheet piling. Bolt configuration shall be submitted to the Engineer prior to drilling of holes. Note that bolt configuration will vary depending on sheet pile size and location of sheet pile relative to Siphon Structure.

Rolled aluminum stub out pipes and flanges, bottoms of Aluminum Outfall structures, and any metallic portion of the complete drainage structure that contacts cement stabilized backfill shall be bitumen coated on the outside for greater corrosion resistance. The Bitumen coating, UV resistant polymer washers as well as all

timbers and hardware to install them shall be subsidiary to the Item 9020 Siphon Structure and no additional compensation will be due the Contractor for the cost of these items.

Siphon Structures have a 6 foot long rolled aluminum plate stub-out in the rear with 36" flange. The 36" plate shall be aluminum and be welded, if necessary, to be placed at full length and avoid joints or connections. This rolled plate and flange shall be considered part of the overall siphon structure and will be subsidiary to Item 9020 with no extra compensation.

Aluminum alloy anodes (N-1A) shall be attached to the aluminum structures with stainless steel bolts and UV resistant polymer washers, (each side) as per Engineer's directions to act as sacrificial anodes for the structures. These anodes shall also be subsidiary to Item 9020 Siphon Structure and no additional compensation will be due the Contractor for the cost or installation of these items.

Minimum weight of aluminum alloy anodes on each box structure shall be 6 lbs. Minimum weight on each flap gate shall be 3.5 lbs.

Material Properties of Structures shall be:

- Aluminum Plate = 5086 Alloy
- Aluminum Angle = 6061-T6 Alloy
- Grating shall be 1" x 3/16" Aluminum Serrated Bar Grating

The Contractor shall verify all dimensions before fabrication.

Item 9030 Breakwater

Breakwaters shall have a side slope of 2.5:1. The crown shall have the width of 3 feet. Rock will be 18" graded rock placed to ensure no large outcroppings occur. The top elevation of the breakwater shall be +4.0 NAVD.

Gradation shall be	Weight, #	% Lighter
	400-160	100
	160-80	50
	80-30	15

Breakwater removal shall be complete and no rocks left at the removal location. The breakwater material removed is to be relocated and reused as part of the proposed breakwater quantity.

Wage Rates

The wage rates listed are those predetermined by the Secretary of Labor and State Statue to be the minimum wages paid. To determine the applicable wage rate zone, a list entitled "TEXAS COUNTIES IDENTIFIED BY WAGE RATE ZONES" is provided in the contract. Any wage rate that is not listed must be submitted to the Engineer for approval. IMPORTANT NOTICE FOR STATE PROJECTS; only the controlling wage rate zone applies to the contract. Effective 1-2-2015

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX07 1/2/15	ZONE TX08 1/2/15	ZONE TX11 1/2/15	ZONE TX12 1/2/15	ZONE TX14 1/2/15	ZONE TX16 1/2/15	ZONE TX18 1/2/15	ZONE TX34 1/2/15	ZONE TX35 1/2/15	ZONE TX37 1/2/15	ZONE TX38 1/2/15	ZONE TX40 1/2/15	ZONE TX41 1/2/15	ZONE TX54 1/2/15	ZONE TX56 1/2/15	ZONE TX63 1/2/15
1428	Agricultural Tractor Operator						$12.69					$12.35			$11.75		
1300	Asphalt Distributor Operator	$14.87	$13.48	$13.88			$15.55	$15.72	$13.28	$15.32	$15.62	$14.36	$14.25	$14.03	$13.75	$14.06	$14.40
1303	Asphalt Paving Machine Operator	$13.40	$12.25	$12.35	$13.87		$14.36	$14.20	$13.26	$13.99	$14.68	$12.92	$13.44	$12.53	$14.00	$14.32	$12.99
1106	Asphalt Raker	$12.28	$10.61	$12.02	$14.21		$12.12	$11.64	$11.44	$12.69	$12.05	$11.34	$11.67	$11.40	$12.59	$12.36	
1112	Batching Plant Operator, Asphalt																
1115	Batching Plant Operator, Concrete																
1214	Blaster																
1615	Boom Truck Operator						$18.36										
1444	Boring Machine Operator																
1305	Broom or Sweeper Operator	$11.21	$10.33	$10.10			$11.04	$11.62		$11.74	$11.41	$10.30		$10.23	$10.60	$12.68	$11.05
1144	Communications Cable Installer																
1124	Concrete Finisher, Paving and Structures	$13.55	$12.46	$13.16	$12.85		$12.56	$12.77	$12.44	$14.12	$13.04	$13.38		$12.80	$12.79	$12.98	$13.32
1318	Concrete Pavement Finishing Machine Operator						$15.48			$16.05		$19.31				$13.07	
1315	Concrete Paving, Curing, Float, Texturing Machine Operator											$16.34				$11.71	
1333	Concrete Saw Operator									$14.48	$17.33					$13.99	
1399	Concrete/Gunite Pump Operator																
1344	Crane Operator, Hydraulic 80 tons or less						$18.36			$18.12	$18.04	$20.21			$18.63	$13.86	
1345	Crane Operator, Hydraulic Over 80 Tons																
1342	Crane Operator, Lattice Boom 80 Tons or Less	$16.82	$14.39	$13.85			$15.87			$17.27		$14.67			$16.42	$14.97	
1343	Crane Operator, Lattice Boom Over 80 Tons						$19.38			$20.52		$17.49			$25.13	$15.80	
1306	Crawler Tractor Operator	$13.96	$16.63	$13.62			$15.67			$14.07	$13.15	$13.38			$14.60	$13.68	$13.50
1351	Crusher or Screen Plant Operator																
1446	Directional Drilling Locator						$11.67										
1445	Directional Drilling Operator						$17.24										
1139	Electrician	$20.96		$19.87			$26.35		$20.27	$19.80		$20.92				$27.11	
1347	Excavator Operator, 50,000 pounds or less	$13.46	$12.56	$13.67			$12.88	$14.38	$13.49	$17.19		$13.88			$14.09	$12.71	$14.42
1348	Excavator Operator, Over 50,000 pounds		$15.23	$13.52			$17.71			$16.99	$18.80	$16.22				$14.53	
1150	Flagger	$10.10	$10.10	$10.10		$10.10	$10.10	$10.10		$10.10	$10.10	$10.10		$10.10	$10.10	$10.33	$10.10
1151	Form Builder/Setter, Structures	$13.52	$12.30	$13.38	$12.91	$12.71	$12.87	$12.38	$12.26	$13.84	$12.98	$13.07	$13.61	$12.82	$14.73	$12.23	$12.25
1160	Form Setter, Paving & Curb	$12.36	$12.16	$13.93	$11.83	$10.71	$12.94			$13.16	$12.54	$11.33	$10.69		$13.33	$12.34	
1360	Foundation Drill Operator, Crawler Mounted									$17.99						$17.43	
1363	Foundation Drill Operator, Truck Mounted		$16.86	$22.05			$16.93			$21.07	$20.20	$20.76		$17.54	$21.39	$15.89	
1369	Front End Loader Operator, 3 CY or Less	$12.28	$13.49	$13.40			$13.04	$13.15	$13.29	$13.69	$12.64	$12.89			$13.51	$13.32	$12.17
1372	Front End Loader Operator, Over 3 CY	$12.77	$13.69	$12.33			$13.21	$12.86	$13.57	$14.72	$13.75	$12.32			$13.19	$13.17	
1329	Joint Sealer																
1172	Laborer, Common	$10.30	$10.10	$10.10	$10.51	$10.71	$10.50	$10.24	$10.58	$10.72	$10.45	$10.30	$10.25	$10.10	$10.54	$11.02	$10.15
1175	Laborer, Utility	$11.80	$11.53	$12.70	$12.17	$11.81	$12.27	$12.11	$11.33	$12.32	$11.80	$11.53	$11.23	$11.50	$11.95	$11.73	$12.37
1346	Loader/Backhoe Operator	$14.18	$12.77	$12.97	$15.68		$14.12			$15.18	$13.58	$12.87		$13.21	$14.13	$14.29	

Texas Department of Transportation

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX07 1/2/15	ZONE TX08 1/2/15	ZONE TX11 1/2/15	ZONE TX12 1/2/15	ZONE TX14 1/2/15	ZONE TX16 1/2/15	ZONE TX18 1/2/15	ZONE TX34 1/2/15	ZONE TX35 1/2/15	ZONE TX37 1/2/15	ZONE TX38 1/2/15	ZONE TX40 1/2/15	ZONE TX41 1/2/15	ZONE TX54 1/2/15	ZONE TX56 1/2/15	ZONE TX63 1/2/15
1187	Mechanic	$20.14	$15.47	$17.47			$17.10			$17.68	$18.94	$18.58		$16.61	$18.46	$16.96	
1380	Milling Machine Operator	$15.54	$14.64	$12.22			$14.18			$14.32	$14.35	$12.86			$14.75	$13.53	
1390	Motor Grader Operator, Fine Grade	$17.49	$16.52	$16.88			$18.51	$16.69	$16.13	$17.19	$18.35	$17.07	$17.74	$17.47	$17.08	$15.69	$20.01
1393	Motor Grader Operator, Rough	$16.15	$14.62	$15.83		$17.07	$14.63	$18.50		$16.02	$16.44	$15.12		$14.47	$17.39	$14.23	$15.53
1413	Off Road Hauler			$10.10			$11.88			$12.25		$12.23			$13.00	$14.60	
1196	Painter, Structures						$18.34						$21.29			$18.62	
1396	Pavement Marking Machine Operator	$16.42		$13.10			$19.17	$12.01		$13.63	$14.60	$13.17		$16.65	$10.54	$11.18	
1443	Percussion or Rotary Drill Operator																
1202	Piledriver															$14.95	
1205	Pipelayer		$11.87	$14.64			$12.79		$11.37	$13.24	$12.66	$13.24	$11.17	$11.67		$12.12	
1384	Reclaimer/Pulverizer Operator	$12.85					$12.88			$11.01		$10.46					
1500	Reinforcing Steel Worker	$13.50	$14.07	$17.53			$14.00			$16.18	$12.74	$15.83		$17.10		$15.15	
1402	Roller Operator, Asphalt	$10.95		$11.96			$12.78	$11.61		$13.08	$12.36	$11.68			$11.71	$11.95	$11.50
1405	Roller Operator, Other	$10.36		$10.44			$10.50	$11.64		$11.51	$10.59	$10.30		$12.04	$12.85	$11.57	
1411	Scraper Operator	$10.61	$11.07	$10.85			$12.27		$11.12	$12.96	$11.88	$12.43		$11.22	$13.95	$13.47	
1417	Self-Propelled Hammer Operator																
1194	Servicer	$13.98	$12.34	$14.11			$14.51	$15.56	$13.44	$14.58	$14.31	$13.83		$12.43	$13.72	$13.97	
1513	Sign Erector																
1708	Slurry Seal or Micro-Surfacing Machine Operator																
1341	Small Slipform Machine Operator									$15.96							
1515	Spreader Box Operator	$12.60		$13.12			$14.04			$14.73	$13.84	$13.68		$13.45	$11.83	$13.58	
1705	Structural Steel Welder															$12.85	
1509	Structural Steel Worker						$19.29									$14.39	
1339	Subgrade Trimmer																
1143	Telecommunication Technician																
1145	Traffic Signal/Light Pole Worker						$16.00										
1440	Trenching Machine Operator, Heavy						$18.48										
1437	Trenching Machine Operator, Light																
1609	Truck Driver Lowboy-Float	$14.46	$13.63	$13.41	$15.00	$15.93	$15.66			$16.24	$16.39	$14.30	$16.62	$15.63	$14.28	$16.03	
1612	Truck Driver Transit-Mix									$14.14							
1600	Truck Driver, Single Axle	$12.74	$10.82	$10.75			$11.79	$13.53	$13.16	$12.31	$13.40	$10.30	$11.61		$11.97	$11.46	
1606	Truck Driver, Single or Tandem Axle Dump Truck	$11.33	$14.53	$11.95			$11.68		$14.06	$12.62	$11.45	$12.28		$13.08	$11.68	$11.48	$11.10
1607	Truck Driver, Tandem Axle Tractor with Semi Trailer	$12.49	$12.12	$12.50			$12.81	$13.16		$12.86	$16.22	$12.50			$13.80	$12.27	
1441	Tunneling Machine Operator, Heavy																
1442	Tunneling Machine Operator, Light																
1706	Welder		$14.02				$15.97		$13.74	$14.84					$13.78		
1520	Work Zone Barricade Servicer	$10.30	$12.88	$11.46	$11.70		$11.85	$10.77		$11.68	$12.20	$11.22	$11.51	$12.96	$10.54	$11.67	

Notes:

Any worker employed on this project shall be paid at the rate of one and one half (1-1/2) times the regular rate for every hour worked in excess of forty (40) hours per week.

The titles and descriptions for the classifications listed here are further detailed in the AGC of Texas' *Standard Job Classifications and Descriptions for Highway, Heavy, Utilities, and Industrial Construction in Texas* . AGC will make it available on its Web site for any contractor.

TEXAS COUNTIES IDENTIFIED BY WAGE RATE ZONES: 7, 8, 11, 12, 14, 16, 18, 34, 35, 37, 38, 40, 41, 54, 56, 63

County Name	Zone	County Name	Zone	County Name	Zone	County Name	Zone
Anderson	38	Donley	54	Karnes	37	Reagan	54
Andrews	54	Duval	41	Kaufman	35	Real	54
Angelina	38	Eastland	54	Kendall	16	Red River	38
Aransas	40	Ector	7	Kenedy	41	Reeves	18
Archer	35	Edwards	18	Kent	54	Refugio	37
Armstrong	7	El Paso	34	Kerr	37	Roberts	54
Atascosa	16	Ellis	35	Kimble	54	Robertson	16
Austin	56	Erath	38	King	54	Rockwall	35
Bailey	54	Falls	38	Kinney	18	Runnels	54
Bandera	16	Fannin	38	Kleberg	37	Rusk	11
Bastrop	16	Fayette	37	Knox	54	Sabine	38
Baylor	54	Fisher	54	Lamar	38	San Augustine	38
Bee	37	Floyd	54	Lamb	54	San Jacinto	56
Bell	16	Foard	54	Lampasas	16	San Patricio	40
Bexar	16	Fort Bend	56	LaSalle	41	San Saba	54
Blanco	37	Franklin	38	Lavaca	37	Schleicher	54
Borden	54	Freestone	38	Lee	37	Scurry	54
Bosque	38	Frio	37	Leon	38	Shackelford	54
Bowie	11	Gaines	54	Liberty	56	Shelby	38
Brazoria	56	Galveston	56	Limestone	38	Sherman	54
Brazos	16	Garza	54	Lipscomb	54	Smith	11
Brewster	18	Gillespie	37	Live Oak	37	Somervell	38
Briscoe	54	Glasscock	54	Llano	37	Starr	41
Brooks	41	Goliad	40	Loving	54	Stephens	54
Brown	54	Gonzales	37	Lubbock	7	Sterling	54
Burleson	16	Gray	54	Lynn	54	Stonewall	54
Burnet	37	Grayson	35	Madison	38	Sutton	18
Caldwell	16	Gregg	11	Marion	38	Swisher	54
Calhoun	40	Grimes	38	Martin	54	Tarrant	35
Callahan	35	Guadalupe	16	Mason	37	Taylor	7
Cameron	8	Hale	54	Matagorda	37	Terrell	18
Camp	38	Hall	54	Maverick	41	Terry	54
Carson	7	Hamilton	38	McCulloch	54	Throckmorton	54
Cass	38	Hansford	54	McLennan	16	Titus	38
Castro	54	Hardeman	54	McMullen	41	Tom Green	7
Chambers	56	Hardin	56	Medina	16	Travis	16
Cherokee	38	Harris	56	Menard	54	Trinity	38
Childress	54	Harrison	63	Midland	7	Tyler	38
Clay	35	Hartley	54	Milam	38	Upshur	11
Cochran	54	Haskell	54	Mills	54	Upton	54
Coke	54	Hays	16	Mitchell	54	Uvalde	41
Coleman	54	Hemphill	54	Montague	54	Val Verde	18
Collin	35	Henderson	38	Montgomery	56	Van Zandt	38
Collingsworth	54	Hidalgo	8	Moore	54	Victoria	14
Colorado	37	Hill	38	Morris	38	Walker	38
Comal	16	Hockley	54	Motley	54	Waller	56
Comanche	54	Hood	38	Nacogdoches	38	Ward	54
Concho	54	Hopkins	38	Navarro	38	Washington	38
Cooke	54	Houston	38	Newton	38	Webb	8
Coryell	16	Howard	54	Nolan	54	Wharton	37
Cottle	54	Hudspeth	18	Nueces	40	Wheeler	54
Crane	54	Hunt	35	Ochiltree	54	Wichita	12
Crockett	18	Hutchinson	54	Oldham	54	Wilbarger	54
Crosby	7	Irion	7	Orange	56	Willacy	41
Culberson	18	Jack	38	Palo Pinto	38	Williamson	16
Dallam	54	Jackson	37	Panola	38	Wilson	16
Dallas	35	Jasper	38	Parker	35	Winkler	54
Dawson	54	Jeff Davis	18	Parmer	54	Wise	35
Deaf Smith	54	Jefferson	56	Pecos	18	Wood	38
Delta	35	Jim Hogg	41	Polk	38	Yoakum	54
Denton	35	Jim Wells	37	Potter	7	Young	54
DeWitt	37	Johnson	35	Presidio	18	Zapata	41
Dickens	54	Jones	35	Rains	38	Zavala	41
Dimmit	41			Randall	7		

Revised 1-2-15

Special Provisions

Special Provision to Item 000
Nondiscrimination

1. DESCRIPTION

All recipients of federal financial assistance are required to comply with various nondiscrimination laws including Title VI of the Civil Rights Act of 1964, as amended, (Title VI). Title VI forbids discrimination against anyone in the United States on the grounds of race, color, or national origin by any agency receiving federal funds.

Texas Department of Transportation, as a recipient of Federal financial assistance, and under Title VI and related statutes, ensures that no person shall on the grounds of race, religion (where the primary objective of the financial assistance is to provide employment per 42 U.S.C. § 2000d-3), color, national origin, sex, age or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any Department programs or activities.

2. DEFINITION OF TERMS

Where the term “Contractor” appears in the following six nondiscrimination clauses, the term “Contractor” is understood to include all parties to Contracts or agreements with the Texas Department of Transportation.

3. NONDISCRIMINATION PROVISIONS

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

3.1. **Compliance with Regulations**. The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract.

3.2. **Nondiscrimination**. The Contractor, with regard to the work performed by it during the Contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the Contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3.3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this Contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

3.4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

3.5. **Sanctions for Noncompliance**. In the event of a Contractor's noncompliance with the Nondiscrimination provisions of this Contract, the Recipient will impose such Contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- withholding payments to the Contractor under the Contract until the Contractor complies, and/or
- cancelling, terminating, or suspending a Contract, in whole or in part.

3.6. **Incorporation of Provisions**. The Contractor will include the provisions of paragraphs (3.1) through (3.6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

4. PERTINENT NONDISCRIMINATION AUTHORITIES:

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

4.1. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

4.2. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

4.3. Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

4.4. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;

4.5. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

4.6. Airport and Airway Improvement Act of 1982, (49 U.S.C. § 4 71, Section 4 7123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

4.7. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and Contractors, whether such programs or activities are Federally funded or not);

4.8. Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

4.9. The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

4.10. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

4.11. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

4.12. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U .S.C. 1681 et seq).

Special Provision to Item 000

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. GENERAL

In addition to the affirmative action requirements of the Special Provision titled "Standard Federal Equal Employment Opportunity Construction Contract Specifications" as set forth elsewhere in this proposal, the Bidder's attention is directed to the specific requirements for utilization of minorities and females as set forth below.

2. GOALS

2.1. Goals for minority and female participation are hereby established in accordance with 41 CFR 60-4.

2.2. The goals for minority and female participation expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area are as follows:

Goals for minority participation in each trade, %	Goals for female participation in each trade, %
See Table 1	6.9

2.3. These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it will apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 will be based on its implementation of the Standard Federal Equal Employment Opportunity Construction Contract Specifications Special Provision and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor must make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority and female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals will be a violation of the Contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

2.4. A Contractor or subcontractor will be considered in compliance with these provisions by participation in the Texas Highway-Heavy Branch, AGC, Statewide Training and Affirmative Action Plan. Provided that each Contractor or subcontractor participating in this plan must individually comply with the equal opportunity clause set forth in 41 CFR 60-1.4 and must make a good faith effort to achieve the goals set forth for each participating trade in the plan in which it has employees. The overall good performance of other Contractors and subcontractors toward a goal in an approved plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the goals contained in these provisions. Contractors or subcontractors participating in the plan must be able to demonstrate their participation and document their compliance with the provisions of this Plan.

3. SUBCONTRACTING

The Contractor must provide written notification to the Department within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the Contract resulting from this solicitation pending concurrence of the Department in the award. The notification will list the names,

address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the Contract is to be performed.

4. COVERED AREA

As used in this special provision, and in the Contract resulting from this solicitation, the geographical area covered by these goals for female participation is the State of Texas. The geographical area covered by these goals for other minorities are the counties in the State of Texas as indicated in Table 1.

5. REPORTS

The Contractor is hereby notified that he may be subject to the Office of Federal Contract Compliance Programs (OFCCP) reporting and record keeping requirements as provided for under Executive Order 11246 as amended. OFCCP will provide direct notice to the Contractor as to the specific reporting requirements that he will be expected to fulfill.

Table 1
Goals for Minority Participation

County	Participation, %	County	Participation, %
Anderson	22.5	Chambers	27.4
Andrews	18.9	Cherokee	22.5
Angelina	22.5	Childress	11.0
Aransas	44.2	Clay	12.4
Archer	11.0	Cochran	19.5
Armstrong	11.0	Coke	20.0
Atascosa	49.4	Coleman	10.9
Austin	27.4	Collin	18.2
Bailey	19.5	Collingsworth	11.0
Bandera	49.4	Colorado	27.4
Bastrop	24.2	Comal	47.8
Baylor	11.0	Comanche	10.9
Bee	44.2	Concho	20.0
Bell	16.4	Cooke	17.2
Bexar	47.8	Coryell	16.4
Blanco	24.2	Cottle	11.0
Borden	19.5	Crane	18.9
Bosque	18.6	Crockett	20.0
Bowie	19.7	Crosby	19.5
Brazoria	27.3	Culberson	49.0
Brazos	23.7	Dallam	11.0
Brewster	49.0	Dallas	18.2
Briscoe	11.0	Dawson	19.5
Brooks	44.2	Deaf Smith	11.0
Brown	10.9	Delta	17.2
Burleson	27.4	Denton	18.2
Burnet	24.2	DeWitt	27.4
Caldwell	24.2	Dickens	19.5
Calhoun	27.4	Dimmit	49.4
Callahan	11.6	Donley	11.0
Cameron	71.0	Duval	44.2
Camp	20.2	Eastland	10.9
Carson	11.0	Ector	15.1
Cass	20.2	Edwards	49.4
Castro	11.0	Ellis	18.2

County	Participation, %	County	Participation, %
El Paso	57.8	Kenedy	44.2
Erath	17.2	Kent	10.9
Falls	18.6	Kerr	49.4
Fannin	17.2	Kimble	20.0
Fayette	27.4	King	19.5
Fisher	10.9	Kinney	49.4
Floyd	19.5	Kleberg	44.2
Foard	11.0	Knox	10.9
Fort Bend	27.3	Lamar	20.2
Franklin	17.2	Lamb	19.5
Freestone	18.6	Lampasas	18.6
Frio	49.4	LaSalle	49.4
Gaines	19.5	Lavaca	27.4
Galveston	28.9	Lee	24.2
Garza	19.5	Leon	27.4
Gillespie	49.4	Liberty	27.3
Glasscock	18.9	Limestone	18.6
Goliad	27.4	Lipscomb	11.0
Gonzales	49.4	Live Oak	44.2
Gray	11.0	Llano	24.2
Grayson	9.4	Loving	18.9
Gregg	22.8	Lubbock	19.6
Grimes	27.4	Lynn	19.5
Guadalupe	47.8	Madison	27.4
Hale	19.5	Marion	22.5
Hall	11.0	Martin	18.9
Hamilton	18.6	Mason	20.0
Hansford	11.0	Matagorda	27.4
Hardeman	11.0	Maverick	49.4
Hardin	22.6	McCulloch	20.0
Harris	27.3	McLennan	20.7
Harrison	22.8	McMullen	49.4
Hartley	11.0	Medina	49.4
Haskell	10.9	Menard	20.0
Hays	24.1	Midland	19.1
Hemphill	11.0	Milam	18.6
Henderson	22.5	Mills	18.6
Hidalgo	72.8	Mitchell	10.9
Hill	18.6	Montague	17.2
Hockley	19.5	Montgomery	27.3
Hood	18.2	Moore	11.0
Hopkins	17.2	Morris	20.2
Houston	22.5	Motley	19.5
Howard	18.9	Nacogdoches	22.5
Hudspeth	49.0	Navarro	17.2
Hunt	17.2	Newton	22.6
Hutchinson	11.0	Nolan	10.9
Irion	20.0	Nueces	41.7
Jack	17.2	Ochiltree	11.0
Jackson	27.4	Oldham	11.0
Jasper	22.6	Orange	22.6
Jeff Davis	49.0	Palo Pinto	17.2
Jefferson	22.6	Panola	22.5
Jim Hogg	49.4	Parker	18.2
Jim Wells	44.2	Parmer	11.0
Johnson	18.2	Pecos	18.9
Jones	11.6	Polk	27.4
Karnes	49.4	Potter	9.3
Kaufman	18.2	Presidio	49.0
Kendall	49.4	Randall	9.3

County	Participation, %	County	Participation, %
Rains	17.2	Reagan	20.0
Real	49.4	Throckmorton	10.9
Red River	20.2	Titus	20.2
Reeves	18.9	Tom Green	19.2
Refugio	44.2	Travis	24.1
Roberts	11.0	Trinity	27.4
Robertson	27.4	Tyler	22.6
Rockwall	18.2	Upshur	22.5
Runnels	20.0	Upton	18.9
Rusk	22.5	Uvalde	49.4
Sabine	22.6	Val Verde	49.4
San Augustine	22.5	Van Zandt	17.2
San Jacinto	27.4	Victoria	27.4
San Patricio	41.7	Walker	27.4
San Saba	20.0	Waller	27.3
Schleicher	20.0	Ward	18.9
Scurry	10.9	Washington	27.4
Shackelford	10.9	Webb	87.3
Shelby	22.5	Wharton	27.4
Sherman	11.0	Wheeler	11.0
Smith	23.5	Wichita	12.4
Somervell	17.2	Wilbarger	11.0
Starr	72.9	Willacy	72.9
Stephens	10.9	Williamson	24.1
Sterling	20.0	Wilson	49.4
Stonewall	10.9	Winkler	18.9
Sutton	20.0	Wise	18.2
Swisher	11.0	Wood	22.5
Tarrant	18.2	Yoakum	19.5
Taylor	11.6	Young	11.0
Terrell	20.0	Zapata	49.4
Terry	19.5	Zavala	49.4

Special Provision to Item 000

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

1. GENERAL

1.1. As used in these specifications:

- "Covered area" means the geographical area described in the solicitation from which this Contract resulted;
- "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- "Minority" includes:
  - Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

1.2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it will physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this Contract resulted.

1.3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) will be in accordance with that plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the equal employment opportunity (EEO) clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

1.4. The Contractor will implement the specific affirmative action standards provided in Section 1.7.1. through Section 1.7.16. of these specifications. The goals set forth in the solicitation from which this Contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction Contractors performing Contracts in geographical areas where they do not have a Federal or federally assisted construction Contract will apply the minority and female goals established for the geographical area where the Contract is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or any Federal procurement contracting officer. The

Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

1.5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women will excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

1.6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

1.7. The Contractor will take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications will be based upon its effort to achieve maximum results from its actions. The Contractor will document these efforts fully, and will implement affirmative action steps at least as extensive as the following:

1.7.1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor will specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

1.7.2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

1.7.3. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this will be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

1.7.4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral Process has impeded the Contractor's efforts to meet its obligations.

1.7.5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor will provide notice of these programs to the sources compiled under 7b above.

1.7.6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and Collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

1.7.7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other

employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., before the initiation of construction work at any job site. A written record must be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

1.7.8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

1.7.9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month before the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor will send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

1.7.10. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

1.7.11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

1.7.12. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

1.7.13. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

1.7.14. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities will be provided to assure privacy between the sexes.

1.7.15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

1.7.16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

1.8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (Section 7.1. through Section 7.16.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Section 7.1. through Section 7.16. of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation will not be a defense for the Contractor's noncompliance.

1.9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, 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. Consequently, the Contractor

Special Provision to Item 000
Special Labor Provisions for State Projects

1. GENERAL

This is a "Public Works" Project, as provided under Government Code Title 10, Chapter 2258, "Prevailing Wage Rates," and is subject to the provisions of the Statute. No provisions in the Contract are intended to be in conflict with the provisions of the Statute.

The Texas Transportation Commission has ascertained and indicated in the special provisions the regular rate of per diem wages prevailing in each locality for each craft or type of worker. Apply the wage rates contained in the specifications as minimum wage rates for the Contract.

2. MINIMUM WAGES, HOURS AND CONDITIONS OF EMPLOYMENT

All workers necessary for the satisfactory completion of the work are within the purview of the Contract.

Whenever and wherever practical, give local citizens preference in the selection of labor.

Do not require any worker to lodge, board or trade at a particular place, or with a particular person as a condition of employment.

Do not charge or accept a fee of any from any person who obtains work on the project. Do not require any person who obtains work on the project to pay any fee to any other person or agency obtaining employment for the person on the project.

Do not charge for tools or equipment used in connection with the duties performed, except for loss or damage of property. Do not charge for necessary camp water.

Do not charge for any transportation furnished to any person employed on the project.

The provisions apply where work is performed by piece work, station work, etc. The minimum wage paid will be exclusive of equipment rental on any shipment which the worker or subcontractor may furnish in connection with his work.

Take responsibility for carrying out the requirements of this specification and ensure that each subcontractor working on the project complies with its provisions.

Any form of subterfuge, coercion or deduction designated to evade, reduce or discount the established minimum wage scales will be considered a violation of the Contract.

The Fair Labor Standards Acts (FLSA) established one and one-half (1-1/2) pay for overtime in excess of 40 hours worked in 1 week. Do not consider time consumed by the worker in going to and returning from the place of work as part of the hours of work. Do not require or permit any worker to work in excess of 40 hours in 1 week, unless the worker receives compensation at a rate not less than 1-1/2 times the basic rate of pay for all hours worked in excess of 40 hours in the workweek.

The general rates of per diem wages prevailing in this locality for each class and type of workers whose services are considered necessary to fulfill the Contract are indicated in the special provisions, and these rates govern as minimum wage rates on this Contract. A penalty of $60.00 per calendar day or portion of a calendar day for each worker that is paid less than the stipulated general rates of per diem wages for any work done under the Contract will be deducted. The Department, upon receipt of a complaint by a worker,

will determine within 30 days whether good cause exists to believe that the Contractor or a subcontractor has violated wage rate requirements and notify the parties involved of the findings. Make every effort to resolve the alleged violation within 14 days after notification. The next alternative is submittal to binding arbitration in accordance with the provisions of the Texas General Arbitration Act (Art. 224 et seq., Revised Statutes).

Notwithstanding any other provision of the Contract, covenant and agree that the Contractor and its subcontractors will pay each of their employees and contract labor engaged in any way in work under the Contract, a wage not less than what is generally known as the “federal minimum wage” as set out in 29 U.S.C. 206 as that Statute may be amended from time to time.

Pay any worker employed whose position is not listed in the Contract, a wage not less than the per diem wage rate established in the Contract for a worker whose duties are most nearly comparable.

3. RECORD AND INSPECTIONS

Keep copies of weekly payrolls for review. Require subcontractors to keep copies of weekly payrolls for review. Show the name, occupation, number of hours worked each day and per diem wage paid each worker together with a complete record of all deductions made from such wages. Keep records for a period of 3 years from the date of completion of the Contract.

Where the piece-work method is used, indicate on the payroll for each person involved:

- Quantity of piece work performed.
- Price paid per piece-work unit.
- Total hours employed.

The Engineer may require the Contractor to file an affidavit for each payroll certifying that payroll is a true and accurate report of the full wages due and paid to each person employed.

Post or make available to employees the prevailing wage rates from the Contract. Require subcontractors to post or make available to employees the prevailing wage rates from the Contract.

may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

1.10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

1.11. The Contractor will not enter into any Subcontract with any person or firm debarred from Government Contracts pursuant to Executive Order 11246.

1.12. The Contractor will carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties will be in violation of these specifications and Executive Order 11246, as amended.

1.13. The Contractor, in fulfilling its obligations under these specifications, will implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.

1.14. The Contractor will designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records must at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records must be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

1.15. Nothing herein provided will be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

1.16. In addition to the reporting requirements set forth elsewhere in this Contract, the Contractor and the subcontractors holding subcontracts, not including material suppliers, of $10,000 or more, will submit for every month of July during which work is performed, employment data as contained under Form PR 1391 (Appendix C to 23 CFR, Part 230), and in accordance with the included instructions.

TECHNICAL SPECIFICATIONS

Item 100
Preparing Right of Way

1. DESCRIPTION

Prepare the right of way and designated easements for construction operations by removing and disposing of all obstructions when removal of such obstructions is not specifically shown on the plans to be paid by other Items.

2. CONSTRUCTION

Protect designated features on the right of way and prune trees and shrubs as directed. Do not park equipment, service equipment, store materials, or disturb the root area under the branches of trees designated for preservation. Treat cuts on trees with an approved tree wound dressing within 20 min. of making a pruning cut or otherwise causing damage to the tree when shown on the plans. Follow all local and state regulations when burning. Pile and burn brush at approved locations as directed. Coordinate work with state and federal authorities when working in state or national forests or parks. Test, remove, and dispose of hazardous materials in accordance with Article 6.10., "Hazardous Materials."

Clear areas shown on the plans of all obstructions, except those landscape features that are to be preserved. Such obstructions include remains of houses and other structures, foundations, floor slabs, concrete, brick, lumber, plaster, septic tank drain fields, basements, abandoned utility pipes or conduits, equipment, fences, retaining walls, and other items as specified on the plans. Remove vegetation and other landscape features not designated for preservation, curb and gutter, driveways, paved parking areas, miscellaneous stone, sidewalks, drainage structures, manholes, inlets, abandoned railroad tracks, scrap iron, and debris, whether above or below ground. Removal of live utility facilities is not included in this Item. Remove culverts, storm sewers, manholes, and inlets in proper sequence to maintain traffic and drainage.

Notify the Engineer in writing when items not shown on the plans and not reasonably detectable (buried with no obvious indication of presence) are encountered and required to be removed. These items will be handled in accordance with Article 4.5., "Differing Site Conditions."

Remove obstructions not designated for preservation to 2 ft. below natural ground in areas receiving embankment. Remove obstructions to 2 ft. below the excavation level in areas to be excavated. Remove obstructions to 1 ft. below natural ground in all other areas. Cut trees and stumps off to ground level when allowed by the plans or directed. Plug the remaining ends of abandoned underground structures over 3 in. in diameter with concrete to form a tight closure. Backfill, compact, and restore areas where obstructions have been removed unless otherwise directed. Use approved material for backfilling. Dispose of wells in accordance with Item 103, "Disposal of Wells."

Accept ownership, unless otherwise directed, and dispose of removed materials and debris at locations off the right of way in accordance with local, state, and federal requirements.

3. MEASUREMENT

This Item will be measured by the acre; by the 100-ft. station, regardless of the width of the right of way; or by each tree removed.

4. PAYMENT

For "acre" and "station" measurement, the work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Preparing Right of Way." For "each"

Item 110
Excavation

1. DESCRIPTION

Excavate areas as shown on the plans or as directed. Remove materials encountered to the lines, grades, and typical sections shown on the plans and cross-sections.

2. CONSTRUCTION

Accept ownership of unsuitable or excess material and dispose of material in accordance with local, state, and federal regulations at locations outside the right of way.

Maintain drainage in the excavated area to avoid damage to the roadway section. Correct any damage to the subgrade caused by weather at no additional cost to the Department.

Shape slopes to avoid loosening material below or outside the proposed grades. Remove and dispose of slides as directed.

2.1. Rock Cuts. Excavate to finish subgrade. Manipulate and compact subgrade in accordance with Section 132.3.4., "Compaction Methods," unless excavation is to clean homogenous rock at finish subgrade elevation. Use approved embankment material compacted in accordance with Section 132.3.4., "Compaction Methods," to replace undercut material at no additional cost if excavation extends below finish subgrade.

2.2. Earth Cuts. Excavate to finish subgrade. Scarify subgrade to a uniform depth at least 6 in. below finish subgrade elevation in areas where base or pavement structure will be placed on subgrade. Manipulate and compact subgrade in accordance with Section 132.3.4., "Compaction Methods."

Take corrective measures as directed if unsuitable material is encountered below subgrade elevations.

2.3. Subgrade Tolerances. Excavate to within 1/2 in. in cross-section and 1/2 in. in 16 ft. measured longitudinally for turnkey construction. Excavate to within 0.1 ft. in cross-section and 0.1 ft. in 16 ft. measured longitudinally for staged construction.

3. MEASUREMENT

This Item will be measured by the cubic yard in its original position as computed by the method of average end areas.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

Limits of measurement for excavation in retaining wall areas will be as shown on the plans.

Shrinkage or swelling factors will not be considered in determining the calculated quantities.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Excavation (Roadway)," "Excavation (Channel),"

"Excavation (Special)," or "Excavation (Roadway and Channel)." This price is full compensation for authorized excavation; drying; undercutting subgrade and reworking or replacing the undercut material in rock cuts; hauling; disposal of material not used elsewhere on the project; scarification and compaction; and equipment, labor, materials, tools, and incidentals.

Drying required deeper than 6 in. below subgrade elevation will be paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Excavation and replacement of unsuitable material below subgrade elevations will be performed and paid for in accordance with the applicable bid items. However, if Item 132, "Embankment," is not included in the Contract, payment for replacement of unsuitable material will be paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

When a slide not due to the Contractor's negligence or operation occurs, payments for removal and disposal of the slide material will be in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Excavation in backfill areas of retaining walls will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 132
Embankment

1. DESCRIPTION

Furnish, place, and compact materials for construction of roadways, embankments, levees, dikes, or any designated section of the roadway where additional material is required.

2. MATERIALS

Furnish approved material capable of forming a stable embankment from required excavation in the areas shown on the plans or from sources outside the right of way. Provide one or more of the following types as shown on the plans:

- Type A. Granular material that is free from vegetation or other objectionable material and meets the requirements of Table 1.

Table 1
Testing Requirements

Property	Test Method	Specification Limit
Liquid limit	Tex-104-E	≤ 45
Plasticity index (PI)	Tex-106-E	≤ 15
Bar linear shrinkage	Tex-107-E	≥ 2

Perform the Linear Shrinkage test only as indicated in Tex-104-E.

- Type B. Materials such as rock, loam, clay, or other approved materials.
- Type C. Material meeting the specification requirements shown on the plans. Type C may be further designated as Type C1, C2, etc.
- Type D. Material from required excavation areas shown on the plans.

Meet the requirements of the pertinent retaining wall Items for retaining wall backfill material.

3. CONSTRUCTION

Meet the requirements of Item 7, "Legal Relations and Responsibilities," when off right of way sources are used. Notify the Engineer before opening a material source to allow for required testing. Complete preparation of the right of way in accordance with Item 100, "Preparing Right of Way," for areas to receive embankment.

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 Item 204, "Sprinkling," and by rolling using equipment complying with Item 210, "Rolling," when directed.

Scarify and loosen the unpaved surface areas, except rock, to a depth of at least 6 in. 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 recompact scarified material with the placed embankment material. Do not exceed the layer depth specified in Section 132.3.4., "Compaction Methods."

Construct embankments to the grade and sections shown on the plans. Construct the embankment in layers approximately parallel to the finished grade for the full width of the individual roadway cross-sections unless

otherwise shown on the plans. Ensure that each section of the embankment conforms to the detailed sections or slopes. Maintain the finished section, density, and grade until the project is accepted.

3.1. Earth Embankments. Earth embankment is mainly composed of material other than rock. Construct embankments in successive layers, evenly distributing materials in lengths suited for sprinkling and rolling.

Treat material in accordance with Item 260, “Lime Treatment (Road-Mixed)” or Item 275, “Cement Treatment (Road-Mixed)” when required. Obtain approval to incorporate rock and broken concrete produced by the construction project in the lower layers of the embankment. Place the rock and concrete outside the limits of the completed roadbed when the size of approved rock or broken concrete exceeds the layer thickness requirements in Section 132.3.4., “Compaction Methods.” Cut and remove all exposed reinforcing steel from the broken concrete.

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 embankment layer in accordance with Section 132.3.4.1., “Ordinary Compaction,” when ordinary compaction is specified. Compact the layer to the required density in accordance with Section 132.3.4.2., “Density Control,” when density control is specified.

3.2. Rock Embankments. Rock embankment is mainly composed of rock. Construct rock embankments in successive layers for the full width of the roadway cross-section with a depth of 18 in. or less. Increase the layer depth for large rock sizes as approved. Do not exceed a depth of 2-1/2 ft. in any case. Fill voids created by the large stone matrix with smaller stones during the placement and filling operations.

Ensure the depth of the embankment layer is greater than the maximum dimension of any rock. Do not place rock greater than 2 ft. in its maximum dimension, unless otherwise approved. Construct the final layer with graded material so that the density and uniformity is in accordance with Section 132.3.4., “Compaction Methods.” Break up exposed oversized material as approved.

Roll and sprinkle each embankment layer in accordance with Section 132.3.4.1., “Ordinary Compaction,” when ordinary compaction is specified. Compact each layer to the required density in accordance with Section 132.3.4.2., “Density Control,” when density control is specified. Proof-roll each rock layer as directed, where density testing is not possible, in accordance with Item 216, “Proof Rolling,” to ensure proper compaction.

3.3. Embankments Adjacent to Culverts and Bridges. Compact embankments adjacent to culverts and bridges in accordance with Item 400, “Excavation and Backfill for Structures.”

3.4. Compaction Methods. 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. Begin rolling at the lower side and progress toward the high side on super elevated curves. Alternate roller trips to attain slightly different lengths. Compact embankments in accordance with Section 132.4.1., “Ordinary Compaction,” or Section 132.3.4.2., “Density Control,” as shown on the plans.

3.4.1. Ordinary Compaction. Use approved rolling equipment complying with Item 210, “Rolling,” to compact each layer. Use specific equipment when required by the plans or the Engineer. Do not allow the loose depth of any layer to exceed 8 in., unless otherwise approved. Bring each layer to the moisture content directed before and during rolling operations. Compact each layer until there is no evidence of further consolidation. Maintain a level layer to ensure uniform compaction. Recompact and refinish the subgrade at no additional expense to the Department if the required stability or finish is lost for any reason.

3.4.2. **Density Control**. Compact each layer to the required density using equipment complying with Item 210, "Rolling." Determine the maximum lift thickness based on the ability of the compacting operation and equipment to meet the required density. Do not exceed layer thickness of 16 in. loose or 12 in. compacted material unless otherwise approved. Maintain a level layer to ensure uniform compaction.

The Engineer will use Tex-114-E to determine the maximum dry density (D_a) and optimum moisture content (W_{opt}). Meet the requirements for field density and moisture content in Table 2 unless otherwise shown on the plans.

Table 2
Field Density Control Requirements

Description	Density	Moisture Content
	Tex-115-E	
PI ≤ 15	≥ 98% D_a	
15 < PI ≤ 35	≥ 98% D_a and ≤ 102% D_a	≥ $W_{opt.}$
PI > 35	≥ 95% D_a and ≤ 100% D_a	≥ $W_{opt.}$

Each layer is subject to testing by the Engineer for density and moisture content. During compaction, the moisture content of the soil should not exceed the value shown on the moisture-density curve, above optimum, required to achieve:

- 98% dry density for soils with a PI greater than 15 but less than or equal to 35 or
- 95% dry density for soils with PI greater than 35.

Remove small areas of the layer to allow for density tests as required. Replace the removed material and recompact at no additional expense to the Department. Proof-roll in accordance with Item 216, "Proof Rolling," when shown on the plans or as directed. Correct soft spots as directed.

3.5. **Maintenance of Moisture and Reworking**. Maintain the density and moisture content once all requirements in Table 2 are met. Maintain the moisture content no lower than 4% below optimum for soils with a PI greater than 15. Rework the material to obtain the specified compaction when the material loses the required stability, density, moisture, or finish. Alter the compaction methods and procedures on subsequent work to obtain specified density as directed.

3.6. **Acceptance Criteria**.

3.6.1. **Grade Tolerances**.

3.6.1.1. **Staged Construction**. Grade to within 0.1 ft. in the cross-section and 0.1 ft. in 16 ft. measured longitudinally.

3.6.1.2. **Turnkey Construction**. Grade to within 1/2 in. in the cross-section and 1/2 in. in 16 ft. measured longitudinally.

3.6.2. **Gradation Tolerances**. Ensure no more than 1 of the 5 most recent gradation tests is outside the specified limits on any individual sieve by more than 5% when gradation requirements are shown on the plans.

3.6.3. **Density Tolerances**. Ensure no more than 1 of the 5 most recent density tests for compaction work is outside the specified density limits, and no test is outside the limits by more than 3 pcf.

3.6.4. **Plasticity Tolerances**. Ensure no more than 1 of the 5 most recent PI tests for material is outside the specified limit by more than 2 points.

4. MEASUREMENT

Embankment will be measured by the cubic yard. Measurement will be further defined for payment as follows:

4.1. Final. The cubic yard will be measured in its final position using the average end area method. The volume is computed between the original ground surface or the surface upon which the embankment is to be constructed and the lines, grades, and slopes of the embankment. In areas of salvaged topsoil, payment for embankment will be made in accordance with Item 160, “Topsoil.” Shrinkage or swell factors will not be considered in determining the calculated quantities.

4.2. Original. The cubic yard will be measured in its original and natural position using the average end area method.

4.3. Vehicle. The cubic yard will be measured in vehicles at the point of delivery.

When measured by the cubic yard in its final position, this is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., “Plans Quantity Measurement.” Additional measurements or calculations will be made if adjustments of quantities are required.

Shrinkage or swell factors are the Contractor’s responsibility. When shown on the plans, factors are for informational purposes only.

Measurement of retaining wall backfill in embankment areas is paid for as embankment unless otherwise shown on the plans. Limits of measurement for embankment in retaining wall areas are shown on the plans.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Embankment (Final),” “Embankment (Original),” or “Embankment (Vehicle)” of the compaction method and type specified. This price is full compensation for furnishing embankment; hauling; placing, compacting, finishing, and reworking; disposal of waste material; and equipment, labor, tools, and incidentals.

When proof rolling is directed, it will be paid for in accordance with Item 216, “Proof Rolling.”

All sprinkling and rolling, except proof rolling, will not be paid for directly but will be considered subsidiary to this Item, unless otherwise shown on the plans.

Where subgrade is constructed under this Contract, correction of soft spots in the subgrade will be at the Contractor’s expense. Where subgrade is not constructed under this Contract, correction of soft spots in the subgrade will be paid in accordance with Article 9.7., “Payment for Extra Work and Force Account Method.”

Item 164
Seeding for Erosion Control

1. DESCRIPTION

Provide and install temporary or permanent seeding for erosion control as shown on the plans or as directed.

2. MATERIALS

2.1. Seed. Provide seed from the previous season's crop meeting the requirements of the Texas Seed Law, including the testing and labeling for pure live seed (PLS = Purity × Germination). Furnish seed of the designated species, in labeled unopened bags or containers to the Engineer before planting. Use within 12 mo. from the date of the analysis. When Buffalograss is specified, use seed that is treated with KNO_3 (potassium nitrate) to overcome dormancy.

Use Tables 1–4 to determine the appropriate seed mix and rates as specified on the plans. If a plant species is not available by the producers, the other plant species in the recommended seed mixture will be increased proportionally by the PLS/acre of the missing plant species.

Table 1
Permanent Rural Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
1 (Paris) Feb. 1–May 15	Green Sprangletop Sideoats Grama (Haskell) Bermudagrass Little Bluestem (Native) Illinois Bundleflower	0.3 3.2 1.8 1.7 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sand Lovegrass Weeping Lovegrass (Ermelo) Partridge Pea	0.3 1.5 6.0 0.6 0.8 1.0
2 (Ft. Worth) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Purple Prairie Clover (Cuero) Engelmann Daisy (Eldorado) Illinois Bundleflower Awnless Bushsunflower (Plateau)	1.0 1.0 1.0 0.4 0.2 0.8 0.6 0.75 1.3 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Slender Grama (Dilley) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover	1.0 0.2 0.2 0.4 1.0 0.2 0.2 0.6 0.8 0.75 0.3
3 (Wichita Falls) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Blue Grama (Hachita) Western Wheatgrass (Barton) Galleta Grass (Viva) Engelmann Daisy (Eldorado) Awnless Bushsunflower (Plateau)	0.6 1.0 1.0 0.4 0.2 0.8 0.4 1.2 0.6 0.75 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover (Cuero)	1.0 0.2 0.2 0.4 0.2 0.2 0.6 0.8 0.75 0.3
4 (Amarillo) Feb. 15–May 15	Green Sprangletop Sideoats Grama (Haskell) Blue Grama (Hachita) Buffalograss (Texoka) Illinois Bundleflower	0.3 3.6 1.2 1.6 1.0	Green Sprangletop Weeping Lovegrass (Ermelo) Blue Grama (Hachita) Sand Dropseed (Borden Co.) Sand Bluestem Purple Prairie Clover	0.3 0.8 1.0 0.3 1.8 0.5

Table 1 (continued) 164

Permanent Rural Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
5 (Lubbock) Feb. 15–May 15	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Buffalograss (Texoka) Illinois Bundleflower	0.3 3.6 1.2 1.6 1.0	Green Sprangletop Weeping Lovegrass (Ermelo) Blue Grama (Hachita) Sand Dropseed (Borden Co.) Sand Bluestem Purple Prairie Clover	0.3 0.8 1.0 0.3 1.8 0.5
6 (Odessa) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Blue Grama (Hachita) Galleta Grass (Viva) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Alkali Sacaton (Saltalk) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Whiplash Pappusgrass (Webb) Arizona Cottontop (La Salle)	1.0 1.0 0.4 0.6 0.2 0.6 0.2 0.2 0.1 0.6 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Blue Grama (Hachita) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Indian Ricegrass (Rim Rock) Sand Bluestem (Cottle County) Little Bluestem (Pastura) Purple Prairie Clover (Cuero)	1.0 0.2 0.4 0.4 0.2 0.2 1.6 1.2 0.8 0.3
7 (San Angelo) Feb. 1–May 1	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Blue Grama (Hachita) Western Wheatgrass (Barton) Galleta Grass (Viva) Engelmann Daisy (Eldorado) Illinois Bundleflower (Sabine)	1.0 1.0 1.0 0.4 0.2 0.4 0.4 1.2 0.6 0.75 1.0	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Sand Bluestem (Cottle County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover (Cuero)	1.0 0.2 0.2 0.4 0.2 0.2 1.2 0.6 0.8 0.75 0.3
8 (Abilene) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Blue Grama (Hachita) Western Wheatgrass (Barton) Galleta Grass (Viva) Engelmann Daisy (Eldorado) Illinois Bundleflower (Sabine)	1.0 1.0 1.0 0.4 0.2 0.4 0.4 1.2 0.6 0.75 1.0	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Sand Bluestem (Cottle County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover (Cuero)	1.0 0.2 0.2 0.4 0.2 0.2 1.2 0.6 0.8 0.75 0.3
9 (Waco) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Purple Prairie Clover (Cuero) Engelmann Daisy (Eldorado) Illinois Bundleflower Awnless Bushsunflower (Plateau)	1.0 1.0 1.0 0.4 0.2 0.8 0.6 0.75 1.3 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Slender Grama (Dilley) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover	1.0 0.2 0.2 0.4 1.0 0.2 0.2 0.6 0.8 0.75 0.3
10 (Tyler) Feb. 1–May 15	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sideoats Grama (Haskell) Illinois Bundleflower	0.3 1.8 9.0 2.7 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Weeping Lovegrass (Ermelo) Sand Lovegrass Lance-Leaf Coreopsis	0.3 1.8 9.0 0.5 0.5 1.0
11 (Lufkin) Feb. 1–May 15	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sideoats Grama (Haskell) Illinois Bundleflower	0.3 1.8 9.0 2.7 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sand Lovegrass Lance-Leaf Coreopsis	0.3 2.1 9.0 0.5 1.0

Table 1 (continued) 164

Permanent Rural Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
12 (Houston) Jan. 15–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell) Little Bluestem (Native) Illinois Bundleflower	0.3 2.1 3.2 1.4 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Weeping Lovegrass (Ermelo) Lance-Leaf Coreopsis	0.3 2.4 10.5 1.0 1.0
13 (Yoakum) Jan. 15–May 15	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Slender Grama (Dilley) Shortspike Windmillgrass (Welder) Halls Panicum (Oso) Plains Bristlegrass (Catarina Blend) Canada Wildrye (Lavaca) Illinois Bundleflower (Sabine) Purple Prairie Clover (Cuero)	1.0 1.0 1.5 1.0 0.3 0.2 0.2 2.0 1.3 0.6	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Slender Grama (Dilley) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Purple Prairie Clover (Cuero) Partridge Pea (Comanche) Englemann Daisy (Eldorado)	1.0 0.4 1.0 0.8 0.2 0.6 0.6 1.0
14 (Austin) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Purple Prairie Clover (Cuero) Engelmann Daisy (Eldorado) Illinois Bundleflower (Sabine) Awnless Bushsunflower (Plateau)	1.0 1.0 1.0 0.4 0.2 0.8 0.6 0.75 1.3 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Slender Grama (Dilley) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover	1.0 0.2 0.2 0.4 1.0 0.2 0.2 0.6 0.8 0.75 0.3
15 (San Antonio) Feb. 1–May 1	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Slender Grama (Dilley) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Halls Panicum (Oso) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Hooded Windmillgrass (Mariah) Arizona Cottontop (La Salle)	1.0 1.0 1.0 1.0 0.2 0.6 0.2 0.2 0.1 0.2 0.2	Green Sprangletop (Van Horn) Slender Grama (Dilley) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Plains Bristlegrass (Catarina Blend) Hooded Windmillgrass (Mariah) Multi-flowered False Rhoades Grass (Hidalgo) Arizona Cottontop (La Salle)	1.0 2.0 0.6 0.4 0.6 0.2 0.3 0.1 0.2
16 (Corpus Christi) Jan. 1–May 1	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Slender Grama (Dilley) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Halls Panicum (Oso) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Hooded Windmillgrass (Mariah) Arizona Cottontop (La Salle)	1.0 1.0 1.0 1.0 0.2 0.6 0.2 0.2 0.1 0.2 0.2	Green Sprangletop (Van Horn) Slender Grama (Dilley) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Plains Bristlegrass (Catarina Blend) Hooded Windmillgrass (Mariah) Multi-flowered False Rhodes Grass (Hidalgo) Arizona Cottontop (La Salle)	1.0 2.0 0.6 0.4 0.6 0.2 0.3 0.1 0.2
17 (Bryan) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell) Little Bluestem (Native) Illinois Bundleflower	0.3 1.5 3.6 1.7 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Weeping Lovegrass (Ermelo) Sand Lovegrass Lance-Leaf Coreopsis	0.3 1.5 7.5 0.6 0.6 1.0

Table 1 (continued) 164

Permanent Rural Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
18 (Dallas) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Purple Prairie Clover (Cuero) Engelmann Daisy (Eldorado) Illinois Bundleflower Awnless Bushsunflower (Plateau)	1.0 1.0 1.0 0.4 0.2 0.8 0.6 0.75 1.3 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Slender Grama (Dilley) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover	1.0 0.2 0.2 0.4 1.0 0.2 0.2 0.6 0.8 0.75 0.3
19 (Atlanta) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell) Illinois Bundleflower	0.3 2.4 4.5 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sand Lovegrass Lance-Leaf Coreopsis	0.3 2.1 7.5 0.6 1.0
20 (Beaumont) Jan. 15–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell) Illinois Bundleflower	0.3 2.7 4.1 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sand Lovegrass Lance-Leaf Coreopsis	0.3 2.1 7.5 0.6 1.0
21 (Pharr) Jan. 15–May 15	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Slender Grama (Dilley) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Halls Panicum (Oso) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Hooded Windmillgrass (Mariah) Arizona Cottontop (La Salle)	1.0 1.0 1.0 1.0 0.2 0.6 0.2 0.2 0.1 0.2 0.2	Green Sprangletop (Van Horn) Slender Grama (Dilley) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Plains Bristlegrass (Catarina Blend) Hooded Windmillgrass (Mariah) Multi-flowered False Rhoades Grass (Hidalgo) Arizona Cottontop (La Salle)	1.0 2.0 0.6 0.4 0.6 0.2 0.3 0.1 0.2
22 (Laredo) Jan. 15–May 1	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Texas Grama (Atascosa) Slender Grama (Dilley) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Halls Panicum (Oso) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Hooded Windmillgrass (Mariah) Arizona Cottontop (La Salle)	1.0 1.0 1.0 1.0 0.2 0.6 0.2 0.2 0.1 0.2 0.2	Green Sprangletop (Van Horn) Slender Grama (Dilley) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Plains Bristlegrass (Catarina Blend) Hooded Windmillgrass (Mariah) Multi-flowered False Rhoades Grass (Hidalgo) Arizona Cottontop (La Salle)	1.0 2.0 0.6 0.4 0.6 0.2 0.3 0.1 0.2
23 (Brownwood) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (Haskell) Texas Grama (Atascosa) Hairy Grama (Chaparral) Shortspike Windmillgrass (Welder) Little Bluestem (OK Select) Blue Grama (Hachita) Western Wheatgrass (Barton) Galleta Grass (Viva) Engelmann Daisy (Eldorado) Awnless Bushsunflower (Plateau)	0.6 1.0 1.0 0.4 0.2 0.8 0.4 1.2 0.6 0.75 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Shortspike Windmillgrass (Welder) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Partridge Pea (Comanche) Little Bluestem (OK Select) Englemann Daisy (Eldorado) Purple Prairie Clover (Cuero)	1.0 0.2 0.2 0.4 0.2 0.2 0.6 0.8 0.75 0.3

Table 1 (continued) 164

Permanent Rural Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
24 (El Paso) Feb. 1–May 15	Green Sprangletop (Van Horn) Sideoats Grama (South Texas) Blue Grama (Hachita) Galleta Grass (Viva) Shortspike Windmillgrass (Welder) Pink Pappusgrass (Maverick) Alkali Sacaton (Saltalk) Plains Bristlegrass (Catarina Blend) False Rhodes Grass (Kinney) Whiplash Pappusgrass (Webb) Arizona Cottontop (La Salle)	1.0 1.0 0.4 0.6 0.2 0.6 0.2 0.2 0.1 0.6 0.2	Green Sprangletop (Van Horn) Hooded Windmillgrass (Mariah) Blue Grama (Hachita) Hairy Grama (Chaparral) Sand Lovegrass (Mason) Sand Dropseed (Borden County) Indian Ricegrass (Rim Rock) Sand Bluestem (Cottle County) Little Bluestem (Pastura) Purple Prairie Clover (Cuero)	1.0 0.2 0.4 0.4 0.2 0.2 1.6 1.2 0.8 0.3
25 (Childress) Feb. 1–May 15	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Western Wheatgrass Galleta Illinois Bundleflower	0.3 2.7 0.9 2.1 1.6 1.0	Green Sprangletop Weeping Lovegrass (Ermelo) Sand Dropseed (Borden Co.) Sand Lovegrass Purple Prairie Clover	0.3 1.2 0.5 0.8 0.5

Table 2

Permanent Urban Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
1 (Paris) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
2 (Ft. Worth) Feb. 1–May 15	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Buffalograss (Texoka)	0.3 3.6 2.4 1.6	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Sand Dropseed (Borden Co.)	0.3 3.6 2.1 0.3
3 (Wichita Falls) Feb. 1–May 15	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Buffalograss (Texoka)	0.3 4.5 1.8 1.6	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Sand Dropseed (Borden Co.)	0.3 3.6 1.8 0.4
4 (Amarillo) Feb. 15–May 15	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Sand Dropseed (Borden Co.) Buffalograss (Texoka)	0.3 2.7 0.9 0.4 1.6
5 (Lubbock) Feb. 15–May 15	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Sand Dropseed (Borden Co.) Buffalograss (Texoka)	0.3 2.7 0.9 0.4 1.6
6 (Odessa) Feb. 1–May 15	Green Sprangletop Sideoats Grama (Haskell) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Sideoats Grama (Haskell) Sand Dropseed (Borden Co.) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 2.7 0.4 0.9 1.6
7 (San Angelo) Feb. 1–May 1	Green Sprangletop Sideoats Grama (Haskell) Buffalograss (Texoka)	0.3 7.2 1.6	Green Sprangletop Sideoats Grama (Haskell) Sand Dropseed (Borden Co.) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.2 0.3 0.9 1.6
8 (Abilene) Feb. 1–May 15	Green Sprangletop Sideoats Grama (Haskell) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Sand Dropseed (Borden Co.) Sideoats Grama (Haskell) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 0.3 3.6 0.8 1.6

Table 2 (continued) 164

Permanent Urban Seed Mix

District and Planting Dates	Clay Soils Species and Rates (lb. PLS/acre)		Sandy Soils Species and Rates (lb. PLS/acre)	
9 (Waco) Feb. 1–May 15	Green Sprangletop Bermudagrass Buffalograss (Texoka) Sideoats Grama (Haskell)	0.3 1.8 1.6 4.5	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed (Borden Co.)	0.3 1.6 3.6 0.4
10 (Tyler) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
11 (Lufkin) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
12 (Houston) Jan. 15–May 15	Green Sprangletop Sideoats Grama (Haskell) Bermudagrass	0.3 4.5 2.4	Green Sprangletop Bermudagrass	0.3 5.4
13 (Yoakum) Jan. 15–May 15	Green Sprangletop Sideoats Grama (South Texas) Bermudagrass	0.3 4.5 2.4	Green Sprangletop Bermudagrass	0.3 5.4
14 (Austin) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (South Texas) Buffalograss (Texoka)	0.3 2.4 3.6 1.6	Green Sprangletop Bermudagrass Buffalograss (Texoka)	0.3 4.8 1.6
15 (San Antonio) Feb. 1–May 1	Green Sprangletop Sideoats Grama (South Texas) Bermudagrass Buffalograss (Texoka)	0.3 3.6 2.4 1.6	Green Sprangletop Bermudagrass Buffalograss (Texoka)	0.3 4.8 1.6
16 (Corpus Christi) Jan. 1–May 1	Green Sprangletop Sideoats Grama (South Texas) Bermudagrass Buffalograss (Texoka)	0.3 3.6 2.4 1.6	Green Sprangletop Bermudagrass Buffalograss (Texoka)	0.3 4.8 1.6
17 (Bryan) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
18 (Dallas) Feb. 1–May 15	Green Sprangletop Sideoats Grama (El Reno) Buffalograss (Texoka) Bermudagrass	0.3 3.6 1.6 2.4	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed (Borden Co.)	0.3 1.6 3.6 0.4
19 (Atlanta) Feb. 1–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
20 (Beaumont) Jan. 15–May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4
21 (Pharr) Jan. 15–May 15	Green Sprangletop Sideoats Grama (South Texas) Buffalograss (Texoka) Bermudagrass	0.3 3.6 1.6 2.4	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed (Borden Co.)	0.3 1.6 3.6 0.4
22 (Laredo) Jan. 15–May 1	Green Sprangletop Sideoats Grama (South Texas) Buffalograss (Texoka) Bermudagrass	0.3 4.5 1.6 1.8	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed	0.3 1.6 3.6 0.4
23 (Brownwood) Feb. 1–May 15	Green Sprangletop Sideoats Grama (Haskell) Bermudagrass Blue Grama (Hachita)	0.3 3.6 1.2 0.9	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed (Borden Co.)	0.3 1.6 3.6 0.4
24 (El Paso) Feb. 1–May 15	Green Sprangletop Sideoats Grama (South Texas) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Buffalograss (Texoka) Sand Dropseed (Borden Co.) Blue Grama (Hachita)	0.3 1.6 0.4 1.8
25 (Childress) Feb. 1–May 15	Green Sprangletop Sideoats Grama (El Reno) Blue Grama (Hachita) Buffalograss (Texoka)	0.3 3.6 1.2 1.6	Green Sprangletop Sand Dropseed (Borden Co.) Buffalograss (Texoka) Bermudagrass	0.3 0.4 1.6 1.8

Table 3
Temporary Cool Season Seeding

Districts	Dates	Seed Mix and Rates (lb. PLS/acre)	
Paris (1), Amarillo (4), Lubbock (5), Dallas (18)	September 1–November 30	Tall Fescue Western Wheatgrass Wheat (Red, Winter)	4.5 5.6 34
Odessa (6), San Angelo (7), El Paso (24)	September 1–November 30	Western Wheatgrass Wheat (Red, Winter)	8.4 50
Waco (9), Tyler (10), Lufkin (11), Austin (14), San Antonio (15), Bryan (17), Atlanta (19)	September 1–November 30	Tall Fescue Oats Wheat	4.5 24 34
Houston (12), Yoakum (13), Corpus Christi (16), Beaumont (20), Pharr (21), Laredo (22)	September 1–November 30	Oats	72
Ft. Worth (2), Wichita Falls (3), Abilene (8), Brownwood (23), Childress (25)	September 1–November 30	Tall Fescue Western Wheatgrass Cereal Rye	4.5 5.6 34

Table 4
Temporary Warm Season Seeding

Districts	Dates	Seed Mix and Rates (lb. PLS/acre)	
All	May 1–August 31	Foxtail Millet	34

2.2. Fertilizer. Use fertilizer in conformance with Article 166.2., "Materials."

2.3. Vegetative Watering. Use water that is clean and free of industrial wastes and other substances harmful to the growth of vegetation.

2.4. Mulch.

2.4.1. Straw or Hay Mulch. Use straw or hay mulch in conformance with Section 162.2.5., "Mulch."

2.4.2. Cellulose Fiber Mulch. Use only cellulose fiber mulches that are on the Approved Products List, *Erosion Control Approved Products*. (http://www.txdot.gov/business/resources/erosion-control.html) Submit one full set of manufacturer's literature for the selected material. Keep mulch dry until applied. Do not use molded or rotted material.

2.5. Tacking Methods. Use a tacking agent applied in accordance with the manufacturer's recommendations or a crimping method on all straw or hay mulch operations. Use tacking agents as approved or as specified on the plans.

3. CONSTRUCTION

Cultivate the area to a depth of 4 in. before placing the seed unless otherwise directed. Use approved equipment to vertically track the seedbed as shown on the plans or as directed. Cultivate the seedbed to a depth of 4 in. or mow the area before placement of the permanent seed when performing permanent seeding after an established temporary seeding. Plant the seed specified and mulch, if required, after the area has been completed to lines and grades as shown on the plans.

3.1. Broadcast Seeding. Distribute the seed or seed mixture uniformly over the areas shown on the plans using hand or mechanical distribution or hydro-seeding on top of the soil unless otherwise directed. Apply the mixture to the area to be seeded within 30 min. of placement of components in the equipment when seed and water are to be distributed as a slurry during hydro-seeding. Roll the planted area with a light roller or other suitable equipment. Roll sloped areas along the contour of the slopes.

3.2. Straw or Hay Mulch Seeding. Plant seed according to Section 164.3.1., "Broadcast Seeding." Apply straw or hay mulch uniformly over the seeded area immediately after planting the seed or seed mixture. Apply straw mulch at 2 to 2.5 tons per acre. Apply hay mulch at 1.5 to 2 tons per acre. Use a tacking method over the mulched area.

3.3. Cellulose Fiber Mulch Seeding. Plant seed in accordance with Section 164.3.1., "Broadcast Seeding." Apply cellulose fiber mulch uniformly over the seeded area immediately after planting the seed or seed mixture at the following rates.

- Sandy soils with slopes of 3:1 or less—2,500 lb. per acre.
- Sandy soils with slopes greater than 3:1—3,000 lb. per acre.
- Clay soils with slopes of 3:1 or less—2,000 lb. per acre.
- Clay soils with slopes greater than 3:1—2,300 lb. per acre.

Cellulose fiber mulch rates are based on dry weight of mulch per acre. Mix cellulose fiber mulch and water to make a slurry and apply uniformly over the seeded area using suitable equipment.

3.4. Drill Seeding. Plant seed or seed mixture uniformly over the area shown on the plans at a depth of 1/4 to 1/3 in. using a pasture or rangeland type drill unless otherwise directed. Plant seed along the contour of the slopes.

3.5. Straw or Hay Mulching. Apply straw or hay mulch uniformly over the area as shown on the plans. Apply straw mulch at 2 to 2.5 tons per acre. Apply hay mulch at 1.5 to 2 tons per acre. Use a tacking method over the mulched area.

Apply fertilizer in conformance with Article 166.3., "Construction." Seed and fertilizer may be distributed simultaneously during "Broadcast Seeding" operations, provided each component is applied at the specified rate. Apply half of the required fertilizer during the temporary seeding operation and the other half during the permanent seeding operation when temporary and permanent seeding are both specified for the same area.

Water the seeded areas at the rates and frequencies as shown on the plans or as directed.

4. MEASUREMENT

This Item will be measured by the square yard or by the acre.

5. PAYMENT

The work performed and the materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Broadcast Seeding (Perm)" of the rural or urban seed mixture and sandy or clay soil specified, "Broadcast Seeding (Temp)" of warm or cool season specified, "Straw or Hay Mulch Seeding (Perm)" of the rural or urban seed mixture and sandy or clay soil specified, "Straw or Hay Mulch Seeding (Temp)" of warm or cool season specified, "Cellulose Fiber Mulch Seeding (Perm)" of the rural or urban seed mixture and sandy or clay soil specified, "Cellulose Fiber Mulch Seeding (Temp)" of warm or cool season specified, "Drill Seeding (Perm)" of the rural or urban seed mixture and sandy or clay soil specified, "Drill Seeding (Temp)" of warm or cool season specified, and "Straw or Hay Mulching." This price is full compensation for furnishing materials, including water for hydro-seeding and hydro-mulching operations, mowing, labor, equipment, tools, supplies, and incidentals. Fertilizer will not be paid for directly but will be subsidiary to this Item. Water for irrigating the seeded area, when specified, will be paid for under Item 168, "Vegetative Watering."

Item 400
Excavation and Backfill for Structures

1. DESCRIPTION

Excavate for placement and construction of structures and backfill structures. Cut and restore pavement.

2. MATERIALS

Use materials that meet the requirements of the following Items.

- Item 401, "Flowable Backfill,"
- Item 421, "Hydraulic Cement Concrete," and
- DMS-4600, "Hydraulic Cement."

3. CONSTRUCTION

3.1. Excavation.

3.1.1. General. Excavate to the lines and grades shown on the plans or as directed. Provide slopes, benching, sheeting, bracing, pumping, and bailing as necessary to maintain the stability and safety of excavations up to 5 ft. deep. Excavation protection for excavations deeper than 5 ft. are governed by Item 402, "Trench Excavation Protection," and Item 403, "Temporary Special Shoring." Use satisfactory excavated material as backfill or as embankment fill in accordance with Item 132, "Embankment." Dispose of material not incorporated into the final project off the right of way in accordance with federal, state, and local regulations.

Keep any topsoil that has been removed separate, and replace it, as nearly as feasible, in its original position when excavating for installation of structures across private property or beyond the limits of the embankment. Restore the area to an acceptable condition.

Excavate drilled shafts in accordance with Item 416, "Drilled Shaft Foundations."

3.1.1.1. Obstructions. Remove obstructions to the proposed construction, including trees and other vegetation, debris, and structures, over the width of the excavation to a depth of 1 ft. below the bottom of excavation. Remove as required to clear the new structure and plug in an approved manner if abandoned storm drains, sewers, or other drainage systems are encountered. Restore the bottom of the excavation to grade by backfilling after removing obstructions in accordance with this Item. Dispose of surplus materials in accordance with federal, state, and local regulations.

3.1.1.2. Excavation in Streets. Cut pavement and base to neat lines when structures are installed in streets, highways, or other paved areas. Restore pavement structure after completion of excavation and backfilling.

Maintain and control traffic in accordance with the approved traffic control plan and the TMUTCD.

3.1.1.3. Utilities. Comply with the requirements of Article 7.15., "Responsibility for Damage Claims." Conduct work with minimum disturbance of existing utilities, and coordinate work in or near utilities with the utility owners. Inform utility owners before work begins, allowing them enough time to identify, locate, reroute, or make other adjustments to utility lines.

Avoid cutting or damaging underground utility lines that are to remain in place. Promptly notify the utility company if damage occurs. Provide temporary flumes across the excavation while open if an active sanitary

sewer line is damaged during excavation, and restore the lines when backfilling has progressed to the original bedding lines of the cut sewer.

3.1.1.4. De-Watering. Construct or place structures in the presence of water only if approved. Place precast members, pipe, and concrete only on a dry, firm surface. Remove water by bailing, pumping, well-point installation, deep wells, underdrains, or other approved method.

Remove standing water in a manner that does not allow water movement through or alongside concrete being placed if structures are approved for placement in the presence of water. Pump or bail only from a suitable sump separated from the concrete work while placing structural concrete or for a period of at least 36 hr. thereafter. Pump or bail during placement of seal concrete only to the extent necessary to maintain a static head of water within the cofferdam. Pump or bail to de-water inside a sealed cofferdam only after the seal has aged at least 36 hr.

Place a stabilizing material in the bottom of the excavation if the bottom of an excavation cannot be de-watered to the point the subgrade is free of mud or it is difficult to keep reinforcing steel clean. Use flexible base, cement-stabilized base or backfill, lean concrete, or other approved stabilizing material. Provide concrete with at least 275 lb. of cement per cubic yard, if lean concrete is used, and place to a minimum depth of 3 in. Stabilizing material placed for the convenience of the Contractor will be at the Contractor's expense.

3.1.2. Bridge Foundations and Retaining Walls. Do not disturb material below the bottom of footing grade. Do not backfill to compensate for excavation that has extended below grade. Fill the area with concrete at the time the footing is placed if excavation occurs below the proposed footing grade. Additional concrete placed will be at the Contractor's expense.

Take core samples to determine the character of the supporting materials if requested. Provide an intact sample adequate to judge the character of the founding material. Take these cores when the excavation is close to completion. Cores should be approximately 5 ft. deeper than the proposed founding grade.

Remove loose material if the founding stratum is rock or another hard material, and clean and cut it to a firm surface that is level, stepped, or serrated, as directed. Clean out soft seams, and fill with concrete at the time the footing is placed.

Place the foundation once the Engineer has inspected the excavation and authorized changes have been made to provide a uniform bearing condition if the material at the footing grade of a retaining wall, bridge bent, or pier is a mixture of compressible and incompressible material.

3.1.3. Cofferdams. The term "cofferdam" designates any temporary or removable structure constructed to hold surrounding earth, water, or both out of the excavation whether the structure is formed of soil, timber, steel, concrete, or a combination of these. Use pumping wells or well points for de-watering cofferdams if required.

Submit details and design calculations for sheet-pile or other types of cofferdams requiring structural members bearing the seal of a licensed professional engineer for review before constructing the cofferdam. The Department reserves the right to reject designs. Design structural systems to comply with the AASHTO *Standard Specifications for Highway Bridges* or AASHTO LRFD *Bridge Design Specifications*. Interior dimensions of cofferdams must provide enough clearance for the construction, inspection, and removal of required forms and, if necessary, enough room to allow pumping outside the forms. Extend sheet-pile cofferdams well below the bottom of the footings, and make concrete seals as well braced and watertight as practicable.

Use Class E concrete for foundation seals unless otherwise specified. Place concrete foundation seals in accordance with Item 420, "Concrete Substructures." Seals placed for the convenience of the Contractor will be at the Contractor's expense.

Make the excavation deep enough to allow for swelling of the material at the base of the excavation during pile-driving operations when the Engineer judges it to be impractical to de-water inside a cofferdam and a

concrete seal is to be placed around piling driven within the cofferdam. Remove swelling material to the bottom of the seal grade after driving the piling. Remove the foundation material to exact footing grades where it is possible to de-water inside the cofferdam without placing a seal after driving piling. Do not backfill a foundation to compensate for excavation that has been extended below grade; fill such areas below grade with concrete at the time the seals or footings are placed.

Remove cofferdams after completing the substructure without disturbing or damaging the structure unless otherwise provided.

3.1.4. Culverts and Storm Drains. When the design requires special bedding conditions for culverts or storm drains, an excavation diagram will be shown on the plans. Do not exceed these limits of excavation.

Construct pipe structures in an open cut with vertical sides extending to a point 1 ft. above the pipe unless otherwise shown on the plans. When site conditions or the plans do not prohibit sloping the cut, the excavation may be stepped or laid back to a stable slope beginning 1 ft. above the pipe. Maintain the stability of the excavation throughout the construction period.

Construct the embankment for pipe to be installed in fill above natural ground to an elevation at least 1 ft. above the top of the pipe, and then excavate for the pipe.

3.1.4.1. Unstable Material. Remove the material to a depth of no more than 2 ft. below the grade of the structure when unstable soil is encountered at established footing grade, unless the Engineer authorizes additional depth. Replace soil removed with stable material in uniform layers no greater than 8 in. deep (loose measurement). Each layer must have enough moisture to be compacted by rolling or tamping as required to provide a stable foundation for the structure.

Use special materials such as flexible base, cement-stabilized base, cement-stabilized backfill, or other approved material when it is not feasible to construct a stable foundation as outlined above.

3.1.4.2. Incompressible Material. Remove the incompressible material to 6 in. below the footing grade, backfill with an approved compressible material, and compact in accordance with Section 400.3.3., “Backfill,” if rock, part rock, or other incompressible material is encountered at established footing grade while placing prefabricated elements.

3.2. Shaping and Bedding. Place at least 2 in. of fine granular material for precast box sections on the base of the excavation before placing the box sections. Use bedding as shown in Figure 1 for pipe installations. Use Class C bedding unless otherwise shown on the plans. The Engineer may require the use of a template to secure reasonably accurate shaping of the foundation material. Undercut the excavation at least 4 in. where cement-stabilized backfill is indicated on the plans and backfill with stabilized material to support the pipe or box at the required grade.

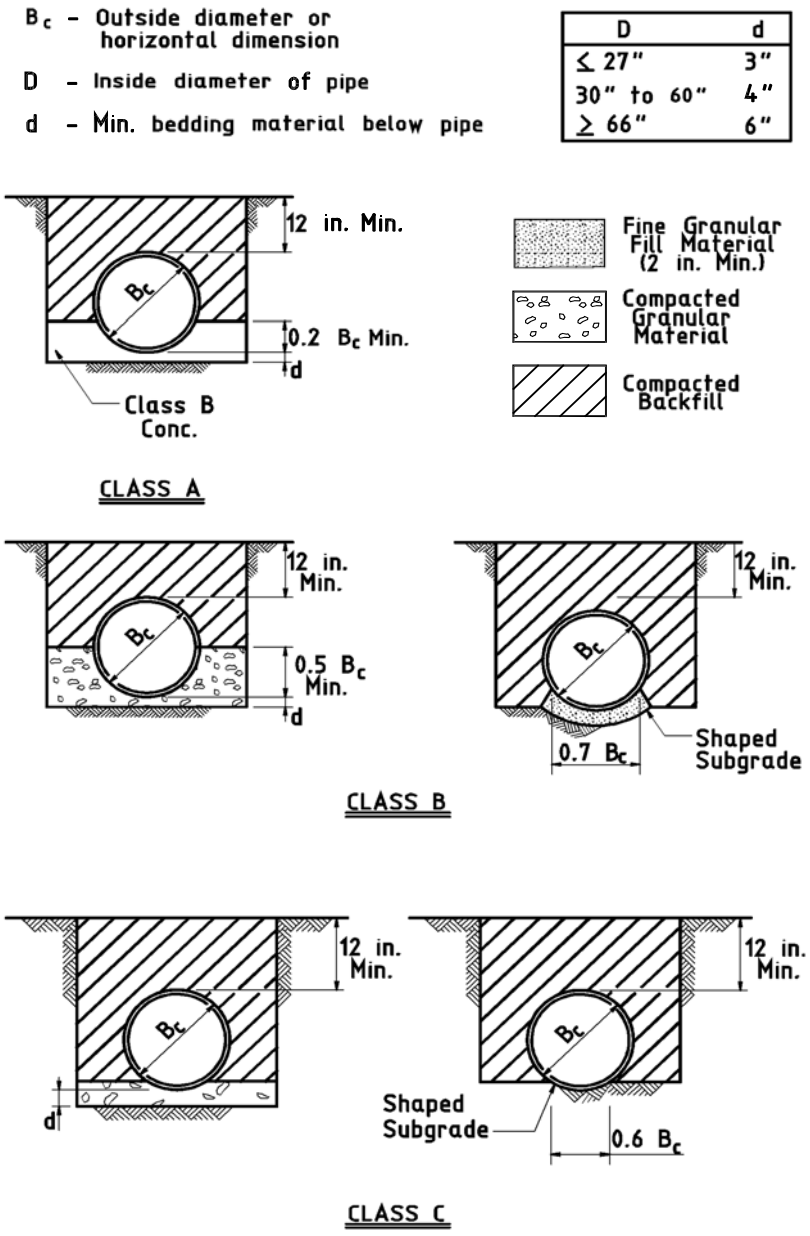

Figure 1
Bedding Diagrams

3.3. Backfill.

3.3.1. General. Backfill the excavation after placement of the permanent structure as soon as practical. Use backfill free from stones large enough to interfere with compaction; large or frozen lumps that will not break down readily under compaction; and wood or other extraneous material. Obtain backfill material from excavation or from other sources.

Place backfill in layers no greater than 10 in. deep (loose measurement) in areas not supporting a completed roadbed, retaining wall, or embankment. Place backfill in uniform layers no greater than 8 in. deep (loose measurement) in areas supporting a portion of a roadbed, retaining wall, or embankment. Compact each layer to meet the density requirements of the roadbed, retaining wall, embankment material, or as shown on the plans.

Bring each layer of backfill material to the moisture content needed to obtain the required density. Use mechanical tamps or rammers to compact the backfill. Rollers may be used to compact backfill if feasible.

Cohesionless materials may be used for backfilling. Use cohesionless materials that conform to the requirements of Table 1.

Table 1
Cohesionless Material Gradation Limits

Sieve Size	Percent Retained
3"	0
#10	See Note[1]
#200	90–100

1. No. 10 sieve requirements are 0 to 30% retained when used as aggregate for cement-stabilized backfill.

Compact cohesionless materials using vibratory equipment, water-ponding, or a combination of both.

3.3.2. Bridge Foundations, Retaining Walls, Manholes/Inlets, and Box Culverts. Place backfill against the structure only after the concrete has reached the design strength required in Item 421, "Hydraulic Cement Concrete."

Backfill retaining walls with material meeting the requirements of Item 423, "Retaining Walls." Backfill around bridge foundations, manholes/inlets and culverts using material with particles no more than 4 in. in greatest dimension and a gradation that permits thorough compaction. Use rock or gravel mixed with soil if the percentage of fines is enough to fill all voids and ensure a uniform and thoroughly compacted mass of proper density.

Use mechanical tamps and rammers to avoid damage to the structure where backfill material is being placed too close to the structure to permit compaction with blading and rolling equipment.

Avoid wedging action of backfill against structures. Step or serrate slopes bounding the excavation to prevent such action. Place backfill uniformly around bridge foundations. Place backfill equally and in uniform layers along both sides of manholes/inlets and culverts.

The Engineer may require backfilling of structures excavated into hard, erosion-resistant material, and subject to erosive forces, with stone or lean concrete.

Box culverts may be opened to traffic as soon as enough backfill and embankment has been placed over the top to protect culverts against damage from heavy construction equipment. Repair damage to culvert caused by construction traffic at no additional expense to the Department.

3.3.3. Pipe. Bring backfill material to the proper moisture condition after installing bedding and pipe as required and place it equally along both sides of the pipe in uniform layers no greater than 8 in. deep (loose measurement). Compact each lift mechanically. Thoroughly compact materials placed under the haunches of the pipe to prevent damage or displacement of the pipe. Place backfill in this manner to the top-of-pipe elevation. Place and compact backfill above the top of the pipe in accordance with Section 400.3.3.1., "General."

The Engineer may reject backfill material containing more than 20% by weight of material retained on a 3 in. sieve with large lumps not easily broken down or that cannot be spread in loose layers. Material excavated by a trenching machine will generally meet the requirements of this Section as long as large stones are not present.

Place and compact additional material where pipe extends beyond the toe of slope of the embankment and the depth of cover provided by backfill to the original ground level is less than the minimum required by the specifications for the type of pipe involved until the minimum cover has been provided.

3.3.4. Cement-Stabilized Backfill. Backfill the excavation to the elevations shown with cement-stabilized backfill when shown on the plans. Use cement-stabilized backfill that contains aggregate conforming to the gradation limits shown in Table 1, water, and a minimum of 7% hydraulic cement based on the dry weight of the aggregate, in accordance with Tex-120-E.

Place cement-stabilized backfill equally along the sides of structures to prevent strain on or displacement of the structure. Fill voids when placing cement-stabilized backfill. Use hand-operated tampers if necessary to fill voids.

3.3.5. Flowable Backfill. Backfill the excavation with flowable backfill to the elevations indicated when shown on the plans. Prevent the structure from being displaced during the placement of the flowable fill, and prevent flowable fill from entering manholes/inlets and culverts, and drainage structures.

4. MEASUREMENT

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

4.1. Structural Excavation. Unless shown on the plans as a pay item, structural excavation quantities shown are for information purposes only.

When structural excavation is specified as a pay item, structural excavation for pipe headwalls, inlets, manholes, culvert or storm drain extensions less than 15 ft. long, bridge abutments, retaining walls, and side road and private entrance pipe culverts will not be measured. No allowance will be made for variance from plans quantity incurred by an alternate bid.

When specified as a pay item, structural excavation will be measured by the cubic yard as computed by the average end areas method. Excavation diagrams on the plans take precedence over the provisions of this Article.

4.1.1. Boundaries of Measurement.

4.1.1.1. Pipe.

4.1.1.1.1. Pipe up to 42 Inches. For pipe up to 42 in. nominal or equivalent diameter, no material outside of vertical planes 1 ft. beyond and parallel to the horizontal projection of the outside surfaces of the pipe will be included.

4.1.1.1.2. Pipe Larger than 42 Inches. For pipes larger than 42 in. nominal or equivalent diameter, no material outside of vertical planes located 2 ft. beyond and parallel to the horizontal projection of the outside surfaces of the pipe will be included.

Quantities for excavation in fill above natural ground include 1 ft. above the top of the pipe regardless of the height of completed fill. Excavation for pipe will be measured between the extreme ends of the completed structure including end appurtenances as shown on the plans and from centerline to centerline of inlets, manholes, etc.

4.1.1.2. Structural Plate Structures. No material outside of vertical planes 3 ft. beyond and parallel to the horizontal projection of the outside surfaces of the structure will be included. When the quality of the existing soil or embankment is less than that of the proposed backfill material, the limits of measurement will be extended to vertical planes located 1/2 of the span beyond the horizontal projection of the outside surfaces of the structure.

4.1.1.3. Footings, Walls, Boxes, and Other Excavation. No material outside of vertical planes 1 ft. beyond and parallel to the edges of the footings or outside walls will be included whether or not a cofferdam or shoring is

used. When plans provide the option of cast-in-place or precast boxes, measurement will be based on the cast-in-place option.

Where excavation in addition to that allowed for the footings is required for other portions of the structure, measurement for the additional excavation will be limited laterally by vertical planes 1 ft. beyond the face of the member and parallel to it, and vertically to a depth of 1 ft. below the bottom of the member.

4.1.1.4. Excavation near Roadways and Channels. At structure sites other than culverts and pipe excavations, the measurement of structural excavation will include only material below or outside the limits of the completed road or channel excavation. Roadway and channel excavation will be paid under Item 110, "Excavation." For culverts except side road and private entrance culverts, excavation within the limits of the structure and below or outside the limits of the completed roadway excavation will be measured as structural excavation.

4.1.2. Falsework. No measurement will be made for excavation necessary for placing forms or falsework that exceeds the limits given in Section 400.4.1.1., "Boundaries of Measurement."

4.1.3. Swelling. Measurement will not include materials removed below footing grades to compensate for anticipated swelling due to pile-driving, nor will it include material required to be removed due to swelling beyond the specified limits during pile-driving operations.

4.1.4. Cave-Ins. Measurement will not include additional volume caused by slips, slides, cave-ins, silting, or fill material resulting from the action of the elements or the Contractor's operation.

4.1.5. Undercut. Where rock or other incompressible or unstable material is undercut to provide a suitable foundation for pipe or box sections, such material below grade directed to be removed will be measured for payment.

4.1.6. Grade Change. Additional measurement will be made of the volume of excavation involved in the lowering or raising of the elevation of a footing, foundation, or structure unit, when such grade change is authorized.

4.2. Cement-Stabilized Backfill. Cement-stabilized backfill will be measured by the cubic yard as shown on the plans.

4.3. Cutting and Restoring Pavement. Cutting and restoring pavement will be measured by the square yard as shown on the plans. Excavation below pavement or base will be measured as structural excavation of the pertinent type.

5. PAYMENT

5.1. Structural Excavation. Unless specified as a pay item, structural excavation and backfill performed, and material furnished in accordance with this Item will not be paid for directly but are subsidiary to pertinent Items.

When structural excavation is specified as a pay item, the excavation and backfill work performed, and materials furnished will be paid for at the unit price bid for "Structural Excavation," "Structural Excavation (Box)," "Structural Excavation (Pipe)," and "Structural Excavation (Bridge)." This price includes concrete to compensate for excavation that has extended below grade for bridge foundations and retaining walls, and backfilling and compacting areas that were removed as part of structural excavation.

Cofferdams or other measures necessary for supporting excavations less than 5 ft. deep will not be measured or paid for directly but will be subsidiary to the Contract.

Foundation seal concrete for cofferdams, when required, will be paid for as provided in the pertinent Items. If no direct method of payment is provided in the Contract, the work will be measured and paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Seal placed for the convenience of the Contractor will not be paid for.

Unless otherwise provided, stone or lean concrete backfill around structures as provided for in Section 400.3.3.2., "Bridge Foundations, Retaining Walls, Manholes/Inlets, and Box Culverts," will be measured and paid for as extra work in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

When structural excavation is specified as a pay item, a partial payment of 50% of the bid price will be made for structural excavation completed to the satisfaction of the Engineer but not backfilled. The remaining amount will be paid upon completion of backfilling. When the Contractor elects to excavate beyond plan requirements, no measurement will be made of the additional volume.

5.2. Removal and Replacement of Unsuitable or Incompressible Material. Removal and replacement of material will be paid for if directed. Removal and replacement of material or placement of special material made necessary by the softening of founding material due to the Contractor's sequence of work or operation, will be at the Contractor's expense. Special material used or additional excavation made for the Contractor's convenience will not be paid for.

5.2.1. Structural Excavation as a Pay Item. Where special materials are not required or specified, payment for the removal and replacement of unstable or incompressible material will be made at a price equal to 200% of the unit price bid per cubic yard for Structural Excavation. When the Contractor elects to remove and replace material deeper than directed, no measurement will be made on that portion below the directed elevation. This price is full compensation for removing the unstable or incompressible material; furnishing, hauling, placing, and compacting suitable replacement material; and equipment, labor, tools, and incidentals.

When the plans specify or when directed, the use of special materials such as flexible base, cement-stabilized base, cement-stabilized backfill, or other special material, payment for excavation below footing grades will be made at the unit price bid for Structural Excavation. Payment for furnishing, hauling, placing, and compacting the flexible base, cement-stabilized base, cement-stabilized backfill, or other special materials will be made at the unit price bid for these items in the Contract, or, if the required material is not a bid item, in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

5.2.2. Structural Excavation Not a Pay Item. Where special materials for backfill are not required or specified, payment for the authorized removal and replacement of unstable or incompressible material will be measured and paid for at $15 per cubic yard of material removed. This price is full compensation for removing the unstable or incompressible material; furnishing, hauling, placing, and compacting suitable replacement material; and equipment, labor, tools, and incidentals.

When the plans specify or when directed, the use of special materials such as flexible base, cement-stabilized base, cement-stabilized backfill, or other special material, excavation below the footing grades will be paid for at $10 per cubic yard. Payment for furnishing, hauling, placing, and compacting the flexible base, cement-stabilized base, cement-stabilized backfill, or other special materials will be made at the unit price bid for these items, or, if the required material is not a bid item, in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

5.3. Lowering of a Structure Foundation. If the Engineer requires a structure foundation to be lowered to an elevation below the grade shown on the plans, overexcavation will be paid in accordance with Table 2.

Table 2
Payment for Required Overexcavation

Variance of Revised Footing Grade from Plan Grade	Payment Terms	Variance of Revised Footing Grade from Plan Grade
	"Structural Excavation" is a Bid Item	"Structural Excavation" is not a Bid Item
Up to and including 5 ft.	Unit price equal to 115% of unit price bid for "Structural Excavation"	$10 per cubic yard
Over 5 ft. up to 10 ft.	Unit price equal to 125% of unit price bid for "Structural Excavation"	$12 per cubic yard
Over 10 ft.	In accordance with Article 9.7., "Payment for Extra Work and Force Account Method."	

5.4. **Cement-Stabilized Backfill**. Cement-stabilized backfill will be paid for at the unit price bid for "Cement-Stabilized Backfill."

5.5. **Cutting and Restoring Pavement**. Cutting and restoring pavement will be paid for at the unit price bid for "Cutting and Restoring Pavement" of the type specified.

Work done to repair damage to base or pavement incurred outside the limits shown on the plans, or the limits authorized, will not be measured for payment.

The unit prices bid are full compensation for excavation including removing obstructions and plugging drainage systems; bedding and backfilling including placing, sprinkling and compaction of material; soundings; cleaning and filling seams; constructing and removing cofferdams; de-watering, sheeting, or bracing excavations up to and including 5 ft. deep; pumps; drills; explosives; disposition of surplus material; cutting pavement and base to neat lines; and materials, hauling, equipment, labor, tools, and incidentals.

Flowable backfill will be paid for as provided in Item 401, "Flowable Backfill." Protection methods for open excavations deeper than 5 ft. will be measured and paid for as required under Item 402, "Trench Excavation Protection," or Item 403, "Temporary Special Shoring."

Item 403
Temporary Special Shoring

1. DESCRIPTION

Furnish and install temporary shoring to hold the surrounding earth, water, or both out of the work area.

2. MATERIALS

Furnish new or used materials. Furnish materials that meet the requirements of Item 423, "Retaining Walls," when using temporary Mechanically Stabilized Earth (MSE) walls. Furnish materials that meet the requirements of Item 410, "Soil Nail Anchors," or Item 411, "Rock Nail Anchors," when using temporary nailed walls (rock or soil).

3. CONSTRUCTION

The Contractor is responsible for the temporary special shoring design unless complete details are included on the plans. Submit details and design calculations bearing the seal of a licensed professional engineer before constructing the shoring. The Department reserves the right to reject designs. Design the shoring to comply with OSHA Standards and Interpretations, 29 CFR Part 1926, Subpart P, "Excavations." Design structural systems to comply with AASHTO *Standard Specifications for Highway Bridges* or AASHTO LRFD *Bridge Design Specifications*. Design shoring subject to railroad loading to comply with the AREMA *Manual for Railway Engineering* and any additional requirements of the railway being supported.

Provide vertical or sloped cuts, benches, shields, support systems, or other systems to provide the necessary protection in accordance with the approved design. Construct temporary MSE walls, when used, in accordance with Item 423, "Retaining Walls." Construct temporary nailed walls (rock or soil), when used, in accordance with Item 410, "Soil Nail Anchors," or Item 411, "Rock Nail Anchors."

4. MEASUREMENT

This Item will be measured by the square foot of surface area of a vertical plane at the face of the shoring between the top of the ground being supported and the minimum protection grade line shown on the plans. If no minimum protection grade is shown on the plans, the lowest required excavated elevation will be used. Shoring projecting above the level of the ground being supported will not be measured. When excavation techniques (e.g., sloped cuts or benching) are used to provide the necessary protection, the surface area for payment will be calculated based on the area described by a vertical plane adjacent to the structure.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Temporary Special Shoring." This price is full compensation for excavation and backfill; furnishing, placing and removing shoring, sheeting, or bracing; de-watering or diversion of water; jacking and jack removal; and equipment, labor, materials, tools, and incidentals.

No payment will be made for special shoring made necessary by the selection of an optional design or sequence of work that creates the need for shoring.

Item 500
Mobilization

1. DESCRIPTION

Establish and remove offices, plants, and facilities. Move personnel, equipment, and supplies to and from the project or the vicinity of the project site to begin work or complete work on Contract Items. Bonds and insurance are required for performing mobilization.

For Contracts with emergency mobilization, provide a person and method of contact available 24 hrs. a day, 7 days a week unless otherwise shown on the plans. The time of notice will be the transmission time of the written notice or notice provided orally by the Department's representative.

2. MEASUREMENT

This Item will be measured by the lump sum or each as the work progresses. Mobilization is calculated on the base bid only and will not be paid for separately on any additive alternate items added to the Contract.

3. PAYMENT

For this Item, the adjusted Contract amount will be calculated as the total Contract amount less the lump sum for mobilization. Except for Contracts with callout or emergency work, mobilization will be paid in partial payments as follows:

- Payment will be made upon presentation of a paid invoice for the payment or performance bonds and required insurance,
- Payment will be made upon verification of documented expenditures for plant and facility setup. The combined amount for all these facilities will be no more than 10% of the mobilization lump sum or 1% of the total Contract amount, whichever is less,
- When 1% of the adjusted Contract amount for construction Items is earned, 50% of the mobilization lump sum bid or 5% of the total Contract amount, whichever is less, will be paid. Previous payments under this Item will be deducted from this amount,
- When 5% of the adjusted Contract amount for construction Items is earned, 75% of the mobilization lump sum bid or 10% of the total Contract amount, whichever is less, will be paid. Previous payments under the Item will be deducted from this amount,
- When 10% of the adjusted Contract amount for construction Items is earned, 90% of the mobilization lump sum bid or 10% of the total Contract amount, whichever is less, will be paid. Previous payments under this Item will be deducted from this amount,
- Upon final acceptance, 97% of the mobilization lump sum bid will be paid. Previous payments under this Item will be deducted from this amount, and
- Payment for the remainder of the lump sum bid for "Mobilization" will be made after all submittals are received, final quantities have been determined and when any separate vegetative establishment and maintenance, test, and performance periods provided for in the Contract have been successfully completed.

For projects with extended maintenance or performance periods, payment for the remainder of the lump sum bid for "Mobilization" will be made 6 months after final acceptance.

For Contracts with callout or emergency work, “Mobilization,” will be paid as follows:

- Payment will be made upon presentation of a paid invoice for the payment of performance bonds and required insurance,
- Mobilization for callout work will be paid for each callout work request, and
- Mobilization for emergency work will be paid for each emergency work request.

Item 618
Conduit

1. DESCRIPTION

Furnish and install conduit.

2. MATERIALS

Provide new materials that comply with the details shown on the plans, the requirements of this Item, and the pertinent requirements of the following Items:

- Item 400, “Excavation and Backfill for Structures”
- Item 476, “Jacking, Boring, or Tunneling Pipe or Box”

When specified on the plans, provide:

- rigid metal conduit (RMC);
- intermediate metal conduit (IMC);
- electrical metallic tubing (EMT);
- polyvinyl chloride (PVC) conduit;
- high density polyethylene (HDPE) conduit;
- liquidtight flexible metal conduit (LFMC); or
- liquidtight flexible nonmetallic conduit (LFNC).

Furnish conduit from new materials in accordance with DMS-11030, “Conduit.”

Provide prequalified conduit from the Department’s MPL. When required by the Engineer, notify the Department in writing of selected materials from the MPL intended for use on each project.

Provide other types of conduit not on the MPL that comply with the details shown on the plans and the NEC. Fabricate fittings such as junction boxes and expansion joints from a material similar to the connecting conduit, unless otherwise shown on the plans. Use watertight fittings. Do not use set screw and pressure-cast fittings. Steel compression fittings are permissible. When using HDPE conduit, provide fittings that are UL-listed as electrical conduit connectors or thermally fused using an electrically heated wound wire resistance welding method.

Use red 3-in. 4-mil polyethylene underground warning tape that continuously states “Caution Buried Electrical Line Below.”

3. CONSTRUCTION

Perform work in accordance with the details shown on the plans and the requirements of this Item.

Use established industry and utility safety practices when installing conduit located near underground utilities. Consult with the appropriate utility company before beginning work.

Install conduit a minimum of 18 in. deep below finished grade unless otherwise shown on the plans. Meet the requirements of the NEC when installing conduit. Secure and support conduit placed for concrete encasement in such a manner that the alignment will not be disturbed during placement of the concrete. Cap ends of conduit and close box openings before concrete is placed.

Ream conduit to remove burrs and sharp edges. Use a standard conduit cutting die with a 3/4-in. taper per foot when conduit is threaded in the field. Fasten conduit placed on structures with conduit straps or hangers as shown on the plans or as directed. Fasten conduit within 3 ft. of each box or fitting and at other locations shown on the plans or as directed. Use metal conduit clamps that are galvanized malleable or stainless steel unless otherwise shown on the plans. Use 2-hole type clamps for 2-in. diameter or larger conduit.

Fit PVC and HDPE conduit terminations with bushings or bell ends. Fit metal conduit terminations with a grounding type bushing, except conduit used for duct cable casing that does not terminate in a ground box and is not exposed at any point. Conduit terminating in threaded bossed fittings does not need a bushing. Before installation of conductors or final acceptance, pull a properly sized mandrel or piston through the conduit to ensure that it is free from obstruction. Cap or plug empty conduit placed for future use.

Perform trench excavation and backfilling as shown on the plans or as directed, and in accordance with Item 400, “Excavation and Backfill for Structures.” Excavation and backfilling will be subsidiary to the installation of the conduit.

Jack and bore as shown on the plans or as directed, and in accordance with Item 476, “Jacking, Boring, or Tunneling Pipe or Box.”

Place warning tape approximately 10 in. above trenched conduit. Where existing surfacing is removed for placing conduit, repair by backfilling with material equal in composition and density to the surrounding areas and by replacing any removed surfacing, such as asphalt pavement or concrete riprap, with like material to equivalent condition. Mark conduit locations as directed.

4. MEASUREMENT

This Item will be measured by the foot of conduit.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., “Plans Quantity Measurement.” Additional measurements or calculations will be made if adjustments of quantities are required.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Conduit” of the type and size specified and the installation method specified as applicable. This price is full compensation for furnishing and installing conduit; hanging, strapping, jacking, boring, tunneling, trenching, and furnishing and placing backfill; encasing in steel or concrete; replacing pavement structure, sod, riprap, curbs, or other surface; marking location of conduit (when required); furnishing and installing fittings, junction boxes, and expansion joints; and materials, equipment, labor, tools, and incidentals.

Flexible conduit will not be paid for directly but will be subsidiary to pertinent Items. Unless otherwise shown on the plans, no payment will be allowed under this Item for conduit used on electrical services or in foundations.

1. Item 1000

1. Horizontal Directional Drilling

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1. Description. This Item shall govern for the installation of a new conduit by the directional drilling method. Horizontal directional drilling (HDD) rig is a mechanical drilling device used to create a horizontal borehole trough which a pipe or conduit is installed. Directional drilling is the installation of a pipe by drilling a pilot bore from the entry pit to a pre-determined exit location. The drilling head is then replaced with a reamer and the drilling string is pulled back to the entry hole, enlarging the hole while simultaneously pulling the conduit into place.

2. Equipment. The Contractor shall be responsible for the directional drilling method and equipment. The Contractor shall confirm that the drilling rig and mud mixing system have the capacity required to successfully complete the installation knowing the length of the crossing and product type and diameter, and shall consider ground and groundwater conditions that can be reasonably foreseen.

   (1) Operating range and degree of accuracy of proposed tracking system shall be adequate to meet project conditions. Tracking/steering equipment shall allow for continuous monitoring of the drilling head along the entire proposed alignment. If a poor contact with the transmitter is expected to occur at any section, this shall be communicated to the Engineer prior to commencement of construction.

   (2) The drilling unit shall be equipped with an electrical strike safety package unless underground electrical utilities are confirmed not in the area. The package shall include warning sound alarm, grounding mats and protective gear.

   (3) Only trained operators shall be permitted to operate the drilling equipment, and manufacture's operating instructions and safety practices shall always be followed.

3. Work Methods.

   (1) Submittals and Requirements.

      (a) Contractor shall submit complete methodology specific to each crossing, including equipment specifications and capabilities, size of pilot hole, number and size of pre-reams, use of rollers, baskets and side booms to suspend and direct pipe during pull back, type and capabilities of tracking system, and number of sections in which the conduit is to be installed.

      (b) The Contractor must determine and document the proposed drill path including its horizontal and vertical alignments and the location of buried utilities and substructures along the path.

      (c) Contractor shall submit for approval a drilling fluid management plan detailing proposed methods to control, collect, transport, and dispose of drilling fluids and spoils. Return and spoils are the drilling mud and cuttings collected in the entry and exit pits as well as any fluid, which escapes from the borehole to the surface. The plan shall contain a method of dealing with inadvertent returns or surface seepage of drilling fluids and spoils and a contingency plan in case of spills (i.e., drilling fluids, hydraulic fluids, etc.) including measures to contain and clean the affected area.

      (d) The Contractor shall also be responsible for developing and maintaining emergency procedures for inadvertently boring into existing utilities including a live power line, natural gas line, water line, sewer line, or fiber-optic cables..

      (e) If a drilled hole beneath a man-made surface must be abandoned, the hole shall be filled with grout to prevent future subsidence. The Engineer shall be notified before the borehole is abandoned and the abandoned borehole shall be identified on the as-built plans.

   (2) Drilling and Back-Reaming.

      (a) Contractor shall prevent drilling fluids from entering the manholes, sanitary and storm sewers, other drainage systems, and any Waters of the United States including creeks and streams.

(b) A strict minimum bending radius guideline is imposed so as to avoid an excessively sharp bending radius and consequently, possible damages to the conduit. The entrance angle of the drill string shall be between 8 and 20 degrees to the horizontal, with 12 degrees considered optimal. The exit angle of the drill string shall be within the range of 5 to 10 degrees.

(c) Drilling mud shall be used during drilling and back-reaming operations. Drilling mud pressure in the borehole should not exceed that which can be supported by the overburden to prevent heaving or hydraulic fracturing of the soil ("Frac-out").

(d) The pilot hole shall be back-reamed to accommodate and permit free sliding of the product inside the borehole. The Contractor shall be responsible for selecting the appropriate reamer size.

(e) A sufficient number of pre-reams shall be utilized as to avoid heaving while enlarging the hole to the desired diameter.

(f) Pipe rollers, skates or other protective devices should be used in the installation of conduits (6 in.) in outside diameter or larger.

(g) Pipe installation shall be performed in a manner that minimizes the over-stressing and straining of the pipe.

(h) During pull-back operations, the conduit shall be sealed with a cap or plug to prevent water, drilling fluids and other foreign materials from entering the pipe as it is being pulled back.

(i) Breakaway swivels shall be used with pulling head to limit the amount of force used during pull-back operation.

(3) Pipe Joining.

(a) High Density Polyethylene. Sections of pipe should be assembled and joined on the job site above ground. Joining should be accomplished by the butt-fusion method in strict conformance with the manufacturer's printed instructions.
The butt-fusion method for pipe joining shall be carried out in the field by qualified fusion technicians following the pipe and fitting manufacturer's specifications. The joints shall have a smooth, uniform, double rolled back bead made while supplying the proper melt, pressure and alignment. It shall be the sole responsibility of the Contractor to provide an acceptable butt-fusion joint. The Contractor shall perform a leak test prior to pull back.
All joints shall be made available for inspection by the Engineer before insertion.

(b) Contractor shall use a form of coating that provides a corrosion barrier as well as an abrasion barrier. To avoid difficulties during the pull-back operation, the coating should be well bonded and have a hard, smooth surface to resist soil stresses and reduce friction. The Contractor shall perform a leak test prior to pull back.

(c) PVC Conduit - Sections of pipe should be assembled and joined on the job site above ground. Joining should be accomplished by the butt-fusion method in strict conformance with the manufacturer's printed instructions.

(4) Tie-Ins and Connections. Trenching may be used to join sections at tie-ins of conduits installed by the directional boring method.

(a) An additional pipe length, sufficient for joining to the next segment, shall be pulled into the entrance pit. This length of the pipe shall not be damaged or interfere with the subsequent drilling of the next leg. The Contractor shall leave a minimum of 3 feet of conduit above the ground on both sides of the borehole.

(b) Polyethylene pipe, tie-ins and connections shall only be made after a suitable time period in order to allow the pipe to recover. Recovery period shall be equal to at least twice the pull-back time.

(5) Drilling fluids –Collection and Disposal Practices. Excess drilling mud slurry shall be contained in a lined pit or containment pound at exit and entry points until recycled or removed from the site. Entrance and exit pits shall be of sufficient size to contain the expected return of drilling mud and spoils.
Precautions shall be taken to keep drilling fluids out of the streets, manholes, sanitary and storm sewers, and other drainage systems including streams and rivers.
The Contractor shall make all diligent efforts to minimize the amount of drilling fluids and cuttings spilled during the drilling operation, and shall provide complete clean-up of all drilling mud overflows or spills.

(6) Acceptance. The Contractor shall provide a set of as-built drawings including both alignment and profile. Drawing should be constructed from actual field reading. Raw data shall be submitted at any time upon Engineer's request.

Conduit shall be installed within the pre-specified alignment and grade tolerances as appear on the drawings and/or project specifications.

All surfaces affected by the work shall be restored to their pre-construction condition. This includes backfilling, replacement of topsoil, seeding and fertilizer.

4. Measurement. This Item will be measured as the distance in feet along the ground of the centerline of the proposed pipeline and not actual drilled distance from entrance pit to exit pit. Trenches for joining sections at tie-ins of conduits shall be considered incidental to the installation.

This is a plans quantity measurement Item and the quantity to be paid for will be that quantity shown in the proposal and on the "Estimate and Quantity" sheet of the contract plans, except as may be modified by Article 9.8. If no adjustment of quantities is required, additional measurements or calculations will not be required.

5. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Horizontal Directional Drilling" of the type of pipe specified and of the size of pipe specified and "Trenches". This price shall be full compensation for drilling, drill mud, pipe, exterior coating (if required), butt-fusion welding, hot glueing, flushing, pressure testing, water, all engineering services, plant, labor, material, and services for preparation of the site including removal of vegetation, location of all existing utilities along the proposed path, excavation of entry, exit, and slurry containment pits, full location map, surface restoration to existing conditions, replacement and/or reinstatement of existing utilities, backfill, compaction, and for all other materials, equipment, labor, tools and incidentals necessary to complete the work.

Item 2000
Filter Fabric

6. Description. Furnish and install filter fabric.

7. Materials. Furnish filter fabric conforming to DMS-6200, "Filter Fabric."

8. Construction. Place when general weather conditions are suitable, in the opinion of the Engineer.

Install to the lines, grades, and dimensions shown on the plans. Overlaps of filter fabric shall be 18 in. minimum. Use securing pins when necessary to insure proper anchoring of the fabric.

Leave filter fabric in its protective wrapping until ready for use. Fabric removed from wrapping for longer than 72 hours without being covered shall be deemed unsatisfactory and be replaced.

Repair torn or punctured fabric by placing a patch over the damaged area. Patch shall consist of an additional layer of fabric large enough to provide a minimum overlap of 3 ft. in all directions.

9. Measurement. Filter fabric will be measured by the square foot, complete in place, with no allowance for overlapping at transverse or longitudinal joints.

10. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" are paid for at the unit price bid for "Filter Fabric." This price is full compensation for furnishing and placing filter fabric including manipulation, labor, tools, equipment, and incidentals.

Item 8000
Dewatering

1. Description. This Item shall govern work for temporary dewatering systems.

2. System Description.

   A. Remove water which accumulates in excavations during the progress of work so that all can be done in the dry, unless otherwise approved by the Engineer. Keep excavated areas free from water while underground utilities or structures are constructed, while concrete is setting and until backfill or elements of the structure have been placed to a sufficient height to anchor the work against possible leakage or buoyant uplift forces. A height to anchor the work against buoyant uplift forces shall be considered sufficient when the dead load weight of the backfill or elements of the structure exceeds the uplift forces by a minimum factor-of-safety of 1.5.

   B. In addition to the other requirements specified herein, design the dewatering systems to perform as follows:
      1. Prevent damage to adjacent properties, buildings, structures, utilities, and other work as a result of settlement or other groundwater-related effects.
      2. At all times, maintain groundwater levels over the entire excavation a minimum of 3 feet below the excavation grade.

   C. At all times, have on the work site sufficient pumping equipment for immediate use, including standby pumps for use in case other pumps become inoperable. Dispose of water in accordance with the detailed requirements specified herein and so as to cause no injury to personnel or the public, damage to public or private property, nor menace to the public health.

   D. Design dewatering system to prevent pumping fines from below grade or disturbing materials exposed at the excavation bottom. Wells shall be cased, and filter(s) shall be provided to prevent such pumping of fines.

   E. Provide a sufficient number of monitoring wells to confirm the following:
      1. The dewatering system is performing as intended and is achieving the specified reduction in groundwater levels.
      2. Construction site groundwater levels inside and outside dewatered excavations to determine the acceptability of removing the dewatering system from operation.

   F. Furnish container for construction dewatering complete with baffles for the purpose of filtering silt prior to discharge of water. Size container or containers to suit dewatering and storage demands.

   G. If the approved methods include displacing groundwater as concrete or other work is placed in excavations, the dewatering system shall capture groundwater as it is displaced and follow the procedures herein for its containment, analysis, and discharge.

   H. Obtain jurisdictional authority's specific discharge requirements prior to commencement of dewatering.

3. Dewatering Plan.

   A. Submit dewatering plan to the Engineer, including shop drawings and design data including the following elements:

      1. The proposed type of dewatering system.
      2. Arrangement, location, and depths of system components.
      3. Complete description of equipment and instrumentation to be used, with installation, operation and maintenance procedures.
      4. Types and sizes of filters.
      5. Design calculations demonstrating adequacy of the proposed system and equipment.
      6. Methods of disposal of pumped water.
      7. Method of water quality monitoring.
      8. Type of filtration and chemical treatment of contaminated water, as applicable.
      9. Well point system design, if proposed: Submit design complete with calculations and shop drawings.
      10. Method for establishing and monitoring construction site groundwater levels.
      11. Criteria for determining the acceptability of removing the dewatering system from operation.

   B. Prior to removing the dewatering system from operation, submit documentation and calculations verifying that the approved criteria for determining the acceptability of removing the system from operation have been met.

4. Deliverables. Submit copies of permits required for work of this Section.

5. Dewatering Execution.

   A. Except as otherwise indicated in the Contract Documents, perform dewatering to accomplish a lowering of measured static ground water level to an elevation which is suitable for the construction of structures below grade.

   B. When pumping is required to reduce groundwater levels, accomplish pumping in a manner that will not disrupt the surrounding environment.

   C. The Contractor may, during the daylight hours of 8:30 AM to 4:30 PM, use power plants to operate the dewatering pumps. During all other hours, power to run the pumps shall be electric and obtained from the electric power utility, unless otherwise authorized by the Engineer and jurisdictional authorities.

   D. If any dewatering well pumps fines, terminate pumping and construct new well at a different location with a revised design which eliminates the pumping of fines.

   E. Do not turn off the dewatering system in a manner that the upsurge in water weakens the subgrade for completed excavation and structure foundation work.

   F. Remove storage containers, including those cleaned, and other dewatering facilities from the site at the completion of dewatering operations.

6. Containment, Analysis, and Discharge of Groundwater Extracted.

A. Containment: Upon extraction, store groundwater extracted in the process of construction dewatering in containers prior to discharge or disposal of water, as applicable. Keep containers locked to prevent accidental or purposeful discharge of the water. Contain and store the water on-site and in such a manner that it will not interfere with the Contractor's existing or continued construction operations.

B. Analysis: Collect and analyze water samples taken directly from each storage container to verify that the extracted groundwater meets applicable discharge requirements. Number of samples taken per container shall be at the sole discretion of the Engineer.

C. Discharge Requirements: Discharge no water which exceeds regulatory requirements or the jurisdictional authority's discharge requirements.

D. Discharge: Obtain jurisdictional authority's specific discharge requirements prior to commencement of dewatering. Subject to the discharge restrictions specified herein and upon written authorization from the jurisdictional authority, discharge effluent from dewatering directly into existing sanitary manholes, where said sewer system is in operating condition. Provide conduits to carry said effluent to nearest sanitary sewer manhole and drainage to the nearest storm drainage. Confirm that manholes to be utilized are in operating condition. Release water in a manner that will not impact the Contractor's operations.

E. Use: Extracted groundwater of sufficient quality as shown by test data may be used on site with Engineer's written approval for those purposes approved by the Engineer.

7. Measurement. Dewatering for this project will be measured by the lump sum.

8. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Dewatering". This price shall be full compensation for dewatering operations and disposal of water removed; for monitoring points; for locating the water table; for restoring dewatering conveyance system routes to original condition; and for all labor, tools, equipment and incidentals necessary to complete the work.

ITEM 9000
ARTICULATED CONCRETE MATS

ARTICULATING CONCRETE BLOCK (ACB)
REVETMENT SYSTEM SPECIFICATIONS - ARMORFLEX®

PART 1: GENERAL

A. Scope of Work

The contractor shall furnish all labor, materials, equipment, and incidentals required and perform all operations in connection with the installation of cellular concrete erosion control blocks in accordance with the lines, grades, design and dimensions shown on the Contract Drawings and as specified herein.

B. Submittal

The Contractor shall submit to the Engineer all manufacturers' hydraulic testing and calculations in support of the proposed cellular concrete mat system and geotextile.

The Contractor shall furnish the manufacturer's certificates of compliance for cellular concrete blocks/mats, revetment cable, and any revetment cable fittings and connectors. The Contractor shall also furnish the manufacturer's specifications, literature, shop drawings for the layout of the mats, and any recommendations, if applicable, that are specifically related to the project.

Alternative materials may be considered. Such materials must be pre-approved in writing by the Engineer prior to bid date. Alternative material packages must be submitted to the Engineer a minimum of fifteen (15) days prior to bid date. Submittal packages must include, as a minimum, the following:

1. Full-scale laboratory testing performed by the submitting manufacturer and associated engineered calculations quantifying the hydraulic capacity of the proposed cellular concrete mat system in similar conditions to the specific project.

2. A list of 5 comparable projects, in terms of size and applications, in the United States, where the results of the specific alternate revetment system use can be verified after a minimum of five (5) year of service life.

PART 2: PRODUCT

A. General

All cellular concrete mats shall be prefabricated as an assembly of concrete blocks, with specific hydraulic capacities, laced with revetment cables. Cellular concrete mats may be assembled on-site by hand-placing the individual units either with or without subsequent insertion of cables.

Individual units in the system shall be staggered and interlocked for enhanced stability. The mats shall be constructed of open and/or closed cell units as shown on the contract drawings. The open cell units have two (2) vertical openings of rectangular cross section with sufficient wall thickness to resist cracking during shipping and installation. Parallel strands of cable shall extend through two (2) cable ducts in each block allowing for longitudinal binding of the units within a mat. Each row of units shall be laterally offset by one-half of a block width from the adjacent row so that any given block is cabled to four other blocks (two in the row above and two in the row below).

Each block shall incorporate interlocking surfaces that minimize lateral displacement of the blocks within the mats when they are lifted by the longitudinal revetment cables. The interlocking surfaces must not protrude beyond the perimeter of the blocks to such an extent that they reduce the flexibility or articulation capability of the cellular mats or

become damaged or broken when the mats are lifted during shipment or placement. Once the mats are in place, the interlocking surfaces shall minimize the lateral displacement of the blocks even if the cables should become damaged or removed. The mats must be able to flex a minimum of 18° between any given row or column of blocks in the uplift direction and a minimum of 45° in the downward direction.

The cables inserted into the mats shall form lifting loops at one end of the mat with the corresponding cable ends spliced together to form a lifting loop at the other end of the mat. The Engineer shall approve appropriate sleeves for use in order to splice the lifting loop. The cables shall be inserted after sufficient time has been allowed for the concrete to complete the curing process.

The cellular concrete mats shall be placed on a filter fabric as specified herein. Under no circumstances shall the filter fabric be affixed (i.e. chemically bonded to the blocks) to the mattress in a manner in which would jeopardize the functionality of the filter fabric. Specifically, the filter fabric shall be independent of the block system.

Certification (Open-Channel Flow): Cellular concrete mats will only be accepted when accompanied by documented hydraulic performance characteristics that are derived from tests under controlled flow conditions. Testing guidelines should conform to U.S. Federal Highway Administration and U.S. Bureau of Reclamation Testing Protocol as documented in “Minimizing Embankment Damage During Overtopping Flow”, Report No. FHWA-RD-88-181 and all hydraulic performance testing shall be performed in a 2H:1V flume.

Performance (Open-Channel Flow): The design of the cellular concrete mats shall be in accordance with the Factor-of-Safety design methodology as described in "Erosion and Sedimentation" by Pierre Julien, Cambridge University Press, 1995. The minimum designed safety factor shall be 1.5 by utilizing the following equation.

$$SF = ((\gamma_2 / \gamma_1)\ \gamma_0) / ((1 - \gamma_2^2)^{0.5} \cos\ \theta + \mu\ (\gamma_2 / \gamma_1) + (\gamma_3\ F_d' \cos\ \theta + \gamma_4\ F_l') / \gamma_1 W_s) = 1.5$$

The analysis shall be performed based upon the stability of the mat due to gravity forces alone, neglecting conservative forces added by cabling, mechanical anchorage, contact with adjacent blocks, or other restraints not attributable to gravity based forces. The analysis must account for a 0.5-inch block projection.

In order to analyze the performance of the unit, the hydraulic information listed below is required:

TABLE 1. ACB HYDRAULIC INFORMATION

Velocity (ft/sec)	?
Shear Stress (lb/ft^2)	?
Friction or Bed Slope (ft/ft)	?.
Side Slope (_H:1V)	?
Allowable Unit Protrusion (in)	0.5 for Uniform Units &
	0.0 for 0.5 inch Tapered Units

B. Cellular Concrete Blocks

1. Scope

1.1 This specification covers erosion control mats used in revetments for soil stabilization.

Note 1 - Concrete units covered by this specification are made from lightweight or normal weight aggregates, or both.

Note 2 - The values stated in U.S. customary units are to be regarded as the standard.

2. Materials

2.1 Cementitious Materials - Materials shall conform to the following applicable ASTM specifications:

2.1.1 Portland Cements - Specification C 150, for Portland Cement.

2.1.2 Blended Cements - Specification C 595, for Blended Hydraulic Cements.

2.1.3 Hydrated Lime Types - Specification C 207, for Hydrated Lime Types.

2.1.4 Pozzolans - Specification C 618, for Fly Ash and Raw or Calcined Natural Pozzolans for use in Portland Cement Concrete.

2.2 Aggregates shall conform to the following ASTM specifications, except that grading requirements shall not necessarily apply:

2.2.1 Normal Weight - Specification C 33, for Concrete Aggregates.

3. Casting

3.1 The concrete units shall be produced by a dry cast method. The dry cast units obtain strength in a shorter duration as well as an increase in the durability and overall quality of product.

4. Physical Requirements

4.1 At the time of delivery to the work site, the units shall conform to the physical requirements prescribed in Table 2 listed below.

2. *TABLE 2. PHYSICAL REQUIREMENTS*

Compressive Strength Net Area Min. p.s.i (mPa)		Water Absorption Max. lb/ft^3 (kg/m^3)	
Avg. of 3 units	Individual Unit	Avg. of 3 units	Individual Unit
4,000 (27.6)	3,500 (24.1)	9.1 (160)	11.7 (192)

4.2 Units will be sampled and tested in accordance with *ASTM D 6684-04, Standard Specification for Materials and Manufacture of Articulating Concrete Block (ACB) Revetment Systems.*

4.3 Units shall be sampled and tested in accordance with ASTM D 6684-04, Standard Specification for Materials and Manufacture of Articulating Concrete Block (ACB) Revetment Systems.

5. Visual Inspection

5.1 All units shall be sound and free of defects that would interfere with either the proper placement of the unit or impair the performance of the system. Surface cracks incidental to the usual methods of manufacture, or surface chipping resulting from customary methods of handling in shipment and delivery, shall not be deemed grounds for rejection.

5.2 Cracks exceeding 0.25 inches (.635 cm) in width and/or 1.0 inch (2.54 cm) in depth shall be deemed grounds for rejection.

5.3 Chipping resulting in a weight loss exceeding 10% of the average weight of a concrete unit shall be deemed grounds for rejection.

5.4 Blocks rejected prior to delivery from the point of manufacture shall be replaced at the manufacturer's expense. Blocks rejected at the job site shall be repaired with structural grout or replaced at the expense of the contractor.

6. Sampling and Testing

6.1 The purchaser or their authorized representative shall be accorded proper access to facilities to inspect and sample the units at the place of manufacture from lots ready for delivery.

6.2 Field installation procedures shall comply with the procedures utilized during the hydraulic testing procedures of the recommended system. All system restraints and ancillary components (such as synthetic drainage mediums) shall be employed as they were during testing. For example, if the hydraulic testing installations utilize a drainage layer then the field installation must utilize a drainage layer; an installation without the drainage layer would not be permitted.

6.3 The theoretical force-balance equation used for performance extrapolation tends for conservative performance values of thicker concrete units based on actual hydraulic testing of thinner units. When establishing performance values of thinner units based on actual hydraulic testing of thicker units, there is a tendency to overestimate the hydraulic performance values of the thinner units. Therefore, all performance extrapolation must be based on actual hydraulic testing of a thinner unit then relating the values to the thicker units in the same "family" of blocks.

6.4 Additional testing, other than that provided by the manufacturer, shall be borne by the purchaser.

Manufacturer

Cellular concrete blocks shall be ARMORFLEX® as manufactured and sold by:

ARMORTEC, A Contech Company
9025 Centre Pointe Dr., Suite 400
West Chester, OH 45269
Phone: 1-800-645-7000 Fax: 1-513-645-7993

The ARMORFLEX® cellular concrete blocks shall have the following nominal characteristics:

TABLE 2. STANDARD SIZES OF ARMORFLEX® BLOCKS

CLASS	TYPE	BLOCK WEIGHT		BLOCK SIZE			OPEN AREA %
		Lbs	Lbs./Sq.ft.	Length inches	Width inches	Height inches	
30S	Open	31-36	32-37	13.0	11.6	4.75	20
50S	Open	45-52	45-53	13.0	11.6	6.0	20
45S	Closed	39-45	40-45	13.0	11.6	4.75	10
55S	Closed	51-61	54-62	13.0	11.6	6.0	10
40	Open	59-64	33-36	17.4	15.5	4.75	20
50	Open	76-82	43-46	17.4	15.5	6.0	20
70	Open	115-124	65-71	17.4	15.5	8.5	20
45	Closed	72-78	41-44	17.4	15.5	4.75	10
55	Closed	91-100	53-57	17.4	15.5	6.0	10
75	Closed	112-121	63-68	17.4	15.5	7.5	10
85	Closed	136-147	76-84	17.4	15.5	8.5	10
40L	Open	97-118	42-46	17.4	23.6	4.75	20
70L	Open	174-189	67-74	17.4	23.6	8.5	20
45L	Closed	108-118	42-46	17.4	23.6	4.75	10
85L	Closed	208-225	80-87	17.4	23.6	8.5	10

*Block height may vary based on local manufacture's capabilities.
**Block weight may vary based upon the specific gravity of local available aggregate material

C. Revetment Cable and Fittings

Option 1. Polyester Revetment Cable and Fittings. Revetment cable shall be constructed of high tenacity, low elongating, and continuous filament polyester fibers. Cable shall consist of a core construction comprised of parallel fibers contained within an outer jacket or cover. The weight of the parallel core shall be between 65% to 70% of the total weight of the cable. The revetment cable shall have the following physical properties:

Polyester Cable				
Nominal Cable Dia.	Approx. Ave. Strength		Weight per Length	
(in.)	(Lbs)	(kN)	(Lbs)/100ft	(kg/m)
1/4	3,000	13.3	2.2	0.03
5/16	7,000	31.1	4.4	0.07
3/8	10,000	44.5	5.5	0.08
1/2	15,000	66.7	9.7	0.14

Elongation requirements specified below are based upon stabilized new, dry cable. Stabilization refers to a process in which the cable is cycled fifty (50) times between a load corresponding to $200D^2$ and a load equal to 10%, 20% or 30% of the cable's approximate average breaking strength. Relevant elongation values are as shown in the table below. The tolerance on these values is $\pm$ 5%.

ELASTIC ELONGATION		
at Percentage of Break Strength		
10%	20%	30%
0.6	1.4	2.2

The revetment cable shall exhibit resistance to most concentrated acids, alkalis and solvents. Cable shall be impervious to rot, mildew and degradation associated with marine organisms. The materials used in the construction of the cable shall not be affected by continuous immersion in fresh or salt water.

Selection of cable and fittings shall be made in a manner that insures a safe design factor for mats being lifted from both ends, thereby forming a catenary. Consideration shall be taken for the bending of the cables around hooks or pins during lifting. Revetment cable splicing fittings shall be selected so that the resultant splice shall provide a minimum of 60% of the minimum rated cable strength. Fittings such as sleeves and stops shall be aluminum and washers shall be galvanized steel unless otherwise shown on the Contract Drawings.

Option 2. Galvanized Steel Revetment Cable and Fittings. Revetment cable shall be constructed of preformed galvanized aircraft cable. The cables shall be made from individual wires and strands that have been formed during the manufacture into the shape they have in finished cable.

Cable shall consist of a core construction comprised of seven (7) wires wrapped within seven (7) or nineteen (19) wire strands. The revetment cable shall have the following physical properties:

Galvanized Cable					
Nominal Cable Dia.	Type	Approx. Ave. Strength		Weight per Length	
(in.)		(Lbs)	(kN)	(Lbs)/100ft	(kg/m)
1/8	7x7	1,700	7.5	2.8	0.04

3/16	7x7	3,700	16.4	6.2	0.09
1/4	7x7	6,100	27.1	10.6	0.16
5/16	7x19	9,800	43.6	17.3	0.26
3/8	7x19	14,400	64.1	24.3	0.36

The revetment cable shall exhibit resistance to mild concentrations of acids, alkalis, and solvents. Fittings such as sleeves and stops shall be aluminum, and the washers shall be galvanized steel. Furthermore, depending on material availability, the cable type (7x7 or 7x19) can be interchanged while always ensuring the required factor of safety for the cable.

Selection of cable and fittings shall be made in a manner that insures a safe design factor for mats being lifted from both ends, thereby forming a catenary. Consideration shall be taken for the bending of the cables around hooks or pins during lifting. Revetment cable splicing fittings shall be selected so that the resultant splice shall provide a minimum of 75% of the minimum rated cable strength.

D. Anchors

Where permanent anchoring is required, e.g. hanging mats on steep slopes without toe construction, the cables (polyester or steel) shall be attached to the anchoring system as indicated on the Contract Drawings. The design and layout of the anchored system shall be design by a separate entity other than Armortec.

E. Filter Fabric

The geotextile filter shall meet the minimum physical requirements listed in Table No. 3 of these Specifications. Consultation with the manufacturer is recommended.

The geotextile must be permitted to function properly by allowing relief of hydrostatic pressure; therefore fine soil particles shall not be allowed to clog the filter fabric.

The geotextile fiber shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of propylene, ethylene, ester, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic, if necessary, to make the filaments resistant to deterioration due to ultraviolet and heat exposure. The edges of the geotextile shall be finished to prevent the outer fiber from pulling away from the geotextile.

The Contractor shall furnish the Engineer, in duplicate, manufacturer's certified test results showing actual test values obtained when the physical properties are tested for compliance with the specifications.

During all periods of shipment and storage, the filter fabric shall be protected from direct sunlight, ultraviolet rays and temperatures greater than 140 degrees Fahrenheit. To the extent possible, the fabric shall be maintained wrapped in its protective covering. The geotextile shall not be exposed to sunlight, ultraviolet rays until the installation process begins.

3.

4. TABLE 3. PHYSICAL REQUIREMENTS

Physical Property	Test Procedure	Minimum Value
Grab Tensile Strength (Unaged Geotextile)	ASTM D4632	200 Lbs. (in any principal direction)
Breaking Elongation (Unaged Geotextile)	ASTM D4632	50% max. (in any principal direction)
Burst Strength	ASTM D3786	400 p.s.i
Puncture Strength	ASTM D4833	115 lbs.
A.O.S., U.S. Std. Sieve	ASTM D4751	see Design Manual

% Open Area	CWO-22125-86	See Design Manual
Permittivity	ASTM D4491	See Design Manual

Final acceptance of the filtration geotextile by the Engineer based on project specific soil information. Soil characteristics such as grain size distribution and plasticity shall be determined for every 200,000 square feet of geotextile installed or for each source of borrow material used during construction. Significant differences in soil characteristics shall require further performance sieve and possible hydrometer testing by either the at the discretion of the Engineer. The locations for which the material to be tested is extracted shall be approved by the Engineer. The Contractor shall provide the site-specific soil and modified proctor curves for the site-soil, at his own expense, to the manufacturer. Also, the contractor shall be responsible for the performance of the test by a certified independent laboratory experienced in performing such test. The test shall be performed under the actual field soil conditions or as otherwise required by the Engineer.

At the time of installation, the filter fabric shall be rejected if it has been removed from its protective cover for over 72 hours or has defects, tears, punctures, flow deterioration, or damage incurred during manufacture, transportation or storage. With the acceptance of the Engineer, placing a filter fabric patch over the damaged area prior to placing the mats shall repair a torn or punctured section of fabric. The patch shall be large enough to overlap a minimum of three (3) feet in all directions.

F. Size of Cellular Concrete Mats

General. The cellular concrete blocks, cables and fittings shall be fabricated at the manufacturer or another approved location into mats with a width of up to eight (8) feet and a length up to forty (40) feet, which is approved by the Engineer.
Mat Length: The cellular concrete mats shall have the ability for fabrication in various lengths, widths, and in combinations of length and/or widths. Special mats are a combination of two opposing dimensions either in the longitudinal or transverse direction of the mats. The special mats are available in various dimensions that allow for a custom fit to a site-specific project.

PART 3: FOUNDATION PREPARATION, GEOTEXTILE AND MAT PLACEMENT

General. All subgrade preparation should be performed in accordance with *ASTM D6884-03, Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems*.

Grading. The slope shall be graded to a smooth plane surface to ensure that intimate contact is achieved between the slope face and the geotextile (filter fabric), and between the geotextile and the entire bottom surface of the cellular concrete blocks. All slope deformities, roots, grade stakes, and stones which project normal to the local slope face must be re-graded or removed. No holes, "pockmarks", slope board teeth marks, footprints, or other voids greater than 0.5 inch in depth normal to the local slope face shall be permitted. No grooves or depressions greater than 0.5 inches in depth normal to the local slope face with a dimension exceeding 1.0 foot in any direction shall be permitted. Where such areas are evident, they shall be brought to grade by placing compacted homogeneous material. The slope and slope face shall be uniformly compacted, and the depth of layers, homogeneity of soil, and amount of compaction shall be as required by the Engineer.
Excavation and preparation for anchor trenches, flanking trenches, and toe trenches or aprons shall be done in accordance to the lines, grades and dimensions shown in the Contract Drawings. The anchor trench hinge-point at the top of the slope shall be uniformly graded so that no dips or bumps greater than 0.5 inches over or under the local grade occur. The width of the anchor trench hinge-point shall also be graded uniformly to assure intimate contact between all cellular concrete blocks and the underlying grade at the hinge-point.

Inspection. Immediately prior to placing the filter fabric and cellular concrete blocks, the prepared subgrade shall be inspected by the Engineer as well as the owner's representative. No fabric or blocks shall be placed thereon until that area has been approved by each of these parties.

B. Placement of Geotextile Filter Fabric

General.
All placement and preparation should be performed in accordance with *ASTM D6884-03, Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems*.

Filter Fabric, or filtration geotextile, as specified elsewhere, will be placed within the limits of ACBs shown on the Contract Drawings.

Placement. The filtration geotextile will be placed directly on the prepared area, in intimate contact with the subgrade, and free of folds or wrinkles. The geotextile will not be walked on or disturbed when the result is a loss of intimate contact between the cellular concrete block and the geotextile or between the geotextile and the subgrade. The geotextile filter fabric will be placed so that the upstream strip of fabric overlaps the downstream strip. The longitudinal and transverse joints will be overlapped at least two (2) feet. The geotextile will extend at least one (1) foot beyond the top and bottom revetment termination points, or as required by the Engineer. If cellular concrete blocks are assembled and placed as large mattresses, the top lap edge of the geotextile should not occur in the same location as a space between cellular concrete mats unless the space is concrete filled.

C. Placement of Cellular Concrete Blocks/Mats

General.
ACB placement and preparation should be perform` with *ASTM D6884-03, Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems*.

Cellular concrete block/mats, as specified in Part 2:A of these Specifications, will be constructed within the specified lines and grades shown on the Contract Drawings.

Placement. The cellular concrete blocks will be prepared subgrade in such a manner as to produce a smooth plane surface in intimate contact. No individual block within the plane of placed cellular concrete blocks will protrude more than one-half inch or as otherwise specified by the Engineer. Cellular concrete blocks should be flush and develop intimate contact with the subgrade section, as approved by the Engineer.

Proposed hand placing only is to be used in limited areas, specifically identified by the Engineer.

If assembled and placed as large mattresses, the cellular concrete mats will be attached to a spreader bar or other approved device to aid in the lifting and placing of the mats in their proper position by the use of a crane or other approved equipment. The equipment used should have adequate capacity to place the mats without bumping, dragging, tearing or otherwise damaging the underlying fabric. The mats will be placed side-by-side and/or end-to-end, so that the mats abut each other. Mat seams or openings between mats greater than two (2) inches will be backfilled with 4000 p.s.i. non-shrink grout, concrete or other material approved by the Engineer. Whether placed by hand or in large mattresses, distinct changes in grade that results in a discontinuous revetment surface in the direction of flow will require backfill at the grade change location so as to produce a continuous surface.

Termination trenches and side trenches will be backfilled and compacted flush with the top of the blocks. The integrity of the trench backfill must be maintained so as to ensure a surface that is flush with the top surface of the cellular concrete blocks for its entire service life. Toe trenches will be backfilled as shown on the Contract Drawings. Backfilling and compaction of trenches will be completed in a timely fashion. No more than 500 linear feet of placed cellular concrete blocks with non-completed anchor and/or toe trenches will be permitted at any time.

Finishing. The cells or openings in the cellular concrete blocks will be backfilled and compacted with suitable material, as specified by the Engineer. Backfilling and compaction will be completed in a timely manner so that no more than 500 feet of exposed mats exist at any time.

Finishing requirements is explicitly at the discretion of the Engineer of Record.

Consultation. The manufacturer of the cellular concrete blocks/mats will provide design and construction advice during the design and initial installation phases of the project as necessary, by the discretion of the Engineer.

Item 9010
Vinyl Sheet Pile

1. DESCRIPTION

Furnish and place vinyl sheet piling.

2. MATERIALS

All vinyl sheet piling shall be ShoreGuard vinyl sheet piling or an approved equal meeting the following requirements as indicated on the General Notes. The length of sheet piling furnished shall be as indicated on the plans or as authorized by the Engineer.

3. MEASUREMENT

This Item will be measured by the square foot of acceptable piling in place. Piling driven below the elevation required by the plans or the elevation authorized by the Engineer will not be measured for payment.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Vinyl Sheet Pile”. No direct payment will be made for excavation and backfill work. The price bid is full compensation for furnishing and placing all vinyl sheet piling materials including timber piling, timber wales, the anchors, tie rods and fasteners, and tools, equipment, labor, and incidentals.

Item 9020
Siphon Structure

1. DESCRIPTION

Furnish and install siphon structure and materials for construction of structure.

2. CONSTRUCTION

The siphon structure is generally lifted and set in place by some kind of cherry picker or crane. The structure is then fastened to sheet piling or some other form of retaining wall to stop any lift of buoyancy the structure may have.

3. MEASUREMENT

This Item will be measured by each structure placed in its final position and accepted by the Engineer.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Siphon Structure.” This price is full compensation for fabrication and installation of structure; and equipment, labor, materials, tools, and incidentals.

INSTALLATION GUIDE

CONTECH®
ENGINEERED SOLUTIONS

ArmorFlex® Installation Guide

ARMORTEC
Erosion Control Solutions

ArmorFlex® Installation Guide

The purpose of the ArmorFlex Installation Guide is to provide recommendations for the proper installation of Articulating Concrete Block (ACB) revetment systems. While this guide offers a set of instructions for performing those operations that are critical for the proper functioning of ACB revetment systems, final preparation and installation is the responsibility of the end user. Additional information is contained in ASTM D6884 Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems.

The proper installation of ACB revetment systems is important to achieving the intended hydraulic performance and maintaining stability against the erosive forces of flowing water. An ACB revetment system consists of a suitably prepared and compacted subgrade, a suitable site-specific filter fabric and properly sized ACB block mattresses placed in "intimate contact" with the filter fabric and subgrade. Each individual site will vary so it is important to follow the engineering project drawings as designed and sealed by a registered Professional Engineer; particularly as they relate to standard termination details. All illustrations and photographs used in this guide are examples of typical situations.

It is the Contractor's responsibility to maintain safe work practices consistent with OSHA (Occupational Safety and Health Administration) regulations and other prevailing safe work practices. This guide is intended to be used in conjunction with all applicable safety regulations and safe work practices and is in no way a replacement thereof.

Site Planning & Preparation

Foundation Preparation

Areas on which filter fabric and ACB units are to be placed shall be constructed to the lines and grades shown on the contract drawings to the tolerances specified in the contract documents and approved by the engineer. All areas to receive the ACB shall be compacted and graded smooth to facilitate the installation of the articulated concrete block system and ensure that intimate contact (between the slope face, the filter fabric and the entire bottom surface of the ACB units) is maintained throughout the system.

Unsatisfactory soils (soils having excessive in-place moisture content, soils containing clods, roots, or other organic material that impair the local slope face) must be removed, replaced with approved material and compacted to a minimum 90% of Standard Proctor density (Test Method D698).

Holes, "pockmarks", slope board teeth marks, footprints or other voids greater than 1 inch in depth normal to the local slope face shall not be permitted. No grooves or depressions greater than 0.5 inches in depth normal to the local slope face with a dimension exceeding 1 foot in any direction shall be permitted. Where such areas are evident, they shall be brought to grade by placing compacted homogeneous material. The slope and slope face shall be uniformly compacted, and the Engineer shall determine the depth of layers, homogeneity of soil, and amount of compaction required. If differing block heights are used — the slope is to be prepared so that the tops of the blocks are flush.

Care shall be exercised so as not to excavate below the grades shown on the Engineer's Contract Drawings, unless directed by the Engineer to remove unsatisfactory materials. Excavation of subgrade shall not be more than 2 inches (50 mm) below specified grade. In such areas, placing and compacting approved material, in order to get up to specified grade, in layers not exceeding 6 inches (150 mm) is required. In such areas where subgrade is above specified grade, they shall be brought to grade by removing material or reworking existing material and compacting.

Proper excavation, grading and compaction is critical to the performance of the ACB system.

Fabric shall have the proper overlap and be free of any holes or tears.

When working in an underwater application, it is the contractor's responsibility to assess the jobsite conditions and the means of achieving proper subgrade preparation, per the Engineer's Contract drawings, specifications, and tolerances.

Placement of Filter Fabric

The subgrade shall be inspected immediately prior to filter fabric and ACB placement for proper preparation. The filter fabric shall be placed directly on the prepared subgrade, in intimate contact with the subgrade and free of folds, wrinkles or excess tension. The filter fabric shall not be walked on or disturbed in a manner resulting in the loss of intimate contact between the filter frabric, the ArmorFlex block and subgrade soils.

The filter fabric shall be placed so that upstream sections overlap downstream sections and so that upslope sections overlap downslope sections ("shingle effect"). Overlaps shall be in the direction of flow wherever possible. The longitudinal and transverse joints shall be overlapped at least 3 feet (91 cm) for below-water installations and at least 2 feet (60 cm) for dry installations. The filter fabric shall extend at least 1 foot beyond the top, bottom, and flanking revetment termination points.

Product Delivery and Handling

Deliveries are typically scheduled to accommodate the overall installation sequence requested though the stacking of mats on an individual load is limited to larger mats towards the bottom and smaller mats toward the top of the trailer.

Deliveries are typically made on 48' flat beds with over-the-road tractors, so adequate truck access and turnaround room at the jobsite must be provided by the Contractor. The trucks and drivers are typically contract carriers (not CONTECH trucks).

The drivers are not expected to have any special certifications, jobsite training or equipment. In the case special requirements are needed, the terms and conditions will need to be negotiated and established at the time of the order. Drivers will untie their loads but are not qualified to help with any rigging, unloading or installation.

CONTECH requires at least a full 4 day notice to schedule trucks (Example: notification on Monday for Friday delivery).

For staging mats (offloading for installation later) allow approximately 30-45 minutes to offload each truck. Staging of mats on-site is highly recommended, especially if your company has never installed ArmorFlex in the past.

Timing is everything. Be prepared to unload the mats when the trucks arrive. If applicable, the first load will have the Spreader Bar and filter fabric, along with the first sequence of mats. For installation off the truck, allow 45-60 minutes for direct installation off the truck. Additional time between loads should be considered for inexperienced crews.

CONTECH loads typically allow 2 hours for unloading time. Detention may apply after this 2 hour period and will be charged to the contractor. Loads are typically pre-loaded the day before in order to arrive first thing in the morning.

Each load will have a Bill of Lading (BOL) that has the load number with unloading dates and times.

All mats will be marked on the side of each mat with one of the following descriptions:

1. Rectangle mats will be marked with the size (Example: 8' W x 20' L).
2. Angle/Pie shape mats will be marked with the mat number per the Mat Layout Spreadsheet.

CONTECH requires notification of any changes or cancellation of scheduled deliveries during normal business hours the day prior to loading in order to avoid any cancellation charges.

The use of a crane is optimal for fast and safe unloading and installation of the mats.

Spreader Bar Overview

This instruction content is for informational purposes and should not be considered to be used in lieu of consultation with a professional rigger. Distribute this guide as a procedure for rigging and handling CONTECH supplied Spreader Bars (See Detail A). Notwithstanding the instructions contained in this guide, it is the responsibility of the customer or customer's agent to handle CONTECH products in a safe and efficient manner. For additional information, refer to safety standard ASME B30.20, *Below-the-Hook Lifting Devices*.

Inspection

The operator or other designated personnel should visually inspect the unit before every lift, as well as during operation in the event that damage occurs during a lift. Connector Links, Eye Hooks with Snap Lock and Screw Pin Shackles should engage properly and be free of damage (see Detail B).

The unit shall be free of structural deformation, cracks or excessive wear of any part of the Main Lifting Beam and the Hook Tube Assemblies. The operator should check for loose or missing fasteners, including Connector Links (12), Eye Hooks with Snap Lock (12) and Screw Pin Shackles (2). Welds should also be inspected for signs of obvious cracking.

Maintenance

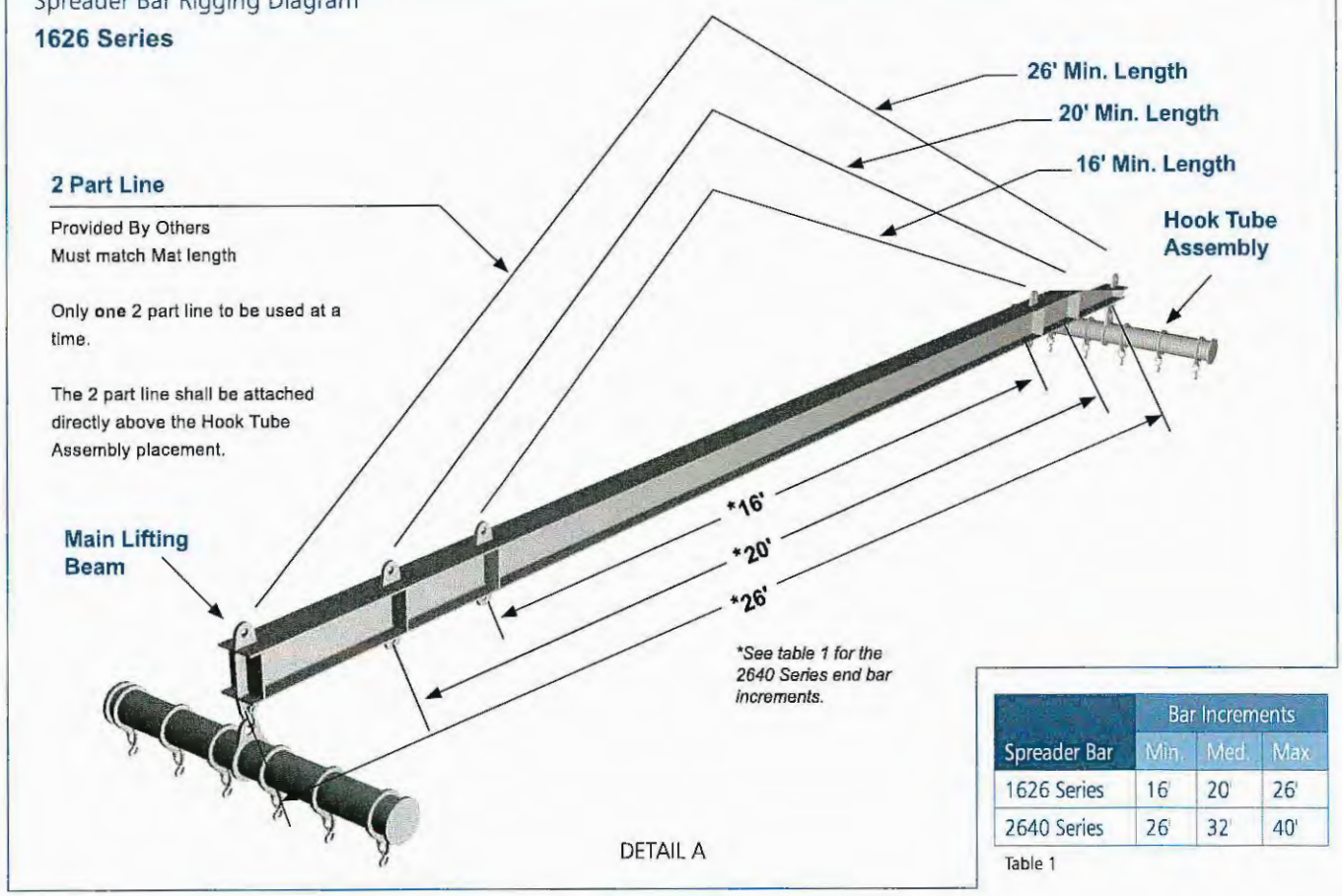
Any observed damage to the Connector Links, Eye Hooks with Snap Lock and Screw Pin Shackles or hazardous conditions found during an inspection shall be corrected before the Spreader Bar is put back into service. Adjustments and repairs shall only be done by a qualified person, and the following process shall be followed by the contractor or their designee:

1. Contact a CONTECH Project Manager before any repair work is performed.
2. The Spreader Bar shall be tagged "OUT OF SERVICE."
3. Replacement parts shall be equal and/or exceed the original manufacturer's specifications (see "Spreader Bar Parts List").
4. Personnel working on the device must be qualified to make the given repair.

When structural damage of the unit is noted or repairs are needed (except for Connector Link, Eye Hooks with Snap Lock, Screw Pin Shackle), the contractor shall halt use of the Spreader Bar, tag the bar "OUT OF SERVICE" and contact the CONTECH Project Manager for further instruction. No welding whatsoever shall be performed on the Spreader Bar unit.

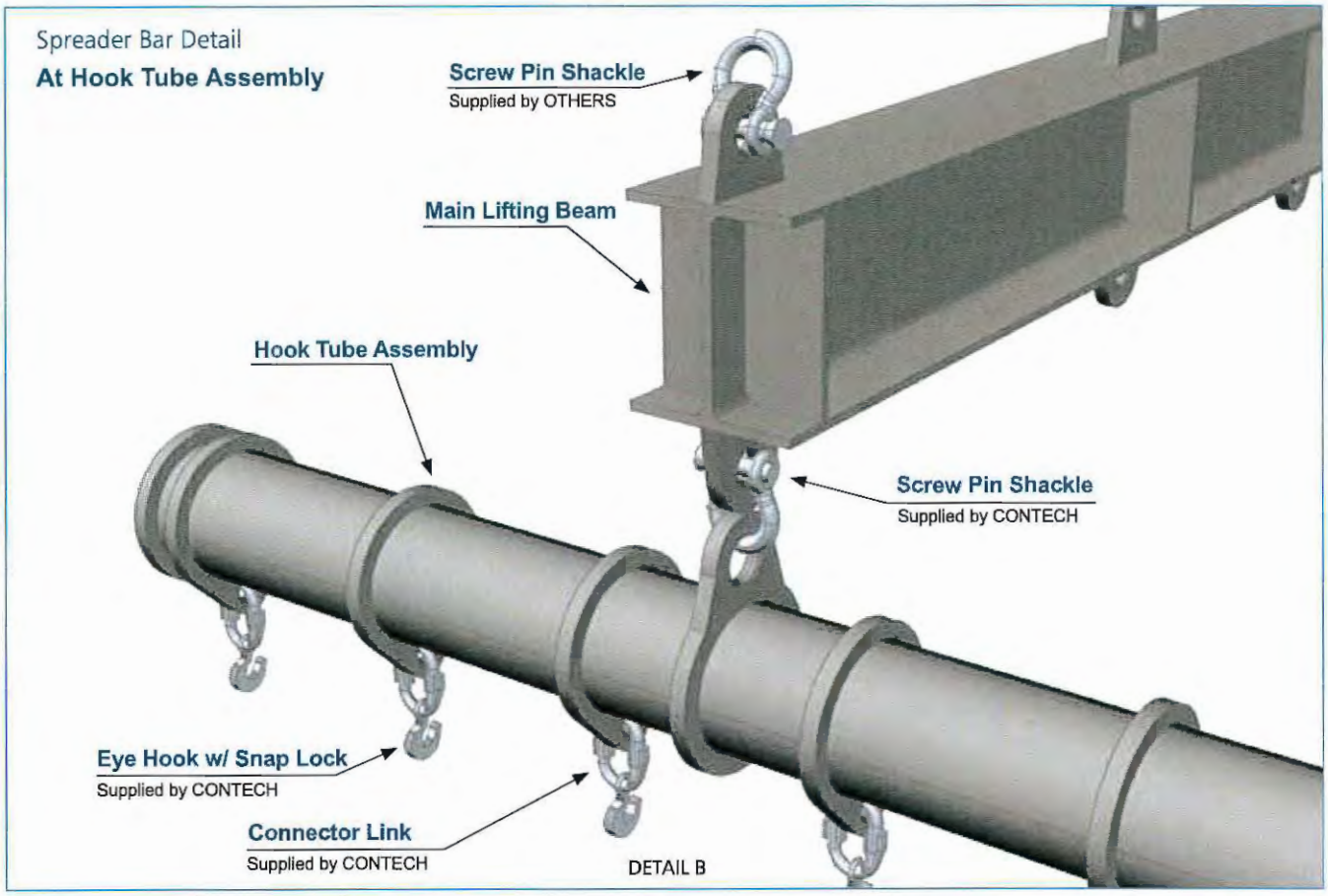
Spreader Bar Rigging Diagram

1626 Series



Spreader Bar	Bar Increments		
	Min.	Med.	Max.
1626 Series	16'	20'	26'
2640 Series	26'	32'	40'

Table 1



SPREADER BAR PARTS LIST	
Qty.	Description
1	Main Lifting Beam
2	Hook Tube Assembly
12	Connector Link, Lok-A-Loy 6-5/8", 16,500 lb Crosby #1014459
12	Eye Hook w/ Snap Lock - 2 ton S-320C Crosby #1022233
2	1" Screw Pin Shcackle 20,000 lb Columbus McKinnon #600-02515
	Replacement Latch Kit - Crosby #1096468

Equipment Needs

Prior to delivery, review the heaviest lift and highest pick in order to properly size the equipment used for the offload and the installation of the mats.

Total pick weight will include the weight of each mat AND Spreader Bar. Estimated Spreader Bar weight is 2,600 lbs for 26' bars and 3,500 lbs for 40' bars.

Total vertical lift height typically ranges between 30' - 65' and is determined by the following variables:

Setting Mats with a Crane or Excavator

1. "Walking" mats with an excavator or using more than one piece of equipment to pick is not recommended and can result in unsafe working conditions and/or damage to the ACB mattresses.
2. Proper lifting with the Spreader Bar ensures the 5:1 working load factor of the cable is preserved.
3. Single end picks (picking up the mat from one end) are not allowed.
4. Identify and avoid obstructions that may hinder reach height (Example: Power lines).

EQUIPMENT	*PICK HEIGHT IMPACT*
Flatbed Trailer	5'
Sag of Mat	5'-20'
2-Part Line	15'-35'
Height of Spreader Bar	4'
Total Vertical Lift Range	30'-65'

Is the reach of your crane or excavator sufficient to set the mats?

CAUTION: Consult the load chart for the machine to verify its load rating is not exceeded.

WARNING NOTES & SAFETY INSTRUCTIONS

Only trained and authorized equipment operators are to be permitted to use CONTECH supplied Spreader Bars. Failure to follow these instructions can result in serious injury or death and/or damage to the product.

DO NOT: Exceed the rated load or lift loads not specified in this guide.

DO NOT: Operate a damaged or malfunctioning unit or a unit with missing parts.

DO NOT: Lift people.

DO NOT: Leave suspended loads unattended.

DO NOT: Remove or obscure warning labels.

DO NOT: Operate without having read and understood the operating guide.

DO NOT: Stand under or near suspended load.

DO NOT: Lift loads higher than necessary.

DO NOT: Make alterations or modifications to a Spreader Bar.

Installation Instructions

Placement of ArmorFlex Units

Care shall be taken while installing the system in order to avoid damage to the filter fabric or the underlying subgrade. The ArmorFlex units shall be placed on the filter fabric in such a manner as to produce a smooth plane surface in intimate contact with the filter fabric.

The preferred method is to start installation of the ACB system at the downstream end and proceed upstream, taking care to protect the leading edge against erosive forces. These erosive forces could potentially undermine the system if proper installation procedures are not followed.

No individual unit within the plane of the system shall exceed a 0.5 inch protrusion or greater protrusion than is specified in the contract drawings. The units shall be placed side by side so that the blocks abut. Termination trenches typically consist of a 2-block toe-in, including the top of slope, the toe of slope and flanks unless otherwise directed by the EOR. This design is typical of an ACB system to protect all sides from erosive factors.

Subgrade preparation, placement of filter fabric, placement of the ArmorFlex concrete units and the final completed project shall be inspected and approved by the Contractor and EOR.

To assist in aligning the unit being placed, use of a pry bar may be necessary.

Earth Anchors (if required):

1. Anchors shall be installed per the manufacturer's instructions.
2. Anchor penetrations through the filter fabric shall be grouted with approved material to prevent migration of subsoil through the penetration point.

FINISHING

Grouting

4,000 psi non-shrinking grout or 4,000 psi concrete shall be placed where the loop ends of the mats meet, or wherever there is greater than a 2-inch gap between adjacent mats or structures. Grout to the top of the block or slightly lower (not above). Grouting of seams is meant to provide a hydraulic connection, not necessarily a structural connection between mats.

Backfill

Backfill of the block shall be specified by the Engineer of Record (EOR). Typical backfill is either suitable soil for revegatation or .375 to .750 inch (10 to 20 mm) diameter crushed stone. Backfilling should occur as early as possible to protect the filter fabric from UV damage. The exposed edges shall be backfilled until flush, ensuring the integrity of a soil backfill is maintained.

Termination trenches shall be backfilled as shown on the approved contract drawings. This backfill material shall be approved by the EOR. It is the recommendation by Armortec® that this non-erodible backfill be 4,000 psi non-shrinking grout or concrete.

Repair of Damaged Units

In the event that a damaged concrete unit exists prior to the placement or after the mat has been installed, the concrete unit can be repaired in one of the following acceptable manners; unit to be completely removed and then backfilled with 4,000 psi grout/concrete or, replaced with a new block unit.

Depending on the size of the crack or chip, the perimeter and void areas of the block can be filled with grout up to or just below the top grade of the block.

Chipping resulting in a weight loss exceeding 10% of the average weight of a concrete unit shall be repaired. Surface chipping (i.e. weight loss of less than 10%) resulting from customary handling methods generally do not require repair.

Grout to the top of the block or slightly lower — not above.

Backfilling should occur as early as possible to protect the filter fabric from UV damage.

Tool and Material Checklist	
Two-part line for attachment to the Spreader Bar's Main Lifting Beam. Each leg of the two-part line needs to be equal to or greater than the longest mat to be picked to achieve an angle no less than 60 degrees between the bar and line. (See Detail A).	**Supplied by others**
Chokers or Straps for ease of Spreader Bar adjustment, recommend: 6 chokers each 2', 5', 8' or 1-2 nylon straps each 2', 5', 8'.	**Supplied by others**
Swivel Clevis for picking point of equipment	**Supplied by others**
Three heavy duty rock bar or pry bars (5 feet length is optimal).	**Supplied by others**
Upside down marking paint (for alignment markings on the mats or ground during installation).	**Supplied by others**
100' measuring tape.	**Supplied by others**
Amortec's Mat Layout Plan Drawings and Mat Layout Spreadsheet with mat numbers and sizes. Have these documents on-site at ALL times for reference.	**Supplied by CONTECH**

Notes:

Support

If you need guidance please, call your local sales representative or our corporate headquarters at 1.800.338.1122 and ask for a representative.

- Drawings and specifications are available at www.ContechES.com.
- Site-specific design support is available from Contech representatives.

Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater and earth stabilization products.

Nothing in this catalog should be construed as an expressed warranty or an implied warranty of merchantability or fitness for any particular purpose. See the Contech standard quotation or acknowledgement for applicable warranties and other terms and conditions of sale.

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visit www.ContechES.com or call 800.338.1122

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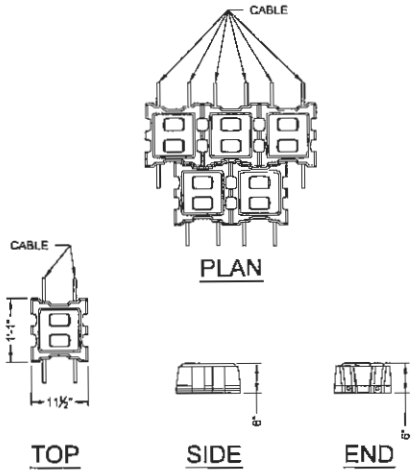
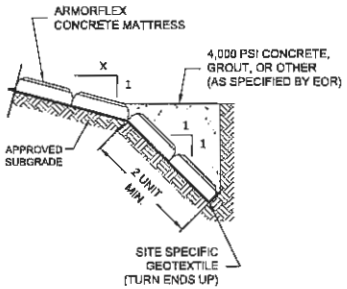
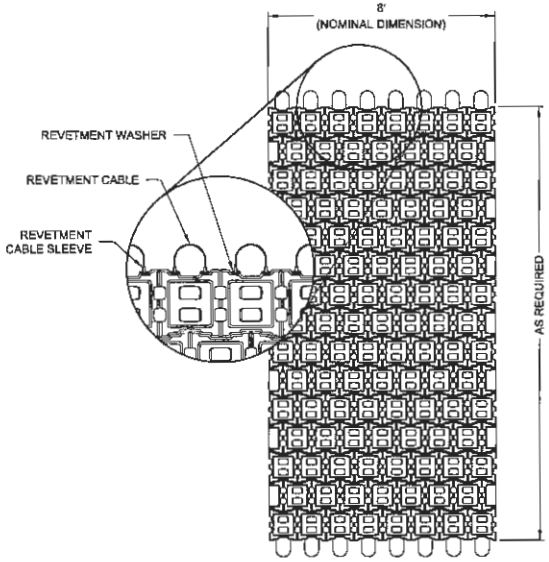


TYP. 50S BLOCK (1)
NOT TO SCALE



SECTION (B)
NOT TO SCALE



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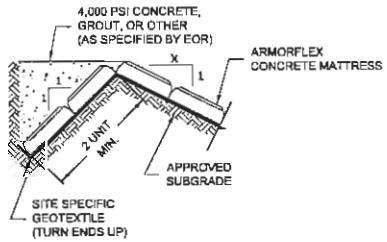

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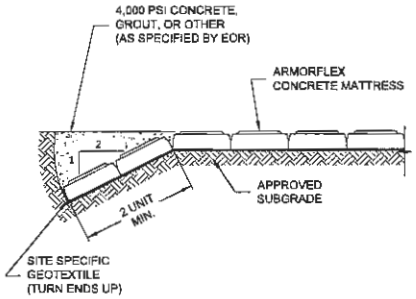

SECTION (C)
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PRELIMINARY
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800-338-1122 513-645-7000 513-645-7993 FAX

ARMORTEC
Erosion Control Solutions

CONTECH
PROPOSAL
DRAWING

ARMORFLEX CLASS 50 SMALL STANDARD TERMINATION DETAILS

PROJECT No	ECO No	DATE
—	—	10/28/2013
DESIGNED		DRAWN
—		—
CHECKED		APPROVED
—		—
SHEET NO.		
CT1 OF CT2		

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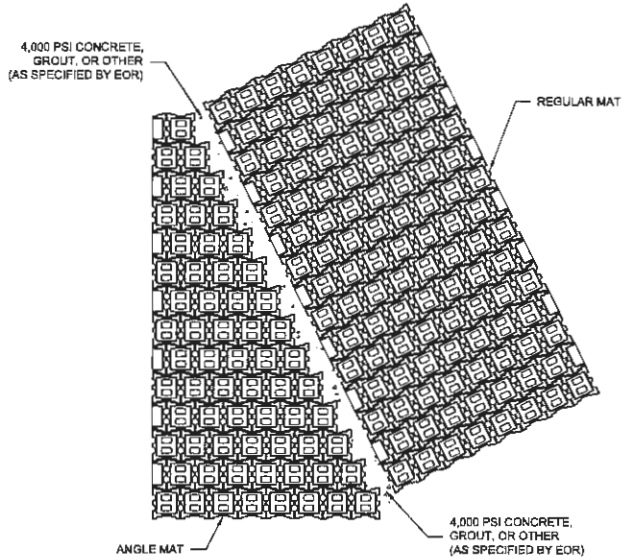

NOTE:
ANGLE MATS WILL BE CONSTRUCTED BY OMITTING THE REQUIRED UNITS SO THE REQUIRED MAT DIMENSIONS CAN BE OBTAINED.

TYP. ANGLE MAT 3
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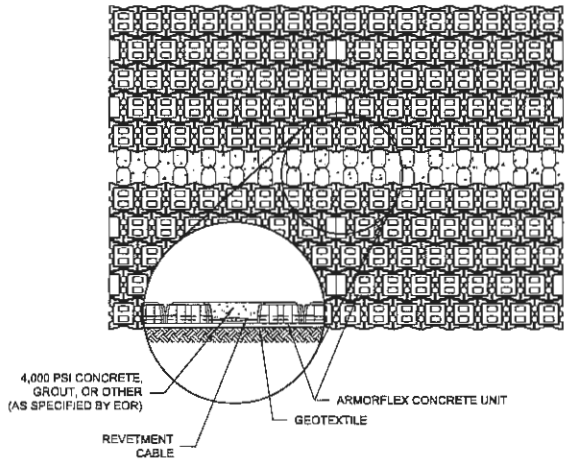

TYP. MAT TO MAT 4
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ARMORTEC Erosion Control Solutions

CONTECH PROPOSAL DRAWING

ARMORFLEX CLASS 50 SMALL STANDARD TERMINATION DETAILS

PROJECT No	ECD No	DATE
		10/28/2013
DESIGNED		DRAWN
CHECKED		APPROVED
SHEET NO.	CT2 OF CT2	

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Item 9010
Vinyl Sheet Pile

1. DESCRIPTION

Furnish and place vinyl sheet piling.

2. MATERIALS

All vinyl sheet piling shall be ShoreGuard vinyl sheet piling or an approved equal meeting the following requirements as indicated on the General Notes. The length of sheet piling furnished shall be as indicated on the plans or as authorized by the Engineer.

3. MEASUREMENT

This Item will be measured by the square foot of acceptable piling in place. Piling driven below the elevation required by the plans or the elevation authorized by the Engineer will not be measured for payment.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Vinyl Sheet Pile". No direct payment will be made for excavation and backfill work. The price bid is full compensation for furnishing and placing all vinyl sheet piling materials including timber piling, timber wales, the anchors, tie rods and fasteners, and tools, equipment, labor, and incidentals.

UltraCOMPOSITE™
SHEET PILING AND PILES

SHOREGUARD®
Synthetic Sheet Piling

Installation Guide

Crane Materials International
www.cmilc.com
770-933-8596
info@cmilc.com

CRANE MATERIALS INTERNATIONAL

WARNING

No two walls are the same. The numerous job site variables make it impossible to provide specific construction designs without careful analysis of each variable and the effect it will have on the structure. This analysis should be left up to an architect, professional contractor, or engineer. This manual lists typical installation techniques for demonstration purposes only, and in no way represents any recommendations on how to approach your particular project. Please rely on your engineer for specific design recommendations. Because of the complexity of geotechnical loading calculations and the susceptibility to extreme change of soil loads with minor changes in local site conditions such as soil parameters, water levels, surcharge loads, etc., we strongly recommend the use of design professionals who are familiar with local wall construction to determine the required wall parameters, design techniques, and applicable installation methods and procedures.

WARNING

This manual does not address any safety or regulatory issues associated with its use nor the installation of CMI products. It is the user's responsibility to establish and ensure that all regulated and appropriate safety and health practices are followed. It is also the user's responsibility to ensure that any and all applicable permits and permissions have been secured before installation of any CMI product.

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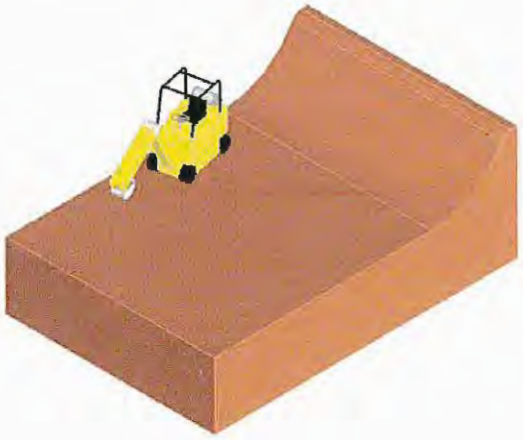
Before You Begin

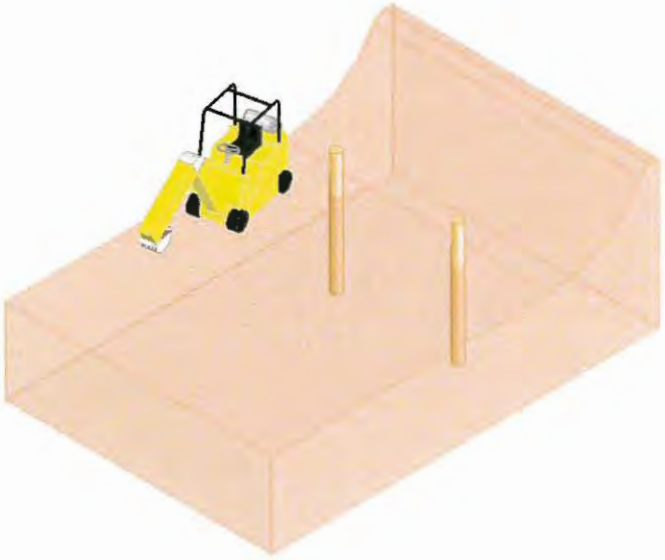
Prepping the Site

There are many types of sheet piling structures that serve many different purposes. We cannot hope to cover every situation here but rather, show some fundamental ideas. Most scenarios are going to involve some preparatory work before you begin the construction of your structure. Many situations require excavation. Whether it is to have more mobility in construction, for burying anchors, or ultimately changing the landscape, preparatory work will need to be done first. This might be a good time to more closely investigate the soil and its properties to ensure that your wall has been properly designed. A simple, anchored, earth retaining wall situation is shown here for illustration purposes.

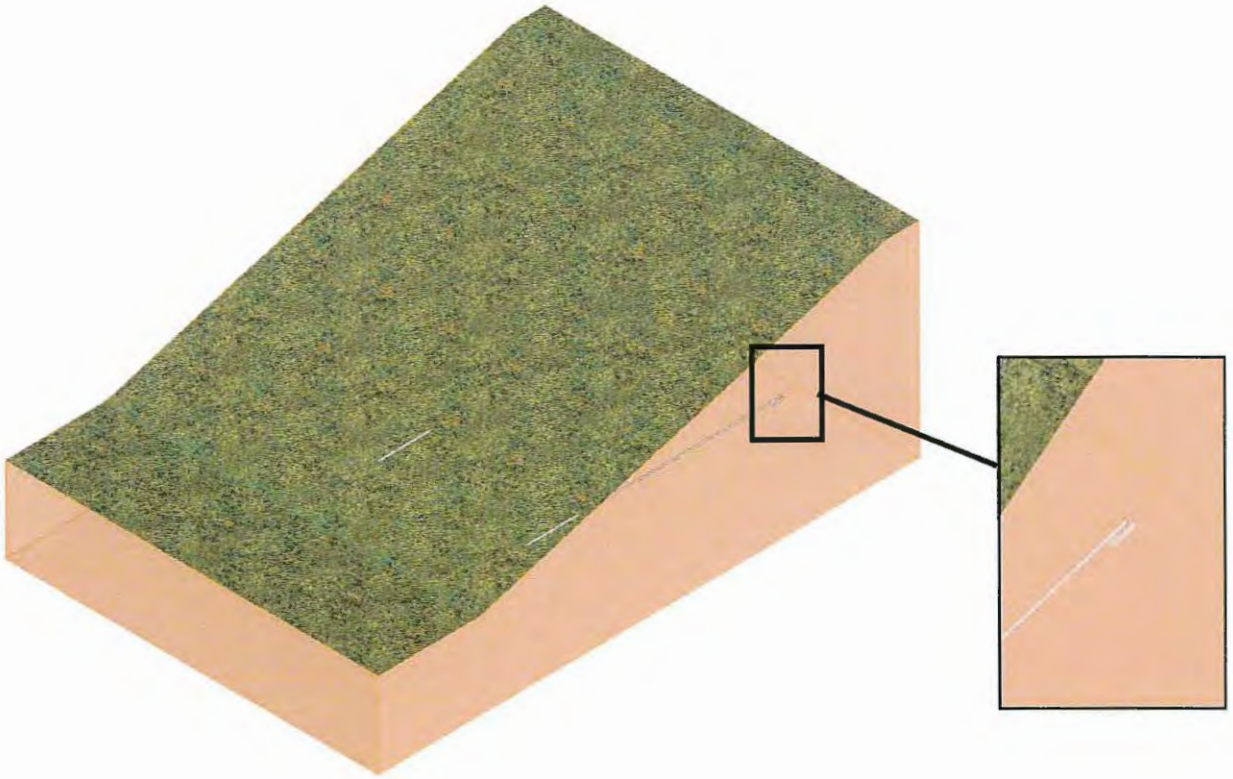


Anchoring

If you will be anchoring your wall, there are many types of anchors to choose from. The most popular anchoring method involves driving or burying large bodies in the ground with which to secure your wall. This method involves excavation which may not be possible or feasible in every situation. Different people use different materials and different layouts to achieve their preferred anchoring system. Shown here are TimberGuard poles used as anchor piles. It is important that, whatever anchor system you use, the anchor be buried outside of the slip plane or active wedge of the soil. This is the angle that the dirt settles to, naturally, if left unsupported. It is this falling of the dirt that you are trying to counteract with a retaining wall. The wall designer should designate the distance and depth that your anchors should be, in relation to the wall. Make sure to plan so that you have access to the anchor for attachment to your wall when nearing completion.

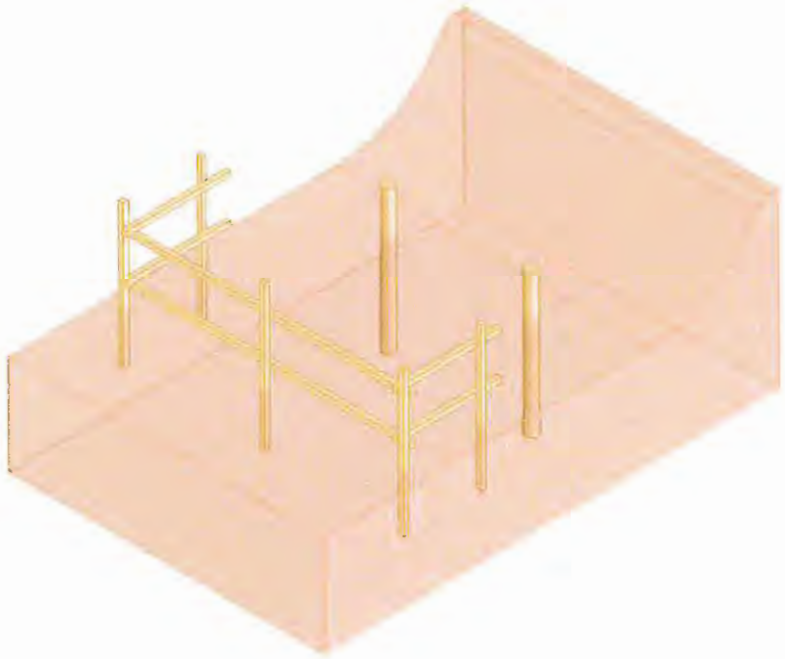


In cases where excavation is undesirable, there are other types of anchors that can be driven or screwed into the ground, leaving the exposed topside virtually undisturbed. The type pictured below has a mechanism that extends when sufficient pressure is applied to the rod, securely holding itself in place. These types of anchors can also have load checking devices, to ensure that they are installed with a firm footing.



Building a Driving Guide

A temporary driving guide is highly recommended for building a straight wall. By assembling a driving guide before you begin installation, you establish an accurate wall position and provide a surface to drive against that keeps the sheet piling plumb. Construction should be fast and simple. There are many methods and techniques out there. For example: If you are re-facing a wall, then you may be able to use the structure you are replacing as your guide. You will need to find the method that best suits you and your situation. You may incorporate your wales and poles, if they are in your design, into your driving guide. This can save you a great deal of time and effort. If you decide to do this, you should construct your wale system as you would for final installation (see Wales). This will be the backbone of your finished wall. ShoreGuard, Gator Aluminum, UltraComposite and TimberGuard wales may be clamped or temporarily lagged to your posts. Use your wales as the horizontal members and poles as the vertical posts for your temporary driving guide. Ensure that an adequate number of posts are used so the guide does not move when you begin driving your sheets. Also, two points of contact for your sheet piling (as shown below) provide for more accurate driving than one alone. If you choose not to incorporate wales or poles into your driving guide, then the guide will need to be removed after the sheet piling is installed. However, if you construct your guide on the back side of your wall, you may be able to simply bury it after completion.

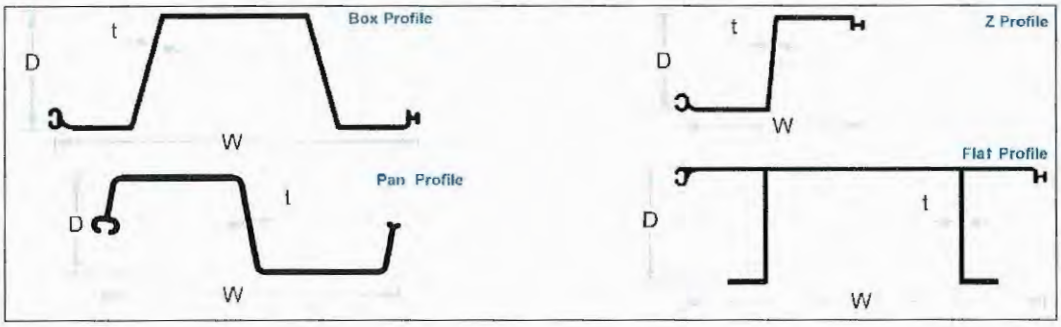


Now you are ready to begin installing your sheet piling.

Sheet Piling

Materials

We offer many different profiles of sheet piling in three different materials; vinyl, aluminum, and FRP Composite (fiber reinforced polymer composite). The many profiles offered fall into four basic categories; "Box", "Z", "Flat", and "Pan" profiles. These four basic shapes are shown here respectively.



Your application may also require corners. They are available for turning 90 degree angles with all products and 45 with most.

Equipping for the Job

Synthetic sheet piling does not require specialized driving equipment. It can be installed with conventional driving practices and equipment. Commonly used equipment for driving includes water jets, excavation equipment, drop hammers, vibratory hammers, and vibratory plate compactors. The equipment you use will need to be appropriate for the soil, site conditions, and the sheet piling that you will be using.

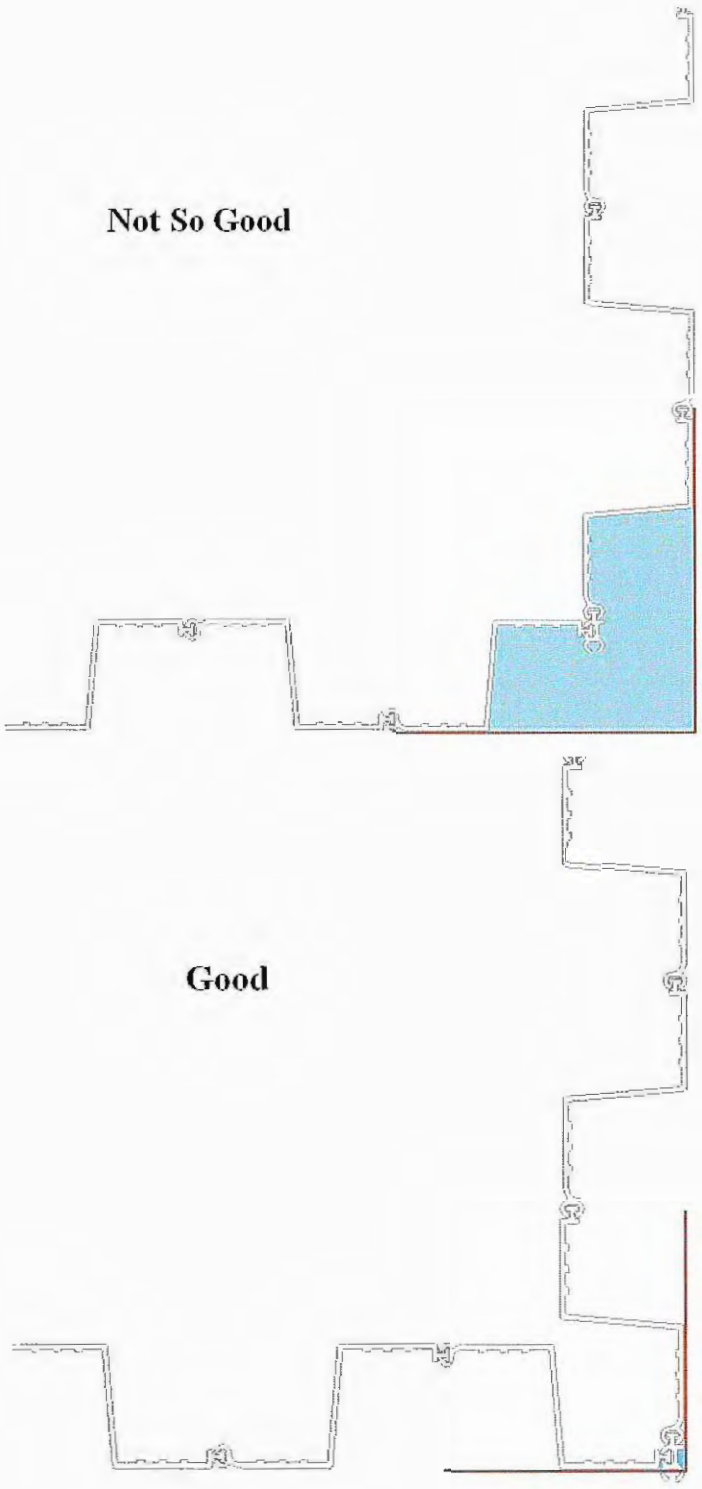
Installation

Sheet piling has been around for many years. There is no one correct installation method. Everyone has their own technique that works best for them. Here, we will cover the basic elements and tips for a successful installation.

In order to achieve the full performance of your structure, your sheet piling must be driven to the depth specified by the wall designer. You may want to mark your desired driving depth on your sheet to ensure that it is sufficiently driven.

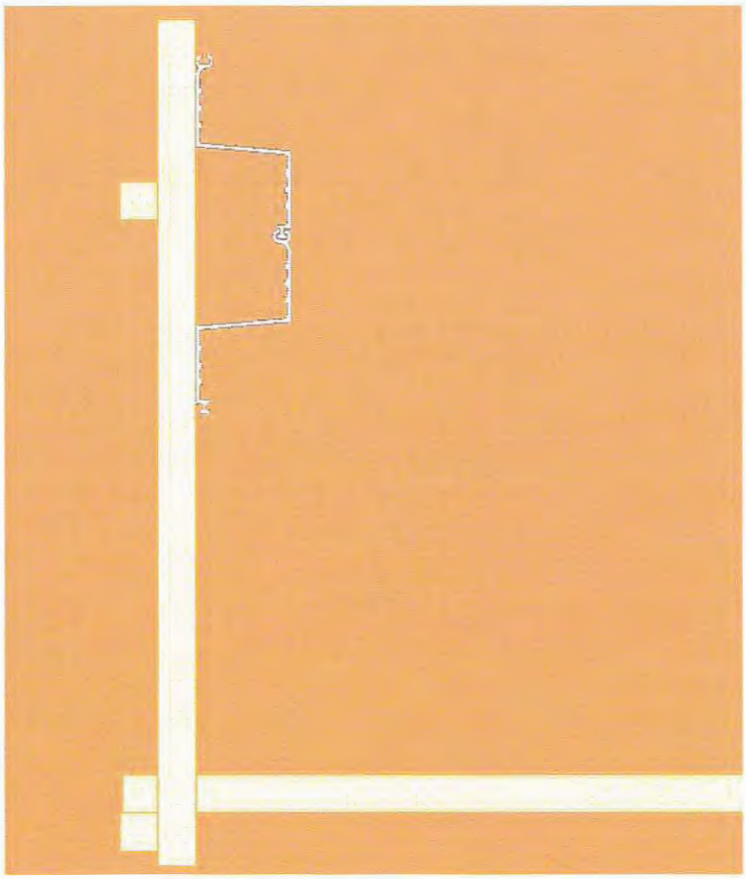
Some forethought needs to be given to the sheet orientation before you begin. First, the most popular way to drive is with the male lock leading; the rationale being that the female lock has a tendency to fill up with soil and hinder driving if used as the leading edge.

It is also a good idea to orient your sheets so that any outside corners are configured as shown in the drawing below whenever possible. Orienting your sheet piling in this way maximizes the strength of your wall in the corners, by eliminating as much of a void as possible between the sheet piling and the cap and/or wale, and reduces the induced stress on the corner joint. If you look closely at the corner, you will see that there is sometimes an attachment point in the corner piece for possible future additions to the wall. Additions will be possible with most series of synthetic sheet piling.

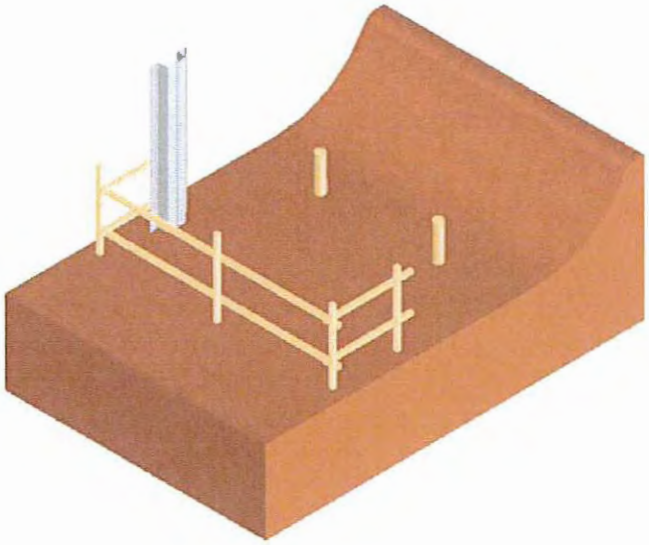


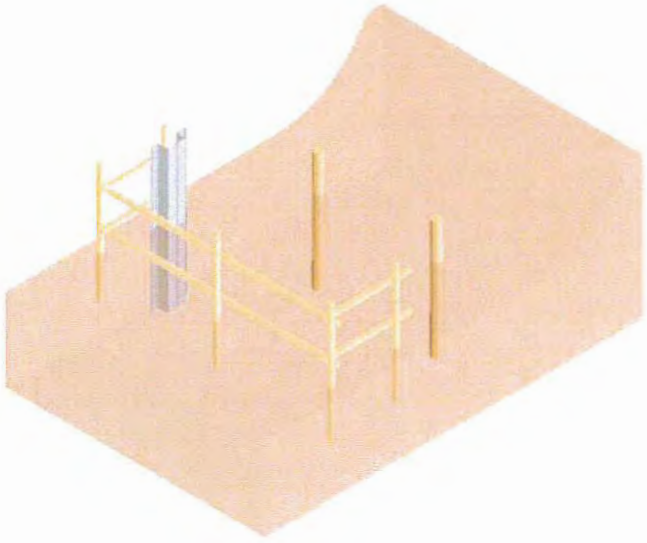
After you are satisfied that your sheet orientation is correct, you are ready to begin driving. You will want to drive your sheets as full box sections. If you have purchased a box section sheet, then you are ready to go. If you have Z section sheets, then you will want to pair them before driving.

Place your first sheet or pair of sheets on your driving guide and make sure they are in the proper location and orientation for driving. Again, sheet piling installation varies from person to person. The starting location is up to you. It is important, however, to drive your first section plumb, because it will act as a vertical guide for the following sheets.

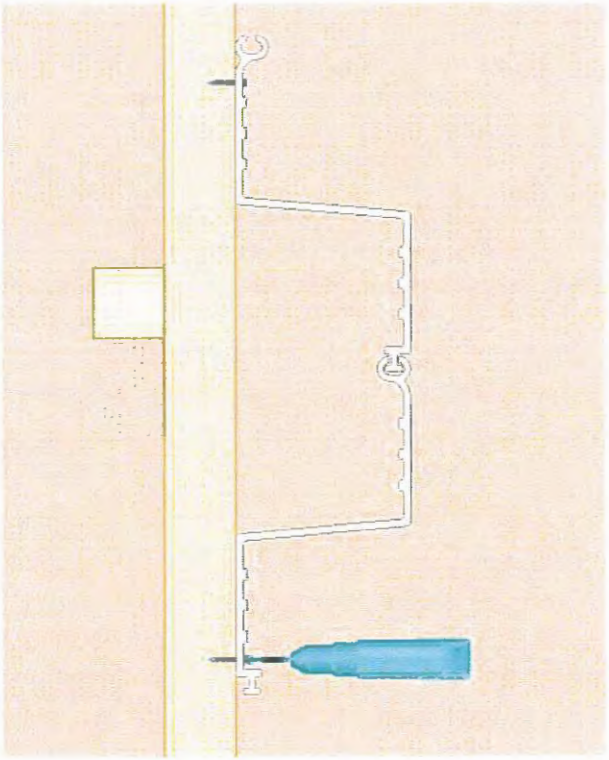


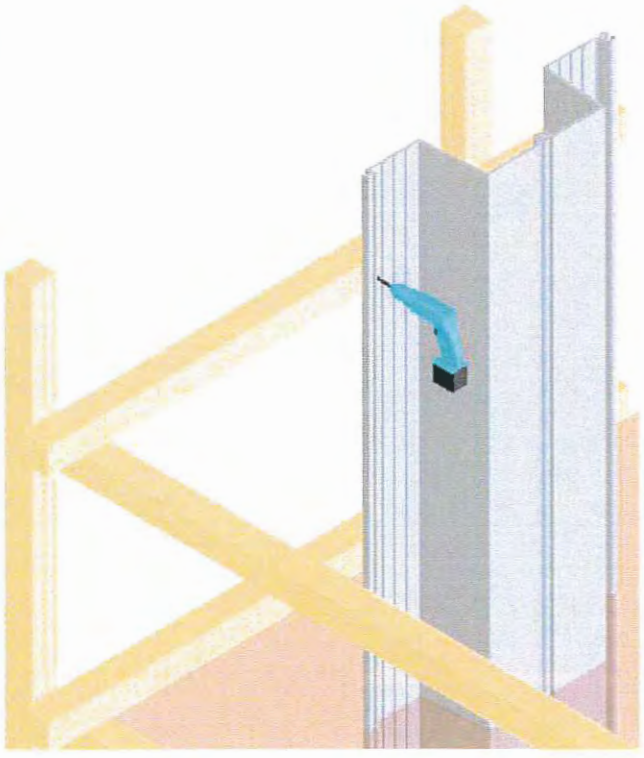
Drive your sheet to the specified depth.



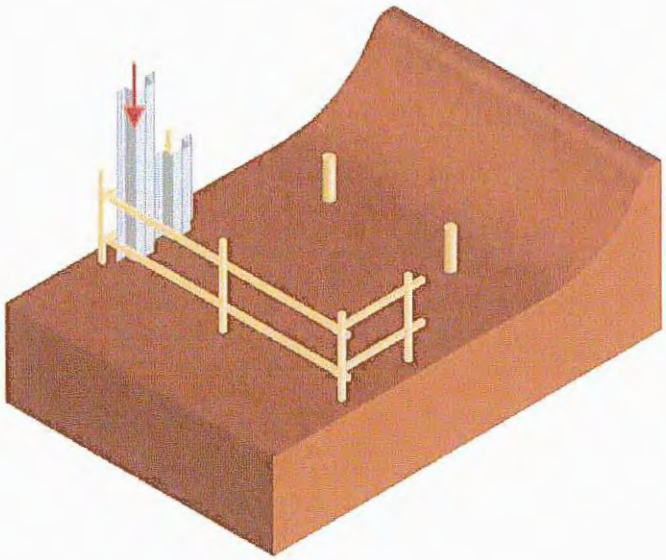


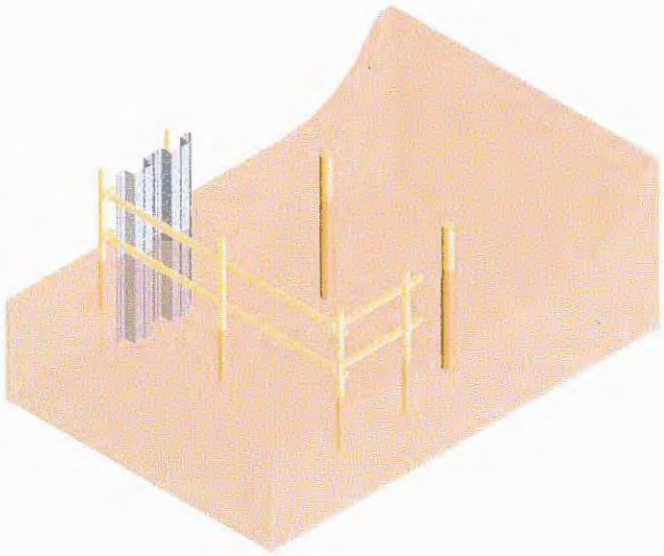
Whether or not your guide includes wales, it is a good idea to lag each sheet to the driving guide after you are satisfied with its position. Lagging your sheets as you go will ensure that your driven sheets will remain plumb as you continue to drive, as well as prevent them from being overdriven as you drive subsequent sheets. If your situation has allowed you to incorporate wales into your guide, then you will be lagging the sheet piling to the wale, eliminating a future step.





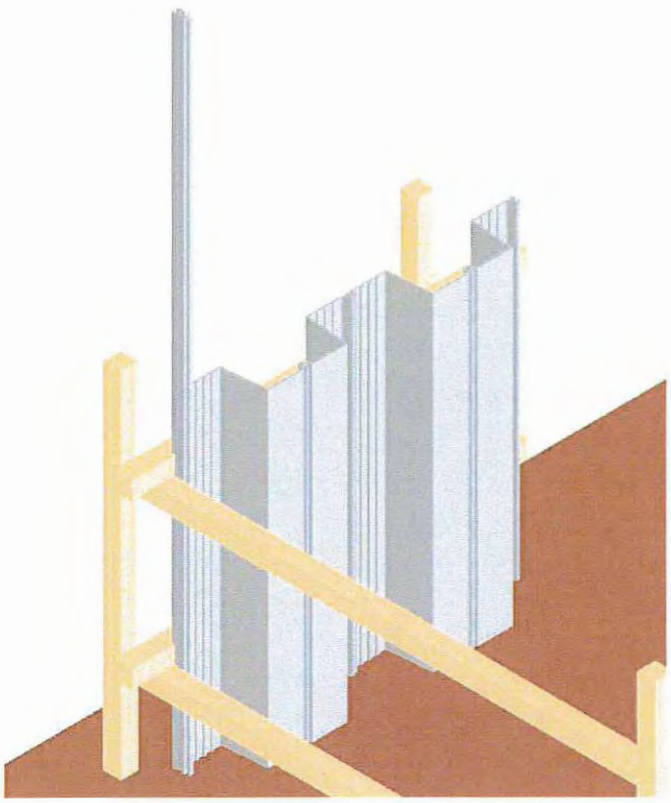
Continue this process for the first straight run of your wall. There should be enough play in the locks and flexibility in the sheets to ensure that each sheet can install in the proper position.

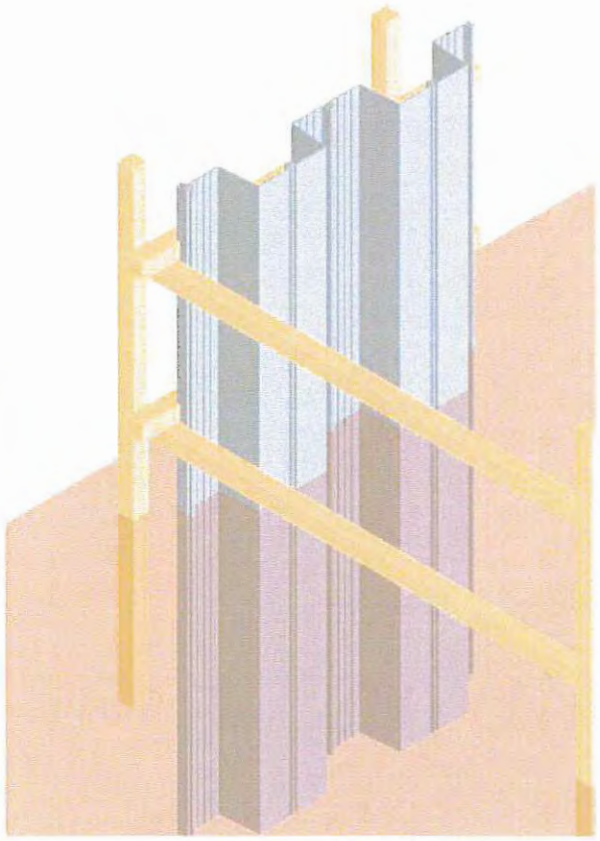




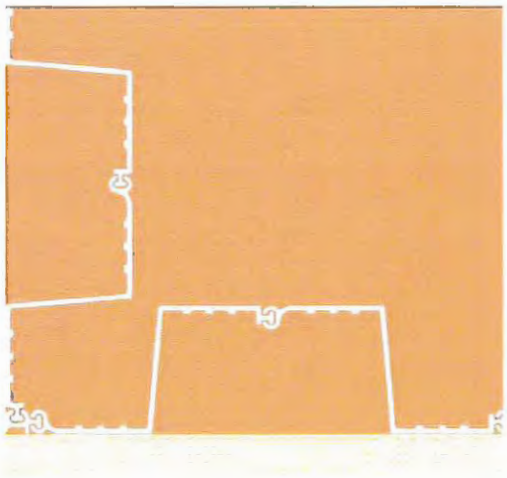
Turning a Standard Corner

Corner pieces are available for any sheet piling that you might purchase. These pieces come in 90 degree angles, and in most cases, include 45 degree bends as well. Drive these just as you would sheet piling. Alternatively you can thread your corner piece on the leading lock of the last sheet to be driven and drive the sheet and the corner piece together.

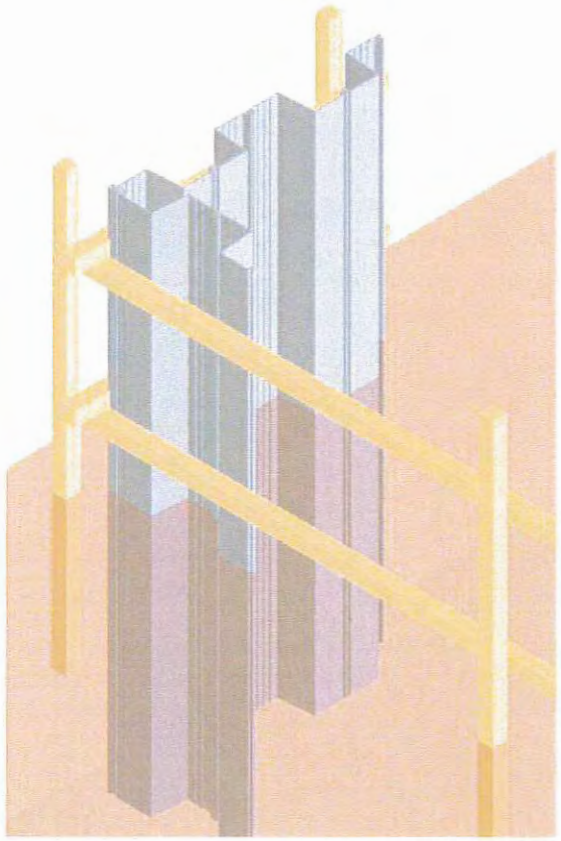




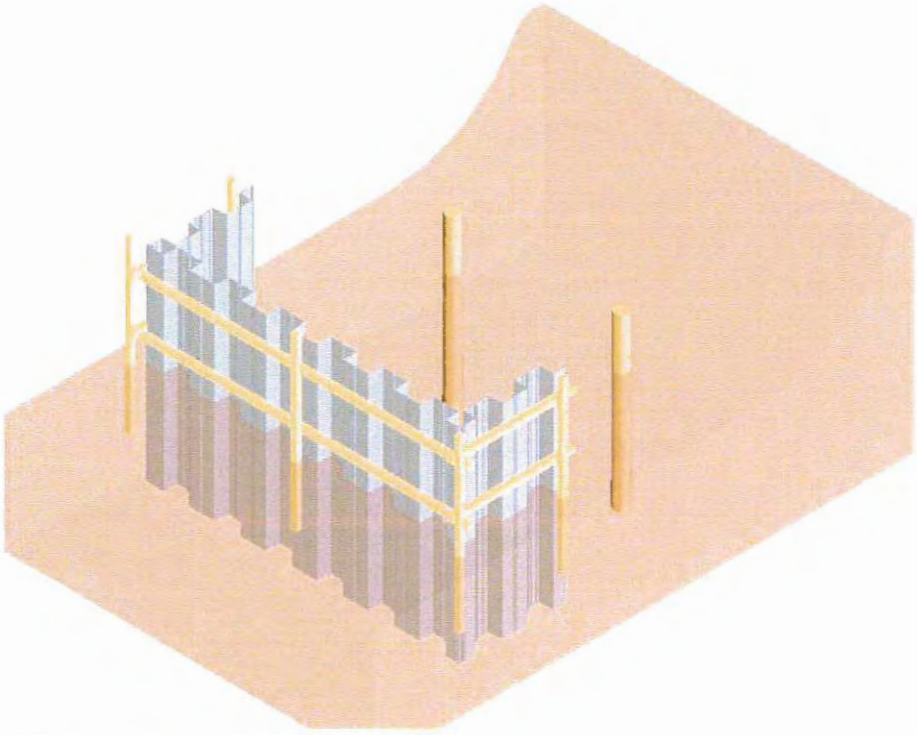
After you are satisfied that your corner is in position, drive your next box section, lining it up, using the corner's male lock and your driving guide.



After you are satisfied that this sheet is properly positioned, secure the sheet to your guide.

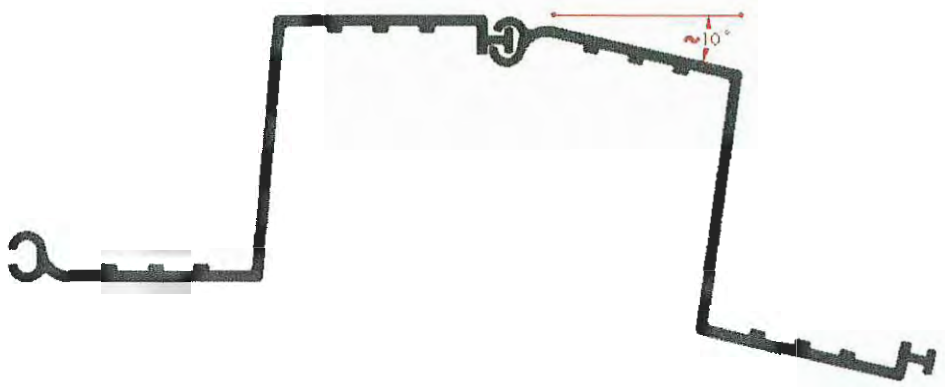


Repeat the steps learned in this section to complete your wall.

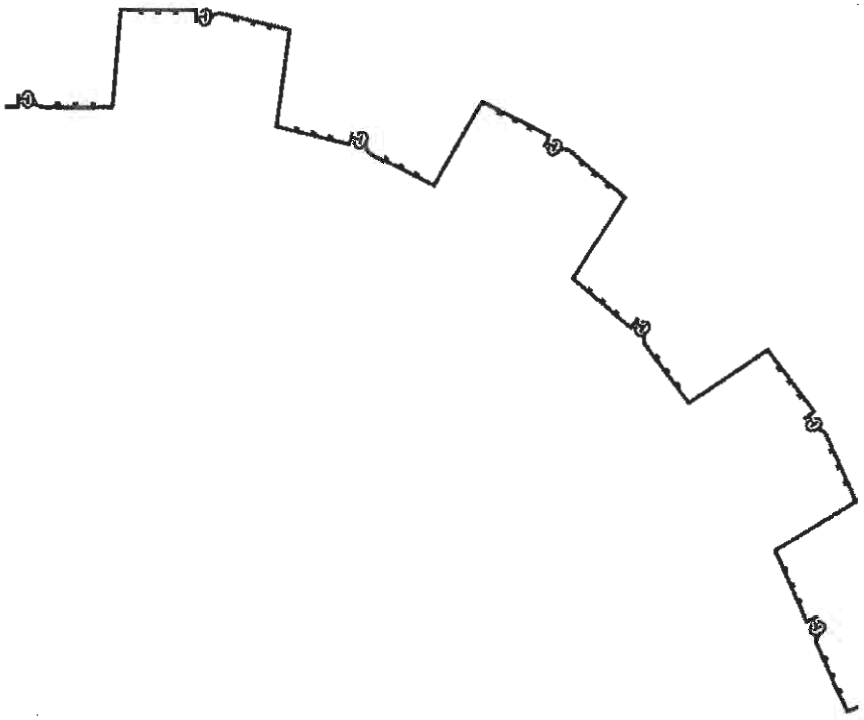


Making a Non-Standard Turn

If you need to make a gradual curve or turn an angle that your particular corner piece does not allow, you can do so by curving the sheets. The tolerance in the locks allows for turns of up to approximately 10º per interlock. (This angle may be greater or smaller, depending on the particular sheet used.)

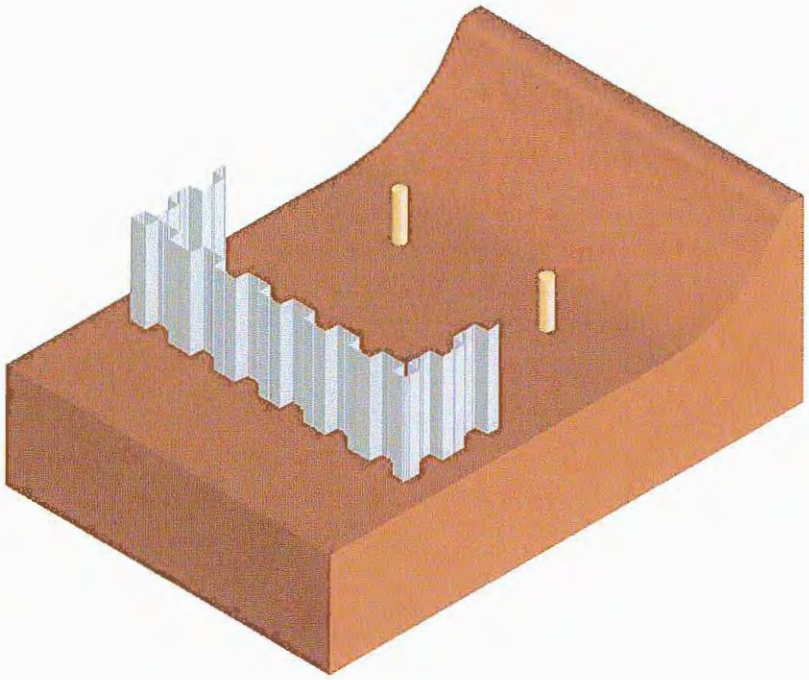


This will allow you to customize your curves and angles when constructing your wall.



Preparing for the Next Step

Depending on your situation, you will probably need to dismantle your driving guide to some degree. If you incorporated your wales into the guide, then you will only need to remove the posts. If you constructed it with wales and poles, or if it is on the back side and will be buried, then you are already prepared to move on to the next step.



TimberGuard Poles

Materials

TimberGuard poles are very popular because they install similar to wood but have a plastic barrier to provide added protection from the elements and the harsh marine environment. The plastic sleeve does not bond to the wood; it is extruded and vacuum molded around the wood in a patented process. This process allows for expansion and contraction of the wood independent of the plastic sleeve.

It will be up to you to decide what fasteners and peripherals you will need to secure your TimberGuard pole to your structure. It is notable that stainless steel fasteners last longer in most pressure treated wood than other, more corrosive steels.

You may want wrap and/or sealant for covering holes in the plastic sleeve due to fasteners, cuts or any accidental damage. Wrap, and sealant are available for purchase and come in standard TimberGuard colors.

Applications

Like wooden poles, there are many applications for TimberGuard Poles. You can use them in the same situations as you would regular wooden poles. Some popular applications are included here.

Docks:

Navy Style Seawalls & Fender Piles:

Anchors:

Installation

You will not have to re-equip to use TimberGuard. TimberGuard can be driven and installed using conventional construction methods and equipment. Shown here is a very typical installation, using a drop hammer. TimberGuard's polymer skin is very robust and can stand up to harsh environments and even harsher driving conditions. However, it is a good idea to take some measure to shield it from extremely high impact scenarios as well as impact with sharp objects like the teeth on a backhoe or forklift. Again, drop hammers are very common, but other types of equipment, such as vibratory plate compactors, are often used. If possible, water jetting can greatly increase the ease of driving. It is also very common for poles to be incorporated into driving guides for sheet piling.

Oxygen and light are two of the primary factors that contribute to marine borer survival and rot. Therefore, when accidental or intentional breech of the TimberGuard's polymer skin occurs, you may utilize a roll of TimberGuard wrap or TimberGuard sealant. The wrap is very useful for wrapping splices or large cuts. Wrap the desired area and secure it with fasteners such as screws. Sealant may be used for small holes and to seal up any fasteners that have been installed. Apply it as you would standard caulk. A putty knife is useful for smoothing the sealant out to create a more seamless look. Shown

below (left) is a TimberGuard Pole that has had the top cut off and been treated with TimberGuard Sealant. Shown below (right) was a damaged TimberGuard Pole that has also been treated with TimberGuard Sealant.

For the aesthetics and the peace of mind that comes with knowing that your TimberGuard pole is more completely covered it is a good idea to use wrap or sealant. However, breaches in the polymer do not necessarily compromise your product. Even with some minor holes in the polymer protection, the vast majority of the pole is still covered and the amount of oxygen and light allowed to penetrate the wood is very limited.

Wales

ShoreGuard & UltraComposite

Materials

After deciding that you will use either ShoreGuard or UltraComposite wales, you will need to decide if your application requires STR or standard aluminum inserts. The standard option comes with a 16" splice kit. This kit includes a 16" piece of aluminum insert for every 20' wale piece, for the purpose of splicing adjacent wale sections. If your application requires a stronger and more rigid beam, then you can upgrade to the STR option, which includes a 20' aluminum insert for every 20' wale section to run the entire length of your wale. If you will be turning corners, you should consider buying prefabricated corner inserts. These inserts are roughly 16" in length (from each direction of the angle) and come in 45 and 90 degree angles. These options save fabrication time and provide better stability at the corners, where you need it most. Mounting hardware is included, so you will only need to provide the appropriate tools for wale installation. In order to show clarifying details, non-standard wale lengths are used in the figures for this manual.

Recommended Tools:

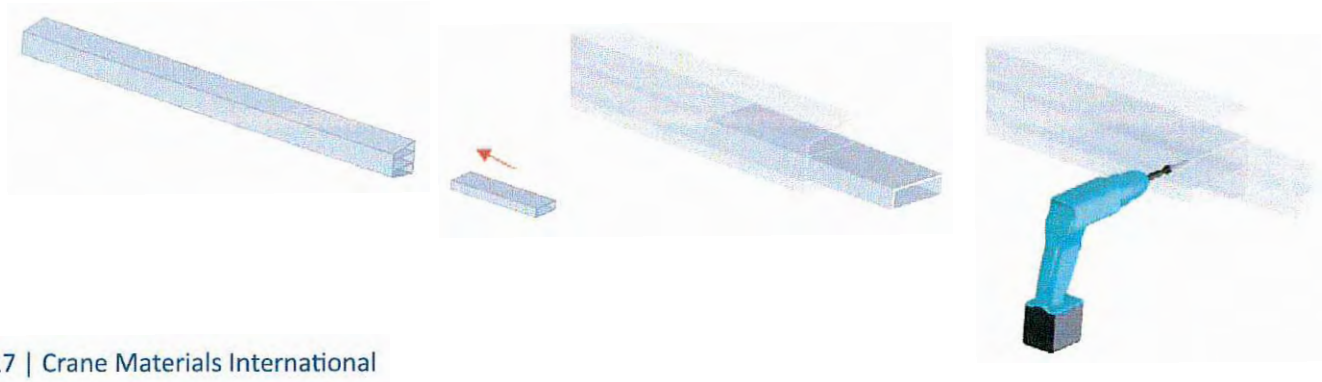
- Drill with a 3/8" hex head socket for hanging the wale with included lag screws
- Chop saw or any mitering saw that can accommodate the dimensions of the wale
- Blades appropriate for the material selected (For ShoreGuard a blade suitable for cutting the aluminum wale and inserts is required. For UltraComposite a masonry blade or diamond blade is recommended. Because FRP is abrasive, you will need to be prepared to have backups if a standard masonry blade is used.)
- Measuring and leveling devices for proper wale placement
- Aluminum Welder, if you will be making non-standard turns or custom inserts

Installation

Hanging your ShoreGuard/UltraCompositeWale

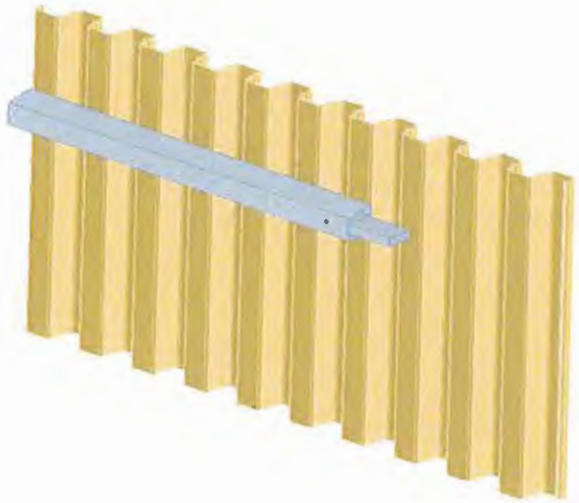
Step 1 – Prepare your wale for hanging

Before you start attaching your wale to your sheet piling, it is a good idea to position your wale insert half in, half out of the wale section as shown, and secure the insert using one of the provided self-tapping screws. We will refer to this as a wale assembly.

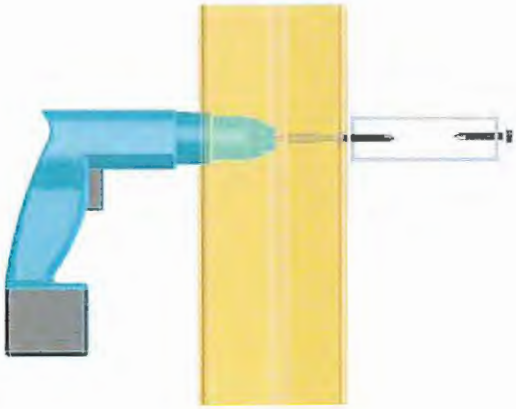


Step 2 – Hanging your first wale section

Place this wale assembly on your sheet piling in the desired position for attachment, ensuring that it is level and that the larger parallel face (we will call this the back) contacts the wall. You will probably want to start at one end of your wall and work to the other end. The wale assembly is oriented such that the insert is on the leading end. We will work from left to right for this example.



Secure your wale assembly to the sheet piling from the back with the remaining self-tapping screws.

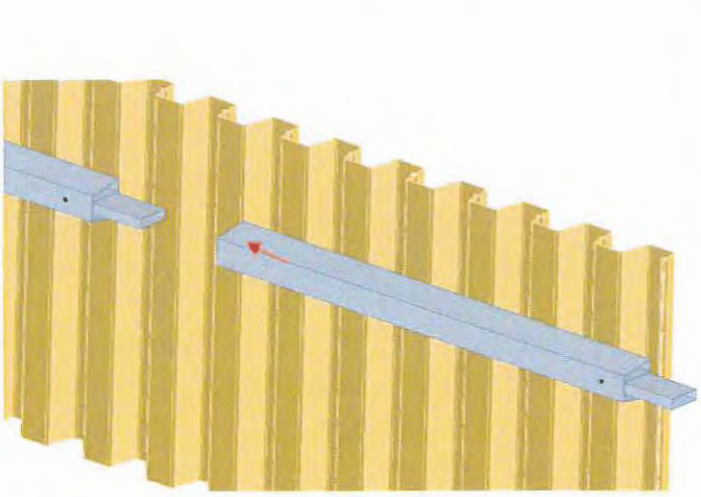


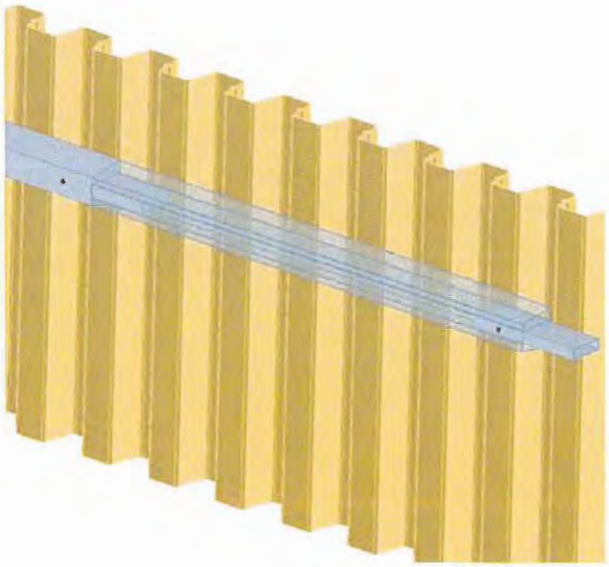
Evenly space the remaining 9 screws over the length of the wale section that does not house any insert (3 shown here). These screws will not be load bearing. They primarily act as a placeholder for your wale until the anchor system is connected.

Step 3 – Hanging intermediate wale sections

Repeat Step 1 for each intermediate section, creating a wale assembly.

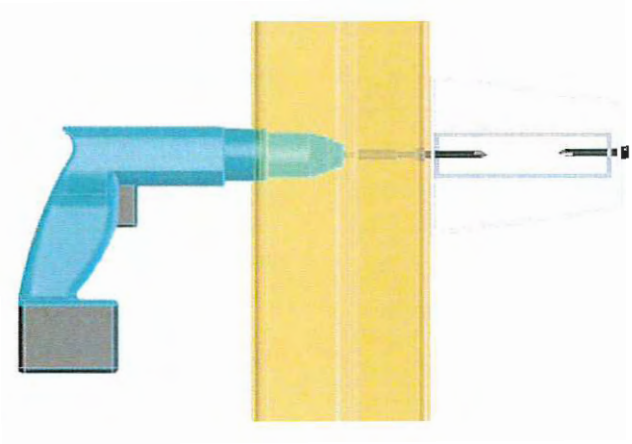
Slide your newly-created wale assembly over the exposed insert section of the previously-hung wale assembly. You will use each hung wale assembly as a guide for the following wale assembly. You will still want to ensure that each is correctly positioned and level before attaching to your wall.



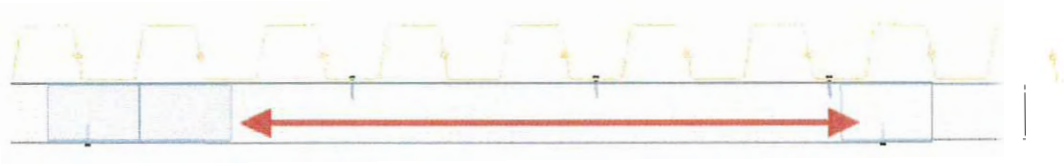


As in the previous step, secure your newly-positioned wale assembly to the sheet piling from the back with the remaining

screws.



Evenly space the screws over the length of the wale that does not house any insert.

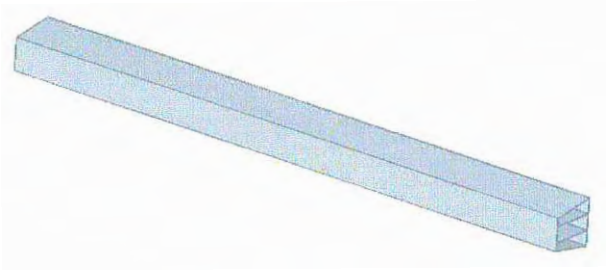


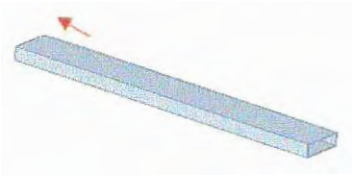
Now repeat this process for all the straight runs of your structure.

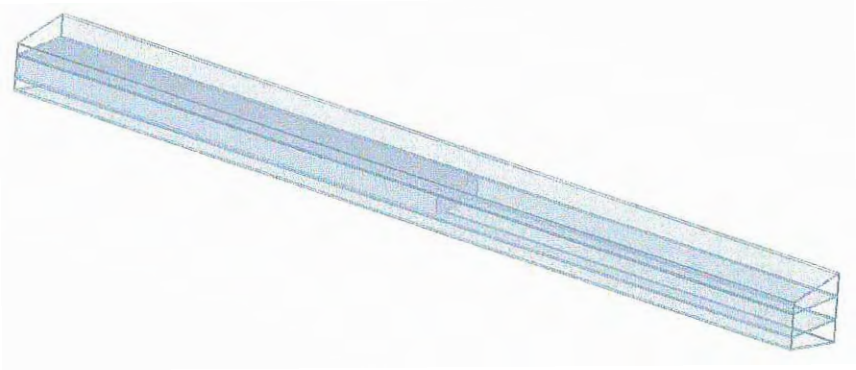
Step 4 – Modifying your installation for ShoreGuard /UltraComposite Wale STR

Choosing to use the STR package will allow your wale system to more closely approximate a continuous beam than the standard package. The only difference between the two is that the STR package includes a 20' insert in place of the 16" standard insert. This results is the insert running the whole length of your wall, adding strength and rigidity. The STR package is also slightly easier to install than the standard one.

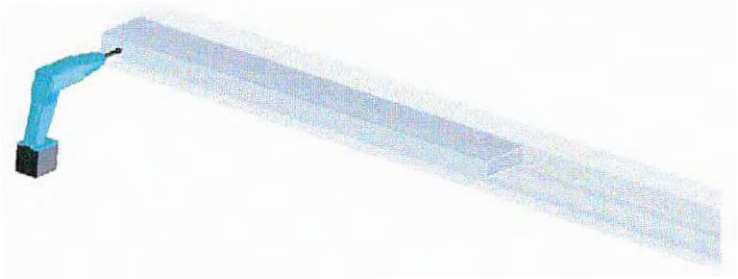
It is recommended that you cut your first 20' structural insert into two 10' lengths for easy installation. Insert one of the 10' lengths into your first wale section so that it is flush with your outside end. You will save the other piece for the final section.



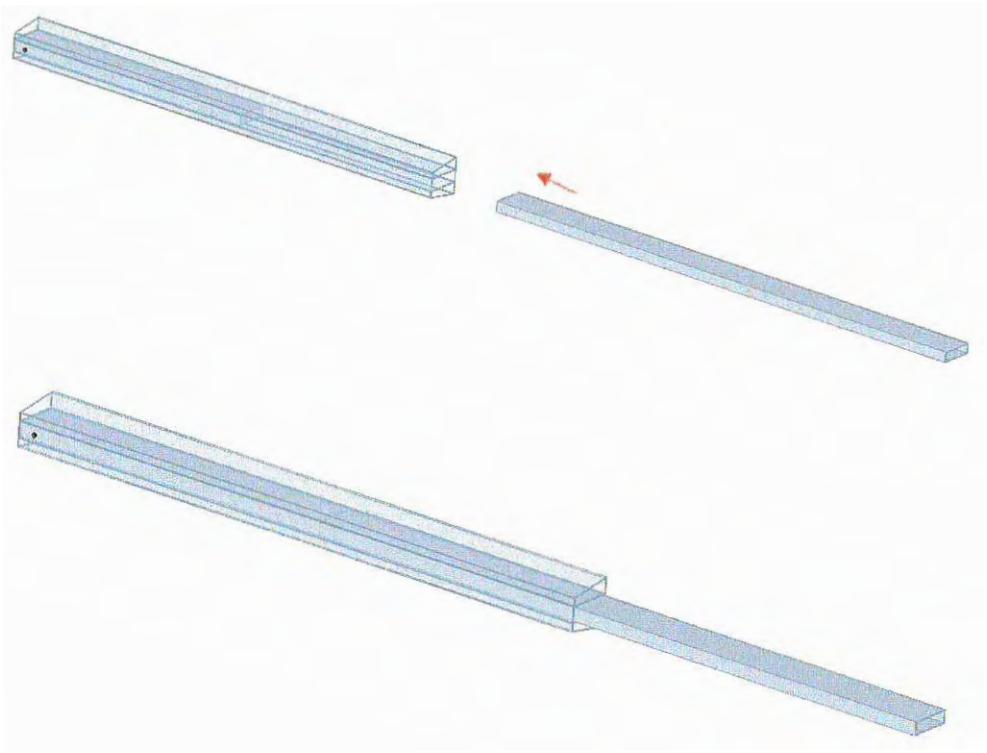




Secure this piece through the front with a self-tapping screw. This is just to keep the insert from moving inside the wale section.

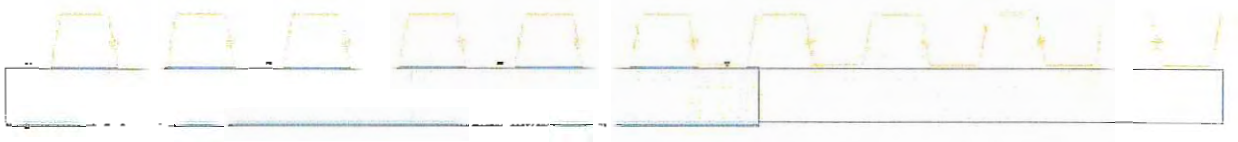


Slide an uncut 20' insert into your wale. Because you have made this 10' piece, every other insert will be half-in, half-out.

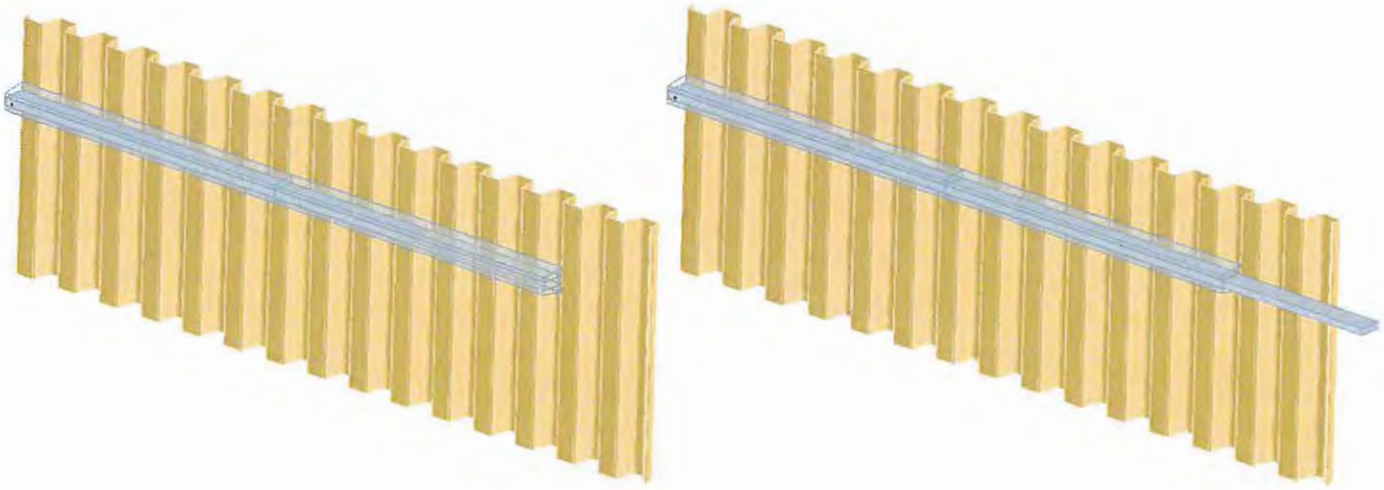


As in Step 2, place this assembly on your sheet piling in the desired position for attachment, and ensure that it is level. You will want to start at one end of your wall and work to the other end.

Secure your newly-positioned assembly to the sheet piling from the back with the remaining 9 screws. Be sure not to screw through the exposed insert, or the next wale section cannot slide over.



Slide a new wale section over the exposed insert section; then, slide in another 20' insert section.



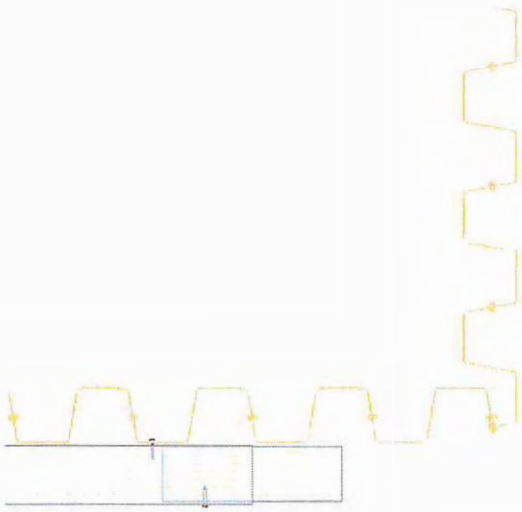
At this point you will secure your unattached wale and insert to the sheet piling. From the back, fasten your unattached wale and insert by evenly spacing all 10 of your self-tapping screws. While you can penetrate the inserts, do not attach the exposed section of the insert, so the next wale piece can slide over the insert.

Repeat this process for all the straight runs of your structure.

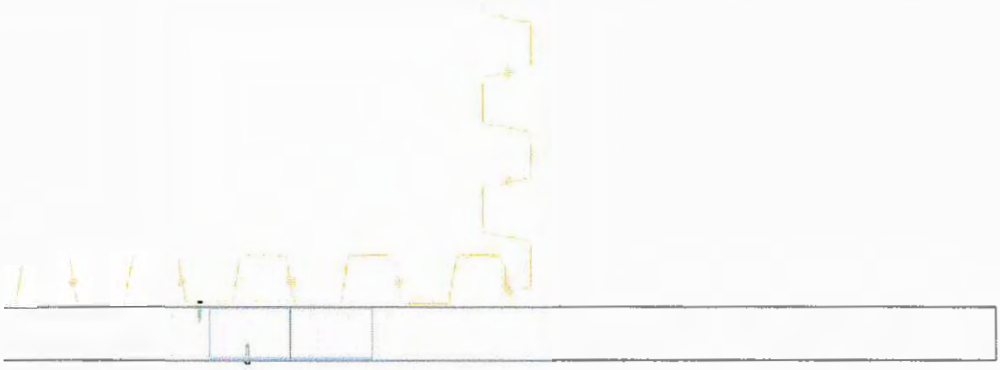
Turning a corner with your ShoreGuard/UltraCompositeWale

Step 1 – Preparing to turn a corner

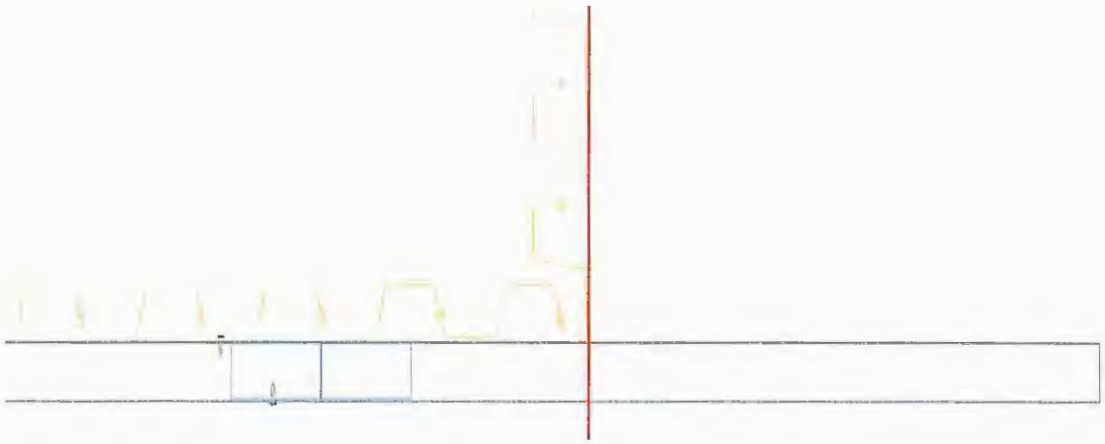
For this example we will show the standard ShoreGuard/UltraComposite Wale package turning a 90 degree corner. This process will use a 90 degree corner insert. CMI also offers 45 degree corner inserts, but the process for turning a 45 or a 90 degree corner is fundamentally the same. When you reach a corner, you will want to stop so that your last wale assembly fits within the straight section of the wall. You should plan so this does not happen too close to the corner.



You will want to slide the next wale section on, in order to identify and mark where your miter cut needs to be made.

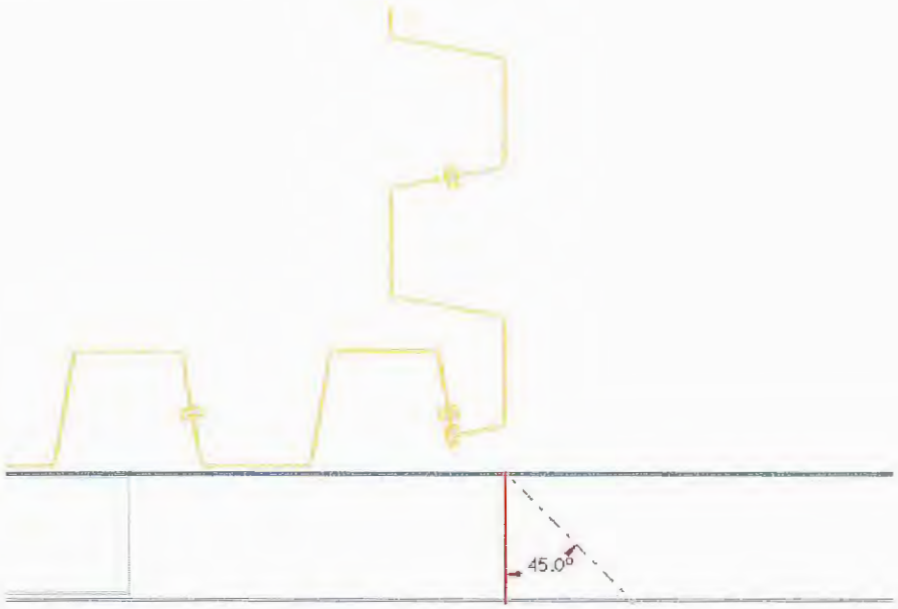


Extend a line from the angled face and transfer a construction line to the wale section using a marking device.



Step 2 – Making your cuts

Since this will be a mitered cut, your cut angle will be ½ of your actual turned angle. For this example of a 90 degree turn, we will cut at a 45 degree angle from our construction line. For a 45 degree turn, the cut would be made at 22.5 degrees and so on. For accurate cutting, you should use a chop saw, miter box, or have them professionally mitered. It is important to note that the wale is angled, and can be very hard to make an accurate miter cut. This should not be attempted without using appropriate mitering equipment.



Slide off your marked wale section and cut your angle. You might want to go ahead and cut your other miter corner piece as well, since you are already cutting. You should make your second corner piece from a new 20' section so that the next splice occurs as far from the corner as possible. For this cut you will make the matching miter cut 22.5 or 45 degrees from perpendicular, respectively, for a 45 or 90 degree turn.

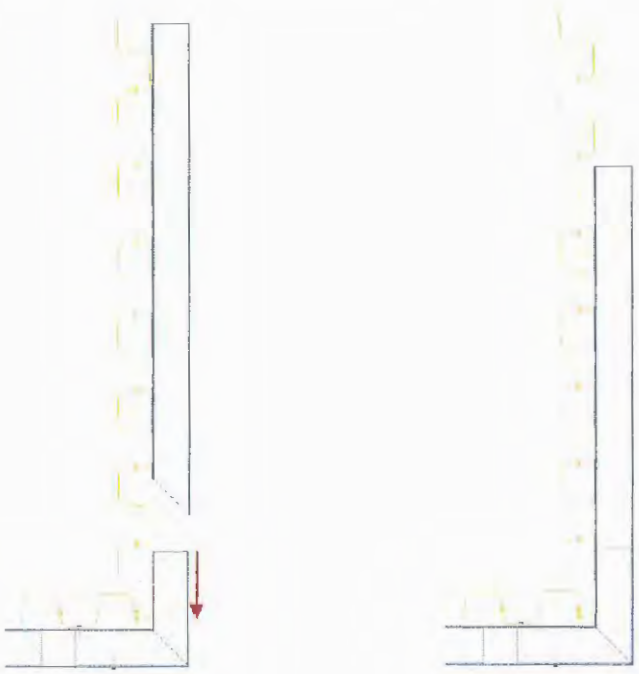
Step 3 – Installing your corner

After you have made your cuts, you are ready to assemble your corner. Slide your first cut wale section onto the exposed insert.

Insert the appropriate corner insert, in this case a 90 degree corner insert, into the wale section.

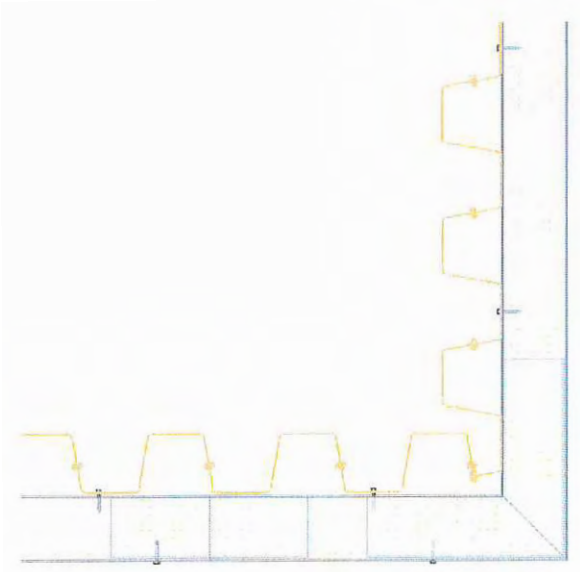
You will use the same attachment principals learned in the Hanging your ShoreGuard/UltraComposite Wale section. You will secure the insert to the previous wale and use it as a guide for the next. It is a good idea to temporarily slide your second cut wale section on to mock up your corner before you attach it. Secure the first cut wale section and corner insert with the provided self-tapping screws. You are provided 10 screws for every 20' of wale, so you should gain some extra screws in the corners.

Slide your second cut wale section onto the exposed corner insert.



If you are going to continue wale placement on this wall face, you might want to create a wale assembly (Step 1, Hanging your ShoreGuard/UltraComposite Wale) with this wale section for easier future installation.

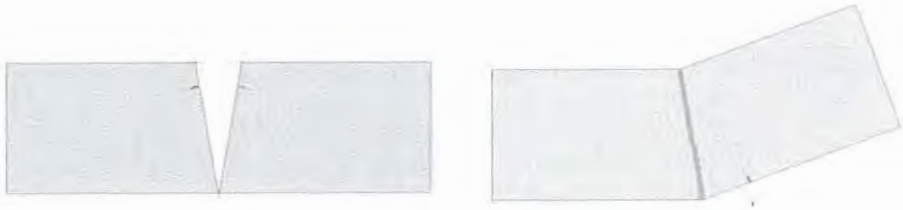
Attach this wale section or wale assembly to the wall as you would have in the Hanging your ShoreGuard/UltraComposite Wale section.



It is important to note that this installation scenario requires that the load on the corners not be excessive. Excessive load on the corners can be avoided by placing your anchor tie rods as closely as possible to the corner. Otherwise, all of the load at the corner would transfer to the screws, as it tries to spread. These screws are not made for carrying load. If you anticipate a significant load concentration in the corner, other support options need to be considered, such as a braced corner as described later.

Step 4 – Modifying your installation for non-standard turns

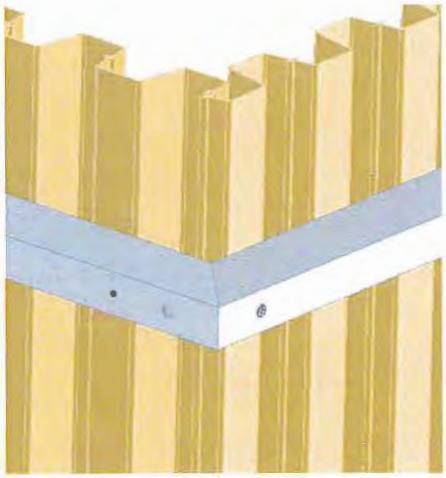
If you will be making a turn other than 45 or 90 degrees, the process is identical, only you will need to fabricate your own corner inserts. You can use a provided splicing insert for this. Miter cut the insert using the same process and at the same angle as you would cut your wale sections. Weld the two mitered aluminum insert pieces together to create your own custom corner insert. Now you have your non-standard corner insert, and the corner turning process is the same as above.



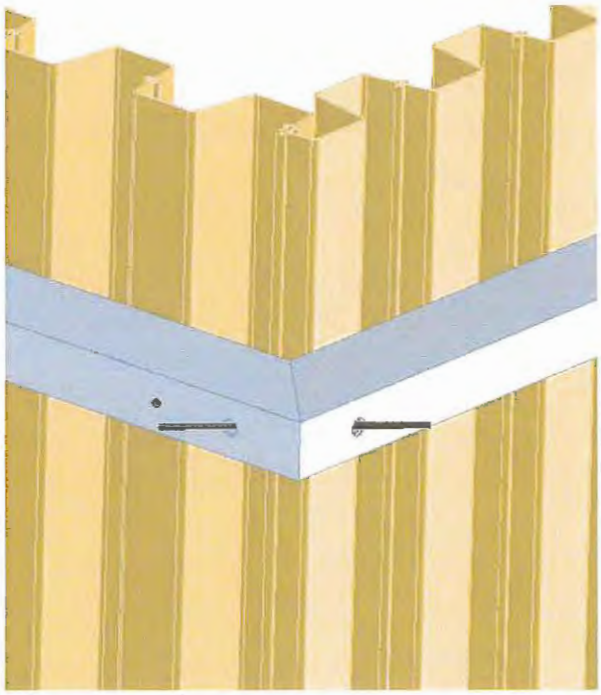
Step 5 – Modifying your installation for a Braced Corner

If you anticipate a need for more stability on your 90 degree corners, then you will want to consider the use of a 90 degree corner Bracing Kit. This kit helps hold your corner together under load.

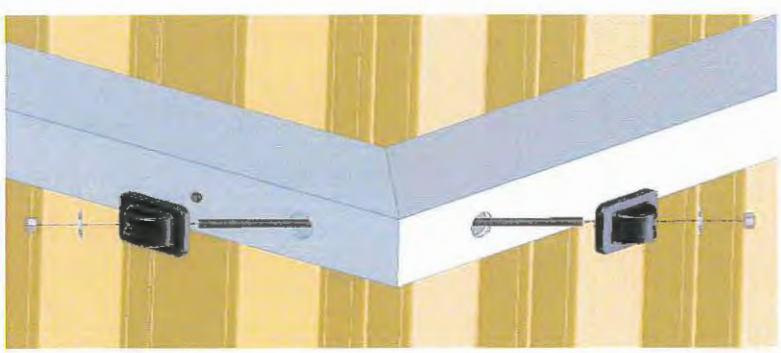
Drill two vertically centered 1 ½" holes, one on each side of the corner joint and straight into the face. Place the holes approximately 6" from the joint or just line them up with the inside corner of the wale. These holes only need to penetrate the outer face of the wale section and the corner insert piece inside. A couple inches will do it.



Insert the 16" threaded rod through both holes.



Attach included washers and nuts, oriented as shown. Tighten the nuts.



Touch Up and Maintenance of Your ShoreGuard Wale

Although ShoreGuard Wales and inserts are made from high quality marine grade aluminum, as is the case with all metallic material, there is a possibility of corrosion in some cases. It is always a good idea to carefully inspect your structure for any area that may be susceptible to corrosion.

Wherever the anodized coating on the cap has been damaged it is necessary to buff the area and apply a fresh layer of touch-up paint. It is also important to grind down and buff any jagged edges and apply a fresh coat of touch-up paint.

Periodically through the life of the structure it is advisable to closely inspect all the components of your structure. If there is any evidence of damage to the wale coating or the onset of corrosion, you can dramatically increase the life of your structure by buffing the area, removing any corrosion and applying a fresh coat of touch-up paint.

TimberGuard

Materials

TimberGuard wales are very popular because they install similar to wood but have a plastic barrier to provide added protection from the elements and the harsh marine environment.. The plastic coating does not bond to the wood; it is extruded and vacuum molded around the wood in a patented process. This process allows for expansion and contraction of the wood independent of the plastic sleeve.

For the most part you can treat TimberGuard generally as you would wood for installation purposes. It will be up to you to decide what fasteners and peripherals you will need to use for lagging the TimberGuard Wales to the sheet and splicing them together. It is notable that stainless steel fasteners last longer in most pressure treated wood than other, more corrosive steels.

You may also need end caps, which are plastic caps used to cover any exposed ends that you may create. You may want wrap and/or sealant for covering holes in the plastic sleeve due to fasteners, cuts or any accidental damage. Caps, wrap, and sealant are available for purchase and come in standard TimberGuard colors. TimberGuard dimensional lumber is available in the sizes listed below.

Recommended Tools/Hardware

- Tools and fasteners needed to lag wale to the sheet
- Saw for cutting wale joints
- Measuring and leveling devices for proper wale placement
- Drill with standard bit for drilling through wood/vinyl
- Through bolts with nuts and washers for connecting wale joints
- Appropriate fasteners for securing corners

Installation

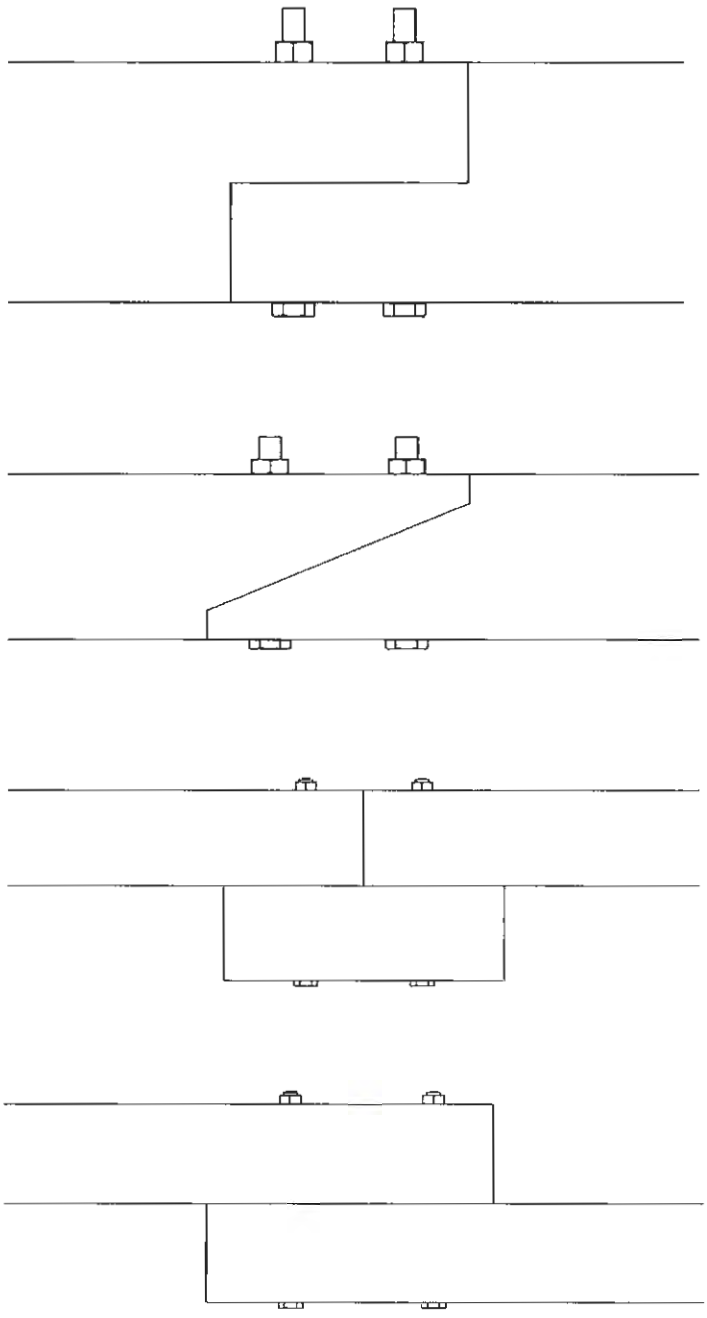
Hanging your TimberGuard Wale

Step 1 – Prepare your wale for hanging

There are many different ways to approach wooden wale installation. For example, many people incorporate their wales into their false work, so that they can also be used as a driving guide. Our guide follows a generic example. For more details on wale installation, see the section titled ShoreGuard/UltraCompositeWales.

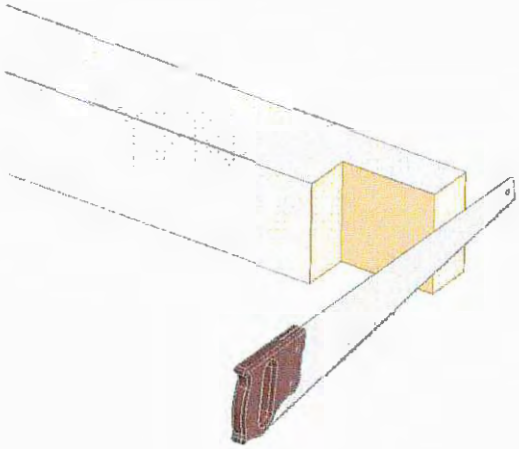
Step 2 – Prepare your joints

There are also many types of joints in woodworking. Several are shown here. Finding a balance between aesthetics, structural requirements, and ease of installation for your application will dictate what type of joint you will use.



Due to the vacuum molding process, the plastic coating is tightly stretched around the wooden core. Because of this, when TimberGuard is cut, the plastic tends to relax and pull back slightly from the newly cut face. One effective method to ensure that you have a clean looking joint is to allow the plastic coating to relax before your joint is cut. Precut your TimberGuard wale to allow the plastic coating to find its natural resting place.

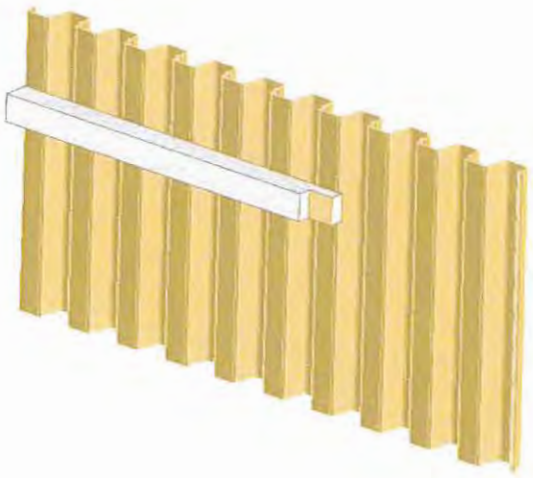
Now cut your joint, and the plastic will be flush with the newly cut wooden face. You can plan ahead and precut all your TimberGuard or cut each joint as you go.



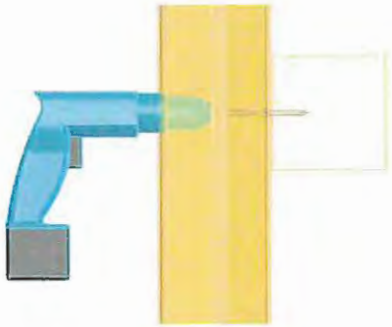
Step 3 – Hanging your first wale section

Place your TimberGuard wale on your sheet piling in the desired position for attachment, ensuring that it is level. The orientation of the joint depends on the situation but primarily on personal preference. We will use the first joint shown above, a standard shiplap, for our example. This joint is very universal. The same joint shape can be used to turn 90 degree corners as well.

You will probably want to start at one end of your wall and work to the other end.



After aligning and leveling your first section, secure your TimberGuard wale to the sheet piling from the back with evenly-spaced lag screws. You do not want to penetrate your joint with screws because you will be securing it with bolts in a later step.

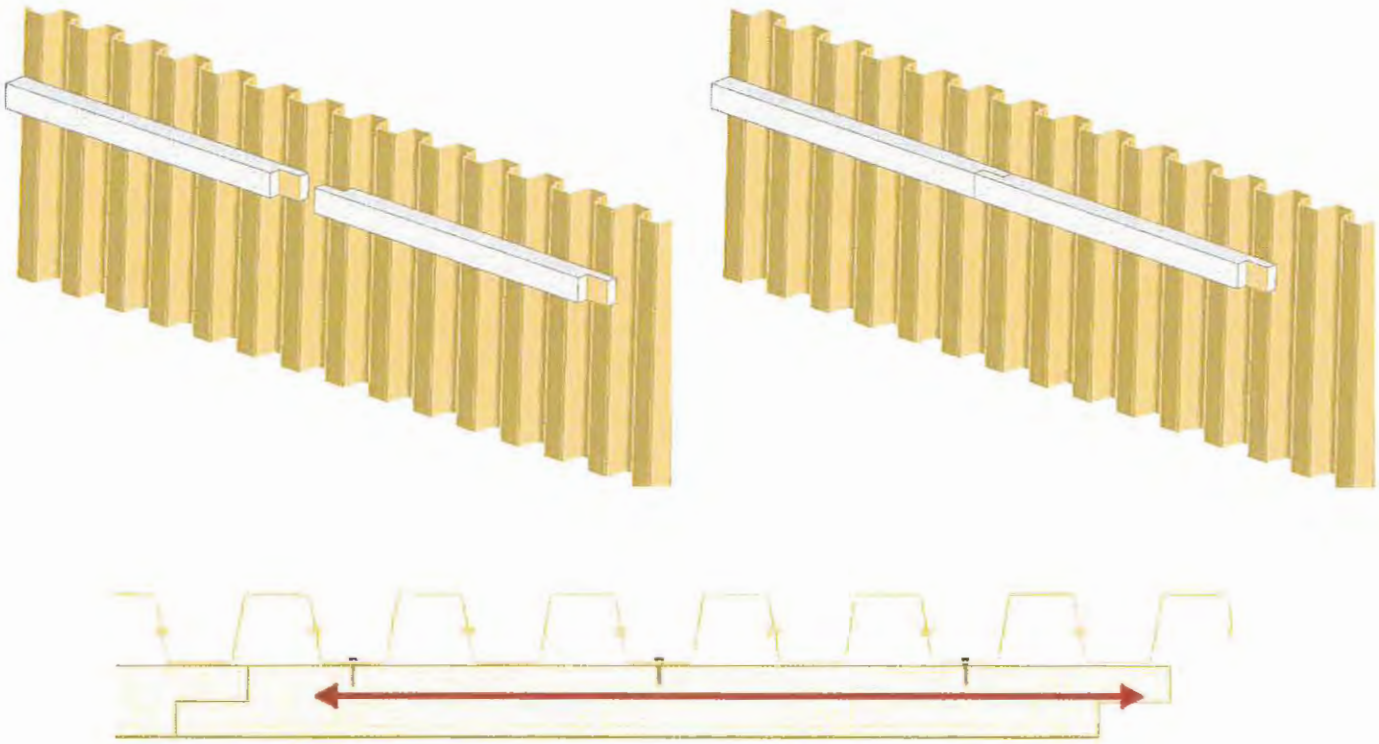


These screws will not be load bearing. They primarily act as a placeholder for your wale until the anchor system is connected.

Step 4 – Hanging intermediate wale sections

You will need to cut two joints for each internal wale piece, one on each end to match your previously-hung wale section and your next wale section to be hung. Properly position this wale section on your wall and lag screw it through the back

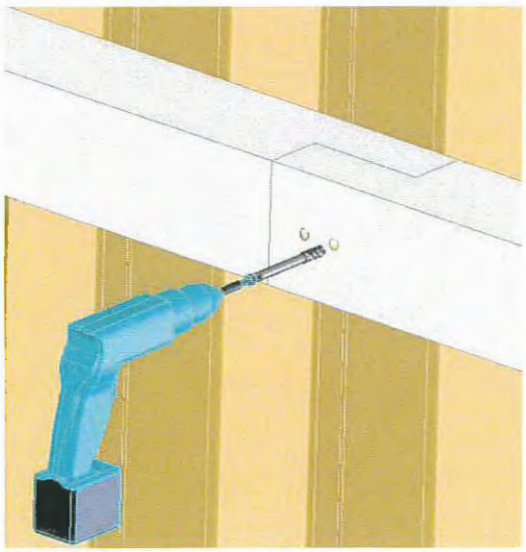
as you did in Step 3. Again, it is a better idea not to lag through joint sections.

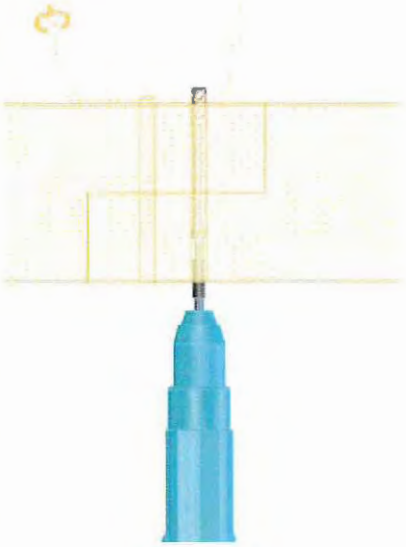


Step 5 – Securing your joint

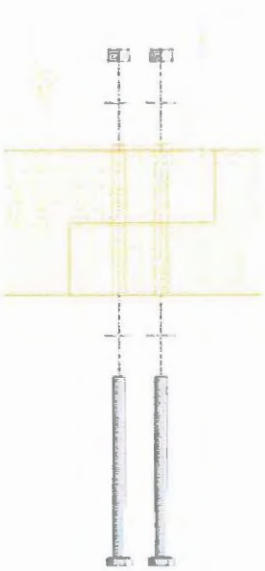
At this point, your joints are the weakest part of the wale. You want to eliminate these weak spots by securely binding them together. The wall type, joint type, and personal preference will dictate how you accomplish this. One of the easiest ways to lock them together is with bolts, nuts, and washers. Since these bolts will be load bearing, you will need to make sure that the fasteners you select are capable of withstanding all of the forces that will be applied to it. The joints are easier to secure when they fall on either a flat face or a gap within the sheet piling corrugation. If at all possible, try to keep them from landing on web sections for simpler bolt installation.

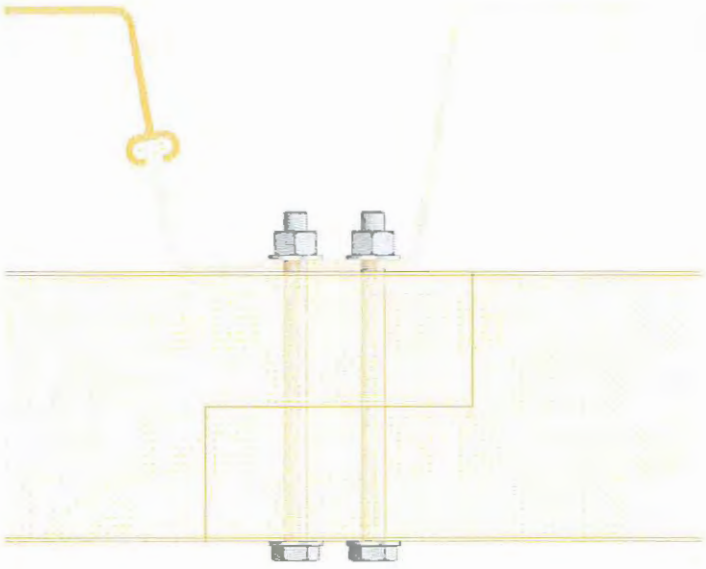
When the joint falls on a flat face, you will want to drill the bolt holes all the way through the TimberGuard and your sheet piling.



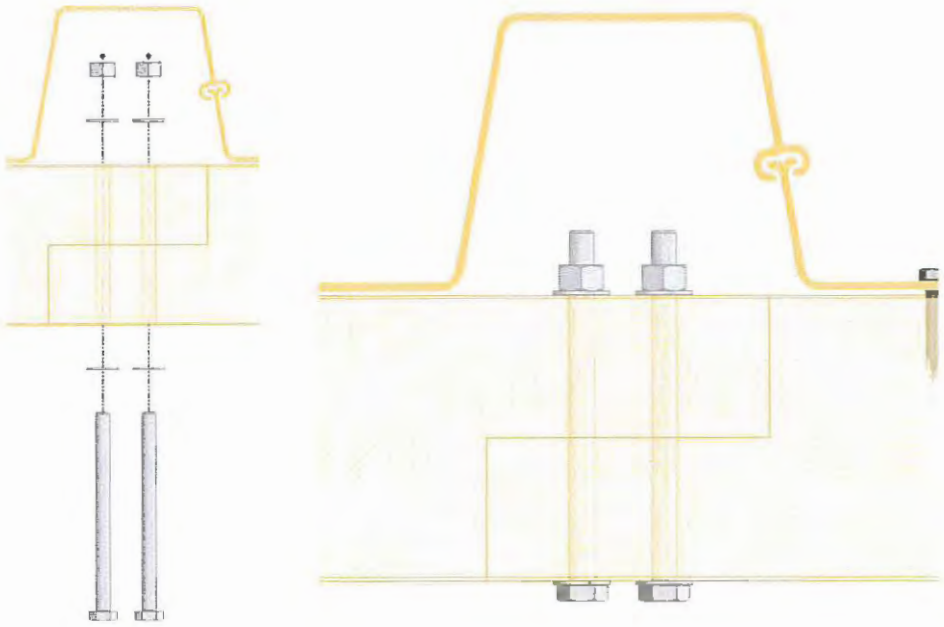


Assemble your fasteners and tighten the nuts.





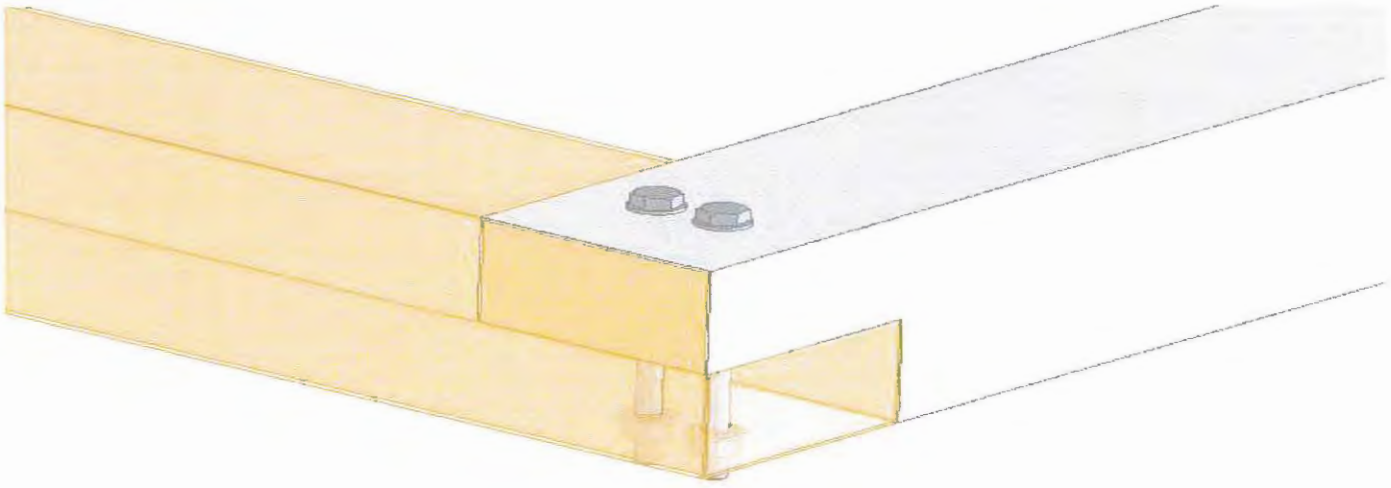
The process is the same if your joint lands on a gap. However, you will only bolt through the TimberGuard, not the sheet piling.



Turning a corner with your TimberGuard Wale

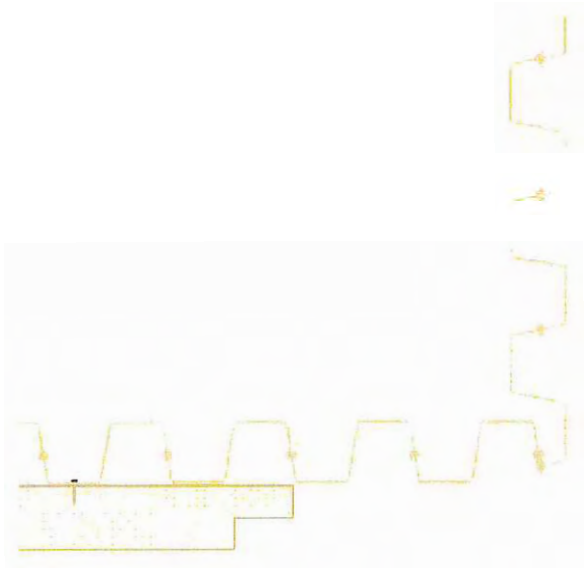
Step 1 – Preparing to turn a corner

There are many ways to turn a corner with TimberGuard, as many as there are for wood. For a common 90 degree turn, one of the easiest corners can be made using the same standard shiplap joint as was used in the previous section, only with a different orientation.

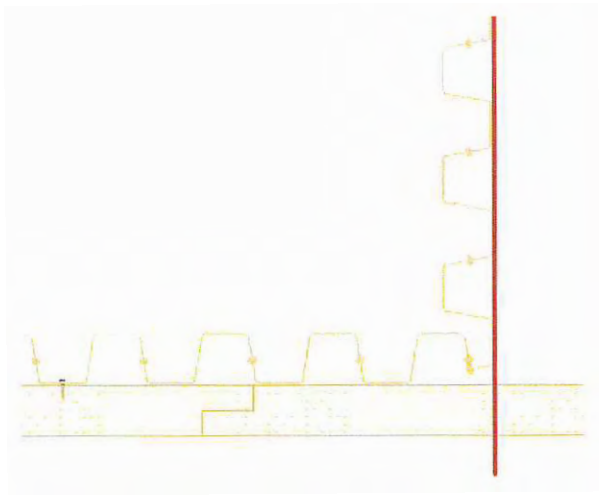


Another aesthetically-pleasing option is a mitered corner. For this example, we will show the steps to create a mitered corner for a 90 degree turn, although you can use this method to create any angled turn by adjusting your cut angle. When you reach a corner, you will want to stop so that your last wale section fits within the straight section of the wall. Make

your face joints as far from the corner as possible.

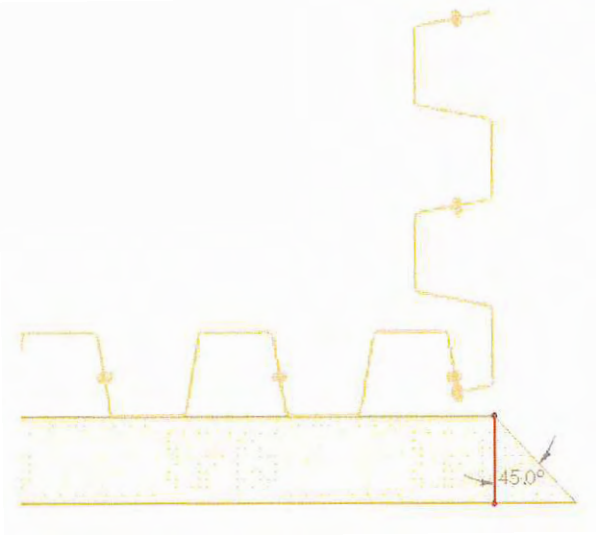


If you haven't already done so, you will want to take your measurements for cutting your first corner wale piece. An easy way to do this is to use a section on which the joint cut has already been made. Place it on the wall as if you were going to connect it to the previously hung wale section. Extend the line from the angled face, and transfer a construction line to the wale section using a marking device.



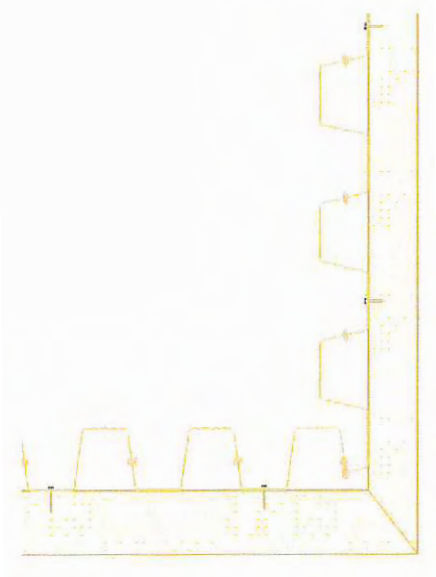
Step 2 – Making your cuts

Since this will be a mitered cut, your cut angle will be ½ of your actual turned angle. For this example of a 90 degree turn, we will cut at a 45 degree angle from our perpendicular construction line. For a 45 degree turn, the cut would be made at 22.5 degrees and so on. For accurate cutting, you should use a chop/miter saw, miter box, or have them professionally cut. If you have a small enough wale and skilled woodworkers, you could use a circular saw and a protractor.



You might want to go ahead and cut your other mitered corner piece as well, since you are already cutting. You should have enough material to cut from a new section so that your face joints are as far from the corner as possible. For this cut you will make the matching miter cut 22.5 or 45 degrees from perpendicular, respectively, for a 45 or 90 degree turn.

Ensure that the pieces are level and properly positioned on the wall. Secure the two corner pieces to your wall as you have done before with lag screws.

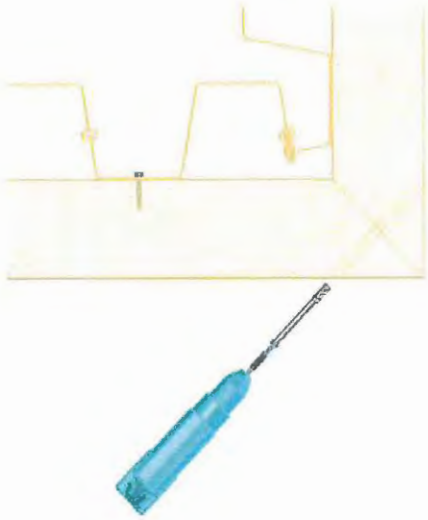


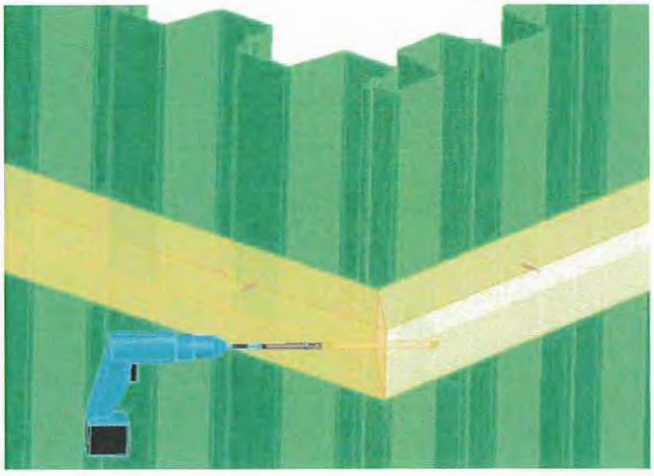
You will need to join your corner to keep it from separating after backfill. There are many ways to achieve this. One example is as follows:

Step 3 – Securing your corner

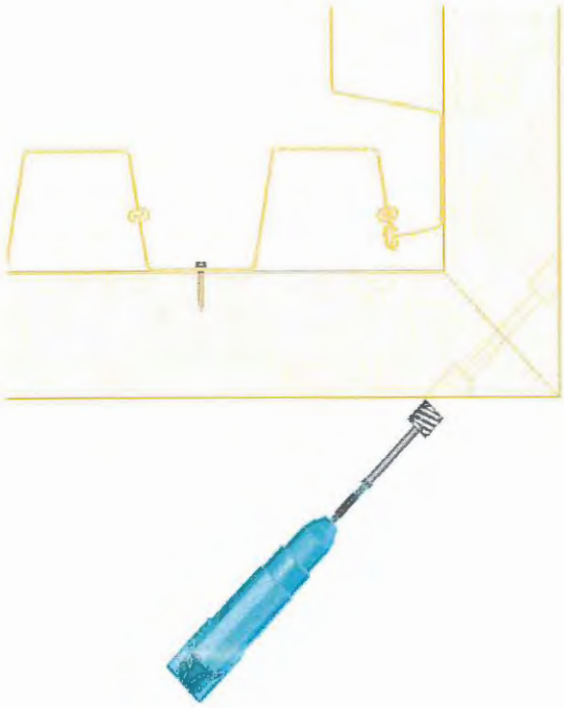
Again, there are many ways to join your corner. The following is one method that is aesthetically pleasing and common. For this particular corner, you will need a threaded rod with two matching nuts as well as two washers. After your corner is

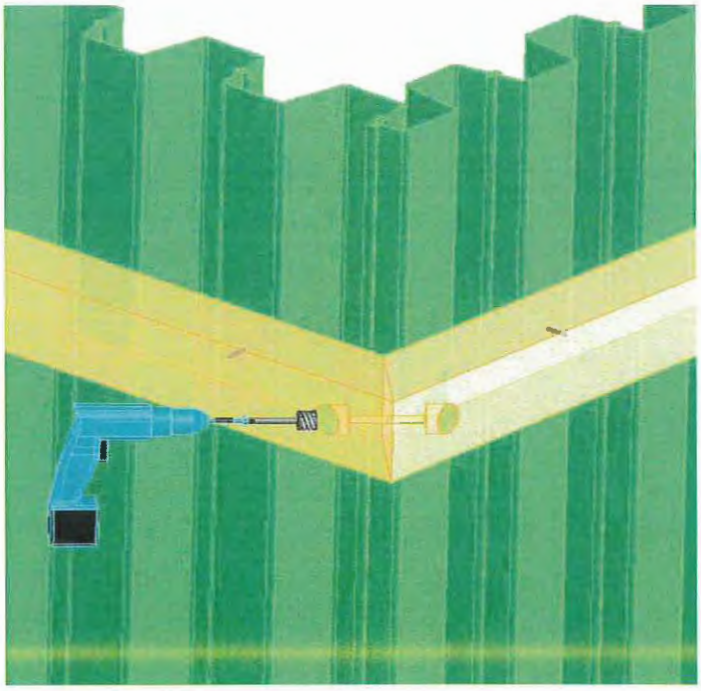
held in place with lag screws, drill a through hole perpendicular to the miter cut and all the way through your corner. This hole should be centered vertically and placed so that the hole intersects the miter cut faces as closely as possible to their center. This hole is made for your threaded rod, so its diameter should be chosen accordingly.



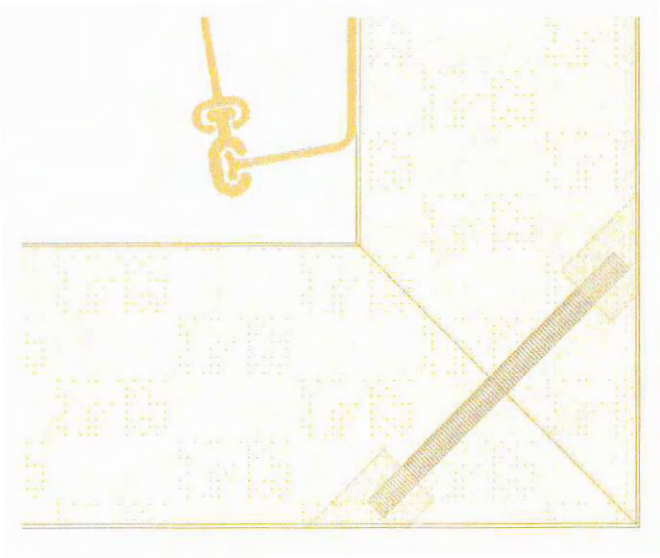


Make a countersunk hole concentric with the hole that you just drilled, and deep enough to house the nuts and washers. It should be wide enough to accommodate the washers you have chosen.

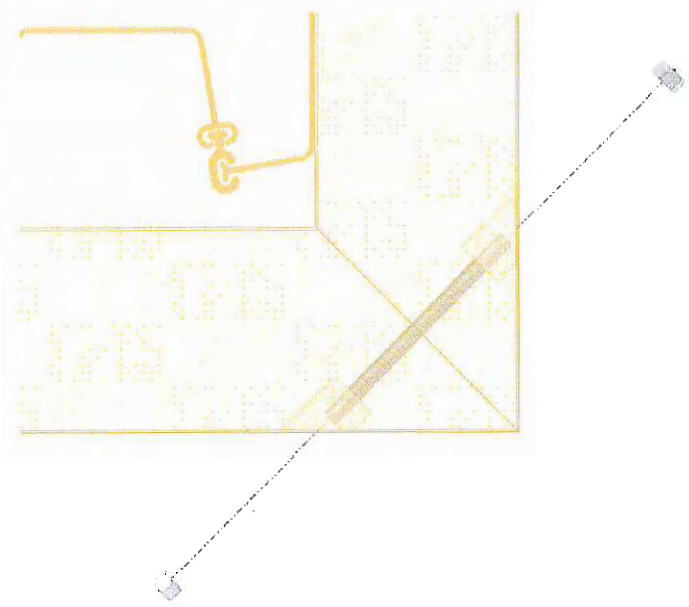


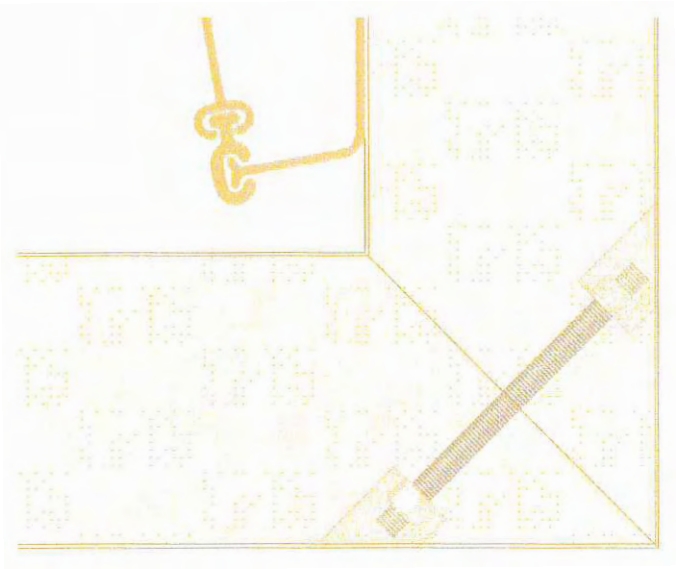


Insert the threaded rod into the drilled hole. It is a good idea to make sure the ends of the rod do not extend outside your wale. You may want to consider cutting them off if they do. Removing this extrusion will help protect the rod from the elements, as well as improve the aesthetics of your wale.



Attach washers and nuts, oriented as shown.





Oxygen and light are two of the primary factors that contribute to marine borer survival and rot. Therefore, when accidental or intentional breech of the TimberGuard's polymer skin occurs, you may utilize a roll of TimberGuard wrap or TimberGuard sealant. The wrap is very useful for wrapping splices or large cuts. Wrap the desired area and secure it with fasteners such as screws. Sealant may be used for small holes and to seal up any fasteners that have been installed. Apply it as you would standard caulk. A putty knife is useful for smoothing the sealant out to create a more seamless look. You may want to save this finishing step for the very end. Shown below is a TimberGuard wale that has been installed with an angled shiplap joint using the pre-cutting process described earlier and TimberGuard Sealant.

For the aesthetics and the peace of mind that comes with knowing that your TimberGuard pole is more completely covered it is a good idea to use wrap or sealant. However, breaches in the polymer do not necessarily compromise your product. Even with some minor holes in the polymer protection, the vast majority of the wale is still covered and the amount

of oxygen and light allowed to penetrate the wood is very limited.

Tie Rods

ShoreGuard Rods

Materials

Tie rod selection is an important decision. A large portion of the load acting on a tied back wall is carried by the tie rods to the anchors. Rod specs as well as spacing need to be given careful design consideration. Since tie rods play such an important role in the life of your wall, you want to make sure that they can handle the job that you need them to do. Many walls fail because the tie rods or anchors fail. Most of the tie rod is covered in soil, therefore protecting it from harsh and corrosive environments. The first few feet, however, can be exposed to air and water which can accelerate corrosion of the rods. ShoreGuard tie rod head sections are coated in plastic to protect them from the harsh environment in these critical first few feet.

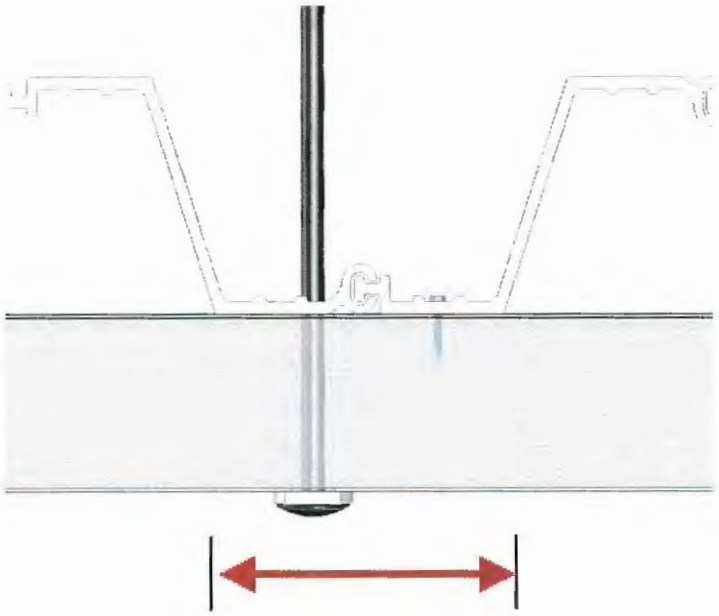
All of the most common hardware for tying back your wall comes with the ShoreGuard Tie Rod package. Use the table below to select the package that is right for you. There are several available accessories that should be considered. If you are going to angle your rods, which is normally the case, we carry ShoreGuard beveled washers. It is recommended, for UltraComposite and ShoreGuard wales and caps in particular, that you use beveled washers when assembling your tie rods. Because of the angle, the rod head would not lie flush with the wale face if beveled washers are not used, and point loading can be a potential problem for this scenario. Using a beveled washer will distribute the load on the angled rod head evenly to the wale face. ShoreGuard beveled washers come in a 5 degree angle, and two can be stacked together to achieve a 10 degree angle. It is highly recommended that you use a ShoreGuard plate washer when tying back through a UltraComposite wale. Due to the particularly high rigidity of FRP material, you want to distribute the load from the tie rods as much as possible to minimize point loading. This large, thick nylon washer will do just that.

Recommended Tools:

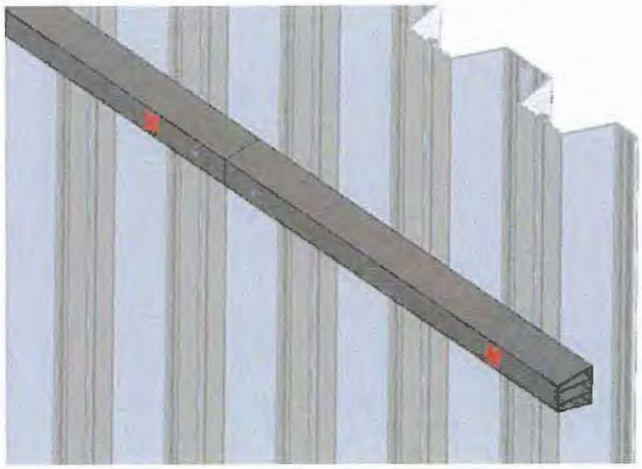
- Appropriate drill for drilling holes through your wale, wall & anchor depending on anchor type
- Drill bits appropriate for the material and tie rod diameter selected. Bits will need to be slightly oversized in order for the holes to be large enough to accommodate the plastic coating.
- Measuring and marking devices for proper tie rod placement
- Heavy wrench or device for tensioning your tie rod with the turnbuckle

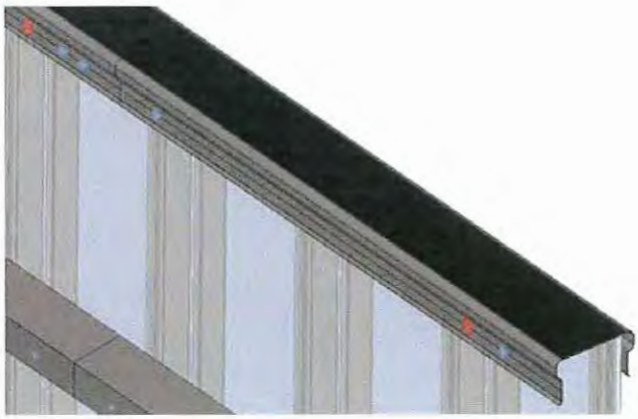
Installation

The rod spacing should already have been determined by the wall designer. It is a good idea to lay out where your rods will be placed by marking hole locations on your wale or cap. As much as possible, you should have your tie rods fall on the flats of outer wall faces.



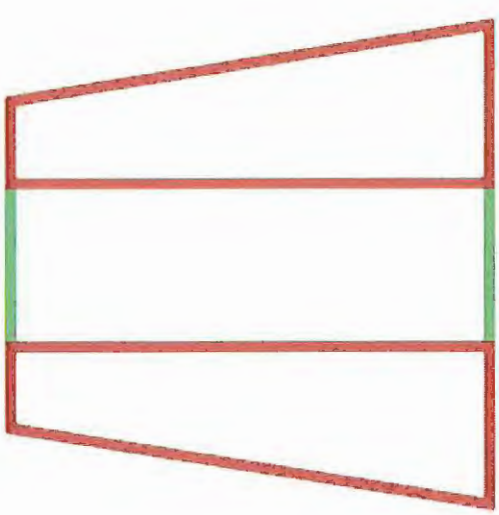
Temporarily mark your hole locations so that the rods can be positioned in the most effective manner before you begin drilling. After you are satisfied with your rod layout, you are ready to drill your holes. If tying back through wales, your holes should be centered on the outer vertical face as shown. If you are tying back through ShoreGuard caps, you should also center your holes on the front, flat, vertical face as shown, and the same face where your cap bolts are located. It is important to note that if you are planning on tying back through your caps, you must use the ShoreGuard Cap STR package.

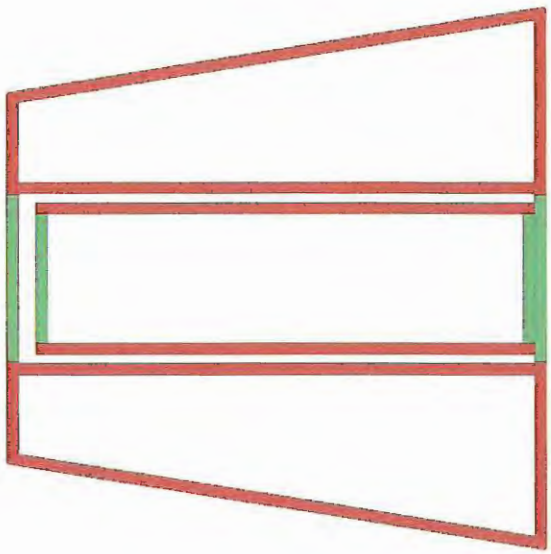




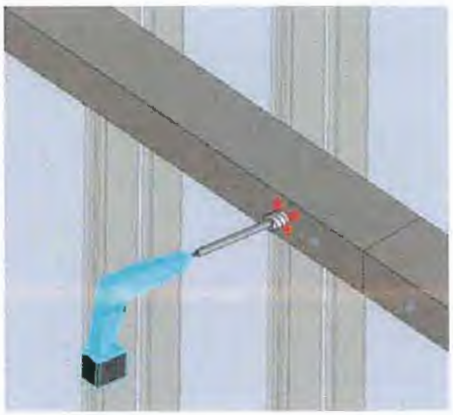
You will have to drill through different materials in this process with as many as three material transitions. This can be very harsh on the drill operator if done in the field. For instance, when drilling through rigid aluminum wales, as soon as the relatively soft plastic is penetrated, it tends to grab the bit, transferring all the torque to the operator. With careful planning, the hole locations can be determined prior to construction, and the drilling process can be done in a safer and more efficient way. If the hole locations are determined ahead of time, at least one component of the wall, can be drilled separately, predrilling the wale with a drill press for example. This way there are no material transitions, making the process quicker, less abrasive, and making it easier to use the appropriate bit for each material. You will want to drill all the way from the outer face of the wale or cap through the back of your wall and whatever lies in between.

It is important that you not drill through the inner web sections of an ShoreGuard or UltraComposite wale or their inserts. Limit all drilling to vertical faces only. If you drill through any horizontal sections, the strength of the beam is weakened. It is a good idea to penetrate green areas only, and leave the red areas completely intact. Profiles are shown for the standard ShoreGuard wale and the STR package. Your drillable area is slightly less in the STR package due to the insert.

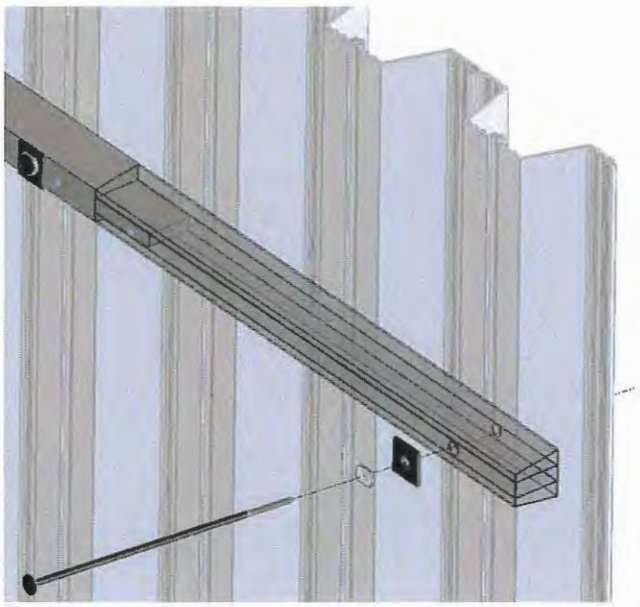


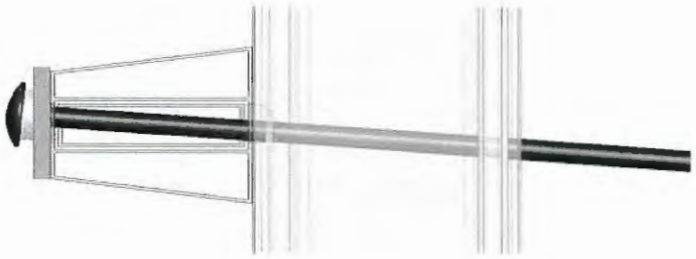


Most designs will call for you to angle your tie rod with a slight downward slope through the wale or cap, which will allow for a deep anchor. Because TimberGuard, like wood, is relatively soft and has a pretty homogeneous cross section, there is little worry about point loading and structural damage with the drilling of such a hole. There are virtually no more constraints with TimberGuard on maximum angle and hole location than with typical lumber, though you will generally want to keep the holes centered. ShoreGuard and UltraComposite wales, however, are more restricting. Because of the limited drillable area, there is a maximum possible angle of between 5 and 10 degrees, depending on your wale setup and rod diameter. To achieve your desired angle, you will either need to drill your hole at the desired angle or straight in. If you choose to drill straight in, then you need to make the hole larger than the diameter of the rod to allow room to adjust to the desired angle.



Insert your ShoreGuard coated rod through whatever washer assembly you will be using and into the holes that you have drilled. Shown is a ¾" diameter ShoreGuard Rod, tied back through the wale, with one ShoreGuard beveled washer and one ShoreGuard plate washer.

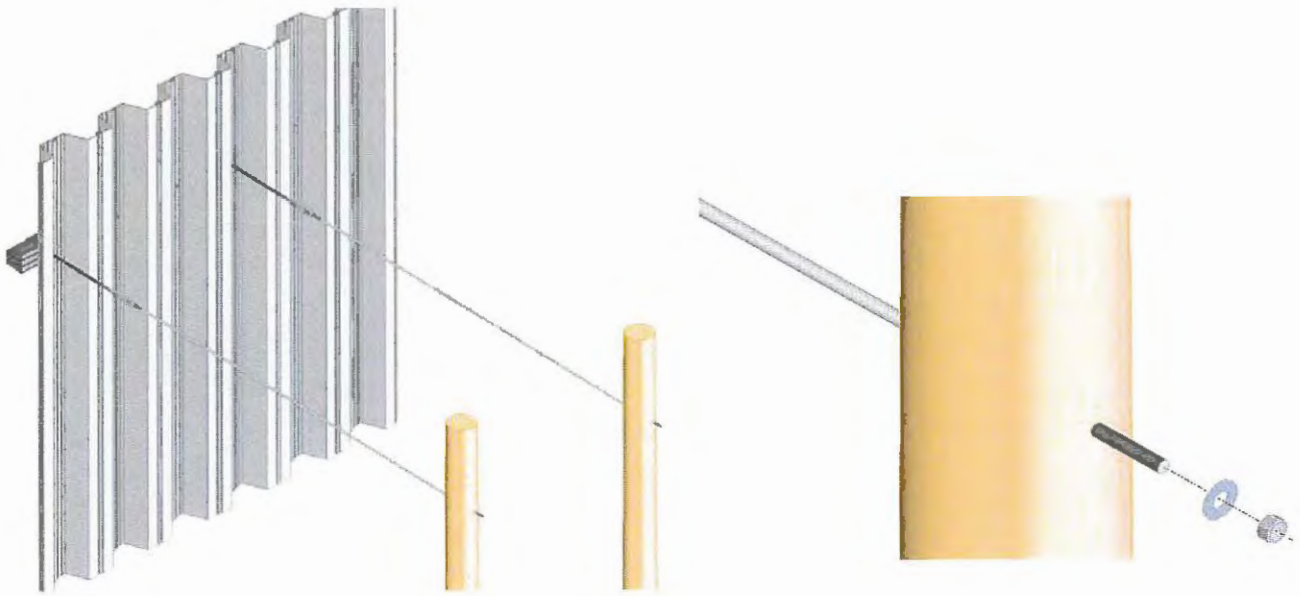




Screw the appropriately threaded end of the included turnbuckle onto the threads of the coated ShoreGuard rod. The coated rod section is reverse-threaded to allow your tie rod system to be tightened with the turnbuckle after assembly.

Next, screw the long uncoated rod into the opposite end of the turnbuckle. This will be regular right-hand thread. It is important to maximize thread contact area here as the rods and turnbuckles will be carrying a large portion of the load on the structure. Be sure that the rod head and tie rods are screwed all the way through the threads of the turnbuckle.

Secure your ShoreGuard tie rods to your anchors with the included nuts and washers. One very common anchor system is shown here, using TimberGuard piles.



After all of your tie rod components are assembled, use the turnbuckle and a wrench to tighten to the desired tension.

Caps

ShoreGuard

Materials

After deciding that you will use ShoreGuard caps, you will need to decide whether or not your application requires aluminum STR inserts. The standard option comes with a splice kit. This kit includes a 16" piece of aluminum insert for every 20' cap piece, for the purpose of splicing your cap. If you are planning on tying back through your cap, then your application will probably require a stronger and more rigid beam, and you should upgrade to the STR option, which includes a 20' aluminum insert for every 20' cap section to run the entire length of your cap. If you will be turning corners, you should consider buying prefabricated corner inserts. These inserts are roughly 16" in length and come in 45 and 90 degree angles. These options save fabrication time and provide some reinforcement at the corners, where you need it most. Touch up paint is available in most ShoreGuard colors. Though our aluminum alloy is designed for resisting corrosion, using this paint to touch up or seal off damaged or exposed areas will cut down on unprotected surfaces available and extend the life of your wall. Mounting hardware is included, so you will only need to provide the appropriate tools for wale installation. Use the table below to select the cap package that is right for you.

Recommended Tools:

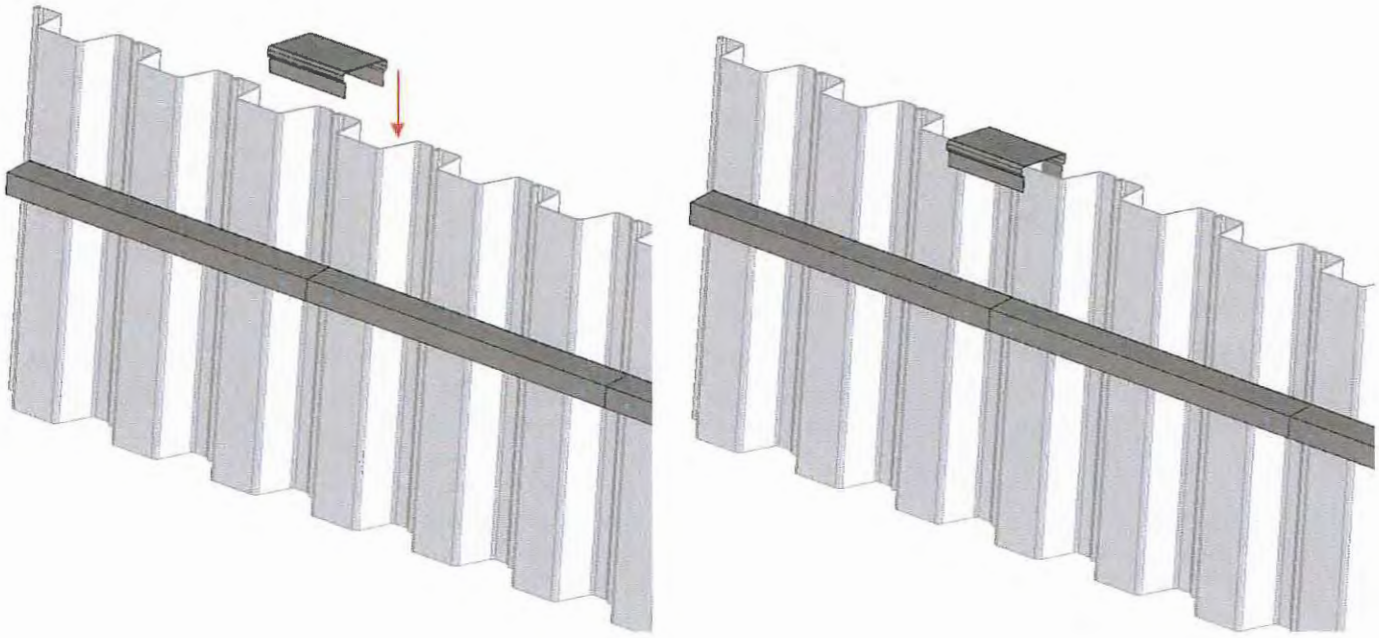
- Drill with a 3/8" bit for drilling bolt holes through aluminum and wall material
- 9/16" socket and/or wrench for tightening nuts and bolts
- Chop saw or any mitering saw that can accommodate the dimensions of the cap
- Blades appropriate for cutting the aluminum cap and inserts are required
- Measuring and leveling devices for proper cap positioning
- Aluminum Welder, if you will be making non-standard turns

Installation

Attaching your ShoreGuard Cap

Step 1 – Positioning your first ShoreGuard Cap section

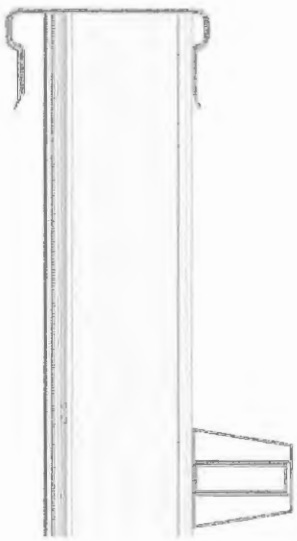
First, place your 16" insert on top of the wall approximately 20' from the beginning of your wall. You will probably want to start at one end of your wall and work to the other end. We will work from left to right for this example.



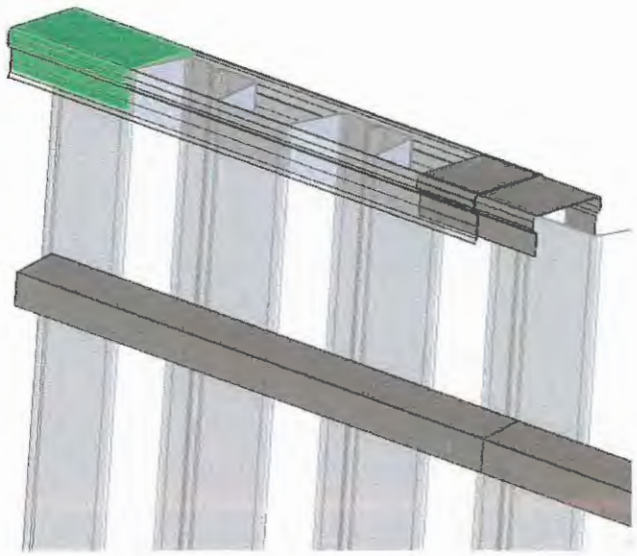
Next, slide a ShoreGuard Cap section onto the insert. The cap acts like a roof on your wall, so you want to make sure that no wall is left exposed underneath the outside end of your cap.

The cap is designed to be wider than the sheet piling wall that it houses. This allows for easy installation and overhanging material for increased protection. Throughout this entire capping process, you will probably want your cap's contact with the sheet piling to be on the front face (exposed side). This is a must if you are planning on tying back through the cap, and this is the way it will be shown throughout the manual. There will also be some instances were there is no gap between

the sheet piling and the cap. This will result in a very tight fit. The fit of the cap will be dependant on several variables such as the straightness of your structure. It is common to have to use some force to install the cap.



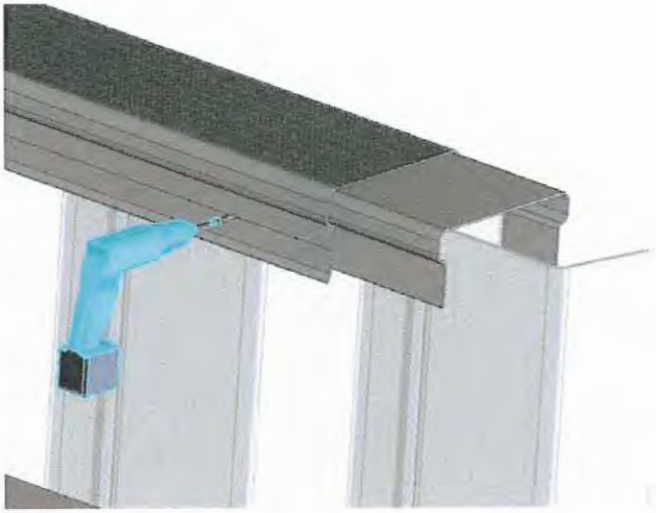
After you have made sure that your cap section is flush with the outermost end of your wall, you want to position your insert for attachment. Like the wale inserts, you want the cap insert to be half in, half out of the cap section. This will leave 9" of cap insert exposed. Before taking steps to secure the cap insert to the cap, you need to make sure that everything is properly positioned and level. Since your 20' cap section is only sitting on the 9" of cap insert, leveling the cap can be awkward. A tip to easily overcome this is to temporarily slide another cap insert on the outside edge of the cap section to give it a level base.

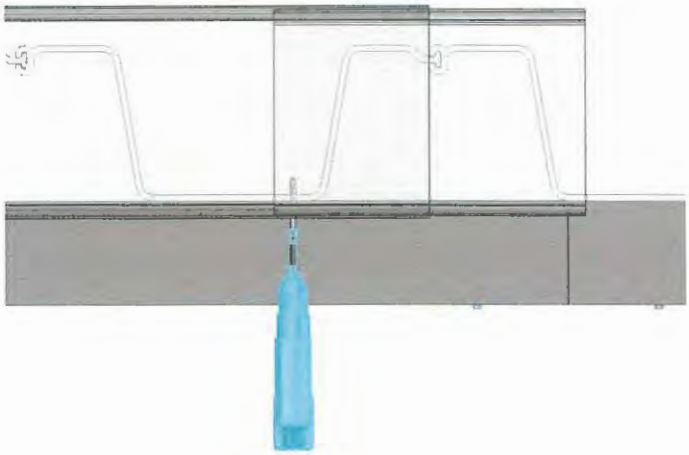


After you have secured the cap to the wall in a level position, you will need to remove the temporary leveling insert as you will be installing it at a later time.

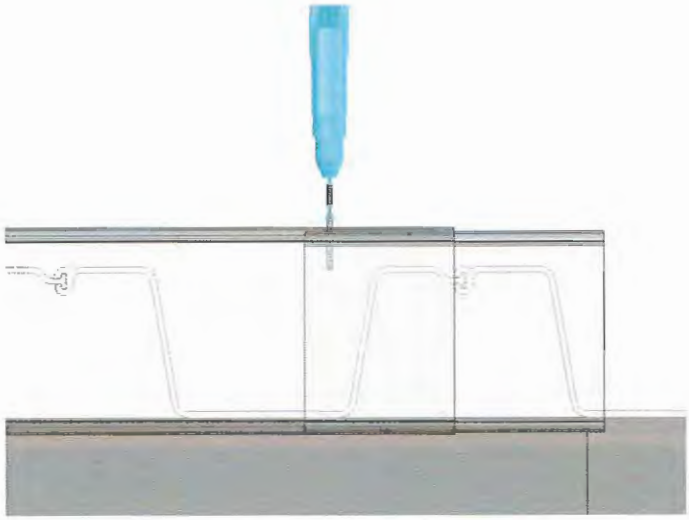
Step 2 – Attaching your Insert to the ShoreGuard Cap section

After you are satisfied that the cap and insert are correctly positioned, you are ready to secure the insert to the cap section. Drill one hole for a 3/8" bolt through the front side of the cap and insert. This hole should be located in the center of the lower flat face of the cap. To add a little more sturdiness to your assembly, you can also drill through the wall (as shown). This can only be done if part of the insert falls on an outside flat face as it does in this scenario. This will be the case more often than not, depending on the type of sheet that you use. The main objective of this step is to secure the ShoreGuard Cap section to the insert, not to secure the cap to the wall. If this does not conveniently fall on a flat face, only drill and secure through the cap and insert.



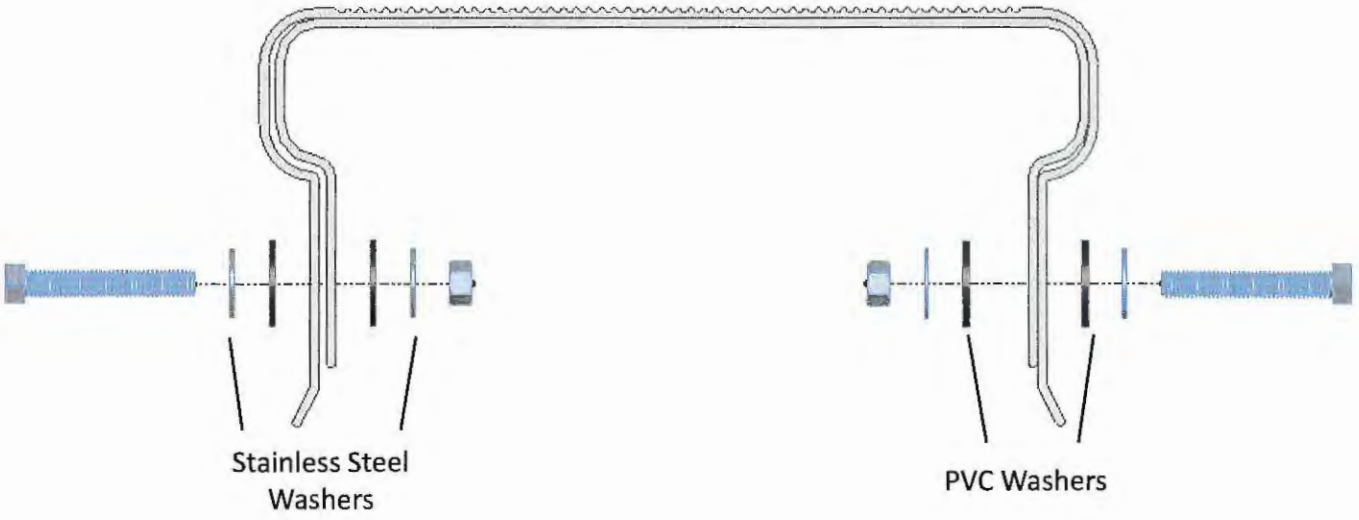


Repeat this process for the rear of the wall. In this case, however, you want to make sure that you do not drill through the wall, only the cap and insert so that they can be securely fastened, and the cap will remain flush with the front wall face.



After both holes have been drilled, secure them with the cap bolts and washers, in the order shown. The PVC washers are

included to provide a galvanic corrosion barrier between the stainless steel washers and the aluminum cap.

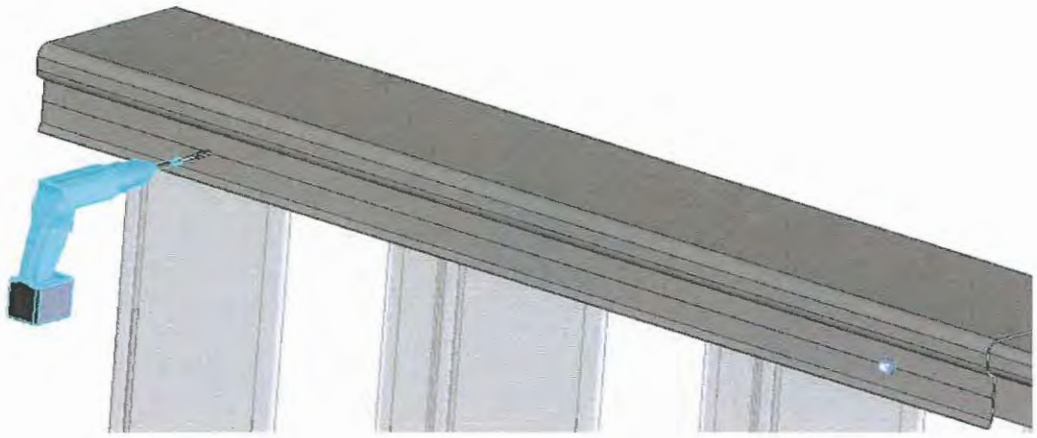


Hand-tighten the front side first to ensure good solid contact, followed by hand tightening the rear side, and then fully tightening both. In this scenario, we have chosen to sandwich the front face of the wall in as well.

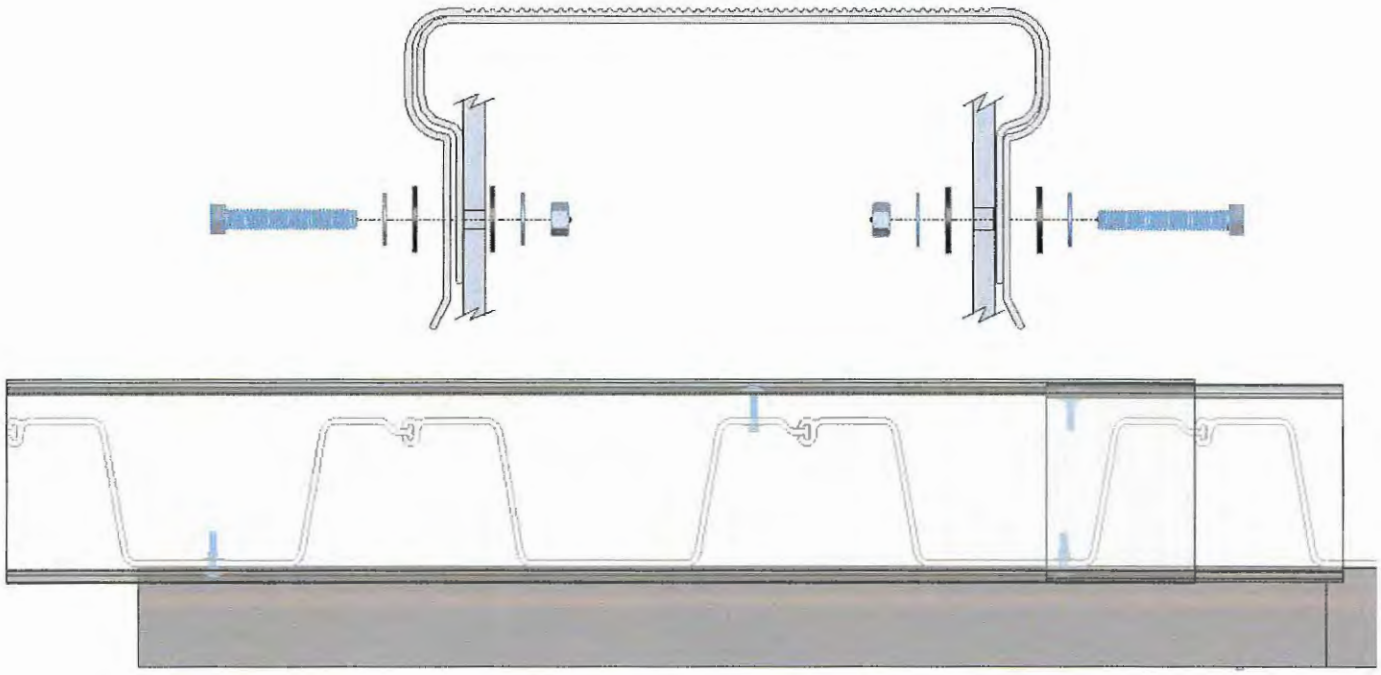
Step 3 – Attaching your first ShoreGuard Cap section to the wall

After you have secured the insert to the cap section, you will attach your cap to the wall using the remaining bolts. As

before, you want to drill your holes in the center of the lower flat face of the cap. Position your holes so that they fall near the center on the flat outer faces of the wall. Drill through the cap and the wall face.

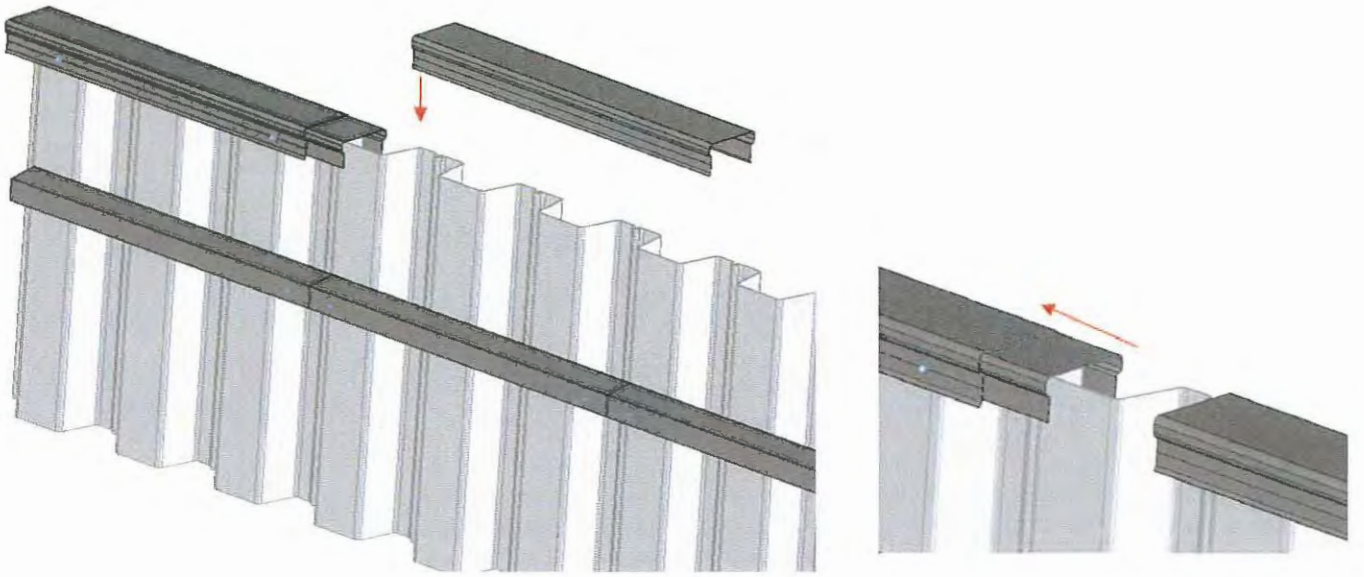


Evenly space your bolts and washers along the length of the cap, half on each side of the wall. Attach them as you did before, with the cap and wall between the washers on both sides. Hand-tighten the complete front side first to make sure that the cap is in direct contact with the front face, and then fully tighten all nuts. In cases were there is a significant gap between the cap and the back surface of the sheet piling, it may be advisable to fill the gap with some kind of blocking material such as left over sheet piling material or wood.

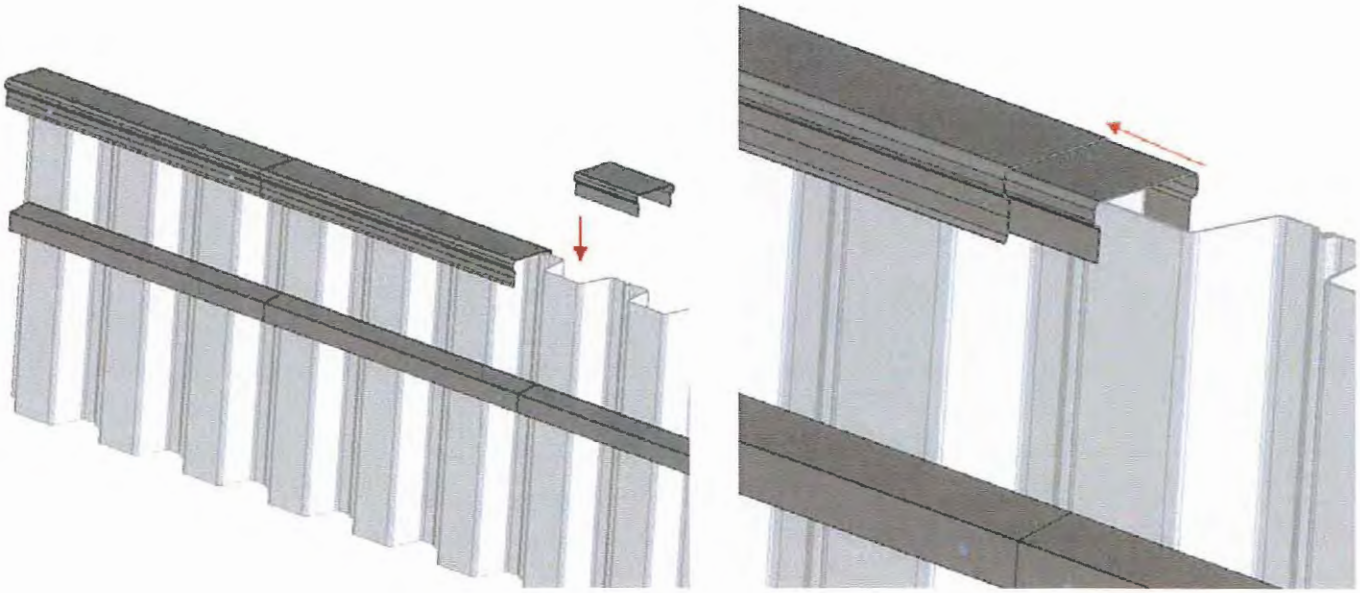


Step 4 – Installing intermediate cap sections

Slide your next cap section onto the attached, exposed insert. You will use each attached cap section and insert as a guide for its following cap section.

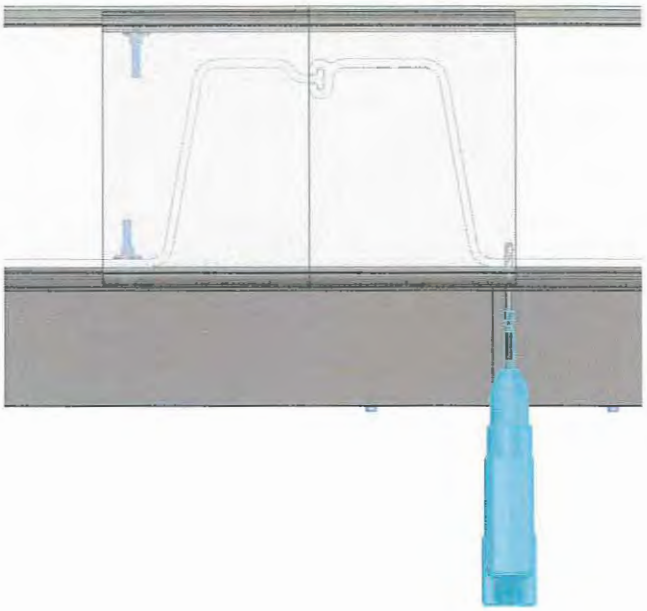


Slide your next cap insert into this cap section, half-in, half-out. This will level the cap section and leave you in a position similar to that in Step 2.

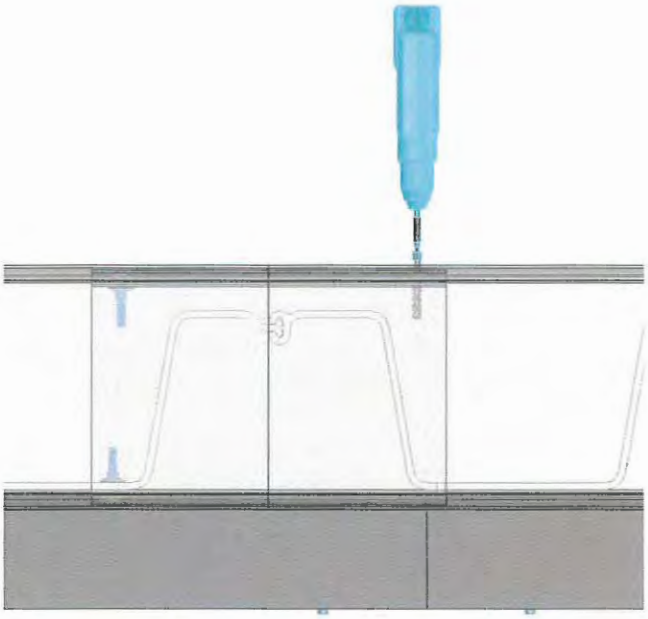


You will need to secure the insert on both sides of the cap section rather than just the leading end. You will begin attachment by securing the trailing end of the unattached cap section to its corresponding (partially installed) insert. You will use the same installation principals and methods as you learned in Step 2. Drill one hole for a 3/8" bolt through the front side of the cap and insert. This hole should be located in the center of the lower flat face of the cap. As in Step 2, to add a little

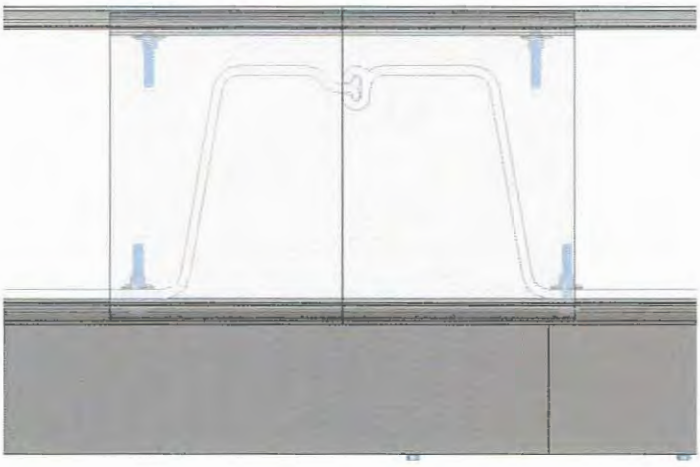
more sturdiness to your assembly, you can also drill through the wall (as shown). Remember from before, this can only be done if part of the insert falls on an outside flat face as it does in this scenario. This will be the case more often than not, depending on the type of sheet that you use. The main objective of this step is to secure the ShoreGuard Cap section to the insert, not to secure the cap to the wall. If this does not conveniently fall on a flat face, only drill and secure through the cap and insert.



Repeat this process for the rear of the wall. Again, in this case, you want to make sure that you do not drill through the wall, only the cap and insert, so that they can be securely fastened, and the cap will remain in direct contact with the front wall face.



Hand-tighten the front side first to ensure good solid contact, followed by hand tightening the rear side, and then fully tighten both. Remember, in this scenario, we have chosen to sandwich the front face of the wall in as well.



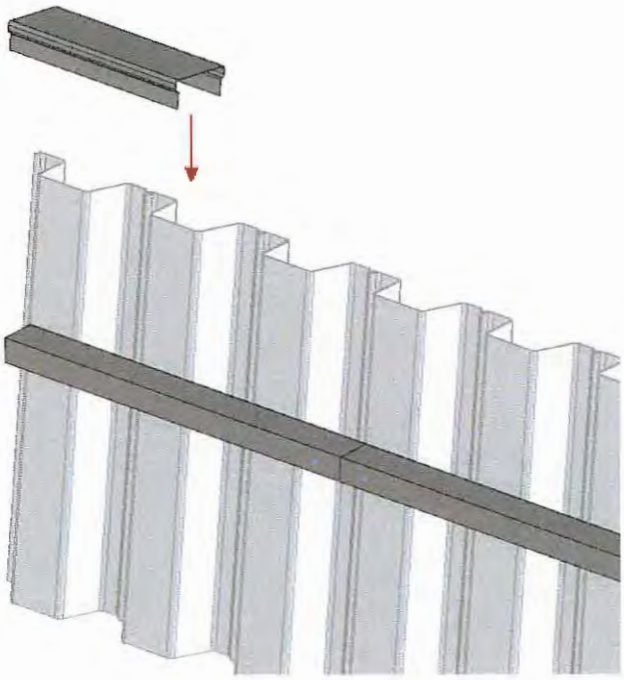
Follow Steps 2 and 3 to finish securing your cap and insert to each other and then to the wall.

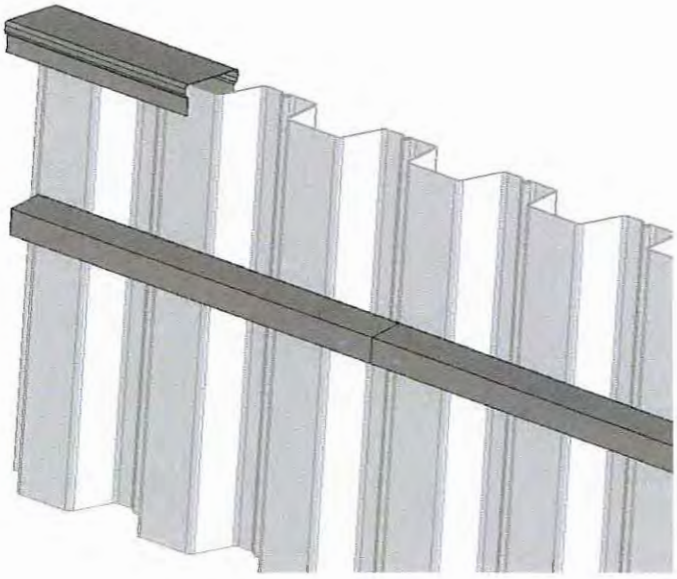
Repeat this process for all the straight runs of your wall.

Step 5 – Modifying your installation for ShoreGuard Cap STR

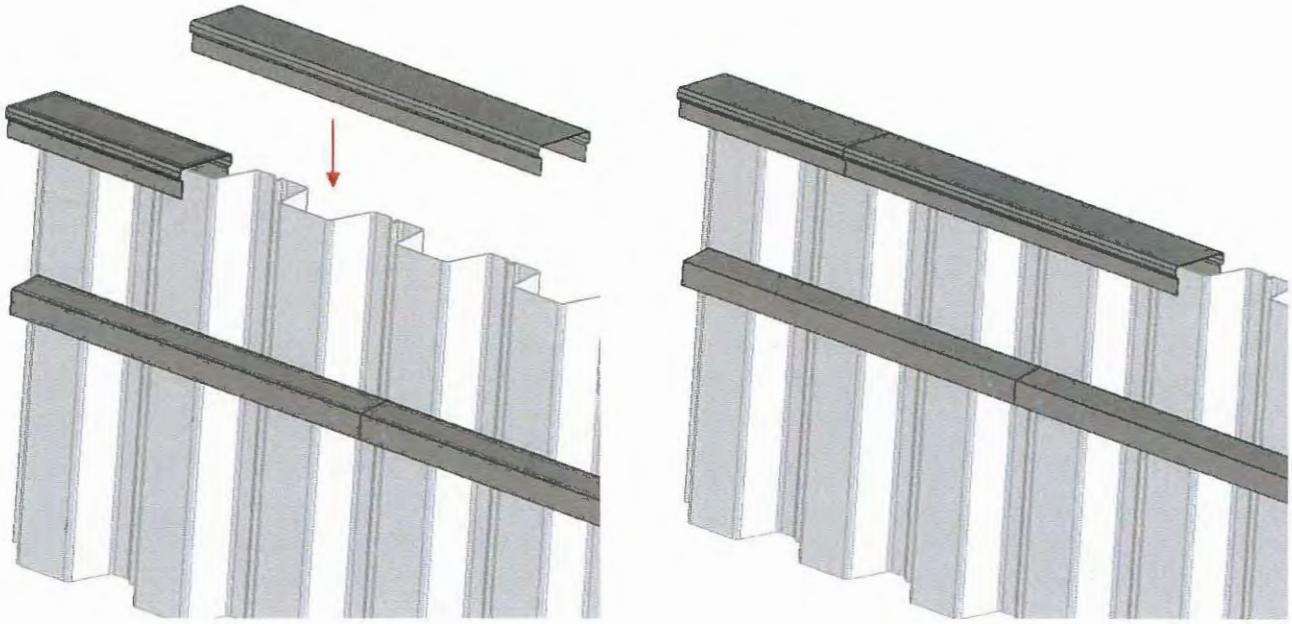
Choosing to use the STR package will allow your cap system to more closely approximate a continuous beam than the standard package. The only difference between the two is that the STR package includes a 20' insert in place of the 16" standard insert. This results in the insert running the whole length of your wall, adding strength and rigidity. The STR package is also slightly easier to install than the standard one.

It is recommended that you cut one of your 20' structural inserts into two 10' lengths for easy installation. Place one of the 10' lengths onto your wall so that no wall is left exposed underneath the outside end of your insert. You will save the other piece for the final step of your installation.

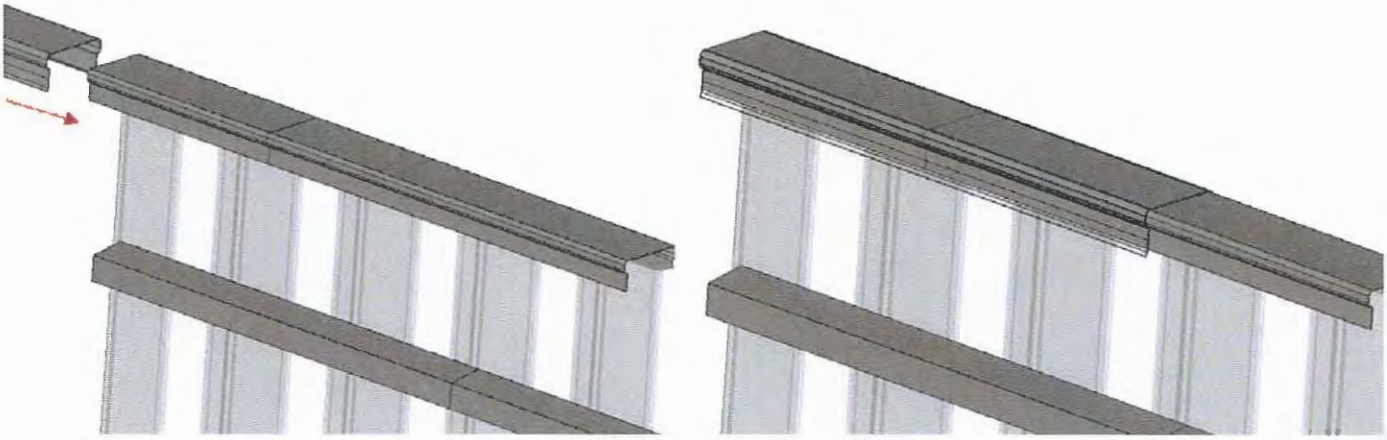




Place a 20' insert onto the wall so that it touches your already positioned 10' insert.

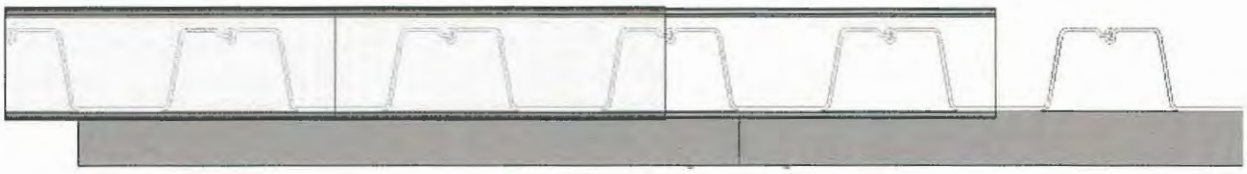


Slide a 20' cap section onto the cap inserts. Because your cap system acts like a roof, be sure that the outside end of your wall is completely covered by the cap section. Because you have made this 10' insert piece, every other insert will automatically be half-in, half-out of the cap for optimal placement.



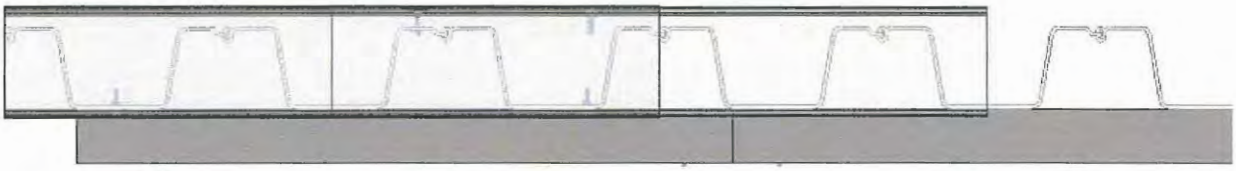
After this helpful setup, the rest of the install process is the same as with the standard package. Follow Steps 2-4 from above to complete the installation for the faces of your wall.

To summarize:



Secure the 1st cap section to the insert.

Secure the cap and insert to the wall.

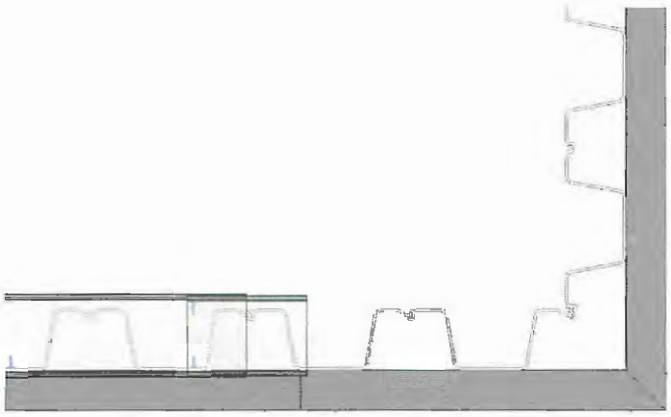


Secure the next cap section to inserts at both ends, followed by securing the cap and insert to the wall.

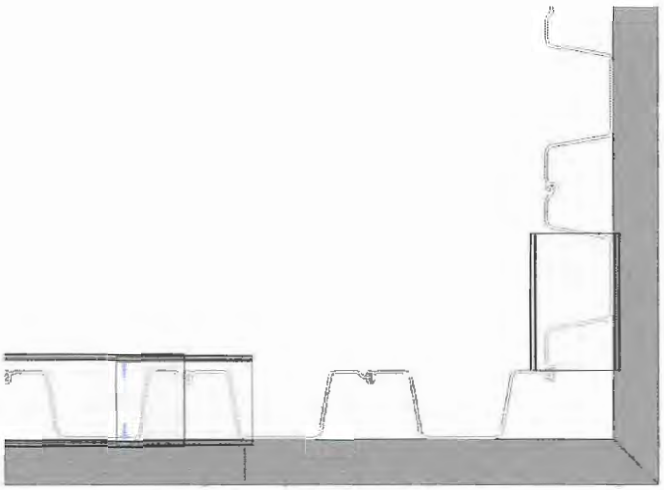
Turning a corner with your ShoreGuard Cap

Step 1 – Preparing to turn a corner

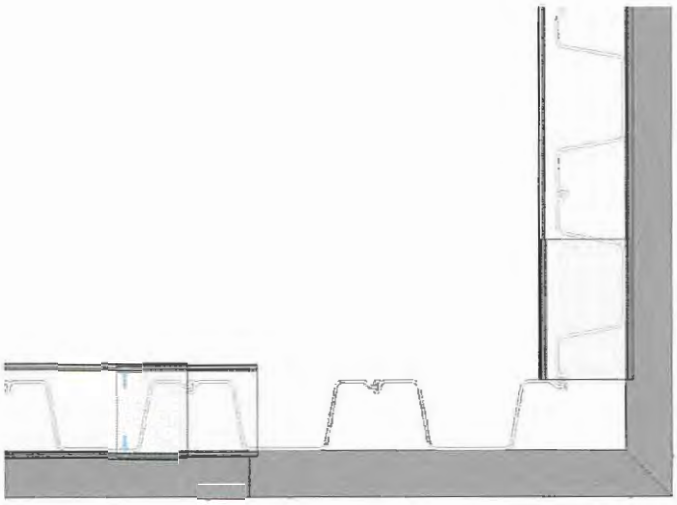
For this example we will show the standard ShoreGuard Cap package turning a 90 degree corner. This process will use a 90 degree corner insert. We also offer 45 degree corner inserts, but the process for turning a 45 or 90 degree corner is fundamentally the same. When you reach a corner, you will want to stop so that your last cap insert is still within a straight section of the wall. You should plan so this does not happen near the corner.



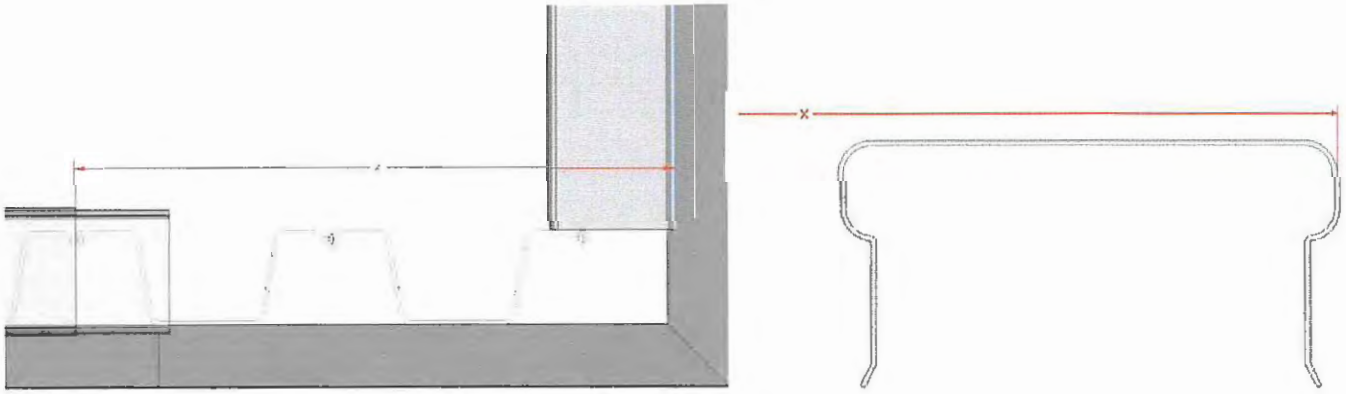
Identifying the proper location for your miter cut is very important for a quick, simple, and attractive wall. There are many ways to accomplish this, but one of the simpler ways is as follows: Place a cap insert onto the turned wall section and slide it as far into the corner as possible.



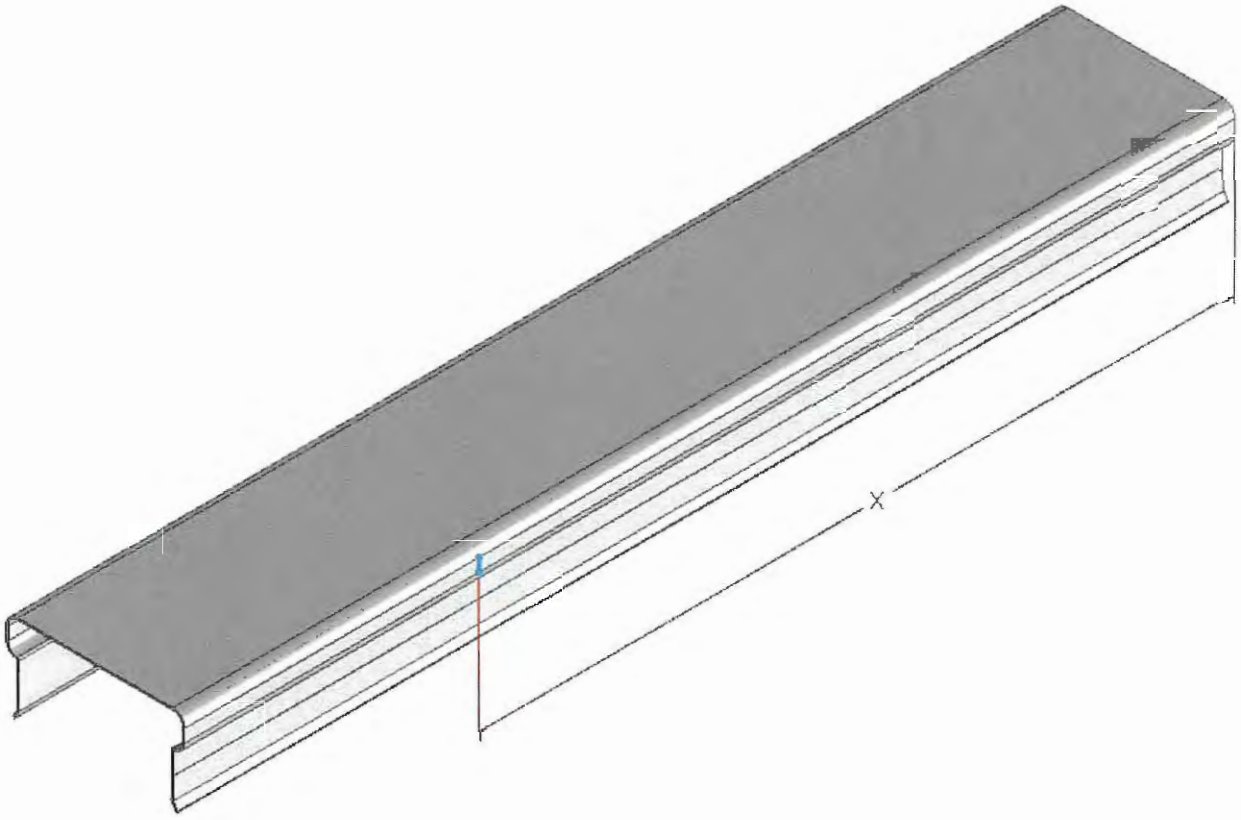
Slide a cap section onto the insert and up to the corner as well. Position these just as you would for final installation. This ensures, in this particular situation, that the cap and wall tightly sandwich the insert on the front side and are hanging over the back just as before.



Measure the distance from the farthest point on the cap that you just positioned (this will be the upper flat section) to the last cap section on the flat of your wall.



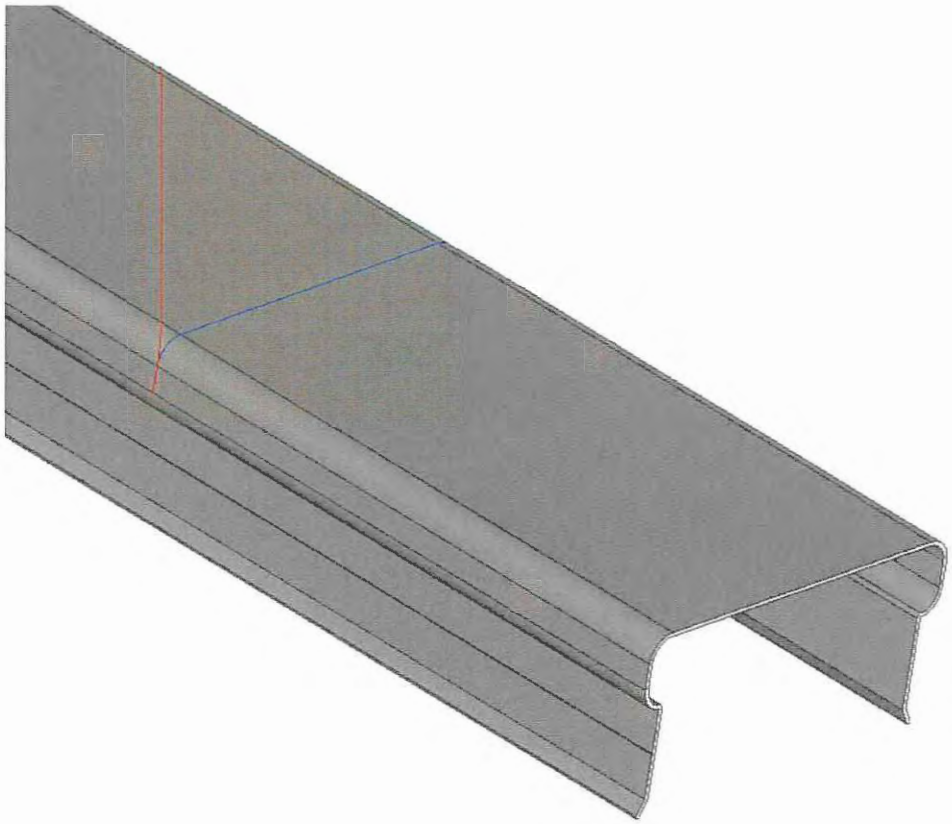
Mark this distance out on a new cap section (shown in blue).



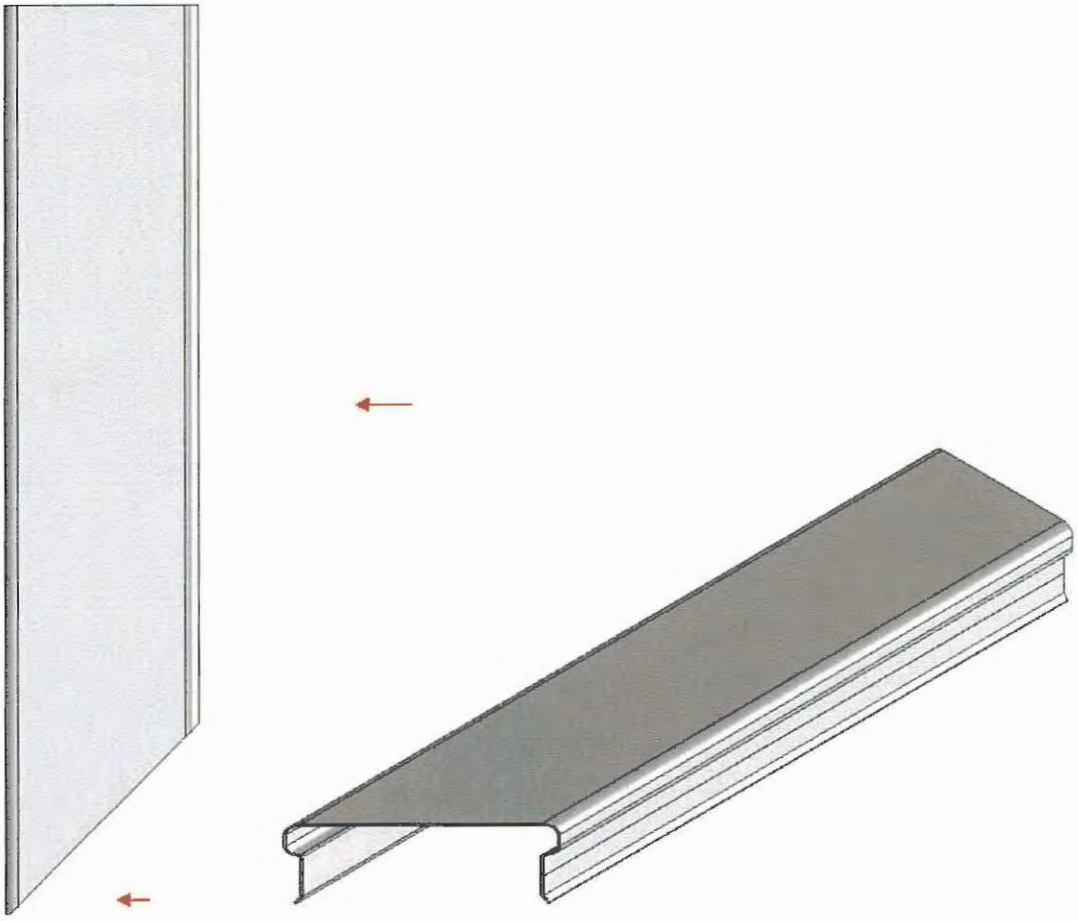
Extend this point across and around to the opposite side of your cap to get a baseline for your cut (shown in blue).

Step 2 – Making your cuts

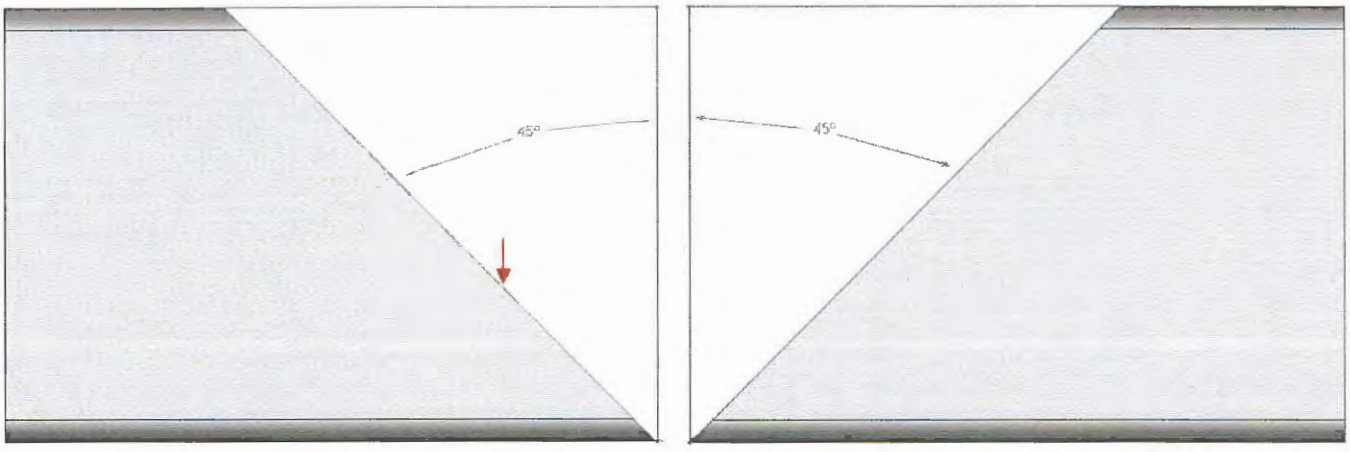
Since this will be a mitered cut, your cut angle will be ½ of your actual turned angle. For this example of a 90 degree turn, we will cut at a 45 degree angle from base line. For a 45 degree turn, the cut would be made at 22.5 degrees and so on. For accurate cutting, you should use a chop saw, miter box, or have your cap sections professionally mitered. The corner will be a focal point for your wall, and you will probably want to take care to make sure that you have accurate angles and clean cuts. Make your angled cut line (shown in red) from the baseline (blue) in the appropriate orientation. The baseline represents the outer corner of your finished wale, so your cut line will always be pointed away from the end that you intend to use as the corner. Remember that this is a projected line, over the curved sections of the cap, so a string might help keep the line.



Make your cut by following the red line with your saw.

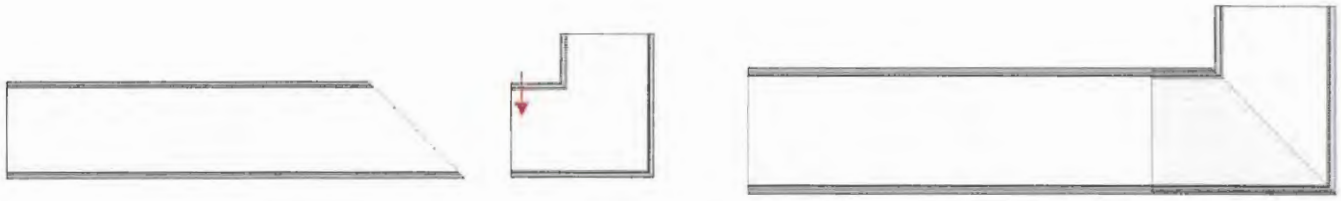


You might want to go ahead and cut your other miter corner piece as well, while you are already cutting. You should make your second corner piece from a new 20' section so that the next splice occurs as far from the corner as possible. For this cut, you will make the matching miter cut 22.5 or 45 degrees from perpendicular, respectively, for a 45 or 90 degree turn. This cut can be made from the end so that no measurement is necessary.

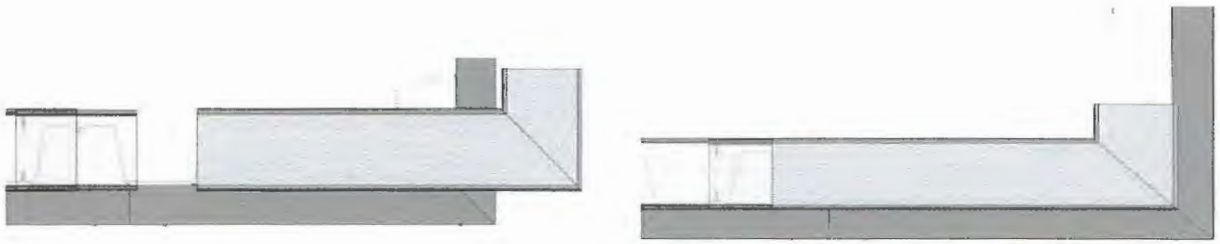


Step 3 – Installing your corner

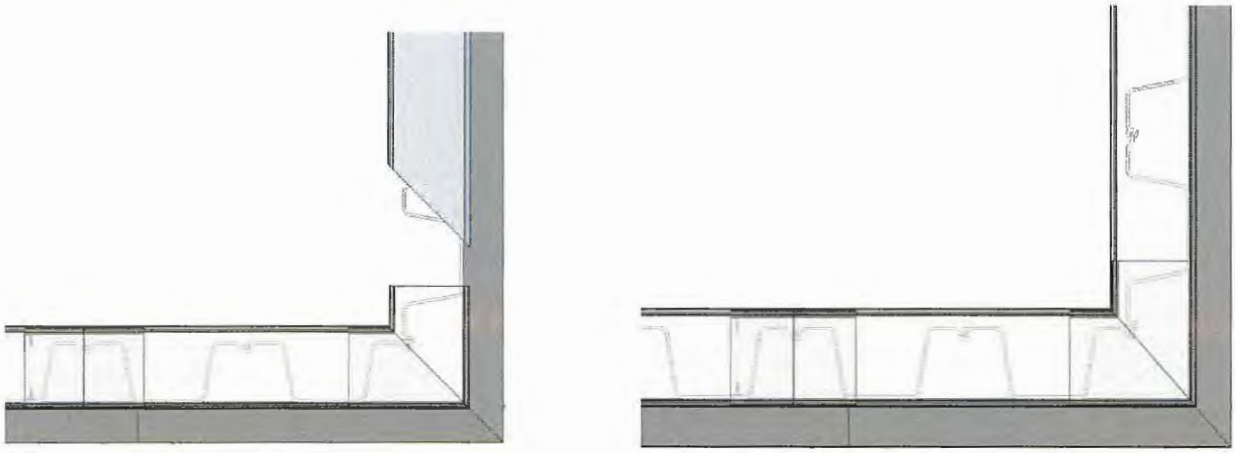
After you have made your cuts, you are ready to assemble your corner. Since there are some precision cuts used here, it might be a good idea to "mock up" your corner to ensure that everything fits together to your satisfaction before fastening. Slide your appropriate corner insert, in this case a 90 degree corner insert, into the first cap section (the one with the measured cut).



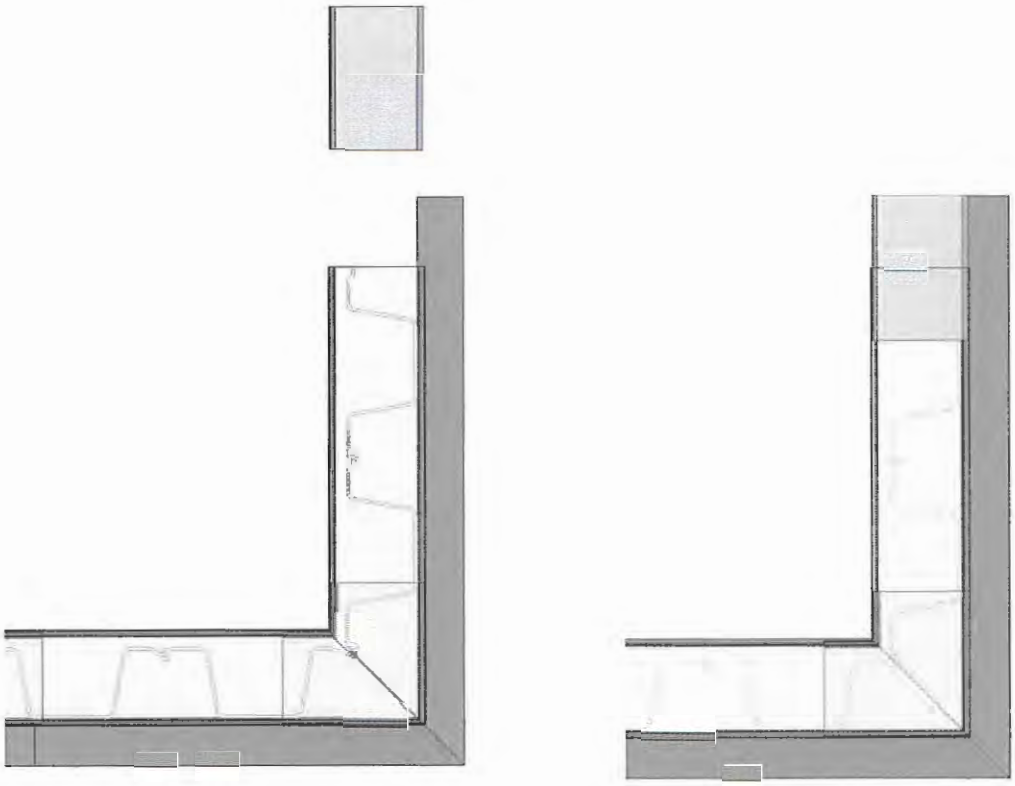
You will now need to slide this onto your last insert on the wall face while at the same time positioning the corner insert piece on the corner of the wall. You will be doing two things at once here, so depending on your situation, some force may be required.



After your cap section and corner insert are in place, slide your matching miter cut cap section (the one from a new 20' section) onto the exposed insert.



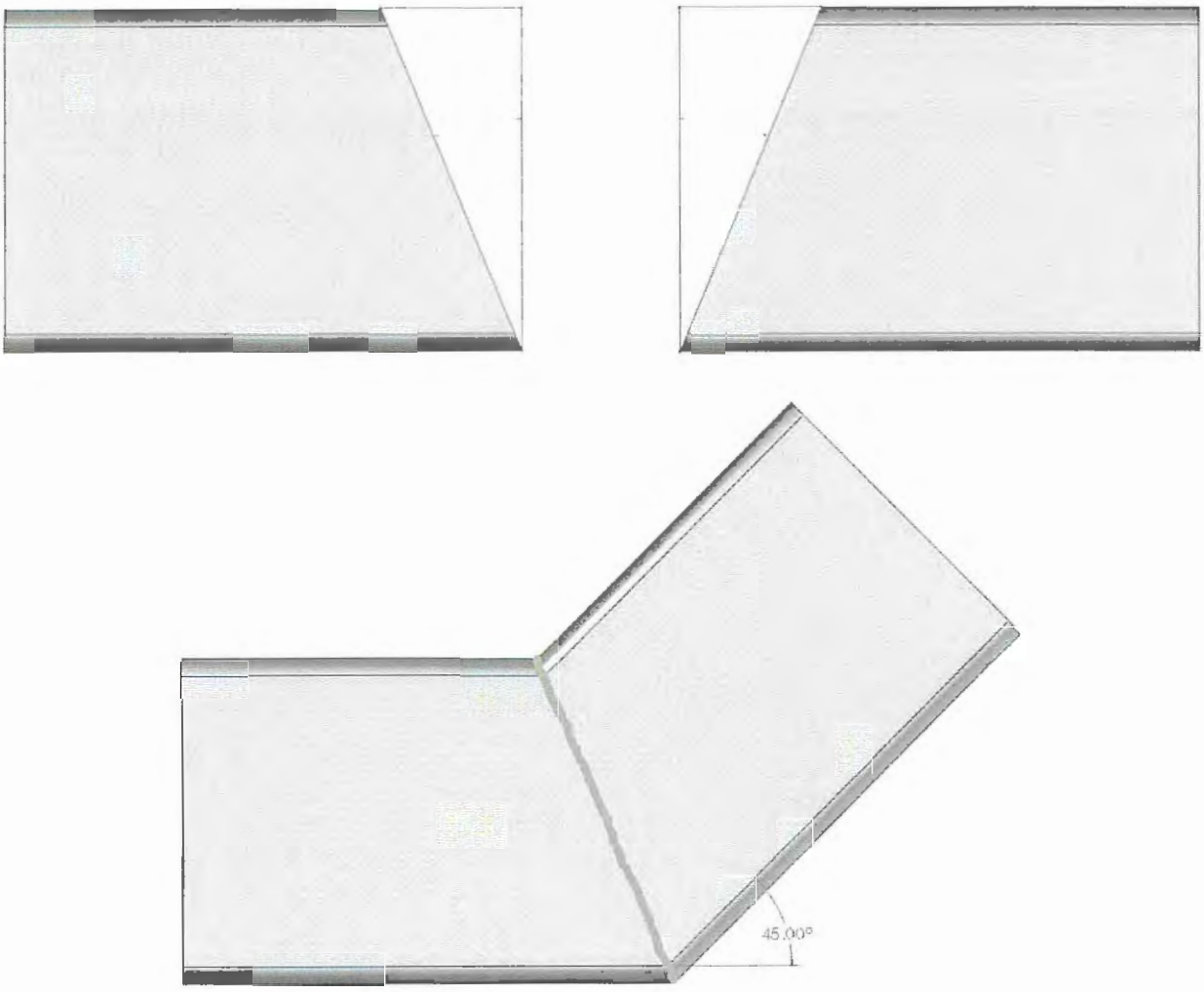
Slide in an 16" insert half-in, half-out of the last cap section. If you will be continuing your wall, this will be used to connect your next cap section. If your wall stops here, then this insert will aid in leveling your cap.



You should make sure that everything fits together properly and no more finishing is required before fastening. When you are satisfied that the cap is level and everything is in contact on the front face, you are ready to fasten the components. You will use the same attachment principals that you have learned throughout this section.

Step 4 – Modifying your installation for non-standard turns

If you will be making a custom turn, the process is identical, only you will need to fabricate your own corner inserts. You can use two of the provided inserts for this. Miter cut the inserts at the same angle as you would cut your cap sections. Weld the two mitered insert pieces together to create your own custom corner insert (45 shown here). Now you have your non-standard corner insert, and the corner turning process is the same as above.



Touch Up and Maintenance of Your ShoreGuard Cap

Although ShoreGuard Caps and inserts are made from high quality marine grade aluminum, as is the case with all metallic material, there is a possibility of corrosion in some cases. It is always a good idea to carefully inspect your structure for any area that may be susceptible to corrosion.

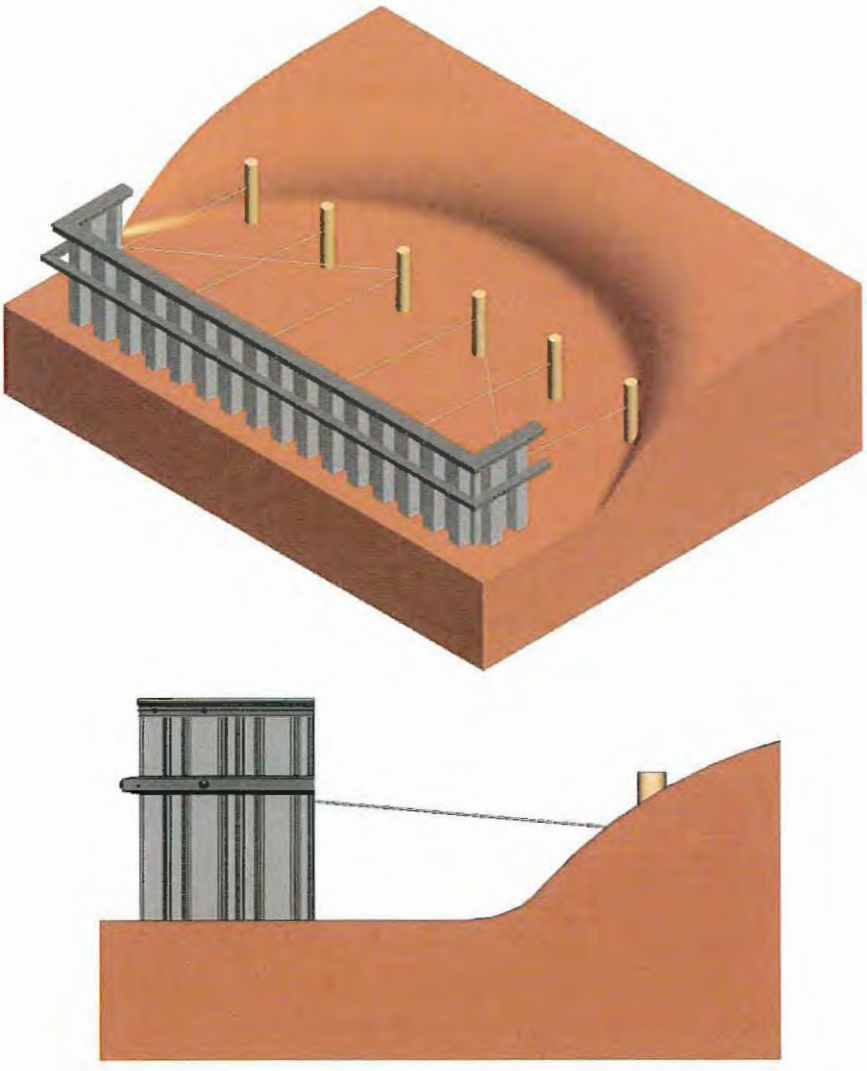
Wherever the painted or anodized coating on the cap has been damaged it is necessary to buff the area and apply a fresh layer of touch-up paint. It is also important to grind down and buff any jagged edges and apply a fresh coat of touch-up paint.

Periodically through the life of the structure it is advisable to closely inspect all the components of your structure. If there is any evidence of damage to the cap coating or the onset of corrosion, you can dramatically increase the life of your structure by buffing the area, removing any corrosion and applying a fresh coat of touch-up paint.

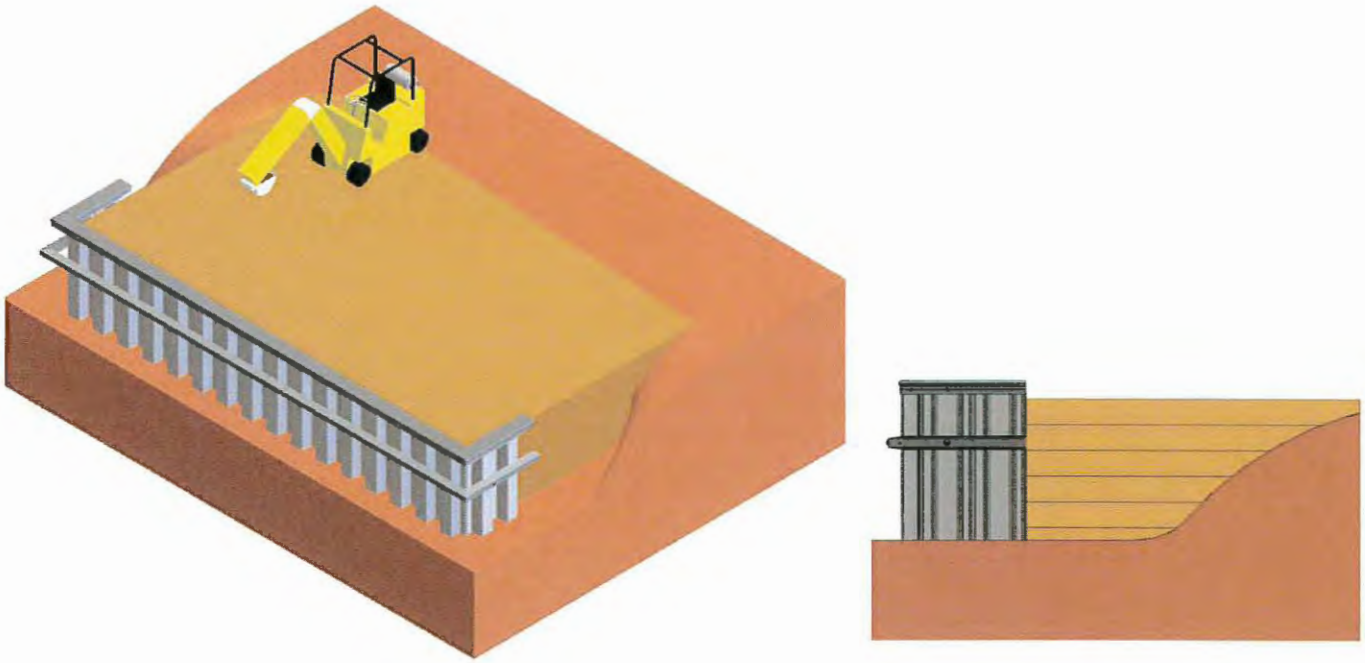
Finishing Up

Backfilling

The type of backfill you use is a very important decision that is often overlooked. Your choice in backfill influences your wall structure more than any other single factor. Hydrostatic pressure behind a wall causes more failures than any other factor. You should use granular, free draining backfill. If site conditions permit, the use of drainage or weep holes is also recommended. Often times the designer for your structure will specify in detail what type of backfill and drainage is required.

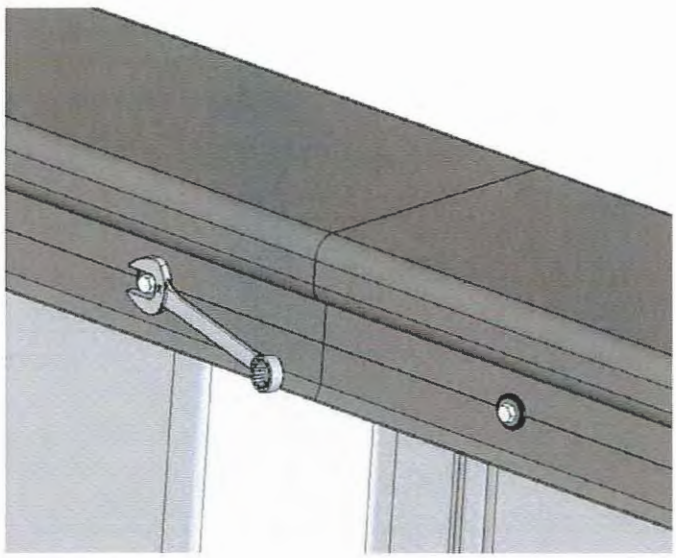


It is a good idea to backfill in lifts or layers of 1-2 ft., compacting the soil at each layer. It is very important to make sure that there are no voids in the backfill and that it has good contact with the entire surface of your wall. This is particularly important in the corners, where it may take some extra effort to ensure good backfilling and compaction.



Final Wall Tuning

After all of your components are installed and you have backfilled, you will now want to tighten all nuts and bolts on your structure.



If you have used TimberGuard components and would like to wrap or seal any openings to give it a finished look, you can do this now. We have suggested that you save this step for last because it is primarily a polishing step to touch up the aesthetics of your wall. You may, however, do this at any point that you wish in the construction process. Shown below is a TimberGuard wale using TimberGuard wrap to conceal the joint.

Finally, after your retaining structure is complete, it is a good practice to periodically check back to make sure that everything is aging as expected and no maintenance is required. Though the metals used are designed for marine environments, all metals corrode eventually. You should make sure that no premature corrosion is taking place, and if found, the corroded material should be removed and sealed to prevent damage to the integrity of the structure.

With the fundamentals learned in this manual you should be well on your way to constructing synthetic sheet piling structures to protect your investments for years to come.

Item 9020

Siphon Structure

1. DESCRIPTION

Furnish and install siphon structure and materials for construction of structure.

2. CONSTRUCTION

The siphon structure is generally lifted and set in place by some kind of cherry picker or crane. The structure is then fastened to sheet piling or some other form of retaining wall to stop any lift of buoyancy the structure may have.

3. MEASUREMENT

This Item will be measured by each structure placed in its final position and accepted by the Engineer.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Siphon Structure." This price is full compensation for fabrication and installation of structure; and equipment, labor, materials, tools, and incidentals.

Item 9030

Breakwater

1. DESCRIPTION

This item shall govern for the furnishing and placing of breakwater as indicated on plans.

2. CONSTRUCTION

The finished breakwater shall be free from objectable pockets of small rocks and clusters of larger rocks. Placing the rocks by dumping into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted. Weighing, as required, to meet particle size specification compliance, shall be performed by the Contractor under the direct supervision of the Engineer.

3. MEASUREMENT

This Item will be measured by the cubic yard.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Breakwater." This price is full compensation for furnishing all materials and for all labor, tools, equipment and incidentals necessary to complete the work.

GUIDE TO SAMPLING AND TESTING

GUIDE SCHEDULE OF SAMPLING & TESTING

MARCH 2015

Texas Department of Transportation

Using the Guide Schedule

Research of sampling and testing rates listed for project tests in the following Guide Schedule show that the Department's and the Contractor's risk of either rejecting "good" material or accepting "bad" material range from 20% to 40%.

To reduce this risk, we recommend that the sampling rate be increased during initial production. A four-fold increase in testing frequency will generally reduce risk to approximately 5%. The intent of increasing testing at the start of production is to insure that the Contractor's processes are in control and to establish acceptability requirements early.

There is a need to increase the frequency of testing for high-variability materials and when testing results do not meet specifications. The Engineer may require the Contractor to reimburse the Department for costs resulting from failing test results, in accordance with the specifications.

Materials incorporated in TxDOT projects are subjected to various quality assurance procedures such as testing (as outlined in this document), certification, quality monitoring, approved lists, etc. The Engineer and testing staff should familiarize themselves with materials to be used before work begins by reviewing the specifications and this document. Discuss material testing requirements with the Contractor.

Other testing required by the specifications, but not shown in the Guide Schedule, should be performed at a frequency necessary to provide adequate confidence that materials meet specifications.

NOTE: For projects subject to FHWA construction oversight activities, use the "Letter of Certification of Materials Used" to document reasons for material acceptance when a test fails. For all other projects, document the justification and explanation for acceptance of materials that fail project tests in the project file.

Assuring the quality of the product and proper incorporation of materials into the project begins with proper sampling practices. Sampling, testing, and construction inspection must be performed collaboratively to assure the specific attributes of the finished product reflect quality workmanship. Sampling guidance for hot-mixed asphalt is contained in Tex-225-F, Random Selection of Bituminous Mixture Samples, and the respective specification for that material. All remaining materials are covered by method and materials specifications, to which the following applies.

For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows:

- Soils/flexible base: Vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed.
- Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.
- Concrete (structural and miscellaneous: Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled. Tests for slump, air, and temperature should be done often to ensure the consistent control of the concrete production (not applicable to miscellaneous concrete).

This Guide Schedule is applicable to all contracts associated with the 2014 Standard Specifications.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES

			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
EMBANKMENT (CUTS & FILLS)	Liquid Limit **(A)**	Tex-104-E	During stockpiling operations, from completed stockpile, or project site **(B)**	Materials with PI ≤ 15: 10,000 CY	For type A embankment or when required by the plans. This test may be waived for embankment cuts as directed by the Engineer. Determine a new liquid limit and plasticity index for each different material or notable change in material. Sample in accordance with Tex-100-E.
	Plasticity Index **(A)**	Tex-106-E		Materials with PI > 15: 5,000 CY	
	Gradation	Tex-110-E		Each 10,000 CY	When shown on plans. This test may be waived for embankment cuts, as directed by the Engineer. Sample in accordance with Tex-100-E.
	Moisture/Density	Tex-114-E		As directed by the Engineer	Not required for ordinary compaction. Determine a new optimum moisture and maximum density for each different material or notable change in material. Sample in accordance with Tex-100-E.
	In-place Density **(A)**	Tex-115-E	As designated by the Engineer	Fill: each 5,000 CY min. 1 per lift.	Not required for ordinary compaction. Determine a new optimum moisture and maximum density according to Tex-114-E for each different material or notable change in material. Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Materials such as RAP, gypsum, lime, cement, and iron ore tend to bias the counts for nuclear density gauges.
				Cut: each 6,000 LF	
RETAINING WALL (NON-SELECT BACKFILL)	As shown above for Embankment (Cuts and Fills)		As shown above for Embankment (Cuts and Fills)	As shown above for Embankment (Cuts and Fills)	Sample in accordance with Tex-100-E.
RETAINING WALL (SELECT BACKFILL)	Gradation	Tex-110-E	During stockpiling operations, from completed stockpile, or project site **(B)**	Each 5,000 CY	Sample in accordance with Tex-400-A.
	Resistivity **(A)**	Tex-129-E	During stockpiling operations, from completed stockpile, or project site **(B)**	Each 5,000 CY	For material with resistivity between 1,500 and 3,000 ohm-cm, determine chloride and sulfate content, as specified in Item 423. Sample in accordance with Tex-400-A.
	pH **(A)**	Tex-128-E	During stockpiling operations, from completed stockpile, or project site **(B)**	Each 5,000 CY	Sample in accordance with Tex-400-A.

This is a guide for minimum sampling and testing.
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TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
RETAINING WALL (SELECT BACKFILL) (continued)	Soundness	Tex-411-A	During stockpiling operations, or from completed stockpile	1 per source, per project	Test when backfill sources appear to contain particles such as shale, caliche, or other soft, poor-durability particles. Sample in accordance with Tex-400-A.
	In-place Density **(A)**	Tex-115-E	As designated by the Engineer.	1 per backfill lift, per wall	Not required for rock backfill. For walls greater than 500 ft. in length, perform one test per lift for every 500 ft. in length. **(F)** Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E for each different material or notable change in material and adjust the density accordingly.
UNTREATED BASE COURSES	Liquid Limit **(A)**	Tex-104-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	Sample in accordance with Tex-400-A.
	Plasticity Index **(A)**	Tex-106-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	
	Gradation **(A)**	Tex-110-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	Sample in accordance with Tex-400-A.
	Moisture/Density	Tex-113-E	From completed stockpile at the source **(E)**	Each 20,000 CY	Not required for ordinary compaction. Sample in accordance with Tex-400-A.
	Wet Ball Mill **(A)**	Tex-116-E	From completed stockpile at the source **(E)**	Each 20,000 CY	As required by the plans. Sample in accordance with Tex-400-A.
	Strength **(A)**	Tex-117-E	From completed stockpile at the source **(E)**	Each 20,000 CY	As required by the plans. When base material is from a source where the District has a record of satisfactory triaxial results, the frequency of testing may be reduced to one per 30,000 CY. If any one test falls below the minimum value required, the frequency of testing will return to the original frequency of 20,000 CY. Sample in accordance with Tex-400-A.

This is a guide for minimum sampling and testing.
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TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES						
				PROJECT TESTS		
MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
UNTREATED BASE COURSES		In-place Density **(A)**	Tex-115-E	As designated by the Engineer	Each 3,000 CY, min. 1 per lift	Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Materials such as RAP, gypsum, lime, cement, and iron ore tend to bias the counts for nuclear density gauges.
		Thickness **(A)**	Tex-140-E	As designated by the Engineer	Each 3,000 CY	Not required where survey grade control documents compliance.
TREATED SUBGRADE AND BASE COURSES	SUBGRADE BEFORE TREATMENT	Organic Content	Tex-148-E	As designated by the Engineer	1 per 500 linear feet or 5,000 CY	Required for existing subgrade material and material imported from a borrow source. Soil survey and geologic maps may be used to determine sampling locations. Sample in accordance with Tex-100-E.
		Sulfate Content	Tex-145-E	As designated by the Engineer	1 per 500 linear feet or 5,000 CY	Required for existing subgrade material and material imported from a borrow source. Soil survey and geologic maps may be used to determine sampling locations. Sample in accordance with Tex-100-E.
	NEW BASE MATERIAL	Liquid Limit **(A)**	Tex-104-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	When central mix site or plant is used, windrow sampling may be waived. Sample in accordance with Tex-400-A.
		Plasticity Index **(A)**	Tex-106-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	
		Gradation **(A)**	Tex-110-E	During stockpiling operations, from completed stockpile, or windrow **(B)**	Each 5,000 CY	Sample in accordance with Tex-400-A.
		Wet Ball Mill **(A)**	Tex-116-E	From completed stockpile at the source **(E)**	Each 20,000 CY	As required by the plans. Sample in accordance with Tex-400-A.

This is a guide for minimum sampling and testing.
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TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES

				PROJECT TESTS		
MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
TREATED SUBGRADE AND BASE COURSES	NEW BASE MATERIAL	Strength **(A)**	Tex-117-E	From completed stockpile at the source **(E)**	Each 20,000 CY	As required by the plans. When base material is from a source where the District has a record of satisfactory triaxial results, the frequency of testing may be reduced to one per 30,000 CY. If any one test falls below the minimum value required, the frequency of testing will return to the original frequency of 20,000 CY.
	LIME	Compliance with DMS-6350	Tex-600-J	During delivery to project	Commercial Lime Slurry: each 200 tons of lime Carbide Lime Slurry: each 100 tons of lime	Sample in accordance with Tex-400-A.Verify the source is listed in the current Material Producer List for Lime. Only materials listed in the Material Producer List will be accepted. Sample frequency for Carbide Lime Slurry may be increased as directed by the Engineer. For Hydrated Lime and Quick Lime project testing is not required but it is encouraged to sample and test the material at a rate of 1 per project as a best practice.
	CEMENT	Compliance with DMS-4600		Railroad car, truck, or cement bins		Verify the source is listed in the current Material Producer List for Cement. If not, sample and test in accordance with DMS-4600. **(C)**
	FLY ASH MATERIAL	Compliance with DMS-4615		Project samples at location designated by the Engineer		Verify the source is listed in the current Material Producer List for Fly Ash. Only materials from CSTM&P approved sources listed in the Material Producer List for Fly Ash will be accepted. Project testing is not required but it is encouraged to sample and test the material at a rate of 1 per project as a best practice. **(C)**
	COMPLETE MIXTURE	Pulverization Gradation	Tex-101-E Part III	Roadway, after pulverization and mixing	As necessary for control	At the beginning of the project, one test must be made for each 4,500 CY or 6,000 tons until the Engineer is satisfied that acceptable pulverization results are being obtained. Sample in accordance with Tex-100-E.
		Soil-Cement Testing Soil-Lime Testing	Tex-120-E (Part II), or Tex-121-E (Part II)	From roadway windrow after treatment **(E)**	Each 20,000 CY	Not required for ordinary compaction. Determine a new moisture/density curve for each different or notable change in material. Perform a Tex-120-E Part II for Cement Treated Material and Tex-121-E Part II for Lime, Lime-Fly Ash or Fly Ash Treated Material. If Tex-120-E Part I, Tex-121-E Part I or Tex-127-E is performed prior to the project, this test may be waived. Sample in accordance with Tex-100-E.

This is a guide for minimum sampling and testing.
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TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES						
				PROJECT TESTS		
MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
TREATED SUBGRADE AND BASE COURSES	COMPLETE MIXTURE	Soil-Cement Testing Soil-Lime Testing	Tex-120-E (Part I) Tex-121-E (Part I) or Tex-127-E	From roadway windrow after treatment	As necessary for control	Perform Tex-120-E Part I on cement treated material, Tex-121-E Part I for lime-fly ash or fly ash treated material. Verifies the field strength by comparing results from the mix design. Performed at the discretion of Engineer. Sample in accordance with Tex-100-E.
		In-place Density **(A)**	Tex-115-E	As designated by the Engineer	Each 3,000 CY, min 1 per lift	Determine the appropriate moisture/density curve for each different material or notable change in material. Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Stabilizers and materials such as RAP, gypsum and iron ore tend to bias the counts for nuclear density gauges.
		Thickness **(A)**	Tex-140-E	As designated by the Engineer	Each 3,000 CY	Not required where survey grade control documents are used for compliance
RECLAIMED ASPHALT PAVEMENT (RAP), CRUSHED CONCRETE, and RECYCLED MATERIALS		Sulfate Content	Tex-145-E	During stockpiling operations, from completed stockpile, or windrow	Each 5,000 CY	Required only for contractor furnished recycled material, including crushed concrete. Not required for RAP. Sample in accordance with Tex-400-A.
		Deleterious Material	Tex-413-A		Each 5,000 CY	Required only for contractor furnished recycled material, including crushed concrete. Sample in accordance with Tex-400-A.
		Decantation	Tex-406-A	During stockpiling operations, from completed stockpile, or windrow	Each 5,000 CY	Required only for contractor furnished RAP. Sample in accordance with Tex-400-A.

This is a guide for minimum sampling and testing.
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TABLE I – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	Engineer will select any of these locations or any combinations thereof with the provision that the initial sample will be obtained from the completed stockpile at the source and at least one out of ten consecutive samples will be taken at the project site (from the windrow for treated and untreated bases and embankments when possible).
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: • Soils/Flexible Base: For gradation, liquid limit, and plastic limit, vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed. • Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.
E	The Engineer will sample from the completed stockpile at the source and test prior to placement.
F	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE IA – ASPHALT STABILIZED BASE (Plant Mix)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	REMARKS
AGGREGATE	Gradation **(A)**	Tex-200-F Part I	During stockpiling operations, from completed stockpile, or prior to mixing	Each 5,000 CY	Sample in accordance with Tex-400-A.
	Liquid Limit **(A)**	Tex-104-E	During stockpiling operations, from completed stockpile, or prior to mixing	Each 5,000 CY	Sample in accordance with Tex-400-A.
	Plasticity Index **(A)**	Tex-106-E	During stockpiling operations, from completed stockpile, or prior to mixing	Each 5,000 CY	
	Wet Ball Mill or L. A. Abrasion **(A)**	Tex-116-E or Tex-410-A	During stockpiling operations, from completed stockpile, or prior to mixing	Each 20,000 CY	When L. A. Abrasion is specified, tests are not required when the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. Sample in accordance with Tex-400-A. **(B)**
	Coarse Aggregate Angularity **(A)**	Tex-460-A Part I	During stockpiling operations, from completed stockpile, or prior to mixing	1 per project, per source	Not required for crushed stone sources. Sample in accordance with Tex-400-A.
	Sand Equivalent	Tex-203-F	Hot aggregate bins, feeder belt, or stockpile	1 per project, per source	When designated by the Engineer, test may be run on combined aggregates when multiple sources are used. Sample in accordance with Tex-400-A.
LIME	Compliance with DMS-6350		During delivery to the project	Hydrated Lime: 1 Per Project. Commercial Lime Slurry: each 200 tons of lime **(D)** Carbide Lime Slurry: each 100 tons of lime **(D)** Quick Lime: 1 Per Project	On projects requiring less than 50 tons, material from CSTM&P approved sources may be accepted on the basis of Producer's Certification without sampling.
RECLAIMED ASPHALT PAVEMENT (RAP), and RECYCLED AGGREGATE	Decantation	Tex-217-F Part II	During stockpiling operations, from completed stockpile, or prior to mixing	Each 10,000 CY	Sample in accordance with Tex-400-A.

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TABLE IA – ASPHALT STABILIZED BASE (Plant Mix)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	REMARKS
RECYCLED ASPHALT SHINGLES (RAS)	Decantation	Tex-217-F Part III	During stockpiling operations, from completed stockpile, or prior to mixing	Each 10,000 CY	Sample in accordance with Tex-400-A.
ASPHALT BINDER	Compliance with Item 300 – Binder and Tack Coat		Sampled, tested and preapproved by CSTM&P. Take project samples when designated by the Engineer.	1 each for binder and tack coat per project, per grade, per source	Test at least one sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.
COMPLETE MIXTURE	Laboratory Density **(A)**	Tex-126-E	Plant Mix **(C)**	20,000 CY (25,000 tons)	Sample in accordance with Tex-222-F.
	Percent Asphalt **(A)**	Tex-236-F	Plant Mix **(C)**	Each 1,500 CY (2,000 tons) or days production	Determine asphalt content correlation factors for ignition oven at a minimum of one per project. Sample in accordance with Tex-222-F.
	Indirect Tensile Strength – Dry	Tex-226-F	Plant Mix	1 per project, per design	Sample in accordance with Tex-222-F.
	Moisture Susceptibility	Tex-530-C	As designated by the Engineer	1 per project, per design	This test may be waived, when shown on the plans. Sample in accordance with Tex-222-F.
ROADWAY	In-Place Air Voids **(A)**	Tex-207-F	Roadway cores, as designated by the Engineer **(C, D)**	Each 2,500 CY (3,000 tons) or days production	Not required for ordinary compaction or when air void requirements are waived. Sample in accordance with Tex-222-F.

TABLE IA – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	Engineer will select any of these locations or any combinations thereof with the provision that at least one out of ten consecutive samples will be taken at the project site (from the windrow for treated and untreated bases and embankments when possible).
C	For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: • Soils/flexible base: Vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed. • Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.
D	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

This is a guide for minimum sampling and testing.
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TABLE II – SEAL COAT					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	REMARKS
AGGREGATE	Gradation **(A)**	Tex-200-F, Part I	Stockpile (At source or at point of delivery)	One each 1,000 CY	Rate may be reduced to one each 2,000 CY if the Engineer approves a contractor quality control plan. Sample in accordance with Tex-221-F.
	L. A. Abrasion **(A)**	Tex-410-A	Stockpile	1 per 20,000 CY	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use. Sample in accordance with Tex-221-F. **(B)**
	Magnesium Soundness **(A)**	Tex-411-A	Stockpile	1 per 20,000 CY	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use. Sample in accordance with Tex-221-F. **(B)**
	Surface Aggregate Classification **(A)**	Tex-612-J Tex-411-A	Stockpile	1 per 20,000 CY	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use. Sample in accordance with Tex-221-F. **(B)**
	Pressure Slake **(A)**	Tex-431-A	Stockpile	1 per 20,000 CY	Same as above. Required only for lightweight aggregate. Sample in accordance with Tex-221-F.
	Freeze Thaw **(A)**	Tex-432-A	Stockpile	1 per 20,000 CY	Same as above. Required only for lightweight aggregate. Sample in accordance with Tex-221-F.
	Unit Weight	Tex-404-A	Stockpile	1 per 20,000 CY	Same as above. Required only for lightweight aggregate. Sample in accordance with Tex-221-F.
	24 hr Water Absorption **(A)**	Tex-433-A	Stockpile	1 per 20,000 CY	Same as above. Required only for lightweight aggregate. Sample in accordance with Tex-221-F.
	Coarse Aggregate Angularity	Tex-460-A	Stockpile	1 per 20,000 CY	Only required for crushed gravel. Sample in accordance with Tex-221-F.
	Deleterious Material **(A)**	Tex-217-F Part I	Stockpile	1 per 10,000 CY	Not required for lightweight aggregate. Sample in accordance with Tex-221-F.
	Decantation **(A)**	Tex-406-A	Stockpile	1 per 10,000 CY	Sample in accordance with Tex-221-F.
	Flakiness Index	Tex-224-F	Stockpile	Frequency as directed by the Engineer	Sample in accordance with Tex-221-F.

This is a guide for minimum sampling and testing.
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TABLE II – SEAL COAT					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	REMARKS
	Micro Deval	Tex-461-A	Stockpile	1 per project or as necessary for control	Compare result to published value listed in the current Material Producer List for BRSQC. Submit sample to CSTM&P for Soundness and LA Abrasion testing when results differ by more than 3% points, unless otherwise directed by the Engineer. Sample in accordance with Tex-221-F.
	White Rock Count	Tex-220-F	Stockpile		Required only for Limestone Rock Asphalt. Not required when CSTM&P provides inspection at the plant. Sample in accordance with Tex-221-F.
	Naturally Impregnated Bitumen Content	Tex-236-F	Stockpile		Required only for Limestone Rock Asphalt. Not required when CSTM&P provides inspection at the plant. Sample in accordance with Tex-221-F.
PRECOATED AGGREGATE	Asphalt Content	Tex-236-F	Stockpile	Frequency as directed by the Engineer when a target value is specified	Sample in accordance with Tex-221-F.
ASPHALT	Compliance with Item 300		Sampled, tested and preapproved by CSTM&P. Take project samples when designated by the Engineer from the distributor or transport.	1 per project, per grade, per source	Sample in accordance with Tex-500-C. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.

TABLE II – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
C	For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: • Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.
D	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

This is a guide for minimum sampling and testing.
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TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)						
				PROJECT TESTS		
MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	REMARKS
MINERAL AGGREGATE	COARSE AGGREGATE	Decantation **(B)**	Tex-406-A	From stockpile at concrete plant	Each 20,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
		Sieve Analysis **(A) (B)**	Tex-401-A		Each 1,000 CY of concrete (each source)	Sample in accordance with Tex-400-A. Test combined aggregate when used.
		Deleterious Materials **(B)**	Tex-413-A		1 per project or as necessary for control	Sample in accordance with Tex-400-A.
		Los Angeles Abrasion **(A) (B)**	Tex-410-A		Two, each source	Verify the value of the source, as listed in the current Material Producer list for CRSQC, meets the project specifications. If not, sample and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-400-A. **(C)**
		5-cycle Magnesium Sulfate Soundness **(A) (B)**	Tex-411-A		Two, each source	Verify the value of the source, as listed in the current CRSQC, meets the project specifications. **(C)**
	FINE AGGREGATE	Sand Equivalent **(B)**	Tex-203-F	From stockpile at concrete plant	1 per project or as necessary for control	Sample in accordance with Tex-400-A. Test combined aggregate when used.
		Organic Impurities **(B)**	Tex-408-A		1 per project, per source	Sample in accordance with Tex-400-A.
		Sieve Analysis **(A) (B)**	Tex-401-A		Each 1,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
		Fineness Modulus **(B)**	Tex-402-A		1 per project or as necessary for control	Sample in accordance with Tex-400-A. Test combined aggregate when used. Test to confirm material variability when strength values are in question.
		Deleterious Material **(B)**	Tex-413-A		1 per project or as necessary for control	Sample in accordance with Tex-400-A. Test to confirm material variability when strength values are in question.
		Acid Insoluble Residue **(A) (B)**	Tex-612-J		Two, each source	Only for concrete subject to direct traffic. Verify the value of the source, as listed in the current CRSQC, meets the project specifications. If not, sample and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-400-A. **(C)**
SILICA FUME		Compliance with DMS-4630 **(A)**		Railroad car, truck, bags or silos	1 per project, per class of concrete (For each type and brand)	Sample in accordance with Tex-320-D.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	REMARKS
METAKAOLIN	Compliance with DMS-4635 **(A)**		Railroad car, truck or silos	1 per project, per class of concrete (For each type and brand)	
MIX DESIGN	Compliance with Standard Specification Item 421.4.A		At source (if not approved)	Min. 1 design per class, per source	Verify if cement, fly ash, slag cement, and chemical admixture sources are listed in the Material Producer Lists. If not, sample and submit to CSTM&P for testing. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT). Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash.
JOINT MATERIAL	Compliance with DMS-6300				Sample in accordance with Tex-500-C. Verify the source is listed in the Material Producer List for Joint Sealers. If not, sample and test prior to use in accordance with DMS-6310. **(C)**
CURING COMPOUND	Compliance with DMS-4650		Sampled at jobsite; tested by CSTM&P. See remarks.	When requested by CST	Only products listed in the Material Producer List for Concrete Curing Compounds will be allowed. When sample is requested by CST, sample in accordance with Tex-718-I. Ensure container has been agitated and mixed prior to sampling. **(C)**
EVAPORATION RETARDANTS	Compliance with DMS-4650				Only products listed in the Material Producer list for Evaporation Retardants will be allowed. **(C)**
REINFORCING STEEL	Compliance with the Std. Specifications & Spec. Provisions	As Specified			Only materials from CSTM&P approved sources listed in the Material Producer List for Reinforcing Steel Mills and Seven Wire Steel Strand will be allowed. **(C)**
MECHANICAL COUPLERS	Compliance with DMS-4510	Tex-743-I	Sampled at jobsite; Tested by CSTM&P	3 couplers per lot (500 couplers) for each type, model, bar size and grade	Only materials from CSTM&P approved sources listed in the Material Producer List for Mechanical Couplers will be allowed. **(C)**
LATEX	Compliance with DMS-4640 for concrete chemical admixtures		Sampled at jobsite.	Min. of 1 test per project	Sample in accordance with Tex-321-E.
EPOXY	Compliance with DMS-6100, unless otherwise specified		Sampled at jobsite if not pre-approved by CSTM&P.	1 per batch or shipment	Verify the source is listed in the Material Producer List for Epoxies and Adhesives. If not, sample and test prior to use in accordance with DMS-6100. Sample in accordance with Tex-734-I. **(C)**

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	REMARKS
CONCRETE	Compressive Strength (A)	Tex-418-A	At point of concrete placement	4 cylinders for each 60 CY per class, per day (For bridge railing and traffic railing, testing may be reduced to 4 cylinders per 180 CY per class regardless of days)	Sampling must be in accordance with Tex-407-A. Two cylinders shall be tested at 7 days and if the average value is below the design strength as defined in Item 421 Table 8, the remaining 2 cylinders shall be tested at 28 days. If the average value of the 2 cylinders tested at 7 days meets the minimum design strength listed in Item 421 Table 8, the two remaining cylinders are not required to be tested.
CONCRETE	Slump	Tex-415-A		See Remarks	When the contract requires the project testing to be by the Engineer, the frequency and job control testing will be in accordance with the item of work. • Sample in accordance with Tex-407-A. • Perform slump and temperature tests on the same load from which strength test specimens are made. • Perform entrained air test only when entrained air concrete is specified in the plans. Check temperature of every load for bridge slabs and mass concrete placements. Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.
	Entrained Air (A)	Tex-416-A or Tex-414-A		1 test for every 10 contractor job control tests	
	Temperature of Concrete (A)	Tex-422-A			
	Slab Thickness and Depth of Reinforcement	Tex-423-A Part II	During dry run and during concrete placement (Bridge decks and direct traffic culverts)	1 per span	Min. 6 – Max. 18 locations per span.

TABLE III – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	These Project Tests may be used for one or more projects being furnished concrete from the same plant during the same period.
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: • Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed. • Concrete (structural): Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled. Tests for slump, air, and temperature should be done often to ensure the consistent control of the concrete production.
E	Each test performed that is based on a quantity of material is considered "or fraction thereof" for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE IV – HYDRAULIC CEMENT CONCRETE – NON-STRUCTURAL CONCRETE (Classes: A, B, or E)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (B)	FREQUENCY OF SAMPLING (C)	REMARKS
CONCRETE	Compressive Strength (A)	Tex-418-A	At point of concrete placement	2 cylinders per 180 CY, per class	Sampling must be in accordance with Tex-407-A. Strength will be determined by 7-day specimens.
MIX DESIGN	Compliance with the Standard Specification		At source if not approved.	Min. 1 design per class, per source	Verify if cement, fly ash, slag cement, and chemical admixture sources are listed in the Material Producer Lists. If not, sample and submit to CSTM&P for testing. Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT).
SILICA FUME	Compliance with DMS-4630		Railroad car, truck, bags or silos	1 test per project, per class (for each type and brand)	Sample in accordance with Tex-320-D.
METAKAOLIN	Compliance with DMS-4635		Railroad car, truck or silos	1 test per project, per class (for each type and brand)	

TABLE IV – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: • Concrete (miscellaneous): Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled.
C	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P, or HES)						
				PROJECT TESTS		
MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	REMARKS
MINERAL AGGREGATE	COARSE AGGREGATE	Decantation	Tex-406-A	From stockpile at concrete plant	Each 20,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
		Sieve Analysis **(A)**	Tex-401-A		As necessary for control	Sample in accordance with Tex-400-A. Test combined aggregate when used.
		Deleterious Materials	Tex-413-A		Each 20,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
		L.A Abrasion **(A)**	Tex-410-A		Two, each source	Verify the value of the source, as listed in the current CRSQC, meets the project specifications. If not, sample and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-400-A. **(C)**
		5-Cycle Magnesium Sulfate Soundness **(A)**	Tex-411-A			
	FINE AGGREGATE	Sand Equivalent	Tex-203-F	From stockpile at concrete plant	Each 3,000 CY of concrete (Each source or combination of sources)	Sample in accordance with Tex-400-A. Test combined aggregate when used. No less than one per week's production
		Organic Impurities	Tex-408-A		1 per project, per source	Sample in accordance with Tex-400-A.
		Sieve Analysis **(A)**	Tex-401-A		As necessary for control	Sample in accordance with Tex-400-A. Test combined aggregate when used.
		Fineness Modulus **(B)**	Tex-402-A			
		Deleterious Material **(B)**	Tex-413-A		Each 20,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
		Acid Insoluble **(A)**	Tex-612-J		1 per project, per source	Verify the value of the source, as listed in the current CRSQC, meets the project specifications. If not, sample and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-400-A. **(C)**
MIX DESIGN		Compliance with the Standard Specifications Item 421.4.A		At source, if not approved	Min. 1 design, per class, per source	Verify if cement, fly ash, ground granulated blast furnace slag, and admixture sources are listed in the Material Producer List. If not, sample and submit to CSTM&P for testing. Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT).

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P, or HES)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	REMARKS
SILICA FUME	Compliance with DMS-4630		Railroad car, truck, bags or silos	1 per project per class of concrete (For each type and brand)	Sample in accordance with Tex-320-D.
METAKAOLIN	Compliance with DMS-4635		Railroad car, truck or silos	1 per project per class of concrete (For each type and brand)	Sample in accordance with Tex-320-D.
JOINT MATERIAL	Compliance with DMS-6310		Sampled at jobsite if not sampled at source by CSTM&P; tested by CSTM&P. See remarks.	1 per batch or shipment	Sample in accordance with Tex-500-C. Sampling may be waived when the source is listed in the Material Producer List for Joint Sealers. **(C)**
CURING COMPOUND	Compliance with DMS-4650		Sampled at jobsite; tested by CSTM&P. See remarks.	When requested by CST	Only products listed in the Material Producer List for Concrete Curing Compounds will be allowed. When sample is requested by CST, sample in accordance with Tex-718-I. Ensure container has been agitated and mixed prior to sampling. **(C)**
EVAPORATION RETARDANTS	Compliance with DMS-4650				Only products listed in the Material Producer List for Evaporation Retardants will be allowed. **(C)**
REINFORCING STEEL	Compliance with the Std. Specifications & Spec. Provisions	As Specified			Only materials from CSTM&P approved sources listed in the Material Producer List for Reinforcing Steel Mills and Seven Wire Steel Strand will be accepted. **(C)**
MULTIPLE PIECE TIE BARS	Compliance with DMS-4515	Tex-712-I	Sampled at jobsite if not sampled at source by CSTM&P; tested by CSTM&P. See remarks.	Refer to Tex-711-I for sampling rates	Only materials from CSTM&P approved sources listed in the Material Producer List for Multiple Piece Tie-bars for Concrete Pavements will be allowed. Sample in accordance with Tex-734-I.
EPOXY	Compliance with DMS-6100		Sampled at jobsite if not pre-approved by CSTM&P. See remarks.	1 batch per shipment	Verify the source is listed in the Material Producer List for Epoxies and Adhesives. If not, sample and test prior to use in accordance with DMS-6100. Sample in accordance with Tex-734-I. **(C)**

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TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P, or HES)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	REMARKS
CONCRETE	Strength **(A) (B)**	Tex-448-A or Tex-418-A	At point of concrete placement	2 cylinders for every 10 contractor job control tests	Sampling shall be in accordance with Tex-407-A. When the contract requires the project testing to be by the Engineer, the frequency and job control testing will be in accordance with the item of work. Split sample verification testing used when contractor performs job control testing. When job control testing by the contractor is waived by the plans, the frequency of sampling shall be one test (2 specimens) for each 3,000 SY of concrete or fraction thereof or per day and split sample verification testing shall be waived. Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.
	Slump	Tex-415-A	At time and location strength specimens are made	See Remarks	Slump is not required for slip-formed pavement. When the contract requires the project testing to be by the Engineer, the frequency and job control testing will be in accordance with the item of work. • Sample in accordance with Tex-407-A. • Perform slump and temperature tests on the same load from which the strength specimens are made. • Perform entrained air test only when entrained air concrete is specified in the plans. Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.
	Entrained Air **(A)**	Tex-416-A or Tex-414-A		1 test for every 10 contractor job control tests.	
	Temperature	Tex-422-A			
	Thickness	Tex-423-A	Center of paving machine	Every 500 feet	Methods other than Tex-423-A may be shown on the plans.
	Ride Quality Surface Test Type B. **(A)**	Tex-1001-S	Final riding surface of travel lanes		Engineer may verify contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency. Results from surface test Type A are not required to be reported.

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Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE V – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	When a project test does not meet the specified strength requirements and a reduced pay factor is assigned, the analysis shall be documented on the Letter of Certification of Materials Used.
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347 and 348) (All testing as noted in Table VI may be waived for exempt production as defined by specification.)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	**TEST FOR**	**TEST NUMBER**	**LOCATION (Per Design)**	**FREQUENCY OF SAMPLING (E)**	**REMARKS**
COARSE AGGREGATE	L. A. Abrasion **(A)**	Tex-410-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. **(C)**
	Magnesium Sulfate Soundness **(A)**	Tex-411-A			
	Surface Aggregate Classification **(A)**	Tex-499-A		1 per project, per source	
	Micro Deval	Tex-461-A		1 per project, per aggregate source	Not required when the Rated Source Soundness Magnesium loss is 15 or less as listed in the current published BRSQC. If testing is required, sample in accordance with Tex-221-F.
COMBINED AGGREGATE	Sand Equivalent	Tex-203-F	Stockpiles, hot bins or feeder belts	1 per project, per source, per design	Does not apply to Item 342. Sample in accordance with Tex-221-F. The timing of when the test is performed is at the discretion of the Engineer.
ASPHALT BINDER	Compliance with Item 300 Binder & Tack Coat **(A)**		Sampled, tested and pre-approved by CSTM&P. Project test sampled at the Plant for Binder & Road for Tack Coat	1 each for binder and tack coat per project, per grade, per source	Test a minimum of one sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.
MIX DESIGN	Compliance with applicable specification	Tex-204-F	At source (if not approved)	Min 1 design per Mix Type and Asphalt Grade	Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted on individual materials as necessary for control.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347 and 348) (All testing as noted in Table VI may be waived for exempt production as defined by specification.)							
			PROJECT TESTS		PROJECT INDEPENDENT ASSURANCE TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY (Per Design)	LOCATION	FREQUENCY	REMARKS
COMPLETE MIXTURE	Asphalt Content (%) **(A)**	Tex-236-F	Engineer Truck Sample **(D)**	Minimum 1 per Lot			Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Voids in Mineral Aggregates (VMA)	Tex-207-F	Truck Sample Plant Produced **(D)**	1 per Sublot	Truck	1 per 10 Lots only if compactor is shared by Contractor and State	Sample in accordance with Tex-222-F. Does not apply to Item 342, Permeable Friction Course. Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.
	Gradation **(A)**	Tex-236-F	Engineer Truck Sample **(D)**	Minimum 1 per 12 Sublots **(E)**			Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Boil Test	Tex-530-C	Truck Sample	1 per project			Sample in accordance with Tex-222-F. Unless waived by the Engineer.
	Indirect Tensile Strength – Dry	Tex-226-F					Sample in accordance with Tex-222-F. Unless waived by the Engineer. Does not apply to Items 342, 346, and 348.
	Moisture Content	Tex-212-F Part II	Engineer Truck Sample				Sample in accordance with Tex-222-F.
	Lab Molded Density **(A)**	Tex-207-F	Truck Sample **(D)**	1 per Sublot 1 per Lot for Item 347	Truck	1 per 10 Lots only if compactor is shared by Contractor and State	Sample in accordance with Tex-222-F. Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.
	Drain Down Test **(A)**	Tex-235-F	Engineer Truck Sample	1 per project 1 per Lot for Item 342			Sample in accordance with Tex-222-F. Not required for Item 341 and Item 344.
	Hamburg Wheel Test **(A)**	Tex-242-F	Engineer Truck Sample	1 per project			Sample in accordance with Tex-222-F. Sample during production. Does not apply to Item 348.
	Overlay Test	Tex-248-F	Engineer Truck Sample	1 per project			Sample in accordance with Tex-222-F. Does not apply to Items 341, 344, and 348.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347, and 348) (All testing as noted in Table VI may be waived for exempt production as defined by specification.)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY (Per Design)	REMARKS
ROADWAY	In-Place Air Voids (A)	Tex-207-F	Roadway (D)	2 cores per Sublot	Two cores taken per Sublot and averaged. Sample in accordance with Tex-222-F. Does not apply to Items 342, 347, and 348.
ROADWAY	Segregation Profile (A)	Tex-207-F Part V	Roadway	1 per project	Not required when Contractor uses thermal imaging system. Does not apply to Items 342, 347, and 348.
	Joint Density (A)	Tex-207-F Part VII	Roadway	1 per project	
	Thermal Profile	Tex-244-F	Immediately behind paver	1 per project	Not required when Contractor uses thermal imaging system.
	Ride Quality Test Type B (A)	Tex-1001-S	Final riding surface of travel lanes	1 per project	Engineer may verify Contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency. Results for surface test Type A are not required to be reported.
	Permeability	Tex-246-F	Roadway	1 per project	Only applies to Items 342, 347, and 348.
FABRIC UNDERSEAL	Compliance with DMS-6220		Sampled, tested, and approved by CSTM&P		Sampling must be in accordance with Tex-735-I. Verify the source is listed in the current Material Producer List for Silt Fence, Filter Fabric and Fabric Underseals. If not sample and test prior to use in accordance with DMS-6220.

TABLE VI – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications.
B	Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	Perform random sampling as specified in Tex-225-F, Random Selection of Bituminous Mixture Samples.
E	Each test performed that is based on a quantity of material is considered "or fraction thereof" for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VII – ASPHALT CONCRETE PAVEMENT (Items 334) (Refer to DMS-9210, Limestone Rock Asphalt (LRA) for testing requirements for Item 330.)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY (Per Design) (F)	REMARKS
COARSE AGGREGATE	L. A. Abrasion **(A)**	Tex-410-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. **(D)**
	Magnesium Sulfate Soundness **(A)**	Tex-411-A			
	Micro Deval	Tex-461-A			Sample in accordance with Tex-221-F. Testing frequency may be reduced or eliminated based on a satisfactory test history.
	Surface Aggregate Classification **(A)**	Tex-499-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. SiteManager Quality Monitoring test documentation is accomplished by attaching an approved mix design.
COMBINED AGGREGATE	Sand Equivalent	Tex-203-F	Stockpiles, hot bins or feeder belts	1 per project, per source	Sample in accordance with Tex-221-F. The timing of when the test is performed is at the discretion of the Engineer.
ASPHALT BINDER	Compliance with Item 300 Binder & Tack Coat **(A) (C)**		Sampled, tested and pre-approved by CSTM&P. Project test sampled at the Plant for Binder & Road for Tack Coat	1 each for binder and tack coat per project, per grade, per source	Test a minimum of one sample from production. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.
MIX DESIGN	Compliance with applicable specification	Tex-204-F	At source (if not approved)	Min 1 design per Mix Type and Asphalt Grade	Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted in individual materials as necessary for control.
COMPLETE MIXTURE	Asphalt Content (%) **(A)**	Tex-236-F	Engineer Truck Sample **(E)**	Minimum of 1 per 5,000 tons	Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Voids in Mineral Aggregates (VMA)	Tex-207-F	Truck Sample Plant Produced **(E)**	1 per 5,000 tons	Sample in accordance with Tex-222-F.
	Gradation **(A)**	Tex-236-F	Truck Sample	Minimum 1 per 5,000 tons	Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Boil Test	Tex-530-C		1 per project	Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VII – ASPHALT CONCRETE PAVEMENT (Items 334) (Refer to DMS-9210, Limestone Rock Asphalt (LRA) for testing requirements for Item 330.)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY (Per Design) (F)	REMARKS
COMPLETE MIXTURE	Moisture Content	Tex-212-F Part II	Truck Sample	1 per 5,000 tons	Sample in accordance with Tex-222-F. Performed by CSTM&P at the point of production for payment calculations.
	Hydrocarbon-Volatile Content	Tex-213-F		1 per 5,000 tons	Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.
	Lab Molded Density **(A)**	Tex-207-F		1 per 5,000 tons	Sample in accordance with Tex-222-F.
	Hveem Stability **(A)**	Tex-208-F		1 per 5,000 tons	Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.
ROADWAY	Ride Quality Test Type B **(A)**	Tex-1001-S	Final riding surface of travel lanes		Engineer may verify Contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency. Results from surface test Type A are not required to be reported.

TABLE VII – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.
B	Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project.
C	Or as called for in the Specifications.
D	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
E	Perform random sampling as specified in Tex-225-F, Random Selection of Bituminous Mixture Samples.
F	Each test performed that is based on a quantity of material is considered "or fraction thereof" for calculating number of tests.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VIII – ASPHALT CONCRETE PAVEMENT (Item 340)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY	REMARKS
COARSE AGGREGATE	L. A. Abrasion **(A)**	Tex-410-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. **(C)**
	Magnesium Sulfate Soundness **(A)**	Tex-411-A			
	Micro Deval	Tex-461-A	Stockpile **(B)**	1 per project, per source	Sample in accordance with Tex-221-F. Testing frequency may be reduced or eliminated based on a satisfactory test history.
	Surface Aggregate Classification **(A)**	Tex-499-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC, meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. **(C)**
COMBINED AGGREGATE	Sand Equivalent	Tex-203-F	Stockpiles, hot bins or feeder belts	1 per project, per design	Sample in accordance with Tex-221-F.
ASPHALT BINDER	Compliance with Item 300 Binder & Tack Coat **(A)**		Sampled, tested and pre-approved by CSTM&P. Plant for Binder & Road for Tack Coat	1 each for binder and tack coat per project, per grade, per source	Test a minimum of 1 sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.
MIX DESIGN	Compliance with applicable specification	Tex-204-F	At source (if not approved)	Min. 1 design per Mix Type and Asphalt Grade	Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted in individual materials as necessary for control.
COMPLETE MIXTURE	Asphalt Content (%)	Tex-236-F	Truck Sample **(D)**	Minimum of 1 per day	Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Voids in Mineral Aggregates (VMA)	Tex-207-F	Truck Sample Plant Produced **(D)**	1 per day	Sample in accordance with Tex-222-F.
	Gradation **(A)**	Tex-236-F	Truck Sample	Minimum 1 per day	Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Boil Test	Tex-530-C		1 per project	Sample in accordance with Tex-222-F. Unless waived by the Engineer.
	Indirect Tensile Strength – Dry	Tex-226-F		1 per project, per design	Sample in accordance with Tex-222-F. Unless waived by the Engineer.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE VIII – ASPHALT CONCRETE PAVEMENT (Item 340)					
			PROJECT TESTS		
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	LOCATION	FREQUENCY	REMARKS
COMPLETE MIXTURE	Lab Molded Density (A)	Tex-207-F	Truck Sample	1 per day	Sample in accordance with Tex-222-F.
	Hamburg Wheel Tracker (A)	Tex-242-F		1 per project	Sample in accordance with Tex-222-F. Sample during production.
ROADWAY	Air Voids (A)	Tex-207-F	Selected by the Engineer (D)	1 per day (2 Cores)	Sample in accordance with Tex-222-F.
	Ride Quality Test Type B (A)	Tex-1001-S	Final riding surface of travel lanes		Engineer may verify Contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency. Results from surface test Type A are not required to be reported.
FABRIC UNDERSEAL	Compliance with DMS-6220		Sampled, tested, and approved by CSTM&P		Sample in accordance with Tex-735-I. Verify the source is listed in the current Material Producer List for Silt Fence, Filter Fabric and Fabric Underseals. If not sample and submit to CSTM&P for testing prior to use in accordance with DMS-6220.

TABLE VIII – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications.
B	Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	Perform random sampling as specified in Tex-225-F, Random Selection of Bituminous Mixture Samples.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE IX – MICROSURFACING (Item 350)

			PROJECT TESTS		
MATERIAL OR PRODUCT	**TEST FOR**	**TEST NUMBER**	**LOCATION OF SAMPLING**	**FREQUENCY (Per Design)**	**REMARKS**
AGGREGATE	5-Cycle Magnesium Sulfate Soundness **(A)**	Tex-411-A	Stockpile **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing at 1 per project, per source. **(C)**
	Gradation	Tex-200-F Part II		1 per project, per source	Sample in accordance with Tex-221-F.
	Crushed Face Count	Tex-460-A		1 per project, per source	Sample in accordance with Tex-221-F.
	Acid Insoluble **(A)**	Tex-612-J		1 per project, per source	Verify the value of the source, as listed in the current BRSQC, meets the project specifications. If not, sample and submit to CSTM&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-221-F. **(C)**
	Surface Aggregate Classification	Tex-499-A	Stockpile, or BRSQC **(B)**	1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CSTM&P for testing at 1 per project, per source. **(C)**
COMBINED BLEND	Sand Equivalent	Tex-203-F	Stockpile **(B)**	1 per project, per source	Sample in accordance with Tex-221-F.
ASPHALT BINDER	Compliance with Item 300 Binder & Tack Coat **(A)**		Sampled, tested, and pre-approved by CSTM&P. Project test sampled at the Plant for Binder & Road for Tack Coat	1 each for binder and tack coat per project, per grade, per source	Test a minimum of one sample during production. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at microsurfacing machine in accordance with Tex-500-C, Part III. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.
CEMENT	Compliance with DMS-4600				Verify the source is listed in the current Material Producer List for Cement. If not, sample and submit to CSTM&P for testing prior to use in accordance with DMS-4600.
COMPLETE MIX	Asphalt Content	Tex-236-F	During production	1 per day	Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.
	Gradation	Tex-200-F Part II Tex-236-F			Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven use at a minimum of one per project.

This is a guide for minimum sampling and testing.
Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE IX – FOOTNOTES	
A	When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications.
B	Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.
C	Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.
D	Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.

JEFFERSON COUNTY, TEXAS

CONSTRUCTION PLANS
FOR
SIPHON CONTROL STRUCTURES
AT
OILCUT DITCH & SALT BAYOU
GULF INTRACOASTAL WATERWAY

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUMMARY SHEET
3	GENERAL NOTES
4	PROJECT LAYOUT
5-6	OILCUT DITCH PLAN & PROFILE
7-10	OILCUT DITCH SIPHON DETAILS
11	SALT BAYOU PLAN & PROFILE
12-15	SALT BAYOU SIPHON DETAILS
16	LEVEE DETAIL
17	FLAP GATE DETAIL
18	WALE DETAIL

PROJECT LOCATION
GIWW SIPHON
CITY: BEAUMONT | COUNTY: JEFFERSON | STATE: TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN: 079 | PN: 1012 | DRAWING | SHEET: 01

LJA Engineering, Inc.
Public Infrastructure
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FRN - F-1386

CLIENT
JEFFERSON COUNTY

TITLE SHEET

08/17/16
DATE

Wallace R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

OILCUT DITCH

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY
100	001	PREPARING ROW (DITCH)	AC	3.00
110	001	EXCAVATION (DITCH)	CY	13,573.00
164	001	SEEDING FOR EROSION CONTROL (DITCH)	SY	6,221.00
400	001	EXCAVATION FOR SIPHON STRUCTURE	CY	81.00
400	002	EXCAVATION FOR ARTICULATED CONCRETE MAT	CY	1,211.00
400	003	CEMENT STABILIZED BACKFILL	CY	77.00
403	001	TEMPORARY SPECIAL SHORING	SF	2,016.00
500	001	MOBILIZATION	LS	1.00
618	002	HIGH DENSITY POLYETHELENE PIPE (36" HDPE)(HDD METHOD)	LF	3,200.00
2000	001	FILTER FABRIC	SF	6,016.00
8000	001	DEWATERING	LS	1.00
9000	001	ARTICULATED CONCRETE MATS (6")	SY	668.00
9010	001	VINYL SHEET PILE (SG-425)	SF	900.00
9010	002	VINYL SHEET PILE (SG-825) WITH WALE SYSTEM	SF	1,750.00
9020	001	SIPHON STRUCTURE (HEIGHT=9.0')/W STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.0')/W STUB-OUT & FLAP GATE	EA	4.00

SALT BAYOU

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY
100	001	PREPARING ROW (DITCH)	AC	0.10
110	001	EXCAVATION (DITCH)	CY	475.00
132	001	EMBANKMENT (TY D)	CY	789.00
164	001	SEEDING FOR EROSION CONTROL (DITCH)	SY	83.00
400	001	EXCAVATION FOR SIPHON STRUCTURE	CY	76.00
400	002	EXCAVATION FOR ARTICULATED CONCRETE MAT	CY	1,297.00
400	003	CEMENT STABILIZED BACKFILL	CY	238.00
403	001	TEMPORARY SPECIAL SHORING	SF	2,120.00
500	001	MOBILIZATION	LS	1.00
618	001	HIGH DENSITY POLYETHELENE PIPE (36" HDPE)	LF	32.00
618	002	HIGH DENSITY POLYETHELENE PIPE (36" HDPE)(HDD METHOD)	LF	3,320.00
2000	001	FILTER FABRIC	SF	12,404.00
8000	001	DEWATERING	LS	1.00
9000	001	ARTICULATED CONCRETE MATS (6")	SY	1,378.00
9010	001	VINYL SHEET PILE (SG-425)	SF	1,320.00
9010	002	VINYL SHEET PILE (SG-825) WITH WALE SYSTEM	SF	1,750.00
9020	001	SIPHON STRUCTURE (HEIGHT=9.0')/ W STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.0')/ W STUB-OUT & FLAP GATE	EA	4.00
9020	003	SIPHON STRUCTURE (HEIGHT=6.0'))/W STUB-OUT & FLAP GATE	EA	2.00
9030	001	BREAKWATER (INSTALL)	CY	408.00
9030	002	BREAKWATER (REMOVE)	CY	110.00

PROJECT LOCATION
CIWW SIPHON | COUNTY | STATE
CITY | BEAUMONT | JEFFERSON | TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079 | PN 1012 | DRAWING | SHEET 02

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CLIENT JEFFERSON COUNTY

SUMMARY SHEET

08/17/16 DATE

Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS · WALLACE R. WILSON · 84857 · LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

General Notes

The Contractor shall have full responsibility for testing all materials incorporated in the project at his sole expense.

Contractor shall assume ownership for all designated construction waste material and dispose of it at a place off of Jefferson County property, as approved by the Engineer.

Contractor shall procure all the necessary city and/or county permits and licenses.

The responsibility for the construction surveying on this contract will be the Contractor's responsibility. No additional compensation will be paid the Contractor for surveying on this project.

Working days will be charged Sunday through Saturday, including Holidays, regardless of weather conditions, material availability, or other conditions not under the control of the Contractor.

All items not specifically covered in these General Notes and Specifications shall be governed by the TxDOT Standard Specifications Manual, 2014 Edition.

Item 100 Preparing Right of Way

Prepare the right of way and designated easements for construction operations by removing and disposing of all vegetation and organic material or anything that would hinder the construction of this Project. All materials removed shall not be reused in the embankment or any part of the construction of this project.

Item 110 Excavation

Excavate areas as shown on plans or as directed by the Engineer to the lines, grades, and typical sections on the plans. All excavation, except grass and other organic matter to be disposed of shall be used as fill on this project.

Item 132 Embankment

Compaction shall be "Ordinary" compaction and maximum lift thickness shall be 8" loose.

Item 164 Seeding for Erosion Control

Provide and install a mixture of 2500 pounds per acre of cellulose fiber mulch, 3 pounds of pure live Bermuda grass seed per acre, fertilizer at a rate of 100 pounds of Nitrogen per acre and enough water to make the mixture sprayable to the areas to be seeded. Fertilizer shall be subsidiary to this Item.

Item 400 Excavation and Backfill for Structures

Cement stabilized backfill shall be cohesionless sand with 3 sacks of cement / C.Y. based on dry weight of sand.

Item 403 Temporary Special Shoring

Furnish and place temporary shoring for excavations deeper than 5 foot. Provide vertical or sloped cuts, benches, shields, support systems, that provide the necessary protection in accordance with OSHA Standards and Interpretations, 29 CFR 1926, Subpart P, "Excavations".

Item 618 Conduit

Conduit pipe shall be high density polyethylene (HDPE) and have a minimum pressure rating of 100 psi.

HDPE installed by the Horizontal Directional Drilling (HDD) method shall have a 12° entry and exit angle and 720' radius on curve.

Item 2000 Filter Fabric

Furnish and install filter fabric in areas shown on the plans and according to the manufacturer's recommendations. Filter fabric shall conform to DMS-6200, "Filter Fabric", Type 2.

Item 8000 Dewatering

Contractor shall submit a dewatering plan to the Engineer prior to the beginning of construction.

Item 9000 Articulated Concrete Mats

Articulated concrete mats shall consist of open-cell blocks. Weight of blocks shall be 40 to 50 pounds per square foot with a nominal thickness of 6 inches. Articulated concrete mat shall be ArmorFlex Class 50-S or an approved equivalent. Articulated mats shall be butted up against the ends of the structures leaving no gap for erosion to occur.

Item 9010 Vinyl Sheet Pile

Vinyl Sheet Pile constructed with 9 foot structures shall have an allowable moment capacity greater than 7,000 foot pounds per foot. Sheet pile shall be ShoreGuard SG-825 or an approved equivalent.

Wale System shall be installed on Vinyl Sheet Pile SG-825. 4"x6" timber wales shall be constructed where indicated on plans. Installation and materials needed for installation, including timber wales, tie back rods, hardware and anchor blocks, shall be subsidiary to Item 9010 with no extra compensation.

Vinyl Sheet Pile constructed with 5 foot structures shall have an allowable moment capacity greater than 2,700 foot pounds per foot. Sheet pile shall be ShoreGuard SG-425 or an approved equivalent.

All Sheet Pile layout and orientation shall be submitted to Engineer for approval prior to construction.

Wale System shall be installed on Vinyl Sheet Pile SG-825. 4" x 6" timber wales shall be constructed where indicated on the plans. Installation and materials needed for installation, including timber wales, tie back rods, hardware and anchor blocks, shall be subsidiary to Item 9010 with no extra compensation.

Item 9020 Siphon Structure (Installed)

Siphon Structures shall be built and installed according to plan details. Any variation from the plan drawings must have prior approval from the Engineer. Siphon Structures have front side tabs that the vinyl sheet pile shall be attached to with ¾" stainless steel bolts, UV resistant polymer washers (both sides) and nuts at a spacing of 1 (one) foot apart. The rear side tabs shall be attached to 6" x 6" treated timbers that are driven a minimum of 4 feet into the ground at each tab location. The rear tabs shall have the same size bolts and bolting pattern as the vinyl sheet piling. Bolt configuration shall be submitted to the Engineer prior to drilling of holes. Note that bolt configuration will vary depending on sheet pile size and location of sheet pile relative to Siphon Structure.

Rolled aluminum stub out pipes and flanges, bottoms of Aluminum Outfall structures, and any metallic portion of the complete drainage structure that contacts cement stabilized backfill shall be bitumen coated on the outside for greater corrosion resistance. The Bitumen coating, UV resistant polymer washers as well as all timbers and hardware to install them shall be subsidiary to the Item 9020 Siphon Structure and no additional compensation will be due the Contractor for the cost of these items.

Siphon Structures have a 6 foot long rolled aluminum plate stub-out in the rear with 36" flange. The 36" plate shall be aluminum and be welded, if necessary, to be placed at full length and avoid joints or connections. This rolled plate and flange shall be considered part of the overall siphon structure and will be subsidiary to Item 9020 with no extra compensation.

Aluminum alloy anodes (N-1A) shall be attached to the aluminum structures with stainless steel bolts and UV resistant polymer washers, (each side) as per Engineer's directions to act as sacrificial anodes for the structures. These anodes shall also be subsidiary to Item 9020 Siphon Structure and no additional compensation will be due the Contractor for the cost or installation of these items.

Minimum weight of aluminum alloy anodes on each box structure shall be 6 lbs. Minimum weight on each flap gate shall be 3.5 lbs.

Material Properties of Structures shall be:

- Aluminum Plate = 5086 Alloy
- Aluminum Angle = 6061-T6 Alloy
- Grating shall be 1" x 3/16" Aluminum Serrated Bar Grating

The Contractor shall verify all dimensions before fabrication.

Item 9030 Breakwater

Breakwaters shall have a side slope of 2.5:1. The crown shall have the width of 3 feet. Rock will be 18" graded rock placed to ensure no large outcroppings occur. The top elevation of the breakwater shall be +4.0 NAVD.

Gradation shall be	Weight, #	% Lighter
	400-160	100
	160-80	50
	80-30	15

Breakwater removal shall be complete and no rocks left at the removal location. The breakwater material removed is to be relocated and reused as part of the proposed breakwater quantity.

PROJECT LOCATION
GIWW SIPHON
CITY BEAUMONT | COUNTY JEFFERSON | STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079 | PN 1012 | DRAWING | SHEET 03

LJA Engineering, Inc.
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FRN - F-1386

CLIENT JEFFERSON COUNTY

GENERAL NOTES

08/17/16 DATE

Walter R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS — WALLACE R. WILSON — 84857 — LICENSED PROFESSIONAL ENGINEER — 12-31-17

NO. DATE REVISION APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386

NO.	DATE	REVISION	APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386			

STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED
PROFESSIONAL ENGINEER

PROJECT LAYOUT

Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

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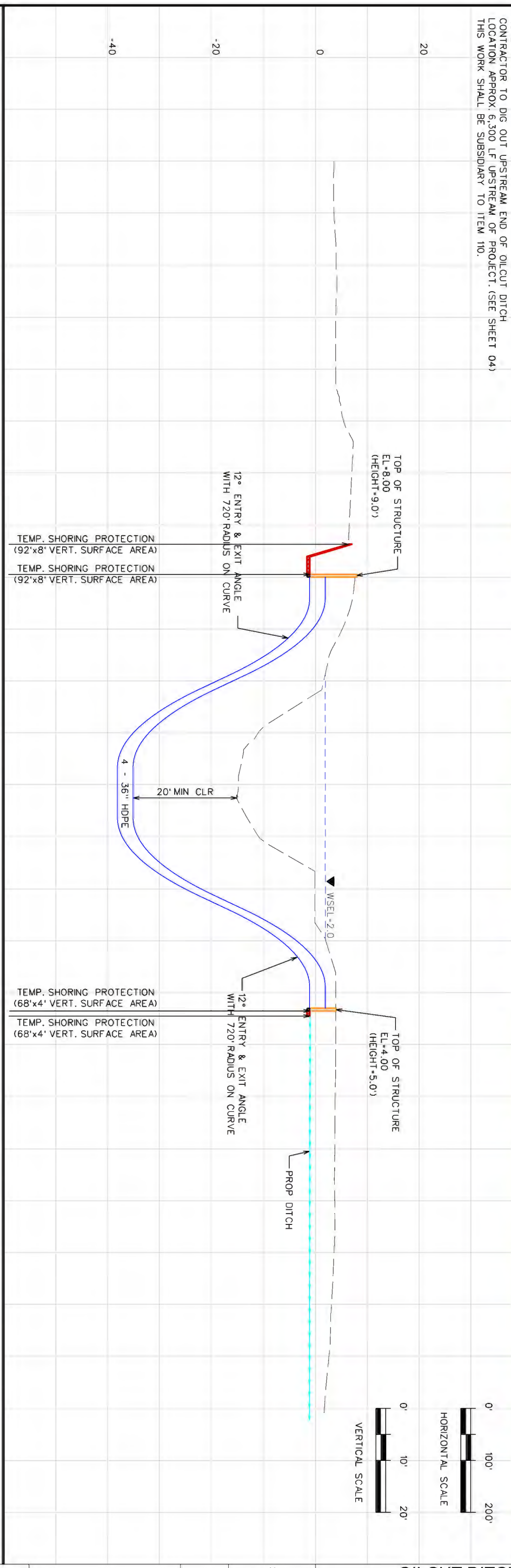
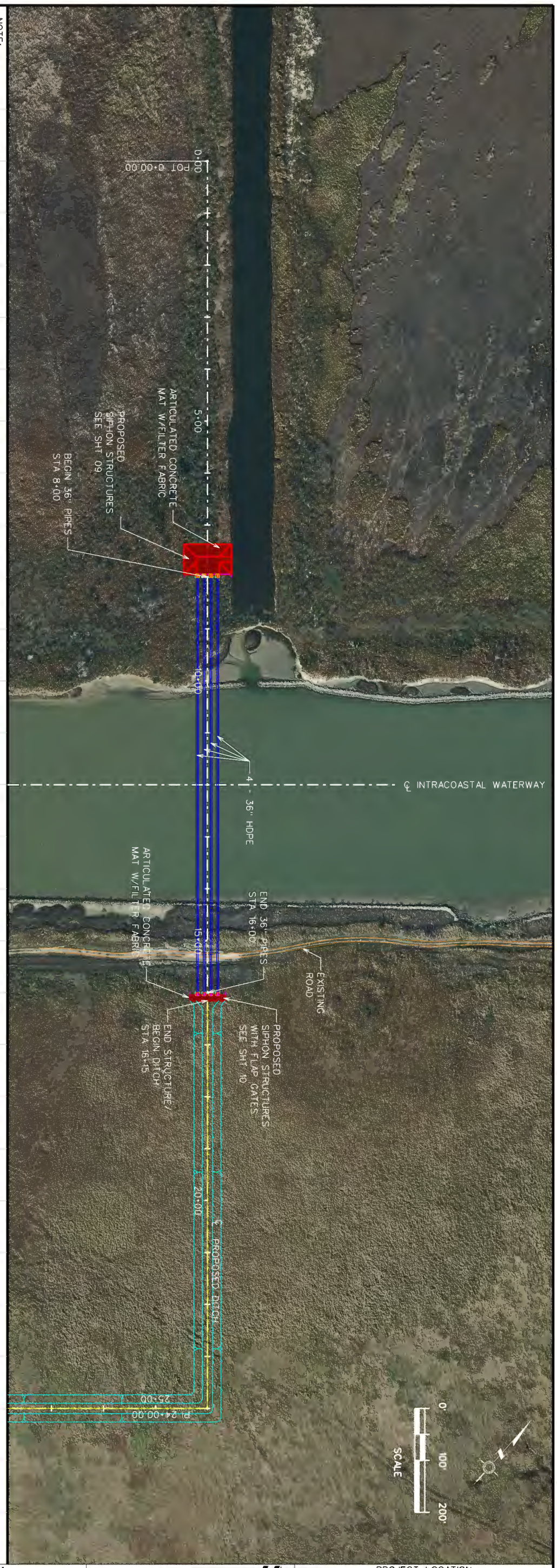
CLIENT
JEFFERSON COUNTY

PROJECT LOCATION			
GIWW SIPHON			
CITY	COUNTY		STATE
BEAUMONT	JEFFERSON		TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY			
CN	PN	DRAWING	SHEET
079	1012		04

NOTE:
CONTRACTOR TO DIG OUT UPSTREAM END OF OILCUT DITCH LOCATION APPROX. 6,300 LF UPSTREAM OF PROJECT. (SEE SHEET 04) THIS WORK SHALL BE SUBSIDIARY TO ITEM 110.





NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

STATE OF TEXAS · WALLACE R. WILSON · 84857 · LICENSED PROFESSIONAL ENGINEER

OILCUT DITCH PLAN & PROFILE

Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1862
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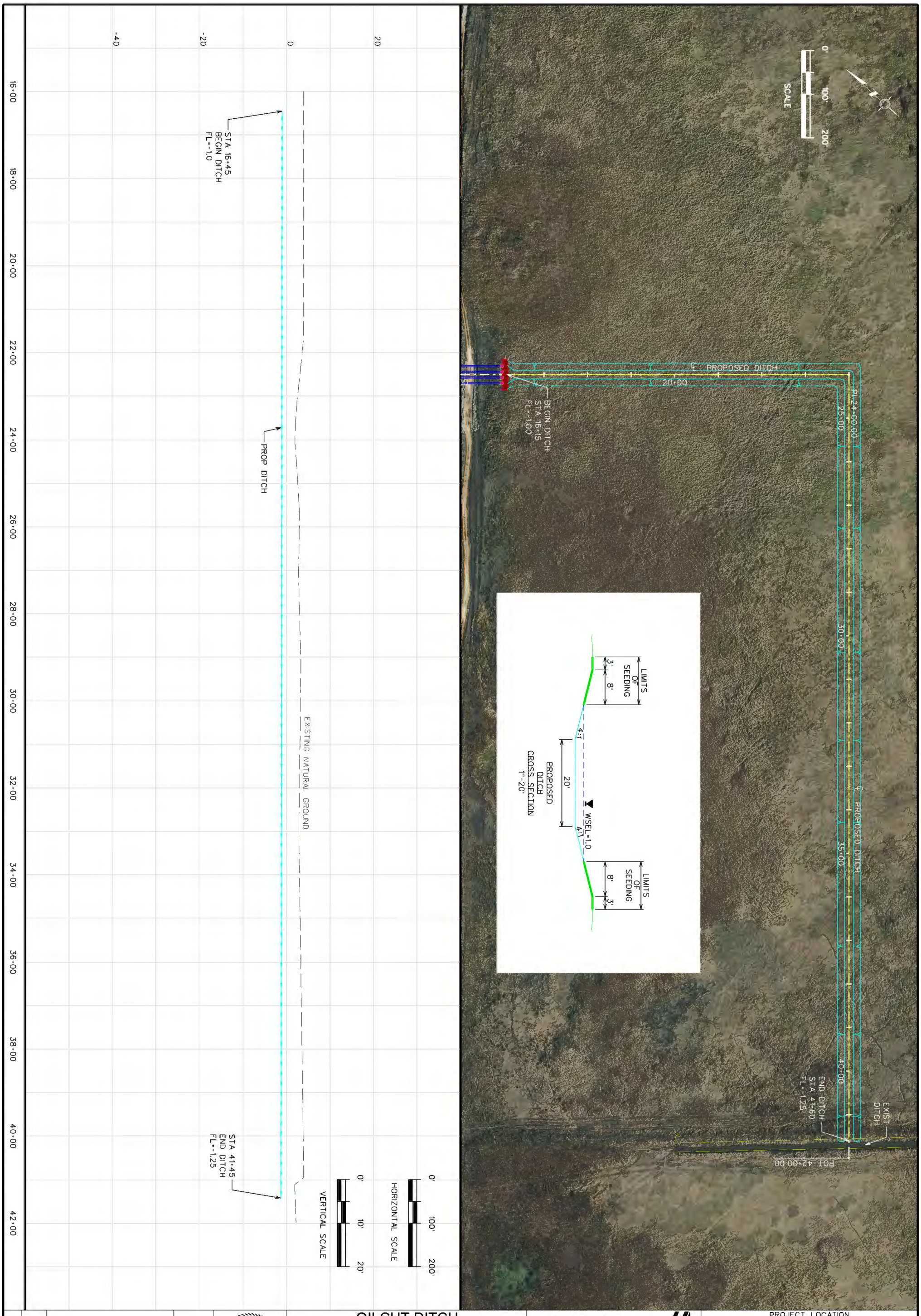
FRN - F-1386

CLIENT
JEFFERSON COUNTY

PROJECT LOCATION			
GIWW SIPHON			
CITY	COUNTY		STATE
BEAUMONT	JEFFERSON		TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY			
CN	PN	DRAWING	SHEET
079	1012		05



NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

STATE OF TEXAS · WALLACE R. WILSON · 84857 · LICENSED PROFESSIONAL ENGINEER

OILCUT DITCH PLAN & PROFILE

Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

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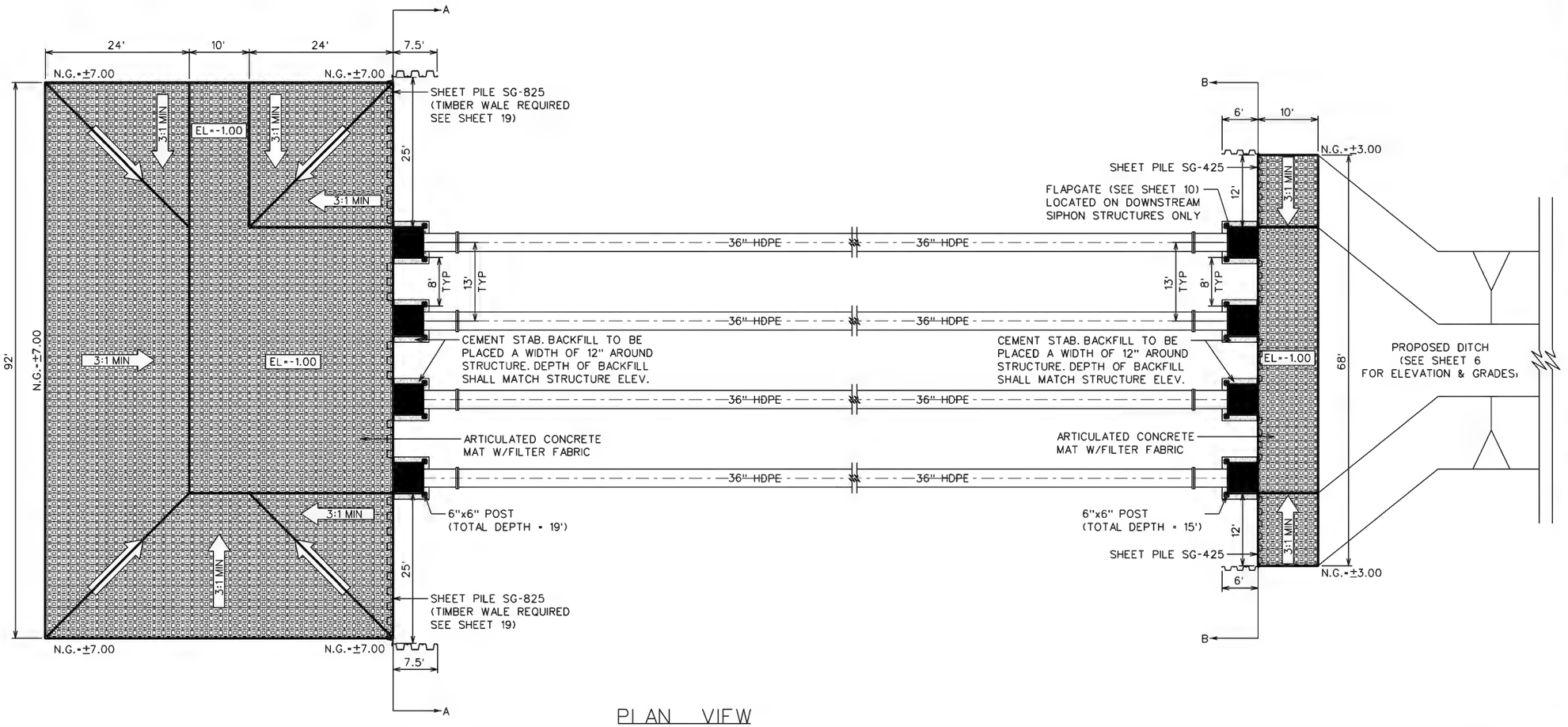
Fax 409.813.1916
FRN - F-1386

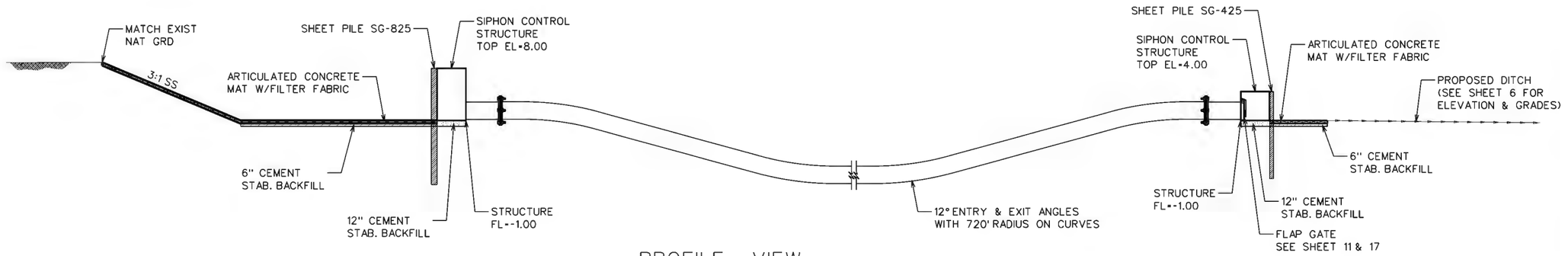
CLIENT
JEFFERSON COUNTY

PROJECT LOCATION			
GIWW SIPHON			
CITY	COUNTY		STATE
BEAUMONT	JEFFERSON		TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY			
CN	PN	DRAWING	SHEET
079	1012		06



PLAN VIEW

SCALE: 1"=20'



PROFILE VIEW

NOTE:
PROFILE NOT TO SCALE
SEE SHEET 5 FOR DETAILS ON PIPE ANGLES AND BENDS

HORIZ SCALE: 1"=20'
VERT SCALE: NTS

OILCUT DITCH
SIPHON DETAIL 1

Walter R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

DATE	08/17/16

PROJECT LOCATION

GIWW	SIPHON	STATE
CITY	COUNTY	TEXAS
BEAUMONT	JEFFERSON	

SITE ADDRESS:	INTRACOASTAL WATERWAY	
CN	PN	DRAWING	SHEET
079	1012		07

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905 Orleans Street
Beaumont, Texas 77701
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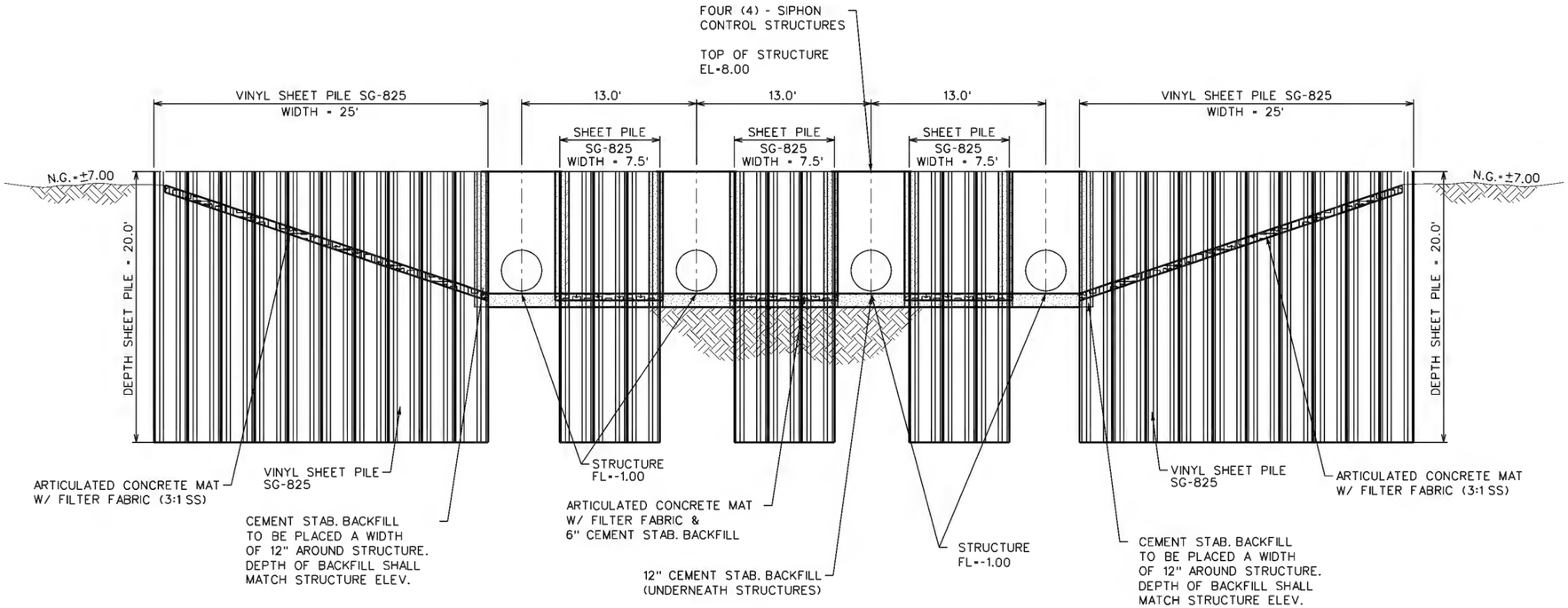
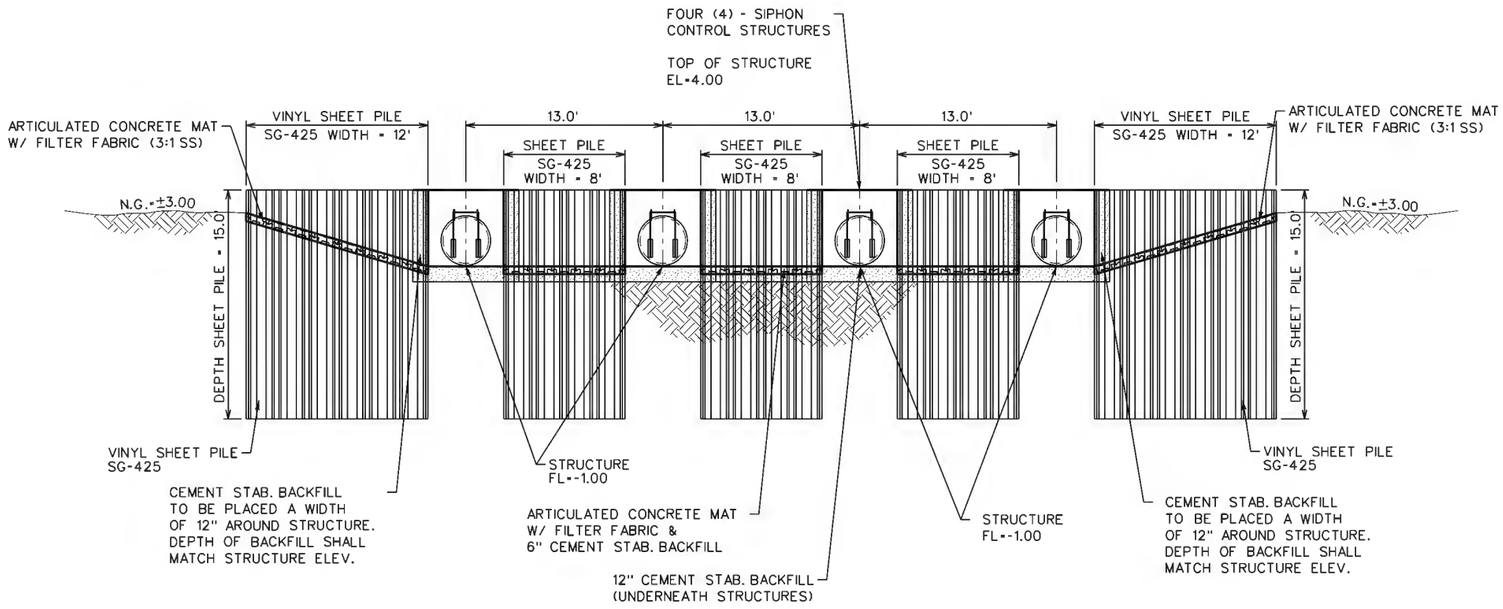
FRN-F-1386

CLIENT
JEFFERSON COUNTY



SECTION A-A



SECTION B-B

SCALE: 1"=10'

PROJECT LOCATION
GIWW SIPHON | CITY BEAUMONT | COUNTY JEFFERSON | STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY | CN 079 | PN 1012 | DRAWING | SHEET 08

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1662
Fax 409.813.1916
FRN-F-1386

CLIENT
JEFFERSON COUNTY

OILCUT DITCH
SIPHON DETAIL 2

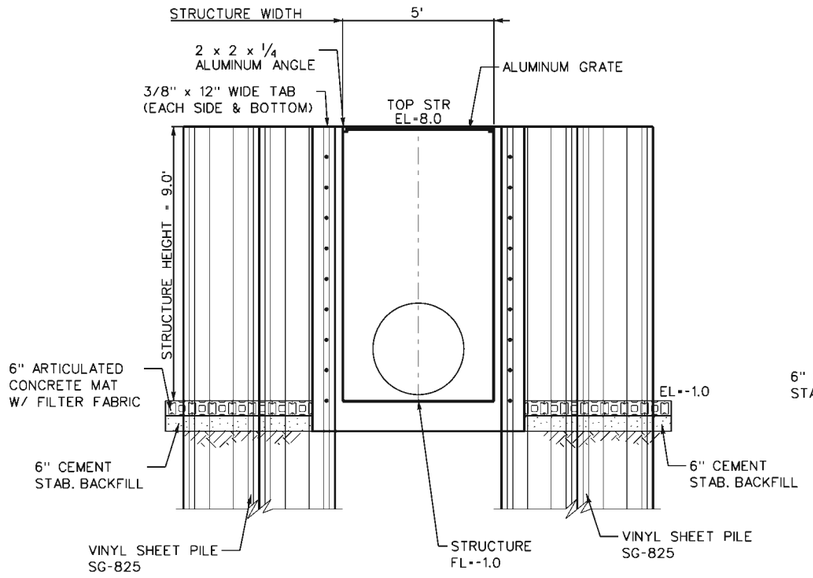
Walter R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

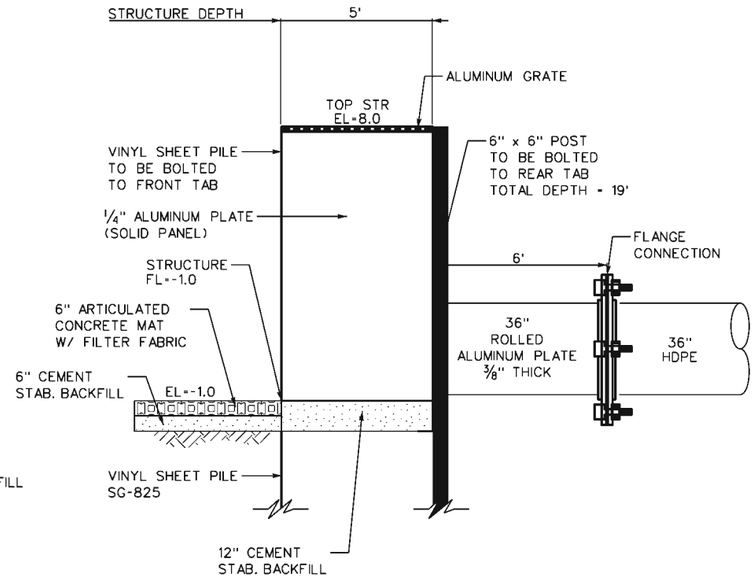
STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED
PROFESSIONAL ENGINEER

NO. | DATE | REVISION | APPROV.

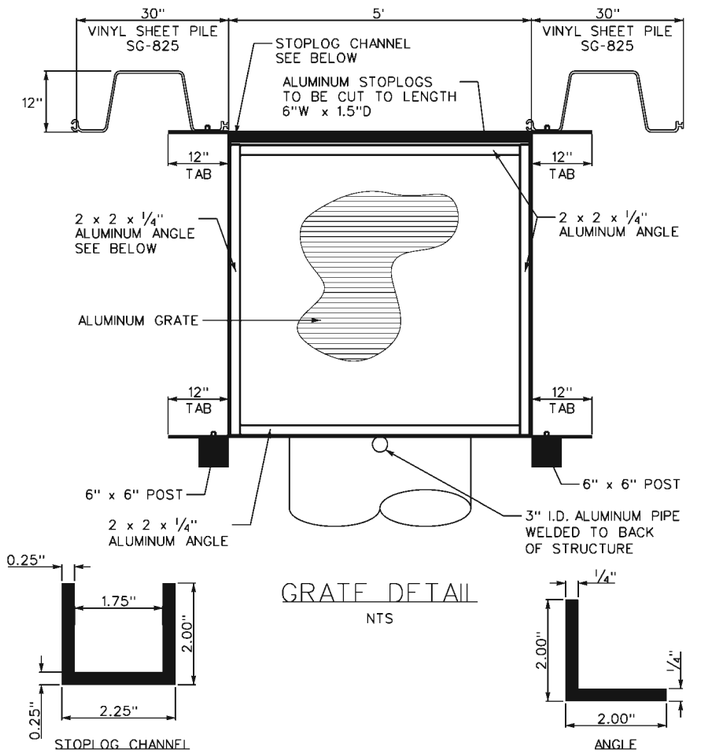
TEXAS REGISTERED ENGINEERING FIRM F-1386



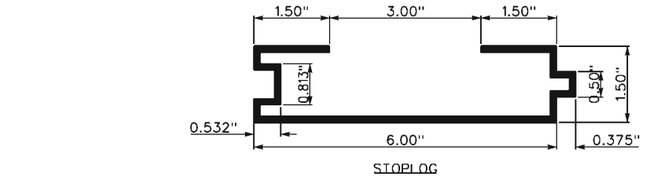
SIPHON CONTROL STRUCTURE
FRONT VIEW



SIPHON CONTROL STRUCTURE
SIDE VIEW



GRATE DETAIL
NTS



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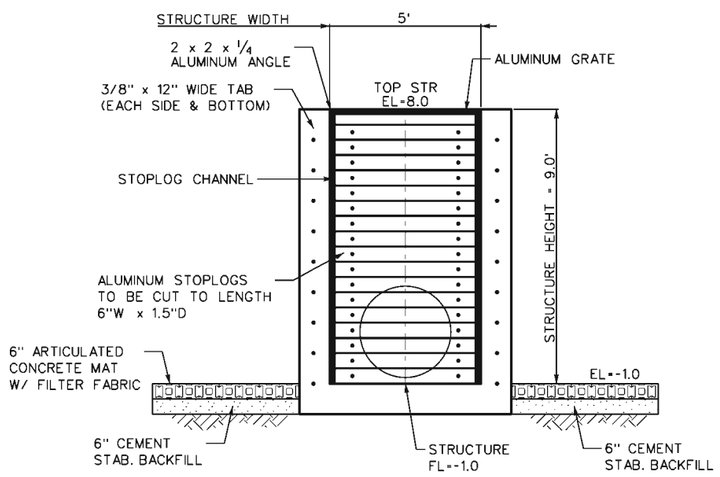
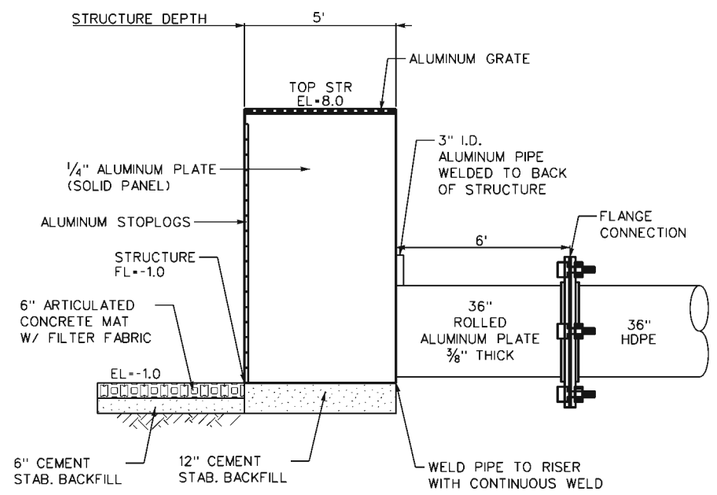


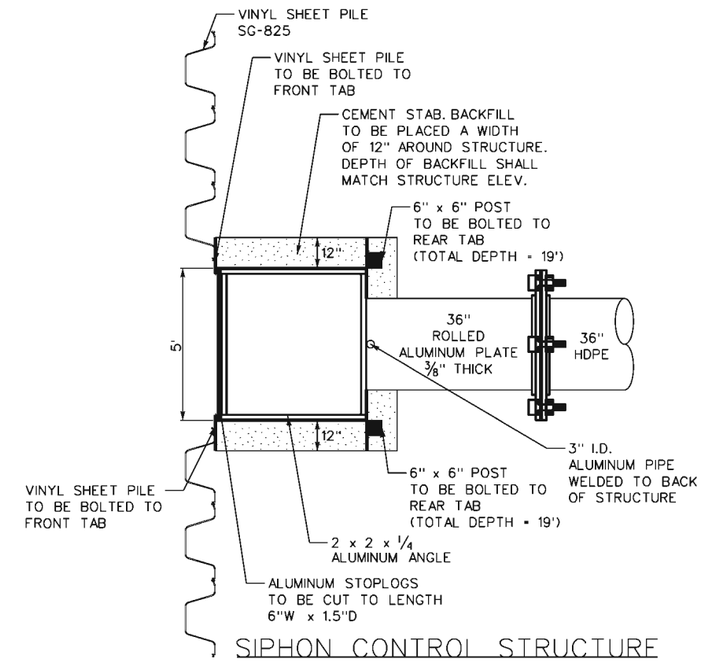
SIPHON CONTROL STRUCTURE
FRONT VIEW
(WITH STOPLOGS)



SIPHON CONTROL STRUCTURE
SIDE VIEW
(WITH STOPLOGS)

STRUCTURE HEIGHT= 9.0'

USE VINYL SHEET PILE SG-825



SIPHON CONTROL STRUCTURE
TOP VIEW

SCALE: 1"=5'

PROJECT LOCATION
GIWW SIPHON
CITY BEAUMONT COUNTY JEFFERSON STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079 PN 1012 DRAWING 09 SHEET 291

LJA Engineering, Inc.
Public Infrastructure
925 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1862
Fax 409.813.1916
FRN-F-1386

CLIENT JEFFERSON COUNTY

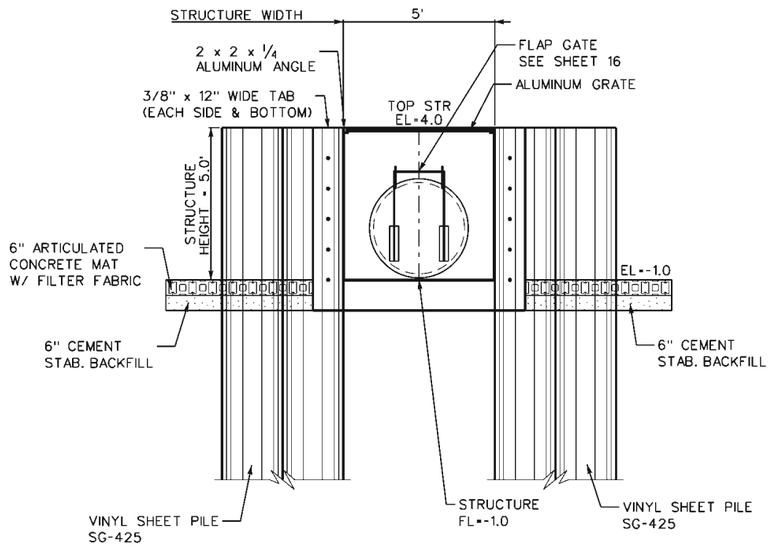
OILCUT DITCH
SIPHON DETAIL 3

Walter R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

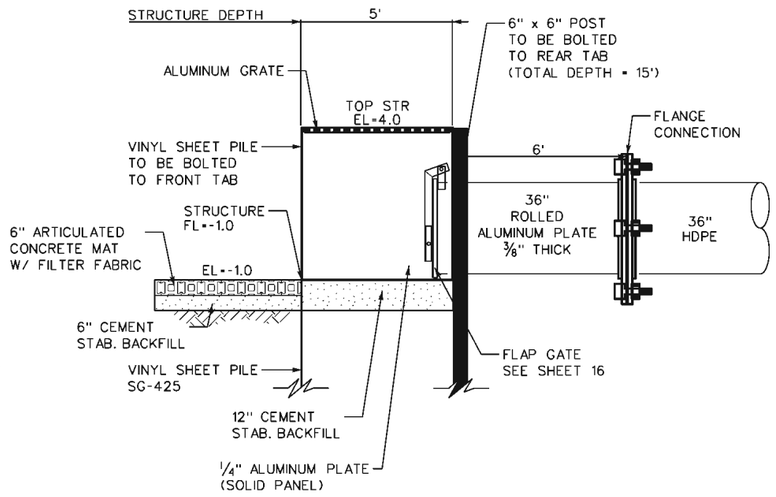
STATE OF TEXAS WALLACE R. WILSON 84857 LICENSED PROFESSIONAL ENGINEER

NO. DATE REVISION APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386

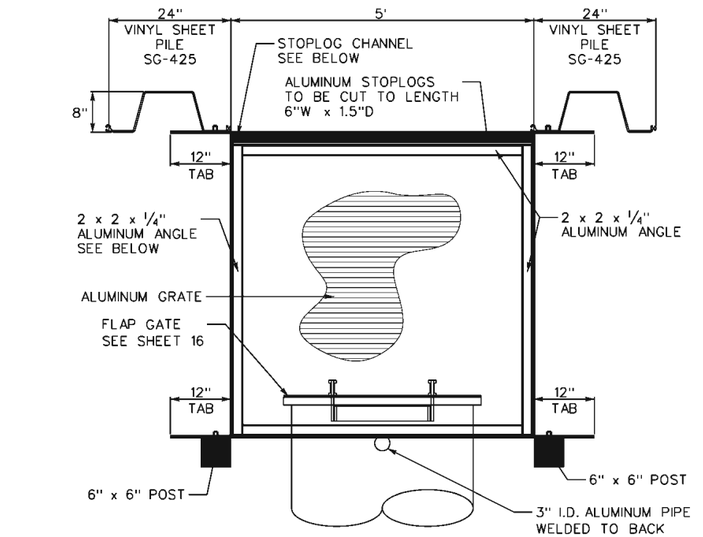
08/17/16
DATE



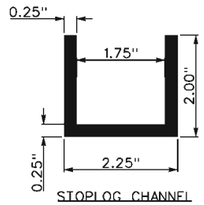
SIPHON CONTROL STRUCTURE
FRONT VIEW



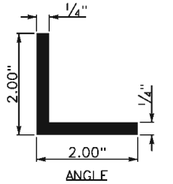
SIPHON CONTROL STRUCTURE
SIDE VIEW



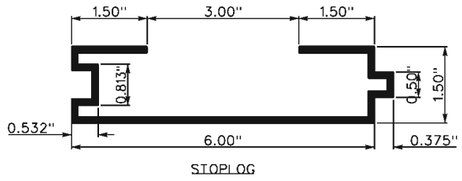
GRATE DETAIL
NTS



STOPLOG CHANNEL



ANGLE



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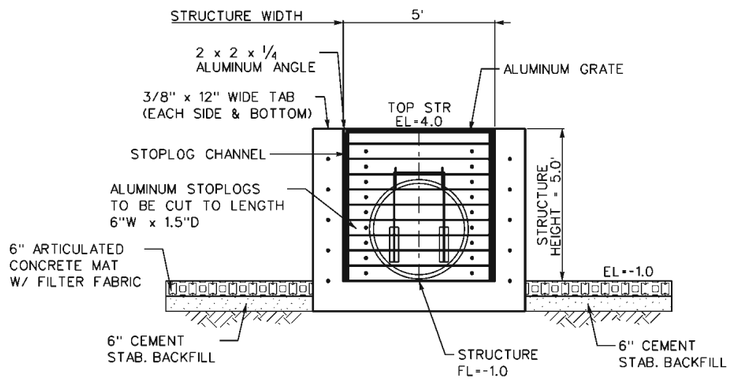
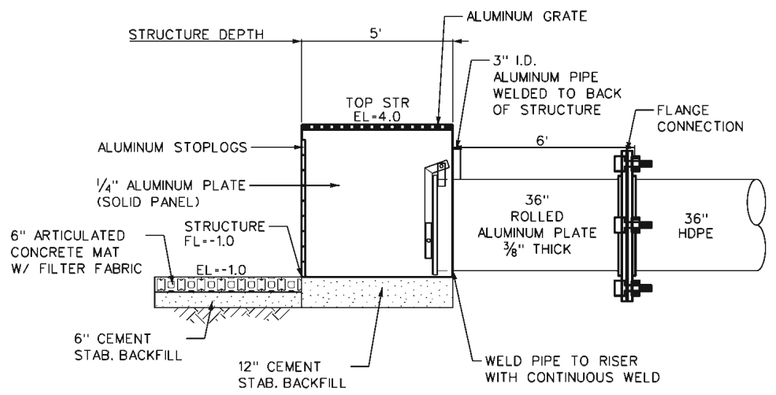


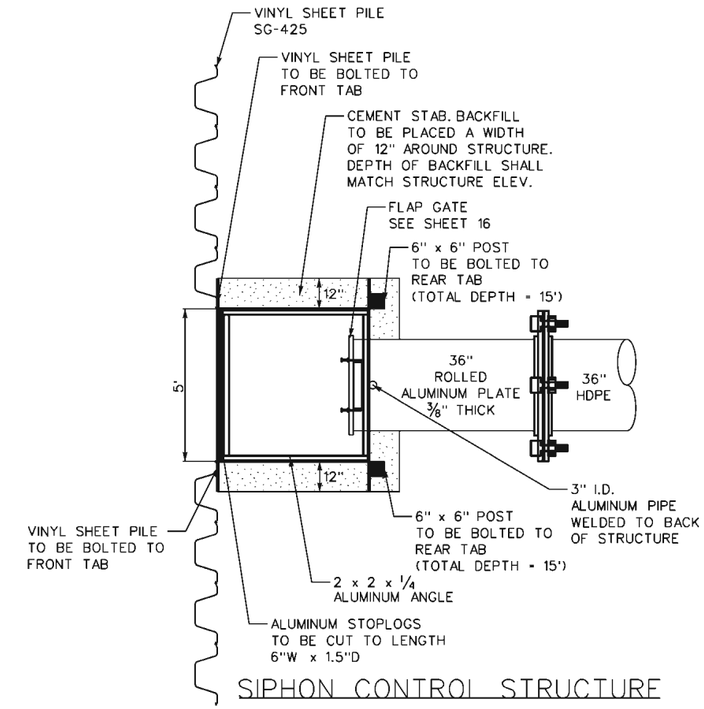
SIPHON CONTROL STRUCTURE
FRONT VIEW
(WITH STOPLOGS)



SIPHON CONTROL STRUCTURE
SIDE VIEW
(WITH STOPLOGS)

STRUCTURE HEIGHT= 5.0'

USE VINYL SHEET PILE SG-425



SIPHON CONTROL STRUCTURE
TOP VIEW

SCALE: 1"=5'

PROJECT LOCATION
GIWW SIPHON
CITY BEAUMONT
COUNTY JEFFERSON
STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079
PN 1012
DRAWING
SHEET 10

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1862
Fax 409.813.1916
FRN-F-1386

CLIENT JEFFERSON COUNTY

08/17/16 DATE

OILCUT DITCH
SIPHON DETAIL 4

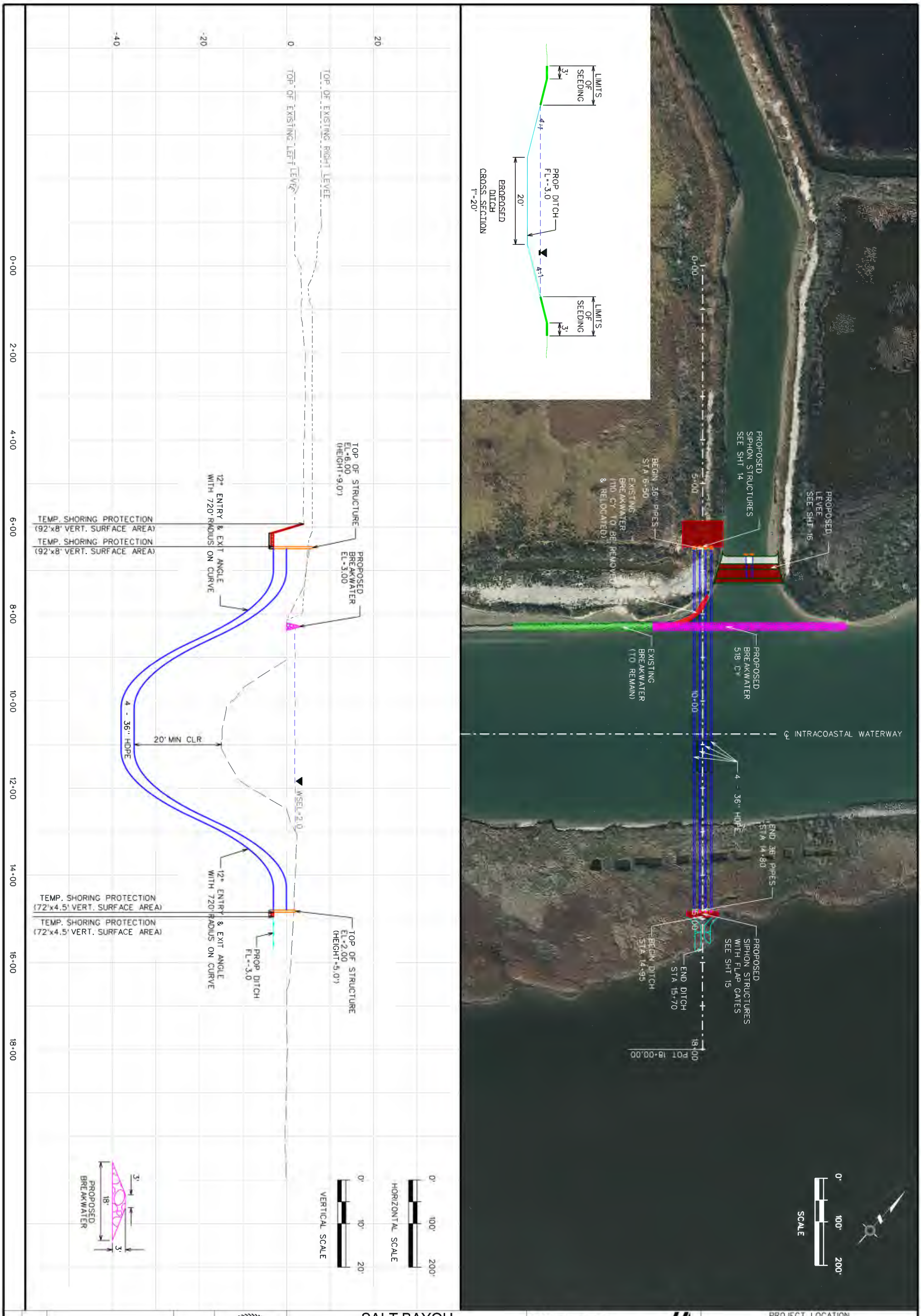
Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS WALLACE R. WILSON 84857 LICENSED PROFESSIONAL ENGINEER

NO. DATE REVISION APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386



NO.	DATE	REVISION	APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386			

STATE OF TEXAS · WALLACE R. WILSON · 84857 · LICENSED PROFESSIONAL ENGINEER

SALT BAYOU
PLAN & PROFILE

Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

LJA Engineering, Inc.
Public Infrastructure
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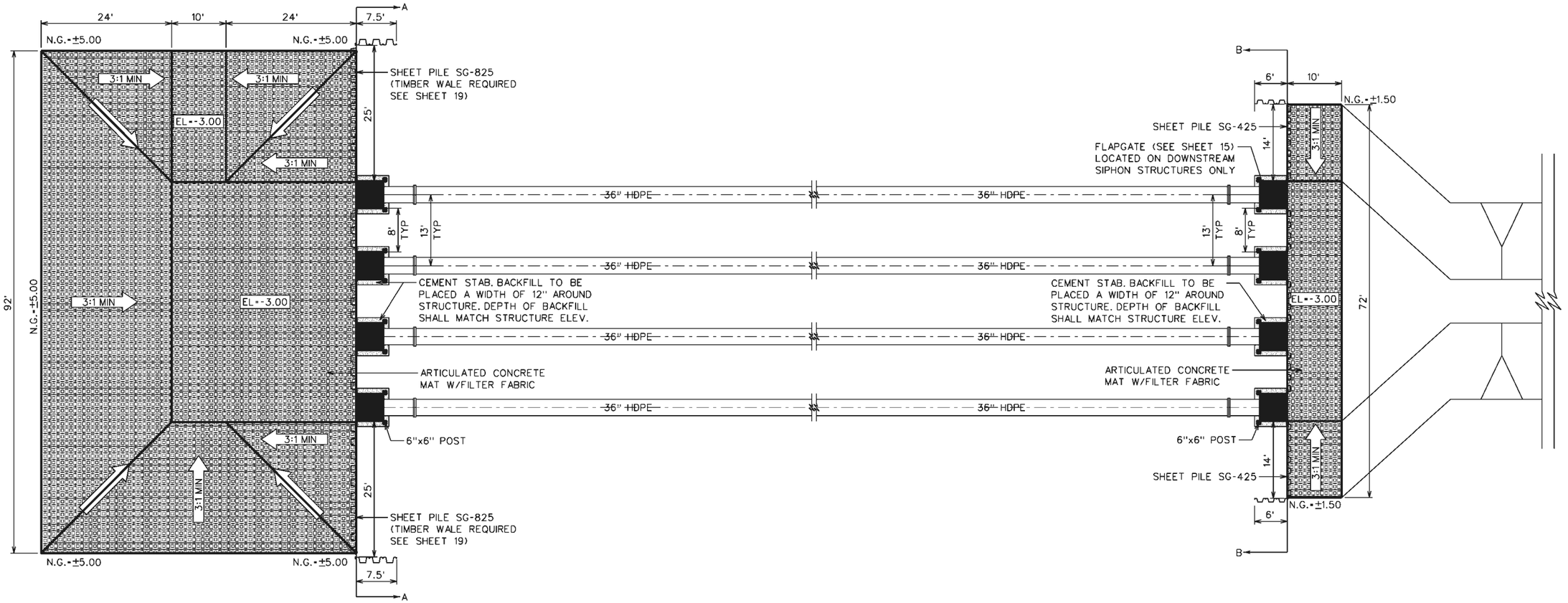
Beaumont, Texas 77701
Phone 409.813.1862
Fax 409.813.1916
FRN - F-1386

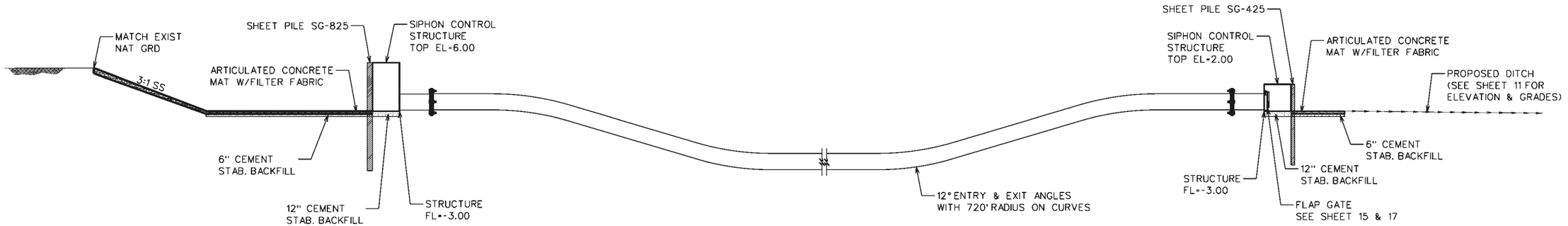
CLIENT
JEFFERSON COUNTY

PROJECT LOCATION			
GIWW SIPHON			
	COUNTY		STATE
BEAUMONT	JEFFERSON		TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY			
CN	PN	DRAWING	SHEET
079	1012		11



PLAN VIEW

SCALE: 1"=20'



PROFILE VIEW

NOTE:
SEE SHEET 7 FOR DETAILS ON PIPE ANGLES AND BENDS

HORIZ SCALE: 1"=20'
VERT SCALE: NTS

PROJECT LOCATION

GIWW SIPHON	COUNTY	STATE
CITY	COUNTY	STATE
BEAUMONT	JEFFERSON	TEXAS

SITE ADDRESS: INTRACOASTAL WATERWAY

CN	PN	DRAWING	SHEET
079	1012		12

LJA Engineering, Inc.
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Phone 409.813.1882
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FRN-F-1386

CLIENT JEFFERSON COUNTY

08/17/16
DATE

SALT BAYOU SIPHON DETAIL 1

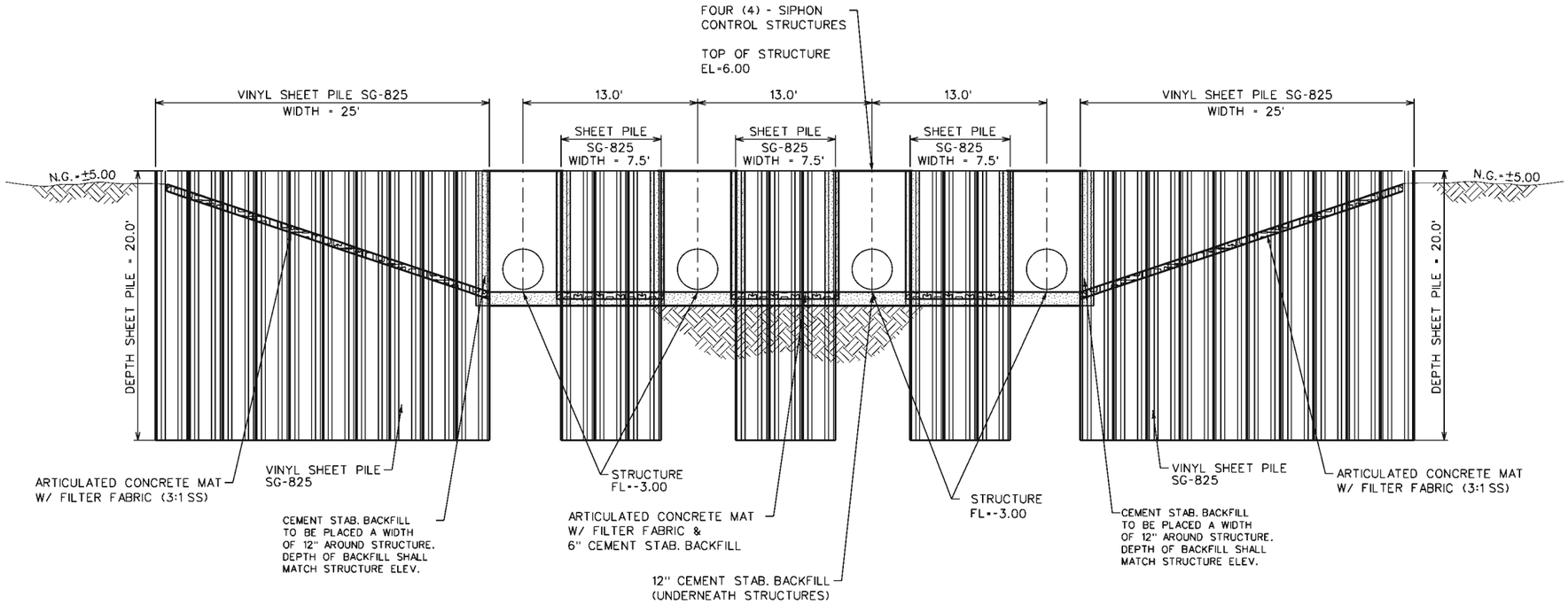
Walter R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

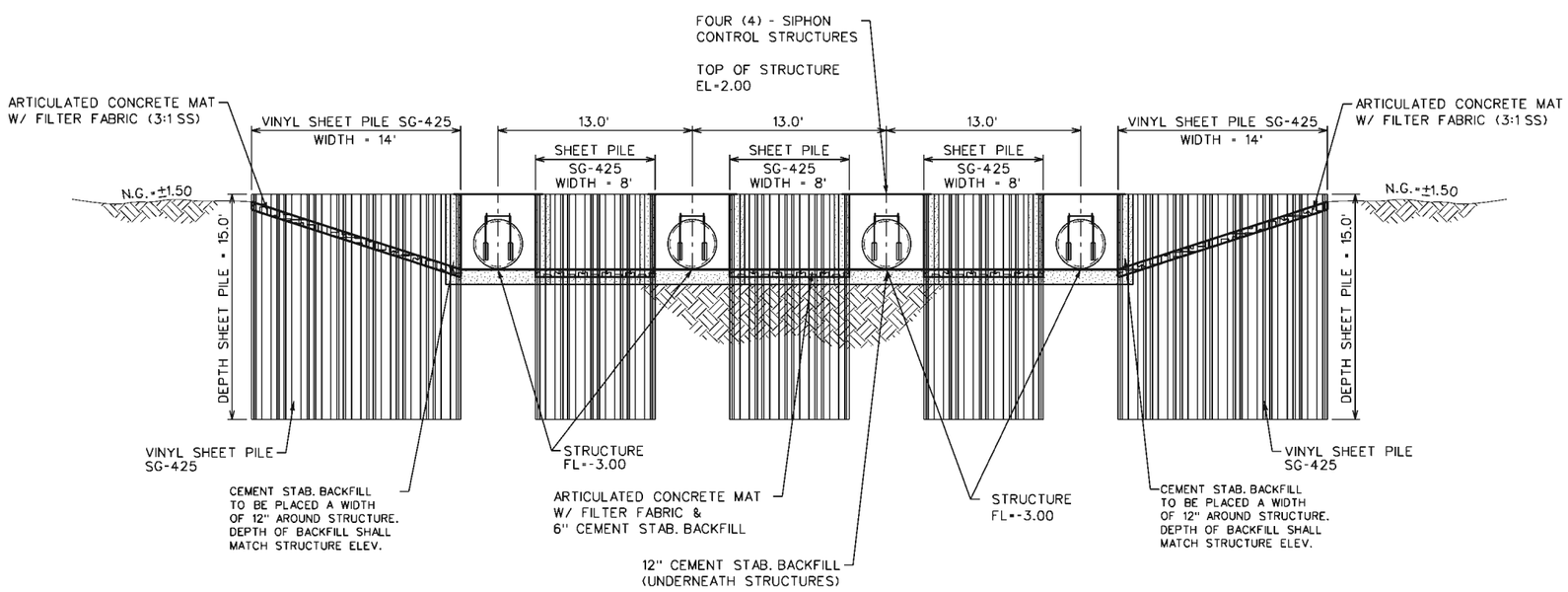
STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386



SECTION A-A



SECTION B-B

SCALE: 1"=10'

PROJECT LOCATION
GIWW SIPHON | CITY BEAUMONT | COUNTY JEFFERSON | STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY | CN 079 | PN 1012 | DRAWING 13 | SHEET 295

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1882
Fax 409.813.1916
FRN-F-1386

CLIENT JEFFERSON COUNTY

SALT BAYOU SIPHON DETAIL 2

08/17/16 DATE

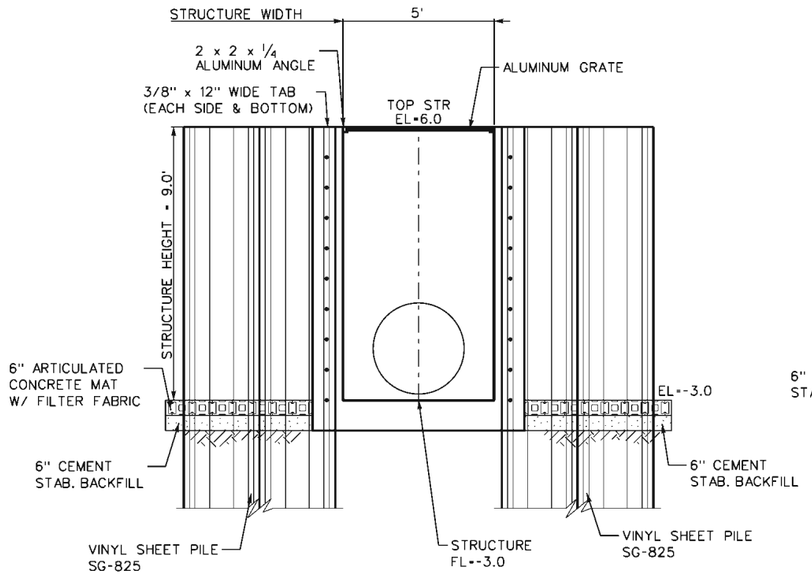
Wallace R. Wilson P.E.

WALLACE R. WILSON, P.E. #84857

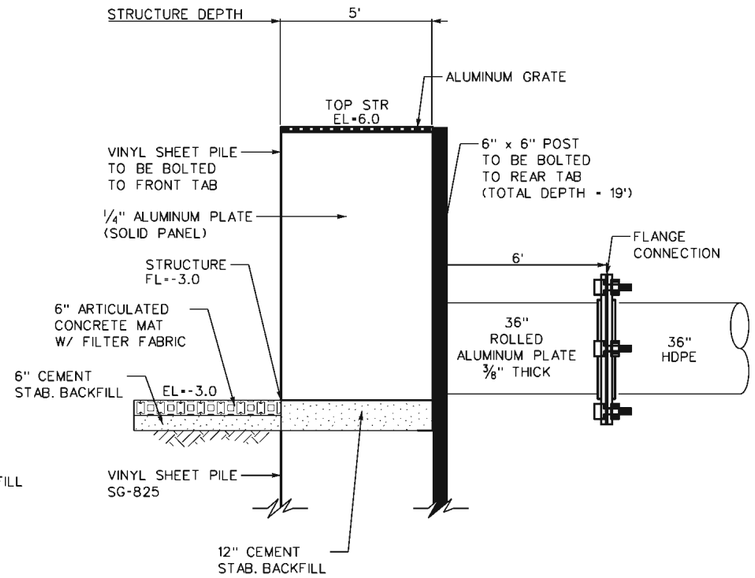
STATE OF TEXAS WALLACE R. WILSON 84857 LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

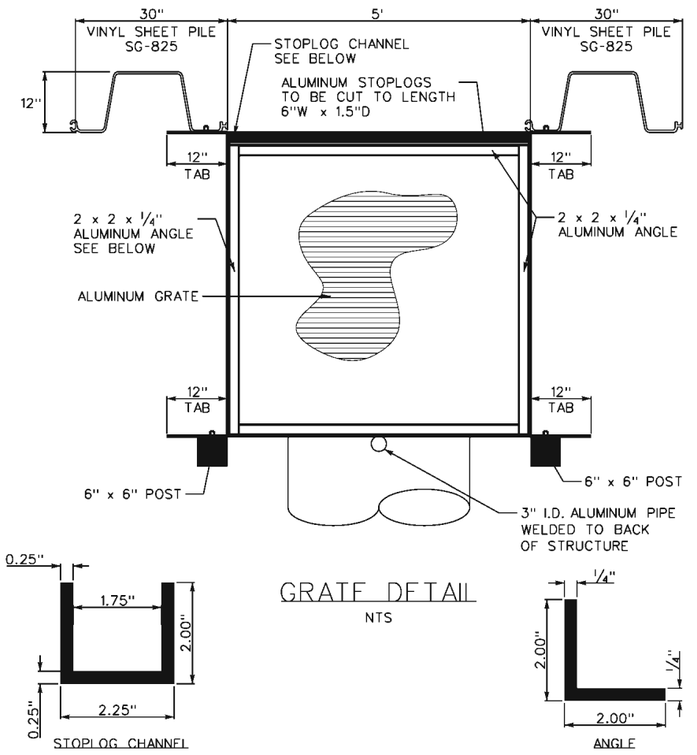
TEXAS REGISTERED ENGINEERING FIRM F-1386



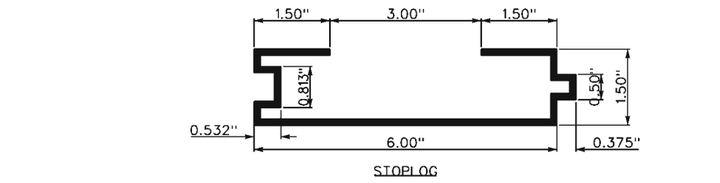
SIPHON CONTROL STRUCTURE
FRONT VIEW



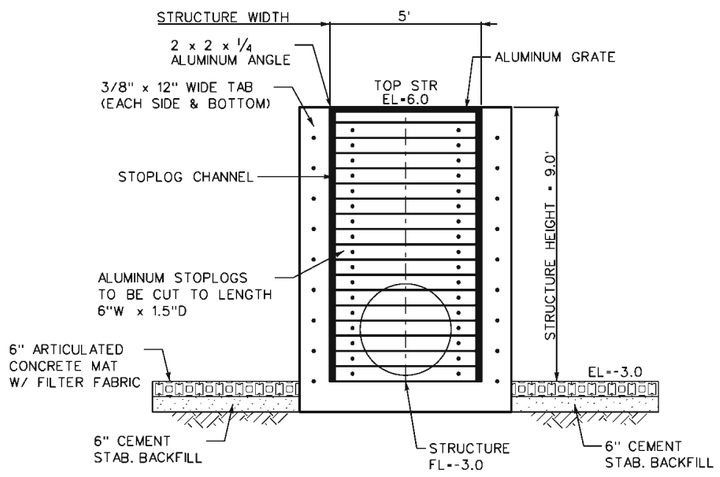
SIPHON CONTROL STRUCTURE
SIDE VIEW



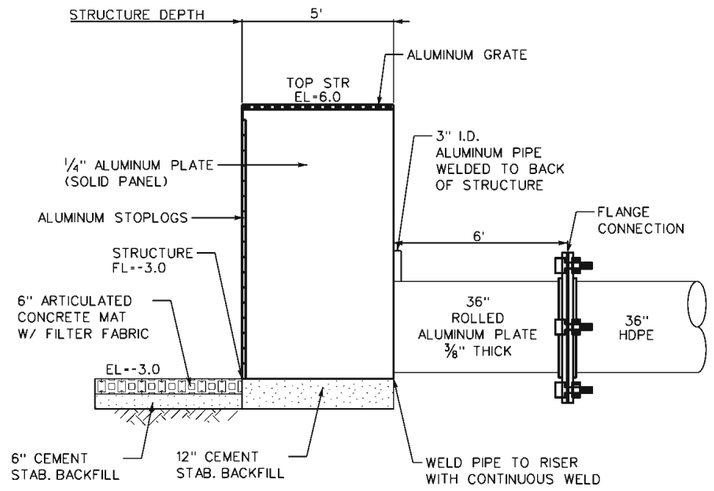
GRATE DETAIL
NTS



STOPLOG

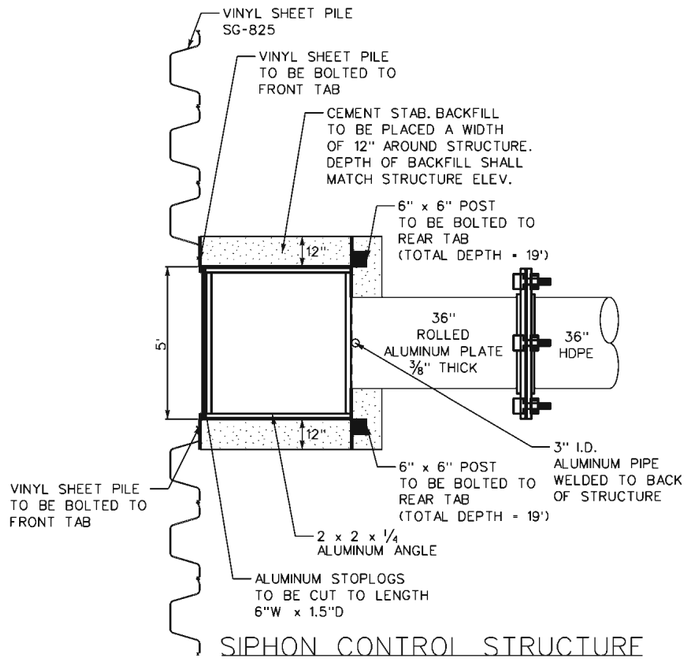


SIPHON CONTROL STRUCTURE
FRONT VIEW
(WITH STOPLOGS)



SIPHON CONTROL STRUCTURE
SIDE VIEW
(WITH STOPLOGS)

STRUCTURE HEIGHT= 9.0'
USE VINYL SHEET PILE SG-825



SIPHON CONTROL STRUCTURE
TOP VIEW

SCALE: 1"=5'

PROJECT LOCATION
GIWW SIPHON | CITY BEAUMONT | COUNTY JEFFERSON | STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY | CN 079 | PN 1012 | DRAWING 14 | SHEET 296

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1882
Fax 409.813.1916
FRN-F-1386

CLIENT JEFFERSON COUNTY

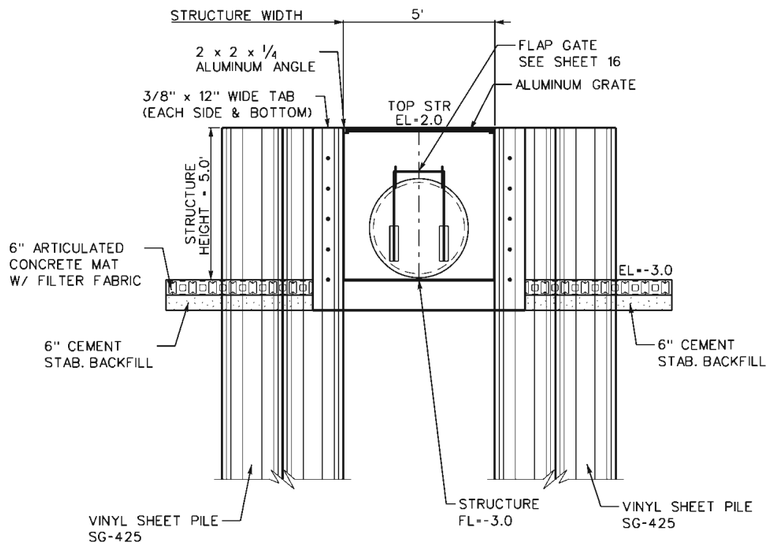
SALT BAYOU
SIPHON DETAIL 3

Walter R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

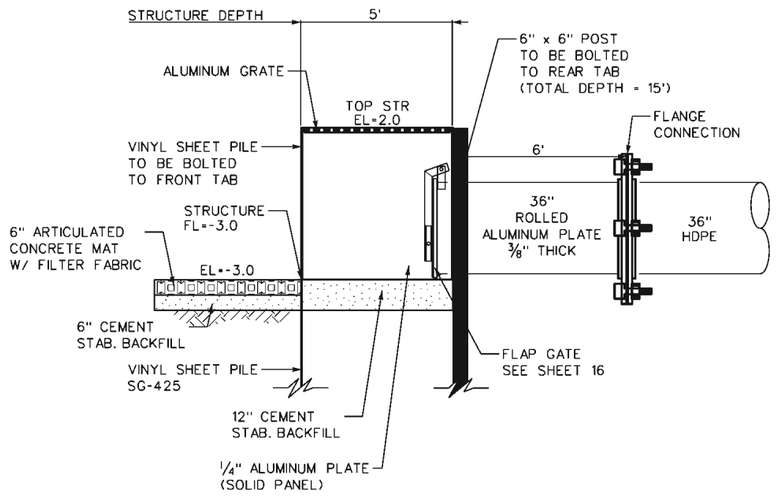
08/17/16
DATE

NO.	DATE	REVISION	APPROV.

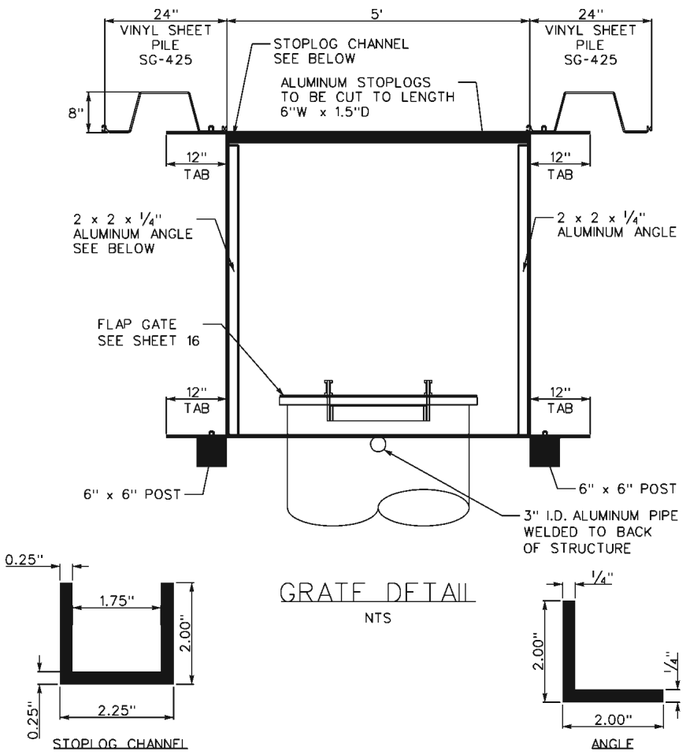
TEXAS REGISTERED ENGINEERING FIRM F-1386



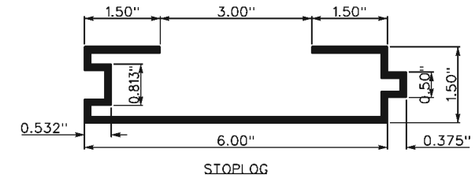
SIPHON CONTROL STRUCTURE
FRONT VIEW



SIPHON CONTROL STRUCTURE
SIDE VIEW



GRATE DETAIL
NTS



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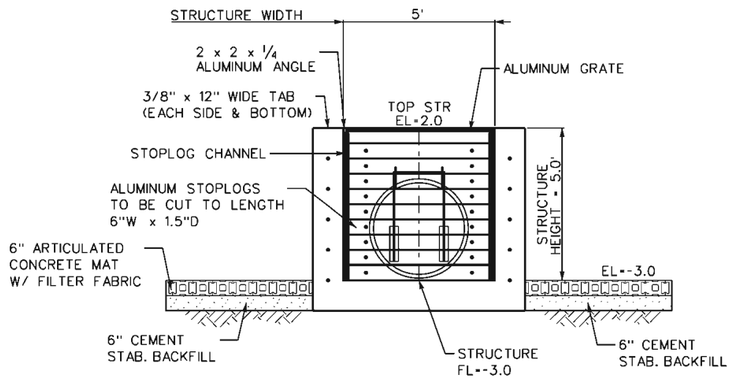
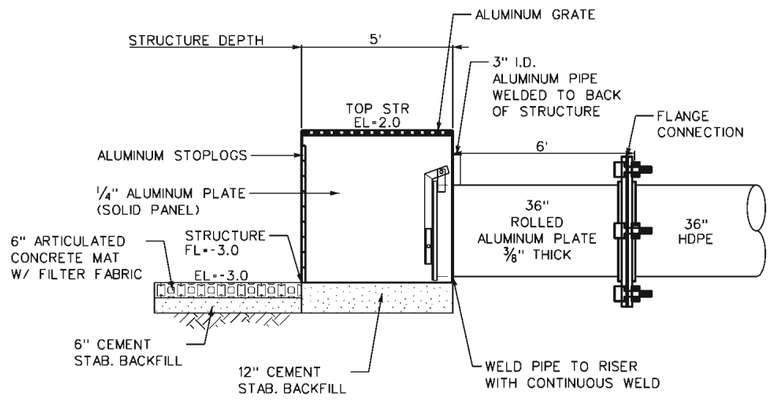
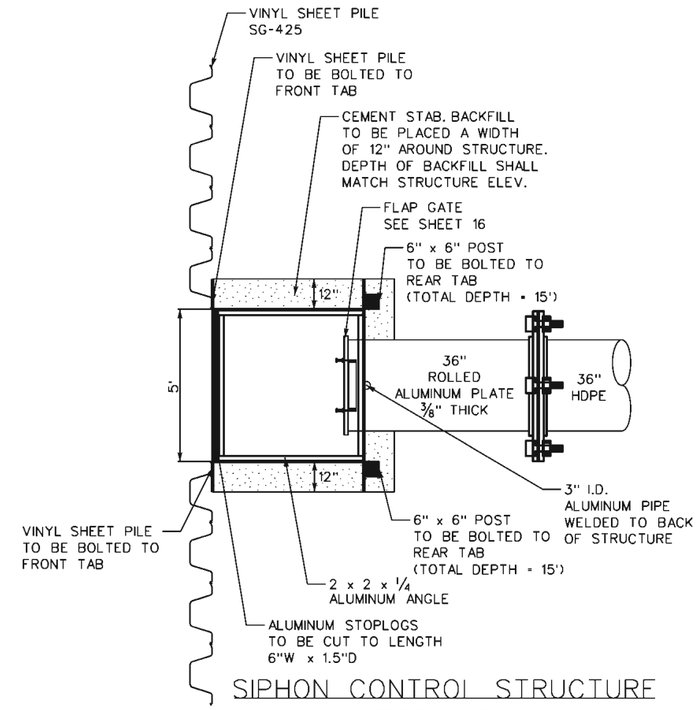


SIPHON CONTROL STRUCTURE
FRONT VIEW
(WITH STOPLOGS)



SIPHON CONTROL STRUCTURE
SIDE VIEW
(WITH STOPLOGS)

STRUCTURE HEIGHT= 5.0'
USE VINYL SHEET PILE SG-425



SIPHON CONTROL STRUCTURE
TOP VIEW

SCALE: 1"=5'

PROJECT LOCATION
GIWW SIPHON
CITY BEAUMONT
COUNTY JEFFERSON
STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079
PN 1012
DRAWING
SHEET 15

297

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1882
Fax 409.813.1916
FRN-F-1386

CLIENT
JEFFERSON COUNTY

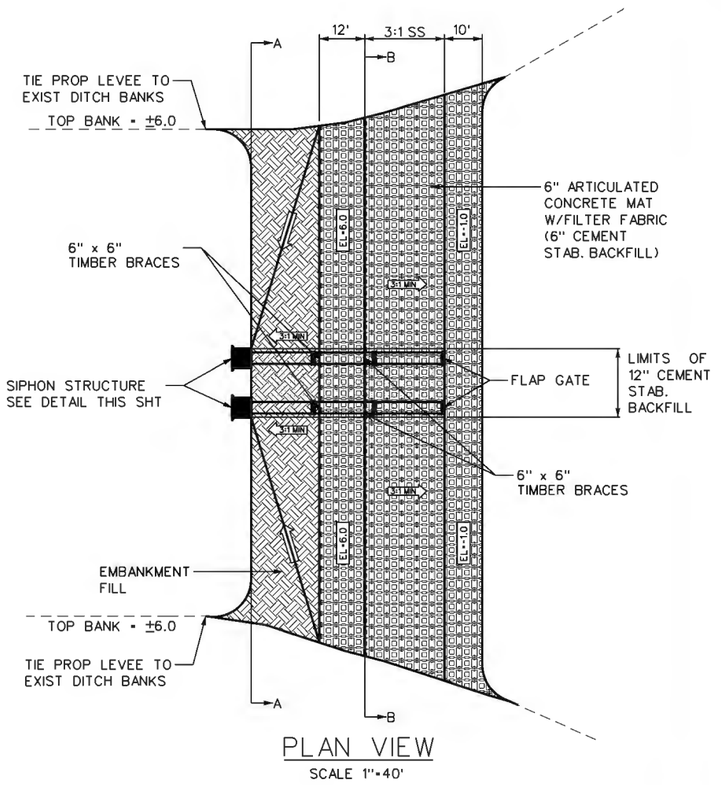
08/17/16
DATE

SALT BAYOU
SIPHON DETAIL 4

Wallace R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

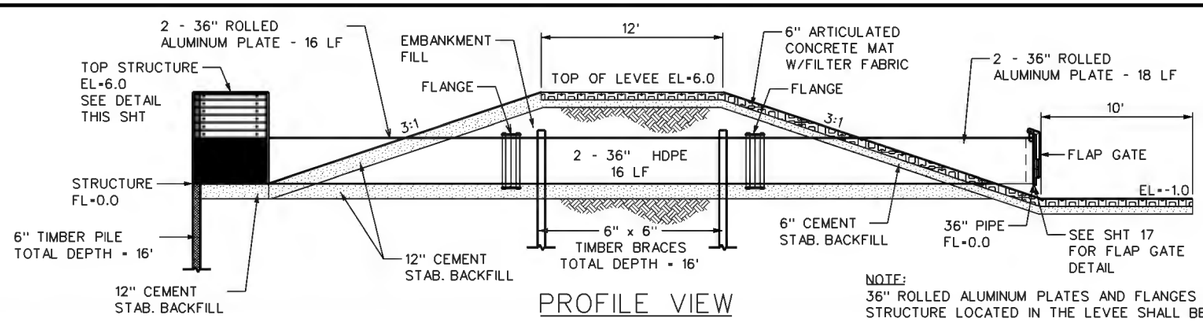
STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED PROFESSIONAL ENGINEER

NO. DATE REVISION APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386



PLAN VIEW

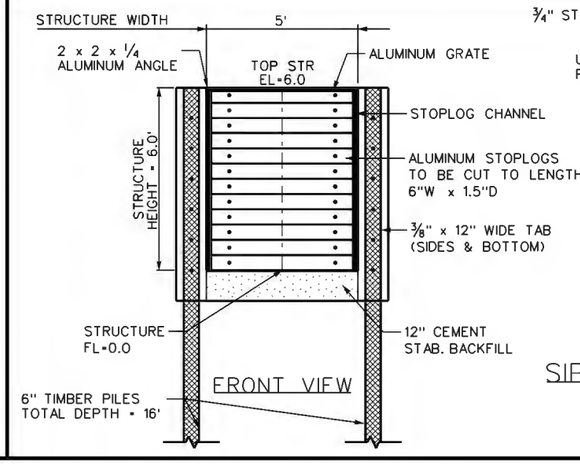
SCALE 1"=40'



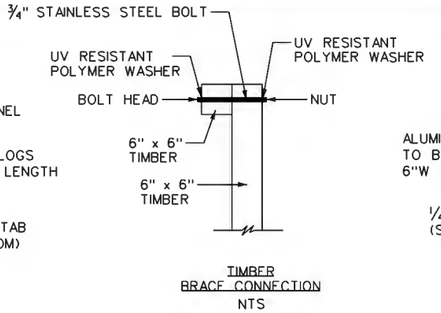
PROFILE VIEW

SCALE 1"=10'

NOTE:
36" ROLLED ALUMINUM PLATES AND FLANGES ON 6' SIPHON STRUCTURE LOCATED IN THE LEVEE SHALL BE SUBSIDIARY TO ITEM 9020 003 WITH NO EXTRA COMPENSATION.



FRONT VIEW

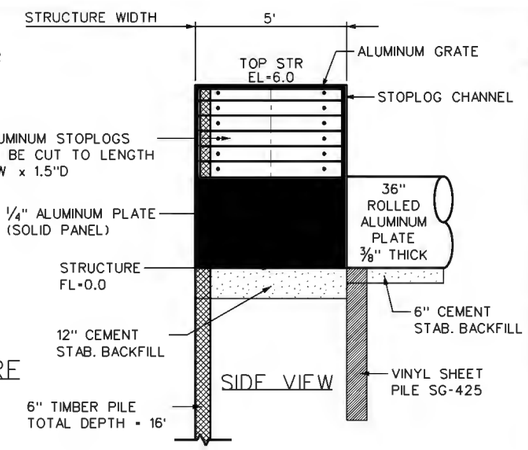


TIMBER BRACE CONNECTION

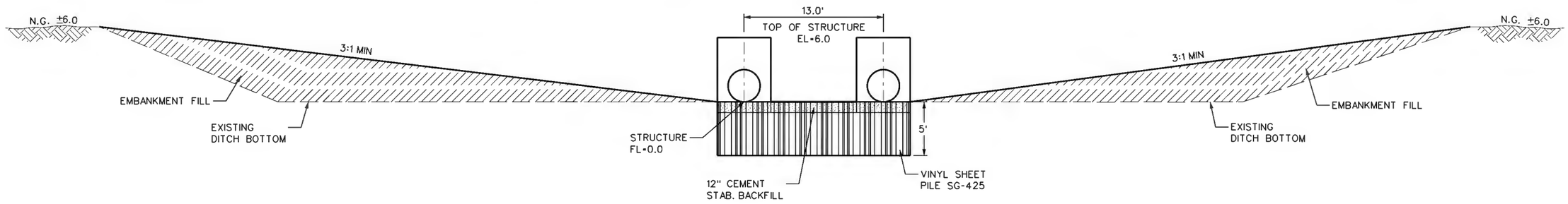
NTS

SIPHON CONTROL STRUCTURE HEIGHT = 6.0'

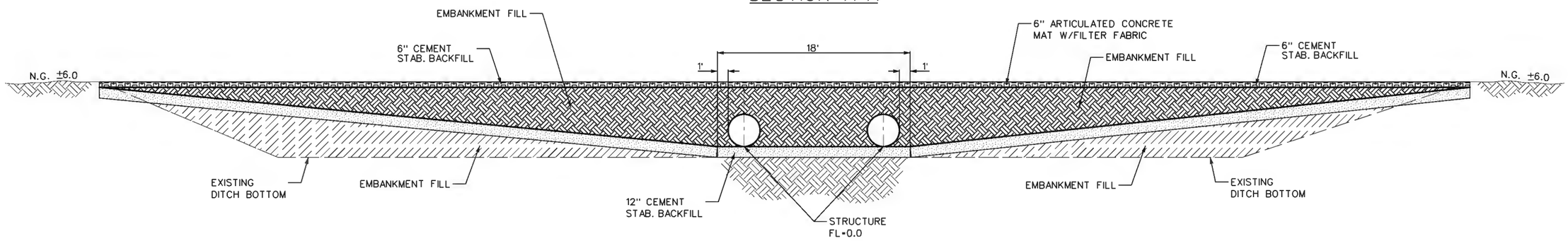
SCALE 1"=5'



SIDE VIEW



SECTION A-A



SECTION B-B

SCALE 1"=10'

NOTE:
STABLE MATERIAL OBTAINED FROM EXCAVATION MAY BE UTILIZED AS EMBANKMENT FILL

PROJECT LOCATION
GIWW SIPHON
CITY BEAUMONT COUNTY JEFFERSON STATE TEXAS
SITE ADDRESS: INTRACOASTAL WATERWAY
CN 079 PN 1012 DRAWING 16 SHEET 298

LJA Engineering, Inc.
Public Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1662
Fax 409.813.1916
FRN-F-1386

CLIENT JEFFERSON COUNTY

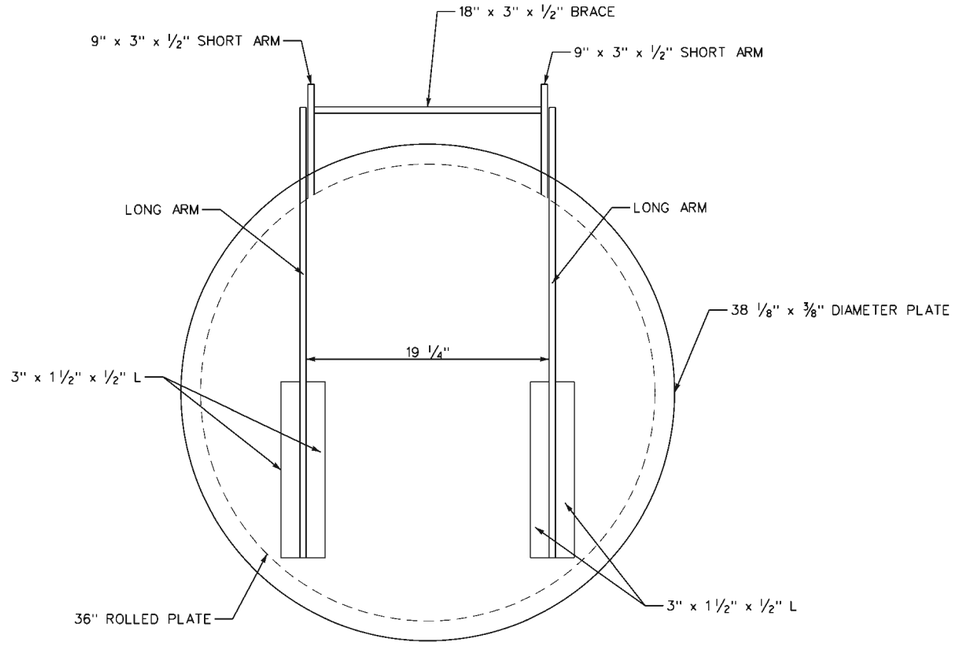
08/17/16 DATE

SALT BAYOU LEVEE DETAIL

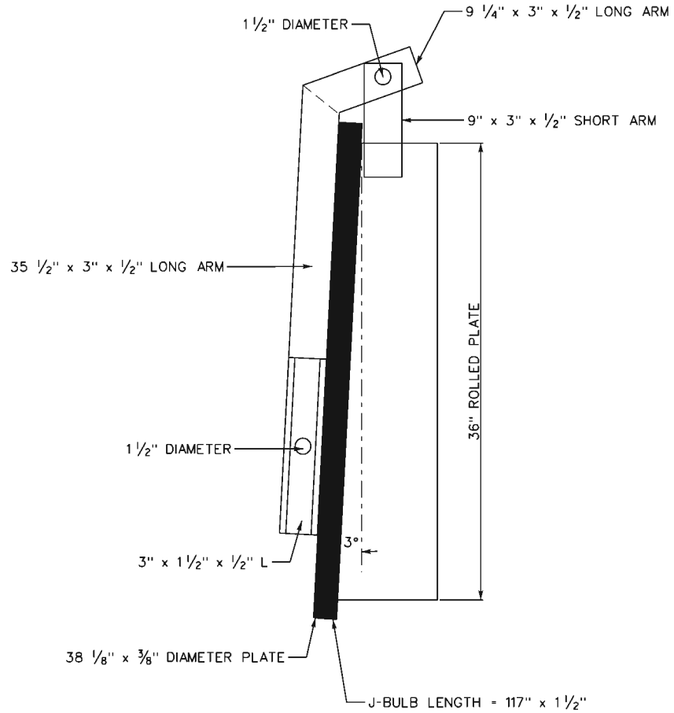
Wallace R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS WALLACE R. WILSON 84857 LICENSED PROFESSIONAL ENGINEER

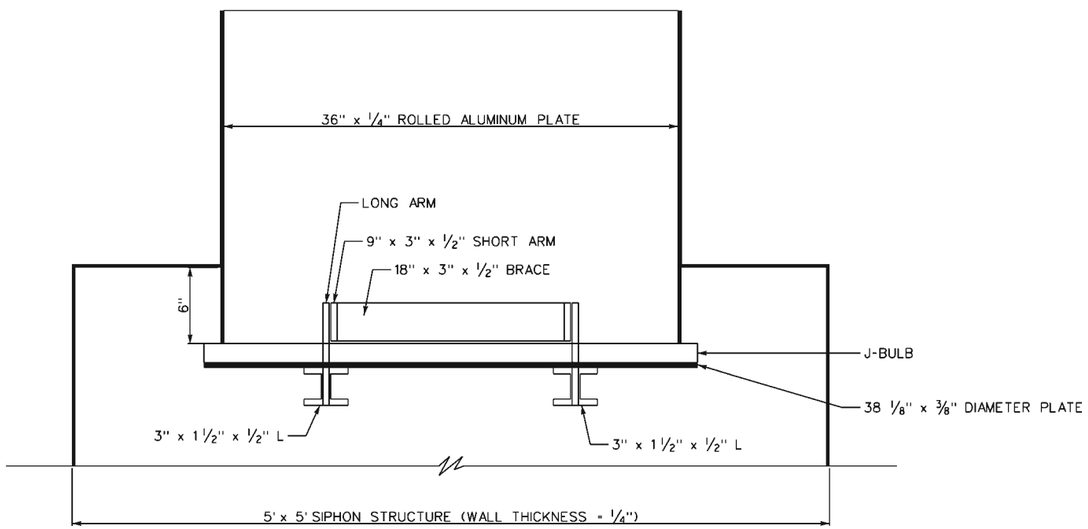
NO. DATE REVISION APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386



FRONT VIEW



SIDE VIEW



TOP VIEW

NOTES:

1. FLAP GATE SHALL BE CONSTRUCTED OF ALUMINUM.
2. ALUMINUM THICKNESS SHALL BE ½".
3. FLAP GATE TO BE CONSTRUCTED ON DOWNSTREAM SIPHON STRUCTURES.
4. CONTRACTOR TO SUPPLY SHOP DRAWINGS OF FLAP GATE TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

SCALE: 1"=1'

FLAP GATE DETAIL FOR STRUCTURE HEIGHT = 5.0'

WALLACE R. WILSON, P.E. #84857

08/17/16
DATE

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

LJA Engineering, Inc.
Public Infrastructure
925 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1862
Fax 409.813.1916
FRN - F-1386

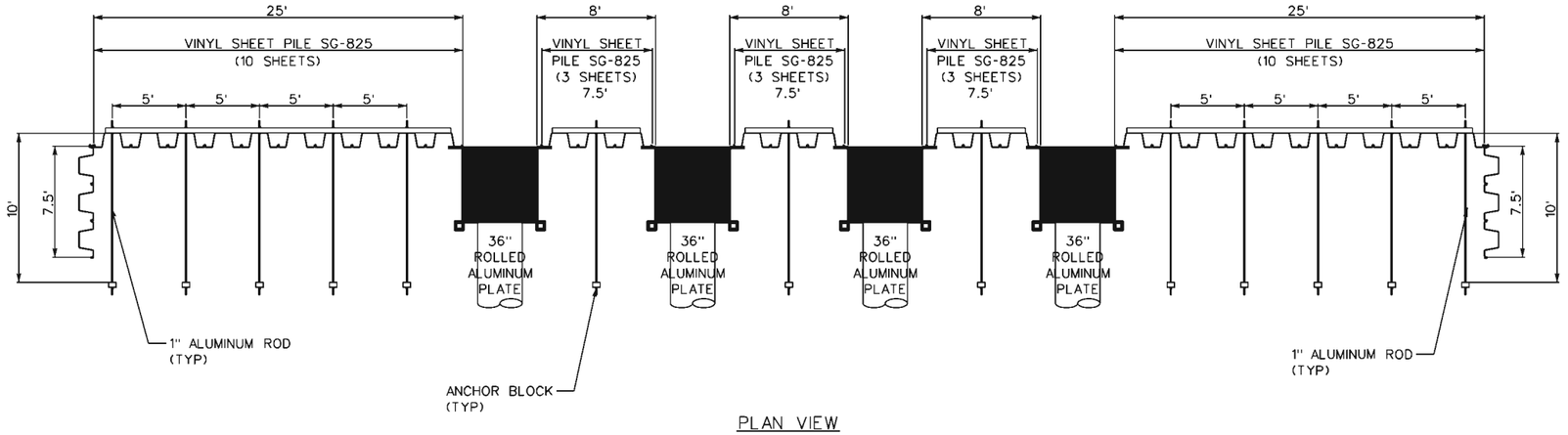
CLIENT
JEFFERSON COUNTY

PROJECT LOCATION

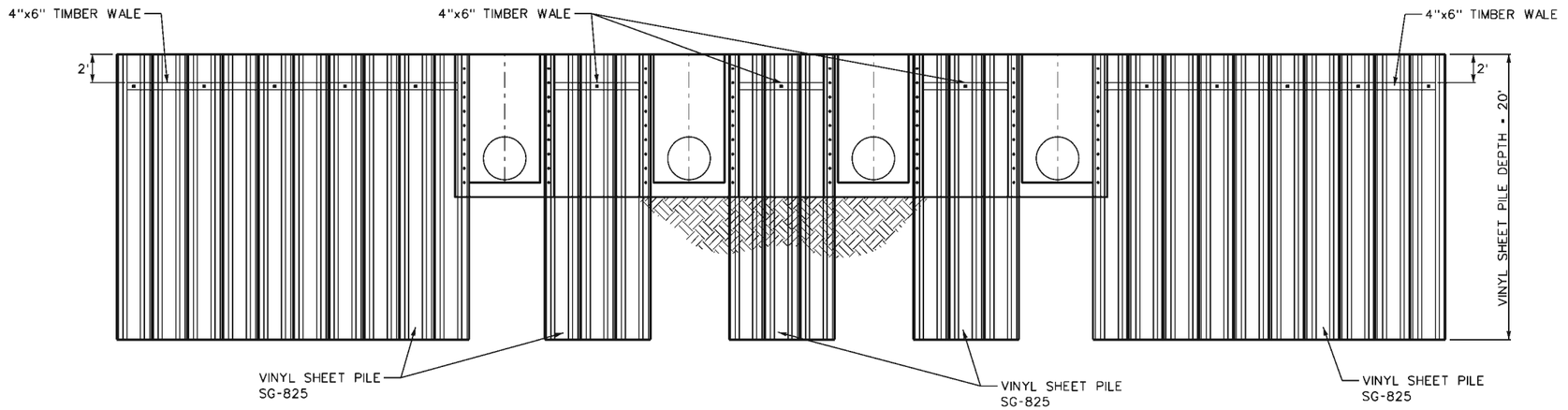
SITE ADDRESS:	CITY	COUNTY	STATE
GIWW SIPHON	BEAUMONT	JEFFERSON	TEXAS

CN	PN	DRAWING	SHEET
079	1012	17	299

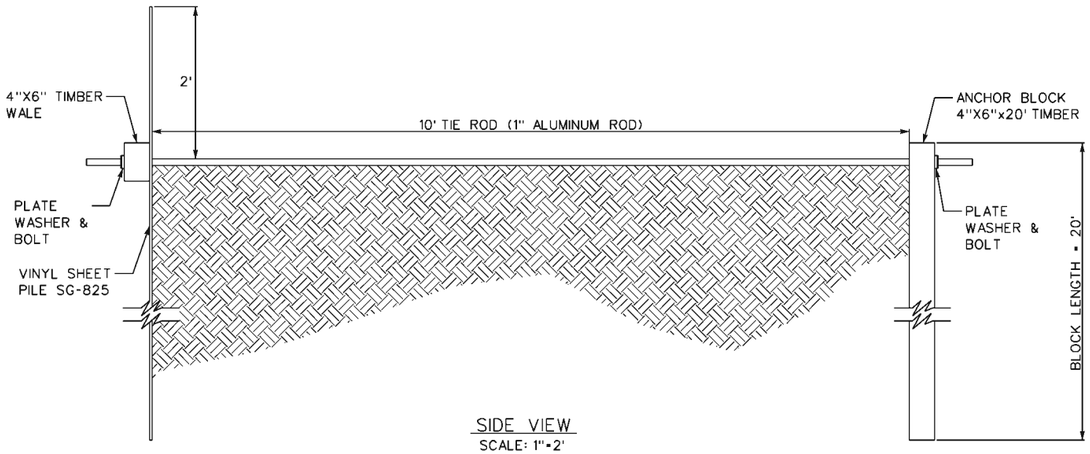
INTRACOASTAL WATERWAY



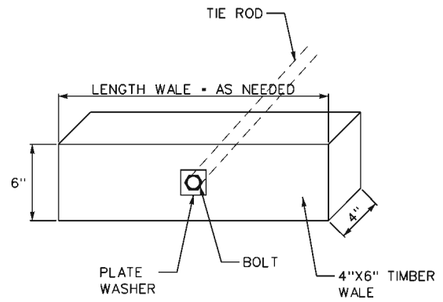
PLAN VIEW



END VIEW



SIDE VIEW
SCALE: 1"=2'



CONNECTION DETAIL
SCALE: 1"=1'

WALE DETAIL FOR VINYL SHEET PILE SG-825

SCALE: 1"=10'

PROJECT LOCATION

GIWW	SIPHON	STATE	
CITY	COUNTY	STATE	
BEAUMONT	JEFFERSON	TEXAS	
SITE ADDRESS:	INTRACOASTAL WATERWAY		
CN	PN	DRAWING	SHEET
079	1012	18	300

LJA Engineering, Inc.
Public Infrastructure
925 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1662
Fax 409.813.1916
FRN - F-1386

CLIENT
JEFFERSON COUNTY

WALE DETAIL

08/17/16
DATE

Wallace R. Wilson P.E.
WALLACE R. WILSON, P.E. #84857

STATE OF TEXAS
WALLACE R. WILSON
84857
LICENSED
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FIRM F-1386

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah L. Clark, Purchasing Agent

1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

November 27, 2017

Request for Statements of Qualification (RFQ 17-046/YS)
Professional Engineering and Architectural Design Services for Jefferson County in Response to Hurricane Harvey

Dear Vendors:

You are invited to submit a statement of qualifications in accordance with RFQ 17-046/YS, Professional Engineering and Architectural Design Services for Jefferson County in Response to Hurricane Harvey. Jefferson County is requesting statements of qualifications from qualified firms.

All interested individuals and firms should obtain a "Request for Qualifications" packet from the Jefferson County website at: http://www.co.jefferson.tx.us/Purchasing/main.htm

All submittals shall be evaluated by a Review/Selection Committee. The Review/Selection Committee will evaluate submissions to this request and select the firm most qualified, responsive and experienced.

Responses are to be sealed and addressed to the Purchasing Agent with the request for qualifications number and name marked on the outside of the envelope or box. All responses shall be submitted with one (1) original and three (3) copies, to the Jefferson County Purchasing Department, 1149 Pearl Street, 1st Floor, Beaumont, Texas 77701, no later than 11:00 am CDT, Tuesday, January 2, 2018. Jefferson County does not accept responses submitted electronically. Responses will be publicly opened and the names of responding firms will be read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Statements of Qualifications received after that time will be considered late and will be returned unopened. Inquiries shall be directed in writing to Yea-Mei Sauer, Contract Specialist, ysauer@co.jefferson.tx.us.

REQUEST NAME:	**Professional Engineering and Architectural Design Services for Jefferson County in Response to Hurricane Harvey**
REQUEST NO. :	**RFQ 17-046/YS**
DUE DATE/TIME:	**11:00 am CDT, Tuesday, January 2, 2018**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department** **1149 Pearl Street, 1st Floor** **Beaumont, TX 77701**

Jefferson County encourages Disadvantaged Business Enterprises to participate in the qualifications submission process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

We look forward to your active participation in this solicitation.

Sincerely,

Deborah L. Clark, Purchasing Agent
Jefferson County, Texas

Published: Beaumont Enterprise and Port Arthur News: November 29, 2017 & December 6, 2017

Request for Statements of Qualification (17-046/YS)
Professional Engineering and Architectural Design Services for Jefferson County in Response to Hurricane Harvey

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Section 1. Introduction and Purpose:

Jefferson County is requesting statements of qualifications and experience from all interested architects, engineers, consultants, and laboratories desiring to provide professional consultant services for the County in response to Hurricane Harvey as the need for these services arises. The range of services to provide will be broad and will involve master planning, scope development, architectural and engineering design, surveying, landscape architecture, site inspection, and construction management. This RFQ will be utilized to engage firms for future, undefined projects, and an indefinite quantity of services as need arises for various County Facilities.

Work provided by the firms under this RFQ will be negotiated. A contract will be signed for individual projects, depending on the type of project and cost of the work.

Section 2. Procedure

Firms are encouraged to submit statements of qualifications and experience to be kept on file in the Jefferson County Purchasing Department. For a given project, the responsible Jefferson County department head will appoint a selection committee, which will evaluate responses and select, in order of preference, a short list of at least three firms. Responses will be ranked on the basis of demonstrated experience, competence, and qualifications. Fees, price, work hours, or any other cost information will not be considered in the development of the short list.

Jefferson County will then enter into negotiations with the highest qualified firm. The negotiations will first establish the scope, terms and conditions, and time limits for the proposed contract. Once agreement is reached between Jefferson County and the selected firm, the County will request a fee proposal from the firm. If agreement is reached, the County will retain the firm and enter into a written contract with it. If an agreement cannot be negotiated with the selected firm, the County will then enter into negotiations with the next most qualified firm. This procedure will continue until agreement is reached and a contract is produced. If the County cannot negotiate an agreement, the procedure will be terminated.

Section 3. Selection Committee

Because of the diversity of the departments and activities of the County, the responsible department head will appoint the selection committee for a given project. The department head will appoint a chairperson and no less than two (2) other members for the committee. Typically, the committee will consist of at least one professional in the task required, a person knowledgeable about procurement practices, and either a representative of the department requesting the project, or the department executing the project. However, this structure is not binding. Other members may be appointed as necessary and appropriate, but the total number of persons on the selection committee shall not exceed four (4) persons. Committee appointments shall be in writing and shall briefly describe the scope of the project and, if necessary, the primary disciplines required to accomplish the project, in order to assist the committee in developing a list of firms that might best accomplish the work required. Committee membership and project requirements will vary from project to project; therefore, a firm rated number one for one project could very well not even be rated for another.

Section 4. Qualifications Statement Requirements

Firms desiring to be considered for professional design services to Jefferson County are required to submit a Statement of Qualifications and Experience in order to be considered for contracts under this procedure. Only firms with statements on file with the County will be evaluated. The statement should contain, as a minimum, the following:

1. Name of the firm wishing to contract with the County.

2. Name(s) of firm(s) wishing to partner with other firms, or to use design firms as subcontractors.

3. In reference to Items 1 & 2 (above), include a complete breakout list of the number of personnel available by discipline, skill, or knowledge area to work on County projects, with a total of all firms shown.

Example of Breakout List Format Below:

Discipline	Your Firm Name Here	Additional Firm Name Here	Additional Firm Name Here	Total
Architect	2 *(personnel available)*	1 *(personnel available)*	5 *(personnel available)*	8 *(personnel available)*

Disciplines to be included in the breakout list (in the format above) are as follows:

- Aerial Specialist
- Architect
- CADD Operator
- Chemical Engineer
- Civil Engineer
- Clerical Admin
- Coastal Engineer
- Coastal Geomorphologist
- Construction Admin
- Construction Engineer
- Construction Inspector
- Design Technician
- Draftsperson
- EIT
- Electrical Engineer
- Electrical Tech
- Environmental Engineer
- Engineering Tech
- Estimator
- Hydrologist
- Interior Designer
- Intern
- Landscape Architect
- Mechanical Engineer
- Planner-Urban/Region
- Project Manager
- Registered Planner
- Resident Engineer
- Sanitary Engineer
- Soils Engineer
- Structural Engineer
- Surveyor
- Draftsperson
- Spec Writer
- Clerk/Typist
- Transportation Engineer

4. An indication of the type(s) of contracts the firm would be interested in being considered for. Qualifications and experience shall be submitted for each expertise. Examples would include, but not be limited to:
    - Architect and Engineer Services
    - Civil Design/ Civil Engineering
    - Coastal Project Analysis
    - Comprehensive Facility Evaluation
    - Construction Administration/ Construction Management/ Materials Testing
    - Design- Building
    - Engineering Design Services
    - Environmental Permitting
    - Erosion Response
    - Facility Planning/ Design
    - Failure Investigation
    - Foundation Design
    - Geotechnical Engineering
    - Hydraulics /Hydrology
    - Interior Design

- Master Planning
- Non-Destructive Testing
- Pavement Consulting/Design
- Retrofit and New Roofing
- Scope Development
- Site Layout and Preparation
- Site Inspection
- Site Selection Consulting
- Structural Analysis and Design
- Surveying
- Testing
- Transportation Engineering
- Utility Design
- Wastewater Management
- Water Supply/ Waste Water Engineering

5. Biographies or resumes, including home office location and other relevant information, for each key staff member likely to be assigned to a project and for any sub-consultants proposed to be used on projects.

6. Names, titles, address, and telephone numbers of persons who are authorized to negotiate for and contractually bind the firm. One of these persons should sign the response. A contact must be named for addressing questions generated during the evaluation process.

7. A description of representative work accomplished for all jobs within the past five (5) years.

8. A list of all projects accomplished for Jefferson County, including the name of the County's representative for each project. This list shall be used as one of the sources for references.

9. A list of references, other than Jefferson County, who have contracted the types of work the firm, is offering to perform. Include name of owner, contact person, and telephone number for jobs listed in (6) above. A reference form is included in this package.

10. Location of primary business office location and location that will serve Jefferson County (if different than primary location).

U.S. Government Forms 254 and 255, used for selection of Architects and Engineers, may be used as part of submissions. All requirements stated above must be presented in the order given in order to be eligible for maximum points.

Section 5. Laws and Regulations

A. The firm(s) must comply with all laws, ordinances, and rules and regulations which govern the work specified in this contract.

Section 6. Insurance

The contractor (including any and all subcontractors as defined in Section 7.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements

Professional Liability (or Equivalent Errors & Omissions Liability Policy)	$1,000,000.00
Public Liability	$1,000,000.00
Excess Liability	$1,000,000.00

Property Insurance (policy below that is applicable to this project)**:**
Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
Builder's Risk Policy: Structural Coverage for Construction Projects
Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation — Statutory Coverage (See Section 7 Below)

Section 7. Workers' Compensation Insurance

7.1 Definitions:

7.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

7.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

7.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

7.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

7.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 6 above.

7.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

7.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

7.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

7.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

7.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

7.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

7.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

7.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

7.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

7.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

7.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

7.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

7.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

7.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

7.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

7.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

7.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 7.1. – 7.7., with the certificates of coverage to be provided to the person for whom they are providing services.

7.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

7.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

Section 8. Additional Information

1. Provide a listing of all current litigation(s), outstanding judgements and liens affecting the firm.

Section 9. Terms and Conditions

1. Jefferson County reserves the right to request clarification of information submitted and to request additional information of one or more respondents.

2. Any agreement or contract resulting from this RFQ shall be on forms approved by Jefferson County and shall contain, at minimum, applicable provisions of this document. Jefferson County reserves the right to reject any agreement that does not conform to this document and any County requirements and contracts.

3. The Professional Engineering and Architectural Design firm shall not assign any interest in the contract and shall not transfer any interest in the same without prior written consent of the County.

4. No reports, information, or data given to or prepared by the Professional Engineering and Architectural Design firm under contract shall be made available to any individual or organization by the aforementioned firm without the prior written approval of the County.

5. Vendor Registration: SAM (System for Award Management).

Vendors doing business with Jefferson County are **required** to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is NO fee to register for this site.

Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Respondents are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Qualifications Submission.

6. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

As of January 1, 2016, per House Bill 1295, the Texas Ethics Commission (TEC) requires **all awarded vendors** to complete a Certificate of Interested Parties (FORM 1295) at time of notification of award. **Awarded Vendors** (for contracts under this RFQ**)** must visit the TEC website link below, enter the required information on Form 1295, and print a copy of the completed form. The form will include a certification of filing that will contain a unique certification number.

At the time of award, the Jefferson County Purchasing Department will submit a request to the Awarded Vendor (for a contract under this RFQ) to both:

1. Submit FORM 1295 online via the Texas Ethics Commission website link below.

2. Submit a printed copy of FORM 1295, signed by an Authorized Agent of the Awarded Vendor and notarized to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

7. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

8. Federal Emergency Management Agency (FEMA) Mandated Contract Clauses

If applicable to the work and services being performed by CONTRACTOR under the parties' AGREEMENT, the following provisions are adopted and form part of this AGREEMENT:

(A) DAMAGES, 2 CFR §200.326 Appendix II to Part 200 (A)

(1) All work to be performed under this AGREEMENT shall be timely commenced. A breach of this AGREEMENT by Contractor would cause substantial delay in the completion of the required services affecting the safety and welfare of the public.

(2) In the event of Contractor's breach of its performance obligations, County shall have all rights and remedies against Contractor as provided by law.

(B) TERMINATION RIGHTS, 2 CFR §200.326 Appendix II to Part 200 (B)

Termination for Convenience: Whenever the interests of the County so require, County may terminate the parties' Agreement, in whole or in part, for the convenience of the County. County shall give Contractor thirty (30) days prior written notice of termination specifying the portions of the Agreement to be terminated and when such termination will become effective. If only portions of the parties' agreement are terminated, Contractor has the right to withdraw from the parties' Agreement, without adverse action or claims. In the event of a termination for convenience by County, Contractor shall be entitled to payment for all work and services performed by it up to the effective date of such termination.

Termination for Cause: The County may, by written notice of default to Contractor, terminate the parties' Agreement, in whole or in part, if the Contractor fails to satisfactorily perform any provisions of the parties' agreement after a period of ten (10) following Contractor's receipt of a Notice of Deficiency provided by County.

(C) EQUAL EMPLOYMENT OPPORTUNITY CLAUSE (2 CFR §200.326 Appendix II to Part 200 (C))

If applicable to the work and services performed by CONTRACTOR under the AGREEMENT, during the performance of the AGREEMENT, CONTRACTOR shall comply with the Equal Employment Opportunity Clause (41 CFR 60-1.4(b)):

(1) CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. 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, 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. AGREEMENTOR 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.

(2) 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, or national origin.

(3) CONTRACTOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other agreement 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.

(4) CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) 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 for purpose of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the CONTRACTOR'S noncompliance with the nondiscrimination clauses of this AGREEMENT or with any of the said rules, regulations or orders, this AGREEMENT 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.

(7) CONTRACTOR will include the portion of the sentence immediately preceding paragraph (1) and the provisions of subparagraphs 1 through 7 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 contractor. 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 CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or contractor 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 interest of the United States.

D. DAVIS-BACON ACT AND COPELAND "ANTI-KICKBACK" ACT, 2 CFR §200.326 Appen. II to Part 200 (D)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(1) Bacon-Davis Act: Applicable to construction or repair of public buildings or public works. see FEMA Public Assistance Program and Policy Guide, Ch.2(V)(G)(2), page 32 (FP 104-009-2/January 2016);

(2) Copeland "Anti-Kickback" Act: In contracts subject to the Davis-Bacon Act, CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (40 U.S.C. §3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that the contractor and subcontractor must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The GOVERNMENT must report all suspected or reported violations to the appropriate Federal agency.

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(a) CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this AGREEMENT.

(b) CONTRACTOR or subcontractor shall insert in any subcontract the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for the compliance by any subcontractor or lower tier subcontract with all of these contract clauses.

(c) A breach of the AGREEMENT clause above may be grounds for termination of the AGREEMENT, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. §5.12.

E. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 2 CFR §200.326 Appendix II to Part 200 (E) (40 U.S.C. 3701-3708)

Contracts in excess of $100,000 that involve the employment of mechanics or laborers shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor and its subcontractors shall compute the wages of every mechanic
and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation: liability for unpaid wages: liquidated damages. In the event of any violation of the clause set forth in paragraph (I) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid

wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (I) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (I) of this section.

(3) Withholding for unpaid wages and liquidated damages. The GOVERNMENT shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) The contractor and subcontractor shall insert in any subcontract the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

F. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT, 2 CFR §200.326 Appendix II to Part 200 (F)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT and if the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the GOVERNMENT wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the GOVERNMENT must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business."

G. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT, 2 CFR §200.326 Appendix II to Part 200 (G)

CONTRACTOR shall 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 Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

CONTRACTOR shall include the foregoing requirements in each subcontract exceeding $100,000.

H. ENERGY EFFICIENCY AND CONSERVATION, 2 CFR §200.326 Appendix II to Part 200 (H)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT, CONTRACTOR shall comply with the mandatory standards and policies of the state regulation promulgated in accordance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).

I. DEBARMENT AND SUSPENSION, 2 CFR §200.326 Appendix II to Part 200 (I)

(1) This AGREEMENT is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by GOVERNMENT. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to GOVERNMENT, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C AGREEMENT is valid and throughout the period of performance. The CONTRACTOR further agrees to include a provision requiring such compliance in its lower tier covered transactions.

J. BYRD ANTI-LOBBYING AMENDMENT, 2 CFR §200.326 Appendix II to Part 200 (J)

CONTRACTOR must file with the GOVERNMENT the required certification. Each tier certifies to the tier above 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 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. If not provided with the bid response, CONTRACTOR must complete and submit the Certification Regarding Lobbying Form.

K. PROCUREMENT OF RECOVERED MATERIALS, 2 CFR §200.326 Appendix II to Part 200 (K) and 2 CFR §200.322)

(1) 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-

(a) Competitively within a timeframe providing for compliance with the contract performance schedule;
(b) Meeting contract performance requirements; or
(c) At a reasonable price.

(2) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/.
The list of EPA-designate items is available at http://www.epa.gov/cpg/products/htm.

L. AGREEMENTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (2 CFR §200.321)

Should the CONTRACTOR subcontract any of the work under this AGREEMENT, CONTRACTOR shall take the following affirmative steps: place qualified small and minority businesses and women's business enterprises on solicitation lists; assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources; divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and use 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.

M. ACCESS TO RECORDS

(1) CONTRACTOR agrees to provide GOVERNMENT, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives' access to any books, documents, papers, and records of the Contractor which are directly pertinent to this AGREEMENT for the purposes of making audits, examinations, excerpts, and transcriptions.

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

(3) CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

N. SEAL, LOGO AND FLAGS

CONTRACTOR shall not use the U.S. Department of Homeland Security's seal(s), logos, crests, or reproductions of flags or likenesses of the U.S. Department of Homeland Security's agency officials without specific FEMA preapproval.

O. COMPLIANCE WITH FEDERAL LAW, REGULATIONS AND EXECUTIVE ORDERS

This is an acknowledgement that FEMA financial assistance will be used to fund the AGREEMENT only. CONTRACTOR will comply will all federal law, regulations, executive orders, FEMA policies, procedures, and directives.

P. NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this AGREEMENT and is not subject to any obligations or liabilities to GOVERNMENT, CONTRACTOR, or any other party pertaining to any matter resulting from the contract.

Q. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR'S actions pertaining to this contract.

Section 10. Rating Criteria

The committee selected for a specific project will select a firm or firms for the work required. Firms will be evaluated using the following criteria.

a. Firm's Capability to Provide the Services – 40%

b. Performance/References - 30 %

c. Experience on Similar Projects – 20 %

d. Staff Qualifications – 10 %

Section 11. Submission Requirements

Respondents are responsible for submitting:

- One (1) *original* response copy to include a completed copy of this specifications packet, in its entirety.
- Three (3) numbered response *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with response submission and any other documentation requested within these specifications.

Additionally, Respondent must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

http://www.co.jefferson.tx.us/purchasing/main.htm

Responses shall be mailed or delivered to:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

All submissions must be received by 11:00 am CDT, Tuesday, January 2, 2018.

Jefferson County will not accept any submissions received after the stated time and date, and shall return such submissions unopened to the Respondent.

Jefferson County will not accept any responsibility for submissions being delivered by third party carriers.

Submissions shall be tightly sealed in an opaque envelope or box and plainly marked with the RFQ Number, RFQ Name, RFQ Due Date, and the Respondent's Name and Address; and shall be addressed to the Purchasing Agent.

The County requests that response submissions NOT be bound by staples or glued spines.

Submissions will be opened publicly in a manner to avoid public disclosure of contents/however only the names of Respondents will be read aloud.

Please direct questions in writing to Yea-Mei Sauer, Contract Specialist, ysauer@co.jefferson.tx.us.

Courthouse Security: Respondents are advised that all visitors to the Courthouse must pass through Security. Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal. Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

County Holidays – 2017:

January 16	Monday	Martin Luther King, Jr. Day
February 20	Monday	President's Day
April 14	Friday	Good Friday
May 29	Monday	Memorial Day
July 4	Tuesday	Independence Day
September 4	Monday	Labor Day
November 10	Friday	Veteran's Day
November 23 & 24	Thursday & Friday	Thanksgiving
December 25 & 26	Monday & Tuesday	Christmas
January 1, 2018	Monday	New Year's

Submissions During Time of Inclement Weather, Disaster, or Emergency:

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the bid closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the County of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the RFQ and urgent County requirements preclude amendment to the RFQ, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR OFFER.

REFERENCE ONE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE TWO

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE THREE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

Respondent Shall Return Completed Form with Offer.

Signature Page

By submitting a response to this solicitation, the undersigned certifies that at the time of submission, he/she is not on the Federal Government's list of suspended, ineligible, or debarred contractors. In the event of placement on the list between the time of bid/proposal/qualifications submission and time of award, the undersigned will notify the Jefferson County Purchasing Agent. Failure to do so may result in terminating a contract for default.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

Firm (Entity Name)	Signature
Street & Mailing Address	Print Name
City, State & Zip	Date Signed
Telephone Number	Fax Number
E-mail Address	

Respondent Shall Return Completed Form with Offer.

Respondent's Certification

I have carefully examined the Request for Statements of Qualifications, Scope of Services Background, and any other documents accompanying or made a part of this Request for Qualifications.

I hereby propose to furnish the goods or services specified in the Request for Qualifications. I agree that my proposal will remain firm for a period of up to 120 days in order to allow the County adequate time to evaluate the qualifications submitted.

I verify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this proposal on behalf of the firm as its act and deed and that the firm is ready, willing and able to perform if awarded the contract.

I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service: no officer, employee or agent of Jefferson County or any other Respondent is interested in said proposal: and that the undersigned executed this Respondent's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

_____
NAME OF BUSINESS

BY:

_____
SIGNATURE

_____
NAME & TITLE, TYPED OR PRINTED

_____
MAILING ADDRESS

_____
CITY, STATE, ZIP CODE

(___)_____
TELEPHONE NUMBER

Sworn to and subscribed before me
this _____day of
_____, 2017

_____
Notary Public

State of _____

My Commission Expires: _____

Respondent Shall Return Completed Form with Offer.

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah L. Clark, Purchasing Agent

1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

LEGAL NOTICE
Advertisement for Invitation for Bids

August 28, 2017

Notice is hereby given that sealed bids will be accepted by the Jefferson County Purchasing Department for IFB 17-029/JW, Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport. **Specifications for this project may be obtained from the Jefferson County website, http://www.co.jefferson.tx.us/Purchasing/main.htm or by calling 409-835-8593.**

Bids are to be sealed and addressed to the Purchasing Agent with the bid number and name marked on the outside of the envelope. Bidders shall forward an original and three (3) copies of their bid to the address shown below. Jefferson County does not accept bids submitted electronically. Late bids will be rejected as non-responsive. Bids will be publicly opened and read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Bidders are invited to attend the sealed bid opening.

BID NAME:	**Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport**
BID NO:	**IFB 17-029/JW**
DUE DATE/TIME:	**11:00 AM CDT, Tuesday, September 26, 2017**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department 1149 Pearl Street, 1st Floor Beaumont, Texas 77701**

There will be a **Pre-bid Conference** at 10:00 AM CDT on Tuesday, September 12, 2017, at the Jefferson County Engineering Department Conference Room located on the 5th floor of the Jefferson County Courthouse, 1149 Pearl Street, Beaumont, Texas 77701.

The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

Any questions relating to these requirements should be directed to Jamey West, Assistant Purchasing Agent, at 409-835-8593 or jwest@co.jefferson.tx.us. Questions relating to the plans and specifications should be directed to Heath Reynolds, P.E., Project Manager, at (409) 291-5362 or hreynolds@ljaengineering.com

Site visits may be made by appointment only. Bidders may request a site visit by contacting Major Clay Woodward with the Jefferson County Sheriff's Department at 409-726-2950. To ensure staff availability, we encourage all bidders to act in a prompt manner in requesting a site visit appointment.

Jefferson County encourages Disadvantaged Business Enterprises to participate in the bidding process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

All interested firms are invited to submit a bid in accordance with the terms and conditions stated in this bid.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.

Deborah Clark

Deborah L. Clark, Purchasing Agent
Jefferson County, Texas

Publish: Beaumont Enterprise & Port Arthur News – August 30, 2017 and September 6, 2017

IFB 17-029/JW
Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

Bids due: 11:00 AM CDT, Tuesday, September 26, 2017

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Bid Submissions:

Bidder is responsible for submitting:

- One (1) *original* bid copy to include a completed copy of this specifications packet, in its entirety.
- Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within t these specifications.

Additionally, Bidder must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

http://www.co.jefferson.tx.us/purchasing/main.htm

Instructions to Bidders

1. Bid Submission

Bids must be submitted in complete original form by mail or messenger to the following address:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud.

Bidder shall submit bid in a tightly sealed opaque envelope or box, plainly marked "SEALED BID." The outside of the envelope of box shall also include the Bid Number, Bid Name, Bid Due Date, and the Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

All bids must be submitted on the Bid Form furnished within these specifications.

Late bids will not be accepted and will be returned unopened to the bidder.

All bids submitted in response to this invitation shall become the property of Jefferson County and will be a matter of public record available for review.

2. Bid Submissions During Time of Inclement Weather, Disaster, or Emergency

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the county of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the IFB and urgent County requirements preclude amendment to the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

3. Courthouse Security

Bidders are advised that all visitors to the Courthouse must pass through Security. **Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal.** Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

4. Preparation of Bids

The bid shall be legibly printed in ink or typed.

The County requests that bid submissions NOT be bound by staples or glued spines.

If a unit price or extension already entered is to be altered, it shall be crossed out and initialed in ink by the bidder.

The bid shall be legally signed and shall include the complete address of the bidder.

Jefferson County is exempt from Federal and State Sales Taxes, and such taxes shall not be included in bid prices.

5. Signatures

All bids, notifications, claims, and statements must be signed by an individual authorized to bind the bidder. The individual signing certifies, under penalty of perjury, that he or she has the legal authorization to bind the bidder.

6. County Holidays – 2017:

January 16	Monday	Martin Luther King, Jr. Day
February 20	Monday	President's Day
April 14	Friday	Good Friday
May 29	Monday	Memorial Day
July 4	Tuesday	Independence Day
September 4	Monday	Labor Day
November 10	Friday	Veteran's Day
November 23 & 24	Thursday & Friday	Thanksgiving
December 25 & 26	Monday & Tuesday	Christmas
January 1, 2018	Monday	New Year's

7. Rejection or Withdrawal

Submission of additional terms, conditions or agreements with the bid document are grounds for deeming a bid non-responsive and may result in bid rejection. Jefferson County reserves the right to reject any and all bids and to waive any informalities and minor irregularities or defects in bids. Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

8. Emergency/Declared Disaster Requirements

In the event of an emergency or if Jefferson County is declared a disaster area, by the County, State, or Federal Government, this Acceptance of Offer may be subjected to unusual usage. Contractor shall service the county during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing as specified in this Acceptance of Offer shall apply to serving the County's needs regardless of the circumstances. If Contractor is unable to supply the services under the terms of the Acceptance of Offer, then Contractor shall provide proof of such disruption and a copy of the invoice from Contractor's supplier(s). Additional profit margin as a result of supplying services during an emergency or declared disaster shall not be permitted. In the event that additional equipment, supplies, and materials are required during the declared disaster, additional shipping, handling and drayage fees may apply.

9. Award

The bid will be awarded to the responsible, responsive bidder(s) whose bid, conforming to the solicitation, will be most advantageous to Jefferson County – price and other factors considered. Unless otherwise specified in this IFB, Jefferson County reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of Jefferson County. Any bidder who is in default to Jefferson County at the time of submittal of the bid shall have that bid rejected. Jefferson County reserves the right to clarify any contractual terms with the

concurrence of the Contractor; however, any substantial nonconformity in the offer, as determined by Jefferson County, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Jefferson County shall consider the qualifications of the bidders, and, where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, Jefferson County may conduct such investigation as it deems necessary to assist in the evaluation of a bid and to establish the responsibility, qualifications, and financial ability of the bidders to fulfill the contract.

Jefferson County reserves the right to award this contract on the basis of **lowest and best bid** in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, and/or to reject any or all bids. In the event the lowest dollar offeror meeting specifications is not a awarded a contract, Offeror may appear before the Commissioners' Court and present evidence concerning Offeror responsibility after officially notifying the Office of the Purchasing Agent of Offeror's intent to appear.

10. Contract

A response to an IFB is an offer to contract with Jefferson County based upon the terms, conditions, and specifications contained in the IFB. Bids do not become contracts unless and until they are executed by Jefferson County, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions is modified by an IFB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

11. Waiver of Subrogation

Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Jefferson County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.

12. Fiscal Funding

A multi-year contract (if requested by the specifications) continuing as a result of an extension option must include fiscal funding out. If, for any reason, funds are not appropriated to continue the contract, said contract shall become null and void.

13. Bid Results

Bid results are not provided in response to telephone inquiries. A preliminary tabulation of bids received will be posted on the Purchasing web page (http://co.jefferson.tx.us/ purchasing/main.htm) as soon as possible following bid opening. A final tabulation will be posted following bid award, and will also be available for review in the Purchasing Department.

14. Changes and Addenda to Bid Documents

Each change or addendum issued in relation to this IFB document will be on file in the Office of the Purchasing Agent, and will be posted on the Purchasing web site as soon as possible. It shall be the bidder's responsibility to make inquiry as to change or addenda issued, and to monitor the web site. All such changes or addenda shall become part of the contract and all bidders shall be bound by such addenda. Information on all changes or addenda issued will be available at the Office of the County Purchasing Agent.

15. Specifications

Unless otherwise stated by the bidder, the bid will be considered as being in accordance with Jefferson County's applicable standard specifications, and any special specifications outlined in the bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of Jefferson County, and should not be construed as excluding bids on other types of materials, equipment, and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid. Jefferson County reserves the right to determine if equipment/ product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid,

or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of the bid, may be considered non-responsive.

16. Delivery

Bids shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the bidder (in writing on the included Bid Form), prices bid will be considered as being based on F.O.B. destination/delivered freight included.

17. Interpretation of Bid and/or Contract Documents

All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening, in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. Inquiries received that are not made in a timely fashion may or may not be considered.

18. Currency

Prices calculated by the bidder shall be stated in U.S. dollars.

19. Pricing

Prices shall be stated in units of quantity specified in the bid documents. In case of discrepancy in computing the amount of the bid, the unit price shall govern.

20. Notice to Proceed/Purchase Order

The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.

21. Certification

By signing the offer section of the Offer and Acceptance page, bidder certifies:

- The submission of the offer did not involve collusion or other anti-competitive practices.
- The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to any public servant in connection with the submitted offer.
- The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.

22. Definitions

"County" – Jefferson County, Texas.

"Contractor" – The bidder whose proposal is accepted by Jefferson County.

23. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

24. Equal Employment Opportunity

Attention is called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, color, creed, sex, gender, or national origin.

General Conditions of Bidding and Terms of Contract

By execution of this document, the vendor accepts all general and special conditions of the contract as outlined below and in the specifications and plans.

1. Bidding

1.1 Bids. All bids must be submitted on the bid form furnished in this package.

1.2 Authorized Signatures. The bid must be executed personally by the vendor, duly authorized partner of the partnership, or duly authorized officer of the corporation. If executed by an agent, a power of attorney or other evidence of authority to act on behalf of the vendor shall accompany the bid to become a valid bid.

1.3 Late Bids. Bids must be in the office of the Jefferson County Purchasing Agent before or at the specified time and date bids are due. Bids received after the submission deadline shall be rejected as non-responsive and returned unopened.

1.4 Withdrawal of Bids Prior to Bid Opening. A bid may be withdrawn before the opening date by submitting a written request to the Purchasing Agent. If time allows, the bidder may submit a new bid. Bidder assumes full responsibility for submitting a new bid before or at the specified time and date bids are due. Jefferson County reserves the right to withdraw a request for bids before the opening date.

1.5 Withdrawal of Bids after Bid Opening. Bidder agrees that its offer may not be withdrawn or cancelled by the vendor for a period of ninety (90) days following the date and time designated for the receipt of bids unless otherwise stated in the bid and/or specifications.

1.6 Bid Amounts. Bids shall show net prices, extensions where applicable and net total. In case of conflict between unit price and extension, the unit price will govern. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be interpreted in the favor of Jefferson County.

1.7 Exceptions and/or Substitutions. All bids meeting the intent of the specifications and plans will be considered for award. Vendors taking exception to the specifications and plans, or offering substitutions, shall state these exceptions in the section provided. If bid is made on an article other than the one specified, which a bidder considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany same to permit thorough evaluation. The absence of stated exceptions and/or substitutions shall indicate that the vendor has not taken any exceptions to the specifications and shall be responsible to perform in strict accordance with the specifications. As a matter of practice, Jefferson County rejects exception(s) and /or substitutions as non-responsive but reserves the right to accept any and/or all of the exception(s) and/or substitution(s) deemed to be in the best interest of Jefferson County.

1.8 Alternates. The Invitation for Bid and/or specifications may expressly allow bidder to submit an alternate bid. Presence of such an offer shall not be considered an indication of non-responsiveness.

1.9 Descriptions. Unless otherwise specified, any reference to make, manufacturer and/or model used in the bid specifications is merely descriptive and not restrictive, and is used only to indicate type, style, or quality of material desired.

1.10 Bid Alterations. Bids cannot be altered or amended after submission deadline. Any interlineations, alterations, or erasures made before opening time must be initialed by the signer of the bid, guaranteeing authenticity.

1.11 Tax Exempt Status. Jefferson County is exempt from federal excise tax and state sales tax. Unless the bid form or specifications specifically indicate otherwise, the bid price must be net, exclusive of above-mentioned taxes and will be so construed. Therefore, the bid price shall not include taxes.

1.12 Quantities. Quantities indicated are estimated quantities only and are not a commitment to buy. Approximate usage does not constitute an order, but only implies the probable quantity that will

be used. Commodities will be ordered on an as-needed basis. Bidder is responsible for accurate final counts.

1.13 **Bid Award.** Award of contract shall be made to the most responsible, responsive bidder, whose offer is determined to be the best value, taking into consideration the relative importance of price. Jefferson County reserves the right to be the sole judge as to whether items bid will serve the purpose intended. Jefferson County reserves the right to accept or reject in part or in whole any bid submitted, and to waive any technicalities or informalities for the best interest of the County. Jefferson County reserves the right to award based upon individual line items, sections or total bid.

1.14 Silence of Specifications for Complete Units. All materials, equipment and/or parts that will become a portion of the completed work, including items not specifically stated herein but, necessary to render the service(s) complete and operational per the specifications, are to be included in the bid price. Vendor may be required to furnish evidence that the service, as bid, will meet or exceed these requirements.

1.15 Addenda. Any interpretations, corrections or changes to the specifications and plans will be made by addenda no later than forty-eight (48) hours prior to the bid opening. Addenda will be posted on the Purchasing web site. Vendors are responsible for monitoring the web site in order to remain informed on addenda. Vendors shall acknowledge receipt of all addenda with submission of bid.

1.16 General Bid Bond/Surety Requirements. Failure to furnish bid bond/surety, if requested, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.17 General Insurance Requirements. Failure to furnish Affidavit of Insurance, if required in these specifications, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.18 Responsiveness. A responsive bid shall substantially conform to the requirements of this Invitation to Bid and/or specifications contained herein. Bidders who substitute any other terms, conditions, specifications and/or requirements or who qualify their bids in such a manner as to nullify or limit their liability to the contracting entity shall have their bids deemed non-responsive. Also, bids containing any clause that would limit contracting authority shall be considered non-responsive. Examples of non-responsive bids include but shall not be limited to: a) bids that fail to conform to required delivery schedules as set forth in the bid request; b) bids with prices qualified in such a manner that the bid price cannot be determined, such as with vague wording that may include "price in effect at the time of delivery," and c) bids made contingent upon award of other bids currently under consideration.

1.19 Responsible Standing of Bidder. To be considered for award, bidder must at least: have the ability to obtain adequate financial resources, be able to comply with required or proposed delivery/completion schedule, have a satisfactory record of performance; have a satisfactory record of integrity and ethics, and be otherwise qualified and eligible to receive award.

1.20 Proprietary Data. Bidder may, by written request, indicate as confidential any portion(s) of a bid that contain proprietary information, including manufacturing and/or design processes exclusive to the vendor. Jefferson County will protect from public disclosure such portions of a bid, unless directed otherwise by legal authority, including existing Open Records Acts.

1.21 Public Bid Opening. Bidders are invited to be present at the opening of bids. After the official opening of bids, a period of not less than one week is necessary to evaluate bids. The amount of time necessary for bid evaluation may vary and is determined solely by the County. Following the bid evaluation, all bids submitted are available for public review.

2. Inspection of Site

2.1 Each bidder should visit the site of the proposed work and become fully acquainted with the existing conditions there and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the contract. The bidder should thoroughly examine and familiarize himself 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 his failure to receive or examine any form

or legal document or to visit the site or acquaint himself with the conditions there existing. The city/county will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

3. Performance

3.1 Design, Strength, and Quality. Design, strength, and quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practices. The apparent silence of specifications and/or plans as to any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications and/or plans shall be made on the basis of this statement.

3.2 Age and Manufacture. All tangible goods being bid must be new and unused, unless otherwise specified, in first-class condition, of current manufacture, and furnished ready to use. All items not specifically mentioned that are required for a complete unit shall be furnished.

3.3 Delivery Location. All deliveries will be made to the address(es) specified on the purchase order during normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, unless otherwise authorized by the Purchasing Agent or designee.

3.4 Delivery Schedule. Delivery time may be an important consideration in the evaluation of best value. The maximum number of days necessary for delivery ARO shall be stated in the space, if provided, on the bid form.

3.5 Delivery Charges. All delivery and freight charges, F.O.B. destination shown on Jefferson County purchase order, as necessary to perform contract are to be included in the bid price.

3.6 Installation Charges. All charges for assembly, installation and set-up shall be included in the bid price. Unless otherwise stated, assembly, installation and set-up will be required.

3.7 Operating Instructions and Training. Clear and concise operating instructions and descriptive literature will be provided in English, if requested. On-site detailed training in the safe and efficient use and general maintenance of item(s) purchased shall be provided as needed at the request of Jefferson County. Instructions and training shall be at no additional cost to the County.

3.8 Storage. Bidder agrees to provide storage of custom ordered materials, if requested, for up to thirty (30) calendar days.

3.9 Compliance with Federal, State, County, and Local Laws. Bids must comply with all federal, state, county and local laws, including, but not limited to, all applicable standard safety, emission, and noise control requirements. Any vehicles or equipment shall contain all standard safety, emission, and noise control requirements required for the types and sizes of equipment at the time of their manufacture. The contractor agrees, during the performance of work or service, to comply with all applicable codes and ordinances of Jefferson County or the State of Texas as they may apply, as these laws may now read, or as they may hereafter be changed or amended.

3.10 OSHA. The bidder will certify all equipment complies with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The successful bidder will further certify that all items furnished under this project will conform and comply with federal and State of Texas OSHA standards. The successful bidder will agree to indemnify and hold harmless Jefferson County for any and all damages that may be assessed against the County.

3.11 Patents and Copyrights. The successful vendor agrees to protect the County from claims involving infringements of patents and/or copyrights.

3.12 Samples, Demonstrations and Testing. At Jefferson County's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested at any point prior to or following bid award. Samples, demonstrations and/or testing may be requested upon delivery and/or any point during the term of resulting contract. All samples (including return thereof), demonstrations, and/or testing shall be at the expense of the bidder/vendor.

3.13 Acceptability. All articles enumerated in the bid shall be subject to inspection by an officer designated for that purpose by Jefferson County. If found inferior to the quality called for, or not equal in value to the specifications, deficient in workmanship or otherwise, this fact shall be certified to the Purchasing Agent, who shall have the right to reject the whole or any part of the same. Items and/or work determined to be contrary to specifications must be replaced at the vendor's expense. Inferior items not retrieved by the vendor within thirty (30) calendar days, or an otherwise agreed upon time, shall become the property of the County. If disposal of such items warrants an expense, an amount equal to the disposal expense will be deducted from amounts payable to the vendor.

3.14 Maintenance. Maintenance required for equipment bid should be available in Jefferson County by a manufacturer authorized maintenance facility. Cost for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Jefferson County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

3.15 Material Safety Data Sheets. Under the "Hazardous Communications Act," common known as the "Texas Right to Know Act," a bidder must provide the user department, with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the bidder to furnish this documentation, will be cause to reject any bid applying thereto.

3.16 Evaluation. Evaluation shall be used as a determinant as to which services are the most efficient and/or most economical for the County. It shall be based on all factors having a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Jefferson County Purchasing Department and recommendation to Jefferson County Commissioners' Court. Compliance with all bid requirements and needs of the using department are considered in evaluating bids. Pricing is not the only criteria for making a recommendation. The Jefferson County Purchasing Department reserves to right to contact any bidder, at any time, to clarify, verify or requirement information with regard to this bid.

4. Purchase Orders and Payment

4.1 Purchase Orders. A purchase order(s) shall be generated by the Jefferson County Purchasing Agent to the successful vendor. The purchase order number must appear on all itemized invoices and packing slips. The County will not be held responsible for any work orders placed and/or performed without a valid current purchase order number. Payment will be made for all services rendered and accepted by the contract administrator for which a valid invoice has been received.

4.2 Invoices. All invoices shall reference the Purchase Order number. Invoices shall reference the bid item number or a detailed description for each item invoiced. If an item purchased and itemized on the invoice does not correspond to an item in any of the categories awarded to the vendor, invoice shall reference the item as "N/C" to indicate that it is a non-contract item. This requirement is to assist the County in verifying contract pricing on all invoices. Payment will be made under terms of net thirty (30) days unless otherwise agreed upon by seller and the purchasing department.

4.3 Prompt Payment. In accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S., payment will be made after receive and acceptance by the County of the merchandise ordered and of a valid invoice. Successful bidder(s) is required to pay subcontractors within ten (10) days after the successful bidder receives payment from the County.

4.4 Funding. Jefferson County is operated and funded on an October 1 to September 30 basis; accordingly, the County reserves the right to terminate, without liability to the County, any contract for which funding is not available.

5. Contract

5.1 Contract Definition. The General Conditions of Bidding and Terms of Contract, Specifications, Plans, Bidding Forms, Addenda, and any other documents made a part of this bid shall constitute the complete bid. This bid, when duly accepted by Jefferson County, shall constitute a contract equally binding between the successful bidder and Jefferson County.

5.2 Changes in the Work

5.2.1 The Owner 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 of his obligations under the Contract or any guarantee given by him 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. Additionally, all such change orders must be approved by the Jefferson County Purchasing Department prior to execution of same.

5.2.2 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 Owner authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

5.2.3 If applicable unit prices are contained in the Agreement, the Owner 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 the total amount by eighteen percent (18%).

5.3 Change Order. No different or additional terms will become part of this contract with the exception of a change order. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing and at the discretion and approval of Jefferson County. No change order will be binding unless signed by an authorized representative of the County and the vendor.

5.3.1 Each change order shall include in its final form:

5.3.2.1 A detailed description of the change in the work.

5.3.2.2 The Contractor's proposal (if any) or a confirmed copy thereof.

5.3.2.3 A definite statement as to the resulting change in the contract price and/or time.

5.3.2.4 The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.

5.3.2.5 The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

5.4 Claims for Extra Cost

5.4.1 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 Owner, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

5.4.2 Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, 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.

5.4.3 Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall be reported at once to the Owner and

work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Owner.

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

5.5 Price Re-determination. A price re-determination may be requested at the time of annual renewal. All requests for price re-determination shall be in written form. Cause for such request, i.e., manufacturer's direct cost, postage rates, Railroad Commission rates, Federal/State minimum wage law, Federal/State unemployment taxes, F.I.C.A, Insurance Coverage Rates, etc., shall be substantiated in writing by the source of the cost increase. The bidder's past experience of honoring contracts at the bid price will be an important consideration in the evaluation of the lowest and best bid. Jefferson County reserves the right to accept or reject any/all requests for price re-determination as it deems to be in the best interest of the County.

5.6 Termination, Delays, and Liquidated Damages

5.6.1 **Right of the Owner (Jefferson County) to Terminate Contract.** In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner 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 Owner 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 Owner 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 Owner for any excess cost incurred. In such event the Owner 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.

5.6.2 **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 Owner as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of $500.00 for each calendar day of delay, until the work is completed. The Contractor and his sureties shall be liable to the Owner for the amount thereof.

5.6.3 **Excusable Delays**

5.6.3.1 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:

5.6.3.2 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;

5.6.3.3 Any acts of the Owner;

5.6.3.4 Causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other contract with the Owner, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.

5.6.3.5 Provided, however, that the Contractor promptly notifies the Owner within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Owner 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 Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

5.7 Assignment or Novation. The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Owner; provided, however, that assignments to banks or other financial institutions may be made without the consent of the Owner. 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, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

5.8 Disputes

5.8.1 All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of commencement of the dispute, be presented by the Contractor to the Owner for decision. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt of the Owner.

5.8.2 The Contractor shall submit in detail his claim and his proof thereof.

5.8.3 If the Contractor does not agree with any decision of the Owner, he shall in no case allow the dispute to delay the work but shall notify the Owner promptly that he is proceeding with the work under protest.

5.9 Conflict of Interest

5.9.1 Employees of the County are not permitted to maintain financial interest in, or receive payment, directly or indirectly, borrow from, lend to, invest in, or engage in any substantial financial transaction with any individual, organization, supplier, or subcontractor who does business with the County without disclosure.

5.9.2 When conflict of interest is discovered, it shall be grounds for termination of contract.

5.10 Injuries or Damages Resulting from Negligence. Successful bidder shall defend, indemnify and save harmless Jefferson County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful bidder shall pay any judgment with related court costs, which may be obtained against Jefferson County growing out of such injury or damages.

5.11 Interest by Public Officials. No public official shall have interest in this contract except, in accordance with Texas Local Government Code.

5.12 Warranty. The successful bidder shall warrant that all materials utilized in the performance of this contract shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title.

5.13 **Uniform Commercial Code.** The successful bidder and Jefferson County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code, subject to and enforceable according to the laws of the State of Texas.

5.14 **Venue.** This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in the County of Jefferson, Texas.

5.15 **Sale, Assignment, or Transfer of Contract.** The successful bidder shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of Jefferson County.

5.16 **Silence of Specifications.** The apparent silence of these specifications as to any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

6. Execution of Agreement/Performance and Payment Bonds

6.1 Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

6.2 The failure of the successful bidder to execute the agreement and supply the required bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as Jefferson County may grant, shall constitute a default and Jefferson County may, at its option, either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, Jefferson County 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 Jefferson County for a refund.

7. Statement of Bidder's Qualifications

7.1 Each bidder shall submit on the form furnished for that purpose a statement of the bidder's qualifications. Jefferson County shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform his obligations under the contract, and the bidder shall furnish Jefferson County 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 Jefferson County that the bidder is qualified to carry out properly the terms of the contract.

Special Requirements/Instructions

The following requirements and instructions supersede General Requirements where applicable.

1. Bid Requirement

Each bidder shall ensure that required parts of the bid are completed with accuracy and submitted as per the requirements within this specifications packet, including any addenda.

Bidder is responsible for submitting one (1) *original* bid copy to include a completed copy of this specifications packet in its entirety; and three (3) numbered bid *hard copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

All bids shall be tightly sealed in an opaque envelope or box and plainly marked "SEALED BID." The outside of the envelope or box shall also include: Bid Number, Bid Name, Bid Due Date, Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Jefferson County shall not be responsible for any effort or cost expended in the preparation of a response to this IFB. All protests should be coordinated through the Purchasing Office prior to award recommendation to Commissioners' Court.

2. Vendor Registration: SAM (System for Award Management)

Vendors doing business with Jefferson County are **required** to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is NO fee to register for this site. Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Bid Respondents are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Bid Submission.

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

As of January 1, 2016, per House Bill 1295, the Texas Ethics Commission (TEC) requires **all awarded vendors** to complete a Certificate of Interested Parties (FORM 1295) at time of notification of award. **Awarded Vendors** must visit the TEC website link below, enter the required information on Form 1295, and print a copy of the completed form. The form will include a certification of filing that will contain a unique certification number.

At the time of award, the Jefferson County Purchasing Department will submit a request to the Awarded Vendor to both:

1. Submit FORM 1295 online via the Texas Ethics Commission website link below.

2. Submit a printed copy of FORM 1295, signed by an Authorized Agent of the Awarded Vendor and notarized to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

4. Multiple Vendor Award

Jefferson County reserves the right to award this contract to more than one vendor at the County's discretion.

5. Delivery

If delivery is required, all items must be packaged so as to be protected from damage during shipping and handling. Any item(s) damaged in shipping must be replaced in kind, or repaired, by the contractor, at the discretion of, and at no additional charge to, Jefferson County.

6. Payment

Jefferson County will pay original invoices that clearly itemize the goods and/or services provided as to quantity, part number, description, price, applicable discount (if any), labor charges showing time differential, if applicable and if previously agreed to, and delivery, installation, and set-up costs, if applicable and if previously agreed to. Only charges as stated on the Bid Form(s) submitted as a part of the bid will be considered.

Invoices must indicate Jefferson County as applicable, the address to which the product(s) and/or service(s) were delivered, and the applicable purchase order number. Invoices will be matched to delivery tickets prior to payment; therefore, all delivery tickets should have an accurate description of the product(s) and/or service(s).

Invoices shall be submitted to: Jefferson County Auditing Department, Attention: Accounts Payable, 1149 Pearl Street, 7th floor, Beaumont, TX 77701.

7. Payments to Contractor

7.1 Partial Payments

7.1.1 The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Jefferson County Auditor, Patrick Swain, for his 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 Jefferson County Engineer.

7.2.2 Monthly or partial payments made by the Owner to the Contractor are moneys 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 Owner. Such payments shall not constitute a waiver of the right of the Owner 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 Owner in all details.

7.2 Final Payment

7.2.1 After final inspection and acceptance by the Owner of all work under the Contract, the Contractor shall prepare his 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 Agreement. 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.

7.2.2 The Owner before paying the final estimate, 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, if the Owner deems it necessary in order to protect its interest. The Owner may, if it deems such action advisable, 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.

7.2.3 Any amount due the Owner under Liquidated Damages, shall be deducted from the final payment due the contractor.

7.3 **Payments Subject to Submission of Certificates.** Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors.

7.4 **Withholding Payments.** The Owner may withhold from any payment due the Contractor whatever is deemed necessary to protect the Owner, 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 Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Owner elects to do so. The failure or refusal of the Owner 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.

8. Usage Reports

Jefferson County reserves the right to request, and receive at no additional cost, up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this IFB. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by Jefferson County department, description of each item purchased, including manufacturer, quantity of each item purchased, per unit and extended price of each item purchased, and total amount and price of all items purchased.

9. Insurance

The contractor (including any and all subcontractors as defined in Section 10.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
Builder's Risk Policy: Structural Coverage for Construction Projects
Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation	Statutory Coverage (see attached)

10. Workers' Compensation Insurance

10.1 Definitions:

10.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

10.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

10.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

10.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

10.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 9 above.

10.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

10.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

10.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

10.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

10.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

10.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

10.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

10.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

10.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

10.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

10.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

10.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

10.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

10.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

10.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

10.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

10.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 10.1. – 10.7., with the certificates of coverage to be provided to the person for whom they are providing services.

10.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

10.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

11. Acknowledgement of Federal Funding from The Department of Homeland Security

All recipients must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with Federal funds.

12. Project Provisions

The following provisions are also included by reference:

- Davis Bacon Act (29 CFR Part 5.5)
- EEO Compliance Reports (41 CFR Part 60-1.7)
- Trade Restriction Certification (49 CFR Part 30)
- Buy American Preferences (Title 49 United States Code, Chapter 501)
- Certification of Non-Segregated Facilities (41 CFR Part 60-1.8)
- Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion (49 CFR Part 29)

Posted Notices:
Prior to commencement of construction activities the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor:
Equal Employment Opportunity(EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.

13. General Civil Rights Provisions

The contractor agrees that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractors from the bid solicitation period through the completion of the contract.

This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

14. Civil Rights – Title VI Assurances

Title VI Solicitation Notice:

The Owner, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C.§§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

During the performance of this contract, the contractor, for itself, its assignees, and successors in Interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Statutes and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the County or Department of Homeland Security to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the County or Department of Homeland Security, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the County will impose such contract sanctions as it or the Department of Homeland Security may determine to be appropriate, including, but not limited to:

a. Withholding payments to the contractor under the contract until the contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the County or Department of Homeland Security may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

15. Notice of Requirement for Affirmative Action

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein

2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

A. Timetables

B. Goals for minority participation for each trade (Vol. 45 Federal Register pg. 65984 10/3/80)

C. Goals for female participation in each trade (6.9%)

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor is also subject to the goals for both federally funded and non-federally funded construction regardless of the percentage of federal participation in funding.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60.

3. Compliance with the goals will be measured against the total work hours performed.

4. The contractor shall provide written notification to the Director, Office of Federal Contract Compliance Programs (OFCCP), within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of subcontract; and the geographical area in which the subcontract is to be performed.

5. As used in this notice and in the contract resulting from this solicitation, the "covered area" is the Jefferson County, Texas.

16. Access to Records and Reports

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the County, the Department of Homeland Security, or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

17. Disadvantaged Business Enterprises

Contract Assurance (§ 26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of Department of Homeland Security assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment (§26.29))- The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 30 days from the receipt of each payment the prime contractor receives from Owner. The prime contractor agrees further to return retainage payments to each subcontractor within {specify the same number as above} days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

18. Energy Conservation Requirements

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

19. Federal Fair Labor Standards Act (Federal Minimum Wage)

All contracts and subcontracts that result from this solicitation incorporate the following provisions by reference, with the same force and effect as if given in full text. The contractor has full responsibility to monitor compliance to the referenced statute or regulation. The contractor must address any claims or disputes that pertain to a referenced requirement directly with the Federal Agency with enforcement responsibilities.

Requirement	**Federal Agency with Enforcement Responsibilities**
Federal Fair Labor Standards Act (29 USC 201)	U.S. Department of Labor – Wage and Hour Division

20. Lobbying and Influencing Federal Employees

The bidder or offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the bidder or offeror, 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.

2) 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.

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 section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

21. Occupational Safety and Health Act of 1970

All contracts and subcontracts that result from this solicitation incorporate the following provisions by reference, with the same force and effect as if given in full text. The contractor has full responsibility to monitor compliance to the referenced statute or regulation. The contractor must address any claims or disputes that pertain to a referenced requirement directly with the Federal Agency with enforcement responsibilities.

Requirement	**Federal Agency with Enforcement Responsibilities**
Occupational Safety and Health Act of 1970 (20 CFR Part 1910)	U.S. Department of Labor – Occupational Safety and Health Administration

22. Trade Restriction Clause

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a

foreign country on said list for use on the project, the Department of Homeland Security may direct through the County cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Department of Homeland Security may direct through the County cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

23. Buy American Preferences

Offeror must follow the standards identified in the Buy American Act, 41 U.S.C. §§10a-10d. The Buy American Act requires that all supplies and construction materials purchased be produced in the United States, unless such materials are not reasonably available, or such a purchase would not be in the public interest. Grant recipients must follow the Federal Acquisition Regulations implementing the Buy American Act, 48 CFR Part 25.

24. Veteran's Preference

In the employment of labor (except in executive, administrative, and supervisory positions), preference must be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Title 49 United States Code, Section 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

25. Copeland "Anti-Kickback" Act

The United States Department of Labor Wage and Hours Division oversees the Copeland "Anti- Kickback" Act requirements. All contracts and subcontracts must meet comply with the Occupational Safety and Health Act of 1970. United States Department of Labor Wage and Hours Division can provide information regarding any specific clauses or assurances pertaining to the Copeland "Anti-Kickback" Act requirements required to be inserted in solicitations, contracts or subcontracts.

26. Davis-Bacon Labor Provisions

1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the

Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis- Bacon poster (WH 1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii) (A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known) or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standard

(C) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Witholding

The Department of Homeland Security or the County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor,

or any other Federally- assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Department of Homeland Security may, after written notice to the contractor, the County, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic records

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits.

Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Department of Homeland Security if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Department of Homeland Security. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Department of Homeland Security if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Department of Homeland Security, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the County, the Department of Homeland Security, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees

(iv) Apprentices.

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed

as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(v) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(vi) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Department of Homeland Security may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility

(vii) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(viii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ix) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 100

27. Texting When Driving

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), the Contractor must promote policies and initiatives for employees and other work personnel that decrease crashes by distracted drivers, including policies to ban text messaging while driving. The Contractor must include these policies in each third party subcontract involved on this project.

28. Equal Opportunity Clause

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

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, 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, 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.

(2) 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, or national origin.

(3) 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.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) 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.

(6) 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.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) 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.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

d. "Minority" includes:

(1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);
(2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
(3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
(4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is

individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in Section 27: Equal Opportunity Clause (above) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft. during the period specified.

6. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

7. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

8. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

   a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

   b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

   c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.

   d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 8b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

h. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

i. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

j. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

k. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

l. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

m. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

n. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

o. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

9. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (18.7a through 18.7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Section 27: Equal Opportunity Clause of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good

faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

10. A single goal for minorities and a separate single goal for women have been established. The contractor, however, 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. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

11. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Section 27: Equal Opportunity Clause of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

29. Notice of Non-Segregated Facilities Requirement

Notice to Prospective Federally Assisted Construction Contractors:

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a federally-assisted construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

2. Contractors receiving federally-assisted construction contract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective

subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause.

3. The penalty for making false statements in offers is prescribed in 18 U.S.C. § 1001.

Notice to Prospective Subcontractors of Requirements for Certification of Non-Segregated Facilities:

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a subcontract exceeding $10,000, which is not exempt from the provisions of the Equal Opportunity Clause.

2. Contractors receiving subcontract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause.

3. The penalty for making false statements in offers is prescribed in 18 U.S.C. § 1001.

CERTIFICATION OF NONSEGREGATED FACILITIES

The federally-assisted construction contractor certifies that she or he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that she or he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that she or he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that she or he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, 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 directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally- assisted construction contractor agrees that (except where she or he has obtained identical certifications from proposed subcontractors for specific time periods) she or he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that she or he will retain such certifications in his files.

30. Termination of Contract

a. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services must be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

b. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price will be made, but no amount will be allowed for anticipated profit on unperformed services.

c. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor is liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination will be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price will be made as provided in paragraph 2 of this clause.

e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

31. Certificate Regarding Debarment and Suspension

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that at the time the bidder or offeror submits its proposal that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

32. Breach of Contract

Any violation or breach of terms of this contract on the part of the contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties and remedies available thereunder are in addition to,and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by laws of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

33. Clean Air and Water Pollution Control

Contractors and subcontractors agree:

1. That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
2. To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder;
3. That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;
4. To include or cause to be included in any construction contract or subcontract which exceeds $100,000 the aforementioned criteria and requirements.

34. Contract Workhours and Safety Standards Act Requirements

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, Including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages, Liquidated Damages

In the event of any violation of the clause set forth in paragraph (1) above, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and

guards, employed in violation of the clause set forth in paragraph 1 above, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 above.

3. Witholding for Unpaid Wages and Liquidated Damages

The Department of Homeland Security or the County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 above.

4. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

General Decision Number: TX170306 11/10/2017 TX306

Superseded General Decision Number: TX20160306

State: Texas

Construction Type: Building

County: Jefferson County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	04/14/2017
2	05/19/2017
3	06/02/2017
4	08/18/2017
5	09/08/2017
6	11/03/2017
7	11/10/2017

ASBE0022-009 06/01/2017

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation)	$ 23.26	12.92

BOIL0074-003 01/01/2017

	Rates	Fringes
BOILERMAKER	$ 28.00	22.35

BRTX0005-006 06/01/2017

	Rates	Fringes
BRICKLAYER	$ 23.02	9.53

ELEC0479-005 09/26/2016

	Rates	Fringes
ELECTRICIAN	$ 28.50	12.30

ENGI0450-002 04/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR Cranes	$ 34.85	9.85

IRON0084-011 06/01/2017

	Rates	Fringes
IRONWORKER, ORNAMENTAL	$ 23.27	7.12

IRON0135-002 06/01/2017

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 30.15	10.54

* PLUM0068-001 10/01/2017

	Rates	Fringes
PLUMBER	$ 30.14	10.44

PLUM0211-009 10/01/2016

	Rates	Fringes
PIPEFITTER	$ 34.10	11.71

SHEE0054-007 07/01/2017

	Rates	Fringes
SHEET METAL WORKER (Excludes HVAC Duct Installation)	$ 27.09	14.03

SUTX2014-032 07/21/2014

	Rates	Fringes
CARPENTER	$ 17.98	3.72
CEMENT MASON/CONCRETE FINISHER	$ 13.44	0.00
FORM WORKER	$ 13.02	0.00
IRONWORKER, REINFORCING	$ 12.95	0.00
LABORER: Common or General	$ 12.04	0.00
LABORER: Mason Tender - Brick	$ 12.90	0.00
LABORER: Mason Tender - Cement/Concrete	$ 10.50	0.00

LABORER: Pipelayer	$ 13.47	0.00
LABORER: Roof Tearoff	$ 11.28	0.00
LABORER: Landscape and Irrigation	$ 11.04	0.36
OPERATOR: Backhoe/Excavator/Trackhoe	$ 18.65	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader	$ 13.93	0.00
OPERATOR: Bulldozer	$ 18.88	0.00
OPERATOR: Drill	$ 16.22	0.34
OPERATOR: Forklift	$ 17.69	0.00
OPERATOR: Grader/Blade	$ 13.37	0.00
OPERATOR: Loader	$ 13.55	0.94
OPERATOR: Mechanic	$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	$ 16.03	0.00
OPERATOR: Roller	$ 16.00	0.00
PAINTER (Brush, Roller, and Spray)	$ 16.75	4.51
ROOFER	$ 15.40	0.00
SHEET METAL WORKER (HVAC Duct Installation Only)	$ 26.89	10.38
TILE FINISHER	$ 12.00	0.00
TILE SETTER	$ 16.17	0.00
TRUCK DRIVER: Dump Truck	$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck	$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck	$ 12.50	0.00
TRUCK DRIVER: Water Truck	$ 12.00	4.11

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the

Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that

classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Bidder Information Form

Instructions: Complete the form below. Please provide legible, accurate, and complete contact information. PLEASE PRINT.

Bid Name & Number: IFB 17-029/JW, Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

Bidder's Company/Business Name: Goss Building Inc

Bidder's TAX ID Number: 76-0576243

Contact Person: James Goss **Title:** Secretary

Phone Number (with area code): 409-842-4988

Alternate Phone Number if available (with area code): 409-842-0124

Fax Number (with area code): 409-842-0709

Email Address: Jamesgoss@gossbuilding.com

Mailing Address (Please provide a physical address for bid bond return, if applicable):

2455 W. Cardinal Dr
Address

Beaumont, Tx 77705
City, State, Zip Code

Bidder Shall Return Completed Form with Offer.

OFFER AND ACCEPTANCE FORM

OFFER TO CONTRACT

To Jefferson County:

We hereby offer and agree to furnish the materials or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. We understand that the items in this Invitation for Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract.

The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete, and states that he/she has the authority to submit this bid, which will result in a binding contract if accepted by Jefferson County.

We acknowledge receipt of the following amendment(s): 1, 2, _____, _____.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

Goss Building, Inc
Company Name

2455 W Cardinal Dr
Address

Beaumont, Tx 77705
City State Zip

Signature of Person Authorized to Sign

James Goss
Printed Name

Secretary
Title

For clarification of this offer, contact:

James Goss
Name

409-842-4988 409-842-0709
Phone Fax

jamesgoss@gossbuilding.com
E-mail

Bidder Shall Return Completed Form with Offer.

Bid Form

Bidder proposes to furnish all labor, material and equipment, and to perform all work necessary to construct a **Hangar Building for the Jefferson County Sheriff's Office (located at the Jack Brooks Regional Airport)**, in accordance with drawings and specifications prepared by LJA Engineering, for the following sum:

Materials Bid Amount: $269,000.00

Materials Bid Amount Written in Words:

Two hundred sixty-nine thousand dollars and Zero /100

Labor Bid Amount: $157,400.00

Labor Bid Amount Written in Words:

One hundred fifty-seven thousand four hundred dollars and Zero /100

Total Base Bid Amount: $426,400.00

Total Base Bid Amount Written in Words:

four hundred twenty-six thousand four Hundred dollars and Zero /100

Bid Alternate 1 – Bid Amount: $19,080.00
Optional Concrete Drive

Bid Alternate 1 for Optional Concrete Drive - Bid Amount Written in Words:

Nineteen thousand eighty dollars and Zero /100

Bidder has examined the site of the Work and the nature and kind of work to be performed and is informed of all local conditions and other things that might affect the cost or difficulty of performing the Work, and Bidder represents and warrants that Bidder has experience in the use of materials and methods of performance specified, and that Bidder and will do the Work and construct the improvements with the specified materials as contemplated and indicated by the Drawings and Specifications.

Upon receipt of notice of acceptance of bid, Bidder agrees to execute the Contract within 10 (ten) days after such notice, deliver Performance and Payment Bonds for the faithful performance of the Work, to begin work on or before the date of commencement of the Work established in the Notice to Proceed, and to complete the Work in 150 calendar days.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project on or before the date of completion shown on the "Notice to Proceed". Bidder further agrees to pay as liquidated damages, the sum of **$500.00** for each consecutive calendar day thereafter.

Acknowledgment of Addenda (if any):

Addendum 1	1	Date Received	9/11
Addendum 2	1	Date Received	10/5
Addendum 3		Date Received	

Bidder Shall Return Completed Form with Offer.

Signature Page

As permitted under Article 4413 (32c) V.A.C.S., other governmental entities may wish to participate under the same terms and conditions contained in this contract (i.e., piggyback). In the event any other entity participates, all purchase orders will be issued directly from and shipped directly to the entity requiring supplies/services. Jefferson County shall not be held responsible for any orders placed, deliveries made or payment for supplies/services ordered by another entity. Each entity reserves the right to determine their participation in this contract.

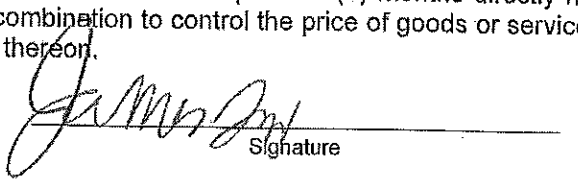
Would bidder be willing to allow other governmental entities to piggyback off this contract, if awarded, under the same terms and conditions?..... Yes ☑ No ☐

This bid shall remain in effect for ninety (90) days from bid opening and shall be exclusive of federal excise and state and local sales tax (exempt).

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price and upon the terms and conditions contained in the Invitation for Bid, Conditions of Bidding, Terms of Contract, and Specifications and all other items made a part of the accepted contract.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

Goss Building, Inc
Bidder (Entity Name)


Signature

2455 W Cardinal Dr
Street & Mailing Address

James Goss
Print Name

Beaumont, Tx 77705
City, State & Zip

10-9-2017
Date Signed

409-842-4988
Telephone Number

409-842-0709
Fax Number

jamesgoss@gossbuilding.com
E-mail Address

Bidder Shall Return Completed Form with Offer.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of TEXAS

County of JEFFERSON

James Goss, being first duly sworn, deposes and says that:

(1) He is Secretary of Goss Building, Inc, 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) James Goss

Secretary

Title

Subscribed and sworn to me this 9 day of October 2017.

PAMELA JEANIS
NOTARY PUBLIC-STATE OF TEXAS
COMM. EXP. 01-19-2020
NOTARY ID 13050282-9

By: Pamela Jeanis

Notary Public

My commission expires 1-19-2020

Bidder Shall Return Completed Form with Offer.

STATEMENT OF BIDDER'S QUALIFICATIONS

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

1. Name of Bidder Goss Building, Inc
2. Permanent main office address
   2455 W Cardinal Dr. Beaumont, Tx 77705
3. When organized 7-20-1998
4. If a corporation, where incorporated Jefferson County
5. How many years have been engaged in the contracting business under your present firm or trade name? 19
6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion)
   First State Bank
   Mobil Oil FCU
   National Tank Rentals

General character of work performed by your company

7. Have you ever failed to complete any work awarded to you? No
8. Have you ever defaulted on a Contract? No
   If so, where and why?
9. Have you ever been fined or had your license suspended by a Contractor's Licensing Board? No
   If so, where and why?
10. List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed (attach to back of this document).
11. List your major equipment available for this Contract (attach to back of this document).
12. List your experience in construction work similar in scope and scale to this project (attach to back of this document).
13. Background and experience of the principal members of your organization, including the officers (attach to back of this document).
14. Credit available: $
15. Give Bank reference: First State Bank 409-924-1065 Damon Vacek

Bidder Shall Return Completed Form with Offer.

STATEMENT OF BIDDER'S QUALIFICATIONS
(Continued)

16. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Owner? Yes

The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the Owner, in verification of the recitals comprising this statement of Bidder's Qualifications.

The Bidder shall provide a brief description of any litigation or administrative proceeding of the following types, either pending or concluded within the proceeding year, to which the Bidder (and the ultimate controlling person, if different from the Bidder) or any of its directors or executive officers was a party or of which the property of any such person is or was the subject; the names of the parties and the court or agency in which such litigation or proceeding is or was pending shall be given:

(a) Administrative or judicial proceedings of any state federal agency or authority concerning environmental violations;

(b) Proceedings which may have a material effect upon the solvency of the ultimate holding company, including but not necessarily limited to, bankruptcy and receivership; and

(c) Criminal proceedings.

Dated at 11:30 AM this 9 day of October, 2017.

(Name of Bidder)

By James Goss

Title Secretary

STATE OF Texas)

§. COUNTY OF Jefferson)

James Goss being duly sworn deposes and says that he is

Secretary of Goss Building, Inc
(Name of Organization)

and that the answers to the foregoing questions and all statements therein contained are true and correct.

SUBSCRIBED AND SWORN TO BEFORE ME this 9 day of October, 2017.

PAMELA JEANIS
NOTARY PUBLIC-STATE OF TEXAS
COMM. EXP. 01-19-2020
NOTARY ID 130502B2-9

(Notary Public)

My Commission Expires:

1-19-2020

Bidder Shall Return Completed Form with Offer.

GOSS
Building Incorporated
P.O. Box 21537
Beaumont, Texas 77720

(409) 842-4988
1-800-458-0648
FAX 842-0709

COMPANY RESUME'

FOR

GOSS BUILDING INC.

CONFIDENTIALITY NOTICE

THE DOCUMENTS ACCOMPANYING THIS COVER SHEET CONTAIN INFORMATION FROM GOSS BUILDING INC. WHICH IS CONFIDENTIAL OR PRIVILEGED. THE INFORMATION IS INTENDED TO BE FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHOM IT IS SENT. IF YOU ARE NOT THE INTENDED RECIPIENT, BE AWARE THAT ANY DISCLOSURE, COPY, DISTRIBUTION OF USE OF THE CONTENTS OF THIS INFORMATION IS PROHIBITED.

REFERENCES

ACCOUNTING	**LANGLEY, WILLIAMS & COMPANY** 205 West College St Lake Charles, LA 70605 337-447-2827
LEGAL COUNSEL	**GRIFFIN & MATTHEWS** Mike Matthews Bill Richey Beaumont, TX 409-832-6006
BANKING	**First State Bank Of Texas** 8350 Phelan Blvd Ste A Beaumont, TX 77706 409-924-1067
INSURANCE	**ARTHUR J. GALLAGHER INS.** 1490 Market St. Ste 3 Lake Charles, LA 70601 337-475-7482
BONDING	**SURETEC INSURANCE CO** 1330 Post Oak Blvd Suite 110 Houston, Tx 77056 713-812-0800

SUB-CONTRACTOR REFERENCES

SUB CONTRACTOR	CONTACT	PHONE #
ABSOLUTE ROOFING & CONSTRUCTION	STUART HASTINGS	409-724-0300
ADVANCED ALARM SYSTEMS	WAYNE DURLER	409-840-2077
AIR COMFORT	TONY THIBODEAUX	409-833-5665
AMERAGLASS	KEITH BARNETT	409-842-2267
BAILEY-BUCHANAN MASONRY	JEFF BUCHANAN	409-722-4376
B.R.C. PAINTING	BOBBY COOLEY	409-866-5844
C & C DEMOLITION, INC.	BOB COVINGTON	409-886-4538
COASTAL SPRINKLER	SHORTY CUNIFF	409-842-0721
CORBELL MASONRY, INC.	JEFF CORBELL	409-842-1078
CROWN ELECTRIC	CHARLIE LABLANC	409-842-1306
CUSTOM FLOORING	TERRY HERRING	409-769-0913
DAWSON MECHANICAL PLUMBING, INC.	LARRY DAWSON	409-295-7427
EFFICIENT SYSTEMS	WAYNE BAREFIELD	409-838-1676
HALL-MCSWEEN'S	BRETT	409-835-3964
HAYGOOD PAINT CO., INC.	JEFF HAYGOOD	409-832-8244
JAMES STUART CONSTRUCTION	JAMES STUART	409-755-3925
FFERSON ELECTRIC CO., INC.	MARK BANKS	409-842-9696
MEEHAN CONSTRUCTION	TIM MEEHAN	409-833-5893
MORGAN CONSTRUCTION	RICKY MORGAN	409-841-0795V.
PERKINS ROOFING CO.	DAVID PERKINS	409-842-2212
PLUMBING SPECIALTIES	KENNY GRANGER	409-832-5889
PREMIER CONSTRUCTION	BILLY PIERSON	409-283-3486
QUALITY CASE & FIXURE, INC.	SCOTT JENNINGS	409-832-3200
RAMIREZ BROTHERS TILE CO.	CARLOS RAMIREZ	409-727-2105
S & B ENTERPRISES	STEVE BRAMMER	409-892-1435
SCHERRY PAINT CONTRACTING	KEVIN SCHERRY	409-834-2339
SHACKELFORD ROOFING CO., INC.	DONALD SHACKELFORD	409-892-3650
SHAFFER MFG., INC.	LARRY CHEATHAM	409-838-6556
SIGN INTERNATIONAL INC.	DAVID MERRIWEATHER	409-832-0117
TEXAS FIRE & COMMUNICATIONS	DOTRY CARTER	409-842-5102
TRI-CITY ELECTRIC	DAVID BARROWS	409-832-8322
TRI STAR GLASS	MIKE WHITMAN	409-769-2565

ARCHITECT & PERSONAL REFERENCES

CATHEDRAL IN THE PINES
2350 Eastex Freeway
Beaumont, Texas 77702
409-892-1372
Bob Morgan

CHRISTUS ST. MARY HOSPITAL
P.O. Box 3696
Port Arthur, Texas 77643
409-985-7431 Ext. 5112
James Pearson

THE LABICHE ARCHITECTURAL GRP., INC.
7999 Gladys Ave., Ste. 101
Beaumont, Texas 77706
409-860-0197
Dohn LaBiche & Greg Wall

SIGMA ENGINEERS, INC.
4099 Calder Avenue
Beaumont, Texas 77708
409-898-1001
Sina Najad

MARK MAGNUSON & ASSOCIATES, INC.
704 Texas Avenue
Bridge City, Texas 77611
409-735-4999
Mark Magnuson

IBEW COMMUNITY
FEDERAL CREDIT UNION
3805 W. Cardinal Drive
Beaumont, TX 77705
409-833-8271

CHRISTUS ST. ELIZABETH HOSPITAL
2830 Calder
Beaumont, Texas 77702
409-899-7050
James Pearson

GULF STAR RENTALS
3425 W. Cardinal Drive
Beaumont, Texas 77705
409-842-3181
Loddie Naymola

LONG ARCHITECTS
6465 Calder, Ste. 205
Beaumont, Texas 77707
409-866-3443
Philip Long

ARCHITECTURAL ALLIANCE
6654 Phelan
Beaumont, Texas 77706
409-866-7196
Ronald Jones

TODAY'S VISION
4159 North Dowlen Road
Beaumont, Texas 77706
409-899-4449
Dr. John Yu

PERSONAL RESUME' OF ANTHONY C. GOSS

6017 CROSSTIMBER
ORANGE, TEXAS 77630

PERSONAL INFORMATION

BORN:	JANUARY 2, 1965
MARRIED:	KATHY LEGER
CHILDREN:	JAMES C. GOSS

EDUCATION

1984 - 1985:	TYLER JUNIOR COLLEGE TYLER, TEXAS Specifics: Advanced Math and Foreign Language
1983:	CARLSBAD SENIOR HIGH CARLSBAD, NM Specifics: College Prep classes GPA - 3.8

CAREER EXPERIENCE

7/98 - PRESENT

Goss Building Inc.
Owner/Vice President
P.O. Box 21537
Beaumont, Texas 77720
Anthony Goss - Vice President
(409)842-4988

2/97 - 7/98

Hughes Building Corporation
P.O. Box 12158
Beaumont, Texas 77726-2158
Virgil Hughes - President
(409)842-4988
Estimator, Project Manager for Commercial Buildings from small businesses to large hospitals, schools, office complexes, etc.

6/95 - 2/97

Brown and Root Industrial Services
Maintenance Foreman over the Ethylene and Cumene Units and various off sight pump house facilities in Chevron Port Arthur. My job as Maintenance Foreman included planning, scheduling, and executing work to maintain all aspects of unit equipment and buildings as well as progressive maintenance.

PERSONAL RESUME' OF JAMES C. GOSS

1203 Wildemeadow Drive
BEAUMONT, TEXAS 77706

PERSONAL INFORMATION

BORN: JANUARY 28, 1990

EDUCATION

2008 - 2012: TEXAS A&M
COLLEGE STATION, TEXAS
Bachelor of Science –
Construction Science
Cum Laude

2004 - 2008: LITTLE CYPRESS-MAURICEVILLE
HIGH SCHOOL – Little Cypress, Texas

CAREER EXPERIENCE

5/12 - PRESENT

Goss Building Inc.
Project Manager/
Assistant Project Manager/Estimator/
Safety Coordinator
P.O. Box 21537
Beaumont, Texas 77720
Anthony Goss - Vice President
(409)842-4988

10 hr. OSHA Certification

Assistant Project Manager/Safety Coordinator for:
Sabine Neches Navigation District Project

Project Manager/Safety Coordinator for:
Beaumont EOC & Emergency Shelter
Mobiloil Federal Credit Union – Vidor
MMR Constructors

1/11 – 8/11

Joeris General Contractors
1390 E. Bitters Rd.
San Antonio, Texas 78216
Julia Delahunt, HR Director
(210)494-1638
Estimating Intern

5/05 – 8/09

Goss Building, Inc.
P. O. Box 21537
Beaumont, Texas 77720
Anthony Goss – Vice President
(409) 842-4988
Laborer

BEAUMONT

Finance

City of Beaumont, Texas

Certifies that

GOSS BUILDING, INC.

Meets all the criteria established by the City of Beaumont,
And thereby is duly registered as a Minority Business Enterprise,
To do business with the City of Beaumont and its agents as such.

This certification is valid until July 18, 2018.

Laura Clark

Laura H. Clark, CPA, Chief Financial Officer

July 18, 2016
Certification Date

GOSS BUILDING, INC.

MAJOR PROJECTS FOR THE LAST 5 YEARS

JOB #	NAME OF PROJECT	OWNER	ARCHITECT/ENGINEER	CONTRACT AMOUNT	DATE OF COMPLETION
		2012			
22582	NATIONAL PUMP FAB SHOP	NAYFO	N/A	$ 1,180,512.00	3/30/2012
22678	GULFCO RELOCATE & SITEWORK	LOMAD	N/A	$ 643,254.00	4/30/2012
		2013			
22773	SABINE NECHES NAVIGATION	SABINE NECHES	SIGMA ENGINEERS	$ 1,455,848.00	3/2/2013
23008	METCO WELDER TEST FACILITY	METCO	LSI ARCHITECT	$ 468,538.00	12/16/2013
		2014			
13067	EOC & EMERGENCY SHELTER	CITY OF BEAUMONT	MILTON BELL ARCHITECTS	$ 1,151,705.00	3/30/2014
13159	NEW MOBILOIL F.C.U./VIDOR	MOBILOIL	Labiche Architects	$ 2,342,000.00	9/30/2014
		2015			
13129	Air Comfort Offices and Shop	Eaux Boy, LLC.	LS Architecture	$ 1,712,732.00	4/1/2015
13199	MMR Admin & Warehouse	MMR	SIGMA ENGINEERS	$ 2,343,482.00	6/30/2015
14105	Jasper First UMC	Jasper UMC	Goodwin Lasiter Architects	$ 1,487,950.00	9/30/2015
		2016			
15047	La Z Boy Furnishings	Lebco Industries, LLC	Hodges Architecture	$ 2,500,000.00	5/1/2016
16004	Jasper ISD Trades & Ag Barn	Jasper ISD	Design Build	$1,570,480.00	Nov-16
16012	Jasper ISD Concessions	Jasper ISd	Design Build	$ 1,400,000.00	12/15/2016

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR BID.

REFERENCE ONE

Government/Company Name: Jasper ISD

Address: 400 Bulldog Ave Jasper, Tx 75951

Contact Person and Title: Richard Skuza / Superintendent

Phone: 409-384-2401 Fax:

Email Address: Contract Period: 2016

Scope of Work: New Construction

REFERENCE TWO

Government/Company Name: LZN Enterprises

Address: 500 W 5th St, Austin, Tx 78701

Contact Person and Title: Loddie Naymola - Owner

Phone: 281-930-7028 Fax:

Email Address: Contract Period: Various Projects

Scope of Work: New Construction and Remodels

REFERENCE THREE

Government/Company Name: Hodges Architects

Address: 13642 Omega Rd, Dallas Tx 75244

Contact Person and Title: Sayers Brown - Architect

Phone: 972-387-1000 Fax:

Email Address: Contract Period: Various Projects

Scope of Work: New Construction, Remodels & Designs

Bidder Shall Return Completed Form with Offer.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, Goss Building, Inc. as PRINCIPAL, and SureTec Insurance Company, as SURETY are held and firmly bound unto (County) hereinafter called the "Local Public Agency", in the penal sum of Five percent of attached bid and alternates---------- Dollars, ($5%-------), 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 October 10, 2017, for Jefferson County Sheriff's Office Hangar Building

NOW, THEREFORE, 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 therefor, 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 Local Public Agency 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 Local Public Agency 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 parties have executed this instrument this 10th day of October, 2017, 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)

_____

(SEAL)

Attest: By: _____

Affix Corporate Seal

Goss Building, Inc.

Attest: By: _____

POA #: 1810025

SureTec Insurance Company
LIMITED POWER OF ATTORNEY

Know All Men by These Presents, That SURETEC INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

Nancy Murphy Bernard, Samoa P. Meche, Aimee Denise Morrison, Catherine Sue Moss, Cory Williams

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include waivers to the conditions of contracts and consents of surety for, providing the bond penalty does not exceed

Two Million Five Hundred Thousand and 00/100 Dollars ($2,500,000.00)

and to bind the Company thereby as fully and to the same extent as if such bond were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney-in-Fact may do in the premises. Said appointment shall continue in force until 12/31/2018 and is made under and by authority of the following resolutions of the Board of Directors of the SureTec Insurance Company:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. *(Adopted at a meeting held on 20th of April, 1999.)*

In Witness Whereof, SURETEC INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 4th day of May , A.D. 2017 .

SURETEC INSURANCE COMPANY

By: _____
John Knox Jr., President

State of Texas ss:
County of Harris

On this 4th day of May , A.D. 2017 before me personally came John Knox Jr., to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of SURETEC INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.

XENIA CHAVEZ
Notary Public, State of Texas
Comm. Expires 09-10-2020
Notary ID 129117659

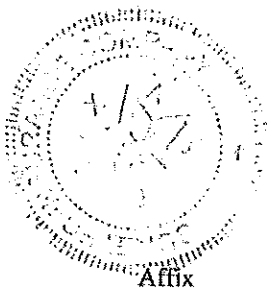
_____
Xenia Chavez, Notary Public
My commission expires September 10, 2020

I, M. Brent Beaty, Assistant Secretary of SURETEC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; and furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

Given under my hand and the seal of said Company at Houston, Texas this 10th day of October 2017, A.D.

_____
M. Brent Beaty, Assistant Secretary

Any instrument issued in excess of the penalty stated above is totally void and without any validity.
For verification of the authority of this power you may call (713) 812-0800 any business day between 8:00 am and 5:00 pm CST.



Affix
Corporate
Seal

Attest: Linda McCall

SureTec Insurance Company

By: Samoa P. Meche

Samoa P. Meche, 1734287 Attorney in Fact

Countersigned

By Jennifer Winters

Jennifer Winters, 1371704 TX Resident Agent
* Attorney-in-Fact, State of Texas

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)

_____ 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 PRINCIPAL/CONTRACTOR is Partnership, all partners should execute BOND.

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned, _____, the duly authorized and acting legal representative of the _____, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and am of the opinion that each of the agreements may be duly executed by the proper parties, acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties; and that the agreements shall constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Attorney's signature: _____ Date: _____

Print Attorney's Name: _____

Texas State Bar Number: _____

COUNTY OF JEFFERSON

CONTRACT

Project Number: (IFB 17-029/JW)
Project Name: (Re-bid) Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

STATE of TEXAS }

JEFFERSON COUNTY}

THIS AGREEMENT, made and entered into this 27th day of November, A.D. 2017, by and between **Goss Building, Inc.** of the COUNTY of Jefferson in the STATE OF TEXAS, thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and **Goss Building, Inc.** of the City of Beaumont County of Jefferson in the State of Texas, Party of the Second Part, hereinafter termed CONTRACTOR.

Scope of Work: In accordance with Jefferson County Invitation for Bid (IFB 17-029/JW), Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport, CONTRACTOR will: furnish all labor, material and equipment, and perform all work necessary to construct a hangar building for the Jefferson County Sheriff's Office (located at the Jack Brooks Regional Airport); in accordance with drawings, specifications, and addenda-if applicable as prepared by LJA Engineering, Inc. Funding for this project has been made available by The Department of Homeland Security.

CONTRACT PRICE:

Jefferson County shall pay Contractor the amount of **$ 426,400.00** (Base Bid) for completion of the Work in accordance with Contract Documents including plans, specifications, addenda, and special provisions for Project: (IFB 17-029/JW), (Re-bid) Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

All specific cash allowances are included in the above price and have been calculated in accordance with bid specifications and addenda (if applicable).

WITNESSETH: That for and inconsideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (OWNER) and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follow: and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at his (or their) own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction, in accordance with the Notice to Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore, as prepared by LJA Engineering, Inc., herein entitled the ENGINEER, each of which has been identified by the CONTRACTOR and the ENGINEER, together with the CONTRACTOR'S written proposal, the General Conditions of the Agreement, the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date written notice to do so shall have been given to him, and to substantially complete within **150** consecutive calendar days after issuance of the "Notice to Proceed" and to be at Final Completion within **150** consecutive calendar days after the issuance of the "Notice to Proceed", subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this contract, such payments to be subject to the General and Special Conditions of the contract.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

Party of the First Part (OWNER)

By: _____
Signature

Jeff R. Branick, Jefferson County Judge

Party of the Second Part (CONTRACTOR)

By: _____
Signature

James Goss Secretary / Treasurer
Printed Name & Title

Goss Building, Inc.
Firm/Company Name

ATTEST: _____
Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT JEFFERSON COUNTY, TEXAS

DATE: November 21, 2014

GENERAL CONTRACT CONDITIONS FOR CONSTRUCTION

1. Contract and Contract Documents

1.1 The project to be constructed pursuant to this contract will be financed with assistance from The Department of Homeland Security and is subject to all applicable Federal and State laws and regulations.

1.2 The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth.

2. Definitions

2.1 Whenever used in any of the contract Documents, the following meanings shall be given to the terms here in defined:

2.1.1 The term "Contract" means the Contract executed between Jefferson County hereinafter called the Owner and **(Goss Building, Inc.)**, hereinafter called Contractor, of which these GENERAL CONDITIONS, form a part.

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

2.1.3 The term "Engineer" means LJA Engineering, Inc., Engineer in charge, serving the Owner with architectural or engineering services, his successor, or any other person or persons, employed by the Owner for the purpose of directing or having in charge the work embraced in this Contract.

2.1.4 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

3.1 Except where the Contractor is an individual and gives his personal supervision to the work, the Contractor shall provide a competent superintendent, satisfactory to the Local Public Agency and the Engineer, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.

3.2 The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He 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

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

4.2 No proposed subcontractor shall be disapproved by the County except for cause.

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

4.4 The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work and required compliance by each subcontractor with the applicable provisions of the Contract.

4.5 Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Owner.

5. Fitting and Coordination of Work

5.1 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

6.1 Partial Payments

6.1.1 The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for his 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 Engineer.

6.1.2 Monthly or partial payments made by the Owner to the Contractor are moneys 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 Owner. Such payments shall not constitute a waiver of the right of the Owner 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 Owner in all details.

6.2 Final Payment

6.2.1 After final inspection and acceptance by the Owner of all work under the Contract, the Contractor shall prepare his 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 Agreement. 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.

6.2.2 The Owner before paying the final estimate, 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, if the Owner deems it necessary in order to protect its interest. The Owner may, if it deems such action advisable, 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.

6.2.3 Any amount due the Owner under Liquidated Damages, shall be deducted from the final payment due the contractor.

6.3 Payments Subject to Submission of Certificates

6.3. Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors.

6.4 Withholding Payments

6.4.1 The Owner may withhold from any payment due the Contractor whatever is deemed necessary to protect the Owner, 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 Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Owner elects to do so. The failure or refusal of the Owner 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

7.1 The Owner 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 of his obligations under the Contract or any guarantee given by him 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. Additionally, all such change orders must be approved by the Jefferson County Purchasing Department prior to execution of same.

7.2 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 Owner authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

7.3 If applicable unit prices are contained in the Agreement, the Owner 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 the total amount by eighteen percent (18%).

7.4 Each change order shall include in its final form:

7.4.1 A detailed description of the change in the work.

7.4.2 The Contractor's proposal (if any) or a confirmed copy thereof.

7.4.3 A definite statement as to the resulting change in the contract price and/or time.

7.4.4 The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.

7.4.5 The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

8. Claims for Extra Cost

8.1 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 Owner, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

8.2 Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, 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.

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

8.4 If, on the basis of the available evidence, the Owner 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

9.1 Right of the Owner to Terminate Contract.

9.2 In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner 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 Owner 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 Owner 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 Owner for any excess cost incurred. In such event the Owner 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.

9.3 Liquidated Damages for Delays.

9.3.1 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 Owner as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of $500.00 for each calendar day of delay, until the work is completed. The Contractor and his sureties shall be liable to the Owner for the amount thereof.

9.4 Excusable Delays.

9.4.1 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:

9.4.2 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;

9.4.3 Any acts of the Owner;

9.4.4 Causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other contract with the Owner, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.

9.4.5 Provided, however, that the Contractor promptly notifies the Owner within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Owner 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 Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

10. Assignment or Novation

10.1 The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Owner; provided, however, that assignments to banks or other financial institutions may be made without the consent of the Owner. 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, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

11. Disputes

11.1 All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of commencement of the dispute, be presented by the Contractor to the Owner for decision. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt of the Owner.

11.2 The Contractor shall submit in detail his claim and his proof thereof.

11.3 If the Contractor does not agree with any decision of the Owner, he shall in no case allow the dispute to delay the work but shall notify the Owner promptly that he is proceeding with the work under protest.

12. Technical Specifications and Drawings

12.1 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 Owner, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

13. Shop Drawings

13.1 All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in three (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 his 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 of his failure in this respect.

13.2 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.

13.3 If a shop drawing is in accordance with the contract or involves only a minor adjustment in the interest of the Owner not involving a change in contract price or time; the engineer may approve the drawing. The approval shall not relieve the Contractor from his responsibility for adherence to the contract or for any error in the drawing.

14. Requests for Supplementary Information

14.1 It shall be the responsibility of the Contractor to make timely requests of the Owner for any additional information not already in his possession which should be furnished by the Owner under the terms of this Contract, and which he will require 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 so as 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 Engineer 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.

15. Materials and Workmanship

15.1 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 particular standard, the Engineer shall decide the question of equality.

15.2 The Contractor shall furnish to the Owner 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.

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

15.4 Materials specified by reference to the number or symbol of a specific standard, shall comply with 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.

15.5 The Owner may require the Contractor to dismiss from the work such employee or employees as the Owner or the Engineer may deem incompetent, or careless, or insubordinate.

16. Samples, Certificates and Tests

16.1 The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, 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 Engineer. 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.

16.2 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 Engineer 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.

16.3 Approval of any materials shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he 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 Engineer 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.

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

16.4.1 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 Engineer;

16.4.2 The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;

16.4.3 The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;

16.4.4 The Owner will pay all other expenses.

17. Permits and Codes

17.1 The Contractor shall give all notices required by and comply with all applicable 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 Owner. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the Owner 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.

17.2 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 Owner.

17.3 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.

17.4 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.

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

17.6 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 Owner, shall moisten the bank and surrounding area to prevent a dusty condition.

18. Care of Work

18.1 The Contractor shall be responsible for all damages to person or property that occur as a result of his 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.

18.2 The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.

18.3 In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Owner.

18.4 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 he shall at his own expense completely repair any damage thereto caused by his operations.

18.5 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 Owner 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 Owner may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

19. Accident Prevention

19.1 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 Secretary of Labor.

19.2 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.

19.3 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 Owner with reports concerning these matters.

19.4 The Contractor shall indemnify and save harmless the Owner 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.

19.5 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.

19.6 The contractor shall at all times conduct his work in such a manner as to insure 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 Owner, 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 Owner at the expense of the Contractor.

20. Sanitary Facilities

20.1 The Contractor shall furnish, install and maintain ample sanitary facilities for the workmen. 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.

21. Use of Premises

21.1 The Contractor shall confine his 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 Owner, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

21.2 The Contractor shall comply with all reasonable instructions of the Owner and all existing state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals; and barricades.

22. Removal of Debris, Cleaning, Etc.

22.1 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.

23. Inspection

23.1 All materials and workmanship shall be subject to inspection, examination, or test by the Owner and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The Owner 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 Owner 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 Owner.

23.2 The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the Owner 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.

23.3 The Contractor shall notify the Owner 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 Owner, the Contractor shall uncover for inspection and recover such facilities at his own expense, when so requested by the Owner.

23.4 Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, 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 his 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 allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

23.5 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 (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.

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

24. Review by Owner

24.1 The Owner 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 Owner through its authorized representatives or agents.

25. Final Inspection

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

26. Deduction for Uncorrected Work

26.1 If the Owner 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 Owner and subject to settlement, in case of dispute, as herein provided.

27. Insurance

The contractor (including any and all subcontractors as defined in Section 28.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
Builder's Risk Policy: Structural Coverage for Construction Projects
Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation	Statutory Coverage (see Section 28 Below)

28. Workers' Compensation Insurance

28.1 Definitions:

28.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

28.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

28.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

28.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

28.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 27 above.

28.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

28.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

28.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

28.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

28.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

28.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

28.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

28.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

28.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

28.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

28.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

28.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

28.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

28.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

28.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

28.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

28.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 28.1. – 28.7., with the certificates of coverage to be provided to the person for whom they are providing services.

28.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in

the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

28.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

29. Warranty of Title

29.1 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 s 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 him to the Owner 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 in the hands of the Owner. 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.

30. Warranty of Workmanship and Materials

30.1 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 Owner 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 twelve (12) months from the date of final acceptance of the work.

31. Compliance with Air and Water Acts

31.1 In compliance with the Clean Air Act, as amended, 41 U.S.C. Sec. 7401 et. seq., and the regulations of the Environmental Protection Agency with respect thereto, the Contractor agrees that:

31.1.1 Any facility to be utilized in the performance of this contract or any subcontract shall not be a facility listed on the EPA List of Violating Facilities pursuant to 40 CFR 15.20.

31.1.2 He will comply with all requirements of Section 114 of the Clean Air Act, as amended.

31.1.3 Materials utilized in the project shall be free of any hazardous materials, except as may be specifically provided for in the specifications.

31.2 If the Contractor encounters existing material on sites owned or controlled by the Owner or in material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor shall immediately notify the Engineer and the Owner. The Owner will be responsible for testing for and removal or disposition of hazardous materials on sites owned or controlled by the Owner. The Owner may suspend the work, wholly or in part during the testing, removal or disposition of hazardous materials on sites owned or controlled by the Owner.

32. Equal Employment Opportunity

32.2 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 consideration for employment without regard to race, color, religion, sex, or national origin.

32.3 The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

32.4 The Contractor shall take affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions.

32.5 Contractors are encouraged to participate in voluntary associations which assist in fulfilling their affirmative action obligations.

32.6 The 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.

32.7 The Contractor shall not use the affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

32.8 The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts.

32.9 Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

33. Affirmative Action for Workers with Disabilities

33.1 The Contractor will not discriminate against any employee or applicant for employment because of disability in regard to 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.

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

34.1 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.

35. The Provision of Local Training, Employment, and Business Opportunities

35.1 To the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.

35.2 The Contractor will include this clause in every subcontract for work in connection with the project.

36. Non-Segregated Facilities

36.1 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. Job Offices

37.1 The Contractor and his subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site. The Owner shall be consulted with regard to locations.

37.2 Upon completion of the improvements, or as directed by the Owner, the Contractors shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

38. Partial Use of Site Improvements

38.1 The Owner 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:

38.1.1 The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.

38.1.2 The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

38.1.3 The period of guarantee stipulated in the Section 29 hereof shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

39. Contract Documents and Drawings

39.1 The Local Public Agency will furnish the Contractor without charge one (1) copy of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

40. Contract Period

40.1 The work to be performed under this contract shall commence within the time stipulated by the Owner in the Notice to Proceed, and shall be fully completed within **150** calendar days thereafter.

41. Liquidated Damages

41.1 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 Owner the sum of **Five Hundred Dollars ($500.00)** as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for completion.

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development
Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) **Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5 5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds $100,000.

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

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

CONTRACTOR CERTIFICATIONS

U.S. Department of Housing and Urban Development

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)

Goss Building, Inc
2455 W Cardinal Dr
Beaumont, Tx 77705

CERTIFICATION BY BIDDER

Bidder has participated in a previous contract or subcontract subject to Civil Rights Laws and Regulations.

☒ Yes ☐ No

The undersigned hereby certifies that:

☐ The Provision of Local Training, Employment, and Business Opportunities clause (Section 3 provision) is included in the Contract. A written Section 3 plan (Local Opportunity Plan) was prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000).

☐ The Equal Opportunity clause is included in the Contract (if bid equals or exceeds $10,000).

Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?

☐ Yes ☒ No

James Goss Secretary
NAME AND TITLE OF SIGNER (Please type)

SIGNATURE

10-9-2017
DATE

Bidder Shall Return Completed Form with Offer.

SECTION 504 CERTIFICATION

POLICY OF NONDISCRIMINATION ON THE BASIS OF DISABILITY

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

(Name) James Goss

(Address) 2455 W Cardinal Dr

Beaumont Tx 77705

City State Zip

Telephone Number (409) 842 - 4988 Voice

( ) _____ - _____ TDD

has been designated to coordinate compliance with the nondiscrimination requirements contained in the Department of Housing and Urban Development's (HUD) regulations implementing Section 504 (24 CFR Part 8. dated June 2, 1988).

Bidder Shall Return Completed Form with Offer.

American Recovery and Reinvestment Act
Port Security Grant Program (ARRA PSGP)
Contractor's Certification Concerning
Labor Standards and Prevailing Wage Requirements

TO (appropriate recipient)	DATE
	PROJECT NUMBER (if any)
C/O	PROJECT NAME

1. The undersigned, having executed a contract with _____ _____ for the construction of the above-identified project, acknowledges that:

   (a) The Labor Standards provisions are included in the aforesaid contract,

   (b) Correction of any infractions of the aforesaid conditions, including infractions by any of his subcontractors and any lower tier subcontractors, is his responsibility.

2. He certifies that:

   (a) Neither he nor any firm, partnership or association in which he has substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5) or pursuant to Section 3(a) of the Davis-Bacon Act, as amended.

   (b) No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions.

3. He agrees to obtain and forward to the aforementioned recipient within ten days after the execution of any subcontract, including those executed by his subcontractors and any lower tier subcontractors, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements executed by the subcontractors.

4. He certifies that:

   (a) The legal name and the business address of the undersigned are:

   (b) The undersigned is:

(1) A SINGLE PROPRIETORSHIP	(3) A CORPORATION ORGANIZED IN THE STATE OF
(2) A PARTNERSHIP	(4) OTHER ORGANIZATION (Describe)

   (c) The name, title and address of the owner, partners or officers of the undersigned are:

NAME	TITLE	ADDRESS

(d) The names and addresses of all other persons having a substantial interest in the undersigned, and the nature of the interest are:

NAME	ADDRESS	NATURE OF INTEREST

(e) The names, addresses and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are:

NAME	ADDRESS	TRADE CLASSIFICATION

(Contractor)

Date

By

This Form to Be Completed Following Bid Award.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE — **FORM CIQ**

For vendor doing business with local governmental entity

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

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.003(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY
Date Received

1 Name of vendor who has a business relationship with local governmental entity.

N/A

2 ☐ Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information in this section is being disclosed.

_____
Name of Officer

This section (item 3 including subparts A, B, C, & D) must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

C Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more?

☐ Yes ☐ No

D. Describe each employment or business and family relationship with the local government officer named in this section.

4

Signature of vendor doing business with the governmental entity — Date: 10/10/17

Adopted 8/7/2015

Bidder Shall Return Completed Form with Offer.

Local Government Officer
Conflicts Disclosure Statement - OFFICE USE ONLY

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

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

N/A

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 employment or other business 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 AFFIDAVIT

PAMELA JEANIS
NOTARY PUBLIC-STATE OF TEXAS
COMM. EXP. 04-15-2020
NOTARY ID 1000020[illegible]

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 period described by Section 176.003(a)(2)(B), Local Government Code.

Signature of Local Government Officer

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said James Goss, this the 9 day of October, 20 17, to certify which, witness my hand and seal of office.

Pamela Jeanis — Pamela Jeanis — Office Manager

Signature of officer administering oath — Printed name of officer administering oath — Title of officer administering oath

Adopted 8/7/2015

Bidder Shall Return Form (For Office Use Only) with Offer.

Good Faith Effort (GFE) Determination Checklist

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☒ Yes ☐ No

Instructions: In order to determine if a "Good Faith Effort" was made in soliciting HUBs for subcontracting opportunities, the following checklist and supporting documentation shall be completed by the Prime Contractor/Consultant, and returned with the Prime Contractor/ Consultant's bid. This list contains the **minimum** efforts that should be put forth by the Prime Contractor/Consultant when attempting to achieve or exceed the goals of HUB Subcontractor participation. The Prime Contractor/Consultant may extend his/her efforts in soliciting HUB Subcontractor participation beyond what is listed below.

Did the Prime Contractor/Consultant . . .

☐ Yes ☐ No 1. To the extent practical, and consistent with standard and prudent industry standards, divide the contract work into the smallest feasible portions, to allow for maximum HUB Subcontractor participation?

☐ Yes ☐ No 2. **Notify** in writing a reasonable number of HUBs, allowing sufficient time for effective participation of the planned work to be subcontracted?

☐ Yes ☐ No 3. **Provide** HUBs that were genuinely interested in bidding on a subcontractor, adequate information regarding the project (i.e., plans, specifications, scope of work, bonding and insurance requirements, and a point of contract within the Prime Contractor/Consultant's organization)?

☐ Yes ☐ No 4. **Negotiate** in good faith with interested HUBs, and not reject bids from HUBs that qualify as lowest and responsive bidders?

☐ Yes ☐ No 5. **Document** reasons HUBs were rejected? Was a written rejection notice, including the reason for rejection, provided to the rejected HUBs?

☐ Yes ☐ No 6. If Prime Contractor/Consultant has zero (0) HUB participation, **please explain the reasons why.**

If "No" was selected, please explain and include any pertinent documentation with your bid.
If necessary, please use a separate sheet to answer the above questions.

James Goss
Printed Name of Authorized Representative

Signature

Secretary
Title

10-9-2017
Date

Bidder Shall Return Completed Form with Offer.

Notice of Intent (NOI) to Subcontract with Historically Underutilized Business (HUB)

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☒ Yes ☐ No

Instructions for Prime Contractor/Consultant: Bidder shall submit this form with the bid; however, the information below may be submitted after contract award, but prior to beginning performance on the contract. Please submit one form for each HUB Subcontractor/Subconsultant with proper signatures, per the terms and conditions of your contract.

Contractor Name: Goss Building, Inc HUB: p Yes p No

Address: 2455 W Cardinal Dr Beaumont, Tx 77705
Street City State Zip

Phone (with area code): (409)842-4988 Fax (with area code): (409)842-0709

Project Title & No.: Rebid Jefferson County Sheriff's Office Hanger Building

Prime Contract Amount: $

HUB Subcontractor Name:

HUB Status (Gender & Ethnicity):

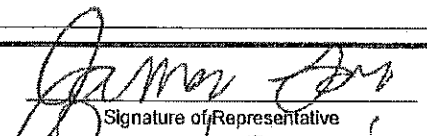
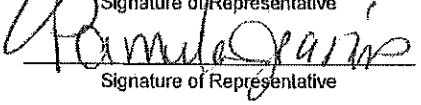
Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address:
Street City State Zip

Phone (with area code): Fax (with area code):

Proposed Subcontract Amount: $ Percentage of Prime Contract: %

Description of Subcontract Work to be Performed:

James Goss Printed Name of Contractor Representative	 Signature of Representative	10-09-17 Date
Pamela Jeanis Printed Name of HUB	 Signature of Representative	10-09-17 Date

NOTE: NOTHING ON THIS NOTICE OF INTENT FORM IS INTENDED TO CONFER ANY RIGHTS, EXPRESSED OR IMPLIED, TO ANY THIRD PARTIES.

Pre-Approval for Subcontractor Substitutions must be obtained from the Jefferson County Purchasing Agent's Representative. The "HUB Subcontractor/Subconsultant Change Form" must be completed and faxed to 409-835-8456.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☑ Yes ☐ No

Prime Contractor: Goss Buildings HUB: ☑ Yes ☐ No

HUB Status (Gender & Ethnicity): Woman owned

Address: 2455 W. Cardinal Dr Beaumont TX 77705
Street City State Zip

Phone (with area code): 409-842-4988 Fax (with area code): 409-842-0709

Project Title & No.: J.C.S.O. Hangar Building IFB/RFP No.: 17-029/JW

Total Contract: $ Total HUB Subcontract(s): $

Construction HUB Goals: 12.8% MBE:: % 12.6% WBE: %

Sub-goals: 1.7 African-American, 9.7% Hispanic, 0.7% Native American, 0.8% Asian American.
Use these goals as a guide to diversify.

FOR HUB OFFICE USE ONLY:

Verification date HUB Program Office reviewed and verified HUB Sub information Date: Initials:

PART I. HUB SUCONTRACTOR DISCLOSURE

HUB Subcontractor Name:

HUB Status (Gender & Ethnicity):

Certifying Agency: ☐ Texas Bldg & Procurement Comm. ☐ Texas Unified Certification Prog.

Address:
Street City State Zip

Contact person: Title:

Phone (with area code): Fax (with area code):

Proposed Subcontract Amount: $ Percentage of Prime Contract: %

Description of Subcontract Work to be Performed:

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

HUB SUBCONTRACTOR DISCLOSURE

PART I: Continuation Sheet **(Duplicate as Needed)**

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

All HUB Subcontractor Participation may be verified with the HUB Subcontractor(s) listed on Part I.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PART II: STATEMENT OF NON-COMPLIANCE FOR NOT MEETING HUB SUBCONTRACTING GOALS

Please complete Good Faith Effort (GFE) Checklist and attach any supporting documentation.

Our firm was unable to meet the HUB goals for this project for the following reasons:

- ☐ All subcontractors to be utilized are "Non-HUBs." *(Complete Part III)*
- ☐ HUBs were solicited but did not respond.
- ☐ HUBs solicited were not competitive.
- ☐ HUBs were unavailable for the following trade(s):
- ☐ Other: _____

Was the Jefferson County HUB Office contacted for assistance in locating HUBs? ☐ Yes ☐ No

PART III: DISCLOSURE OF OTHER "NON-HUB" SUBCONTRACTS

The bidder shall use this area to provide a listing of all "Non-HUB" Subcontractors, including suppliers, that will perform under this project. A list of those "Non-HUB" Subcontractors the bidder selects, after bid submission, shall be provided to the Purchasing Office not later than five (5) calendar days after being notified that bidder is the apparent low bidder. A list of those "Non-HUB" Subcontractors that are selected after contract award must be provided **immediately** after their selection.

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

I hereby certify that I have read the *HUB Program Instructions and Information*, truthfully completed all applicable parts of this form, and **attached any necessary support documentation as required.** I fully understand that intentionally falsifying information on this document may result in my not receiving a contract award or termination of any resulting contract.

Name (print or type): James Goss

Title: Secretary

Signature: [signature]

Date: 10-9-17

E-mail address: JamesGoss@gossbuilding.com

Contact person that will be in charge of invoicing for this project:

Name (print or type): Pamela Seanis

Title: Office manager

Date: 10-9-17

E-mail address: pam@gossbuilding.com

Bidder Shall Return Completed Form with Offer.

Residence Certification/Tax Form

Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Jefferson County requests Resident Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

☒ I certify that Goss Building Inc [company name] is a Resident Bidder of Texas as defined in Government Code §2252.001.

☐ I certify that _____ [company name] is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____ _____ (city and state).

Taxpayer Identification Number (T.I.N.):	76-0576243
Company Name submitting bid/proposal:	Goss Building, Inc
Mailing address:	2455 W Cardinal Beaumont, Tx 77705
If you are an individual, list the names and addresses of any partnership of which you are a general partner:	

Property: List all taxable property owned by you or above partnerships in Jefferson County.

Jefferson County Tax Acct. No.*	Property address or location**
700000-000-246270-000000-6	2455 W cardinal Beaumont, Tx 77705

* This is the property amount identification number assigned by the Jefferson County Appraisal District.

** For real property, specify the property address or legal description. For business property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored as a warehouse or other location.

Bidder Shall Return Completed Form with Offer.

Bid Affidavit

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the specifications and the Notice to Bidders.

STATE OF Texas COUNTY OF Jefferson

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas,

on this day personally appeared James Goss (name), who

after being by me duly sworn, did depose and say:

"I, James Goss (name) am a duly authorized officer of/agent

for Goss Building Inc (name of firm) and have been duly authorized to execute the

foregoing on behalf of the said Goss Building Inc (name of firm).

I hereby certify that the foregoing bid has not been prepared in collusion with any other bidder or other person or persons engaged in the same line of business prior to the official opening of this bid. Further, I certify that the bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities bid on, or to influence any person or persons to bid or not to bid thereon."

Name and address of bidder: Goss Building Inc
2455 W Cardinal Dr Beaumont, Tx 77705

Fax: 409 842-0709 Telephone# 409 842-4988

by: James Goss (print name) Title: Secretary

Signature:

SUBSCRIBED AND SWORN to before me by the above-named James Goss on

this the 9 day of October, 2017.

PAMELA JEANIS
NOTARY PUBLIC-STATE OF TEXAS
COMM. EXP. 01-19-2020
NOTARY ID 13050282-9

Notary Public in and for
the State of Texas

Bidder Shall Return Completed Form with Offer.

§ 135.38 Section 3 Clause.

All section 3 contracts shall include the following clause (referred to as the section 3 clause):

A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3 shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (1) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

A1001

Equal Opportunity Guidelines for Construction Contractors

Note: To be included in bid packet and distributed at the preconstruction conference (optional)

1. **What are the responsibilities of the offeror or bidder to ensure equal employment opportunity?**
   For contracts over $ 10,000, 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 ensure a legal 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 Section 3 or minority and female recruitment sources?**
   Yes, construction contractors must establish a current list of Section 3, 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 Section 3 residents, 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 Section 3, 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 TDA.
7. **What efforts are made by construction contractors to create entry-level positions for Section 3 residents, 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 Section 3 residents, 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 Section 3 residents, minorities and women?**
The construction contractor must notify both orally and in writing, Section 3, 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 insure that personnel policies are in accordance with the EEO policy?**
Personnel policies in regard to job practices, work assignments, etc. should be continually monitored to insure 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 ensure privacy.

14. **What efforts should be utilized to include minority and female contractors and suppliers?**
Take affirmative steps to ensure that small, minority, and women owned businesses are included on all lists for contractors/service providers. Solicit these businesses when issuing RFPs and RFQs and soliciting construction bids. Divide project activities into small tasks to allow participation. Keep records 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 equal opportunity affirmative action standards, does that show his/her failure to comply?**
No, the construction contractor is responsible for its own compliance.

16. **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.

17. **What effort has been taken by the construction contractor to monitor all employment to insure 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.

LOCAL OPPORTUNITY PLAN
SECTION 3 PLAN FORMAT
CONTRACTOR or SUBCONTRACTOR
(if either contract exceeds $100,000.00)

_____ agrees to implement the following
(NAME OF CONTRACTOR)
specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within the City/County of _____.

A. To ascertain from the locality's CDBG/DRS program official the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.

B. To attempt to recruit from within the City/County the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U. S. Employment Service.

C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.

D. * To insert this Section 3 Plan in all bid documents, and to require all bidders on subcontracts to submit a Section 3 Plan including utilization goals and the specific steps planned to accomplish these goals.

E. * To ensure that subcontracts, which are typically let on a negotiated rather than a bid basis, in areas other than Section 3 covered project areas, are also let on a negotiated basis whenever feasible, if let in a Section 3 covered project area.

F. To formally contact unions, subcontractors, and trade associations to secure their cooperation for this program.

G. To ensure that all appropriate project area business concerns are notified of pending sub-contractual opportunities.

H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.

I. To appoint or recruit an executive official of the company or agency as the Equal Opportunity Officer to coordinate the implementation of this Section 3 Plan.

This Form to Be Completed (If Applicable) Following Bid Award.

J. To list on **Table A** information related to subcontracts to be awarded.

K. To list on **Table B** all projected workforce needs for all phases of this project by occupation, trade, skill level, and number of positions.

L. For employment, 30 percent of all "new hires", at all levels, in conjunction with the CDBG/DRS project must be targeted to Section 3 residents. As stated previously, the extension of employment opportunities to Section 3 residents does not preclude the necessity for meeting the qualifications of the job.

M. For contracting, at least 10 percent of the total dollar amount for all Section 3 covered contracts for building trades work arising from housing rehabilitation and other public construction awarded through this grant must be targeted to Section 3 Business Concerns.

For L. and M. above, if these numerical goals cannot be reached, the contractor will have the burden of demonstrating why it was not feasible to meet these goals. This will include documentation of all efforts to comply and any impediments encountered despite efforts undertaken.

As officers and representatives of _____, we the undersigned have read and fully agree to this Affirmative Action Plan, and become a party to the full implementation of this program.

We appoint _____ as the EEO Officer.

_____
Signature

_____ _____
Title Date

_____
Signature

_____ _____
Title Date

* Loans, grants, contracts, and subsidies for less than $100,000.00 will be exempt.

This Form to Be Completed (If Applicable) Following Bid Award.

TABLE A

PROPOSED SUBCONTRACT BREAKDOWN

CONTRACT NUMBER: _____

PROJECT NAME: _____

CONSTRUCTION CONTRACTOR: _____

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
TYPE OF CONTRACT (BUSINESS OR PROFESSION)	TOTAL NUMBER OF CONTRACTS	TOTAL APPROXIMATE DOLLAR AMOUNT	ESTIMATED NUMBER OF CONTRACTS TO PROJECT AREA BUSINESSES*	ESTIMATED DOLLAR AMOUNT TO PROJECT AREA BUSINESSES*

*The Project Area is coextensive with the County of _____'s boundaries.

_____ _____

EEO Officer's Signature Date

This Form to Be Completed (If Applicable) Following Bid Award.

TABLE B

ESTIMATED PROJECT WORKFORCE BREAKDOWN

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Job Category	Total Estimated Positions	No. Positions Currently Occupied By Permanent Employees	No. Positions Not Currently Occupied	No. Positions To Be Filled w/LIPAR*
Officers/Supervisors				
Professionals				
Technicians				
Housing Sales/Rental/Mgmt.				
Office Clerical				
Service Workers				
Others				

SPECIFY TRADE CLASSIFICATION: _____

Journeymen				
Apprentices				
Maximum No. Trainees				
Others				

SPECIFY TRADE CLASSIFICATION: _____

Journeymen				
Apprentices				
Maximum No. Trainees				
Others				

SPECIFY TRADE CLASSIFICATION: _____

Journeymen				
Apprentices				
Maximum No. Trainees				
Others				

*Lower Income Project Area Residents. Individuals residing within the City/County of _____ whose family income does not exceed 80% of the median income in the State.

_____ _____

(EEO Officer's Signature) (COMPANY NAME)

USE ADDITIONAL PAGES IF NECESSARY

This Form to Be Completed (If Applicable) Following Bid Award.

SECTION 3 CERTIFICATION OF SELECTED BIDDER

Completed by Prime Contractor Only

Name of Prime Contractor _____ Project Name and Number _____

The undersigned hereby certifies that:

(Complete Section I or II)

I. A. The positions listed under part B that have been filled by _____ (Name of Prime Contractor)

since being notified of contract selection on _____ (Date of Award/Selection)

were not filled to circumvent the contractor's obligations to provide employment opportunities, including training positions, for Section 3 residents, as required by Section 3 residents of the Housing & Urban Development Act of 1968 and the implementing regulations, 24 CFR Part 135.

B. Employment Positions filled since _____ (Date of Contract Award/Selection).

OR

II. No employment positions have been filled since _____ (Date of Contract Award/Selection).

Name of Signatory (print or type) _____ Title of Signatory _____

Signature _____ Date _____

NOTICE: This certification must be made BEFORE contract execution (24 CFR 135 135.38 (e))

This Form to Be Completed (If Applicable) Following Bid Award.

CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING SECTION 3 AND SEGREGATED FACILITIES

Name of Subcontractor _____ Project Name _____

Contract Number _____

The undersigned hereby certifies that:

(a) Section 3 provisions are included in the Contract;

(b) A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000);

(c) Tables A and B were prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000); and

(d) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

Name & Title of Signer (Print or Type) _____

Signature _____ Date _____

This Form to Be Completed (If Applicable) Following Bid Award.

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

This disclosure form shall be completed by the reporting entity, whether subawardee 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 followup 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 subawardee, e.g., the first subawardee 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 "Subawardee," 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; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include 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

Approved by OMB
4040-0013

Review Public Burden Disclosure Statement

1. * Type of Federal Action:
- a. contract
- [X] b. grant
- c. cooperative agreement
- d. loan
- e. loan guarantee
- f. loan insurance

2. * Status of Federal Action:
- a. bid/offer/application
- [X] b. initial award
- c. post-award

3. * Report Type:
- [X] a. initial filing
- b. material change

4. Name and Address of Reporting Entity:

[X] Prime [ ] SubAwardee

* Name

* Street 1 Street 2

* City State Zip

Congressional District, if known:

5. If Reporting Entity in No 4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:

7. * Federal Program Name/Description:

CFDA Number, if applicable:

8. Federal Action Number, *if known*:

9. Award Amount, *if known*:

$

10. a. Name and Address of Lobbying Registrant:

Prefix * First Name Middle Name

* Last Name Suffix

* Street 1 Street 2

* City State Zip

b. Individual Performing Services (including address if different from No. 10a)

Prefix * First Name Middle Name

* Last Name Suffix

* Street 1 Street 2

* City State Zip

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 the 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.

* Signature:

* Name: Prefix * First Name James Middle Name

* Last Name Goss Suffix

Title: Secretary Telephone No.: 409 842 4988 Date: 10-6-17

Federal Use Only:

Authorized for Local Reproduction
Standard Form - LLL (Rev. 7-97)

Bidder Shall Return Completed Form with Offer.

CERTIFICATE FROM CONTRACTOR APPOINTING OFFICER OR EMPLOYEE TO SUPERVISE PAYMENT OF EMPLOYEES

Note: This certificate must be executed by an authorized officer of a corporation, by a member of a partnership, or the sole owner and submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Copeland Act.

Locality/Grantee: Jefferson County Contract #: IFB 17-029/JW
Project Name: Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

Firm Goss Building, Inc Date: 10-09-17

I do hereby certify that I am a contractor on the above-mentioned project and that I have appointed Pamela Jeanis whose signature appears below, to supervise the payment of my employees. I further certify that he/she is in the position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland "Anti-Kickback" Act which he/she is to execute with my full authority and approval until such time as I submit to the grantee/locality a new certificate appointing some other person for the purposes herein above stated.

Insert name, address, phone number & email address of person appointed as payroll officer

Name: Pamela Jeanis

Address: 2455 W Cardinal

City: Beaumont State: Tx Zip Code: 77705

Telephone No: 409-842-4988 Email Address: Pam@gossbuilding.com

Pamela Jeanis ⇐
Identifying Signature of Appointee

⇐ Title: Secretary ⇐
Signature of Appointing Officer:

Contractor's Payroll Officer Appointment Form *Page 1*

Bidder Shall Return Completed Form with Offer.

CONTRACTOR'S CERTIFICATION REGARDING LOBBYING FOR
CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS

Contract Number: IFB 17-029/JW Grantee/Locality: Jefferson County

The undersigned, James Goss, of Goss Building, Inc
(Name of Signatory Party) (Name of Construction Company)

certifies to the best of his/her knowledge and belief, that:

1) 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 agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2) 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 of 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 wit its instructions.

3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients 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 s prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to files the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

SIGNED: [signature] DATE: 10-09-2017

Secretary
TITLE

Bidder Shall Return Completed Form with Offer.

TITLE 29--Labor

Subtitle A--OFFICE OF THE SECRETARY OF LABOR

PART 3--CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

SEC.

3.1 Purpose and Scope
3.2 Definitions
3.3 Weekly Statement with respect to payment of wages
3.4. Submission of weekly statement and the preservation and inspection of weekly payroll records
3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
3.7 Applications for the approval of the Secretary of Labor
3.8 Action by the Secretary of Labor upon applications.
3.9 Prohibited payroll deductions
3.10 Method of payment of wages
3.11 Regulations part of contract

AUTHORITY: The provisions of this Part 3 issued under R.S. 161, sec.2, 48 STAT. §48:Reorg.Plan No. 14 of 1950, 64 Stat. 1267,5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 3 appear at 29 F.R. 97, Jan.4, 1964, unless otherwise noted.

§ 3.1 Purpose and scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with federally assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

§ 3.2 Definitions.

As used in the regulations in this part:

(a) The terms *building* or *work* generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a *building* or *work* within the meaning of the regulations in this part.

(b) The terms *construction, prosecution, completion,* or *repair* mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms *public building* or *public work* include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal

agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term *building or work financed in whole or in part by loans or grants from the United States* includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is *employed* and receiving *wages*, regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term *any affiliated person* includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary, or otherwise, and an officer or agent of such corporation.

(g) The term *Federal agency* means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

[29 FR 97, Jan. 4, 1964, as amended at 38 FR 32575, Nov. 27, 1973]

§ 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term *employee* shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by this part 3 and part 5 of this title during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and shall be on the back of Form WH 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Copies of Form WH 347 may be obtained from the Government contracting or sponsoring agency or from the Wage and Hour Division Web site at *http://www.dol.gov/esa/whd/forms/wh347instr.htm* or its successor site.

(c) The requirements of this section shall not apply to any contract of $2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

[29 FR 97, Jan. 4, 1964, as amended at 33 FR 10186, July 17, 1968; 47 FR 23679, May 28, 1982; 73 FR 77511, Dec. 19, 2008] **§ 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.**

(a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or, if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

(Reporting and recordkeeping requirements in paragraph (b) have been approved by the Office of Management and Budget under control number 1215–0017)

[29 FR 97, Jan. 4, 1964, as amended at 47 FR 145, Jan. 5, 1982]

§ 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A *bona fide prepayment of wages* is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor, or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: *Provided, however,* That the following standards are met:

(1) The deduction is not otherwise prohibited by law;

(2) It is either:

(i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or

(ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees;

(3) No profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and

(4) The deductions shall serve the convenience and interest of the employee.

(e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: *Provided, however,* That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and part 531 of this title. When such a deduction is made the additional records required under §516.25(a) of this title shall be kept.

(k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own property for his personal protection in his work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the

employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a third person, and if the deduction is either

(1) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or

(2) Provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees.

[29 FR 97, Jan. 4, 1964, as amended at 36 FR 9770, May 28, 1971]

§ 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under §3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;

(b) The deduction is not otherwise prohibited by law;

(c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee.

§ 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

(a) The application shall be in writing and shall be addressed to the Secretary of Labor.

(b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of §3.6, and specifies any conditions which have changed in regard to the payroll deductions.

(c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.

(d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

[29 FR 97, Jan. 4, 1964, as amended at 36 FR 9771, May 28, 1971]

§ 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

§ 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under §3.6 are prohibited.

§ 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

§ 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

Complaint Register
Under Section 3 of the Housing
And Urban Development Act of 1968

U.S. Department of Housing and Urban Development
Office of Fair Housing
and Equal Opportunity

OMB Approval No. 2529-0043 (revised)
(Expires 11/30/2018)

Instructions: This form is to be used to report allegations of noncompliance with Section 3 of the Housing and Urban Development Act of 1968, as amended and implementing regulations at 24 CFR Part 135.

1. Complainant Information:

Name of Complainant (Person or organization) | Home Phone

Street Address | Work Phone

City, State, Zip code

Email Address

2. You are: (check all that apply)

- ☐ Low/Very Low Income Person
- ☐ Public Housing Resident
- ☐ HUD Youthbuild Participant
- ☐ A Representative of any of the above listed Individuals (Such as: a Low-Income Person or Public Housing Resident)
- ☐ Section 3 Business
- ☐ A Representative of a Section 3 Business
- ☐ Other: _____

3. Basis for alleged noncompliance with Section 3:

☐ Denied Training ☐ Denied Employment ☐ Denied Contracting ☐ Other (see below in item 6)

4. Complaint is against: (check one or more boxes)

☐ Recipient of HUD Funds (Such as a PHA, city/county agency, etc.) ☐ Contractor ☐ Subcontractor ☐ Other (please specify). _____

5. Who is this complaint being filed against?

Name of agency, organization, or company: | Business Phone

Street Address

City, State, Zip code

Name and identify others (if any) who allegedly violated Section 3 in this case:

Previous Editions are Obsolete | Page 1 of 9 | form HUD-958 (5/2016)

Form Included for Use (If Applicable) During Construction Phase of this Project.

6. How did the HUD recipient, contractor, or subcontractor violate the requirements of Section 3? (Check all that apply – provide documentation, if available)

HUD Recipient	Contractor and/or Subcontractor
☐ Failed to notify Section 3 businesses about contracting opportunities	☐ Failed to certify that all employment vacancies filled prior to contract execution were not filled to circumvent Section 3
☐ Failed to incorporate the Section 3 Clause into covered Section 3 bid solicitations or contracts	☐ Failed to notify potential subcontractors about Section 3 requirements
☐ Failed to provide priority consideration to Section 3 businesses for covered contracting opportunities	☐ Failed to post notices at the work site regarding Section 3 requirements in accordance with the Section 3 Clause
☐ Failed to select Section 3 businesses in accordance with the order of priority consideration as set forth in 24 CFR 135.36	☐ Failed to send to each labor organization or representative of workers a notice of Section 3 obligations in accordance with the Section 3 Clause
☐ Failed to award contracts to Section 3 businesses	☐ Failed to ensure that its subcontractors complied with Section 3
☐ Failed to ensure that its contractors/ subcontractors complied with Section 3 requirements	☐ Failed to train and/or hire Section 3 residents for new employment opportunities
☐ Knowingly entered into contracts with contractors/ subcontractors that failed to comply with Section 3 requirements	☐ Failed to provide priority consideration to Section 3 residents for employment or training opportunities in accordance with 24 CFR Part 135.34
☐ Failed to notify Section 3 residents about training and/or employment opportunities	☐ Failed to ensure that contracts awarded to subcontractors included the Section 3 Clause
☐ Failed to provide priority consideration to Section 3 residents for employment or training opportunities	☐ Failed to award subcontracts to Section 3 businesses
☐ Failed to select Section 3 residents for training or employment opportunities in accordance with the order of priority consideration set forth in 24 CFR 135.34	☐ Failed to award subcontracts to Section 3 businesses in accordance with the order of priority consideration set forth in 24 CFR 135.34
☐ Failed to hire Section 3 residents for new employment opportunities	☐ Retaliated against the complainant because complainant sought to enforce Section 3 requirements or participated in an investigation or proceeding regarding Section 3
☐ Retaliated against the complainant because complainant sought to enforce Section 3 requirements or participated in an investigation or proceeding regarding Section 3	☐ Other _____
☐ Other _____	

Form Included for Use (If Applicable) During Construction Phase of this Project.

7. When did the act(s) checked above occur? (Include the most recent date if several dates are involved):
_____/ _____/ _____ Month Day Year
* The date of the last alleged violation or occurrence must be less than 180 days from the date of submission to HUD

8. Project name or location where alleged violation occurred? (If applicable):
Project Name (if applicable): _____ Project Number: _____
Project Location: _____
Local Contracting Agency (LCA): _____

9. Identify the type of HUD funding used by the HUD funding recipient, organization, or contractor that this complaint is filed against: (Check all that apply)			
☐ PIH Operating Subsidy	☐ Other PIH Assistance	☐ Neighborhood Stabilization Program (NSP) Assistance	☐ Section 811 Supportive Housing for the Disabled
☐ PIH Capital Fund Subsidy	☐ Community Development Block Grants (CDBG)	☐ Other Community Development Assistance	☐ Project Based Housing Vouchers
☐ Choice Neighborhood Initiative Grant	☐ HOME Investment Partnership Funding	☐ Lead-Based Paint	☐ Other HUD Housing Assistance
☐ HOPE VI Grant	☐ McKinney Homeless Assistance	☐ Section 202Supportive Housing for the Elderly	☐ Other Covered HUD Funding

Form Included for Use (If Applicable) During Construction Phase of this Project.

10. Description of act(s) or incident(s) involving alleged violation of Section 3: Summarize what happened? Attach additional information if necessary	
11. Declaration Statement I declare under penalty of perjury that I have read this complaint (including any attachments) and that all information is accurate and correct.	
Signature	Date

Form Included for Use (If Applicable) During Construction Phase of this Project.

Section 3 of the Housing and Urban Development Act of 1968

Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB number.

The information is given voluntarily and provides the basis for HUD's investigation of the complaint to determine if the allegations of noncompliance are valid. The Department will use the information provided as the basis for its determination of jurisdiction over a complainant's allegations. All information collected complies with the Privacy Act of 1974 and OMB Circular A-108. The information is unique to the processing of complaints alleging noncompliance with the Section 3 statute or implementing regulations. The information collected on this form will only be used by HUD during the investigation and resolution of complaints and will not be shared with persons or parties that are not directly involved with the complaint.

What is Section 3 of the Housing and Urban Development Act of 1968?

Section 3 is a provision of the Housing and Urban Development (HUD) Act of 1968 that helps foster local economic development, neighborhood economic improvement, and individual self-sufficiency. The Section 3 requirements ensure that ***when*** new jobs or contracts are created during the usage of certain HUD funds, priority consideration is given to low- and very low-income persons residing in the community in which the funds are spent (regardless of race or gender), and to the businesses that substantially employ these persons.

Who are Section 3 residents and businesses?

Section 3 residents are:

- Public housing residents; or
- Persons who live in the area where a HUD-assisted project is located and who have a household income that falls below HUD's income limits for low- and very low-income.

Please visit: http://www.huduser.org/portal/datasets/il.html to determine the income limits for residents of your community.

A Section 3 business is one that meets one of the following criteria:

- Is 51 percent or more owned by Section 3 residents;
- Employs Section 3 residents for at least 30 percent of its full-time, permanent staff; or
- Provides evidence of a commitment to subcontract to Section 3 business concerns, 25 percent or more of the dollar amount of the awarded contract.

What HUD funding does Section 3 cover?

Section 3 applies to any of the following:

A. Public and Indian Housing programs that receive: (1) Annual contributions for low income housing projects provided pursuant to section 5 of the U.S. Housing Act of 1937, as amended by the Quality Housing and Work Responsibility Act of 1998 (QWHRA); (2) Capital Fund Project assistance provided pursuant to Section 9 of QHWRA; (3) Operating Subsidy assistance provided pursuant to Section 9 of QHWRA.

B. Housing and community development assistance extended for: (1) housing rehabilitation (including reduction and abatement of lead based paint hazards); (2) housing construction or (3) other public construction projects; and for which the contract and subcontract exceeds $100,000, and

C. Certain competitive HUD grant funding, such as: HOPE VI, Choice Neighborhoods, etc.).

Form Included for Use (If Applicable) During Construction Phase of this Project.

What can you do about violations of the Law?

Remember, Section 3 applies to the awarding of jobs, training programs, and contracts, generated from projects receiving HUD financial assistance. If you believe that, as a low-income person or a Section 3 business concern, the responsibilities to provide economic opportunities under Section 3 have been violated, you have a right to file a complaint within **180 days** of the last alleged occurrences of noncompliance.

Complaints alleging violations of the Section 3 regulatory requirements must be submitted to the appropriate HUD Regional Office of Fair Housing and Equal Opportunity listed below. Please be certain to sign and date this form, where indicated, to ensure prompt complaint processing.

HUD will send the complaint to the appropriate HUD recipient for resolution. If resolution by the recipient fails, HUD will investigate. If HUD finds that the complaint has merit, it will try to end the violation by informal resolution. If conciliation fails, HUD may initiate other steps to enforce the law, including but not limited to suspension and debarment of the recipient or contractors as applicable.

You can obtain assistance in learning about more Section 3 by visiting www.hud.gov/section3 or by contacting one of the HUD's Regional Offices of Fair Housing and Equal Opportunity.

Authority: Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1968, as amended by the Housing and Community Development Act of 1992, U.S.C. 1701u and implementing regulations at 24 CFR Part 135.

Purpose: The information requested on this form is to be used to investigate and process Section 3 complaints.

Use: The information requested will be used to process a complaint filed under Part 135. HUD may disclose certain information for Federal, State, and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law.

Penalty: Failure to provide some or all of the requested information will result in delayed processing or rejection of this complaint for investigation.

Privacy Act of 1974 (P.L.93-579)
All information collected is provided voluntarily and complies with the Privacy Act of 1974 and OMB Circular A-108. The information is unique to the processing of complaints alleging noncompliance with the Section 3 statute or implementing regulations. The information collected on this form will only be used by HUD during the investigation and resolution of complaints and will not be shared with persons or parties that are not directly involved with the complaint.

Form Included for Use (If Applicable) During Construction Phase of this Project.

Instructions for completing the Section 3 Complaint Register

Box 1: Enter the requested information for the person that is filing the complaint (i.e., the complainant). This person must meet the definition of a Section 3 resident or business.

Box 2: Select the appropriate statement that describes your status as a Section 3 resident, businesses, or representative of either.

Box 3: Select the appropriate basis for the complaint which you are filing.

Box 4: Select the appropriate option that best describes the person or entity that you are filing this complaint against.

Box 5: Provide the name, address, and contact information for the person or entity that you are filing this complaint against.

Box 6: Select the statement(s) that best describe the alleged actions or omissions undertaken by the person or entity that you are filing this complaint against that are in violation of the requirements of Section 3. If you select "other", please briefly describe the alleged violation on the appropriate line.

Box 7: Provide the date that the alleged violation or action occurred. If the alleged act or violation is continuing in nature, please provide the date of the most recent occurrence.

Box 8: If this complaint is based upon acts or omissions that occurred at a specific job site, project, or location, please provide information that will allow HUD to identify the specific project that is the subject of the complaint that you are filing.

Box 9: Select the appropriate type of covered HUD funding that the recipient, organization, contractor/ subcontractor received or administered.
NOTE: In order for the complaint to be jurisdictional, covered HUD funding must be administered by the recipient, organization, contractor/subcontractor.

Box 10: Provide a detailed description of the acts or omissions undertaken by the person or entity that you filing this complaint against. Provide enough specific information to enable HUD to clearly understand the alleged violation and whether it demonstrates noncompliance with the requirements of Section 3.

Box 11: Please sign the complaint and enter the current date.
NOTE: By signing and dating this complaint you are affirming that your statements and allegations are true and accurate by penalty of perjury. Complaints must be signed and dated prior to acceptance by HUD for investigation.

Form Included for Use (If Applicable) During Construction Phase of this Project.

Where to file your complaint:
Please fax or mail your complaint to the appropriate HUD Regional Office of Fair Housing and Equal Opportunity that has jurisdiction over the state for which you are located or where the alleged violation occurred. Inquiries regarding the status of your complaint should be directed to the appropriate Regional office of FHEO by telephone or email.

BOSTON REGIONAL OFFICE U.S. Department of Housing and Urban Development New England Office 10 Causeway Street, Suite 308 Boston, MA 02222 (617) 994-8300 (800) 827-5005 Fax:(617) 565-7313 Email: complaints_office_01@hud.gov *Covers the following states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	**FORT WORTH REGIONAL OFFICE** U.S. Department of Housing and Urban Development Southwest Office 801 Cherry St., Unit 45, Suite 2500 Fort Worth, TX 76102 (817) 978-5900 (888)560-8913 Fax:(817) 978-5876 Email: complaints_office_06@hud.gov *Covers the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
NEW YORK REGIONAL OFFICE U.S. Department of Housing and Urban Development New York and New Jersey Office 26 Federal Plaza New York, NY 10278 (212) 264-1290 (800) 496-4294 Fax: (212) 264-9829 Email: complaints_office_02@hud.gov *Covers the following states: New Jersey and New York	**KANSAS CITY REGIONAL OFFICE** U.S. Department of Housing and Urban Development Great Plains Office 400 State Avenue Kansas City, KS 66101 (913) 551-6958 (800) 743-5323 Fax: (913) 551-6856 Email: complaints_office_07@hud.gov *Covers the following states: Iowa, Kansas, Missouri, and Nebraska
PHILADELPHIA REGIONAL OFFICE U.S. Department of Housing and Urban Development Mid-Atlantic Office 100 Penn Square East, 12th Floor Philadelphia, PA 19107 (215) 861-7646 (888) 799-2085 Fax: (215) 656-3449 Email: complaints_office_03@hud.gov *Covers the following states: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	**DENVER REGIONAL OFFICE** U.S. Department of Housing and Urban Development Rocky Mountain Office 1670 Broadway Denver, CO 80202 (303) 672-5437 (800) 877-7353 Fax: (303) 672-5026 Email: complaints_office_08@hud.gov *Covers the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

Form Included for Use (If Applicable) During Construction Phase of this Project.

ATLANTA REGIONAL OFFICE U.S. Department of Housing and Urban Development Southeast Office 40 Marietta Street Atlanta, GA 30303 (404) 331-5140 (800) 440-8091 Fax: (404) 331-1021 Email: complaints_office_04@hud.gov *Covers the following states: Alabama, Puerto Rico, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and the Virgin Islands	**SAN FRANCISCO REGIONAL OFFICE** U.S. Department of Housing and Urban Development Pacific/Hawaii Office 600 Harrison Street Third Floor San Francisco, CA 94107 (415) 489-6536 (800) 347-3739 Fax: (415) 489-6560 Email: complaints_office_09@hud.gov *Covers the following states: Arizona, California, Guam, Hawaii, and Nevada
CHICAGO REGIONAL OFFICE U.S. Department of Housing and Urban Development Midwest Office 77 W. Jackson Boulevard, Suite 2101 Chicago, IL 60604 (312) 353-7776 (800) 765-9372 Fax: (312) 886-2837 Email: complaints_office_05@hud.gov *Covers the following states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	**SEATTLE REGIONAL OFFICE** U.S. Department of Housing and Urban Development Northwest/Alaska Office 909 First Avenue Seattle, WA 98104 (206) 220-5170 (800)877-0246 Fax: (206) 220-5447 Email: complaints_office_03@hud.gov *Covers the following states: Alaska, Idaho, Oregon, and Washington

Form Included for Use (If Applicable) During Construction Phase of this Project.

JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT
1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number: IFB 17-029/JW

IFB Title: Re-bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport

IFB Due: **11:00 am , Tuesday, September 26, 2017**

Addendum No.: 1

Issued (Date): September 11, 2017

TO BIDDER: This Addendum is an integral part of the IFB package under consideration by you as a Bidder in connection with the subject matter herein identified. Jefferson County deems all sealed proposals to have been proffered in recognition and consideration of the entire IFB package – **including all addenda.** For purposes of clarification, **receipt of this present Addendum by a Bidder should be evidenced by returning it (signed) as part of the Bidder's sealed proposal.** If the Proposal has already been received by the Jefferson County Purchasing Department, Bidder should return this addendum in a separate sealed envelope, clearly marked with the IFB Title, IFB Number, and Opening Date and Time, as stated above.

Reason for Issuance of this addendum: Re-scheduled Pre-Bid Conference & Bid Due Date Extension

▸ **The Pre-Bid Conference for this bid has been re-scheduled as follows:**
10:00 am CDT, Tuesday, September 26, 2017
Location: Jefferson County Engineering Department Conference Room, 1149 Pearl Street, 5th Floor (Historic Courthouse), Beaumont, Texas 77701

▸ **The Bid Due Date for this bid has been extended to:**
11:00 am CDT, Tuesday, October 10, 2017
Location: Jefferson County Commissioners' Courtroom, 1149 Pearl Street, 4th Floor (Historic Courthouse), Beaumont, Texas 77701

The information included herein is hereby incorporated into the documents of this present Bid matter and supersedes any conflicting documents or portion thereof previously issued.

Receipt of this Addendum is hereby acknowledged by the undersigned Bidder:

ATTEST:

Pamela Jeanise
Witness

Witness

Approved by ____ Date: _____

Authorized Signature (Bidder)

Project manager / Estimator
Title of Person Signing Above

Goss Building, Inc.
Typed Name of Business or Individual

P.O. Box 21537 Bmt, TX 77720
Address

JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT
1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number:	IFB 17-029?JW
IFB Title:	Re-Bid Jefferson County Sheriff's Office Hangar Building at Jack Brooks Regional Airport
IFB Due:	**11:00 am CDT , Tuesday , October 10, 2017**
Addendum No.:	2
Issued (Date):	October 5, 2017

TO BIDDER: This Addendum is an integral part of the IFB package under consideration by you as a Bidder in connection with the subject matter herein identified. Jefferson County deems all sealed proposals to have been proffered in recognition and consideration of the entire IFB package – **including all addenda.** For purposes of clarification, **receipt of this present Addendum by a Bidder should be evidenced by returning it (signed) as part of the Bidder's sealed proposal.** If the Proposal has already been received by the Jefferson County Purchasing Department, Bidder should return this addendum in a separate sealed envelope, clearly marked with the IFB Title, IFB Number, and Opening Date and Time, as stated above.

Reason for Issuance of this addendum: Clarification to Specifications

1) Section 05100-6 Paragraph 2.5, A line 1 d states "Shop coat primary structural members with red-oxide primed hot dip galvanizing after fabrication". Typically, the framing is either hot dip galvanized or primed with standard red oxide primer, not both. Are you looking for one or the other, and if so which do you prefer?

   Primary and secondary structural members are to be red-oxide primed and not hot-dipped galvanized.

2) Section 051000-5 Paragraph H, indicates that secondary framing bolts (A307) and high strength bolts (A325) are to have a hot dip zinc coating. Paragraphs K, L, and M indicate that the anchor bolts are also to have a hot dip zinc coating. If the answer to the first question above, is red-oxide primer for framing, do you still need hot-dip zinc finish for bolts?

   A307 and A325 bolts are not required to be hot-dip galvanized. Anchor bolts are to be hot-dip galvanized.

3) Section 051000-5 Paragraph I, line 2 mentions "Tension-Control, High-Strength Bolt-Nut Washer Assemblies. Will tension-control bolts be required, or is this just for reference only?

   Tension-control bolts are not required for this project. This portion of the specification is included in the event that a vendor requires the use of them, and then they would have to adhere to the specification.

4) Will LJA provide a Texas Department of Insurance Windstorm Certificate for the structure?

   The contractor is responsible for engaging a certified windstorm inspector and applying for a WPI-8 windstorm certificate through the Texas Department if Insurance.

The information included herein is hereby incorporated into the documents of this present Bid matter and supersedes any conflicting documents or portion thereof previously issued.

Receipt of this Addendum is hereby acknowledged by the undersigned Bidder:

ATTEST:

Pamela Garris
Witness

Witness

Approved by ____ Date: _____

Authorized Signature (Bidder)

Project manager / Estimator
Title of Person Signing Above

Goss Buildings, Inc.
Typed Name of Business or Individual

P.O. Box 21537 Bmt, Tx 77720
Address

Technical Specifications

Please see Technical Specifications
And Construction Documents in this
Project Manual Beginning on page 01100-1

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

PROJECT CONSTRUCTION MANUAL

JEFFERSON COUNTY SHERRIFF'S OFFICE

HANGAR BUILDING

AT

JACK BROOKS REGIONAL AIRPORT

BEAUMONT, TEXAS

LJA Engineering, Inc.
Midstream Infrastructure
905 Orleans Street
Beaumont, Texas 77701
Phone 409.813.1862
Fax 409.813.1916
FRN - F-1386

STATE OF TEXAS
HEATH E. REYNOLDS
113232
LICENSED
PROFESSIONAL ENGINEER

WRS
White Rock Studio
1407 Sun Saha Drive
Dallas, Texas 75218
Office: 214.763.9416

REGISTERED ARCHITECT
WALTER A. REED
11498
STATE OF TEXAS

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

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JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

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JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Project Information
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions
6. Specification and drawing conventions.

B. Related Section:

1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

A. Project Location: Jefferson County Engineering Department
JCSO Hangar Building
Jack Brooks Regional Airport
N. Hwy 69 Nederland
Beaumont, TX 77705

B. Owner: Jefferson County

1. Owner's Representative: Deputy Chief Clay Woodward, P.O. Box 3522, Beaumont, Texas 77704-3522.

C. Engineer: Heath Reynolds, PE, LJA Engineering, Inc., 905 Orleans Street, Beaumont, Texas 77701, 409-291-5362

D. Throughout the entirety of this manual, "Architect" can also refer to LJA Engineering, Inc.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of the Project is defined by the Contract Documents and consists of the following:

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Construction of a new 60' x 80' hangar (pre-engineered steel building), including site grading, site access and parking, concrete area paving, mechanical, electrical, and plumbing, and interior wood framing.

B. Type of Contract.

1. Project will be constructed under a single prime contract.

1.4 ACCESS TO SITE

A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits: Confine construction operations to areas indicated on site plans.
2. Limits: Limit site disturbance, including earthwork and clearing of vegetation, to 40 feet beyond building perimeter; 10 feet beyond surface walkways, patios, surface parking, and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that require additional staging areas in order to limit compaction in the constructed area.
3. Driveways, Walkways and Entrances: Keep driveways, loading areas and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

    a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
    b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.5 COORDINATION WITH OCCUPANTS

A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or

used facilities without written permission from Owner and authorities having jurisdiction.

2. Provide not less than 48 hours notice to Owner of activities that will affect Owner's operations.

B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.

1. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

1.6 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.

B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. Notify Architect not less than two days in advance of proposed utility interruptions.
2. Obtain Owner's written permission before proceeding with utility interruptions.

C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Architect not less than two days in advance of proposed disruptive operations.
2. Obtain Owner's written permission before proceeding with disruptive operations.

D. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor air intakes.

E. Controlled Substances: Use of controlled substances on the Project site is not permitted

1.7 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations as shown on Drawings.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

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SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

B. Related Section:

1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use facsimile of form provided in the Project Manual.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified product or fabrication or installation cannot be provided, or why substitution is being requested.
b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. Certificates and qualification data, where applicable or requested.

g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
k. Cost information, including a proposal of change, if any, in the Contract Sum.
l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied:

    a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    b. Requested substitution will not adversely affect Contractor's construction schedule.
    c. Requested substitution has received necessary approvals of authorities having jurisdiction.
    d. Requested substitution is compatible with other portions of the Work.
    e. Requested substitution has been coordinated with other portions of the Work.
    f. Requested substitution provides specified warranty.
    g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied:

    a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    b. Requested substitution does not require extensive revisions to the Contract Documents.
    c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    d. Requested substitution will not adversely affect Contractor's construction schedule.
    e. Requested substitution has received necessary approvals of authorities having jurisdiction.
    f. Requested substitution is compatible with other portions of the Work.
    g. Requested substitution has been coordinated with other portions of the Work.
    h. Requested substitution provides specified warranty.
    i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

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PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

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SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time on EJCDC forms where applicable.

1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

    a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    c. Include costs of labor and supervision directly attributable to the change.
    d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

C. Proposal Request Form: Use EJCDC forms.

1.4 ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within 7 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 21 days after such authorization.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on EJCDC forms.

1.6 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on EJCDC forms. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

JEFFERSON COUNTY ENGINEERING DEPARTMENT
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SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.

1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets, Submittals Schedule and Contractor's Construction Schedule.
2. Submit the Schedule of Values to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
3. Subschedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.

B. Format and Content: Use the Project Construction Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the Schedule of Values:

    a. Project name and location.
    b. Name of Engineering Firm.
    c. Engineer's project number.
    d. Contractor's name and address.
    e. Date of submittal.

2. Submit draft of EJCDC forms.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Construction Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

    a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.

9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.

    1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.

C. Payment Application Times: Progress payments shall be submitted to Architect by the 23rd of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.

D. Payment Application Forms: EJCDC forms as form for Applications for Payment.

E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

    1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
    2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

F. Transmittal: Submit 3 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of Values.
3. Contractor's Construction Schedule (preliminary if not final).
4. Schedule of unit prices.
5. Submittals Schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. List of Contractor's principal consultants.
8. Copies of building permits.
9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
10. Initial progress report.
11. Report of preconstruction conference.
12. Certificates of insurance and insurance policies.

I. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. Evidence that claims have been settled.

5. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
6. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

JEFFERSON COUNTY ENGINEERING DEPARTMENT
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SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Coordination Drawings.
2. Project meetings.
3. Requests for Interpretation (RFIs).

B. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.3 COORDINATION

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's Construction Schedule.
2. Preparation of the Schedule of Values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.
9. Project closeout activities.

1.4 SUBMITTALS

A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.

1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:

   a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
   b. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

2. Sheet Size: At least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
3. Number of Copies: Submit two opaque copies of each submittal. Architect will return one copy.
4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

1.5 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.

2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.

B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including the following:

    a. Tentative construction schedule.
    b. Phasing.
    c. Critical work sequencing and long-lead items.
    d. Designation of key personnel and their duties.
    e. Procedures for processing field decisions and Change Orders.
    f. Procedures for RFIs.
    g. Procedures for testing and inspecting.
    h. Procedures for processing Applications for Payment.
    i. Distribution of the Contract Documents.
    j. Submittal procedures.
    k. LEED requirements.
    l. Preparation of Record Documents.
    m. Use of the premises.
    n. Work restrictions.
    o. Owner's occupancy requirements.
    p. Responsibility for temporary facilities and controls.
    q. Construction waste management and recycling.
    r. Parking availability.
    s. Office, work, and storage areas.
    t. Equipment deliveries and priorities.
    u. First aid.
    v. Security.
    w. Progress cleaning.
    x. Working hours.

3. Minutes: Record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

    a. The Contract Documents.
    b. Options.
    c. Related RFIs.
    d. Related Change Orders.
    e. Purchases.
    f. Deliveries.
    g. Submittals.
    h. Review of mockups.
    i. Possible conflicts.
    j. Compatibility problems.
    k. Time schedules.
    l. Weather limitations.
    m. Manufacturer's written recommendations.
    n. Warranty requirements.
    o. Compatibility of materials.
    p. Acceptability of substrates.
    q. Temporary facilities and controls.
    r. Space and access limitations.
    s. Regulations of authorities having jurisdiction.
    t. Testing and inspecting requirements.
    u. Installation procedures.
    v. Coordination with other work.
    w. Required performance results.
    x. Protection of adjacent work.
    y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Conduct progress meetings when deemed necessary. Coordinate dates of meetings with preparation of payment requests.

1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

   a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

      1) Review schedule for next period.

   b. Review present and future needs of each entity present, including the following:

      1) Interface requirements.
      2) Sequence of operations.
      3) Status of submittals.
      4) Deliveries.
      5) Off-site fabrication.
      6) Access.
      7) Site utilization.
      8) Temporary facilities and controls.
      9) Work hours.
      10) Hazards and risks.
      11) Progress cleaning.
      12) Quality and work standards.
      13) Status of correction of deficient items.
      14) Field observations.
      15) RFIs.
      16) Status of proposal requests.
      17) Pending changes.
      18) Status of Change Orders.
      19) Pending claims and disputes.
      20) Documentation of information for payment requests.

3. Minutes: Record the meeting minutes.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

   a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.6 REQUESTS FOR INTERPRETATION (RFIs)

A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.

1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:

1. Project name.
2. Date.
3. Name of Contractor.
4. Name of Engineer.
5. RFI number, numbered sequentially.
6. Specification Section number and title and related paragraphs, as appropriate.
7. Drawing number and detail references, as appropriate.
8. Field dimensions and conditions, as appropriate.
9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
10. Contractor's signature.
11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.

C. Hard-Copy RFIs:

1. Identify each page of attachments with the RFI number and sequential page number.

D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:

a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for coordination information already indicated in the Contract Documents.
d. Requests for adjustments in the Contract Time or the Contract Sum.
e. Requests for interpretation of Architect's actions on submittals.
f. Incomplete RFIs or RFIs with numerous errors.

2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.

3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."

    a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly, including the following:

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Contractor's Construction Schedule.
2. Submittals Schedule.
3. Daily construction reports.
4. Field condition reports.

B. See Division 01 Section "Payment Procedures" for submitting the Schedule of Values.

1.2 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.

C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

D. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.

F. Major Area: A story of construction, a separate building, or a similar significant construction element.

1.3 SUBMITTALS

A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:

1. Scheduled date for first submittal.
2. Specification Section number and title.
3. Submittal category (action or informational).
4. Name of subcontractor.
5. Description of the Work covered.
6. Scheduled date for Architect's final release or approval.

B. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.

1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.

C. Daily Construction Reports: Submit three copies at monthly intervals.

D. Field Condition Reports: Submit three copies at time of discovery of differing conditions.

1.4 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.

2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.

1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Engineer.
2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
4. Startup and Testing Time: Include not less than 7 days for startup and testing.
5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Engineer's administrative procedures necessary for certification of Substantial Completion.

C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.

1. Phasing: Arrange list of activities on schedule by phase.
2. Work under More Than One Contract: Include a separate activity for each contract.
3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
4. Work Restrictions: Show the effect of the following items on the schedule:

   a. Coordination with existing construction.
   b. Limitations of continued occupancies.
   c. Uninterruptible services.
   d. Partial occupancy before Substantial Completion.
   e. Use of premises restrictions.
   f. Provisions for future construction.
   g. Seasonal variations.
   h. Environmental control.

5. Work Stages: Indicate important stages of construction for each major portion of the Work.

D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate Actual Completion percentage for each activity.

B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. See Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.

C. See Division 01 Section "Quality Requirements" for submitting test and inspection reports.

D. See Division 01 Section "Closeout Procedures" for submitting warranties.

E. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

F. See Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information that requires Architect's responsive action.

B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

    a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

B. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.

C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 15 days for review of each resubmittal.

D. Identification: Place a permanent label or title block on each submittal for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Include the following information on label for processing and recording action taken:

    a. Project name.
    b. Date.
    c. Name and address of Architect.
    d. Name and address of Contractor.
    e. Name and address of subcontractor.
    f. Name and address of supplier.
    g. Name of manufacturer.
    h. Submittal number or other unique identifier, including revision identifier.

        1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

    i. Number and title of appropriate Specification Section.
    j. Drawing number and detail references, as appropriate.
    k. Location(s) where product is to be installed, as appropriate.
    l. Other necessary identification.

E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.

F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

1. Additional copies submitted for maintenance manuals will be marked with action taken and will be returned.

G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.

1. Transmittal Form: Use approved Contractor Transmittal Form.

H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked approved on Architect's Submittal review form attached at the end of this section.

I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

J. Use for Construction: Use only final submittals with mark indicating approval taken by Architect.

1.4 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:

1. Approval by the Architect and Owner.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

A. General: Prepare and submit Action Submittals required by individual Specification Sections.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

a. Manufacturer's written recommendations.
b. Manufacturer's product specifications.
c. Manufacturer's installation instructions.
d. Manufacturer's catalog cuts.
e. Wiring diagrams showing factory-installed wiring.
f. Printed performance curves.
g. Operational range diagrams.
h. Compliance with specified referenced standards.
i. Testing by recognized testing agency.

4. Number of Copies: Submit seven copies of Product Data, unless otherwise indicated. Architect will return five copies. Mark up and retain two returned copies as Project Record Documents.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

a. Dimensions.
b. Identification of products.
c. Fabrication and installation drawings.
d. Roughing-in and setting diagrams.
e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
f. Shopwork manufacturing instructions.
g. Templates and patterns.
h. Schedules.
i. Notation of coordination requirements.
j. Notation of dimensions established by field measurement.
k. Relationship to adjoining construction clearly indicated.
l. Seal and signature of professional engineer if specified.
m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
3. Number of Copies: Submit six opaque (bond) copies of each submittal. Architect will return one copy.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:

a. Generic description of Sample.
b. Product name and name of manufacturer.
c. Sample source.
d. Number and title of appropriate Specification Section.

3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

   a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

   a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.

E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.

   1. Number of Copies: Submit seven copies of product schedule or list, unless otherwise indicated. Architect will return five copies.

F. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."

H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.

1. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Architect will return two copies.

2.2 INFORMATIONAL SUBMITTALS

A. General: Prepare and submit Informational Submittals required by other Specification Sections.

1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
3. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."

B. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

C. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

M. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

Q. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.

S. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:

1. Statement on condition of substrates and their acceptability for installation of product.
2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
3. Results of operational and other tests and a statement of whether observed performance complies with requirements.

T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Architect.

1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

2.3 DELEGATED DESIGN

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

1. All submittals shall be submitted on the forms provided in the EJCDC. For forms not available in the EJCDC, submittals shall be on approved construction transmittal forms.

C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
2. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

C. See Divisions 02 through 49 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

A. Architect: The term architect shall also refer to LJA Engineering.

B. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

C. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.

D. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.

E. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.

F. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

G. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

H. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

I. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

J. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

K. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

L. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 SUBMITTALS

A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

B. Reports: Prepare and submit certified written reports that include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and re-inspecting.

C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY ASSURANCE

A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.

F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those

operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

1. Requirement for specialists shall not supersede building codes and regulations governing the Work.

G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
3. Demonstrate the proposed range of aesthetic effects and workmanship.
4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
6. Demolish and remove mockups when directed, unless otherwise indicated.

J. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Sections in Divisions 02 through 49.

1.6 QUALITY CONTROL

A. Contractor Responsibilities: Where quality-control services are indicated as Contractor's responsibility, Contractor will engage a qualified testing agency to perform these services.

1. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be paid by the contractor and contract sum will not be adjusted.

B. Tests and inspections not explicitly assigned to Contractor are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.

    a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."

D. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.

E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
2. Determine the location from which test samples will be taken and in which situations tests are conducted.
3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
6. Do not perform any duties of Contractor.

F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

1. Access to the Work.
2. Incidental labor and facilities necessary to facilitate tests and inspections.
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Delivery of samples to testing agencies.
6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
7. Security and protection for samples and for testing and inspecting equipment at Project site.

G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.7 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Contractor will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:

B. Special Tests and Inspections: Conducted by a qualified testing agency required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
6. Retesting and re-inspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
2. Comply with the Contract Document requirements for Division 01 Section "Cutting and Patching."

B. Protect construction exposed by or for quality-control service activities.

C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."

D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

H. "Provide": Furnish and install, complete and ready for the intended use.

I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

AA	Aluminum Association, Inc. (The)
AAADM	American Association of Automatic Door Manufacturers
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists (The)
ABAA	Air Barrier Association of America
ABMA	American Bearing Manufacturers Association
ACI	ACI International (American Concrete Institute)
ACPA	American Concrete Pipe Association
AEIC	Association of Edison Illuminating Companies, Inc. (The)
AF&PA	American Forest & Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America (The)
AHA	American Hardboard Association (Now part of CPA)
AHAM	Association of Home Appliance Manufacturers

AI	Asphalt Institute
AIA	American Institute of Architects (The)
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALCA	Associated Landscape Contractors of America (Now PLANET - Professional Landcare Network)
ALSC	American Lumber Standard Committee, Incorporated
AMCA	Air Movement and Control Association International, Inc.
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts, Inc.
APA	Architectural Precast Association
APA	APA - The Engineered Wood Association
APA EWS	APA - The Engineered Wood Association; Engineered Wood Systems
API	American Petroleum Institute
ARI	Air-Conditioning & Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASCE	American Society of Civil Engineers
ASCE/SEI	American Society of Civil Engineers/Structural Engineering Institute (See ASCE)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	ASME International (The American Society of Mechanical Engineers International)
ASSE	American Society of Sanitary Engineering
ASTM	ASTM International (American Society for Testing and Materials International)
AWCI	AWCI International (Association of the Wall and Ceiling Industry International)

AWCMA	American Window Covering Manufacturers Association (Now WCSC)
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association (The)
BICSI	BICSI
BIFMA	BIFMA International (Business and Institutional Furniture Manufacturer's Association International)
BISSC	Baking Industry Sanitation Standards Committee
CCC	Carpet Cushion Council
CDA	Copper Development Association
CEA	Canadian Electricity Association
CFFA	Chemical Fabrics & Film Association, Inc.
CGA	Compressed Gas Association
CIMA	Cellulose Insulation Manufacturers Association
CISCA	Ceilings & Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CRRC	Cool Roof Rating Council
CPA	Composite Panel Association
CPPA	Corrugated Polyethylene Pipe Association
CRI	Carpet & Rug Institute (The)
CRSI	Concrete Reinforcing Steel Institute

CSA	Canadian Standards Association
CSA	CSA International (Formerly: IAS - International Approval Services)
CSI	Cast Stone Institute
CSI	Construction Specifications Institute (The)
CSSB	Cedar Shake & Shingle Bureau
CTI	Cooling Technology Institute (Formerly: Cooling Tower Institute)
DHI	Door and Hardware Institute
EIA	Electronic Industries Alliance
EIMA	EIFS Industry Members Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ESD	ESD Association
FIBA	Federation Internationale de Basketball (The International Basketball Federation)
FIVB	Federation Internationale de Volleyball (The International Volleyball Federation)
FM Approvals	FM Approvals
FM Global	FM Global (Formerly: FMG - FM Global)
FMRC	Factory Mutual Research (Now FM Global)
FRSA	Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.
FSA	Fluid Sealing Association
FSC	Forest Stewardship Council
GA	Gypsum Association
GANA	Glass Association of North America
GRI	(Now GSI)

GS	Green Seal
GSI	Geosynthetic Institute
HI	Hydraulic Institute
HI	Hydronics Institute
HMMA	Hollow Metal Manufacturers Association (Part of NAAMM)
HPVA	Hardwood Plywood & Veneer Association
HPW	H. P. White Laboratory, Inc.
IAS	International Approval Services (Now CSA International)
IBF	International Badminton Federation
ICEA	Insulated Cable Engineers Association, Inc.
ICRI	International Concrete Repair Institute, Inc.
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)
IESNA	Illuminating Engineering Society of North America
IEST	Institute of Environmental Sciences and Technology
IGCC	Insulating Glass Certification Council
IGMA	Insulating Glass Manufacturers Alliance
ILI	Indiana Limestone Institute of America, Inc.
ISO	International Organization for Standardization
ISSFA	International Solid Surface Fabricators Association
ITS	Intertek Testing Service NA
ITU	International Telecommunication Union
KCMA	Kitchen Cabinet Manufacturers Association
LMA	Laminating Materials Association (Now part of CPA)

LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturers Association
MFMA	Maple Flooring Manufacturers Association, Inc.
MFMA	Metal Framing Manufacturers Association, Inc.
MH	Material Handling (Now MHIA)
MHIA	Material Handling Industry of America
MIA	Marble Institute of America
MPI	Master Painters Institute
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc.
NAAMM	National Association of Architectural Metal Manufacturers
NACE	NACE International (National Association of Corrosion Engineers International)
NADCA	National Air Duct Cleaners Association
NAGWS	National Association for Girls and Women in Sport
NAIMA	North American Insulation Manufacturers Association
NBGQA	National Building Granite Quarries Association, Inc.
NCAA	National Collegiate Athletic Association (The)
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCTA	National Cable & Telecommunications Association
NEBB	National Environmental Balancing Bureau
NECA	National Electrical Contractors Association
NeLMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NETA	InterNational Electrical Testing Association

NFHS	National Federation of State High School Associations
NFPA	NFPA (National Fire Protection Association)
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NOFMA	NOFMA: The Wood Flooring Manufacturers Association (Formerly: National Oak Flooring Manufacturers Association)
NRCA	National Roofing Contractors Association
NRMCA	National Ready Mixed Concrete Association
NSF	NSF International (National Sanitation Foundation International)
NSSGA	National Stone, Sand & Gravel Association
NTMA	National Terrazzo & Mosaic Association, Inc. (The)
NTRMA	National Tile Roofing Manufacturers Association (Now TRI)
NWWDA	National Wood Window and Door Association (Now WDMA)
OPL	Omega Point Laboratories, Inc. (Now ITS)
PCI	Precast/Prestressed Concrete Institute
PDCA	Painting & Decorating Contractors of America
PDI	Plumbing & Drainage Institute
PGI	PVC Geomembrane Institute
PLANET	Professional Landcare Network (Formerly: ACLA - Associated Landscape Contractors of America)
PTI	Post-Tensioning Institute
RCSC	Research Council on Structural Connections

RFCI	Resilient Floor Covering Institute
RIS	Redwood Inspection Service
SAE	SAE International
SDI	Steel Deck Institute
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers (See ASCE)
SGCC	Safety Glazing Certification Council
SIA	Security Industry Association
SIGMA	Sealed Insulating Glass Manufacturers Association (Now IGMA)
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SMPTE	Society of Motion Picture and Television Engineers
SPFA	Spray Polyurethane Foam Alliance (Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division)
SPIB	Southern Pine Inspection Bureau (The)
SPRI	Single Ply Roofing Industry
SSINA	Specialty Steel Industry of North America
SSPC	SSPC: The Society for Protective Coatings
STI	Steel Tank Institute
SWI	Steel Window Institute
SWRI	Sealant, Waterproofing, & Restoration Institute
TCA	Tile Council of America, Inc.

TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance
TMS	The Masonry Society
TPI	Truss Plate Institute, Inc.
TPI	Turfgrass Producers International
TRI	Tile Roofing Institute
UL	Underwriters Laboratories Inc.
UNI	Uni-Bell PVC Pipe Association
USAV	USA Volleyball
USGBC	U.S. Green Building Council
USITT	United States Institute for Theatre Technology, Inc.
WASTEC	Waste Equipment Technology Association
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association (Now WCSC)
WCSC	Window Covering Safety Council (Formerly: WCMA - Window Covering Manufacturers Association)
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA - National Wood Window and Door Association)
WI	Woodwork Institute (Formerly: WIC - Woodwork Institute of California)
WIC	Woodwork Institute of California (Now WI)
WMMPA	Wood Moulding & Millwork Producers Association
WSRCA	Western States Roofing Contractors Association
WWPA	Western Wood Products Association

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

BOCA	BOCA International, Inc. (See ICC)

IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials (See ICC)
ICBOES	ICBO Evaluation Service, Inc. (See ICC-ES)
ICC	International Code Council
ICC-ES	ICC Evaluation Service, Inc.
SBCCI	Southern Building Code Congress International, Inc. (See ICC)
UBC	Uniform Building Code (See ICC)

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CE	Army Corps of Engineers
CPSC	Consumer Product Safety Commission
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDA	Food and Drug Administration
GSA	General Services Administration
HUD	Department of Housing and Urban Development
LBL	Lawrence Berkeley National Laboratory
NCHRP	National Cooperative Highway Research Program (See TRB)
NIST	National Institute of Standards and Technology

OSHA	Occupational Safety & Health Administration
PBS	Public Building Service (See GSA)
PHS	Office of Public Health and Science
RUS	Rural Utilities Service (See USDA)
SD	State Department
TRB	Transportation Research Board
USDA	Department of Agriculture
USPS	Postal Service

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list.

ADAAG	Americans with Disabilities Act (ADA) Architectural Barriers Act (ABA)
CFR	Code of Federal Regulations
DOD	Department of Defense Military Specifications and Standards
DSCC	Defense Supply Center Columbus (See FS)
FED-STD	Federal Standard (See FS)
FS	Federal Specification
FTMS	Federal Test Method Standard (See FS)
MIL	(See MILSPEC)
MIL-STD	(See MILSPEC)
MILSPEC	Military Specification and Standards
UFAS	Uniform Federal Accessibility Standards

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CBHF	State of California, Department of Consumer Affairs Bureau of Home Furnishings and Thermal Insulation
CCR	California Code of Regulations
CPUC	California Public Utilities Commission
TFS	Texas Forest Service Forest Resource Development

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. See Division 01 Section "Execution" for progress cleaning requirements.

C. See Divisions 02 through 49 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.

1.2 DEFINITIONS

A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weather tight; exterior walls are insulated and weather tight; and all openings are closed with permanent construction or substantial temporary closures.

1.3 USE CHARGES

A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.

B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Pavement: Comply with Division 32 Section "Asphalt Paving."

B. Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.76-mm-) thick, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top rails.

C. Portable Chain-Link Fencing: Minimum 2-inch (50-mm), 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top and bottom rails. Provide galvanized steel bases for supporting posts.

D. Lumber and Plywood: Comply with requirements in Division 06 Section "Rough Carpentry."

E. Gypsum Board: Minimum 1/2 inch (12.7 mm) thick by 48 inches (1219 mm) wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.

F. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

2.2 TEMPORARY FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return air grille in system and remove at end of construction.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary."

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.

1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.

C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.

D. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.

E. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

1. Toilets: Use of Owner's existing toilet facilities will not be permitted.

F. Heating and Cooling : Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

G. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

H. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.

I. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.

1. Install electric power service overhead, unless otherwise indicated.
2. Connect temporary service to Owner's existing power source, as directed by Owner.

J. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

K. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.

1. Provide additional telephone lines for the following:

a. Provide a dedicated telephone line for each facsimile machine and computer in each field office.

2. At each telephone, post a list of important telephone numbers including police and fire departments, Contractor's home office, Architect's office, Owner's office and security office, Principal subcontractors' field and home offices.
3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

L. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail in field office.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines. Comply with NFPA 241.
2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits indicated on Drawings.

1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.

C. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas in same location as permanent roads and paved areas. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.

1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
2. Prepare sub grade and install sub base and base for temporary roads and paved areas according to Division 31 Section "Earth Moving."
3. Recondition base after temporary use, including removing contaminated material, re-grading, proof rolling, compacting, and testing.
4. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion. Repair hot-mix asphalt base-course pavement before installation of final course according to Division 32 Section "Asphalt Paving."

D. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

E. Parking: Use designated areas of Owner's existing parking areas for construction personnel.

F. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
2. Remove snow and ice as required to minimize accumulations.

G. Project Identification and Temporary Signs: Provide Project identification and other signs as indicated at the end of this section. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.

1. Provide temporary, directional signs for construction personnel and visitors.
2. Maintain and touchup signs so they are legible at all times.

H. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

I. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

J. Temporary Elevator Use: Refer to Division 14 Sections for temporary use of new elevators.

K. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

L. Temporary Use of Permanent Stairs: Cover finished, permanent stairs with protective covering of plywood or similar material so finishes will be undamaged at time of acceptance.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.

C. Storm Water Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and sub grade construction to prevent flooding by runoff of storm water from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

E. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.

F. Site Enclosure Fence: Before construction operations begin and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide Owner with one set of keys.

G. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

I. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.

1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

J. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

B. See Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.

C. See Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.3 SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: type written letter on company stationary.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified material or product cannot be provided.
b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
j. Cost information, including a proposal of change, if any, in the Contract Sum.
k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Acceptance: Change Order.

b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

B. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.

C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
3. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.

10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.

    a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
    b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

A. Timing: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.

B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
2. Requested substitution does not require extensive revisions to the Contract Documents.
3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
4. Substitution request is fully documented and properly submitted.
5. Requested substitution will not adversely affect Contractor's Construction Schedule.
6. Requested substitution has received necessary approvals of authorities having jurisdiction.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work.
9. Requested substitution provides specified warranty.

2.3 COMPARABLE PRODUCTS

A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. General installation of products.
4. Progress cleaning.
5. Starting and adjusting.
6. Protection of installed construction.
7. Correction of the Work.

B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 SUBMITTALS

A. Certificates: Submit certificate signed by professional engineer certifying that location and elevation of improvements comply with requirements.

B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal. .

C. Certified Surveys: Submit two copies signed by professional engineer.

D. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

1.3 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

1. Before construction, verify the location and points of connection of utility services.

B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field

measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

B. General: Engage a professional engineer to lay out the Work using accepted surveying practices.

1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
3. Inform installers of lines and levels to which they must comply.
4. Check the location, level and plumb, of every major element as the Work progresses.
5. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.

D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.

C. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.

D. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.

1. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.5 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not

recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 Section "Quality Requirements."

3.8 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.9 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Restore permanent facilities used during construction to their specified condition.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Inspection procedures.
2. Warranties.
3. Final cleaning.

B. See Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.

C. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

D. See Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

E. See Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise Owner of pending insurance changeover requirements.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.3 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:

a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
k. Remove labels that are not permanent.
l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.

m. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
n. Replace parts subject to unusual operating conditions.
o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
r. Leave Project clean and ready for occupancy.

C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1. Emergency manuals.
2. Operation manuals for systems, subsystems, and equipment.
3. Maintenance manuals for the care and maintenance of products, materials, and finishes, systems and equipment.

B. See Divisions 02 through 49 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 SUBMITTALS

A. Manual: Submit one copy of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.

1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

PART 2 - PRODUCTS

2.1 MANUALS, GENERAL

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents, and manual contents.

B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name, address, and telephone number of Contractor.
6. Name and address of Architect.
7. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

   a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.

2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

   a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
   b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.2 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for type of emergency, emergency instructions, and emergency procedures.

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component for fire, flood, water leak, power failure, water outage, equipment failure and chemical release or spill.

C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

D. Emergency Procedures: Include instructions on stopping, shutdown instructions for each type of emergency, operating instructions for conditions outside normal operating limits, and required sequences for electric or electronic systems.

2.3 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.

B. Descriptions: Include the following:

1. Product name and model number.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include start-up, break-in, and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal, and weekend operating instructions; and required sequences for electric or electronic systems.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.4 PRODUCT MAINTENANCE MANUAL

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.

4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment:

D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions, and demonstration and training videotape if available, that detail essential maintenance procedures:

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.

H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.

1. Do not use original Project Record Documents as part of operation and maintenance manuals.

F. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

JEFFERSON COUNTY ENGINEERING DEPARTMENT
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SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:

1. Record Drawings.
2. Record Specifications.
3. Record Product Data.

B. See Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

C. See Divisions 02 through 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.2 SUBMITTALS

A. Record Drawings: Comply with the following:

1. Number of Copies: Submit two sets of marked-up Record Prints.
2. Number of Copies: Submit copies of Record Drawings as follows:

a. Initial Submittal: Submit one set of corrected Record Transparencies and two sets of marked-up Record Prints. Architect will initial and date each transparency and mark whether general scope of changes, additional information recorded, and quality of drafting are acceptable. Architect will return transparencies and prints for organizing into sets, printing, binding, and final submittal.
b. Final Submittal: Submit two sets of marked-up Record Prints, and the following:

1) Record Transparencies: One set.
2) Copies printed from Record Transparencies: Two. Print each Drawing, whether or not changes and additional information were recorded.

B. Record Specifications: Submit two copies of Project's Specifications, including addenda and contract modifications.

C. Record Product Data: two copies of each Product Data submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.

1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.

a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.

2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Record Transparencies: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect. When authorized, prepare a full set of corrected transparencies of the Contract Drawings and Shop Drawings.

1. Incorporate changes and additional information previously marked on Record Prints. Erase, redraw, and add details and notations where applicable.
2. Refer instances of uncertainty to Architect for resolution.
3. Owner will furnish Contractor one set of transparencies of the Contract Drawings for use in recording information.
4. Print the Contract Drawings and Shop Drawings for use as Record Transparencies. Architect will make the Contract Drawings available to Contractor's print shop.

C. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
2. Record Transparencies: Organize into unbound sets matching Record Prints. Place transparencies in durable tube-type drawing containers with end caps. Mark end cap of each container with identification. If container does not include a complete set, identify Drawings included.

3. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
4. Identification: As follows:

    a. Project name.
    b. Date.
    c. Designation "PROJECT RECORD DRAWINGS."
    d. Name of Architect.
    e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. Note related Change Orders, Record Product Data, and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

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PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.

B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839

JEFFERSON COUNTY ENGINEERING DEPARTMENT
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SECTION 021000 - PROTECTION OF ENVIRONMENT

PART 1 - GENERAL

1.1 SUMMARY

A. This section covers all work necessary to comply with the requirements of the Owner and Contractor furnished permits and all applicable Federal, State, and local laws governing this Work and for implementing, installing, and maintaining all required Best Management Practices (BMPs).

1.2 SUBMITTALS

A. Develop and submit a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall, at a minimum include and address the following:

1. Site map which shows the construction site perimeter, stormwater collection and discharge points, and drainage patterns across the project.
2. Description of BMP's and Drawings
3. Installation, Maintenance, and Inspection Procedures
4. BMP Removal

B. The Contractor shall develop and submit a copy of the SWPPP to the Engineer for review 10 days prior to the start of any onsite construction activities. The SWPPP shall be submitted in accordance with Section 013300.

C. Product specification and product sample proposed for use as soil retention blanket shall be submitted to the Engineer for review, within five days after issuance of a Notice to Proceed.

PART 2 - PRODUCTS

2.1 GENERAL

A. The Contractor is responsible for the selection and adequacy of all materials and equipment used for compliance with the Owner and Contractor supplied the permits.

2.2 SEEDING FOR EROSION CONTROL

A. Seed for erosion control shall conform to the requirements outlined in the TXDOT Standard Specification Section 164.2. The varieties and species of seed shall be from the types specified in Tables 1 through 4 of TXDOT Standard Specification Section 164.2(A).

PART 3 - EXECUTION

3.1 GENERAL

A. All debris or deleterious material resulting from construction shall be removed from the work area and prevented from entering waters of the State.

B. All work operations shall be conducted in a manner that causes little or no adverse environmental impact to adjacent areas. If at any time, as a result of project activities, water quality problems develop (including equipment leaks or spills), operations shall cease and the Owner shall be contacted immediately.

C. Heavy equipment operating within wetlands shall be placed on mats or other measures taken to minimize soil disturbance.

3.2 SEEDING FOR EROSION CONTROL

A. All newly constructed soil slopes, fill areas, and areas disturbed during construction shall be seeded upon completion of construction.

B. Seeding for erosion control shall be installed at the locations shown on the Plans, as specified herein, and in accordance with TXDOT Standard Specification 164.3.

C. Seeding mixture shall conform to the requirements of TXDOT Standard Specification 164.2.

D. Cellulose fiber mulch seeding shall be utilized for all areas requiring seeding for erosion control in accordance with TXDOT Standard Specification 164.3(C) for Clay Soils.

3.3 PROTECTION OF ENVIRONMENTAL RESOURCES

A. The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications. Environmental protection shall be as stated in the following paragraphs.

3.4 PROTECTION OF LAND RESOURCES

A. Prior to the beginning of any construction, the Contractor shall identify all land resources to be approved by the Engineer. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without special permission from the Owner. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall

provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs.

3.5 PROTECTION OF WATER RESOURCES

A. The Contractor shall keep construction activities under surveillance, management and control to avoid pollution of surface and ground waters. Special management techniques as set out below shall be implemented to control water pollution by the listed construction activities, which are included in this contract. As soon as possible the contractor shall clear all waterways of temporary embankments, temporary bridges, matting, falsework, debris, or other obstructions placed during construction operations that are not part of the finished work. The Contractor is responsible for maintaining area drainage during construction. Water shall not be allowed to pond on any roadway surface, and Project Work shall not impede runoff from adjacent properties.

3.6 PROTECTION OF FISH AND WILDLIFE RESOURCES

A. The Contractor shall keep construction activities under surveillance, management, and control to minimize interference with, disturbance to and damage of fish and wildlife. Species that require specific attention along with measures for their protection will be listed by the Contractor prior to beginning of construction operations.

3.7 CONSTRUCTION DEBRIS

A. The Contractor shall collect and properly dispose all trash and construction debris in accordance with all local and state solid waste management regulations and practices. No construction waste material shall be buried on the Project Site. The Contractor shall store all waste materials in approved metal dumpsters, or other containers approved by the Engineer. The dumpster shall be emptied as necessary or as required by local and state regulation, and the contents hauled away for proper disposal. No construction waste material shall be buried within the Project limits.

3.8 EQUIPMENT MAINTENANCE

A. The Contractor's equipment used in excavation and filling operations shall be inspected, cleaned, and maintained to prevent loss of petroleum products.

3.9 EROSION AND SEDIMENT CONTROL

A. Burn-off: Burn-off of ground cover is not permitted.

B. Erosion Protection: Earthwork brought to final grade shall be immediately finished. Protect side and back slopes upon completion of rough grading. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils. All areas disturbed that are to remain dormant for longer than 21 calendar days shall be temporarily stabilized with fast germinating temporary seed or shall be protected by

mulch. Temporary stabilization shall be in place within 14 days of last disturbance. Adequate seeding and vegetative cover shall be maintained. A ground cover density of 70% or greater must be maintained. The contractor shall re-seed, water, and fertilize as necessary to maintain ground cover. Use the following methods to prevent erosion, control sedimentation, and prevent waterborne soil from entering surface waters and ditches for all areas of excavation, clearing and grubbing, and earth fill.

1. Mechanical Control: Divert runoff by constructing ditches or berms, and then filter runoff using filter fabric dams, sandbag berms, or other methods approved by the Engineer.

3.10 SEDIMENT CONTROL

A. Prior to project initiation, the upland project construction areas must be isolated from water bodies by the use of BMPs to confine sediment. BMPs used for sedimentation control shall include at least one of the following:

1. Silt Fencing
2. Straw Bale Dikes
3. Diversion Dikes

B. As construction progresses and unexpected seasonal conditions dictate, more sedimentation control facilities may be required to ensure sufficient siltation control is maintained. Therefore, during the course of the project, the Contractor shall review the in-place sedimentation control systems and provide additional facilities and structures as required to protect adjacent wetlands and waters.

3.11 EROSION CONTROL

A. Disturbed areas must be stabilized to prevent the introduction of sediment to adjacent wetlands or water bodies during wet weather conditions (erosion). At least one of the following BMPs must be maintained and in place until the excavation, cleared and grubbed, and earthfill areas have been stabilized:

1. Mulch
2. Temporary Vegetation

PART 4 - MEASUREMENT AND PAYMENT

4.1 SEEDING FOR EROSION CONTROL

A. Measurement: No measurement for Seeding work of this Section will be made.

B. Payment: Payment for Seeding work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 021000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

B. See Division 31 Section "Earth Moving" for drainage fill under slabs-on-grade.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete mixture.

C. Shop Drawings: For steel reinforcement and formwork. Material test reports.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

B. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

1. ACI 301, "Specification for Structural Concrete," Sections 1 through 5.
2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

C. Preinstallation Conference: Conduct conference at Project site.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

2.2 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

B. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.

C. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice."

2.3 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:

1. Portland Cement: ASTM C 150, Type II.

B. Normal-Weight Aggregates: ASTM C 33, graded, 3/4-inch nominal maximum coarse-aggregate size.

1. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Water: ASTM C 94/C 94M.

D. Air-Entraining Admixture: ASTM C 260.

E. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.

F. Set-Retarding Admixture: Set-retarding admixture shall conform to ASTM C4994, Type A or D. All concrete shall contain Master Builders Pozzolith 100-XR, or equal, set retarding admixture, which shall be used at the rate recommended by the manufacturer if the concrete can not be placed within 1-1/2 hours of batching.

G. Other Admixtures: Anti-freeze liquids, salts, calcium chloride, or other similar materials shall not be used in concrete unless specifically authorized in writing by the Engineer prior to construction.

H. Concrete Slab Coating: Thompson's Waterseal.

2.4 VAPOR RETARDERS

A. Plastic Vapor Retarder: ASTM E 1745. Include manufacturer's recommended adhesive or pressure-sensitive tape.

2.5 CURING MATERIALS

A. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

B. Water: Potable.

2.6 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.

B. Flexible Joint Sealant: Thiokol 2235SL or Engineer approved equivalent.

2.7 CONCRETE MIXTURES

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

B. Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Maximum Water-Cementitious Materials Ratio: 0.40.
3. Slump Limit: 5 inch maximum, 2 inch minimum. Slump may be increased when approved chemical admixtures are used, provided that the concrete admixture has the same water-cement ratio and does not exhibit segregation potential or excessive bleeding.
4. Air Content: Air content must be no less than 4% and must not exceed 6%.

2.8 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.9 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, erect, shore, brace, and maintain formwork according to ACI 301 to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Chamfer exterior corners and edges of permanently exposed concrete.

3.2 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 VAPOR RETARDERS

A. Plastic Vapor Retarders: Place, protect, and repair vapor retarders according to ASTM E 1643 and manufacturer's written instructions.

1. Lap joints 6 inches and seal with manufacturer's recommended tape.

3.4 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.5 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated on drawings or as approved by Engineer.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:

1. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/4-inch-wide joints into

concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks. Fill joint with flexible joint sealant

D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed. Contractor must notify the Engineer at least 24 hours before concrete placement for pre-pour inspection.

B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.

1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.

C. Cold-Weather Placement: Comply with ACI 306.1.

D. Hot-Weather Placement: Comply with ACI 301.

3.7 FINISHING FORMED SURFACES

A. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view.

B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.8 FINISHING FLOORS AND SLABS

A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill

low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.

C. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

1. Finish and measure surface so gap at any point between concrete surface and an unleveled, freestanding, 10-foot- long straightedge resting on 2 high spots and placed anywhere on the surface does not exceed 1/4 inch.

3.9 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days.
2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

3.10 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Engineer. Remove and replace concrete that cannot be repaired and patched to Engineer's approval.

3.11 FIELD QUALITY CONTROL

A. Testing and Inspecting: Contractor will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

1. Concrete test specimens shall be made in accordance with ASTM C31 and be tested in accordance with ASTM C39.

2. A minimum of three 6-by-12-inch test specimens shall be taken by the testing laboratory for every 50 cubic yards of concrete placed in each placement. At a minimum, 2 separate sets of test samples shall be taken during different placement times for the concrete. One test specimen of each set shall be tested at 7 days, and again at 14 days. The 14-day compressive strength shall be evaluated in accordance with ACI 214. The remaining test cylinder to be tested under the direction of the engineer, if required. If 28 day strength is achieved, the additional cylinder(s) may be discarded.

PART 4 - MEAUREMENT AND PAYMENT

4.1 CONCRETE

A. Measurement: No measurement for Concrete work of this Section will be made.

B. Payment: Payment for Concrete work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

4.2 STEEL REINFORCEMENT

A. Measurement: No measurement for Reinforcement work of this Section will be made.

B. Payment: Payment for Reinforcement work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 033000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 051000 – PRE-ENGINEERED METAL BUILDING

PART 1 - GENERAL

1.1 CUSTOMER DATA (Building Location)

Jefferson County Engineering Department
JCSO Hangar Building
Jack Brooks Regional Airport
N. Hwy 69 Nederland
Beaumont, TX 77705

1.2 PURPOSE OF DOCUMENT

This specification covers the minimum technical requirements for the design, engineering, materials, fabrication, and assembly of a pre-engineered metal building to serve as an airport hangar. The metal building system consists of integrated sets of mutually dependent components including framing, roof panels, wall panels, and accessories.

1.3 BUILDING DESCRIPTION

A. MBMA Intended Use

1. Building use classification: Standard building
2. Description of building use: Airport hangar

Size

3. Width: 60'
4. Length: 80'
5. Eave Height: 18'
6. Ridge Offset: 30'
7. Roof Pitch: 1:12

B. Frame Types

1. All (5) frame lines to have rigid frames (preferred over cold formed end walls)
   (a) End wall columns required for sheathing should be a hot-rolled ASTM shape.

C. Sheeting Requirements

1. West End Wall: This wall to be completely sheathed from ridge to top of concrete, with a 16' W x 14' H frame for a roll-up door with a centerline that is 13' from the northwest corner.
2. East End Wall: Sheet down from ridge to 16'-6½" (verify with door manufacturer) above top of concrete, with frame for a 50' W X 16' H Hangar Door centered on the east end.
3. Side Walls: Sheet down from eave to top of concrete.

1.4 SYSTEM PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide metal building systems capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Structure shall be designed to meet or exceed the wind loading criteria set forth in the IBC 2012 Edition as required by the Texas Department of Insurance's windstorm inspection program.
2. Design Loads: As required by ASCE 7, "Minimum Design Loads for Buildings and Other Structures", the 2009 International Building Code and the Metal Building Manufacturer's Association, Low Rise Building Systems Manual.
3. Dead Load: Metal Building Structure only as furnished by manufacturer.
4. Building Risk Category II
5. Live Load: 20 PSF (Reducible per code)
6. Wind Load: 140 MPH
   a. Importance Factor: 1.00
   b. Exposure: C
7. Ground Snow Load: 0 PSF
8. Collateral Load: 5 PSF

B. Seismic Performance: Design and engineer metal building systems capable of withstanding the effects of earthquake motions determined according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 9, "Earthquake Loads."

C. Thermal Movements: Provide metal panel systems that allow for thermal movements resulting from the following maximum change (20 to 110 degrees) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

D. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for Class 140 mph 3 second gust.

E. Louvers: Provide (2) 24" x 48" self-mulling, self-flashing, self-framing, fixed louver assemblies on the East end gable centered in wall. Louver assemblies to have an 18 gauge frame and 20 gauge blades.

F. Overhead Chain Hoist Beam: Provide steel beam capable of supporting 2-Ton capacity chain hoist and trolley as described in Section 2.8G. Beam to be located centerline of 16' roll-up door, (13') from north side wall, spanning between column lines 03 & 04 as shown on Sheet A7.01. Bottom of rail should be 15' above top of concrete. Provided rail shall have minimum height of 8" and flange width between 3.23" and 6.02".

1.5 SUBMITTALS

A. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

2. Anchor-Bolt Plans: ,Submit anchor-bolt plans before foundation work begins. Include location, diameter, and projection of anchor bolts required to attach metal building to foundation. Indicate column reactions at each location.
3. Structural-Framing Drawings: Show complete fabrication of primary and secondary framing; include provisions for openings. Indicate welds and bolted connections, distinguishing between shop and field applications. Include transverse cross-sections.
4. Metal Roof and Wall Panel Layout Drawings: Show layouts of metal panels including methods of support. Include details of edge conditions, joints, panel profiles, corners, anchorages, trim, flashings, closures, and special details. Distinguish between factory- and field-assembled work; show locations of exposed fasteners.
5. Overhead Chain Hoist: Provide submittals of electrical chain hoist and push trolley as described in Section 2.8G

B. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:

1. Name and location of Project.
2. Order number.
3. Name of manufacturer.
4. Building dimensions including width, length, height, and roof slope.
5. Indicate compliance with AISC standards for hot-rolled steel and AISI standards for cold-rolled steel, including edition dates of each standard.
6. Governing building code and year of edition.
7. Design loads and load combinations.
8. Building-use category.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer.
1. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

B. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel," and AWS D1.3, "Structural Welding Code--Sheet Steel."

C. Structural Steel: Comply with AISC's "Specification for Structural Steel Buildings--Allowable Stress Design, Plastic Design," or AISC's "Load and Resistance Factor Design Specification for Structural Steel Buildings," for design requirements and allowable stresses.

D. Cold-Formed Steel: Comply with AISI's "Specification for the Design of Cold-Formed Steel Structural Members," or AISI's "Load and Resistance Factor Design Specification for Steel Structural Members," for design requirements and allowable stresses.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness and with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

1.8 WARRANTY

A. Special Warranty on Metal Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Galvalume Finish: Deterioration includes, but is not limited to, the following:

a. Corrosion
b. Rupture
c. Fail structurally
d. Perforate

2. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. United Steel Structures, Inc.
2. Mueller, Inc.
3. SISCORP
4. Whirlwind Steel
5. Ludwig Building Enterprises, LLC
6. Red Dot Building Systems
7. ACI Building Systems
8. Nucor
9. Shulte Building Systems
10. Engineer-Approved Equal

2.2 STRUCTURAL-FRAMING MATERIALS

A. W-Shapes: ASTM A 992, Grade 50

B. Channels, Angles, M-Shapes, and S-Shapes: ASTM A 36

C. Plate and Bar: ASTM A 36

D. Steel Pipe: Schedule 40, ASTM A 53, Type E or S, Grade B.

E. Cold-Formed Hollow Structural Sections: ASTM A 570, Grade 55

F. Steel Sheet Panels: ASTM A653 , Grade 80, or ASTM A446, Grade E, minimum yield strength of 80 ksi.

1. Finish: Galvanized coating conforming to ASTM A525.

G. Insert joist girders instead of built-up steel plates or structural-steel shapes if required for primary structural framing. Insert open-web steel joists instead of cold-formed steel sheet if required for rafters or purlins.

H. Non-High-Strength Bolts, Nuts, and Washers: ASTM A 307, Grade A , carbon-steel, hex-head bolts; ASTM A 563 carbon-steel hex nuts; and ASTM F 844 plain (flat) steel washers.

1. Finish: Hot-dip zinc coating, ASTM A 153, Class C.

I. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.

1. Finish: Hot-dip zinc coating, ASTM A 153, Class C.
2. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, heavy-hex-head steel structural bolts with splined ends.

a. Finish: Mechanically deposited zinc coating, ASTM B 695, Class 50.

J. High-Strength Bolts, Nuts, and Washers: ASTM A 490, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers, plain.

K. Unheaded Anchor Rods: ASTM F 1554, Grade 36 Grade 50

1. Configuration: Straight.
2. Nuts: ASTM A 563 heavy hex carbon steel.
3. Plate Washers: ASTM A 36 carbon steel.
4. Washers: ASTM F 436 hardened carbon steel.
5. Finish: Hot-dip zinc coating, ASTM A 153, Class C.

L. Headed Anchor Rods: ASTM F 1554, Grade 36, straight.

1. Nuts: ASTM A 563 heavy hex carbon steel.
2. Plate Washers: ASTM A 36 carbon steel.
3. Washers: ASTM F 436 hardened carbon steel.
4. Finish: Hot-dip zinc coating, ASTM A 153, Class C.

M. Threaded Rods: ASTM A 572, Grade 50.

1. Nuts: ASTM A 563 heavy hex carbon steel.
2. Washers: ASTM F 436 hardened carbon steel.
3. Finish: Hot-dip zinc coating, ASTM A 153, Class C.

2.3 MISCELLANEOUS MATERIALS

A. Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide fasteners with heads matching color of materials being fastened by means of plastic caps or factory-applied coating.

1. Fasteners for Metal Roof Panels: Self-drilling or self-tapping, zinc-plated, hex-head carbon-steel screws, with a stainless-steel cap or zinc-aluminum-alloy head and EPDM or neoprene sealing washer.
2. Fasteners for Metal Wall Panels: Self-drilling or self-tapping, zinc-plated, hex-head carbon-steel screws, with nylon or polypropylene washer.
3. Fasteners for Metal Roof and Wall Panels: Self-drilling Type 410 stainless-steel or self-tapping Type 304 stainless-steel or zinc-alloy-steel hex washer head, with EPDM or PVC washer under heads of fasteners bearing on weather side of metal panels.

B. Metal Panel Sealants:

1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing.
2. Joint Sealant: ASTM C 920; one-part elastomeric polyurethane, polysulfide, or silicone-rubber sealant.

2.4 FABRICATION, GENERAL

A. Tolerances: Comply with MBMA's "Metal Building Systems Manual": Chapter IV, Section 9, "Fabrication and Erection Tolerances."

B. Metal Panels: Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of metal panel.

2.5 STRUCTURAL FRAMING

A. General:

1. Primary Framing: Shop fabricate framing components to indicated size and section with baseplates, bearing plates, stiffeners, and other items required for erection welded into place. Cut, form, punch, drill, and weld framing for bolted field assembly.

   a. Make shop connections by welding or by using high-strength bolts.
   b. Join flanges to webs of built-up members by a continuous submerged arc-welding process.
   c. Brace compression flange of primary framing with steel angles or cold-formed structural tubing between frame web and purlin or girt web, so flange compressive strength is within allowable limits for any combination of loadings.
   d. Shop Coating: Prepare surfaces for shop priming according to SSPC-SP 2. Shop coat primary structural members with red-oxide primed hot dipped galvanizing after fabrication.

2. Secondary Framing: Shop fabricate framing components to indicated size and section by roll-forming or break-forming, with baseplates, bearing plates, stiffeners, and other plates required for erection welded into place. Cut, form, punch, drill, and weld secondary framing for bolted field connections to primary framing.

   a. Shop Coating: Prepare uncoated surfaces for shop coating according to SSPC-SP 2. Shop coat secondary structural members with red-oxide primed after fabrication.

B. Primary Framing: Manufacturer's standard structural primary framing system, designed to withstand required loads and specified requirements. Primary framing includes transverse and lean-to frames; rafter, rake, and canopy beams; sidewall, intermediate, end-wall, and corner columns; and wind bracing. Provide frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide frame span and spacing indicated.

1. Rigid Clear-Span Frames: I-shaped frame sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Interior columns are not permitted.
2. Rigid Modular Frames: I-shaped frame sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Provide interior columns fabricated from round structural steel I shapes, steel pipe or tube, or shop-welded, built-up steel plates as required.
3. Frame Configuration: Single gable.
4. Exterior Column Type: Uniform depth or Tapered.
5. Rafter Type: Uniform depth or Tapered.

C. Secondary Framing: Manufacturer's standard secondary framing members, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members. Fabricate framing from cold-formed, structural-steel sheet or roll-formed, hot dipped galvanized steel sheet, unless otherwise indicated, to comply with the following:

1. Purlins: C- or Z-shaped sections; fabricated from minimum 0.0598-inch- thick steel sheet, built-up steel plates, or structural-steel shapes; minimum 2-1/2-inch- wide flanges.

   a. Depth: As required to comply with system performance requirements.

2. Girts: C- or Z-shaped sections; fabricated from minimum 0.0598-inch- thick steel sheet, built-up steel plates, or structural-steel shapes. Form ends of Z-sections with stiffening lips angled 40 to 50 degrees to flange and with minimum 2-1/2-inch- wide flanges.

   a. Depth: As required to comply with system performance requirements.

3. Eave Struts: Unequal-flange, C-shaped sections; fabricated from 0.0598-inch- thick steel sheet, built-up steel plates, or structural-steel shapes; to provide adequate backup for metal panels.
4. Flange Bracing: Minimum 2-by-2-by-1/8-inch structural-steel angles or 1-inch diameter, cold-formed structural tubing to stiffen primary frame flanges.
5. Sag Bracing: Minimum 1-by-1-by-1/8-inch structural-steel angles.
6. Base or Sill Angles: Minimum 3-by-2-by-0.0598-inch zinc-coated steel sheet.
7. Purlin and Girt Clips: Minimum 0.0598-inch- thick, steel sheet. Provide galvanized clips where clips are connected to galvanized framing members.
8. Secondary End-Wall Framing: Manufacturer's standard sections fabricated from minimum 0.0598-inch- thick, zinc-coated steel sheet.
9. Framing for Openings: Channel shapes; fabricated from minimum 0.0598-inch- thick, cold-formed, structural-steel sheet or structural-steel shapes. Frame head and jamb of door openings, and head, jamb, and sill of other openings.
10. Miscellaneous Structural Members: Manufacturer's standard sections fabricated from cold-formed, structural-steel sheet; built-up steel plates; or zinc-coated steel sheet; designed to withstand required loads.

D. Bracing: Provide adjustable wind bracing as follows:

1. Rods: ASTM A 36; ASTM A 572, Grade 50 ; or ASTM A 529, Grade 50; minimum 1/2-inch diameter steel; threaded full length or threaded a minimum of 6 inches at each end.
2. Cable: ASTM A 475, 1/4-inch diameter, extra-high-strength grade, Class B zinc-coated, 7-strand steel; with threaded end anchors.
3. Angles: Fabricated from structural-steel shapes to match primary framing, of size required to withstand design loads.
4. Rigid Portal Frames: Fabricate from shop-welded, built-up steel plates or structural-steel shapes to match primary framing; of size required to withstand design loads.
5. Fixed-Base Columns: Fabricate from shop-welded, built-up steel plates or structural-steel shapes to match primary framing; of size required to withstand design loads.
6. Diaphragm Action of Metal Panels: Design metal building to resist wind forces through diaphragm action of metal panels.
7. Bracing: Provide wind bracing using any method specified above, at manufacturer's option.

E. Bolts: Provide hot-dipped galvanized bolts for structural-framing components that are galvanized.

2.6 METAL ROOF PANELS

A. Tapered-Rib-Profile, Lap-Seam Metal Roof Panels: Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be field assembled by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps.

1. Material: Zinc-coated (galvanized) steel sheet, 24 gauge (0.0179" thick).
   a. Exterior Finish: Galvalume
2. Major-Rib Spacing: 12 inches o.c.
3. Panel Coverage: 36 inches.
4. Panel Height: 1 ¼" inches.

2.7 FIELD-ASSEMBLED METAL WALL PANELS

A. Tapered-Rib-Profile, Exposed-Fastener Metal Wall Panels: Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be field assembled by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps.

1. Material: Zinc-coated (galvanized) steel sheet, 26 gauge (0.0179" thick).
   a. Exterior Finish: Tan Walls with Brown Trim (to match adjacent tan hangar as close as possible)
2. Major-Rib Spacing: 12 inches o.c.
3. Panel Coverage: 36 inches.
4. Panel Height: 1 ¼".

2.8 ACCESSORIES

A. General: Provide accessories as standard with metal building system manufacturer and as specified. Fabricate and finish accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes. Comply with indicated profiles and with dimensional and structural requirements.

B. Roof Panel Accessories: Provide components required for a complete metal roof panel assembly including copings, fasciae, corner units, ridge closures, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels, unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same material as metal roof panels.
2. Clips: Manufacturer's standard, formed from stainless-steel sheet, designed to withstand negative-load requirements.
3. Cleats: Manufacturer's standard, mechanically seamed cleats formed from stainless-steel sheet.
4. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
5. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- thick, flexible closure strips; cut or premolded to match metal roof panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

C. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including copings, fasciae, mullions, sills, corner units, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels, unless otherwise indicated.

1. Closures: Provide closures at eaves and rakes, fabricated of same material as metal wall panels.
2. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- thick, flexible closure strips; cut or premolded to match metal wall panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

D. Flashing and Trim: Formed from minimum 0.0159-inch- thick, galvanized steel sheet; finished to match adjacent metal panels.

1. Opening Trim: Minimum 0.0269-inch- thick, metallic-coated steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating. Trim head and jamb of door openings, and head, jamb, and sill of other openings.

E. Gutters: Formed from minimum 0.0159-inch- thick, metallic-coated steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating; finished to match roof fascia and rake trim. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- long sections, sized according to SMACNA's "Architectural Sheet Metal Manual."

1. Gutter Supports: Fabricated from same material and finish as gutters; spaced 36 inches o.c.

F. Downspouts: Formed from 0.0159-inch- thick, zinc-coated (galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating; finished to match metal wall panels. Fabricate in minimum 10-foot- long sections, complete with formed elbows and offsets.

1. Mounting Straps: Fabricated from same material and finish as gutters; spaced 10 feet o.c.

G. Overhead Chain Hoist: One (1) single speed electric chain hoist with push trolley – capacity of 2 tons. Hoist to have 15' lift capacity.

1. Harrington product code – SNERPOZOL-15 or engineer-approved equal. Electrical requirement of 12 amps @ 230V.

H. Insulation: Provide 3" thick VRR fiberglass insulation on walls and roof of metal building. Install as per manufacturers recommended installation procedure.

I. Canopy: Provide 4'x4' rod hung canopy centered over personnel walk door. Canopy to designed and provided by the pre-engineered metal building vendor and must meet the structural performance criteria set forth in section 1.4 of this specification.

END OF SECTION 051000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Steel weld plates and angles.

1.2 SUBMITTALS

A. Product Data for the following:

1. Grout.

B. Shop Drawings: Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

C. Templates: For anchors and bolts.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.

B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.

2.2 METALS

A. Metal Surfaces, General: Provide materials with smooth, flat surfaces without blemishes.

B. Ferrous Metals:

1. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

2.3 FASTENERS

A. General: Type 316 stainless-steel fasteners for exterior use at exterior walls. Use zinc-plated fasteners with coating complying with ASTM B 633, Class Fe/Zn 5, in all other exterior applications unless noted otherwise. Provide stainless-steel fasteners for fastening aluminum. Select fasteners for type, grade, and class required.

B. Cast-in-Place Anchors in Concrete: ASTM F1554, Grade 36, threaded and nutted.

C. Common Bolts: ASTM A307, hot-dip galvanized in accordance with ASTM B 633. Utilize common bolts in connections with timber piles, engineered beam floor framing system, and as indicated in the construction drawings.

2.4 MISCELLANEOUS MATERIALS

A. Galvanizing Repair Paint: SSPC-Paint 20, high-zinc-dust-content paint for regalvanizing welds in steel.

B. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107.

C. Concrete Materials and Properties: Comply with requirements in Division 03 Section "Cast-in-Place Concrete" for normal-weight, air-entrained, ready-mix concrete with a minimum 28-day compressive strength of 4000 psi, unless otherwise indicated.

2.5 FABRICATION

A. General: Preassemble items in the shop to greatest extent possible. Use connections that maintain structural value of joined pieces.

1. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
2. Weld corners and seams continuously. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals. Obtain fusion without undercut or overlap. Remove welding flux immediately. Finish exposed welds smooth and blended.
3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Locate joints where least conspicuous.
4. Fabricate seams and other connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
5. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, not less than 24 inches o.c.

B. Loose Bearing and Leveling Plates: Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts.

2.6 FINISHES

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Finish metal fabrications after assembly.

B. Steel and Iron Finishes:

1. Hot-dip galvanize items as indicated to comply with ASTM A 123/A 123M or ASTM A 153/A 153M as applicable.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, with edges and surfaces level, plumb, and true.

1. Fit exposed connections accurately together. Weld connections that are not to be left as exposed joints but cannot be shop welded. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication.
2. Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.
3. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

B. Set bearing and leveling plates on cleaned surfaces using wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts and pack solidly with nonshrink, nonmetallic grout.

C. Touch up surfaces and finishes after erection.
1. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

PART 4 - MEASUREMENT AND PAYMENT

4.1 FABRICATION

A. Measurement: No measurement for Fabrication work of this Section will be made.

B. Payment: Payment for Fabrication work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 055000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 055001 – ANCHOR ROD ASSEMBLIES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies all thread bar anchor rods and terminal assemblies as shown on the plans.

B. The contractor shall furnish and install all thread bar anchor rods and terminal assemblies as shown on the plans to meet the requirements of ASTM A615.

1.2 SUBMITTALS

A. Shop Drawings: Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchor rod assemblies covering material, terminal assembly details, coating specifications and procedures, and duct material and installation.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide all materials for assemblies as required by drawings, listed below:

1. Threaded bar meeting the requirements of ASTM A615.
2. Heavy hex nuts
3. Bearing plates
4. Couplings
5. Other appurtenances as required to affect the installation described in the plans.

All nuts, couplers, and other appurtenance shall be capable of developing a minimum of 95% of the ultimate tensile strength of the base rod.

2.2 FINISHES

A. Rods shall be blast cleaned to SSPC-SP 10 and coated with coal tar epoxy paint suitable for use on structural steel. Paint supplied shall meet or exceed the requirements of (a) Paint Specification No. 16, Type 1, Class II, of the Steel Structures Painting Council (b) Corps of Engineers C-200, C200a and (c) AWWA C-210-92. Final coating thickness to be minimum 10 mils. This system is used for painting new steel.

B. For those bar manufacturers that offer a factory coating option, the manufacturer's recommended preparation and epoxy coating systems may be substituted with

engineer's approval. Other items required for completion of the assemblies shall be hot-dip galvanized in accordance with Division 05 Section "Metal Fabrications."

PART 3 - EXECUTION

3.1 INSTALLATION

A. Rods shall be installed to the lines and grades shown in the plans.

B. Nuts on terminal assemblies shall be tightened to snug tight, and there shall be a minimum of 2 (two) nut lengths of exposed bar between the terminal nut and the bar end.

C. Bars shall be supported in such a way as to allow backfill without causing sag or deflection in the bars.

D. Coating damage shall be repaired in using the same materials and processes as defined in Article 2.2A "Finishes" prior to backfilling operations.

PART 4 - MEASUREMENT AND PAYMENT

4.1 ANCHOR ROD ASSEMBLIES

A. Measurement: No measurement for Anchor Rod Assembly work of this Section will be made.

B. Payment: Payment for Anchor Rod Assembly work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 055001

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 061100 - WOOD FRAMING

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Structural floor, wall, and roof framing.
B. Floor sheathing.
C. Preservative treatment of wood.
D. Miscellaneous framing and sheathing.
E. Concealed wood blocking for support of toilet and bath accessories.

1.2 REFERENCES

A. AHA (American Hardboard Association) A135.4 - Basic Hardboard.
B. ALSC (American Lumber Standards Committee) - Softwood Lumber Standards.
C. ANSI A208.1 - Mat-Formed Wood Particleboard.
D. APA (American Plywood Association).
E. AWPA (American Wood Preservers Association) C1 - All Timber Products - Preservative Treatment by Pressure Process.
F. AWPA (American Wood Preservers Association) C20 - Structural Lumber Fire Retardant Treatment by Pressure Process.
G. NFPA (National Forest Products Association).
H. RIS (Redwood Inspection Service).
I. SPIB (Southern Pine Inspection Bureau).
J. WCLIB (West Coast Lumber Inspection Bureau).
K. WWPA (Western Wood Products Association).

1.3 SUBMITTALS FOR REVIEW

A. Division One - Submittals: Procedures for submittals.
B. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.
C. Shop Drawings For Site Fabricated Truss Frame: Indicate dimensions, wood species and grades, component profiles, drilled holes, fasteners, connectors, erection details and sequence.
D. Samples of Exposed To View Wood Members: Submit two samples, 12 inches of running length illustrating wood grain, stain, and finish.

1.4 SUBMITTALS FOR INFORMATION

A. Division One - Submittals: Procedures for submittals.

B. Manufacturer's Certificate: Certify that Products conform to specified requirements.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with the following agencies:
   1. Lumber Grading Agency: Certified by ALSC.
   2. Plywood Grading Agency: Certified by APA.

B. In lieu of grade stamping exposed to view lumber and plywood, submit manufacturer's certificate certifying that products meet or exceed specified requirements.

1.6 DELIVERY, STORAGE, AND PROTECTION

A. Division One - Material and Equipment: Transport, handle, store, and protect products.

B. Protect trusses from warping or other distortion by stacking in vertical position, braced to resist movement.

PART 2 – PRODUCTS

2.1 LUMBER MATERIALS

A. Lumber Grading Rules: SPIB, WWPA.

B. Beam Framing: YP species, 2 or better grade, 19 percent maximum moisture content.

C. Joist Framing: YP species, 2 or better grade, 19 percent maximum moisture content.

D. Non-structural Light Framing: YP or HemFir species, 2 or better grade, 19 percent maximum moisture content.

E. Studding: YP or HemFir species, 2 or better grade, 19 percent maximum moisture content.

2.2 SHEATHING MATERIALS

A. Plywood Decking/ Sheathing: APA Rated Sheathing, Structural II; Exposure Durability 2; sanded.

2.3 SHEATHING AND UNDERLAYMENT LOCATIONS

A. Floor Sheathing: 3/4 inch thick, 48 x 96 inch sized sheets, square edges.

2.4 ACCESSORIES

A. Fasteners and Anchors:

1. Fasteners: Electro galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.

2.5 FACTORY WOOD TREATMENT

A. Wood Preservative (Pressure Treatment): AWPA Treatment C1 using water borne preservative with 0.25 percent retainage.

PART 3 – EXECUTION

3.1 FRAMING

A. Set structural members level and plumb, in correct position.

B. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.

C. Place horizontal members, crown side up.

D. Construct load bearing framing members full length without splices.

E. Double members at openings over 24 inches wide. Space short studs over and under opening to stud spacing.

F. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.

G. Bridge joists or framing in excess of 8 feet span at mid-span. Fit solid blocking, bridging, or header joists at ends of members.

H. Place full width continuous sill flashings under framed walls on cementitious foundations.

Lap flashing joint 4 inches.

I. Coordinate installation of wood decking.

3.2 SHEATHING

A. Secure roof sheathing with longer edge perpendicular to framing members and with ends staggered and sheet ends over bearing.

3.3 TOLERANCES

A. Framing Members: 1/4 inch from true position, maximum.

B. Surface Flatness of Floor: 1/4 inch in 10 feet maximum, and ½ inch in 30 feet maximum.

END OF SECTION 061100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 066400 - FIBERGLASS-REINFORCED PLASTIC PANELS

PART 1 – GENERAL

1.1 SUMMARY

A. Provide fiberglass reinforced plastic (FRP) panels for wall [and ceiling] applications.

B. Related Sections: Coordinate with Work of other sections including the following:

a. Section 092900 – Gypsum Board.

1.2 SUBMITTALS

A. Product Data: Submit manufacturer's literature including product characteristics, accessories and limitations.

B. Selection Samples: Submit samples of colors and finishes if requested by Architect.

C. Verification Samples: Submit samples of materials selected specified to verify color and finish.

D. Industry Certifications and Standards: Submit copy of documentation indicating compliance.

1.3 QUALITY ASSURANCE

A. Manufacturer: Minimum of 5 years experience manufacturing similar products.

1.4 DELIVERY, STORAGE AND HANDLING

A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations.

1.5 WARRANTY

A. Manufacturer's Warranty: Provide manufacturer's standard warranty against defects in manufacturing.

PART 2 – PRODUCTS

2.1 FIBERGLASS-REINFORCED PLASTIC PANELS

A. Manufacturers:

1. Panolam Industries International, Inc.
2. Stabilit
3. Or Equal

B. Properties:

1. Color: White.
2. Surface Texture: Embossed.
3. Fire Rating ASTM E 84: Class C.

5. IMO Certified available for marine use.
6. Thickness: 0.090 inches.
7. Accessories: Color matched dividers, outside corners, inside corners, end caps and fastening rivets.
8. Adhesive: As recommended by manufacturer.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install products in strict accordance with manufacturer's instructions and approved submittals.
   1. Clean substrate of dirt, dust, waxes, and other bond breaking substances prior to beginning installation.
   2. Install panels with bottom edge located to clear top of resilient base.
   3. Apply adhesive uniformly using adhesive manufacturers recommended trowel to the entire back of panels completely to the edge (100% coverage).
   4. Lay FRP panels in place leaving approximately 1/8 inch between panels and 1/4 inch space top and bottom.
   5. Follow adhesive manufacturer's recommendations for set and application times.
   6. Apply pressure to entire panel face with laminate type roller, removing trapped air and ensure proper adhesion between surfaces.

3.3 ADJUSTING AND CLEANING

A. Replace installations out of plumb and not aligned with adjacent panels and construction.
B. Clean panel face to remove soiling, stains, dust, and dirt using clean rags, and cleaning agents as instructed by manufacturer.
C. Leave installation clean, free of residue and debris resulting from work of this Section.

END OF SECTION 066400

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 072113 - BATT INSULATION

PART 1 - GENERAL

1.1 SECTION INCLUDES
A. Batt insulation and vapor retarder in exterior wall and ceiling construction.

1.2 REFERENCES
A. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
B. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
C. NFPA 255 - Test of Surface Burning Characteristics of Building Materials.
D. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 SYSTEM DESCRIPTION
A. Materials of This Section: Provide continuity of thermal barrier at building enclosure elements.

A.4.1 SUBMITTALS
A. Submit under provisions of Section 013300 - Submittals.
B. Product Data: Provide data on product characteristics, performance criteria, limitations.
C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.5 COORDINATION
A. Coordinate work under provisions of Section 013113 - Coordination and Meetings.

PART 2 - PRODUCTS

2.1 MATERIALS
A. Batt Insulation: ASTM C665; preformed glass fiber batt; conforming to the following:
1. Thermal Resistance: Refer drawings.
2. Batt Size: Width to match stud spacing.
3. Facing: Foil faced for ceiling area, paper for wall area.
4. Flame/Smoke Properties: 25/450 in accordance with ASTM E84.
B. Tape: Bright aluminum self-adhering type, mesh reinforced, 2 inch wide.
C. Insulation Fasteners: Steel impale spindle and clip on flat metal base, self adhering backing, length to suit insulation thickness, capable of securely and rigidly fastening insulation in place; as recommended by insulation manufacturer.
D. Wire Mesh: Galvanized steel, hexagonal wire mesh.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that substrate, adjacent materials, and insulation are dry and ready to receive insulation ,

3.2 INSTALLATION

A. Install insulation and vapor retarder in accordance with insulation manufacturer's instructions.

B. Install in exterior walls, roof, and ceiling spaces without gaps or voids. Do not compress insulation.

C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.

D. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation.

E. Install with factory applied vapor retarder membrane facing warm side of building spaces. Lap ends and side flanges of membrane between framing members.

F. Friction fit batts between studs. Staple or nail facing flanges in place at maximum 6 inches oc. Tape in place.

G. Tape seal butt ends, lapped flanges, and tears or cuts in membrane.

H. Wood Framing: Place vapor retarder on warm side of insulation by stapling at 6inches oc.

Lap and seal sheet retarder joints over member face.

I. Tape seal tears or cuts in vapor retarder.

J. Extend vapor retarder tight to full perimeter of adjacent window and door frames and other items interrupting the plane of membrane. Tape seal in place.

END OF SECTION 072113

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 081100 - STANDARD STEEL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Non-rated and fire rated thermally insulated steel doors and panels.

1.2 REFERENCES

A. Americans with Disabilities Act.
B. State of Texas Handicap Accessibility Standards.
C. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.
D. ANSI/SDI-100 - Standard Steel Doors and Frames.
E. ASTM A525 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
F. ASTM E413 - Classification for Determination of Sound Transmission Class.
G. Door Hardware Institute (DHI) - The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames and Builder's Hardware.

1.3 DESIGN / PERFORMANCE REQUIREMENTS (EXTERIOR WALK DOOR ONLY)

A. Wind Loads: Design door assembly to withstand wind/suction load without damage to door or assembly components.
   1. Design Wind Load: 140 MPH - 3 Second Burst.
B. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.

1.4 SUBMITTALS

A. Shop Drawings: Indicate door elevations, internal reinforcement, closure method, and cut-outs for glazing and louvers and finish.
B. Product Data: Indicate door configurations, location of cut-outs for hardware reinforcement.
C. Manufacturer's Installation Instructions: Indicate special installation instructions.
D. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Conform to requirements of ADA, ANSI/SDI-100 and ANSI A117.1.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect, and handle products to site under provisions of Section 01 65 00 -Material and Equipment.
B. Accept doors on site in manufacturer's packaging. Inspect for damage.
C. Break seal on-site to permit ventilation.

1.8 FIELD MEASUREMENTS

A. Verify that field measurements are as instructed by the steel door manufacturer.

1.9 COORDINATION

A. Coordinate the work with door opening construction, door frame and door hardware installation.

PART 2 - PRODUCTS

2.1 DOORS AND PANELS

A. Exterior Doors Non-thermally Broken: SDI-100 Grade III Extra Heavy-Duty Model 2. Seamless - Composite Construction, 1-3/4 inches, Level A.
B. Interior Doors (Non-rated): SDI-100 Grade II Heavy Duty, Model 2. Seamless - Composite Construction, 1-3/4 inches, Level B.

2.2 DOOR CONSTRUCTION

A. Face: Steel sheet in accordance with ANSI/SDI-100.
B. Core:
   1. Polystyrene foam at exterior doors.
   2. Cardboard honeycomb at interior non-fire rated doors.
   3. Mineral fiberboard at interior fire rated and acoustic doors.
C. Thermal Insulated Door: Total insulation R value of 7, measured in accordance with ASTM C236.

2.3 ACCESSORIES

A. Removable Stops: Rolled steel shape, mitered corners; prepared for countersink style tamper proof screws.
B. Primer: Zinc chromate type.

2.4 FABRICATION

A. Fabricate doors with hardware reinforcement welded in place.
B. Close top and bottom edge of exterior doors with flush end closure. Seal joints watertight.
C. Configure exterior doors with special profile to receive recessed weatherstripping.

2.5 FINISH

A. Steel Sheet: Galvanized to ASTM A525 A60.

B. Primer: Baked.
C. Factory Finish: Baked enamel, color as selected.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify substrate conditions under provisions of Section 013113 - Coordination and Meetings.
B. Verify that opening sizes and tolerances are acceptable.

3.2 INSTALLATION

A. Install doors in accordance with ANSI/SDI-100 and DHI.
B. Coordinate installation of doors with installation of frames specified.
C. Touch-up factory finished doors and frames.

3.3 ERECTION TOLERANCES

A. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.4 ADJUSTING

A. Adjust door for smooth and balanced door movement.

END OF SECTION 081100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 083323 - OVERHEAD COILING DOORS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Overhead coiling service doors.

1.2 REFERENCES

A. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
B. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
C. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
D. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
E. NEMA MG 1 - Motors and Generators.

1.3 DESIGN / PERFORMANCE REQUIREMENTS

A. Wind Loads: Design door assembly to withstand wind/suction load without damage to door or assembly components.
   1. Design Wind Load: 140 MPH - 3 Second Burst.
B. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.

1.4 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Details of construction and fabrication.
   4. Installation instructions.
B. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.
C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
E. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
B. Installer Qualifications: Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.
B. Protect materials from exposure to moisture. Do not deliver until after wet work is

complete and dry.

C. Store materials in a dry, warm, ventilated weathertight location.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 COORDINATION

A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Overhead Door Corp.
B. Substitutions: Or Equal.

2.2 OVERHEAD COILING SERVICE DOORS

A. Industrial Doors: Overhead Door Corporation, 610 Series Service Doors.
1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.

2. Finish:
a. Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.
1) Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
2) Top Coat Color:
a) Powder coating finish in color as selected by Owner from manufacturer's standard color palette.
b. Vinyl bottom seal.
c. Guide weatherseal.
3. Bottom Bar:
a. Two galvanized steel angles.
4. Guides:
a. Three structural steel angles with minimum thickness of 3/16 inch for doors over 15 feet 4 inches wide or high.
5. Brackets:
a. Hot rolled steel to support counterbalance, curtain and hood.
b. Galvanized steel to support counterbalance, curtain and hood.
6. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
7. Hood:
a. 24 gauge galvanized steel with intermediate supports as required.
b. Stainless steel, 24 gauge hood with intermediate supports as required.
c. Aluminum hood with intermediate supports as required.
8. Manual Operation:

a. Chain hoist for doors over 96 SF.

9. Locking:
   a. Interior bottom bar slide bolt for manually operated doors.
   b. Chain keeper locks for chain hoist operation.
10. Wall Mounting Condition:
   a. Face-of-wall mounting.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify opening sizes, tolerances and conditions are acceptable.
B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.
B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

3.4 ADJUSTING

A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
B. Remove labels and visible markings.
C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

A. Protect installed products until completion of project.

END OF SECTION 083323

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 083324 – SINGLE SPAN HYDRAULIC HANGAR DOOR

PART 1 - QUANTITY

1.1 Doors for this project will consist of (1) Single Span Hydraulic door

PART 2 - SIZE OF DOOR

2.1 Hanger door with door in up position, shall have a minimum clear opening width of (50'-0") as shown in the plans and a minimum clear height of (16'-0") above finished floor elevation.

Note: the hydraulic single span when in a fully open position will be lying flat which will not shed water off when in a full open position. Unless the door is to open with a slight slope to provide enough proper drainage to the door covering when the door is in a full open position.

PART 3 - PLACEMENT OF THE SINGLE SPAN HYDRAULIC DOOR UNTO THE BUILDING

3.1 Door shall be mounted flush with exterior walls of building.

PART 4 - CONTRACTORS REQUIREMENTS: DESIGN CRITERIA

4.1 The single span hangar door shall be designed to the same loading requirements for live, dead and wind loads as the hangar building.

4.2 The doors shall be engineered to resist all anticipated loads without sagging, bowing or conflicting with its smooth and efficient operation.

4.3 Design for wind load as required by ASCE 7-10

Wind Load 140 mph – Exposure C

4.4 The design shall be furnished, approved and sealed by a professional engineer registered in the state of Texas.

4.5 The building header shall be designed to accommodate horizontal and vertical building deflections to support the single span door in all positions (with the proper lateral bracing) if hangar door chosen is not a self-supporting unit.

4.6 The building's door columns shall be framed of the proper design and size to reinforce the opening (with lateral bracing) and to carry all loads and vibrations imposed thereon if hangar door chosen is not a self-supporting unit.

4.7 The single span door should have solid footing with sill directly underneath the door frame and extending outward from the door to provide a base for the door's weather seal. This also prevents flow of water into, or under, the door installation.

4.8 The finished floor of the building should be designed to prevent flow of water under the door installation. Sills shall have a slight slope outward of the single span hydraulic door to prevent water flow under the door installation.

PART 5 - ELECTRICAL REQUIREMENTS

5.1 The building contractor shall furnish and install a prewired electrical door operating mechanism to control each single span door.

5.2 The contractor is responsible and required to completely install the prewired electrical door operating mechanism, push button controls, devices and electrical conduit and wiring to the door operating controls.

5.3 The electrical door mechanism and control shall be field wired by the contractor (not the door manufacturer).

5.4 Control panel with 24 volt up/down/off switch pre-wired to motor, and over-ride controls with the required number of adequately sized insulated electrical conductors.

5.5 Electrical contractor will be responsible for installing a disconnect for the hydraulic pump as well as the feeder from the disconnect to the equipment.

PART 6 - ELECTRIC POWER OPERATOR FOR THE SINGLE SPAN HYDRAULIC DOORS

6.1 All electrical controls and devices shall conform to the requirements of the current National Electrical Code 513, NEMA, and be UL approved.

6.2 Provide UL Listed Electric Operator, size and type as recommended by the manufacturer.

6.3 The operator is furnished complete and consists of a motor and factory-wired control panels consisting of main fused disconnect switch, magnetic reversing starters, limit switches and push button controls, control circuit transformers, relays, timing devices, and warning devices.

PART 7 - SUBMITTALS

7.1 Product Data: Submit manufacturer's A1, A2, A3, A4, A5, A6 Spec Sheets for each single span door, plus product data and installation instructions. Include details of construction relative to materials, dimensions of individual components, profiles, and finishes. Provide roughing-in diagrams. Include the following:

A. Summary of forces and loads on walls and jambs if hangar door chosen is not a self-supporting unit.

B. Setting drawings, templates, and installation instructions for built-in or embedded anchor devices.

7.2 Shop Drawings: Submit shop drawings for approval prior to fabrication. Include detailed plans, elevations, details of framing members, required clearance, anchors and accessories. Include relationship with adjacent materials. The make and type of door, operators and controls shall be clearly shown. Door weight, method of suspension, operation, and all fastenings shall be indicated.

7.3 Submit three (3) copies each of the following manufacturer's Manuals / Diagrams

A. Single Span Hydraulic Door Literature

B. Installation Manual

C. Operating Instructions

D. Maintenance data/manual.

E. Safety Decal Placement Guide Manual / Warning Labels

F. Electrical System Manual for the Single Span Hydraulic Door System

1. Electrical Schematics
2. Electrical Wiring Diagram

G. Diagrams of potentially hazardous locations related to the operation of the door.

H. Shop drawings for approval.

7.4 Submit shop drawings specific for this project.

NOTE: Generalized project drawings not specific to this project will not be acceptable

PART 8 - QUALIY ASSURANCE

8.1 Source Limitations: Obtain Single Span Hydraulic Door through one source from a single manufacturer.

8.2 Manufacturer Qualifications: Engage a firm experienced in manufacturing Single Span Hydraulic Doors similar to those indicated for this Project and with a record of successful in-service performance.

8.3 Installer Qualifications: Engage an experienced installer who is an authorized representative of the door manufacturer for both installation and maintenance of units required for this Project.

8.4 Product Options: Drawings indicate size, profiles, and dimensional requirements of Single Span Hydraulic Door and accessories. Other manufacturers' systems with equal performance and dimensional characteristics may be considered. Refer to available UPGRADE EQUIPMENT.

8.5 Pre-Installation Conference: Schedule a pre-installation conference prior to commencement of field operations that might affect installation of Single Span Hydraulic Door to establish procedures for maintaining optimum working conditions, and to coordinate this work with related and adjacent work.

8.6 The contractor shall touch up all scratches, abrasions or other slight painting defects with the same type and color of paint as originally applied.

PART 9 - DELIVERY, STORAGE AND HANDLING

9.1 Deliver materials and products in manufacturer's labeled protective packages. Store and handle in strict compliance with manufacturer's written instructions and recommendations. Protect from damage from weather, excessive temperatures and constructions operations.

9.2 Inspect vertical Single Span Hydraulic door upon delivery for damage. Minor damages may be repaired provided refinished items are equal in all respects to new work and acceptable to Architect. Otherwise, remove and replace damaged items as directed.

9.3 Place Single Span Hydraulic Door frame units on minimum 4" high wood blocking. Store doors components & Packages at building site under cover. Avoid use of non-vented plastic or canvas shelters which could create humidity chamber. If cardboard wrapper on door becomes wet, remove carton immediately.

9.4 The contractor shall store the sheet, panels, components and other manufactured items so that they will not be damaged or deformed. Store metal sheets or panels so that water accumulations will drain freely. Do not store sheets or panels in contact with other materials which might cause staining.

PART 10 - APPROVED MANUFACTURERS

10.1 The Single Span Hydraulic Doors supplied by a manufacturer who is regularly engaged in the manufacture of aircraft hangar doors, and upon request from the owner provide a list of completed projects. Single Span Hydraulic Door shall be as manufactured by:

- Higher Power
- Schweiss Bi-Fold Doors

10.2 Other manufacturers seeking approval of their products must comply with requirements of the Instructions to Bidders.

PART 11 - DOOR FRAMEWORK - FABRICATION / CONSTRUCTION REQUIREMENTS

11.1 Hangar doors shall be of the electrically operated single span canopy type and shall be integral with the hangar building design unless door chosen is a self-supporting unit.

11.2 When in the open position the doors shall have a slight slope to direct drainage away from the building.

CAUTION: Do not have the door lying flat when in a full open position

11.3 Door shall be hinged horizontally at the top, and be arranged to open by moving frame out & up.

11.4 Door frames shall have prelocated top hinges to align with the building truss members if door unit chosen is not self-supporting unit.

11.5 Door shall be self-contained with only the top hinges, Side Column Cylinders supports Legs.

11.6 The door framework shall consist of jig welded steel sections engineered by the door manufacturer to resist all anticipated loads without sagging, bowing or conflicting with its smooth operation.

11.7 All labor, materials, accessories, equipment and services necessary to furnish a complete installation of a single span hangar door as indicated by the manufacturer, including frame, sections, brackets, guides, side column cylinders, supports, legs, hardware, operators, and installation instructions.

11.8 Shop connections shall be welded.

11.9 Field connections shall be bolted.

PART 12 - HEAVY DUTY HINGES

12.1 Heavy Duty Steel Hinges furnished complete.

PART 13 - DOOR TRUSS'S

CHOOSE ONE:

13.1 External Truss - Standard

A. Provide an extra heavy duty truss to the exterior side of the single span door.

PART 14 - WIND PINS

CHOOSE ONE:

14.1 Manual Wind Pin

A. Include center wind pins 1" diameter minimum - provide a sturdy installation if required.

PART 15 - SELF CONTAINED LATCHING SYSTEM'S - STANDARD

15.1 Standard Latch System - Standard

A. The latching system shall secure the door and hold in a fully closed position on both sides of the doors.

PART 16 - PAINT

16.1 The door frame members and parts shall be factory primer finished with gray or red oxide primer.

PART 17 - TOP & BOTTOM RUBBER SEALS

17.1 Provide manufacturer's standard seal continuous at top, bottom of each door.

17.2 The door shall be equipped with neoprene weather stripping at heads and jambs to prevent flow of moisture into the door installation. Sills shall have a special fabric reinforced high grade rubber astragal. The entire door perimeter shall be weather tight.

NOTE: Existing bituminous surface varies and seals shall be placed accordingly.

PART 18 - METAL SIDING FOR THE SINGLE SPAN DOOR (Optional)

18.1 Install door skins to completely clad the door frames, use noncorrosive fasteners.

18.2 The hangar door covering shall meet the requirements as specified for the metal siding of the hangar and the exposed surface shall be colored to match the exterior siding of the hangar.

18.3 Install the the door skin and all trims according to the "One Piece" door recommendations.

PART 19 - Inside Liner Panel - CHOOSE ONE: (Optional)

19.1 The bottom half of the Single Span Hangar door shall be lined on the inside of the door frame.

19.2 Hangar doors shall be completely lined on the inside of the door frame (entire inside of the door frame).

PART 20 - "ONE PIECE" ELECTRIC HYDRAULIC POWER DOOR OPERATOR

20.1 Location of Power Operator

A. Motor must be able to be located on either side of door frame.

20.2 Electrical Controls

A. All electrical controls and devices shall be designed to meet National Electrical Code Section 513.

B. All controls are pre-wired and factory tested.

PART 21 - ELECTRIC MOTOR / VOLTAGE / PHASE

21.1 ELECTRIC MOTOR / VOLTAGE / PHASE

A. Service: 240 VAC, 60 Hz single phase, 3 wire service.

B. Single Phase motors shall be totally enclosed capacitor start.

C. Single Phase, 240 volt electric motor with fused protection direct mounted to a hydraulic pump

D. The size of the motor shall be as recommended by the manufacturer.

E. Door operator shall be pre-wired at factory complete with 24 V.A.C. control system.

PART 22 - HYDRAULIC Gear Motor PUMP

22.1 The hydraulic gear Motor pump system, must stop and hold door in any position of door travel.

22.2 Provide high starting torque, reversible, continuous duty, class A insulated, electric motors complying with NEMA MG 1, with fused protection, sized to start, accelerate, and operate door in either direction, from any position.

22.3 A magnetic starter, with 24v control unit for reliability is standard.

22.4 Design operator so motor may be removed without disturbing limit switch adjustment and without affecting emergency auxiliary operator.

PART 23 - CONTROL STATION

23.1 2-Button Constant Hold Control Station - for opening & closing your single span door

A. 2-button constant contact dead man switch, prevents operator from leaving control panel while door is in motion, either up or down.

B. When the operator takes his hand off the up /down button, the door immediately stops regardless of its opening / closing position.

PART 24 - ELECTRICAL DISCONNECT

24.1 Provide Electrical Disconnect to completely disable the door, for service, maintenance, emergency backup operations.

24.2 Mount disconnect so it is accessible from floor level.

PART 25 - EXECUTION

25.1 Examination

A. Examine wall and overhead areas, including opening framing and blocking, with Installer present, for compliance with requirements for installation tolerances, clearances, and other conditions affecting performance of Work of this section.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

PART 26 - INSTALLATION

26.1 General:

A. Door manufacturer is required to coordinate with the metal building manufacturer in the development of the exact installation details, and provide weights and door loadings to building manufacturer if door chosen is not a self-supporting unit.

B. Install door, cylinder columns, and operating equipment complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers, and equipment supports according to Shop Drawing's, manufacturer's written instructions, and as specified.

C. Fasten/ Hang horizontal track, hinges from structural overhead framing with angle or channel hangers welded and/or bolt fastened in place.Fasten/ Hang vertical cylinder columns, from structural column framing with angle or channel hangers welded and/or bolt fastened in place. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track, hinges and door-operating equipment. (If door chosen is not a self-supporting unit.)

26.2 Recommended Clear Opening

A. Each single span door has a recommended clear opening setting, specified by the manufacture. Do not over travel the door beyond the recommended setting.

26.3 Exterior Wall Panels

A. Metal building erector to install the same exterior wall panels that are on the building, use the same type on the single span door. Install the proper trims that are recommended by the manufacturer.

26.4 Apply Proper Safety Markings

A. Apply Proper Markings for any potentially hazardous locations related to the operation of the door.

B. Follow the pictorial diagram included in the door installation manual.

26.5 Installing Warning Labels

A. Furnish warning labels for any potentially hazardous locations related to the operation of the door.

B. Fasten warning labels to the single span door frame and by the operator's station in accordance with manufacturer's instructions, NO EXCEPTIONS.

26.6 Installer Certificates: Signed by manufacturer certifying that installers comply w/ specified requirements.

26.7 Installing Services - (Optional)

A. Install Representative, Manufacturer's representative to supervise assembly of door.

PART 27 - ELECTRICAL WORK - Contractor is responsible for:

27.1 The contractor is responsible and required to completely install the prewired electrical door operating mechanism, push button controls, devices and electrical conduit & wiring to the door operating controls.

27.2 Detail wiring for power, signal, and control systems.

A. Differentiate between manufacturer-installed and field installed wiring & between components provided by door manufacturer and those provided by others.

27.3 Install single span doors in accordance with manufacturer's instructions.

PART 30 - ADJUST & CLEAN

28.1 Lubricate, test adjust doors - to operate easily, free from warp, twist, or distortion and fitting weathertight for entire perimeter.

28.2 Prime Coat Touch Up:

A. Immediately after erection, sand smooth any rusted or damaged areas of prime coat.

B. Touch-up damaged coating and finishes and repair minor damage.

C. Clean exposed surfaces using non-abrasive materials and methods recommended by manufacturer of material or product being cleaned, and apply touch up of compatible air drying primer.

28.3 Final Adjustments:

A. Lubricate Hinges, verify recommended clear opening adjustments open and closed to operate easily , free from warp, twist , or distortion and fitting weathertight for the entire perimeter.

B. Check and readjust operating finish hardware items, leaving vertical "One Piece" doors undamaged and in complete and proper operating condition.

PART 29 - DEMONSTRATION - (Optional) - Choose From The Following:

29.1 Startup Services: Engage a qualified and authorized service representative to perform startup services and to train Owner's maintenance personnel as specified below:

A. Test and adjust controls and safeties. Replace damaged and malfunctioning controls & equipment.

B. Train Owner's maintenance personnel on procedures and schedules related to startup and shut down, operating, troubleshooting, servicing, and preventative maintenance.

C. Review data in the installation & maintenance manuals.

D. Schedule training with Owner at least 7 days advance notice.

PART 30 - WARRANTY

30.1 The Contractor shall warrant the door to be free of defects in accordance with the General Conditions, except the warranty shall be extended by manufacturer's 2 - year written warranty against defects in materials and workmanship, against problems which arise through normal anticipated usage of the door during the warranty period. The warranty shall be signed by the manufacturer.

PART 31 - UPGRADE EQUIPMENT

Note to Specifier: Select desired upgrade options below, and verify materials and insulation / application with the manufacturer; those related to door operating safety relative to danger to humans, and followed by an (R), may be required for your project; delete (R) in final text for those selected.

31.1 Top Limit Override Safety Switches

Upper override switch that disconnects power to door if upper limit fails or if limits are overridden. This safety feature is designed to prevent the door from traveling beyond its recommended clear opening height. If the door passes its full clear opening height, it will activate the override and stop the door automatically.

31.2 Electric Photo Eye Sensors (R)

A. Option 2 - Electric Photo Eye Sensors mounted near floor level prevent or stop & reverse the door when an obstruction brakes the detection beam. If the beam is broken, door will reverse to a fully open position. When using this system use a Top Limit Override switch to shut the motored pump off when door reaches a full open position.

31.3 Door Base Safety Edge (R)

Electrical sensing switch along door bottom stops door if it comes in contact with an obstruction. Door will then reverse to a fully open position.

A. Safety edge must be capable of protecting the entire width of the door opening.

B. The only approved manufacturer of the safety sensing edge is Miller Edge, Inc., West Grove, PA (800-220-3343) Model MU-22

31.4 Emergency Operation - Auxiliary Backup System

A. Auxiliary Operated Backup

1. The door shall be capable of being auxiliary operated in the event of a power outage.
2. Include disconnect device to prevent motor from operating when manually operating door.
3. Manual opp. of door shall be designed to avoid damage to doors, safety edges, & electrical system.
4. Provide safety operating instructions: Observe all safety precautions according to the manufacturer's precautions.

31.5 Radio Control System consisting of the following:

A. 3-channel coaxial receiver to open, close, and stop door per operator.

B. Multifunction remote control transmitter. (Quantity of 2 per door)

IMPORTANT: When the operator takes his hand off the remote control transmitter, the door immediately stops regardless of its opening / closing position.

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Hardware for hollow steel doors.
B. Thresholds.
C. Weatherstripping, seals and door gaskets.

1.2 REFERENCES

A. Americans with Disabilities Act.
B. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Useable by Physically Handicapped People.
C. State of Texas Handicap Accessibility Standards.
D. NFPA 80 - Fire Doors and Windows.
E. AWI - Architectural Woodwork Institute - Quality Standards.
F. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
G. NFPA 252 - Fire Tests of Door Assemblies.
H. UL 10B - Fire Tests of Door Assemblies.
I. UL 305 - Panic Hardware.

1.3 DESIGN / PERFORMANCE REQUIREMENTS (EXTERIOR HARDWARE ONLY)

A. Wind Loads: Design door assembly to withstand wind/suction load without damage to door or assembly components.
   1. Design Wind Load: 140 MPH - 3 Second Burst.
B. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.

1.4 SUBMITTALS

A. Shop Drawings: Indicate locations and mounting heights of each type of hardware.
B. Submit manufacturer's parts lists, and templates.
C. Manufacturer's Installation Instructions.
D. Certification: Submit notarized certification indicating that hardware furnished for labeled doors and doors requiring physically handicapped access complies with requirements of governing authorities applicable regulations.

1.5 PROJECT RECORD DOCUMENTS

A. Record actual locations of installed cylinders and their master key code.

1.6 OPERATION AND MAINTENANCE DATA

A. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

1.7 QUALITY ASSURANCE

A. Perform work in accordance with the following requirements:
   1. Americans with Disabilities Act.
   2. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.

3. NFPA 101.
4. NFPA 80.
5. NFPA 252.
6. Elimination of Architectural Barriers Act of Texas, Article 7, Article 601b, Rules 115.51 throught 115.61 and Rule 115.62.

1.8 QUALIFICATIONS

A. Hardware Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
B. Hardware Supplier: Company specializing in supplying institutional door hardware with three years documented experience.
C. Hardware Supplier: Company specializing in supplying commercial door hardware with three years documented experience.
D. Hardware Supplier: Company specializing in supplying residential door hardware with three years documented experience.
E. Hardware Supplier Personnel: Employ an Architectural Hardware Consultant (AHC) to assist in the work of this section.

1.9 REGULATORY REQUIREMENTS

A. Conform to applicable code for requirements applicable to fire rated doors and frames.
B. Products Requiring Electrical Connection: Listed and classified by Underwriters' Laboratories, Inc., as suitable for the purpose specified and indicated.

1.10 PRE-INSTALLATION CONFERENCE

A. Convene two weeks prior to commencing work of this section, under provisions of Section 01039.

1.11 DELIVERY, STORAGE, AND HANDLING

A. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.
B. Deliver keys to Owner by security shipment direct from hardware supplier.

1.12 COORDINATION

A. Coordinate the work with other directly affected sections involving manufacture or fabrication of internal reinforcement for door hardware.

1.13 WARRANTY

A. Warranty: Include coverage for latch and lock sets and door closers.

1.14 MAINTENANCE MATERIALS

A. Provide special wrenches and tools applicable to each different or special hardware component.
B. Provide maintenance tools and accessories supplied by hardware component manufacturer.

1.15 EXTRA MATERIALS

A. Provide ten extra key lock cylinders for each master keyed group.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A Hinges: Hager, McKinney, and Stanley.
B. Pivots: Hager, McKinney, and Stanley.
C. Latch Sets: Sargent, Schlage, and Yale.
D. Cylinder Locks: Sargent, Schlage, and Yale.
E. Door Closers: LCN, Rixson, and Sargent.
F. Gasketing and Thresholds: Zero, Pemko and National Guard Products.

2.2 HARDWARE SELECTIONS

A. General:
1. Furnish all hardware for proper installation and operation of door movement shown on drawings.

2. Quality Standards:
a) Manufacturer: ANSI A156
b) Finish: ANSI A156.18
c) Do not furnish "optional" materials or finishes, except as otherwise specified.
3. Furnish all screws and fasteners required for complete installation of hardware. All exposed screws and fasteners shall match hardware finish.

B. Hinges, Butts and Pivots:
1. Exterior Doors:
a) Five knuckle, ball bearing, with non-removable pin.
b) All doors: TA-TB2714 - Size 4 1/2 x 4 1/2.
c) Provide hinges with set screw in barrel, concealed with door in closed position.
d) Provide steel pins throughout.
2. Interior Doors:
a) Hinge:
1. Five knuckle, non-rising pin.
2. Doors without closers: T2714 - Size 4 1/2 x 4 1/2.
3. Doors with closers: TA-TB2714 - Size 4 1/2 x 4 1/2.
b) Spring Hinge: 1502 Standard Weight
1. Spring hinge shall only be located in the middle hinge position.
3. Number of Hinges:
a) Number of hinges per door based upon door height.
1. 60 inches or less: 1 pair
2. Greater than 60 but less than 90 inches: 1 1/2 pair.
3. Greater than 90 but less than 120 inches: 2 pair.
4. Greater than 120 inches: 1 additional hinge per 30 inches of height above 120 inches.
4. Tips: Flat button and matching plug, finished to match leaves, except where hospital tip (HT) indicated.

C. Lock Cylinders and Keying:
1. Supplier shall meet with Owner in order to finalize keying requirements.

D. Locks, Latches and Bolts:
   1. Provide manufacturer's standard wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set.
   2. Provide dust proof strikes for foot bolts, except where special threshold construction provides non-recessed strike for bolt.
   3. Provide roller-type strikes where recommended by manufacturer of the latch and lock units.
   4. Lock Throw:
      a) Single leaf doors: Provide 1/2 inch minimum throw on latch and deadlock bolts.
      b) Pair doors: Provide 5/8 inch minimum throw on latch and deadlock bolts.
      c) Rated openings: Comply with UL requirements for throw of bolts.

E. Hardware Finishes:
   1. Provide matching finishes for hardware units at each door or opening, to the greatest extent possible, and except as otherwise noted. In general, match items to the manufacturer's standard finish for the latch and lock set (or push-pull units if no latch-lock set) for color and texture.
   2. The designations used in schedules and elsewhere to indicate hardware finishes are the industry-recognized standard commercial finishes, except as noted-otherwise.

F. Door Stops: Furnish a door stop for all door leafs. Where a door strikes a wall, furnish a wall bumper or dome stop equal to Trimco 121ORP or W1274CCS. In the event a wall bumper or dome stop cannot be used effectively, furnish an overhead stay as follows:
   1. Interior Doors: Overhead Stay equal to Sargent 1540 series.
   2. Exterior Doors: Overhead Stay equal to Sargent 590 series.

G. Door Silencers: All interior metal door frames, except for frames for lightproof and soundproof doors, shall be provided with Sargent Silencers 3346 as listed below:
   1. Single Swing Doors - 3 per door.
   2. Pairs of Doors - 2 per door.

2.3 KEYING

A. Door Locks: Master keyed. Include construction keying. Key to existing keying system.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that doors and frames are ready to receive work and dimensions are as instructed by the hardware manufacturer.
B. Verify that electric power is available to power operated devices and of the correct characteristics.

3.2 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions.
B. Use templates provided by hardware item manufacturer.
C. Mounting heights for hardware shall comply with requirements of the Americans with Disabilities Act.

3.3 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 45 00 - Quality Control.

B. Architectural Hardware Consultant to inspect installation and certify that hardware and ininstallation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.4 ADJUSTING

A. Adjust hardware for smooth operation.

3.5 PROTECTION OF FINISHED WORK

A. Do not permit adjacent work to damage hardware or finish.

END OF SECTION 087100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Acoustical insulation.
   2. Gypsum board.
   3. Taping and bedding of gypsum board.

B. Related Sections:
   1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

A. ASTM International (ASTM):
   1. C475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
   2. C514 - Standard Specification for Nails for the Application of Gypsum Wallboard.
   3. C665 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Wood Frame and Light Construction Buildings.
   4. C1002 - Standard Specification for Steel Drill Screws for the Application of Gypsum Board.
   5. C1047 - Standard Specifications for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
   6. C1178 - Standard Specification for Glass Mat Water-Resistant Gypsum Backing Panel.
   7. C1396 - Standard Specification for Gypsum Board.
   8. C1629 - Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels.
   9. D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
   10. E90 - Standard Test Method for Airborne Sound Transmission Loss of Building Partitions.
   11. E413 - Standard Test Method for Classification for Rating Sound Insulation.

B. Gypsum Association (GA):
   1. GA-214 - Levels of Gypsum Board Finish.
   2. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.
   3. GA-600 - Fire Resistance Design Manual.

C. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

1.5 PROJECT CONDITIONS

A. Do not install gypsum board until building is substantially weathertight.

B. Maintain temperature in spaces in which work is being performed above 50 degrees F during and after installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers - Gypsum Panels:
   1. CertainTeed Gypsum, Inc.
   2. GP Gypsum Corporation.
   3. National Gypsum Co.
   4. USG Corporation.

B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS - GYPSUM PANELS

A. Regular Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, maximum practical length, tapered edge.

B. Fire Resistant Gypsum Board: ASTM C1396, Type X; 48 inches wide x 5/8 inch thick, maximum practical length, tapered edge; apply to fire rated assemblies.

C. Water Resistant Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, maximum practical length, water resistant; apply to walls to receive tile or sanitary wall panels and walls at janitor closets and toilet rooms.

D. Fire Resistant, Water Resistant Gypsum Board: ASTM C1396, Type X; 48 inches wide x 5/8 inch thick, maximum practical length, water resistant; apply to fire rated walls to receive tile or sanitary wall panels and walls at janitor closets, toilet rooms and showers.

2.3 ACCESSORIES

A. Fasteners: ASTM C1002, screws, minimum 5/8 inch penetration into framing.

B. Trim Accessories: ASTM C1047.
   1. Material: Formed steel, minimum 26 gage core steel, hot dip galvanized finish, expanded flanges.
   2. Corner reinforcement: GA-216, Type CB-100 x 100.
   3. Casing: GA-216, Type LC.
   4. Control joint.

C. Joint Treatment Materials:
   1. Reinforcing tape and joint compound; ASTM C475.

PART 3 - EXECUTION

3.1 INSTALLATION OF GYPSUM PANELS

A. Install panels and accessories in accordance with ASTM C754, GA-216, and manufacturer's instructions.

B. Accurately cut panels to fit around openings and projections. Do not tear face paper or break gypsum core.

C. Apply panels at non fire-rated assemblies in most economical manner, with ends and edges occurring over supports.

D. Apply panels at fire-rated assemblies as required by design assembly.

E. Stagger joints on opposite sides of partitions.
F. Do not locate joints to align with edges of openings unless a control joint is installed.
G. Mechanically fasten single layer panels to framing. Place fasteners minimum 3/8 inch from edges of panels; drive heads slightly below surface. Stagger fasteners at abutting edges.
H. Apply face layer of double layer applications with joints offset from those in base layer; secure with mechanical fasteners to framing or with adhesive to base layer.
I. At deflection compensating head tracks, cut panels 1/2 inch short of structure at head; do not secure panels to top runner channel.
J. Treat cut edges and holes in moisture resistant gypsum board with joint sealer.
K. Where recessed items occur in fire rated partitions, box item on all sides with gypsum board as required to maintain continuity of fire rating.

3.2 INSTALLATION OF ACCESSORIES

A. Install in accordance with manufacturer's instructions.
B. Install corner reinforcement at outside corners. Use single lengths where length of corner does not exceed standard length.
C. Install casings where indicated and where gypsum board abuts dissimilar materials or stops with edge exposed.
D. Install control joints at ceilings:
    1. At maximum 50 feet on center.
    2. Where ceiling framing changes direction.
E. Install control joints at walls and partitions:
    1. At changes in backup material.
    2. At maximum 30 feet on center.
    3. Above both jambs of openings in partitions.

3.3 JOINT TREATMENT

A. Treat joints and fasteners in gypsum board in accordance with GA-214.
B Levels of Finish:
    1. Surfaces in plenums, service corridors, and janitor closets: Level 1 finish.
    2. Surfaces to receive tile and stone: Level 2 finish.
    3. Surfaces to receive flat or eggshell paints: Level 4 finish.
    4. Surfaces to receive semigloss or gloss paints: Level 5 finish.

END OF SECTION 092900

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES
A. Surface preparation and field application of paints on interior substrates.

1.2 REFERENCES
A. ASTM D 16 - Standard Terminology Relating to Paint, Varnish, Lacquer, and Related Products.

1.3 DEFINITIONS
A. Conform to definitions of terms in ASTM D16 in interpreting requirements of this specification section.

1.4 SUBMITTALS
A. Product Data: Provide manufacturer's printed product data on all coatings specified, including preparation and application instructions.
B. Selection Samples: Provide two sets of samples not less than one inch by two inches in size illustrating range of colors and textures available for each finishing product specified.
C. Verification Samples: Provide two samples of not less than six inches square illustrating selected colors and textures for each color specified.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver products to site in sealed and labeled containers. Labels shall include manufacturer's name, type of coating, brand name, lot number, estimated coverage, surface preparation requirements, drying time, cleanup instructions, color designation, and instructions for mixing.
B. Store paint products in covered, ventilated area at minimum ambient temperature of 45 degrees F and maximum ambient temperature of 90 degrees F.

1.6 ENVIRONMENTAL REQUIREMENTS
A. Do not apply products of this section outside acceptable range of conditions as specified by paint manufacturer.
B. Do not apply coatings when humidity is in excess of manufacturer's recommended limit.

PART 2 - PRODUCTS

2.1 MANUFACTURER
A. Sherwin Williams or approved substitute.

2.2 MATERIALS
A. Coatings: Ready mixed, except for field catalyzed coatings; having good flow

and brushing properties and consistent drying or curing behavior, free of sags and streaks.

B. Accessory Materials: Linseed oil, turpentine, paint thinners and other materials recommended by coatings manufacturer as necessary to achieve finishes specified.

C. Patching and Surface Preparation: Latex fillers as recommended by coatings manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that site environmental conditions are appropriate and substrates are in proper condition to receive work of this section.

B. Verify that shop applied primers are compatible with specified finish coats.

C. Measure moisture content of surfaces using an electronic moisture meter. Do not begin application of coatings unless moisture content of surfaces is below paint manufacturer recommendations.

3.2 PREPARATION

A. Remove or mask electrical plates, hardware, light fixture trim, and similar fittings prior to beginning painting operations.

B. Correct defects and clean surfaces affecting work of this section. Remove existing coatings that are flaking or otherwise in unacceptable condition to receive paint.

C. Seal with shellac or other coating acceptable to paint manufacturer any marks or defects that might bleed through paint finishes.

D. Clean and prepare substrate per paint manufacturer requirements.

3.3 APPLICATION

A. Apply paint products in accordance with manufacturer's printed instructions. Do not apply coatings to surfaces that are not dry.

B. Apply each coat to uniform thickness and finish, with each coat slightly darker than preceding coat. Allow each coat to dry thoroughly before applying next coat.

C. Sand wood and metal surfaces lightly between coats. Vacuum surfaces free of loose particles prior to application of next coat.

3.4 CLEANING AND PROTECTION

A. Keep project premises free of painting-related debris. Collect material that may constitute a fire hazard, place in closed metal containers, and remove daily from site.

B. Protect work adjacent to painting operations from paint spatters and spills. Immediately remove paint that falls on finished surfaces not scheduled to receive paint, using materials and techniques that will not damage affected surfaces.

3.5 SCHEDULE

A. Smooth and Textured Drywall:
   1. Smooth and Textured Drywall: 1 coat Wall Primer.
   2. Eggshell Finish:
      a. Acrylic Latex:
         1) 1 coat appropriate wall primer.
         2) 2 coats 100 percent Acrylic Eggshell Enamel.

B. Architectural Metals:
   1. Shop primed ferrous metal:
      a. Touch up all bare or abraded areas with Alkyd Primer.
      b. 1 coat Alkyd Primer.
   2. Semi-Gloss Finish:
      a. Acrylic Latex:
         1) coat appropriate metal primer.
         2) 2 coats 100 percent Acrylic Semi-Gloss.

END OF SECTION 099123

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 220700 - PLUMBING SYSTEMS PIPING INSULATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Piping insulation.

1.2 RELATED SECTIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.
B. Division 15 - Mechanical Specifications.
C. Division 16 - Electrical Specifications.

1.3 REFERENCES

A. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
B. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
C. NFPA 255 - Test of Surface Burning Characteristics of Building Materials.
D. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.4 QUALITY ASSURANCE

A. Installation: Company specializing in installation of the products required and/or specified in this section with minimum three years documented experience.

1.5 SUBMITTALS

A. Product Data: Provide data on product characteristics, performance criteria, limitations.
B. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.6 COORDINATION

A. Coordinate work under provisions of other trades.

1.7 REGULATORY REQUIREMENTS

A. Comply with all federal, state and local codes and ordinances relating to installation of piping insulation.

PART 2 - PRODUCTS

2.1 PIPE INSULATION

A. Insulation products shall have composite (insulation, jacket and adhesive used to adhere to jacket to the insulation) fire and smoke hazard ratings as tested under procedure ASTM E-84, NFPA 255 and U.L. 723, not exceeding flame spread of 25 and developed smoke of 50.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

3.2 PIPE INSULATION

A. Install pipe insulation in a workmanlike manner and in compliance with all manufacturer's recommendations and code requirements.

3.3 HANGERS AND SUPPORTS

A. Install hangers for domestic water pipes 1" and larger outside of the insulation.
B. Provide a galvanized steel sheet-metal protection shield at each pipe hanger.
C. Provide 360degree segment of incompressible, load bearing insulation with matching vapor barrier jacket at each support point to prevent insulation from sagging or crushing. Thickness of rigid insulation shall match thickness as adjoining insulation and shall extend 1 inch beyond galvanized protection shield.
D. For individual domestic water pipes, install copper plated ring or band type hanger inside the insulation.
E. Where domestic water pipes are 1/2" and 3/4" pipe sizes, installed on trapeze hangers, place insulation jacket directly on hanger. Incompressible insulation segments and protection shields are not required.
F. Where domestic water pipes above 1" are installed on trapeze hangers, install incompressible insulation segments and protection shields.

1.2 DOMESTIC WATER PIPING INSULATION

A. Cover domestic cold water, domestic hot water and domestic return circulating water piping with fiberglass, one piece insulation with reinforced jacket.

END OF SECTION 220700

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 221116 - DOMESTIC WATER PIPING SYSTEMS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Section includes ASTM F877 cross-linked polyethylene (PEX) tubing hot and cold water distribution systems, ASTM F876 cross-linked polyethylene (PEX) tube, ASTM F1807 fittings and ASTM F2159 fittings.

1.2 GENERAL

A. Use only the specified materials and procedures in fabricating the piping systems.
B. Extend and connect piping to all fixtures and equipment in the building as shown on the Drawings.
C. Provide all domestic water piping from the water meter, under the building slab, above grade, and inside throughout the building.
D. Locate the meter box and provide the domestic water tie in to the municipal water system. Coordinate with the Owner the location of the box and the direction of all water piping.

1.3 REFERENCES

A. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
B. ASTM F876 Standard Specification for Cross-linked Polyethylene (PEX) Tubing.
C. ASTM F877 Standard Specification for Cross-linked Polyethylene (PEX) Plastic Hot and Cold Water Distribution Systems.
D. ASTM F1807 Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing.
E. ASTM F2159 Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing.
F. National Sanitation Foundation Standard 14 Plastics Piping System Components and Related Materials.
G. National Sanitation Foundation Standard 61 Drinking Water System Components – Health Effects.
H. Canadian Standards Association CAN/CSA B137.5 Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications.
I. International Code Council (ICC) International Mechanical Code.
J. International Code Council (ICC) International Plumbing Code.
K. Plastic Pipe Institute (PPI) Technical Report TR-3 Policies and Procedures for Developing Recommended Hydrostatic Design Stresses for Thermoplastic Pipe Materials.
L. Plastic Pipe Institute (PPI) Technical Report TR-4 Recommended Hydrostatic Strengths and Design Stresses for Thermoplastic Piping and Fitting Compounds.

1.4 SYSTEM DESCRIPTION AND PERFORMANCE REQUIREMENTS

A. Design Requirements.
   1. Standard Grade hydrostatic pressure ratings from the Plastic Pipe Institute in accordance with TR-3 and listed in TR-4. The following three

standard-grade hydrostatic ratings are required;
a) 200 degrees F at 80 psi.
b) 180 degrees F at 100 psi.
c) 73 degrees F at 160 psi.

2. Tubing tested in general accordance with ASTM E84 for a flame spread/smoke developed index of 25/50 or less for the following PEX tube sizes encased with ‰inch fiberglass insulation;
a) 1 1/4 inch.
b) 1 1/2 inch.
c) 2 inch.

3. Tubing tested in general accordance with ASTM E84 for a flame spread/smoke developed index of 25/50 or less for the following PEX tube sizes;.
a) 3/8 inch.
b) 1/2 inch.
c) 5/8 inch.
d) 3/4 inch.
e) 1 inch.

B. Performance Requirements.
1. To provide a PEX tubing hot and cold potable water distribution system, which is manufactured, fabricated and installed to comply with regulatory agencies and to maintain performance criteria stated by the PEX tubing manufacturer without defects, damage or failure.
a) Comply with NSF Standard 14.
b) Comply with NSF Standard 61.
c) Show compliance with ASTM F877.

1.5 SUBMITTALS
A. General. Upon request, submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section
B. Product Data. Upon request, submit manufacturer's product submittal data, installation instructions and Manufacturer's Professional Installation Limited Warranty.
C. Shop Drawings. Upon request, provide installation drawings indicating tubing layout, manifold locations, plumbing fixtures supported and schedules with details required for installation of the system.
D. Samples. Upon request, submit selection and verification samples of piping.
E. Listing Certifications. Upon request, submit manufacturers third party listings.

1.6 QUALITY ASSURANCE
A. Installer Qualifications.
1. Utilize an installer having demonstrated experience on projects of similar size and complexity and possesses the skills and knowledge to install a PEX potable water distribution system.
2. Installer will utilize skilled workers holding a trade qualification license or equivalent or apprentices under the supervision of a licensed tradesperson.

1.7 REGULATORY REQUIREMENTS
A. Comply with all Federal, State, Local and Industry Codes and Ordinances

governing work of this contract.

1.8 DELIVERY STORAGE AND HANDLING

A. General. Comply with all Division 1 Product Requirement Section.

B. Delivery. Deliver materials in manufacture's original, unopened, undamaged containers with identification labels intact until ready for installation.

C. Storage and Protection.

1. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

2. Store PEX tubing indoors, in cartons or under cover to avoid dirt or foreign material from entering the tubing.

3. Do not expose PEX tubing to direct sunlight for more than six months. If construction delays are encountered, cover the tubing that is exposed to direct sunlight.

1.9 WARRANTY

A. Project Warranty. Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty.

1. Shall cover the repair or replacement of properly installed tubing and fittings proven defective as well as incidental damages.

2. Warranty period for PEX tubing and subsequent system shall be 25 year non-prorated warranty against failure due to defect in material or workmanship, beginning with the date of installation.

3. It is the installer's responsibility to avoid mixing fittings manufactured by others as it will reduce the owner's warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Hot and Cold Potable Water Distribution System Piping. All components of the potable water system piping systems, including all terminations, connections and controls shall be manufactured, supplied and/or approved for use by a single manufacturer.

1. Zurn PEX Inc.
2. Uponor.
3. Viega.
4. Approved Substitute.

B. Fittings and Related Components. All fittings, manifolds and terminations shall be manufactured by or sourced from a supplier approved by the manufacturer of the potable water piping.

2.2 INDIVIDUAL MATERIAL

A. Tubing.

1. Cross-linked polyethylene (PEX) manufactured by the Silane method.
2. Non-barrier type.

a) Shall have a pressure and temperature rating of 160 PSI at 73 F, 100 PSI at 180 F and 80 PSI at 200 F.
b) Tubing shall have a minimum of 6 months UV protection.

3. Manufactured in accordance with ASTM F876 and ASTM F877 and tested for compliance by an independent third-party agency.

B. Fittings. Manufactured in accordance with ASTM F1807 or ASTM F2159 and/or comply with ASTM F877 system standard as identified on the fitting.
C. Crimp Systems. Listed to ASTM F1807 and/or ASTM F877.
D. Manifold and Terminations. Shall be of the plastic or metal type, meeting the requirements of ASTM F877, identified as such with the appropriate mark on the product.
E. Valves. Shall be of the plastic or metal type, meeting the requirements of ASTM F877, identified as such with the appropriate mark on the product.
F. Tools. Approved for use on products supplied by the manufacturer of the potable water piping.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Site Verification of Conditions.
1. Verify that site conditions are acceptable for the installation of the PEX potable water system.
2. Do not proceed with installations of the PEX potable water system until unacceptable conditions are corrected.

3.2 GENERAL
A. Manufacturer's Instructions. Comply with manufacture's product data, including product technical bulletins, technical memo's, installation instructions and design drawings, including; Zurn PEX Plumbing Installation Guide.

3.3 INSTALLATION
A. Install Pex tubing in accordance with tubing manufacturer's recommendations and as indicated in the Pex Plumbing Installation Guide.
B. Do not solder within 18 inches of Pex tubing in the same waterline. Make sweat connections prior to making Pex connections.
C. Ensure no glues, solvents, sealants or chemicals come in contact with the tubing without prior permission from the tubing manufacturer.
D. Do not expose Pex tubing to direct sunlight for more than 6 months.
E. Use a Pex manufacturer recommended fire stop sealant manufacturer.
F. Protect Pex tubing with sleeves where abrasion may occur.
G. Use nail plates where Pex tubing penetrates wall stud or joists and has the potential for being struck with a screw or nail.
H. Allow slack of approximately 1/8 inch per foot of tube length to compensate for expansion and contraction.
I. Minimum horizontal supports are to be installed not less than 32 inches between hangers in accordance with model plumbing codes and the Zurn Pex Plumbing Installation Guide.
J. Pressurize Zurn Pex tubing in accordance with applicable codes or in the absence of applicable codes, test pressure shall be at least equal to normal

system working pressure, but not less than 40 PSI water or air and not greater than 225 PSI water, 125 PSI air.

K. Refer to other sections listed in Related Sections paragraph herein for related products installation.

3.4 FIELD QUALITY CONTROL

A. Site Tests. To ensure system integrity, pressure test the system before covering tubing in concrete and/or other finish materials and after other trades have worked in the vicinity of the tubing.

B. Maintain system operating pressure on entire potable water system during installation of finish materials covering studs and/or cavities containing Pex piping. Repair and replace any product that has been damaged according to manufacturer's recommendation.

3.5 PROTECTION

A. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION 221116

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 221316 - SOIL WASTE PIPING SYSTEMS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Sanitary Soil Waste and Vent Piping System.

1.2 GENERAL

A. Use only the specified materials and procedures in fabricating the piping systems.
B. Extend and connect piping to all fixtures and equipment in the building as shown on the Drawings.
C. Mauriceville Municipal Utility District will locate a sanitary tap and provide the connection to the municipal sewer system. Coordinate with the Owner the location and flow line elevation of the sanitary tap.

1.3 REFERENCES

A. ANSI/ ASTM D 1784 - "Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds.".
B. ANSI/ASTM D2729 - "Polyvinyl Chloride (PVC) Sewer Pipe and Fittings".
C. ASTM D2855 - "Practice for Making Solvent - Cemented Joints With PVC Pipe and Fittings".
D. ASTM D3033 & 3034- "PVC Sewer Pipe and Fittings".
E. ASTM C564 - rubber gaskets for cast iron soil pipe and fittings.
F. CISPI No.301 - "Cast Iron Soil Pipe and Fittings for Hubless Cast Iron Sanitary System".
G. ANSI/ ASTM D 1784 - "Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds".
H. ASTM D2855 - "Practice for Making Solvent - Cemented Joints with PVC Pipe and Fittings".

1.4 QUALITY ASSURANCE

A. Test all piping systems for leaks using procedures and standards required by governing codes and authorities.
B. Test all new piping back to the connection of the existing source.

1.5 REGULATORY REQUIREMENTS

A. All piping systems to be installed in accordance with applicable Federal, State and Local governing regulations and codes.

1.6 DELIVERY, STORAGE and HANDLING

A. Protect all materials during handling and storage to avoid damage.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Sanitary Soil Waste and Vent Piping System:
   1. Soil, waste and vent piping underground, below building slab and above grade inside the building (outside limits of return air plenum areas) to be schedule 40 PVC pipe with drainage pattern fittings and solvent welded joints.
   2. Soil, waste and vent piping above grade within limits of return air plenum areas to be service weight cast iron hub and spigot soil pipe and fittings. Make joints with positive, double seal, compression-type gaskets, or, hubless cast iron soil pipe and fittings with no hub-coupling joints.
   3. Reference drawings for limits of return air plenum areas.

B. Municipal Utility Extensions: Provide schedule 40 PVC pipe and fittings with solvent-welded joints for all underground domestic water piping from water main to the meter.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

A. Protect interior of pipe and fittings during installation to prevent debris from entering the system.

B. Do not install piping in water-filled trenches or when trench or weather conditions are unsuitable.

C. Leave joints exposed for examination during testing.

D. Install the various piping systems using procedures and methods in accordance with the Manufacturer's instructions.

E. Cutting and patching of existing concrete building slabs and existing exterior concrete or asphalt paving to accommodate installation of new piping systems is to be provided/performed by the plumbing systems installer.

F. Use only factory made fittings of same material as the pipe and approved by the pipe Manufacturer.

3.2 INSTALLATION - PVC PIPING

A. Join piping by solvent welding, using solvent and procedures as recommended by the Manufacturer.

B. Verify all systems are completely installed, unobstructed and free of all debris.

3.3 TESTING AND CERTIFICATION

A. Provide the following minimum testing procedures.

B. Sanitary Sewer Piping System:
   1. Test by filling with water, full to the top of the highest stub-up or stack and held so for 24 hours.
   2. After completion of the test, but prior to Substantial Completion, pass a plumber's rod through the entire new and existing system to verify system is free of obstruction and debris.

C. Immediately correct all leaks by replacing defective materials and connections and repeat tests until leaks are eliminated.

D. Provide written certification that the piping systems have been tested using the specified procedures and that test results indicate no leaks exist in the system.
   1. Insert copies of certification in the Owner's Manuals.

END OF SECTION 221316

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 224213 - PLUMBING FIXTURES AND TRIM

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Plumbing Fixtures and Trim.

1.2 SUBMITTALS

A. Submit manufacturer's printed product data for all fixtures, trim and appurtenances.
B. Submit manufacturer's installation instructions.

PART 2 - PRODUCTS

2.1 MATERIALS SUPPLIERS

A. Plumbing fixtures, faucets and trim.
   1. Eljer.
   2. American Standard.
   3. Bradley.
   4. Chicago.
   5. Crane.
B. Supplies, stops and tubular chromed brass.
   1. Eljer.
   2. American Standard .
   3. Bradley.
   4. Chicago.
   5. Crane.
   6. McGuire.
C. Supports and Carriers:
   1. Wade
   2. Smith
   3. Zurn
   4. Church
   5. Beneke
   6. Eljer

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify exact location and placement of fixtures with actual job conditions and make adjustments necessary to conform with architectural features, symmetry and cabinet/counter arrangements.
B. Coordinate fixtures mounted in cabinets with millwork shop drawings.
   1. Confirm all requirements before rough in and installation.
   2. Resolve discrepancies between actual requirements and catalog

references at time of shop drawing submission.

3.2 GENERAL

A. Install and connect all plumbing fixtures and required trim to the building waste, soil,
vent and water supplies.
B. Furnish all required trim, and appurtenances for a complete and operational installation.
C. Clean and disinfect all fixtures upon completion of the installation.

3.3 INSTALLATION

A. Mount all fixtures in accordance with manufacturer's requirements.
B. Provide wall hung fixtures fastened with through bolts and back plates.
C. Provide wall hung lavatories with anchor bolts on underside of backsplash.
D. Provide brass or chrome plated toggle bolts to tightly secure fixtures.

3.4 SCHEDULES

A. Plumbing fixtures and trim are scheduled on the drawings and represent the overall quality of fixtures, trim and supports.

END OF SECTION 224213

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 230100 - GENERAL MECHANICAL REQUIREMENTS

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. Mechanical and Plumbing Systems are included. Provide all additional engineering necessary to finalize orders for equipment and fixturing. Design of all systems and components shall meet general industry standards common to the region, along with the 2012 International Building Code, the 2012 International Mechanical Code and the 2012 International Plumbing Code.

1.2 SECTION INCLUDES

A. General Requirements.
B. Contractor qualifications.
C. Coordination with other trades.
D. Materials and Workmanship.
E. Quality Assurance.
F. Delivery, Storage and Handling.
G. Drawings and Specifications.
H. Locations and Elevations of Municipal Utilities.
I. Submittals.
J. Regulatory Requirements.
K. Drawings and Specifications.

1.3 RELATED SECTIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.
B. Division 23 - Mechanical Specifications.
C. Division 26 - Electrical Specifications.

1.4 GENERAL REQUIREMENTS

A. Refer to other Divisions of the specifications for the scope of required connections to equipment furnished under that Division. Determine from the Contractors for the various trades and by direction from the Owner the exact location of all items. The Contractors involved will furnish all roughing-in drawings and piping diagrams required for proper installation of the mechanical work.

1.5 CONTRACTOR QUALIFICATIONS

A. Qualifications: The Contractor shall provide qualified workers trained and experienced in executing work of the various sections and shall submit documentation of five (5) consecutive years of work of this type. A list of similar projects shall be provided identifying when, where, and for whom the work was done.
B. Provide evidence of having contracted for and installed systems of comparable size and type to the systems specified herein. Systems submitted as previous experience shall have served their Owners satisfactorily for not less than 3 years.

1.6 COORDINATION WITH OTHER TRADES

A. Coordinate work of the various mechanical sections with the work of other trades and conditions of the Project and other divisions of work. Cooperate and coordinate with other divisions of work to provide a complete and functioning system in accordance with the Project Documents. Notify Owner of conflicts in ample time to prevent unwarranted changes in any work.

B. Provide coordination drawings of any and all systems necessary for coordination with other divisions of work.

C. Request all shop drawings and product data in ample time to permit proper installation of the systems and to prevent unwarranted delays in the Project construction schedule.

D. Stub up and protect open ends of pipe before enclosed by work of other divisions.

E. Coordinate sizes of required equipment pads Coordinate and locate all bolts and fittings required to be cast in them.

F. Coordinate electrical requirements of all mechanical equipment with Division 16.

1.7 MATERIALS AND WORKMANSHIP

A. All materials and equipment shall be new and of best grade and quality, provided by reputable manufacturers regularly engaged in the production of such materials and equipment.

B. Work shall be executed and all materials installed in accordance with the best practice of the trades in a thorough, workmanlike manner by competent workmen, presenting a neat appearance when completed.

C. With exceptions as specified and/or indicated on the Drawings; install, connect, erect, use, clean and condition manufactured articles, materials and equipment per Manufacturer's current printed instructions and recommendations.

D. The design is based on the equipment scheduled. Items furnished by Manufacturers other than those named in the Specifications shall have prior approval of the Owner.

E. Materials and equipment shall be new and in good condition. The commercially standard items of equipment, and the specified names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements are the minimum standard selections other than those scheduled.

F. Continuously maintain quality control over supervision, sub-contractors, materials, equipment and workmanship to produce work in accordance with the Contract Documents.

1.8 QUALITY ASSURANCE

A. Factory-assembled equipment (excluding plumbing fixtures, nonferrous or galvanized items and other items specified or scheduled to have specific finish) shall be delivered with a factory applied finish such as baked on machinery enamel which does not require additional field painting.

B. Factory finishes that become marred, stained or otherwise damaged shall be restored.

C. Should any of the special factory applied coatings be damaged during handling,

storage or installation, the damaged areas shall be recoated in the field using the same surface preparation and coating system originally applied by the manufacturer.

D. All changes due to poor workmanship and/or coordination shall be made without additional expense to the Owner.

1.9 DELIVERY, STORAGE and HANDLING

A. Protect all materials and equipment to be installed under this Division from physical and weather damage. Work under this division shall include:
   1. Shipping from point of manufacture to job site.
   2. Storage on-site as required.

1.10 DRAWINGS AND SPECIFICATIONS

A. Mechanical Drawings are diagrammatic and shall be followed as closely as the actual construction will permit.

B. Should changes in work be required to make work specified in this Division conform to the Project as it is constructed or to make it conform with requirements of governing Codes and authorities: Submit request for direction before proceeding with work.

C. Relocation of equipment and systems installation of up to 3 feet both vertically and horizontally from the position indicated on the drawings may be directed without additional cost.

1.11 LOCATIONS AND ELEVATIONS OF MUNICIPAL UTILITIES

A. Locations and elevations of utilities indicated on the drawings have been obtained from utility maps and other substantially reliable sources and are offered only as a general guide for coordination, without guarantee as to accuracy.

B. Prior to excavation for new work, field verify all locations and elevations of utilities and their relation to new work.

C. Coordinate with the various utility companies connections to utility mains.

1.12 SUBMITTALS

A. Submit shop drawings, coordination drawings and product data for all materials and equipment.

B. Employ the procedures of submittals processing as described in other Sections of the Specifications.

1.13 REGULATORY REQUIREMENTS

A. Comply with the most recent versions of all applicable laws, rules, regulations, and ordinances of all governing Codes and Authorities.

B. Modifications required by the above said authorities shall be made without additional charge to the Owner.

C. Where alterations to and deviations from the Contract Documents are required by said authority, report the requirements and secure approval before starting work.

D. Where Contract Document requirements are in excess of code requirements and are permitted under the code, the Contract Documents shall govern.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION 230100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 230198 - OWNER'S OPERATING AND MAINTENANCE MANUALS

PART 1 - GENERAL

1.1 SECTION INCLUDES
- A. Maintenance manuals.

1.2 RELATED SECTIONS
- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.
- B. Division 23 - Mechanical Specifications.
- C. Division 26 - Electrical Specifications.

1.3 GENERAL
- A. Manuals to include product and equipment data and related information necessary for the Owner's maintenance and operation of all products and systems provided in the Contract.

1.4 CONTENTS OF MANUAL
- A. Provide the following information, neatly typewritten in the front of each manual or each volume of the manual. Provide more than one binder as required:
  1. Table of contents identifying each product or item required to be included; indexed to content of the volume.
  2. Project Directory indicating division and / or section of work responsibility for each contractor and subcontractor listed.
     a) Name of Business.
     b) Responsible principal.
     c) Physical address.
     d) Telephone Number.
     e) Facsimile Telephone Number.
  3. Provide cross referenced listing of products installed with the name, address and telephone number of the manufacturer/supplier along with name of installing contractor.
  4. Provide index tabs separating each product or item of equipment required
  5. Arrange in order as indicated in the typed Table of Contents.

1.5 SUBMITTALS
- A. Preliminary review copy of completed Table of Contents.

1.6 SUBMITTAL REVIEW PROCEDURE FOR MANUALS
- A. Submit to the Owner, three copies of the Manual in final form, one day after final inspection.
- B. The Contractor will be notified of any omissions or deviations requiring corrections.
- C. Corrections will be made by the Contractor in the office of the Owner. Manuals will not be re-transmitted.

1.7 FORM FOR MANUALS
- A. Prepare in the form of an instructional manual for use by Owner.
- B. Format and media.

1. Insert all material in commercial quality 3-ring binders.
2. Label cover of binder "Owner's Manual" with Project title.
3. When multiple binders are used, catalog contents into related, consistent groupings and identify on front cover of binders.
4. Provide all required text, typewritten on 81/2" x 11" white, commercial bond paper.
5. Fold larger drawings to size of text pages and insert in pre-punched folder with reinforced binders.
6. Index tabs to be the flyleaf type with typed identification of product on tab.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 PRODUCT AND EQUIPMENT DATA

A. Include only information that is pertinent to the specific product or item of equipment.
B. Annotate each sheet to identify the specific product or item installed.
   1. Clearly identify all data applicable to installation.
   2. Delete references to inapplicable information.
C. Supplement product data with written text and/or drawings as necessary to clearly illustrate required maintenance and operation of products in the systems.
   1. Indicate relations or component parts of equipment and systems.
   2. Provide drawings illustrating control and flow diagrams.
D. Contents for each product and unit of equipment shall include.
   1. Complete list and commercial numbers of replaceable parts. Function of equipment, normal operating characteristics and limiting conditions.
   2. Procedures for start-up, break-in, control during normal operation and stopping.
   3. Emergency shut-down instructions.
   4. Special operating instructions.
   5. Routine maintenance based on operating hours.
   6. Manufacturer's operating and maintenance instructions.
   7. Manufacturer's guide to trouble shooting and repair.
   8. Lubrication requirements and types of lubricants recommended.
   9. Schedule of filters for each type of fan coil unit.
   10. Complete equipment internal wiring diagrams.
E. Provide Control's Manufacturer's written sequence of Operations along with as-installed control diagrams.
F. Provide copies of all warranties, bonds and service contracts.
   1. Indicate procedures in event of failures.
   2. Indicate conditions that may afford the validity of warranties or bonds.
G. Prepare warranties using the same phraseology as the Specifications.
H. Indicate the starting warranty date for each warranted item.
I. Provide any and all additional information as necessary to provide the Owner with a complete understanding of the products, equipment and system's furnished in the contract.

J. Provide signed copies of all specified certifications of testing.

3.2 OWNER'S INSTRUCTION

A. Prior to the final inspection of the Project, provide an on-site training session with the Owner's personnel to explain systems and instruct on proper operating and maintenance.

B. Schedule date and time of training session with the Owner's authorized personnel.

C. Allocate a minimum of two consecutive eight-hour days for training session.
   1. Provide training during the Owner's regular working hours unless instructed otherwise by the Owner.

D. Use the Owner's Manual as a basis of instruction and to familiarize the Owner with contents and order of manuals.

E. Demonstrate to the Owner: start-up, operation, shutdown and maintenance of the installed systems and equipment.

F. At conclusion of the training session, have the attending Owner's personnel sign a certificate to certify:
   1. That he has been adequately instructed in the systems.
   2. That all demonstrations have been conducted successfully.
   3. That content of Owner's manuals were reviewed and used as the basis of instruction.

G. Insert a copy of the certificate in each of the Owner's Manuals.

END OF SECTION 230198

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 230199 - CORRECTIONS AND MAINTENANCE DURING THE WARRANTY PERIOD

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Warrantee Period.
B. Corrections.
C. Routine Maintenance.
D. Quality Assurance.

1.2 RELATED SECTIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.
B. Division 23 - Mechanical Specifications.
C. Division 26 - Electrical Specifications.

1.3 WARRANTY PERIOD

A. The Guarantee and Warranty period is for 12 months after Substantial Completion of the Project.

1.4 CORRECTIONS

A. The Owner will notify the Contractor of any failure or observed defects in the system during this period.
B. Corrections to the work during this period and during regular working hours shall be at no additional cost to the Owner.
C. Response time shall be no longer than the day following the call from the Owner..
D. During this period, emergency service shall be available to the Owner on a 24 hour everyday basis..
E. Overtime work, if requested by the Owner, shall be reimbursed at the difference between regular and premium labor at the Contractor's current standard hourly billing rate for contract customers.
F. Procedures for corrections are as follows:
    1. Prior to commencing corrections, determine from the Owner any special requirements necessary to conform to his established policy for work on premises.
    2. When the service technician arrives at the Project, notify the Owner's authorized representative.
    3. Upon completion of the corrective work, file a signed copy of the service report with the Owner's authorized representative.
    4. If corrective work requires more than one day to complete, notify the Owner and provide an estimate of the completion date.

1.5 ROUTINE MAINTENANCE

A. During the warranty period, provide normal maintenance service recommended by the Manufacturer at no additional cost to the Owner.

1.6 QUALITY ASSURANCE

A. Maintenance: Personnel specializing in maintenance of the products required and/or specified in this section with minimum three years documented experience.

PART 2 - PRODUCTS

None Used

PART 3 - EXECUTION

None Used

END OF SECTION 230199

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 230529 - SUPPORTS, SLEEVES and HANGERS

PART 1 GENERAL

1.1 SECTION INCLUDES
- A. General Requirements.
- B. References.
- C. Quality Assurance.
- D. Regulatory Requirements.

1.2 RELATED SECTIONS
- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.
- B. Division 23 - Mechanical Specifications.
- C. Division 26 - Electrical Specifications.

1.3 GENERAL REQUIREMENTS
- A. All equipment and piping shall be installed in a neat and workmanlike manner by skilled mechanics having prior experience in installing such systems.
- B. Adhere to the general routing of the piping systems as shown on drawings.
- C. Coordinate exact location and routing of the piping systems with all elements of the building construction to avoid conflicts with use of building space.
- D. Install piping systems in the most direct manner, adjacent walls and structures to occupy the minimum of space while maintaining adequate space and clearance for:
  1. Installation of pipe insulation.
  2. Adjustment of pipe hangers.
  3. Access to valves and other appurtenances in the piping systems.
  4. Expansion and contraction without stressing pipe, pipe joints and connections to equipment.
- E. Excessive vibration or noise levels in the piping systems caused by improper or inadequate suspension, support or connection is not acceptable.

1.4 REFERENCES
- A. MSS SP-89 Pipe Hangers and Supports - "Fabrication and Installation Practices".
- B. MSS SP-89 Pipe Hangers and Supports - "Materials, Design and Manufacturer".

1.5 QUALITY ASSURANCE
- A. Installation: Company specializing in installation of the products required and/or specified in this section with minimum three years documented experience.

1.6 REGULATORY REQUIREMENTS
- A. Comply with all federal, state and local codes and ordinances relating to installation of sleeves and pipe hangers.

PART 2 - PRODUCTS

2.1 INDIVIDUAL MATERIAL
- B. Hanger types:
  1. Malleable iron or carbon steel swivel, split ring type.
  2. Carbon steel, adjustable clevis.

PART 3 - EXECUTION

3.1 EXAMINATION
- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

3.2 INSTALLATION
- A. Set and secure materials and components in place, plumb and level.
- B. Install hardware in accordance with manufacturer's instructions.

3.3 GENERAL SECURING, SUPPORTING AND SUSPENDING OF PIPING AND EQUIPMENT
- A. Secure and suspend piping and equipment from the building structure by approved hangers and supports, installed in a manner to prevent excessive stress and vibration transmission.
- B. All components of the hanger and support assemblies to be electro-galvanized with galvanized or cadmium plated threaded rods, nuts and hangers.
- C. Fasten hanger rods to the building structure with beam fasteners compatible with structural members and conditions.
- D. Perforated strap shall not be used as hanger material.
- E. Hanger types for pipe sizes as follows:
  1. 1/2" to 2" - malleable iron or carbon steel swivel, split ring type.
  2. 1/2" to 6" - carbon steel, adjustable clevis.
- F. Where trapeze hangers are used to suspend multiple pipes; provide rods sized for largest pipe on hanger.
- G. Maximum horizontal single pipe support/hanger spacing.
- H. Where multiple pipes are suspended/supported on common hangers or supports; provide spacing as required for smallest pipe on hanger/support.
- I. Reference drawing details for additional support and hanger requirements.
- J. Submit special types of sleeves, escutcheons plates, hangers, supports, framing and attachment methods where required for particular conditions.

3.4 PIPE HANGERS and SUPPORTS
- A. Install hangers and supports to provide a minimum of 1/2 inch between finished covering and adjacent work.
- B. Provide hangers within 12 inch of each horizontal elbow.
- C. Support riser piping independently of connected horizontal piping.
- D. Use hangers with minimum 1 1/2 inch vertical adjustment.
- E. Provide multiple or trapeze hangers where several pipes can be installed parallel

and at the same elevation. Size hangers to accommodate piping and conduits where shown on the drawings or required for operation of equipment.

F. Wall supports: Provide as required and/or as noted and/or detailed on drawings.

G. Vertical supports: Provide steel riser clamps at at maximum of every other floor penetration.

H. Horizontal supports: Provide as required and/or as noted and/or detailed on drawings.

I. Trapeze hangers: Provide galvanized steel channels or galvanized uni-strut steel channels with galvanized hanger rods and clamps and/or anchorage supports.

J. Copper pipe hangers: Provide adjustable copper plated carbon steel ring hangers sized for copper piping. Sheet lead packing between hanger and piping may be used in lieu of copper plated hangers.

3.5 PIPE SLEEVES AND ESCUTCHEONS

A. Provide formed stainless steel or cast brass escutcheon plates where piping penetrations are exposed to view on exterior wall surface and interior unoccupied spaces.
   1. In finished interior spaces exposed to view, provide nickel-brass or chrome plated escutcheons.
   2. Secure all escutcheons to pipe with tamper-proof set screws.

B. Provide sleeves:
   1. Where piping penetrates concrete or masonry construction.
   2. Where required to accommodate installation of piping after completion of other work.
   3. Where vibration, expansion and contraction may affect finished surfaces penetrated by pipe.
   4. All other places shown on the drawings.
   5. Where required for compliance with codes and ordinances.

C. Sleeves shall be adequately sized to allow for:
   1. Application of the specified insulation types and thicknesses; continuous through the sleeve.
   2. Movement due to expansion and contraction.

D. Do not permit the pipe/pipe insulation to touch the wall of the sleeve.

E. Penetrations through exterior walls:
   1. Provide schedule 40 PVC pipe sleeves. Terminate sleeves flush with finished surface of wall.
   2. Seal annular space with butyl rubber sealant.

F. Penetrations through fire rated partitions.
   1. Provide schedule 40 galvanized steel pipe sleeves. Terminate sleeves as required to maintain partition rating.
   2. Seal annular with fire retardant silicone foam.

G. Penetrations through non-fire rated partitions that terminate and seal at deck.
   1. Provide schedule 40 galvanized steel pipe sleeves. Terminate sleeves flush with finished surface of wall.
   2. Pack annular space with 1 lb. density fiberglass insulation.

END OF SECTION 230529

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 233400 - HVLS CEILING FAN

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. The ceiling-mounted, circulation fan is the model scheduled with the capacities indicated. The fan shall be furnished with standard mounting hardware and variable speed control to provide cooling and destratification.

B. Summary of Work

1. Installation of the fan, miscellaneous or structural metal work (if required), field electrical wiring, cable, conduit, fuses and disconnect switches, other than those addressed in the installation scope of work, shall be provided by others. Factory installation services are available through Big Ass Fans. Consult the appropriate installation scope of work for information on the available factory installation options, overview of customer and installer responsibilities, and details on installation site requirements.

1.2 REFERENCES

A. National Fire Protection Agency (NFPA)
B. Underwriters Laboratory (UL)
C. Restriction of Hazardous Substances (ROHS)
D. International Organization for Standardization (ISO)
E. National Electrical Manufacturers Association (NEMA)

1.3 SUBMITTALS

A. Shop Drawings: Drawings detailing product dimensions, weight, and attachment methods.
B. Part 2 Product Data: Specification sheets on the ceiling-mounted fan, specifying electrical and installation requirements, features and benefits, and controller information.
C. Revit Files: File provided for architectural design
D. Installation Guide: The manufacturer shall furnish a copy of all operating and maintenance instructions for the fan. All data is subject to change without notice.
E. Schedule

1.4 QUALITY ASSURANCE

A. Certifications

1. The fan assembly, as a system, shall be ETL-certified and built pursuant to the guidelines set forth by UL standard 507 and CSA standard 22.2 No. 113.
2. The fan shall be compliant with NFPA 13—Standard for the Installation of Sprinkler Systems, NFPA 72— National Fire Alarm and Signaling Code, and NFPA 70-2011—National Electric Code (NEC).
3. Controllers shall comply with National Electrical Code (NEC) and Underwriters Laboratory (UL) standards and shall be labeled where required by code.

B. Manufacturer Qualifications
   1. The fan and any accessories shall be supplied by Big Ass Fans, which has a minimum of ten (10) years of product experience.
   2. ISO 9001-certified

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver product in original, undamaged packaging with identification labels intact. The fan shall be new, free from defects, and factory tested.
B. The fan and its components must be stored in a safe, dry location until installation.

1.6 WARRANTY
A. The manufacturer shall replace any products or components defective in material or workmanship for the customer free of charge (including transportation charges within the USA, FOB Lexington, KY), pursuant to the complete terms and conditions of the Big Ass Fans Non-Prorated Warranty in accordance to the following schedule:

Item	Period of Coverage
Hub and airfoils	Lifetime (Parts)
Motor, gearbox, & controller	5 years (Parts); Prorated 6–12 years
All other fan components	5 years (Parts); Prorated 6–12 years
Labor	1 year

PART 2 - PRODUCT

2.1 MANUFACTURER
A. Delta T Corporation, dba Big Ass Fans,
PO Box 11307, Lexington, Kentucky 40575.
Phone (877) 244-3267.
Fax (859) 233-0139.
Website: www.bigassfans.com.
B. Approved Substitutes

2.2 HIGH VOLUME, LOW SPEED FANS – BIG ASS FANS POWERFOIL®8
A. Complete Unit
   1. Regulatory Requirements: The entire fan assembly shall be ETL-certified and built pursuant to the construction guidelines set forth by UL standard 507 and CSA standard 22.2.
   2. Sustainability Characteristics: The fan shall be designed to move an effective amount of air for cooling and destratification in industrial applications over an extended life. The fan components shall be designed specifically for high volume, low speed fans to ensure lower operational noise. Sound levels from the fan operating at maximum speed measured in a laboratory setting shall not exceed 55 dBA. Actual results of sound measurements in the field may vary due to sound reflective surfaces and environmental conditions.
   3. Good workmanship shall be evident in all aspects of construction. Field

balancing of the airfoils shall not be necessary.

B. Airfoil System
   1. The fan shall be equipped with eight (8) Powerfoil airfoils of precision extruded aluminum alloy. The airfoils shall be connected by means of two (2) high strength locking bolts per airfoil. The airfoils shall be connected to the hub and interlocked with zinc plated steel retainers.
   2. The fan shall be equipped with eight (8) Powerfoil winglets on the ends of the airfoils and eight (8) AirFences™ positioned on the airfoils at the optimum location for performance. Both the winglets and AirFences shall be molded of polypropylene. The standard color of the winglet and AirFence shall be "Safety Yellow."

C. Motor
   1. The fan motor shall be an AC induction type inverter rated at one of the following:
      a. 1725 RPM, 200–250/400–480 VAC, 50/60 Hz, three-phase
      b. 1725 RPM, 200–250 VAC, 50/60 Hz, single-phase
   2. The motor shall be totally enclosed, fan cooled (TEFC) with an IP56 NEMA classification. A NEMA 56C standard frame shall be provided for ease of service. The motor shall be manufactured with a double baked Class F insulation and be capable of continuous operation in -30°F to 122 °F ambient conditions.

D. Gearbox
   1. The gearbox shall be a helical gear reducer, precision finished from hardened steel for low noise and long service life with double lip seals to retain oil and prevent contamination. The gearbox shall be lubricated for life. The gear reducer shall have a standard backlash of less than 25 arc minutes and be equipped with a 17-4 stainless steel shaft of 1-1/4" diameter.

E. Motor Frame
   1. The motor frame and mount shall be constructed of steel and powder coated for corrosion resistance and appearance. Non-visible, steel, threaded rods in each structural member of the motor frame shall provide a redundant safety feature in the event of a catastrophic event.

F. Mounting System
   1. The fan mounting system shall be designed for quick and secure installation on a variety of structural supports. The mounting yoke shall be of ASTM A-36 steel, welded construction, at least 3/16" thick, and powder coated for appearance and corrosion resistance. No mounting hardware or parts substitutions, including cast aluminum, are acceptable.
   2. All mounting bolts shall be SAE Grade 8 or equivalent.

G. Hub
   1. The fan hub shall be made of laser cut aluminum for high strength and light weight. The hub shall consist of two aluminum plates, eight (8) aluminum spars and one (1) spacer fastened with a pin and collar rivet system.
   2. The hub shall be secured to the output shaft of the gearbox by means of a steel coupling interface. The hub shall incorporate four (4) safety retaining clips made of 1/4" (0.6 cm) thick steel that shall restrain the hub/airfoil assembly.

H. Safety Cable
   1. The fan shall be equipped with a safety cable that provides an additional means of securing the fan assembly to the building structure. The safety cable shall be at least 1/4" (0.6 cm) in diameter and fabricated out of 7 x 19 galvanized steel cable. The end loops shall be secured with swaged Nicopress® sleeves, pre-loaded and tested to 3,200 lbf.
   2. Field construction of safety cables is not permitted.

I. Variable Frequency Drive
   1. The fan controller shall be a NEMA 4X variable frequency drive (VFD) that is factory programmed to minimize starting and braking torques. The VFD shall have touchpad controls and an LED display for controlling the fan's direction, operation, speed, and programming. The VFD shall be equipped with an EMI/RFI filter to limit interference with other electronic equipment and a rotary switch disconnect for lockout/tag-out requirements.
   2. Wall Control: The VFD may be wall-mounted for ease of access.
   3. Onboard Control: The VFD may be mounted on the fan motor frame. A wall-mounted remote keypad shall be provided for such installations. The remote keypad shall be equipped with touchpad controls and an LED display providing access to all controller functions.

J. Fire Control Panel Integration
   1. Includes a 10–30 VDC pilot relay for seamless fire control panel integration. The pilot relay can be wired Normally Open or Normally Closed in the field.

K. Guy wires
   1. Included for installations with extension tubes 4 ft or longer to limit the potential for lateral movement.

PART 3 - EXECUTION

3.1 PREPARATION

A. Fan location must have a typical bar joist or existing I-beam structure from which to mount the fan. Additional mounting options may be available.
B. Mounting structure must be able to support weight and operational torque of fan. Consult structural engineer if necessary.
C. Fan location must be free from obstacles such as lights, cables, or other building components.
D. Check fan location for proper electrical requirements. Consult installation guide for appropriate circuit requirements.
E. Each fan requires dedicated branch circuit protection.

3.2 INSTALLATION

A. The fan shall be installed by a factory-certified installer according to the manufacturer's Installation Guide, which includes acceptable structural dimensions and proper sizing and placement of angle iron for bar joist applications. Big Ass Fans recommends consulting a structural engineer for installation methods outside the manufacturer's recommendation and a certification, in the form of a stamped print or letter, submitted prior to installation.
B. Minimum Distances

1. Airfoils must be at least 10 ft above the floor.
2. Installation area must be free of obstructions such as lights, cables, sprinklers or other building structures with the airfoils at least 2 ft clear of all obstructions.
3. The structure the fan is attached to shall be capable of supporting a torque load of up to 300 ft·lb.

C. The fan shall not be located where it will be continuously subjected to wind gusts or in close proximity to the outputs of HVAC systems or radiant heaters. Additional details are in the Big Ass Fans 3.2 Installation Manual.

D. In buildings equipped with sprinklers, including ESFR sprinklers, fan installation shall comply with all of the following:
1. The maximum fan diameter shall be 14 ft.
2. The HVLS fan shall be centered approximately between four adjacent sprinklers.
3. The vertical clearance from the HVLS fan to the sprinkler deflector shall be a minimum of 3 ft.

END OF SECTION 233400

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 238127 – DUCTLESS SPLIT-SYSTEM AIR-CONDITIONERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Fan Coil Unit.
   2. Condensing unit.

1.2 REFERENCES

A. Air-Conditioning and Refrigeration Institute:
   1. ARI 210/240 - Unitary Air-Conditioning and Air-Source Heat Pump Equipment.
   2. ARI 270 - Sound Rating of Outdoor Unitary Equipment.
   3. ARI 340/360 - Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment.
   4. ARI 365 - Commercial and Industrial Unitary Air-Conditioning Condensing Units.

B. American Society of Heating, Refrigerating and Air-Conditioning Engineers:
   1. ASHRAE 52.1 - Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter.
   2. ASHRAE 90.1 - Energy Standard for Buildings Except Low-Rise Residential Buildings.

C. ASTM International:
   1. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus.

D. National Electrical Manufacturers Association:
   1. NEMA MG 1 - Motors and Generators.

E. National Fire Protection Association:
   1. NFPA 90A - Standard for the Installation of Air Conditioning and Ventilating Systems.

1.3 SUBMITTALS

A. Product Data: Submit data indicating:
   1. Cooling and heating capacities.
   2. Dimensions.
   3. Weights.
   4. Rough-in connections and connection requirements.
   5. Electrical requirements with electrical characteristics and connection requirements.
   6. Controls.
   7. Accessories.

B. Manufacturer's Installation Instructions: Submit assembly, support details, connection requirements, and include start-up instructions.

1.4 QUALITY ASSURANCE

A. Performance Requirements: Energy Efficiency Rating (EER) and Coefficient of Performance (COP) not less than prescribed by ASHRAE 90.1 when used in combination with compressors and evaporator coils when tested in accordance

with ARI Standards.

PART 2 - PRODUCTS

2.1 SPLIT SYSTEM AIR CONDITIONING UNITS

A. Product Description: Split system consisting of fan coil unit and condensing unit including cabinet, evaporator fan, refrigerant cooling coil, compressor, refrigeration circuit, condenser, air filters, controls, air handling unit accessories, condensing unit accessories, and refrigeration specialties.
B. Manufacturers:
   1. Mitsubishi.
   2. Daikin.
   3. Sanyo.
C. Refrigerants R-410A and R-407C.

2.2 FAN COIL UNIT
A. Cabinet:
   1. Panels: Constructed of galvanized steel with baked enamel finish.
   2. Access Panels: Located on both sides of unit. Furnish with duct collars on inlets and outlets.
   3. Insulation: Factory applied to each surface to insulate entire cabinet. One inch thick neoprene coated aluminum foil faced glass fiber with edges protected from erosion.
B. Evaporator Fan: Forward curved centrifugal type, resiliently mounted with adjustable belt drive and high efficiency motor. Motor permanently lubricated with built-in thermal overload protection.
C. Evaporator Coil: Constructed of copper tubes expanded onto copper fins. Factory leak tested under water. Removable, PVC construction, double-sloped stainless steel drain pan with piping connections on both sides. Coil shall be coated with minimum 1.0 mil. aluminum impregnated polyurethane coating by Blygold PoluAl XT or approved equal. Coating shall withstand 4,000 hours in both salt spray test per ASTM B117 and acid salt spray test per ASTM D5339.
D. Refrigeration System: Single or Dual refrigeration circuits controlled by factory installed thermal expansion valve. Refrigerant shall be R407C or R410A.
E. Air Filters: 1 inch thick glass fiber disposable media in metal frames. 25 to 30 percent efficiency based on ASHRAE 52.1.Unit shall be wall mounted, ceiling mounted, or ceiling cassette type (integral with grid).

2.3 CONDENSING UNIT
A. General: Factory assembled and tested air cooled condensing units, consisting of casing, compressors, condensers, coils, condenser fans and motors, and unit controls.
B. Unit Casings: Exposed casing surfaces constructed of galvanized steel with manufacturer's standard baked enamel finish. Designed for outdoor installation and complete with weather protection for components and controls, and complete with removable panels for required access to compressors, controls, condenser fans, motors, and drives.
C. Compressor: Single refrigeration circuit or two independent refrigeration circuits

with rotary or hermetic semi-hermetic reciprocating type compressors, resiliently mounted, with positive lubrication, and internal motor overload protection. Compressor shall five (5) year warranty.

D. Condenser Coil: Constructed of copper tubing mechanically bonded to copper fins, factory leak and pressure tested. Coil shall be coated with minimum 1.0 mil. aluminum impregnated polyurethane coating by Blygold PoluAl XT or approved equal. Coating shall withstand 4,000 hours in both salt spray test per ASTM B117 and acid salt spray test per ASTM D5339.

E. Controls: Furnish operating and safety controls including high and low pressure cutouts.

F. Control transformer. Furnish magnetic contactors for compressor and condenser fan motors.

G. Condenser Fans and Drives: Direct drive propeller fans statically and dynamically balanced. Wired to operate with compressor. Permanently lubricated ball bearing type motors with built-in thermal overload protection. Furnish high efficiency fan motors.

H. Condensing Unit Accessories: Furnish the following accessories:
   1. Controls to provide low ambient cooling to 0 degrees F.
   2. Time delay relay.
   3. Anti-short cycle timer.
   4. Disconnect switch.
   5. Vibration isolators.
   6. Hot gas bypass kit.
   7. Coil with corrosion resistant coating capable of withstanding salt spray test of 1000 hours in accordance with ASTM B117.
   8. Condenser Coil Guard: Condenser fan openings furnished with PVC coated steel wire safety guards.
   9. Suction and discharge pressure gauges.

I. Refrigeration specialties: Furnish the following for each circuit:
   1. Charge of compressor oil.
   2. Holding charge of refrigerant.
   3. Replaceable core type filter drier.
   4. Liquid line sight glass and moisture indicator.
   5. Shut-off valves on suction and liquid piping.
   6. Liquid line solenoid valve.
   7. Charging valve.
   8. Oil level sight glass.
   9. Crankcase heater.
   10 Hot gas muffler.
   11. Pressure relief device.

PART 3 - EXECUTION

3.1 INSTALLATION – FAN COIL UNIT

A. Install per manufacturer's recommendations. Where appropriate, provide 2" deflection spring vibration isolators and seismic restraints.

B. Install condensate piping with trap and route from drain pan to approved receptor.

END OF SECTION 238127

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260101 - BASIC ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. Electrical Systems are to be provided. Provide all additional engineering necessary to finalize orders for equipment and fixturing. Design of all systems and components shall meet general industry standards common to the region, along with the 2009 International Building Code and the 2008 National Electrical Code.

1.2 CONTRACTOR'S QUALIFICATIONS

A. An approved contractor for the work under this Division. A specialist in this field and have the personnel, experience, training and skill, and the organization to provide a practical working system.

1.3 RELATION WITH OTHER TRADES

A Carefully study all matters and conditions concerning the project. Submit notifications of conflict in ample time to prevent unwarranted changes in any work. Review other Divisions of these specifications to determine their requirements. Extend mechanical services and final connections to all items requiring it.

B Because of the complicated relationship of this work to the total project, conscientiously study the relation and cooperation as necessary to accomplish the full intent of the documents.

C Provide sleeves and inserts in forms as required or the work. Stub up and protect open ends of pipe before any concrete is placed. Furnish sizes of required equipment pads. Furnish and locate bolts and fittings required to be case in them.

D Locate and size openings required for installation of work specified I this Division in sufficient time to prevent delay in the work.

E Make final electrical connections to all electrically operated equipment.

F Request all Shop Drawings required in ample time to permit proper installation of equipment, piping, and appurtenances.

1.4 APPARATUS PROTECTION

A. Take all precautions necessary to protect the work from damage during handling and installation and until completion of construction. Failure to comply shall be sufficient cause for rejection of the work

1.5 NOISE AND VIBRATION

A. Eliminate any abnormal noises which are not considered to be an inherent part of the systems as designed. Abnormal bussing in equipment components will not be acceptable.

1.6 MATERIALS AND EQUIPMENT

A. All materials or equipment furnished for this work:

1. New and delivered in undamaged original crate.

2. Plainly marked for identification.
3. Quality as specified.

1.7 FACTORY FINISH

A. Factory assembled equipment except nonferrous or galvanized items and other items specific or scheduled to have a specific finish:
B. Protect equipment from damage and defacement.
C. Factory finish that becomes marred, stained or otherwise damaged: Fully and satisfactorily restored.
D. Should any of the special factory applied coatings be damaged during handling, storage or installation, the damaged areas shall be recoated in the field using the same surface preparation and coating system originally applied by the manufacturer.

1.8 UTILITIES, LOCATIONS AND ELEVATIONS

A. Locations and elevations of the various utilities included within the scope of this work:
   1. Obtained from utility maps and other substantially reliable sources.
   2. Are offered separate from the Contract Documents as a general guide only, without guarantee as to accuracy.
B. Examine the site and verify the locations and elevations of all utilities and of their relation to the work

1.9 DRAWINGS AND SPECIFICATIONS

A. The Electrical Drawings:
   1. Are diagrammatic and shall be followed as closely as the actual construction will permit.
   2. Are not intended to show complete and accurate location of apparatus and appurtenances.
B. Should any changes be required to make work specified in this Division conform to the project as it is constructed or to make it conform with the rules of the authorities having jurisdiction, submit request for directions before proceeding with the work. All changes due to poor coordination make without additional expense to the Owner.
C. Exact locations of equipment and accessories in finished spaces:
   1. Determined by reference to specific details. When not specifically shown, locations of items to be approved prior to installation. Relocation before installation. Relocation from the position indicated on the Drawings may be directed without additional cost.

1.10 PERMITS AND REGULATIONS

A. Obtain all permits required.
B. Conform to applicable Federal, State and Local Ordinances and Codes.
C. Electrical work shall comply with applicable inspection services.
   1. Underwriter's Laboratories.
   2. National Fire Protection Association.
   3. State Health Department.
D. Where laws, codes or ordinances conflict with the specifications, then the laws, codes or ordinances govern.
E. In cases where the specifications exceed in quantity or quality of material or

labor, specifications shall be followed.

F. In cases of conflict, submit request for directions before proceeding.

1.11 UTILITY SERVICE

A. Provide all connections wiring, meters, outlets, sockets, and lamps for temporary electric power and lighting required during construction of the project.

B. Remove temporary equipment, facilities and materials prior to substantial completion.

C. Make arrangements with the utility sources and pay costs for the connections and changeovers for permanent electric service.

1.12 AVAILABLE SPACE

A. Size and shape of physical spaces for equipment shown on drawings has been designed in accordance with the types indicated and specified.

B. Equipment shall be selected to fit properly into such spaces.

C. Be arranged and positioned to permit access as required for maintenance, servicing, removal or replacement of parts and/or whole pieces of equipment.

1.13 ELECTROLYSIS ISOLATION

A. Provide continuous neoprene strip to separate dissimilar metals that could come into contact.

B. Provide dielectric couplings at instrument connections to piping mains.

END OF SECTION 260101

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260102 - CORRECTIONS DURING THE WARRANTY PERIOD

PART 1 - GENERAL

1.1 SUMMARY

A. The warranty and guarantee period is for 12 months after substantial completion of the project.
B. The Owner will notify the contractor of any failure or observed defects in the system during this period.
C. Corrections to the work during this period and during regular working hours shall be at no cost to the Owner.
   1. Response time shall be no longer than the day following the call from the Owner.
D. Emergency service shall be available to the Owner on a 24 hour every day basis during this period.
E. Overtime work, if required by the Owner, will be reimbursed at the difference between regular and premium labor at the contractor's current standard hourly billing rate for contract customers.

1.2 PROCEDURES

A. Prior to commencing corrections during the warranty period determine from the Owner any special requirements required to conform to his established policy for work on his premises.
B. When the service technician arrives at the project to perform the corrective work, notify the Owner's authorized representative.
C. Upon completion of the corrective work, file a signed copy of the service report with the owners authorized representative.
D. If the corrective work requires more than one day to complete, notify the Owner and give an estimate of the completion date.

END OF SECTION 260102

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260103 - OPERATING AND MAINTENANCE MANUALS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
B. Instruct Owner's personnel in maintenance and operation of equipment and systems.
C. Submit three copies of complete manual in final form.

1.2 FORM FOR MANUALS

A. Prepare data in form of an instructional manual for use by Owner's personnel.
B. Format:
   1. Size: 8-1/2 X 11 inches.
   2. Text: Manufacturer's printed data or neatly typewritten.
   3. Drawings:
      a. Provide reinforced punched binder tab and bind in text.
      b. Fold larger drawings to size of text pages.
   4. Provide flyleaf with indexed tabs for each separate product or each piece of operating equipment.

1.3 CONTENT OF MANUAL

A. Typewritten Table of Contents.
   1. Contractor, name of responsible principal, address and telephone number.
   2. List with each product, name, address and telephone number:
      a. Subcontractor or installer.
      b. Maintenance contractor as appropriate.
      c. Identify area of responsibility of each.
      d. Local source of supply for parts and replacement.
   3. Identify each product-by-product name and other identifying symbols as set forth in Contract Documents.
B. Product Data:
   1. Include only those sheets, which are pertinent to the specific product.
   2. Annotate each sheet to:
      a. Clearly identify specific product or part installed.
      b. Clearly identify data application to installation.
      c. Delete references to inapplicable information.
C. Printed listing of program statements.
D. Drawings:
   1. Supplement product data with drawings as necessary to clearly illustrate:
      a. Relations of component parts of equipment and systems.
      b. Control diagrams.
   2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
   3. Do not use Project Record Documents as maintenance drawings.

E. Copy of each warranty, issued.
F. Provide information sheet for owner's personnel, giving:
   1. Proper procedures in event of failure.
   2. Instances, which might affect validity of warrant.
G. Shop Drawings, Coordination Drawings and Product data as specified.

1.4 MANUAL OR EQUIPMENT AND SYSTEMS

A. Content, for each electric and electronic system, as appropriate:
   1. Description of system and component parts.
   2. Function, normal operating characteristics, and limiting conditions.
   3. Complete nomenclature and commercial number of replaceable parts.
   4. Copies of typed circuit directories of panel boards.
   5. As installed color-coded wiring diagrams.
   6. Operating procedures:
      a. Routine and normal operating instructions.
      b. Sequences required.
      c. Special operating instructions.
   7. Maintenance procedures:
      a. Routine operations
      b. Guide to "Trouble-shooting".
   8. Manufacturer's printed operating and maintenance instructions.

1.5 INSTRUCTION OF OWNER'S PERSONNEL

A. Provide to final inspection, conduct an on site training program to instruct the Owner's operating personnel in the operation and maintenance of the electrical systems.
B. Provide the training during the Owner's regular working day.
C. The Owner will provide a list of personnel to receive instructions, and will coordinate their attendance at the agreed upon times.
D. Use the operation and maintenance manuals as the basis of instruction. Review contents of manuals with personnel in detail to explain all aspects of operation and maintenance.
E. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment.
F. Prepare and insert additional data in operations and maintenance manuals when needed or when additional data becomes apparent during instructions.
G. At the conclusion of the on site training program, have the person designated by the Owner, sign a certificate to certify that he has a proper understanding of the system, that the demonstrations and instructions have been satisfactorily completed.
H. Include the report and the certificate in an appropriately tabbed section for each manual.

END OF SECTION 260103

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260104 - CONTRACT QUALITY CONTROL

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED
- A. General quality control.
- B. Workmanship.
- C. Manufacturer's Instructions.

1.2 QUALITY CONTROL PROGRAM
- A. Maintain quality control over supervision, subcontractor's, suppliers, manufacturers, products, services, site conditions and workmanship to produce work in accordance with the contract documents.

1.3 WORKMANSHIP
- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses vibration and racking.

1.4 MANUFACTURER'S INSTRUCTIONS
- A. Comply with instructions in full detail, including each step in sequence.
- B. Should instruction conflict with Contract Documents, request clarification from Engineer before proceeding.

END OF SECTION 260104

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260105 - SHOP DRAWINGS, COORDINATION DRAWINGS AND PRODUCT DATA

PART 1 - GENERAL

1.1 SUMMARY

A. Prepare submittal as required by the Contract Documents.
B. The term submittal, as used herein, refers to all:
   1. Shop drawings.
   2. Coordination drawings.
   3. Product data.
C. Submittals shall be prepared and produced for:
   1. Distribution as specified.
   2. Inclusion in the Operating and Maintenance Manual, as specified, in the related section.

1.2 SHOP DRAWINGS

A. Present drawings in a clear and thorough manner.
   1. Identify details by reference to sheet and detail, schedule, or room numbers shown on Contract Drawings.
B. Show all dimensions of each item of equipment on a single composite Shop Drawing. Do not submit a series of drawings of components.
C. Identify field dimensions, show relation to adjacent or critical features or work or products.

1.3 COORDINATION DRAWINGS

A. Present in a clear and thorough manner. Title each drawing with project name. Identify each element of drawings by reference to sheet number and detail, or room number of contract documents.
   1. Minimum drawing scale: 1/4" = 1'-0".
B. Prepare coordination drawings to coordinate installations for efficient use of available space, for proper sequence of installation, and to resolve conflicts.
   1. Coordinate with work specified in other sections and other divisions of the specifications.
C. Identify field dimensions. Show relation to adjacent or critical features or work or products.

1.4 PRODUCT DATA

A. Submit only pages which are pertinent.
B. Mark each copy of standard printed data to identify pertinent products, referenced to specification section and article number.
C. Show reference standards, performance characteristics and capabilities, wiring diagrams and controls, component parts, finishes, dimensions and required clearances.
D. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable.

1.5 MANUFACTURER'S INSTRUCTIONS

A. Submit Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, calibrating, and finishing.

1.6 CONTRACTOR RESPONSIBILITIES

A. Review submittals prior to transmittal.

B. Determine and verify:

1. Field measurements.
2. Field construction criteria.
3. Manufacturer's catalog numbers.
4. Conformance with requirements of contract documents.

C. Coordinate submittals with requirements of the Work and of the Contract Documents.

D. Notify the Owner in writing at time of submission of any deviations in the submittals from requirements of the contract documents.

E. Do not fabricate products, or begin work for which submittals are specified, until such submittals have been produced and bear Contractor's stamp.

F. Do not fabricate products or begin work schedule to have submittals reviewed, until return of reviewed submittals with Owner's acceptance.

G. Contractor's responsibility for errors and omissions in submittals is not relieved whether Owner reviews submittals or not.

H. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved whether Owner reviews submittals or not, unless Owner gives written acceptance of the specified deviations on reviewed documents.

I. Submittals shall show sufficient data to indicate complete compliance with Contract Documents:

1. Proper sizes and capacities.
2. That the item will fit in the available space in a manner that will allow proper service.

J. Where located outdoors, will not infringe upon sight lines.

K. Construction methods, materials and finishes.

L. Schedule submissions at least 15 days before date reviewed submittals will be needed.

1.7 SUBMISSION REQUIREMENTS

A. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other Contractor.

B. Accompany submittals with transmittal letter, duplicate, containing:

1. Date
2. Project title and number

3. Contractor's name and address
4. The number of each Shop Drawing and Project Datum.
5. Other pertinent data.

C. Submittals shall include:
1. The date of submission.
2. The project title and number.
3. Contract identification.
4. The names of:
a. Contractor.
b. Subcontractor.
c. Supplier.
d. Manufacturer.
5. Identification of the product.
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the work or materials.
8. Applicable standards, such as ASTM or federal specifications numbers.
9. Identification of deviations from contract documents.
10. Suitable blank space for Contractor stamps.
11. Contractor's signed and dated Stamp of Approval.
12. Associated items, which require correlation for efficient function or for installation.

D. Coordinate submittals into logical groupings to facilitate interrelation of the several items.

1.8 SUBMITTAL SPECIFICATION INFORMATION

A. Every submittal document whether identified to be reviewed by the Owner or not, shall bear the following information as used in the project manual:
1. The related specification section number.
2. The exact specification section title.

B. Submittals delivered to the Owner without the specified information will not be processed.

C. The Contractor shall bear the risk of all delays, as if no submittal had been delivered.

1.9 RESUBMISSION REQUIREMENTS

A. Make resubmittals under procedures specified for initial submittals.
1. Indicate that the documents are a resubmittal.
2. Identify changes made since previous submittals

B. Indicate any changes that have been made other than those requested by the Owner.

1.10 CONTRACTOR'S STAMP OF APPROVAL

A. Contractor shall stamp and sign each document certifying to the review of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and of Contract Documents.

B. Contractor's stamp of approval on any submittal shall constitute a representation to Owner that Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data or assumes full responsibility for doing so, and that Contractor has reviewed or coordinated each submittal with the requirement of the work and the Contract Documents.

C. Do not deliver any submittals to the Owner that do not bear the Contractor's stamp of approval and signature.

D. Submittals delivered to the Owner without Contractor' s stamp of approval and signature will not be processed.

E. The Contractor shall bear the risk of all delays, as if no submittal had been delivered.

1.11 SUBSTITUTIONS

A. Do not make requests for substitution employing the procedures of this Section.

END OF SECTION 260105

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260106 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Maintain at the site for review by the Owner one record copy of:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change orders and other modifications to the contract.
   5. Field orders or written instructions.
   6. Approved shop drawings and product data.
   7. Field test records.

1.2 MAINTENANCE OF DOCUMENTS

A. Store documents apart from documents used for construction.
B. Maintain documents in a clean, dry, legible condition and in good order.
   1. Do not use record documents for construction purposes.
C. Make documents available at all times for inspection by Owner.

1.3 MARKING DEVICES

A. Provide red felt tip marking pens for recording information

1.4 RECORDING

A. Label each document "Project Record" in neat, large printed letters.
B. Record information concurrently with construction progress.
   1. Do not conceal any work until required information is recorded.
C. Legibly mark Record Drawings to record actual construction:
   1. Depths of various buried elements in relation to finish first floor datum.
   2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
   3. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
   4. Details not on original contract drawings.
   5. Identity locations by at least two dimensions to permanent structures.
   6. Field changes of dimension and detail.
   7. Changes made by field order or by change order.

1.5 REPRODUCIBLE RECORD DRAWINGS

A. Transfer all recorded information from the original record drawings to one set of reproducible myler films and deliver to the Owner.

B. Identify all record drawing information.

C. Delete Engineer seals and ownership information from the documents.

1.6 SUBMITTALS

A. Submit record documents to Owner with final Application for Payment.

B. Accompany submittal with transmittal letter in duplicate containing:

1. Date.
2. Project title and number.
3. Contractor's name and address.
4. Title and number of each record document.
5. Signature of an officer of the contracting firm.

END OF SECTION 260106

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260513 - CONDUCTOR SYSTEMS

PART 1 - GENERAL

1.1 GENERAL

A. Conductors:
   1. Soft drawn annealed copper, having a conductivity of not less than 98% of that of pure copper.
   2. Continuous without weld or splice throughout its length.
   3. Approved by NEC for the environment.
   4. Bear the UL label.

1.2 CIRCUITRY

A. The intent of the drawings is to indicate schematically the circuitry required.
B. Branch circuit may be grouped in a single raceway provided the work performed in grouping conductors:
   1. Complies with all applicable articles in the National Electrical Code.
   2. Includes, but shall not be limited to, ampacity derating of conductors.
   3. Observes maximum capacities of raceways.
C. Adopt a standard connection system to lights and appliances uniform throughout the system.
D. Insure that branch circuits are so connected to the panels as to provide balanced loading insofar as practical.

1.3 CONDUCTORS AND CONNECTIONS

A. Install no branch circuit with wire smaller than No.12.
B. Branch circuits shall be of such size that the drop in potential to the furthers point on the circuit shall not exceed 2%.
C. Connections for electrical and mechanical security:
   1. Number 8 wire and larger with forged copper pressure connectors.
   2. Number 10 wire and smaller made with indent type splice caps or electrical spring connectors.
   3. Cover joints with sufficient plastic tape or caps to insure insulating value equal to that of the conductor insulation itself.
D. Pad sharp corners and voids to prevent damage.
E. In junction boxes joining underground conduit or in wet location, make connections waterproof with Scotch 2200 self-fusing rubber based insulating rubber based compound laminated to PVC backing.
F. Conductors in continuous row fluorescent fixtures – code gauge type rated at 90 degrees Celsius.

1.4 COLOR CODING

A. All branch circuits and feeder conductors color coded as scheduled on the

drawings.

1. Neutrals of different voltage systems must be of different color.
2. All circuit conductors of the same color - connected to the same feeder conductor throughout the installation.
3. Conductors intended solely for equipment grounding purposes - green in color.

B. Wire Number 6 AWG or smaller, - the color of the insulation covering.

C. Wire larger than No. 6 AWG and other types of wire: self-adhesive, rap around wire markers of solid colors.

D. Mark each wire at panel boards, auxiliary gutters, junction boxes, pull boxes, outlets, disconnect switches and control centers.

END OF SECTION 260513

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260526 - ELECTRICAL GROUNDING

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Grounding shall conform to the requirements of:
   1. National Electrical Code
   2. Governing local codes
   3. Local Utility Company

B. Ground effectively and permanently:
   1. Neutral conductor at the main service disconnect and other separately derived systems.
   2. All conduit systems.
   3. All electrical equipment and related current carrying supports or structures.
   4. All Metal piping systems.
   5. All building structural metal frames.

1.2 GROUNDING ELECTRODE

A. 3/4" X 10'- 0" copper clad grounding electrode.
   1. UL listed.

B. Connections.
   1. Burundey irreversible copper hydraulic compression fittings.

C. Driven with top of electrode at grade.

D. The total ground resistance shall not exceed 10 ohms for service entrance grounds and 25 ohms for equipment grounds.

E. Resistance of neutral ground shall be measured using a megger earth resistance tester.
   1. Not less than 48 hours after last rainfall.
   2. Shall not exceed 10 ohms

1.3 GROUNDING SYSTEMS

A. In the service equipment, provide a ground bus separate from the neutral bar.
   1. Bond it with copper bus bar to the neutral bar.

B. Connect the grounding electrode conductor between the ground bus and the driven ground electrode.

C. Install a green insulated grounding conductor:
   1. In each section of nonmetallic conduit.
   2. To all weatherproof receptacles.
   3. With each panel feeder.
   4. With each branch circuit with two or three pole breakers.
   5. To the transformer.
   6. Flexible steel conduit.

D. Provide all conduit terminating I electrical equipment with grounding bushings

and ground wire extended to ground bus in equipment.

1.4 MISCELLANEOUS REQUIREMENTS

A. Continuity of the building equipment grounding system shall be maintained throughout the project. Grounding jumpers shall be installed across conduit expansion fittings, liquid-tight flexible metal and flexible metal conduit, light fixture pigtails in excess of 6', and other non-electrically continuous raceway fittings.

B. Grounding conductors and grounding electrode conductor shall be green insulated stranded copper conductors and run in a suitable raceway. Grounding conductors and grounding electrode conductor shall be continuous, without joints or splices over their entire length, except as allowed by NEC.

END OF SECTION 260526

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260529 - SUPPORTS AND FASTENERS

PART 1 - GENERAL

1.1 GENERAL

A. Use methods and devices recommended by the equipment manufacturer.
B. Fasteners shall be compatible with the material into which they are applied.

1.2 QUALITY ASSURANCE

A. Support systems shall be adequate for weight of equipment and conduit, including wiring, which they carry.

1.3 SECURING AND SUPPORTING OF CONDUIT AND BOXES

A. Support Conduit:
   1. At intervals not greater than 7 feet.
   2. Within three feet of bends, outlets and junction box.
   3. With channel support with conduit fittings on vertical runs.
B. Support outlet and junction boxes.
   1. Independently to surface on which conduit is run.
   2. Rigidly to building structure.
   3. Conduit shall not be used for sole support of boxes.
C. Support individual conduit with approved anchor straps employing:
   1. Toggle bolts on hollow masonry.
   2. Self-drilling anchors or power driven studs on concrete surfaces.
   3. Perforated strap in not approved as hanger material.
   4. Use electro-galvanized or cadmium plated steel bolts, threaded rods, nuts, washers and screws.

1.4 SURFACE MOUNTED EQUIPMENT

A. Install surface-mounted cabinets, boxes and panel boards with minimum of four anchors.
B. Provide steel channel supports to stand cabinet one inch off wall.
C. Use fasteners suitable for the surface or structure and weight of device.

END OF SECTION 260529

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260533.13 - CONDUIT SYSTEMS

PART 1 - GENERAL

1.1 GENERAL

A. Install conduit systems as shown on the drawings.
B. Installation and all components of the system:
   1. UL labeled.
   2. Conform to National Electrical Code
C. Use fittings and methods of joining conduit as set forth in the National Electrical Code.
D. Conduit termination's at electrical equipment:
   1. Secured in place by locknuts inside and outside.
   2. Provided with approved bushings.
E. Join rigid conduit with standard couplings according to the manufacturer's recommendations.
F. Adhere to the general routing of conduit systems as shown on the drawings.
G. Install all conduits in the most direct, neat, and workmanlike manner, employing only skilled mechanics.
   1. Install conduit to conserve space and not interfere with use of space.
H. Hold horizontal and vertical conduit as close as possible to walls, ceilings, struts, and members as to occupy the minimum space consistent with the proper requirements for service of adjacent elements.
I. Layout to maintain headroom, neat mechanical appearance, and to support equipment loads required.

1.2 CONNECTIONS TO MOTORS AND EQUIPMENT

A. Flexible conduit:
   1. Minimum Length: 24 inches
   2. Maximum Length: 36 inches
B. For all connections to motors, transformer and control valves:
   1. U.L. Labeled Liquid-tight non-metallic with PVC watertight fittings.
   2. U.L. labeled Liquid-tight Flexible Steel Conduit

1.3 CONDUIT MATERIALS

A. Electrical metallic tubing (EMT).
   1. Cold rolled steel tubing.
   2. Zinc coated inside and out.
   3. UL labeled standard weight.
B. Fittings meet same requirements as for EMT. UL labeled.
   1. Only compression fittings shall be utilized.
   2. Cast Metal fittings are not approved and shall not be utilized.
C. PVC conduit:
   1. UL labeled type 40.
   2. PVC fittings and solvent welded joints.
D. Rigid aluminum conduit:

1. UL labeled schedule 40.
2. 6063 aluminum alloy T3 temper.

E. Fittings meet same requirements as for rigid aluminum conduit. UL labeled.

F. Conduit run exposed to the weather:
1. Rigid aluminum conduit

G. Conduit run underground or beneath the building slab:
1. PVC

H. Branch circuit exposed inside building:
1. Electrical metallic tubing.

I. Conduit in concrete floor slabs at grade:
1. PVC.

1.4 INSTALLATION

A. Conduit 1" and smaller – in the slab dimension. Slab dished for larger conduit to accommodate 4" of concrete over the conduit with 2" of encasement.
B. Cap or plug conduit ends upon completion of the run until the wire is pulled.
C. Swab out conduit to remove moisture and debris before wires are pulled in.
D. Completely install each conduit run prior to pulling conductors.
E. Route all exposed conduits parallel or perpendicular to building lines.
F. Alter conduit routing to avoid structural obstructions, minimizing crossovers.

1.5 MINIMUM CONDUIT SIZES

A. Branch circuit: 1/2 inch.

1.6 RACEWAY CONTINUITY

A. Assure the electrical continuity of all metal conduit systems.
B. Approved methods shall comply with the requirements of the 2005 National Electrical Code.

1.7 EMPTY CONDUIT SYSTEM

A. Empty conduit in which cable is to be installed by others shall be minimum 3/4 inch.
1. National Electrical Code.

B. Ground effectively and permanently:
1. Neutral conductor.
2. All conduit Systems.
3. All electrical equipment.

END OF SECTION 260533.13

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260533.16 - PULL AND JUNCTION BOXES

PART 1 - GENERAL

1.1 WORK INCLUDED
- A. Pull boxes.
- B. Junction boxes

1.2 SUMMARY
- A. Provide where required for the installation and servicing of the conductors.
- B. Sized to conform with the National Electrical Code.

1.3 MATERIALS
- A. Galvanized steel, gauges conforming to NEC.
- B. If underground or at grade use reinforces plastic; concrete with cast iron lid; or cast iron.

1.4 CONSTRUCTION
- A. Surface mounted pull boxes.
  1. With screw-on or hinged cover.
  2. Galvanized with waterproof gasket.
- B. Flush mounted pull boxes.
  1. With overlapping covers.
  2. With flush head cover retaining screws.
  3. Prime coated indoors.
  4. Galvanized outdoors with waterproof gasket.

1.5 INSTALLATION
- A. Locate pull and junction boxes above removable ceilings or in electrical rooms, utility rooms, or storage areas.
- B. Close unused openings in pull and junction boxes with a knockout closure.

END OF SECTION 260533.16

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 260553 - IDENTIFICATION

PART 1 - GENERAL

1.1 GENERAL

A. Provide identifying nameplates for all permanently connected electrical equipment.
   1. Identify as shown on the drawings.
   2. Switches and starters identified by the load served.
   3. Transformers identified by the scheduled identification and the load served.
   4. Panels identified by the scheduled identification.
   5. Indicate voltage and phases.
   6. Panels.
   7. Transformers, primary and secondary

B. Provide identification nameplates for all elements of the control and monitor panel.

C. Provide permanent identification of all wiring.

1.2 NAMEPLATES

A. Fabricated of laminated engraved plastic, etched, or photo-anodized metal.

B. Secured to equipment with escutcheon pins, self-tapping or machine screws, or approved adhesive that is removable only by mechanical means.

C. Have letters at least 1/4" high.

1.3 SPECIFIED MARKERS

A. Provide a specified marker on each wire in conduit including pull wires.
   1. Where runs are interrupted in junction boxes.
   2. Terminated in electrical equipment.
   3. Showing circuit number and identification.

END OF SECTION 260553

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 261216 - DRY TYPE TRANSFORMER

PART 1 - GENERAL

1.1 GENERAL

A. Provide the dry type transformer where shown on the drawings or required for system operation.
B. Minimum overload capacity to comply with ASA standards.
C. Provide in an enclosure suitable for its locations.
D. Electrical characteristics and capacity as scheduled on the drawings.

1.2 CONSTRUCTION

A. Class 220 degrees C insulation.
B. Constructed in accordance with NEMA standards and the NEC.
C. Terminal compartment in an ambient temperature location.
D. Incorporate build in vibration dampening systems.
E. Sound levels shall conform to the NEMA standards after installation.
F. Provide transformer with 6 taps.
G. Transformers 25 KVA and above 80 degrees C rise above 40 degrees C ambient.

1.3 INSTALLATION

A. Install the transformer according to the manufacturer's installation manual.

1.4 ACCEPTABLE MANUFACTURES

A. Square D
B. General Electric

END OF SECTION 261216

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 261313 - CIRCUIT BREAKER PANELBOARDS

PART 1 GENERAL

1.1 CIRCUIT BREAKER PANELBOARDS

A. Panel boards:
   1. Provided with cover and door.
   2. Equipped with the number and size of circuit breakers scheduled.
   3. Provided with a typewritten directory of circuits mounted in a card holder on the inside of the panel.

B. Breakers:
   1. Thermal magnetic.
   2. Trip indicating.
   3. Multi-pole breakers provided with:
      a. Common trips on all poles.

C. Constructed in accordance with all applicable NEMA and UL Standards.

D. Panel boards bussing:
   1. Tin plated, full size copper.
   2. Of sufficient cross section area to continuously conduct rated full load current with a maximum temperature rise of 50 degrees C. above an ambient temperature of 40 degrees C.
   3. Provide a grounding bus sized at 25% of the phase bus.
   4. Provide a neutral bus sized at 100% of the phase bus.

E. Identify each breaker with an engraved laminated nameplate stating the load it serves.

F. Provide 3" laminated plastic nameplate with 3/8" letters on cover of each panel board.
   1. Refer to specifications 16021 - Identification

G. Verify the electrical characteristics of all equipment for use in preparing shop drawings for panelboard.

1.2 ACCEPTABLE MANUFACTURERS

A. Square D.

B. General Electric

END OF SECTION 261313

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 261323 - SAFETY SWITCHES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Provide where shown on the drawings and where required by NEC.
B. Conform to NEMA and UL standards for heavy duty switches.

1.2 ENCLOSURE

A. NEMA 3R or NEMA 1
B. Operating handle lockable "OFF" with three pad locks.
C. Door interlocks:
    1. Defeatable, front accessible interlock.
        a. To prevent opening door when operating handle is in the "ON" position.
        b. To prevent throwing switch to "ON" position when door is open.
D. Provide specified identification label.

1.3 CONSTRUCTION

A. Rated at system voltage.
B. Current rating as shown on the drawings.
C. Three Pole:
    1. Quick make, quick break action.
    2. Current carrying parts plated.
    3. Provide with auxiliary interlock contact where shown on the drawing.

1.4 ACCEPTABLE MANUFACTURERS

A. Square D.
B. General Electric

1.5 INSTALLATION OF SAFETY AND DISCONNECT SWITCHES

A. Install safety and disconnect switches where shown, in accordance with the manufacturer's written instructions, requirements of the NEC, NECA Standard of Installation, and industry practices.
B. Provide safety switches where shown and at each motor out of sight of, or more than 50 feet from, the switch or panel from which the motor circuit is fed.
C. Provide all safety and disconnect switches with galvanized channel sub-structure. Switches shall not be supported by conduit alone.
    1. Provide neoprene to isolate S.S. Enclosures.
D. Coordinate safety and disconnect switch installation work with electrical raceway and cable work as necessary for interface.

1.6 TESTING

A. Before energizing, check for continuity of circuits and short circuits.

END OF SECTION 261323

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 261600 - POWER SERVICE ENTRANCE

PART 1 - GENERAL

1.1 GENERAL

A. Obtain from the electrical utility company all required information to provide a complete electrical service change over.

1.2 WORK INCLUDED

A. Provide the construction coordination required to effect the utility power connection at the proper time.

B. Coordinate that part of the service installation. Construction including metering provisions, provided by the electric utility. Pay all fees required by the electric utility company for their part of the work.

C. Provide all services, material, equipment, installation and labor to construct the power service entrance in accordance with the requirements of:
   1. The Electric Utility Company.
   2. The National Electric Code.
   3. Governing Local codes.

END OF SECTION 261600

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 265100 - LUMINARIES

PART 1 - GENERAL

1.01 GENERAL

A. Provide a luminaire for each luminaire symbol shown on the drawings.

B. The descriptions and catalog numbers establish the quality, appearance, and performance of the specified luminaires.

C. Verify all dimensions and electrical characteristics with actual project conditions.

D. If conditions do not permit the installation of any of the lighting details as specified, request guidance from the Owner prior to installation.

END OF SECTION 265100

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 310000 - GEO-TECHNICAL INVESTIGATION REPORTS

GENERAL

A. A Geo-technical Investigation Report was not performed for this project. However, a Geo-technical Investigation Report was performed to an adjacent site 200' to 250' away from this site. This report was conducted in 2009 for the construction of the SETRA Hangar No. 7. Due to its proximity to the proposed hangar building in this project, the data provided in this report will be sufficient for this project.

B. The report reproduced on the following pages is an exact copy of the original Geotechnical Study - Final Report for the SETRA Hangar No. 7 Jefferson County, Texas prepared by Tolunay-Wong Engineers, Inc. (Project No. 09.23.100) June 2009.

C. Procedures and precautions recommended in the following Geotechnical Study - Final Report and attachments are to be strictly followed by the contractor. Where the technical sections of these specifications differ from the recommendations of the Geotechnical Study - Final Report, the more stringent requirement shall govern.

D. The Contractor is responsible for examining the site and determining the nature of the materials to be excavated.

E. Contractor shall be responsible for paying for all failed tests. Geo-Technical inspection service will bill all failed tests directly to the Contractor. Evidence of payment shall be a requirement for substantial completion.

GEOTECHNICAL STUDY - FINAL REPORT FOLLOWS IN ITS ENTIRETY AND COMPLETES SECTION 310000.

GEOTECHNICAL STUDY – FINAL REPORT
SETRA HANGAR NO. 7
JEFFERSON COUNTY, TEXAS

Prepared for

Bartlett Cocke General Contractors
15865 International Plaza Drive, Suite 280
Houston, Texas 77032

Prepared by

Tolunay-Wong Engineers, Inc.
2455 W Cardinal Drive, Suite A
Beaumont, Texas 77705
(409) 840-4214

June 2009

Project No. 09.23.100

Tolunay-Wong Engineers, Inc.

June 9, 2009

Mr. Jason Atherton
Bartlett Cocke General Contractors
15865 International Plaza Drive, Suite 280
Houston, Texas 77032

Re: Geotechnical Study – Final Report
SETRA Hangar No. 7
Jefferson County, Texas
TWE Project No: 09.23.100

Dear Mr. Atherton,

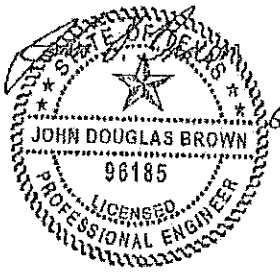
We are pleased to submit this final report of our geotechnical study for the above referenced project. This report contains a detailed description of the field and laboratory work performed for this study, as well as soil boring logs including tabulated laboratory test results. Also included in this report are our recommendations for design and construction of suitable foundations for the proposed Southeast Texas Regional Airport (SETRA) Hangar No. 7.

We appreciate the opportunity to work with you on this phase of the project, and look forward to the opportunity to provide additional services as the project progresses. If you have any questions regarding the report or if we can be of further assistance, please contact us.

Sincerely,
TOLUNAY-WONG ENGINEERS, INC.

Nutan Palla

Nutan Palla, E.I.T., Ph.D.
Project Engineer



6-9-09

John D. Brown

John D. Brown, P.E.
Geotechnical Engineer

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Figure 1 Plan of Borings

Appendix

Appendix A - TWE Project Boring Logs (B-1 thru B-3) and,
Key to Symbols and Terms Used on the Logs

1 INTRODUCTION AND PROJECT DESCRIPTION

1.1 Introduction

This report presents the results of the geotechnical study for the Southeast Texas Regional Airport (SETRA) Hangar No. 7 in Jefferson County, Texas.

This study was conducted in general accordance with TWE Proposal P09-B044 dated March 27, 2009, and authorized by Bartlett Cocke Subcontract No. 01.014500-000.S.

1.2 Project Description

Based on information provided, we understand that the project consists of a 90-ft by 300-ft steel frame hangar and a smaller adjoining office building with dimensions of 25-ft by 180-ft. The project details were provided verbally and via electronic mail. The transmittal included a site layout and preliminary foundation details of the planned building.

2 PURPOSE AND SCOPE OF SERVICES

The purposes of the geotechnical study were to investigate the soil and groundwater conditions and to interpret this data to develop geotechnical design and construction guidelines for the proposed Hangar No. 7. This study included field exploration to obtain subsurface stratigraphy and groundwater conditions, geotechnical laboratory testing on recovered soil samples to evaluate the physical and engineering properties of the subsurface materials encountered, and engineering analyses to develop design and construction recommendations with respect to:

- Subsurface soil and groundwater conditions;
- Foundations;
- Foundation settlement estimates;
- Subgrade preparation for building pad, and;
- Floor slab.

Environmental assessments, a geologic fault study, and recommendations for areas outside the area covered by the project-boring layout were beyond the scope of this study.

3 FIELD EXPLORATION

3.1 Test Borings

Tolunay-Wong Engineers, Inc. conducted an exploration of subsurface soil and groundwater conditions at the proposed project site on May 13, 2009 by drilling three (3) soil test borings. Borings B-1 through B-3 were drilled to a depth of thirty (30) feet. The boring depths were measured from the existing ground surface at the time of our field activities. A total of 90 vertical feet was drilled.

TWE representatives were present at the site to coordinate the field activities and to log the boreholes. The boring locations were staked by a TWE representative prior to commencement of the field work. The approximate boring locations are shown on Figure 1.

3.2 Drilling Methods

Field operations were performed in general accordance with *Standard Practice for Soil Investigation and Sampling by Auger Borings* [American Society for Testing and Materials (ASTM) D 1452]. Soil borings were drilled with an all-terrain mounted drilling rig equipped with a rotary head. Boreholes were advanced using dry-auger and wet-rotary drilling methods. Typically, borings are drilled using a flight auger to advance the boreholes until groundwater is encountered or until the borehole becomes unstable and collapses. At that point, the borings are completed using wet-rotary drilling techniques. Samples were obtained continuously at intervals of 2 ft from the ground surface to a depth of 12 ft, at the 13 to 15 ft depth interval, and then at intervals of 5 ft to the 30-ft completion depth.

3.3 Soil Sampling

Cohesive soil samples were recovered from the test borings by hydraulically pushing a 3-in. diameter, thin-walled tube a distance of about 24 inches. The field sampling procedures were conducted in general accordance with the *Standard Practice for Thin-Walled Tube Sampling of Soils* (ASTM D 1587). The field technician visually classified the recovered soils, and obtained a penetration resistance measurement of the recovered soils using a calibrated pocket penetrometer. A factor of 0.67 is typically applied to the penetrometer measurement to estimate the unconfined compressive strength of the Gulf Coast cohesive soils. Undrained shear strength is computed as ½ of the unconfined compressive strength. The samples were extruded in the field, sealed and placed into secure containers, protected from disturbance, and transported to the laboratory. The recovered soil sample depths and pocket penetrometer measurements are shown on the test boring logs in Appendix A.

Cohesionless sands and semi-cohesionless silts were collected with the Standard Penetration Test (SPT) sampler driven 18 in. by blows from a 140 pound hammer falling 30 in. (ASTM D 1586). The number of blows required to advance the sampler three consecutive 6 in. depths are recorded for each corresponding sample on the boring log. The N- value, in blows per foot, is obtained from SPT by adding the last two blow count numbers. The samples obtained from the split barrel sampler were visually classified, sealed in plastic bags, and transported to our laboratory. The SPT sampling intervals and blow counts are presented on the boring logs in Appendix A.

3.4 Boring Logs

Our interpretations of general subsurface soil and groundwater conditions at the boring locations are included on the boring logs. The interpretations of the soil types throughout the boring depth and the locations of strata changes were based on visual classifications during field sampling and laboratory testing using ASTM D 2487, Unified Soil Classification System, and ASTM D 2488, Description and Identification of Soils. The boring logs include the sample type and interval depth for each sample along with the corresponding pocket penetrometer readings for cohesive soils. The project boring logs and a key to the terms and symbols used on the logs are presented in Appendix A.

3.5 Groundwater Measurements

Groundwater levels were measured in the open boreholes during drilling. Measurements were taken initially during dry-auger drilling when groundwater was first encountered and then at five minute intervals over a fifteen minute time period. The groundwater observations in the project borings are summarized in Section 5.5 of this report entitled *"Groundwater Observations"*.

4 LABORATORY TESTING

A laboratory testing program was conducted on selected samples to assist in classification of the soils encountered in the borings, and to evaluate the engineering properties of the soils pertinent to the design of foundations for this project.

4.1 Soil Classification Tests

All samples obtained during the field program were visually classified in the laboratory according to procedures outlined in ASTM D 2488. In addition, tests for natural moisture content, Atterberg limit, and material finer than the No. 200 sieve were conducted on selected samples obtained from the borings. These laboratory test results were used to classify the soils encountered in general accordance with the Unified Soil Classification System (ASTM D 2487). Results of the classification tests are presented on the Logs of Borings, B-1 through B-3, in the Appendix.

Total suction tests were also performed on soil samples recovered from boring B-1 to develop a soil moisture profile with depth. The suction test uses the chilled-mirror technique to measure the water potential (suction) of a sample. Water potential is the vapor pressure of air in equilibrium with a sample in a sealed measurement chamber. Water potential is measured by equilibrating the liquid phase water of the sample with the vapor phase water in the headspace of a closed chamber, then measuring the vapor pressure of that headspace. The water potential (suction) is displayed in MegaPascals (MPa) and pF.

4.2 Soil Strength Tests

The approximate undrained shear strength of selected samples of cohesive soils obtained in the borings was determined by performing unconfined compression tests. Natural moisture content and dry unit weight was determined for each sample tested for compression. Results of the unconfined compression tests are presented on the Logs of Borings, B-1 through B-3, in the Appendix.

4.3 Laboratory Procedures

Laboratory tests were performed in general accordance with ASTM Standards to measure physical and engineering properties of the soil samples obtained for this project. The types of laboratory tests performed are presented in Table 4-1.

Table 4-1
Laboratory Testing Program

Type of Test	Testing Method
Natural Water Content	ASTM D 2216
Atterberg Limits	ASTM D 4318
Material Passing Sieve No. 200	ASTM D 1140
Dry Unit Weight	ASTM D 2937

Type of Test	Testing Method
Unconfined Compression	ASTM D 2166
Total Suction	Chilled-Mirror Technique

The tests results are shown on the boring logs in Appendix A. The total suction test results are presented in Section 5. 4 *Subsurface Soil Properties.*

5 SITE CONDITIONS

5.1 General

Our interpretations of soil and groundwater conditions at the site are based on information obtained at the soil boring locations only. The project boring logs are presented in Appendix A. This information has been used as the basis for our conclusions and recommendations. Subsurface conditions may vary at areas not explored by the project soil borings. Significant variations at areas not explored by the project borings will require re-evaluation of our recommendations.

5.2 Site Description and Surface Conditions

The proposed project site is located at the Southeast Texas Regional Airport, 4875 Parker Dr., Beaumont, Texas. The site is situated east of the main terminal and southwest of the newly constructed parking area. The site is located in a low-lying area surrounded by parking and grassy fields. The proposed construction area generally consists of open grassy area between the parking lot and the fence separating the taxiway and existing airplane hangers. The site was generally flat and the ground surface was firm, and drainage appeared to be good.

5.3 Subsurface Soil Stratigraphy

The soil stratigraphy, as interpreted from borings B-1 through B-3, was predominantly cohesive within the 30-ft explored depth. The cohesive soils typically consisted of firm to stiff consistency, high plasticity fat clays and fat clays with sand to 10-ft to 13-ft depths, followed by medium plasticity stiff lean clays with sand to 17-ft and 18-ft depths. Below 17-ft and 18-ft depths, the cohesive soils were underlain by medium dense sandy silts and silty sands to 27-ft and 28-ft depths, followed by firm to stiff lean clays to the boring completion depths. We observed clay pockets and seams, silt partings, sand pockets, calcareous nodules, shell fragments, and slickenslided substructure within the soil matrix.

The upper 2-ft to 4-ft soils were identified as fill in borings B-1 through B-3. It should be stressed that it is relatively difficult in practice to accurately delineate fill from similar natural soils. Fill classifications are made based upon visual observations and require considerable judgment. The interpreted fill depths may vary somewhat from actual conditions.

Detailed descriptions of the soils encountered at the boring locations are presented on the boring logs included in Appendix A.

5.4 Subsurface Soil Properties

We measured liquid limits (LL) of 54 to 90 and corresponding plasticity indices (PI) of 39 to 69 on selected five high plasticity cohesive soil samples recovered from the 2 to 12-ft depth range in the project borings. Selected three medium plasticity lean clay samples obtained from the 10-ft and 28-ft depths in borings B-1 and B-3 yielded liquid limits of 40 to 48, and plasticity indices of 23 to 31. In-situ moisture contents of the tested soil samples were 8 to 19 percentage points wet of the corresponding plastic limits, indicating a relatively wet soil condition at the time of field work. The plasticity data indicates a moderate to high, but mostly high shrink/swell potential

with moisture variation. However, the swell potential at this site is somewhat reduced based on the moisture content and plasticity data. Measured fines contents of three (3) selected cohesive soil samples ranged from 77% to 97%.

Suction measurements were taken on the samples recovered from the upper 15-ft depth in boring B-3. The total suction values and corresponding moisture contents are tabulated in the following table-5-1.

Table 5-1
Suction Measurements

Boring No.	Depth (feet)	Moisture Content (%)	Total Soil Suction (pF)	Soil Type
B-3	0-2	32	3.68	Fat Clay "Fill"(CH)
	2-4	39	3.54	Fat Clay (CH)
	4-6	33	3.61	Fat Clay (CH)
	6-8	37	3.51	Fat Clay (CH)
	8-10	35	3.64	Fat Clay (CH)
	10-12	27	3.60	Fat Clay (CH)
	13-15	22	3.22	Lean Clay w/ Sand (CL)

Movements in expansive clays are generated by changes in suction which are brought about by the entry or loss of moisture.[1] For comparison purposes, a suction value of 2.5 pF corresponds to the wettest soil condition possible if measured under soaking conditions (such as a plumbing leak), which is typical of excessive wetting. The driest soil condition (at the surface) is 4.5 pF if the surface suction is controlled by vegetation, or 6.0 pF if the surface suction is controlled by evaporation from bare soil, or soil with wilted vegetation. For clays, the plastic limit is 3.5 pF (Lytton, 1994).

Measured undrained shear strengths, based on unconfined compression testing, ranged from 510 psf to 1380 psf for selected seven cohesive samples recovered from the 2-ft to 30-ft depth interval in the project borings. Dry unit weights of the tested samples ranged from 84 pcf to 101 pcf. Pocket penetrometer readings on recovered cohesive soil samples ranged from 0.50 tsf to 3.25 tsf and averaged 1.76 tsf. Based on the calibrated pocket penetrometer readings and the undrained shear strengths, the cohesive soils recovered from the project borings were inferred to have firm to very stiff, but typically stiff consistencies.

5.5 Groundwater Observations

Groundwater measurements obtained in the project borings during drilling are presented in the following table:

[1] Prediction of Movement in Expansive Clays, Robert L. Lytton, Proceedings from Foundations and Embankments Deformations Conference, 1994, pg, 1828.

Table 5-2
Groundwater Level Measurements

Boring No.	Boring Depth (ft)	Groundwater Level Depth		
		Encountered During Drilling (ft)	Observed in the Open Borehole after 15 minutes (ft)	Caved Depth (ft)
B-1	30	Dry	-	-
B-2	30	Dry	-	-
B-3	30	17	8	14

Groundwater levels may fluctuate with climatic and seasonal variations and should be verified before construction. Accurate determination of the static groundwater level is typically made with a standpipe piezometer. Installation of a piezometer to evaluate the long-term groundwater condition was not included in the work scope.

6 GEOTECHNICAL DESIGN RECOMMENDATIONS

6.1 General Foundation Recommendations

This section includes guidelines for site preparation, as well as foundation design and construction recommendations for the proposed airplane hangar.

6.2 Site Preparation

Site preparation, including site stripping, proofrolling and fill placement will be required. These considerations are addressed in the following paragraphs.

6.2.1 Site Access during Construction

Site access should not become a problem during construction because the surficial fat clays are relatively impermeable. Construction delays due to wet weather conditions may be avoided if the ground surface is graded to allow drainage prior to a rainfall event.

6.2.2 Site Stripping and Proofrolling

The surficial soils within the building outline should be stripped to a minimum of 6 inches depth to remove top soil, organic matter, major root systems, and debris. After stripping, the construction area should be proof-rolled to detect zones of soft or wet soils. If encountered, such soils should be undercut and replaced with compacted backfill. Close monitoring of the proof-rolling should be made during periods of extended rainfall to detect loose or wet soils.

The backfill should consist of soils having similar physical and moisture characteristics as surrounding natural soils and should be compacted to a minimum of 95 percent of the maximum dry density in accordance with ASTM D 698 at a moisture content of not less than 1 percent below and not more than 3 percent above optimum moisture content.

The ground surface should be appropriately graded at all times to prevent ponding of rainfall runoff. The site is relatively flat and natural drainage may not be adequate for construction operations during wet weather conditions. The establishment of temporary drainage swales may be necessary to expedite construction during periods of extended rainfall.

6.2.3 Fill Placement

Fill for the new hangar site should consist of select cohesive soil. Select fill soils should have measured plasticity indices of 10 to 20 and liquid limits less than 40, and should be free of organic matter and other deleterious material. Select fill should be tested and approved by the Geotechnical Engineer prior to use for the building pad.

The maximum loose thickness for each lift will depend on the type of compaction equipment used. Recommended fill layers are summarized in the following table:

Table 6-1
Compaction Equipment

Maximum Lift Thickness for Different Compaction Equipment	
Compaction Equipment	**Maximum Lift Thickness**
Mechanical Hand Tamper	4 in.
Pneumatic Tired Roller	6 in.
Tamping Foot Roller	8 in.
Sheepsfoot Roller	8 in.

All fill should be compacted to at least 95% of the standard Proctor maximum dry density at moisture content of not less than 1 percent below and not more than 3 percent above optimum moisture content (ASTM D 698). We recommend compaction testing of all fill placed under floor slab areas.

6.3 Foundation System

The building columns will transfer a maximum compression force of 50.2 kips and a maximum uplift force of 63.5 kips into the underlying foundations. Also, a maximum shear force of 9.0 kips could develop at the column base due to wind loads. Column loads were provided in the Preliminary Reactions Drawing prepared by Red Dot Buildings and furnished by Bartlett-Cocke.

The foundation system must satisfy two independent engineering criteria with respect to soil conditions. One criterion is that the system be designed with an appropriate factor of safety against bearing capacity failure of the soils underlying the foundations. The second criterion is that movement beneath the foundation system due to compression (consolidation) or expansion (swell) of the underlying soils must be within tolerable limits for the structure.

The field and laboratory data acquired in borings B-1 through B-3 indicated the presence of competent soils. Bearing capacity failure of the soils underlying the foundations is not anticipated to be a concern provided the recommendations presented herein are implemented.

The second criterion addressing movement is a design concern given the presence of potentially expansive clay within the zone of seasonal moisture change, and the future landscaping around the hangar perimeter. The potential for shrink/swell movements must be considered in selection and design of the foundation and floor slab system. Plasticity indices (PI) of the soil within the active zone (upper 6 ft depth) range from 53 to 69. When considering PI only, clays with PIs of greater than 20 have a high potential for volume change with variation in soil moisture content.

6.3.1 Drilled Piers

Principal structural loads for the proposed SETRA Hangar No. 7 may be supported on drilled and underreamed, cast-in-place concrete footings. The piers should be placed in competent natural cohesive soils at a depth of at 10-ft below existing grade. The recommended allowable net bearing pressure for drilled footings bearing on the undisturbed natural clay at the recommended depth is 2,100 psf for dead load plus sustained live loads and 3,200 psf for total

dead plus live loads (including extreme wind load). These values should provide factors of safety of 3.0 and 2.0, respectively, against soil shear failure.

6.3.2 Uplift

The drilled footing foundations will be subjected to a maximum uplift force of 63.5 kips, based on the foundation details furnished by Bartlett-Cocke. Uplift capacity for a bell bottomed rigid pier can be determined from the expression:

$$Q_u = (CN_u + \gamma D) \times A$$

Where,
Q_u = Ultimate Uplift Capacity
C = Cohesion (C = 850 psf)
N_u = Uplift coefficient [analogous to the N_c (Coefficient of Bearing Capacity) = 5.53]
A = Area of the Bell
γ = Unit weight of soil and concrete (γ =135 pcf)
D = Depth of pier below final grade (10-ft)
F.S. = 2.0

For this project, we estimate the appropriate value of N_c would be on the order of about 5.53. Values of undrained shear strength are obtained from the field and laboratory testing. The allowable uplift capacity = Q_u/ F.S.

6.3.3 Lateral Resistance to Horizontal Loads

The lateral resistance of drilled and underreamed piers was analyzed using Broms Short Pile Method (ASCE, Soil Mechanics and Foundations Journal, March 1964). Based on a lateral load of 9 kips and a compressive axial force of 50.2 kips, we calculated a minimum pier embedment depth of 10-ft and a maximum bending moment of 74.0 ft-kips acting at a height of 5.3-ft above the base of the pier.

6.3.4 Footing Construction

The bell/shaft diameter ratio of underreamed footings should not be greater than three to reduce sloughing and caving potential. Based on observed conditions in the project borings, it should be possible to form stable underreams by designing the bells within the competent cohesive soils at the 10-ft depth.

It is frequently advisable in expansive soil environments to provide additional steel reinforcing in the shafts of the underreamed footings. The tension steel should extend the full length of the shaft and the underream. A steel quantity of 0.5% of the gross shaft area is usually sufficient.

If underreams cannot be completed because of local anomalies and/or sloughing, the contractor should be required to excavate to a depth specified by the Geotechnical Engineer and provide a straight-sided pier with the shaft diameter possibly equal to the design bell diameter. The bottom of each excavation should be cleaned before concrete placement. Concrete should be placed in underreamed or straight-sided footings immediately following drilling and inspection.

Water seepage is not anticipated during excavation of drilled piers. If water collects in excess of 1-in. depth at the bottom of the footing excavations, water should be pumped out prior to concrete placement or the concrete should be tremied into place. In no instance should the pier excavation be left open for more than two hours.

6.3.5 Estimated Footing Settlements

Total post construction settlements of less than 0.50-in. are anticipated for the individual drilled and underreamed footings placed using proper construction methods. Differential movements between any two adjacent column units are not expected to exceed 0.3-in. These estimates assume uniformly loaded foundations with pressures that are no greater than the recommended allowable net bearing pressures and that the foundations are designed and constructed in accordance with the recommendations provided in this report. In addition, these estimates assume that foundations will act as isolated foundations, that is, the clear spacing between adjacent foundations is great enough to significantly reduce the influence of adjacent foundations. The recommended clear spacing between underreams should be a minimum of one underream diameter for foundation design.

It should be pointed out that the performance of the foundations would be more sensitive to construction quality than soil-structure interaction. Monitoring of the footing installation by the Geotechnical Engineer or a representative is recommended.

6.3.6 Variations during Construction

The recommendation to consider drilled pier footings is based on the observed subsurface conditions encountered only at the boring locations; however, significant variations can occur over short horizontal distances. An experienced soil technician should be present during foundation installation to verify that the proper bearing stratum has been reached, the pier dimensions are as designed, and that the excavation is clean and dry before reinforcing steel and concrete placement. This exploration does not eliminate possible presence of zones within the subsurface stratigraphy that would not support pier construction.

6.4 Floor Slab Design

The natural clay soils within the upper 6 feet at this site possess high to very high shrink/swell potential with an average plasticity index of 63. Soils with plasticity indices greater than 20 can experience significant volume changes with variations in moisture content. It is generally accepted that a primary source of foundation and floor slab distress is movements associated with shrink/swell behavior of subgrade soils. It is therefore recommended that measures be incorporated into design of floor slabs to reduce the shrink/swell potential of the foundation soils.

This section provides two (2) options to mitigate the effects of shrink/swell potential of the foundation soils on floor slab design; 1) Structurally suspended floor slab, and 2) Ground- supported floor slab.

Any ground-supported floor slab scheme for this project placed on high plasticity cohesive soils with plasticity indices of more than 20 will incur some level of risk associated with shrink/swell movements. Selection of the appropriate floor slab option should be in accordance with the

owner's performance expectations and recommendations from a structural engineer. It should be realized that slab performance would depend largely on the subgrade soil properties. Properly designed and constructed floor slabs may experience distress from active or improperly prepared subgrade soils.

6.4.1 Structurally Suspended Floor Slab

One of the most successful techniques for the construction of floor slabs in expansive clay soils is to suspend the floor and grade beams above the clay subgrade leaving a void space (crawl space) such that the shrink-swell soil movements do not affect the floor. The floor loads are carried to columns and grade beams which are supported by foundations as previously described. The floor slab is either cast on void forms or constructed of precast elements with a topping slab. The foundation system is bearing at about 10-ft below grade where the impact of the seasonal moisture variations and shrink/swell movements are significantly reduced.

Although the initial construction cost is high, the foundation performance is generally good to excellent and long-term maintenance and/or remedial repair expense as compared to a ground-supported slab is much lower. It should also be noted that a suspended floor does not have the cost of thick select fill layers or other subgrade treatments. Some movement of the pier should be anticipated but should be on the order of less than ½ inch total and ¼ inch differential.

If the suspended floor technique is chosen, it is further recommended that the void space area be shaped (graded) to allow subfloor drainage to a low slump area where water can collect and be discharged to drains. This precaution is intended to prevent water which may inadvertently enter from the exterior or from a plumbing break from ponding inside the crawl space. The void space should also be properly ventilated if possible.

6.4.2 Ground-Supported Floor Slab

A ground supported floor slab could be constructed provided remedial methods are used to reduce the potential for shrink/swell movement to tolerable levels. The typical method of reducing the swell potential includes installation of a layer of non-expansive soil beneath the floor slab. This method has beneficial results but does not totally eliminate the potential for shrink/swell movements.

In order to reduce the shrink/swell movements to tolerable limits (about 1 inch or less), it is recommended that a minimum of 2 feet of non-expansive select structural fill be provided beneath the floor slab. We recommend that the 2 feet of non-expansive material consist of select sandy clay fill as described in section 6.2 of this report. The minimum fill thickness may be provided by undercutting the existing material and replacing it with select fill, raising the building pad with select fill, or a combination of these two alternatives. Structural select fill should extend full depth at least 2 feet beyond the perimeter of the building

It should be noted that these methods for reducing shrink/swell movements are designed for normal seasonal changes in soil moisture content of the subgraded soils. Excessive shrink/swell movements can be expected if increases in soil moisture content occur as a result of broken

water lines and sewer lines, improper drainage of surface water, shrubbery and trees planted near the foundation slab and excessive lawn on shrubbery irrigation

Due to the expansive nature of the subgrade soils at this site, special care should be taken not to allow the exposed subgrade soils to become extremely wet or extremely dry of the existing moisture content. Therefore, delays between excavation and fill placement should be avoided. If construction occurs during rainy weather and the exposed subgrade soils are allowed to become wet or saturated, removal and replacement of excessively soft, wet soils or lime-stabilization should be anticipated. The depth of undercutting should be determined in the field by the geotechnical engineer.

It is recommended that a vapor barrier such as polyethylene sheeting be provided beneath soil supported floor slabs. Adequate construction joints and reinforcement should be provided to reduce the potential for cracking of the floor slab due to differential movement and volume change in concrete.

7 LIMITATIONS AND DESIGN REVIEW

7.1 Limitations

This report has been prepared for the exclusive use of Bartlett Cocke General Contractors, and their design team for specific application to the construction of the referenced project at the aforementioned location in Jefferson County, Texas. Our report has been prepared in accordance with the generally accepted geotechnical engineering practice common to the local area. No other warranty, express or implied, is made.

The analyses and recommendations contained in this report are based on the data obtained from the referenced subsurface exploration. The borings indicated subsurface conditions only at the specific locations and times, and only to the depths penetrated. The borings do not necessarily reflect strata variations that may exist at other locations within the project site. The validity of the recommendations is based in part on assumptions about the stratigraphy made by the Geotechnical Engineer. Such assumptions may be confirmed only during earthwork and foundation installation. Our recommendations presented in this report must be re-evaluated if subsurface conditions during construction are different from those described in this report.

If any changes in the nature, design, or location of the project are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed, and the conclusions modified or verified in writing by TWE. TWE is not responsible for any claims, damages, or liability associated with interpretation or reuse of the subsurface data or engineering analyses without the expressed written authorization of TWE.

7.2 Design Review

Review of the design and construction drawings as well as the specifications should be performed by TWE before release. The review is aimed at determining if the geotechnical design and construction recommendations contained in this report have been properly interpreted. Design review is not within the authorized scope of work for this study.

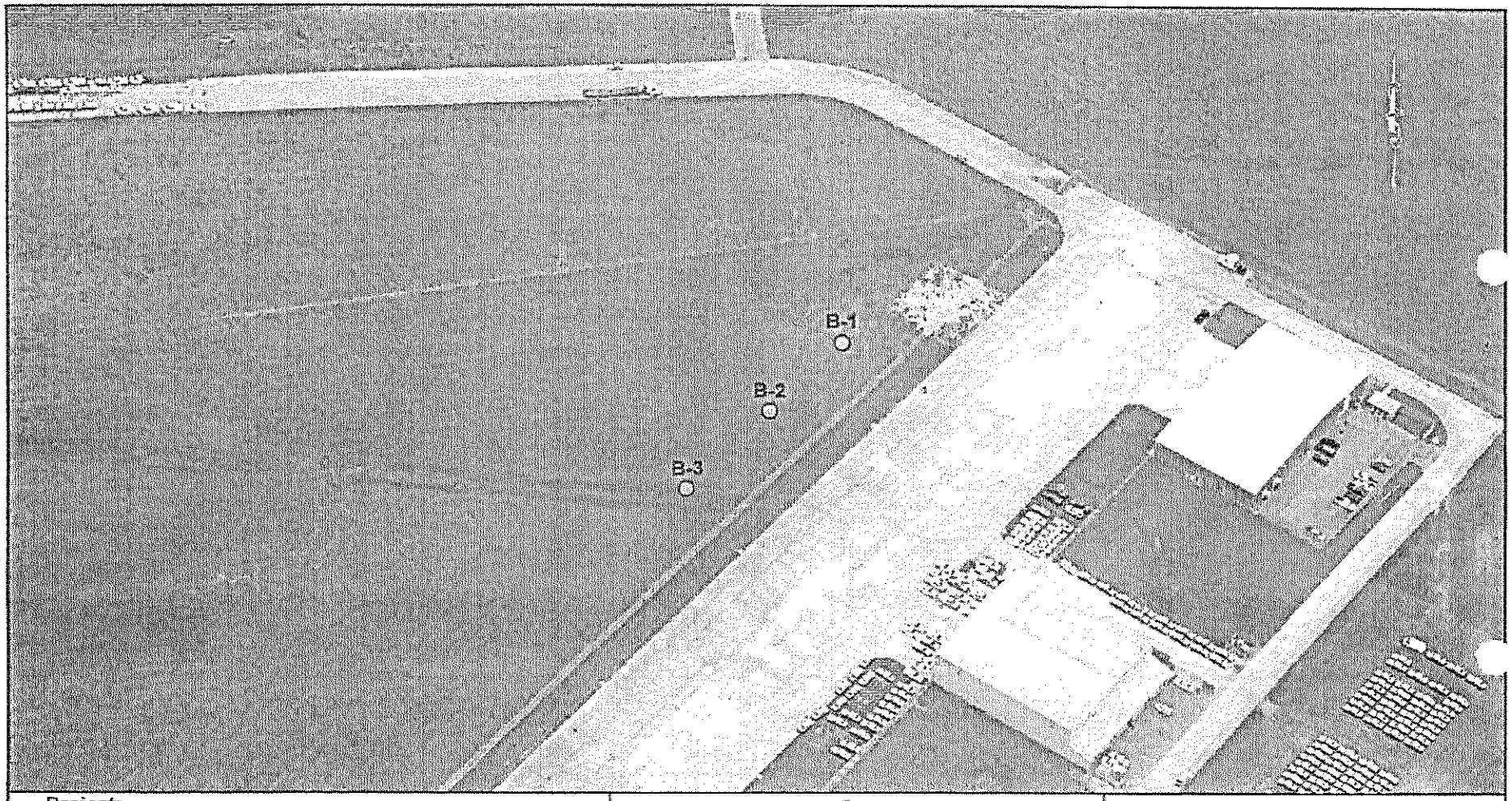
7.3 Construction Monitoring

Construction surveillance is recommended and has been assumed in preparing our recommendations. These field services are required to check for changes in conditions that may result in modifications to our recommendations. The quality of the construction practices will affect hangar foundation performance and should be monitored.

7.4 Closing Remarks

We appreciate the opportunity to be of service during this phase of the project, and we look forward to continuing our services during the construction phase and on future projects.

ILLUSTRATION



Project: SETRA Hangar No. 7 Jefferson County, Texas	Tolunay-Wong Engineers, Inc.	Project No. 09.23.110
Client: Bartlett Cocke General Contractors Houston, Texas	Approximate Boring Locations	Figure: 1

APPENDIX A

TWE PROJECT BORING LOGS (B-1 THRU B-3)
AND
KEY TO LOG TERMS AND SYMBOLS

LOG OF BORING F 1

PROJECT: SETRA Hangar No. 7
Jefferson County, Texas

CLIENT: Bartlett Cocke General Contractors
Houston, Texas

COORDINATES: N E
SURFACE ELEVATION:
DRILLING METHOD:
Dry Augered: 0' to 15'
Wash Bored: 15' to 30'

ELEVATION (FT) / DEPTH (FT)	SAMPLE TYPE	SYMBOL	MATERIAL DESCRIPTION	(P) POCKET PEN (tsf) (T) TORVANE (tsf)	STD. PENETRATION TEST BLOW/COUNT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)	PASSING #200 SIEVE (%)	OTHER TESTS PERFORMED
0			Fill: Stiff brown & reddish brown FAT CLAY (CH)	(P)2.25		27								
			Firm reddish brown & greenish gray FAT CLAY w/ SAND (CH), w/ ferrous nodules to 6'	(P)0.75		35	86	84	65	0.52	7			
5			-w/ calcareous nodules @ 4'-10'	(P)1.00		27							77	
			-w/ slickensides @ 6'-10'	(P)1.25		40								
			-becomes stiff	(P)1.50		40								
10			Stiff light gray & reddish brown LEAN CLAY w/ SAND (CL)	(P)2.50		22	101	41	28	1.38	13			
			-becomes tan & light gray	(P)1.50		21								
15														
			Medium dense reddish brown & tan SANDY SILT (ML)		9/6 11/6 16/6	29							64	
20														
			-becomes brown w/ clay pockets & seams		7/6 6/6 7/6									
25														
			Firm brown LEAN CLAY (CL) w/ silt partings & shell fragments	(P)1.25		29	99	40	23	0.81	5			
30			Bottom @ 30'											
35														

COMPLETION DEPTH: 30 ft
DATE BORING STARTED: 05/13/09
DATE BORING COMPLETED: 05/13/09
LOGGER: J. Parish
PROJECT NO.: 09.23.100

NOTES: Free water was not encountered during drilling. The borehole was set up wet due to sticking.

TOLUNAY-WONG ENGINEERS, INC.

LOG OF BORING F ?

PROJECT: SETRA Hangar No. 7
Jefferson County, Texas

CLIENT: Bartlett Cocke General Contractors
Houston, Texas

COORDINATES: N
E
SURFACE ELEVATION:

DRILLING METHOD:
Dry Augered: 0' to 15'
Wash Bored: 15' to 30'

ELEVATION (FT) / DEPTH (FT)	SAMPLE TYPE	SYMBOL	MATERIAL DESCRIPTION	(P) POCKET PEN (tsf) (T) TORVANE (tsf)	STD. PENETRATION TEST BLOWCOUNT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)	PASSING #200 SIEVE (%)	OTHER TESTS PERFORMED
0			Fill: Very stiff brown & reddish brown FAT CLAY (CH)	(P)3.25		29								
			-becomes stiff	(P)1.75		35							97	
5			Stiff reddish brown & greenish gray FAT CLAY (CH) w/ ferrous nodules to 6'	(P)2.00		33		72	53					
			-w/ calcareous nodules @ 6'-10' -w/ slickensides @ 6'-12'	(P)1.75		39	84			0.51	1			
				(P)2.50		37								
10				(P)2.50		24		54	39					
			Stiff reddish brown & greenish gray LEAN CLAY w/ SAND (CL)	(P)2.50		20								
15														
			Medium dense reddish brown & tan SILTY SAND (SM)		8/6 13/6 14/6	27								
20														
			-w/ clay pockets @ 23.5'-25'		8/6 12/6 7/6	27							35	
25														
			Firm brown LEAN CLAY (CL) w/ silt partings & shell fragments	(P)1.50		31	90			0.67	6			
30			Bottom @ 30'											
35														

COMPLETION DEPTH: 30 ft
DATE BORING STARTED: 05/13/09
DATE BORING COMPLETED: 05/13/09
LOGGER: J. Parish
PROJECT NO.: 09.23.100

NOTES: Free water was not encountered during drilling. The borehole was set up wet due to sticking.

TOLUNAY-WONG ENGINEERS, INC.

LOG OF BORING B 3

PROJECT: SETRA Hangar No. 7
Jefferson County, Texas

CLIENT: Bartlett Cocke General Contractors
Houston, Texas

COORDINATES: N E
SURFACE ELEVATION:
DRILLING METHOD:
Dry Augered: 0' to 20'
Wash Bored: 20' to 30'

ELEVATION (FT) / DEPTH (FT)	SAMPLE TYPE	SYMBOL	MATERIAL DESCRIPTION	(P) POCKET PEN (tsf) (T) TORVANE (tsf)	STD. PENETRATION TEST BLOWCOUNT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)	PASSING #200 SIEVE (%)	OTHER TESTS PERFORMED
0			Fill: Soft brown FAT CLAY (CH)	(P)2.00		32								
				(P)2.50		39		90	69					
5			Firm reddish brown & greenish gray FAT CLAY (CH)	(P)0.50		33	92			0.77	7		95	
			-w/ slickensides @ 6'-12'	(P)0.75		37								
				(P)0.75		35								
10			-w/ calcareous nodules @ 10'-12' -becomes stiff	(P)2.50		27	94	68	49	1.09	4			
15			Stiff tan & reddish brown LEAN CLAY w/ SAND (CL) -w/ silt partings & sand pockets @ 13'-17'	(P)2.00		22								
20			Medium dense tan & reddish brown SILTY SAND (SM) -w/ clay seams & calcareous nodules @ 18.5'-20'		9/6 10/6 20/6	25							46	
25					10/6 13/6 14/6	29								
			Stiff brown LEAN CLAY (CL) w/ silt partings & shell fragments	(P)1.50		34		48	31					
30			Bottom @ 30'											
35														

COMPLETION DEPTH: 30 ft
DATE BORING STARTED: 05/13/09
DATE BORING COMPLETED: 05/13/09
LOGGER: J. Parish
PROJECT NO.: 09.23.100

NOTES: Free water was encountered at the 17 ft. depth during drilling. The water level rose to the 8 ft. depth 15 min. after the initial reading.

TOLUNAY-WONG ENGINEERS, INC.

SYMBOLS AND TERMS USED ON BORING LOGS

Most Common Unified Soil Classifications System Symbols

- Fill
- Pavement
- Lean Clay (CL)
- Lean Clay w/ Sand (CL)
- Sandy Lean Clay (CL)
- Fat Clay (CH)
- Fat Clay w/ Sand (CH)
- Sandy Fat Clay (CH)
- Silty Clay (CL)
- Sandy Silty Clay (CL-ML)
- Silty Clayey Sand (SC-SM)
- Clayey Sand (SC)
- Sandy Silt (ML)
- Silty Sand (SM)
- Silt w/ Sand (ML)
- Well Graded Sand (SW)
- Well Graded Sand w/ Gravel (SW-GM)
- Poorly Graded Sand (SP)
- Poorly Graded Sand w/ Silt (SP-SM)
- Silt (ML)
- Elastic Silt (MH)
- Elastic Silt w/ Sand (MH-SP)
- Silty Gravel (GM)
- Clayey Gravel (GC)
- Well Graded Gravel (GW)
- Well Graded Gravel w/ Sand (SP-GM)
- Poorly Graded Gravel (GP)
- Peat

Sampler Symbols	Meaning
	Pavement core
	Thin - walled tube sample
	Standard Penetration Test (SPT)
	Auger sample
	Sampling attempt with no recovery
	TxDOT Cone Penetrometer Test

Field Test Data

2.50	Pocket penetrometer reading in tons per square foot
8/6"	Blow count per 6 - in. interval of the Standard Penetration Test
	Observed free water during drilling
	Observed static water level

Laboratory Test Data

Wc (%)	Moisture content in percent
Dens. (pcf)	Dry unit weight in pounds per cubic foot
Qu (tsf)	Unconfined compressive strength in tons per square foot
UU (tsf)	Compressive strength under confining pressure in tons per square foot
Str. (%)	Strain at failure in percent
LL	Liquid Limit in percent
PI	Plasticity Index
#200 (%)	Percent passing the No. 200 mesh sieve
( )	Confining pressure in pounds per square inch
*	Slickensided failure
**	Did not fail @ 15% strain

RELATIVE DENSITY OF COHESIONLESS & SEMI-COHESIONLESS SOILS

The following descriptive terms for relative density apply to cohesionless soils such as gravels, silty sands, and sands as well as semi-cohesive and semi-cohesionless soils such as sandy silts, and clayey sands.

Relative Density	Typical N_{60} Value Range*
Very Loose	0-4
Loose	5-10
Medium Dense	11-30
Dense	31-50
Very Dense	Over 50

* N_{60} is the number of blows from a 140-lb weight having a free fall of 30-in. required to penetrate the final 12-in. of an 18-in. sample interval, corrected for field procedure to an average energy ratio of 60% (Terzaghi, Peck, and Mesri, 1996).

CONSISTENCY OF COHESIVE SOILS

The following descriptive terms for consistency apply to cohesive soils such as clays, sandy clays, and silty clays.

Pocket Penetrometer (tsf)	Typical Compressive Strength (tsf)	Consistency	Typical SPT "N_{60}" Value Range**
$pp < 0.50$	$qu < 0.25$	Very soft	≤ 2
$0.50 \leq pp < 0.75$	$0.25 \leq qu < 0.50$	Soft	3-4
$0.75 \leq pp < 1.50$	$0.50 \leq qu < 1.00$	Firm	5-8
$1.50 \leq pp < 3.00$	$1.00 \leq qu < 2.00$	Stiff	9-15
$3.00 \leq pp < 4.50$	$2.00 \leq qu < 4.00$	Very Stiff	16-30
$pp \geq 4.50$	$qu \geq 4.00$	Hard	≥ 31

** An "N_{60}" value of 31 or greater corresponds to a hard consistency. The correlation of consistency with a typical SPT "N_{60}" value range is approximate.

Tolunay-Wong Engineers, Inc.

2455 West Cardinal Drive, Suite A • Beaumont, Texas 77705 • Phone: (409) 840-4214 • Fax: (409) 840-4259

August 11, 2017

LJA Engineering, Inc.
905 Orleans Street
Beaumont, Texas 77701

Attn: Mr. Heath Reynolds, P.E., Project Manager
hreynolds@lja.com

Ref: Geotechnical Report
Proposed Stiffened Slab-On-Grade Foundation
New Pre-Engineered Metal Building
Jack Brooks Regional Airport
Beaumont, Texas
TWE Project No. 17.23.097 / Report No. 92646

Dear Mr. Reynolds,

Tolunay-Wong Engineers, Inc. (TWE) is pleased to submit this report of our geotechnical engineering study performed for the above referenced project. This report contains our geotechnical recommendations for the proposed stiffened slab-on-grade foundation system to support the new pre-engineered metal building at the Jack Brooks Regional Airport in Beaumont, Texas. The geotechnical recommendations presented in this report are based on the subsurface conditions encountered at an adjacent project site during a previous geotechnical study performed under TWE Project No. 09.23.100 dated June, 2009.

Introduction

We understand, Jefferson County Sheriff's Office is proposing to construct a new 60-ft x 80-ft pre-engineered metal building adjacent to the existing to Hangar 7 (Philpott Hangar) at the Jack Brooks Regional Airport in Beaumont, Texas. Due to the close proximity of the proposed structure to the adjacent hangar, the Client is considering using the previous geotechnical investigation for Hangar 7 (TWE Project # 9.23.100, June, 2006) as a basis for foundation design for the new pre-engineered metal building at the referenced project site.

TWE was informed by the Client that that during installation of the proposed drilled and underreamed footings originally specified for the Hangar 7 project, sloughing of the shafts occurred due to slickensides and they could not be installed. As an alternate, TWE recommended a spread footing design in subsequent memos.

Based on the furnished information, the Hangar 7 building was 300-ft x 90-ft x 20-ft eave height. In comparison, the proposed sheriff's office hangar will be much smaller; approximately 60-ft x 80-ft x 18-ft eave height. From project documentation, Hangar 7 had column compressive reactions of 50-kips and column uplift reactions of 63.5-kips. The proposed structure will have compressive and uplift reactions in the range of 16-kips each.

We understand, the use of spread footing foundation system to support the proposed new metal building, following the recommendations provided in the referenced TWE report is not being considered by the Client since the installation of the spread footings would require a lot of labor intensive digging and forming with multiple concrete pours. Instead it is being considered to support the pre-engineered metal building on a stiffened slab-on-grade foundation with spread footings built into the grade beam intersections at the main frame column locations. The spread footings would be created by chamfering the corners of the subgrade at the grade beam intersections until enough plan area is obtained to get the actual maximum bearing pressure below the recommended allowable soil bearing pressure.

Shrink-Swell Potential

The tendency for a soil to shrink and swell with change in moisture content is a function of clay content and type. These properties are generally defined by the Atterberg Limits. The amount of expansion that will actually occur with increase in moisture content is inversely related to the overburden pressure. Therefore, the larger the overburden pressure, the smaller the amount of expansion. Near-surface soils are susceptible to shrink/swell behavior because they experience low amounts of overburden. Shrink/swell behavior is normally considered to be limited to the upper 6-ft of the various soil formations in this coastal zone of Texas. The presence of a water table will tend to keep the clays near the water table saturated and thus less likely to swell.

Based on the characteristics of soils encountered at the site during the referenced previous geotechnical investigation and as noted in the geotechnical report issued in June, 2009, pertaining to TWE Project No. 09.23.100, overall, the clay soils in the upper 6-ft at this site possess very high shrink/swell potential. Therefore relative lightly-loaded spread footings and slab-on-grade foundation systems constructed at this project site are susceptible to distress resulting from shrink-swell movements. Therefore the owner should be willing to accept some risk of damage from shrink-swell movements of the underlying soils. The risks associated with the use of slab-on-grade foundation systems and spread footings can however be significantly reduced provided certain considerations are addressed during the design and construction of the foundations as described in the following report sections. Based on our discussion with the Client, we understand the proposed stiffened slab-on-grade foundation system to be used to support the new building could withstand up to about 1.5-in of potential vertical movement due to expansive soils and the Client is willing to accept the associated risks.

Potential Vertical Rise

As stated earlier, the clay soils above 6-ft, lying above the expected groundwater table at this site possess very high shrink/swell potential. Considering the existing moisture conditions of the supporting soils encountered during the referenced field investigation, based on TxDOT Method TEX-124E, we estimated a potential vertical rise (PVR) at the base of the proposed slab-on-grade foundation to be about 3.5-in. We also estimated that 3-ft of soils beneath the slab-on-grade need to be removed and replaced with non-expansive structural fill soils, to reduce the PVR to be in the range of 1.5-in.

Shallow Foundation Design Considerations

Shallow foundation systems must satisfy two (2) independent design criteria with respect to soil conditions. The first criterion is that the system be designed with an appropriate factor of safety against bearing capacity failure of the soils underlying the foundations. The second criterion is that movement beneath the foundation system due to compression (consolidation) or expansion (swell) of the underlying soils must be within tolerable limits for the structure.

Spread Footings

Foundation Depth and Allowable Bearing Pressure

Based on the evaluation of PVR associated with potential shrink-swell movements of the shallow foundation system, we recommend the spread footings be placed in the natural clay soils at a minimum depth of 3-ft below existing grade. We expect the final grade will not be significantly different than the existing or final grade. The maximum allowable net bearing pressure for spread footings bearing on undisturbed natural soils at the recommended foundation depth is 1,000-psf. This allowable net soil bearing pressure includes a factor of safety of 3.0 against soil shear failure. If weak, soft, wet or otherwise unsuitable soils are encountered during construction at the recommended foundation depths, the unsuitable materials should be over-excavated, and replaced with properly-compacted structural fill materials or the foundation depth can be extended to the depth of competent soil.

Uplift Resistance

Resistance to vertical force (uplift) is provided by the weight of the concrete footing plus the weight of the soil directly above the footing. Based on the groundwater measurements at this site, we recommend the ultimate uplift resistance be based on total unit weights for soil and concrete of 120-pcf and 150-pcf, respectively. The calculated ultimate uplift resistance should be reduced by a factor of safety of 1.2 to calculate the allowable uplift resistance.

Lateral Resistance

Horizontal loads acting on spread footings will be resisted by passive earth pressure acting on one side of the footing and by base adhesion in cohesive soils (clays). An allowable passive pressure of 750-psf can be used for the natural clay soils or properly-compacted structural select fill material used as backfill around the footings. An allowable base adhesion of 375-psf can be used for footings in good contact with the proposed structural clay fill beneath the footing or with natural clay soils at the recommended/final depth of the footings.

Resistance to Overturning Moments

The contact pressure distribution of a spread footing subject to overturning moments will be trapezoidal. The design of the foundation should be such that full soil contact and positive pressure area are maintained under the foundation. In addition, the maximum foundation contact pressure should not exceed the allowable net bearing pressure of the foundation soil.

Settlement

Estimated settlement for the recommended spread footings placed at the recommended depth is based on our experience. This estimate assumes uniformly loaded foundations with pressures that are no greater than the recommended allowable net bearing pressures and assume the foundations are designed and constructed in accordance with the recommendations provided in this report. In addition, the estimates assume that foundations will act as isolated foundations and that the clear spacing between adjacent foundations is great enough to significantly reduce the influence of adjacent foundations.

Settlement of properly designed and installed spread footings is estimated to be on the order of about 1-in assuming a clear spacing between footings of at least the width of the larger adjacent footing. Differential settlement between spread footings could be on the order of about one-half (1/2) the total settlement. TWE can perform detailed settlement calculation upon request if information regarding the actual footing sizes and the bearing pressures are provided.

Stiffened Slab-On-Grade Foundation

We understand it is being considered to support the pre-engineered metal building on a stiffened slab-on-grade foundation with spread footings built into the grade beam intersections at the main frame column locations. The spread footings would be created by chamfering the corners of the subgrade at the grade beam intersections until enough plan area is obtained to get the actual maximum bearing pressure below the recommended allowable soil bearing pressure.

The proposed slab-on-grade should be supported on properly-prepared subgrade or properly-compacted structural select fill with the associated spread footings placed at a minimum depth of 3-ft below final grade. We recommend an allowable soil bearing capacity of 1,000-psf be used for design purposes. This allowable net bearing pressure includes a factor of safety of 3.0 against soil shear failure.

As discussed earlier, the typical method of reducing the swell potential includes installation of a layer of non-expansive soil beneath the slab. This method has beneficial results but does not totally eliminate the potential for shrink/swell movements. Based on our PVR estimation, in order to reduce the potential shrink/swell movements to tolerable limits (about 1.5-in for this project, as discussed before), it is recommended that a minimum of 3-ft of non-expansive select structural fill be provided beneath slab-on-grade.

Select structural fill for the project should consist of a clean sandy lean clay (CL) material with a liquid limit (LL) less than 40, plasticity index (PI) between 10 and 20, greater than 60% passing the No. 200 sieve and an organic content less than 4%. Select fill should be placed in thin lifts, moisture conditioned between -2% and +3% of optimum moisture content compacted to a minimum 95% of the maximum dry density as determined by the *Standard Test Method for Laboratory Compaction Characteristics of Soil using Standard Efforts (ASTM D 698).*

Prior to any filling operations, samples of the proposed fill materials should be obtained for laboratory moisture-density testing. The tests will provide a basis for evaluation of fill compaction by in-place density testing. A qualified soil technician should perform sufficient in-place density tests during the filling operations to verify that proper levels of compaction are being attained.

The minimum fill thickness may be provided by undercutting the existing material and replacing it with select fill, raising the foundation pad with select fill or a combination of these two (2) alternatives. Structural select fill should extend full depth at least 3-ft beyond the perimeter of the project structure.

It should be noted that these methods for reducing shrink/swell movements are designed for normal seasonal changes in soil moisture content of the subgrade soils. Excessive shrink/swell movements can be expected if increases in soil moisture content occur as a result of broken water and sewer lines, improper drainage of surface water, shrubbery and trees planted near the mausoleum slab and excessive lawn or shrubbery irrigation.

It is recommended that a vapor barrier such as polyethylene sheeting be provided beneath the soil-supported floor slab. Adequate construction joints and reinforcement should be provided to reduce the potential for cracking of the floor slab due to differential movement and volume change in concrete. We also recommend that the slab-on-grade, at a minimum, include a thickened edge around the perimeter to prevent desiccation and undermining of the foundation soils.

Shallow Foundation Construction

The performance of shallow foundation systems associated with the project will be highly dependent upon the quality of construction. Thus, it is recommended shallow foundation construction be monitored by a representative of the Geotechnical Engineer experienced in quality control testing and inspection procedures to help evaluate foundation construction.

Areas designated for shallow foundation construction should be stripped of all surface vegetation, loose topsoil and fill material. The exposed soil subgrade should then be proof-rolled with at least a 15-ton pneumatic roller, loaded dump truck or equivalent to detect weak areas. Such weak areas should be removed and replaced with properly-compacted structural fill material. Subsequent to proof-rolling, and just prior to placement of select fill, the exposed subgrade in foundation areas should be compacted to at least 95% of the maximum dry density near optimum (to +3%) in accordance with *Standard Proctor Compaction Efforts (ASTM D 698)* procedures.

Spread footings and grade beams could be either open-cut and formed or neatly-excavated. Excavations for shallow foundations should be made with a smooth-mouthed bucket or hand labor. Any loose or soft soils encountered during foundation excavation should be removed and replaced with select fill prior to form installation and steel placement. The soils exposed in excavations for shallow foundations should be protected from disturbance prior to and during foundation construction (2-in thick seal slab of lean concrete could be placed over the exposed soils). The need for protection will be most critical for large foundation excavations which are expected to remain open for more than one (1) working day.

If any of the foundations are formed, any voids between the footing and the excavation walls should be backfilled with cement-stabilized sand [one and one-half (1-1/2) sacks of cement per ton of sand] or flowable fill.

Select structural fill for the project should consist of a clean sandy lean clay (CL) material with a liquid limit (LL) less than 40, plasticity index (PI) between 10 and 20, greater than 60% passing the No. 200 sieve and an organic content less than 4%. Select fill should be placed in thin lifts, moisture conditioned between -2% and +3% of optimum moisture content and compacted to a minimum 95% of the maximum dry density as determined by the *Standard Test Method for Laboratory Compaction Characteristics of Soil using Standard Efforts (ASTM D 698).*

Granular soils such as sands and gravels are not recommended for use as select fill due to the potential to trap water. Excess water could result in softening of the bearing soils, causing a loss of support and possible heaving from soil swelling. It may be necessary to import select clay fill from off-site borrow sources. We recommend proposed sources of select fill or backfill soil be tested for compliance with the project specifications prior to use. In addition, it is imperative specific provisions be made to include testing of the actual fill and backfill soils delivered to the project site during construction to provide a level of quality assurance that the material specification requirements are maintained.

Prior to any filling or backfilling operations, samples of the proposed fill and backfill materials should be obtained for laboratory moisture-density testing. These tests will provide a basis for evaluation of fill and backfill compaction by in-place density testing. A representative of the Geotechnical Engineer should perform sufficient in-place density tests during the filling and backfilling operations to verify that proper levels of compaction are being attained. Maximum loose lift thicknesses for fill and backfill placement will depend on the type of compaction equipment used. Recommended fill layers are summarized in Table 1 below.

Table 1: Compaction Equipment and Maximum Lift Thickness

Compaction Equipment	Maximum Lift Thickness
Mechanical Hand Tamper	4-in
Pneumatic-Tired Roller	6-in
Tamping Foot Roller	8-in
Sheepsfoot Roller	8-in

Groundwater and Surface Water Control

The performance of the shallow foundation system for the proposed project structures will not only be dependent upon the quality of construction but also upon the stability of the moisture content of the near surface soils. Therefore, we highly recommend that site drainage be developed so that ponding of surface runoff near the structure does not occur. Accumulations of water near structure foundations may cause significant moisture variations in the soils adjacent to the foundation thus increasing the potential for structural distress.

Based on the groundwater measurements obtained from the project borings, shallow foundations constructed within this area at the recommended foundation depth should bear above the static groundwater level and we expect foundation excavations can be performed in the dry. Perched water into shallow foundation excavations, if encountered, should be pumped out and not allowed to deteriorate the foundation soils. If the quantities of water present cannot be controlled using sumps and pumps, a more rigorous method of groundwater control could be required. In addition, surface runoff could provide another source of water into the excavation. We recommend that adequate surface drainage away from the excavations be established to prevent surface runoff from flooding excavations during construction.

Open Excavation

The sides of open excavations are susceptible to deterioration upon exposure and may become unstable. The contractor's competent supervisor should inspect all excavations and take appropriate safety measures including the use of trench shields and sloped excavations. We recommend that OSHA standards be observed with all excavations.

Limitations

This report has been prepared for the exclusive use of LJA Engineering, Inc. for specific application to the proposed foundation system to support the new pre-engineered metal building at the Jack Brooks Regional Airport in Beaumont, Texas. This report has been prepared in accordance with generally-accepted geotechnical engineering practices common to the local area. No other warranty, express or implied, is made.

The analyses and recommendations contained in this report are based on the data obtained from the previously performed referenced subsurface explorations at the project site. The soil borings indicated subsurface conditions only at the specific locations and times performed and only to the depth penetrated. The soil borings do not necessarily reflect strata variations that may exist at other locations within the project site. The validity of the recommendations provided is based in part on assumptions about the stratigraphy made by the Geotechnical Engineer. Such assumptions may be confirmed only during earthwork and foundation installation. Our recommendations presented in this revised report must be re-evaluated if subsurface conditions during construction are different from those described in this report.

If any changes in the nature, design or location of the project are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and the conclusions modified or verified in writing by TWE. TWE is not responsible for any claims, damages or liability associated with interpretation or reuse of the subsurface data or engineering analyses without the expressed written authorization of TWE.

Construction Surveillance

Construction surveillance is recommended and has been assumed in preparing our recommendations. These field services are required to check for changes in conditions that may result in modifications to our recommendations. The quality of the construction practices will affect foundation performance and should be monitored.

Closing

We appreciate the opportunity to provide our services to this project. If you have any questions regarding this report or if we can be of further assistance, please contact us.

Sincerely,

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JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Protecting existing groundcovers and grass to remain.
2. Remove existing groundcovers and grass.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Disconnecting and capping or sealing site utilities.
7. Temporary erosion and sedimentation control measures.

1.2 MATERIAL OWNERSHIP

A. Except for stripped topsoil or other materials indicated to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.3 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.

C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

D. Do not commence site clearing operations until temporary erosion and sedimentation control measures are in place.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. Satisfactory Soil Materials: Requirements for satisfactory soil materials are specified in Division 31 Section "Earth Moving."

1. Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to a sediment and erosion control plan, specific to the site, that complies with EPA 832/R-92-005 or requirements of authorities having jurisdiction, whichever is more stringent.

B. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.

C. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 UTILITIES

A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.

1. Arrange with utility companies to shut off indicated utilities.

B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Architect not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Architect's written permission.

C. Removal of underground utilities is included in Division 21, Division 22, Division 23, Division 26, Division 27 and Division 28.Sections covering site utilities.

3.4 CLEARING AND GRUBBING

A. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches (200 mm), and compact each layer to a density equal to adjacent original ground.

3.5 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.

C. Stockpile topsoil materials away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.

3.6 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

3.7 DISPOSAL

A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

1. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

END OF SECTION 311000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Preparing subgrades for slabs-on-grade, pavements, lawns, and grasses.
2. Excavating and backfilling for buildings and structures.
3. Drainage course for slabs-on-grade.
4. Subbase course for concrete pavements.
5. Subbase course for asphalt paving.
6. Excavating and backfilling for utility trenches.

1.2 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Course placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Course placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Course supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subbase Course: Course placed between the subgrade and base course for hot-mix asphalt pavement, or course placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.

K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.3 PROJECT CONDITIONS

A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Engineer and then only after arranging to provide temporary utility services according to requirements indicated.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

B. Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP, and SM, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.

E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.

F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.

G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.

H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.

2.2 ACCESSORIES

A. Warning Tape: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

B. Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface is specified in Division 31 Section "Site Clearing."

C. Protect and maintain erosion and sedimentation controls, which are specified in Division 31 Section "Site Clearing." during earthwork operations.

3.2 EXCAVATION

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.3 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing

and removing concrete formwork, for installing services and other construction, and for inspections.

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.5 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit, unless otherwise indicated.

1. Clearance: 12 inches each side of pipe or conduit.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material, 4 inches deeper elsewhere, to allow for bedding course.

3.6 SUBGRADE INSPECTION

A. Proof-roll subgrade below the building slabs and pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.7 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Engineer.

1. Fill unauthorized excavations under other construction or utility pipe as directed by Engineer.

3.8 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.9 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Place and compact initial backfill of subbase material, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the utility pipe or conduit.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of utility piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

D. Place and compact final backfill of satisfactory soil to final subgrade elevation.

E. Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.10 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use satisfactory soil material.
3. Under building slabs, use engineered fill.
4. Under footings and foundations, use engineered fill.

3.11 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
2. Under lawn or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
3. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.13 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Lawn or Unpaved Areas: Plus or minus 1 inch.
2. Pavements: Plus or minus 1/2 inch.

C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

3.14 SUBBASE AND BASE COURSES

A. Place subbase course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place subbase course under pavements and walks as follows:

1. Shape subbase course to required crown elevations and cross-slope grades.

2. Compact subbase course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.15 DRAINAGE COURSE

A. Place drainage course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:

1. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
2. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.16 FIELD QUALITY CONTROL

A. Testing Agency: Contractor will engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.

B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.

C. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Engineer.

D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable.

E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

PART 4 - MEASUREMENT AND PAYMENT

4.1 EARTHWORK

A. Measurement: No measurement for Earth work of this Section will be made.

B. Payment: Payment for Earth work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 312000

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 312319 - DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes construction dewatering.

1.2 PERFORMANCE REQUIREMENTS

A. Dewatering Performance: Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

1.3 SUBMITTALS

A. Shop Drawings: For dewatering system. Show arrangement, locations, and details of wells and well points; locations of risers, headers, filters, pumps, power units, discharge lines, piezometers, and flow-measuring devices; and means of discharge, control of sediment, and disposal of water.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning dewatering. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Preinstallation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

A. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements, establishing exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.

1. During dewatering, regularly resurvey benchmarks, maintaining an accurate log of surveyed elevations for comparison with original elevations. Promptly notify Architect if changes in elevations occur or if cracks, sags, or other damage is evident in adjacent construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 INSTALLATION

A. Provide temporary grading to facilitate dewatering and control of surface water.

B. Monitor dewatering systems continuously.

C. Protect and maintain temporary erosion and sedimentation controls, which are specified in Division 31 Section "Site Clearing" during dewatering operations.

D. Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal, and surface-water controls.

1. Space well points or wells at intervals required to provide sufficient dewatering.
2. Use filters or other means to prevent pumping of fine sands or silts from the subsurface.

E. Before excavating below ground-water level, place system into operation to lower water to specified levels. Operate system continuously until drains, sewers, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.

F. Provide an adequate system to lower and control ground water to permit excavation, construction of structures, and placement of fill materials on dry subgrades. Install sufficient dewatering equipment to drain water-bearing strata above and below bottom of foundations, drains, sewers, and other excavations.

1. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.

G. Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations.

1. Maintain piezometric water level a minimum of 24 inches below surface of excavation.

H. Provide standby equipment on site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails. If dewatering requirements are not satisfied due to inadequacy or failure of dewatering system, restore damaged structures and foundation soils at no additional expense to Owner.

1. Remove dewatering system from Project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of 36 inches below overlying construction.

END OF SECTION 312319

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JSCO HANGAR BUILDING

SECTION 313116 - TERMITE CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Soil treatment with termiticide.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated. Include the EPA-Registered Label.

B. Product certificates.

C. Soil Treatment Application Report: Include the following:

1. Date and time of application.
2. Moisture content of soil before application.
3. Brand name and manufacturer of termiticide.
4. Quantity of undiluted termiticide used.
5. Dilutions, methods, volumes, and rates of application used.
6. Areas of application.
7. Water source for application.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: A specialist who is licensed according to regulations of authorities having jurisdiction to apply termite control treatment and products in jurisdiction where Project is located.

B. Regulatory Requirements: Formulate and apply termiticides according to the EPA-Registered Label.

1.4 WARRANTY

A. Special Warranty: Manufacturer's standard form, signed by Applicator and Contractor certifying that termite control work, consisting of applied soil termiticide treatment, will prevent infestation of subterranean termites. If subterranean termite activity or damage is discovered during warranty period, re-treat soil and repair or replace damage caused by termite infestation.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Termiticides:

a. Aventis Environmental Science USA LP; Termidor.
b. Bayer Corporation; Premise 75.
c. Dow AgroSciences LLC; Dursban TC.
d. FMC Corporation, Agricultural Products Group; Prevail FT.
e. Syngenta; Demon TC.

2.2 SOIL TREATMENT

A. Termiticide: Provide an EPA-registered termiticide complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to prevent termite infestation. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to product's EPA-Registered Label.

PART 3 - EXECUTION

3.1 PREPARATION

A. General: Remove all extraneous sources of wood cellulose and other edible materials such as wood debris, tree stumps and roots, stakes, formwork, and construction waste wood from soil within and around foundations.

B. Soil Treatment Preparation: Loosen, rake, and level soil to be treated except previously compacted areas under slabs and footings. Termiticides may be applied before placing compacted fill under slabs if recommended in writing by termiticide manufacturer.

3.2 APPLYING SOIL TREATMENT

A. Application: Mix soil treatment termiticide solution to a uniform consistency. Provide quantity required for application at the label volume and rate for the maximum specified concentration of termiticide, according to manufacturer's EPA-Registered Label, to the following so that a continuous horizontal and vertical termiticidal barrier or treated zone is established around and under building construction. Distribute treatment evenly.

1. Slabs-on-Grade: Underground-supported slab construction, including footings, building slabs, and attached slabs as an overall treatment. Treat soil materials before concrete footings and slabs are placed.
2. Foundations: Adjacent soil including soil along the entire inside perimeter of foundation walls, along both sides of interior partition walls, around plumbing pipes and electric conduit penetrating the slab, and around interior column footers, piers, and chimney bases; also along the entire outside perimeter, from grade to bottom of footing. Avoid soil washout around footings.
3. Penetrations: At expansion joints, control joints, and areas where slabs will be penetrated.

B. Avoid disturbance of treated soil after application. Keep off treated areas until completely dry.

C. Protect termiticide solution, dispersed in treated soils and fills, from being diluted until ground-supported slabs are installed. Use waterproof barrier according to EPA-Registered Label instructions.

D. Post warning signs in areas of application.

E. Reapply soil treatment solution to areas disturbed by subsequent excavation, grading, landscaping, or other construction activities following application.

END OF SECTION 313116

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes exterior cement concrete pavement for the following:

1. Driveways and roadways.
2. Parking lots.
3. Curbs and gutters.
4. Walkways.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete pavement mixture.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C 94/C 94M requirements for production facilities and equipment.

B. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by requirements in the Contract Documents.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

A. Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

B. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.

C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.

D. Plain Steel Wire: ASTM A 82, as drawn.

E. Deformed-Steel Wire: ASTM A 496.

F. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice."

2.2 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:

1. Portland Cement: ASTM C 150, Type I/II. Supplement with the following:

a. Fly Ash: ASTM C 618, Class C or F.
b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.

B. Normal-Weight Aggregates: ASTM C 33, uniformly graded. Provide aggregates from a uniformly graded single source.

C. Water: ASTM C 94/C 94M.

D. Air-Entraining Admixture: ASTM C 260.

E. Chemical Admixtures: ASTM C 494/C 494M, of type suitable for application, certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

2.3 FIBER REINFORCEMENT

A. Synthetic Fiber: Monofilament or fibrillated polypropylene fibers engineered and designed for use in concrete pavement, complying with ASTM C 1116, Type III, 1/2 to 1-1/2 inches long.

2.4 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

D. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.

E. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

F. White Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B.

2.5 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.

B. Pavement-Marking Paint: Latex, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952, with drying time of less than 3 minutes.

2.6 WHEEL STOPS

A. Wheel Stops: Precast, air-entrained concrete.

1. Dowels: Galvanized steel, 3/4-inch diameter, 10-inch minimum length.

2.7 CONCRETE MIXTURES

A. Prepare design mixtures, proportioned according to ACI 301, with the following properties:

1. Compressive Strength (28 Days): 3000 psi.
2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.40.
3. Slump Limit: 4 inches, plus or minus 1 inch.
4. Air Content: 4-1/2 percent plus or minus 1.5 percent.

B. Synthetic Fiber: Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1.0 lb/cu. yd.

C. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions.

2.8 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M and ASTM C 1116. Furnish batch certificates for each batch discharged and used in the Work.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Proof-roll prepared subbase surface below concrete pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.4 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness to match jointing of existing adjacent concrete pavement.

E. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.

3.5 CONCRETE PLACEMENT

A. Moisten subbase to provide a uniform dampened condition at time concrete is placed.

B. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

C. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

D. Screed pavement surfaces with a straightedge and strike off.

E. Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.6 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float

surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
2. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

C. Slip-Resistive Aggregate Finish: Before final floating, spread slip-resistive aggregate finish on pavement surface according to manufacturer's written instructions.

1. Cure concrete with curing compound recommended by slip-resistive aggregate manufacturer. Apply curing compound immediately after final finishing.
2. After curing, lightly work surface with a steel wire brush or abrasive stone and water to expose nonslip aggregate.

3.7 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these methods.

3.8 PAVEMENT TOLERANCES

A. Comply with tolerances of ACI 117 and as follows:

1. Elevation: 1/4 inch.
2. Thickness: Plus 3/8 inch, minus 1/4 inch.
3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/4 inch.
4. Joint Spacing: 3 inches.
5. Contraction Joint Depth: Plus 1/4 inch, no minus.
6. Joint Width: Plus 1/8 inch, no minus.

3.9 PAVEMENT MARKING

A. Allow concrete pavement to cure for 28 days and be dry before starting pavement marking.

B. Sweep and clean surface to eliminate loose material and dust.

C. Apply paint with mechanical equipment to produce pavement markings of dimensions indicated with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

3.10 WHEEL STOPS

A. Securely attach wheel stops into pavement with not less than two galvanized steel dowels embedded in holes drilled or cast into wheel stops at one-quarter to one-third points. Firmly bond each dowel to wheel stop and to pavement. Securely install dowels into pavement and bond to wheel stop. Recess head of dowel beneath top of wheel stop.

3.11 REPAIRS AND PROTECTION

A. Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.

B. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement.

C. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

PART 4 - MEASUREMENT AND PAYMENT

4.1 CONCRETE PAVING

A. Measurement: No measurement for Concrete Paving work of this Section will be made.

B. Payment: Payment for Concrete Paving work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 321313

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Expansion and contraction joints within cement concrete pavement.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For each type and color of joint sealant required.

C. Product certificates & test reports.

D. Compatibility and Adhesion Test Reports: From sealant manufacturer.

1.3 QUALITY ASSURANCE

A. Preconstruction Compatibility and Adhesion Testing: Submit samples of materials that will contact or affect joint sealants to joint-sealant manufacturers for testing according to ASTM C 1087 to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

2.2 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer based on testing and field experience.

1. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 COLD-APPLIED JOINT SEALANTS

A. Single-Component Jet-Fuel-Resistant Urethane Sealant for Concrete: Single-component, pourable, coal-tar-modified, urethane formulation complying with ASTM C 920 for Type S; Grade P; Class 25; Uses T, M, and, as applicable to joint substrates indicated, O.

1. Products:

a. Sonneborn, Div. of ChemRex, Inc.; Sonomeric SL-1.

2.4 JOINT-SEALANT BACKER MATERIALS

A. General: Provide joint-sealant backer materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by joint-sealant manufacturer based on field experience and laboratory testing.

B. Round Backer Rods for Cold- and Hot-Applied Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

C. Backer Strips for Cold- and Hot-Applied Sealants: ASTM D 5249; Type 2; of thickness and width required to control sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

D. Round Backer Rods for Cold-Applied Sealants: ASTM D 5249, Type 3, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.

B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience.

C. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

D. Install backer materials to support sealants during application and at position required to produce optimum sealant movement capability. Do not leave gaps between ends of backer materials. Do not stretch, twist, puncture, or tear backer materials. Remove absorbent backer materials that have become wet before sealant application and replace them with dry materials.

E. Install sealants at the same time backings are installed to completely fill recesses provided for each joint configuration and to produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

G. Clean off excess sealants or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

END OF SECTION 321373

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 330500 - COMMON WORK RESULTS FOR UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Piping joining materials.
2. Sleeves.
3. Identification devices.
4. Grout.
5. Piping system common requirements.
6. Equipment installation common requirements.
7. Concrete bases.
8. Metal supports and anchorages.

1.2 DEFINITIONS

A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions.

B. Concealed Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.

1.3 SUBMITTALS

A. Product Data: For the following:

1. Dielectric fittings.
2. Identification devices.

1.4 QUALITY ASSURANCE

A. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

PART 2 - PRODUCTS

2.1 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.

1. ASME B16.21, nonmetallic, flat, asbestos free, 1/8-inch maximum thickness, unless otherwise indicated.

    a. Full-Face Type: For flat-face, Class 125, cast-iron and cast-bronze flanges.
    b. Narrow-Face Type: For raised-face, Class 250, cast-iron and steel flanges.

2. AWWA C110, rubber, flat face, 1/8 inch thick, unless otherwise indicated; and full-face or ring type, unless otherwise indicated.

B. Flange Bolts and Nuts: ASME B18.2.1, carbon steel, unless otherwise indicated.

C. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer, unless otherwise indicated.

D. Solvent Cements for Joining Plastic Piping:

1. ABS Piping: ASTM D 2235.
2. CPVC Piping: ASTM F 493.
3. PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.
4. PVC to ABS Piping Transition: ASTM D 3138.

E. Fiberglass Pipe Adhesive: As furnished or recommended by pipe manufacturer.

2.2 SLEEVES

A. Galvanized-Steel Sheet Sleeves: 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint.

B. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized, plain ends.

C. Cast-Iron Sleeves: Cast or fabricated "wall pipe" equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

D. Molded PVC Sleeves: Permanent, with nailing flange for attaching to wooden forms.

E. PVC Pipe Sleeves: ASTM D 1785, Schedule 40.

F. Molded PE Sleeves: Reusable, PE, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.

2.3 IDENTIFICATION DEVICES

A. Equipment Nameplates: Metal permanently fastened to equipment with data engraved or stamped.

1. Data: Manufacturer, product name, model number, serial number, capacity, operating and power characteristics, labels of tested compliances, and essential data.

2. Location: Accessible and visible.

B. Pressure-Sensitive Pipe Markers: Manufacturer's standard preprinted, color-coded, pressure-sensitive-vinyl type with permanent adhesive.

C. Pipes with OD, Including Insulation, Less Than 6 Inches: Full-band pipe markers, extending 360 degrees around pipe at each location.

D. Pipes with OD, Including Insulation, 6 Inches and Larger: Either full-band or strip-type pipe markers, at least three times letter height and of length required for label.

E. Lettering: Use piping system terms indicated and abbreviate only as necessary for each application length.

1. Arrows: Either integrally with piping system service lettering to accommodate both directions of flow, or as separate unit on each pipe marker to indicate direction of flow.

F. Plastic Tape: Manufacturer's standard color-coded, pressure-sensitive, self-adhesive vinyl tape, at least 3 mils thick.

1. Width: 1-1/2 inches on pipes with OD, including insulation, less than 6 inches; 2-1/2 inches for larger pipes.
2. Color: Comply with ASME A13.1, unless otherwise indicated.

G. Valve Tags: Stamped or engraved with 1/4-inch letters for piping system abbreviation and 1/2-inch sequenced numbers. Include 5/32-inch hole for fastener.

1. Material: Provide valve tags made from one of the following materials:

a. 0.032-inch- thick, polished brass or aluminum.
b. 0.0375-inch- thick stainless steel.
c. 3/32-inch- thick plastic laminate with 2 black surfaces and a white inner layer.
d. Valve manufacturer's standard solid plastic.

2. Size: 1-1/2 inches in diameter, unless otherwise indicated.

H. Valve Tag Fasteners: Brass, wire-link or beaded chain; or brass S-hooks.

I. Engraved Plastic-Laminate Signs: ASTM D 709, Type I, cellulose, paper-base, phenolic-resin-laminate engraving stock; Grade ES-2, black surface, black phenolic core, with white melamine subcore, unless otherwise indicated. Fabricate in sizes required for message. Provide holes for mechanical fastening.

1. Engraving: Engraver's standard letter style, of sizes and with terms to match equipment identification.
2. Thickness: 1/16 inch, for units up to 20 sq. in. or 8 inches in length, and 1/8 inch for larger units.
3. Fasteners: Self-tapping, stainless-steel screws or contact-type permanent adhesive.

J. Plastic Equipment Markers: Manufacturer's standard laminated plastic, in the following color codes:

1. Green: Cooling equipment and components.
2. Yellow: Heating equipment and components.
3. Brown: Energy reclamation equipment and components.
4. Blue: Equipment and components that do not meet criteria above.
5. Hazardous Equipment: Use colors and designs recommended by ASME A13.1.
6. Terminology: Match schedules as closely as possible. Include the following:
   a. Name and plan number.
   b. Equipment service.
   c. Design capacity.
   d. Other design parameters such as pressure drop, entering and leaving conditions, and speed.
7. Size: 2-1/2 by 4 inches for control devices, dampers, and valves; 4-1/2 by 6 inches for equipment.

2.4 GROUT

A. Description: ASTM C 1107, Grade B, nonshrink and nonmetallic, dry hydraulic-cement grout.

1. Characteristics: Post hardening, volume adjusting, nonstaining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
2. Design Mix: 5000-psi, 28-day compressive strength.
3. Packaging: Premixed and factory packaged.

PART 3 - EXECUTION

3.1 PIPING INSTALLATION

A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on the Coordination Drawings.

B. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.

C. Install piping to permit valve servicing.

D. Install piping at indicated slopes.

E. Install piping free of sags and bends.

F. Install fittings for changes in direction and branch connections.

G. Select system components with pressure rating equal to or greater than system operating pressure.

H. Sleeves are not required for core-drilled holes.

I. Permanent sleeves are not required for holes formed by removable PE sleeves.

J. Install sleeves for pipes passing through concrete and masonry walls and concrete floor and roof slabs.

1. Cut sleeves to length for mounting flush with both surfaces.

a. Exception: Extend sleeves installed in floors of equipment areas or other wet areas 2 inches above finished floor level.

2. Install sleeves in new walls and slabs as new walls and slabs are constructed.

a. PVC Pipe Sleeves: For pipes smaller than NPS 6.
b. Steel Sheet Sleeves: For pipes NPS 6 and larger, penetrating gypsum-board partitions.

K. Verify final equipment locations for roughing-in.

L. Refer to equipment specifications in other Sections for roughing-in requirements.

3.2 PIPING JOINT CONSTRUCTION

A. Join pipe and fittings according to the following requirements and Division 33 Sections specifying piping systems.

B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.

C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.

D. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:

1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

E. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.

F. Grooved Joints: Assemble joints with grooved-end pipe coupling with coupling housing, gasket, lubricant, and bolts according to coupling and fitting manufacturer's written instructions.

G. Soldered Joints: Apply ASTM B 813 water-flushable flux, unless otherwise indicated, to tube end. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy (0.20 percent maximum lead content) complying with ASTM B 32.

H. Brazed Joints: Construct joints according to AWS's "Brazing Handbook," "Pipe and Tube" Chapter, using copper-phosphorus brazing filler metal complying with AWS A5.8.

I. Pressure-Sealed Joints: Assemble joints for plain-end copper tube and mechanical pressure seal fitting with proprietary crimping tool to according to fitting manufacturer's written instructions.

J. Plastic Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:

1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
2. ABS Piping: Join according to ASTM D 2235 and ASTM D 2661 appendixes.
3. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.
4. PVC Pressure Piping: Join schedule number ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
5. PVC Nonpressure Piping: Join according to ASTM D 2855.
6. PVC to ABS Nonpressure Transition Fittings: Join according to ASTM D 3138 Appendix.

K. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D 3139.

L. Plastic Nonpressure Piping Gasketed Joints: Join according to ASTM D 3212.

M. Plastic Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.

1. Plain-End PE Pipe and Fittings: Use butt fusion.
2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.

N. Bonded Joints: Prepare pipe ends and fittings, apply adhesive, and join according to pipe manufacturer's written instructions.

3.3 PIPING CONNECTIONS

A. Make connections according to the following, unless otherwise indicated:

1. Install unions, in piping NPS 2 and smaller, adjacent to each valve and at final connection to each piece of equipment.

2. Install flanges, in piping NPS 2-1/2 and larger, adjacent to flanged valves and at final connection to each piece of equipment.
3. Install dielectric fittings at connections of dissimilar metal pipes.

3.4 EQUIPMENT INSTALLATION

A. Install equipment level and plumb, unless otherwise indicated.

B. Install equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference with other installations. Extend grease fittings to an accessible location.

C. Install equipment to allow right of way to piping systems installed at required slope.

3.5 IDENTIFICATION

A. Piping Systems: Install pipe markers on each system. Include arrows showing normal direction of flow.

1. Plastic markers, with application systems. Install on insulation segment if required for hot noninsulated piping.
2. Locate pipe markers on exposed piping according to the following:

    a. Near each valve and control device.
    b. Near each branch, excluding short takeoffs for equipment and terminal units. Mark each pipe at branch if flow pattern is not obvious.
    c. Near locations where pipes pass through walls or floors or enter inaccessible enclosures.
    d. At manholes and similar access points that permit view of concealed piping.
    e. Near major equipment items and other points of origination and termination.

B. Equipment: Install engraved plastic-laminate sign or equipment marker on or near each major item of equipment.

1. Lettering Size: Minimum 1/4 inch high for name of unit if viewing distance is less than 24 inches, 1/2 inch high for distances up to 72 inches, and proportionately larger lettering for greater distances. Provide secondary lettering two-thirds to three-fourths of size of principal lettering.
2. Text of Signs: Provide name of identified unit. Include text to distinguish among multiple units, inform user of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.

C. Adjusting: Relocate identifying devices that become visually blocked by work of this or other Divisions.

3.6 CONCRETE BASES

A. Concrete Bases: Anchor equipment to concrete base according to equipment manufacturer's written instructions and according to seismic codes at Project.

1. Construct concrete bases of dimensions indicated, but not less than 4 inches larger in both directions than supported unit.
2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch centers around the full perimeter of base.
3. Install epoxy-coated anchor bolts for supported equipment that extend through concrete base, and anchor into structural concrete floor.
4. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
5. Install anchor bolts to elevations required for proper attachment to supported equipment.
6. Install anchor bolts according to anchor-bolt manufacturer's written instructions.
7. Use 4000-psi, 28-day compressive-strength concrete and reinforcement as specified in Division 03 Section "Cast-in-Place Concrete."

3.7 ERECTION OF METAL SUPPORTS AND ANCHORAGES

A. Refer to Division 05 Section "Metal Fabrications" for structural steel.

B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor piped utility materials and equipment.

3.8 GROUTING

A. Mix and install grout for equipment base bearing surfaces, pump and other equipment base plates, and anchors.

B. Clean surfaces that will come into contact with grout.

C. Provide forms as required for placement of grout.

D. Avoid air entrapment during placement of grout.

E. Place grout, completely filling equipment bases.

F. Place grout on concrete bases and provide smooth bearing surface for equipment.

G. Place grout around anchors.

H. Cure placed grout.

END OF SECTION 330500

JEFFERSON COUNTY ENGINEERING DEPARTMENT
JCSO HANGAR BUILDING

SECTION 330641 – REMOVING AND INSTALLING STORM DRAIN PIPE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Removal of existing storm drain pipe.
2. Transportation and cleaning of salvaged storm drain pipe.
3. Installation of new and/or salvaged storm drain pipe.

PART 2 - PRODUCTS

2.1 MATERIAL

A. Corrugated Metal Pipe in accordance with Division 33 Section "Corrugated Metal Pipe." Pipe furnished may be new or salvaged or a combination of both.

PART 3 - EXEUCTION

3.1 REMOVAL

A. Storm drain pipe to be removed and reused will be shown on the plans.

B. Remove debris and sediment within the storm drain pipe.

C. Excavate, bed, and backfill in accordance with Division 31 Section "Earth Moving." Prevent damage to the pipe and fittings.

D. If items designated for reuse are damaged by the Contractor, replace them with new material or restore them to previous condition, as approved. The Contractor may remove and dispose of existing structures and construct new structures at no expense to the Owner in accordance with pertinent specifications and designs shown on the plans or as approved.

3.2 TRANSPORTATION AND CLEANING

A. Mark the top and bottom of reinforced concrete pipe before removal and reinstall in the same position. If shown on the plans, reuse headwall, aprons, or other appurtenances by severing from the culvert and moving to the new position.

B. Clean joints to facilitate proper re-laying.

C. Use a coating of bituminous material in accordance with Division 33 Section "Corrugated Metal Pipe" to insulate portions of aluminum pipe that are to be in contact with metal other than aluminum. Extend coating 1 ft. minimum beyond area of contact.

3.3 INSTALLATION

A. Storm drain pipe to be installed will be shown on the plans.

B. Excavate, bed, and backfill in accordance with Division 31 Section "Earth Moving."

C. Make connections for joining sections of pipes in accordance with pertinent Items.

D. Make connections to existing structures as shown on the plans and in conformance to the requirements for connections as described in pertinent pipe specifications.

E. Install corrugated metal pipe in accordance with Division 33 Section "Corrugated Metal Pipe."

PART 4 - MEASUREMENT AND PAYMENT

4.1 STORM DRAIN INSTALLATION

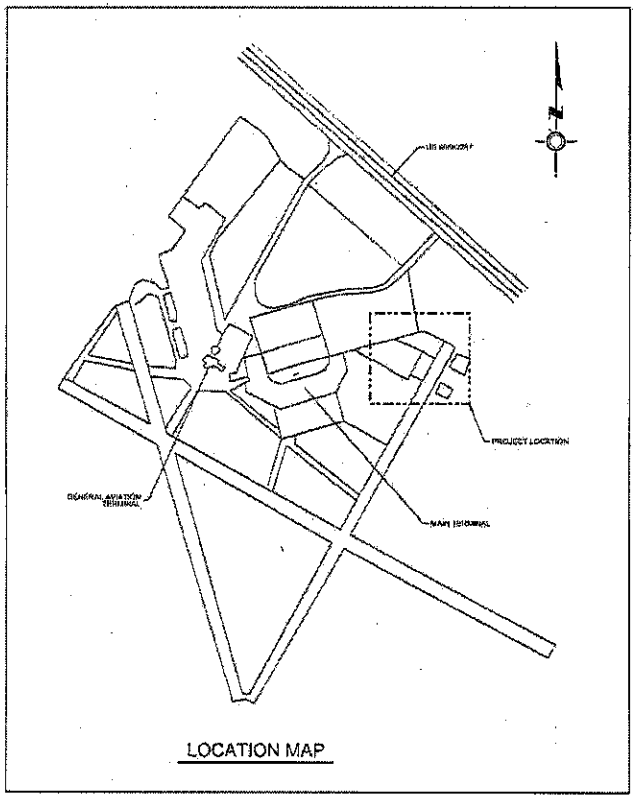
A. Measurement: No measurement for Storm Drain Removal or Installation work of this Section will be made.

B. Payment: Payment for Storm Drain Removal and Installation work of this Section will be made subsidiary to the lump sum (LS) amount for this project.

END OF SECTION 330641

JCSO HANGAR BUILDING

JACK BROOKS REGIONAL AIRPORT



LOCATION MAP

INDEX OF SHEETS

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CIVIL

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C1.02	PROPOSED GRADING AND PAVING PLAN
C1.03	HANGAR ACCESS DRIVE/PARKING JOINT PLAN
C1.04	HANGAR FOUNDATION PLAN
C1.05	HANGAR TAXIWAY APRON JOINT PLAN
C1.06	HANGAR ACCESS DRIVE & TAXIWAY APRON DETAILS
C1.07	HANGAR FOUNDATION DETAILS
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M2.02	ENLARGED FLOOR PLAN
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E2.02	ENLARGED FLOOR PLAN
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PLUMBING

P2.01	FLOOR PLAN
P2.02	ENLARGED FLOOR PLAN

PROJECT TEAM

CIVIL ENGINEER

HEATH REYNOLDS, P.E.
LJA ENGINEERING, INC.
905 ORLEANS STREET
BEAMONT, TX 77701
(409) 813-1862

ARCHITECT

TONY EEDS (11498)
WHITE ROCK STUDIO
1407 SAN SABA DRIVE
DALLAS, TX 75218
(214) 763-0416
PROJECT NO. 221

NO	LOC	DESCRIPTION OF REVISION	BY	DATE
4				
3				
2		RESSUED FOR CONSTRUCTION	AJC	8/31/17
1		ISSUED FOR OWNER'S REVIEW	AJC	8/31/17
0		ISSUED FOR CONSTRUCTION	AJC	8/31/17

WORK ORDER NO.

Jefferson County Sheriff's Department

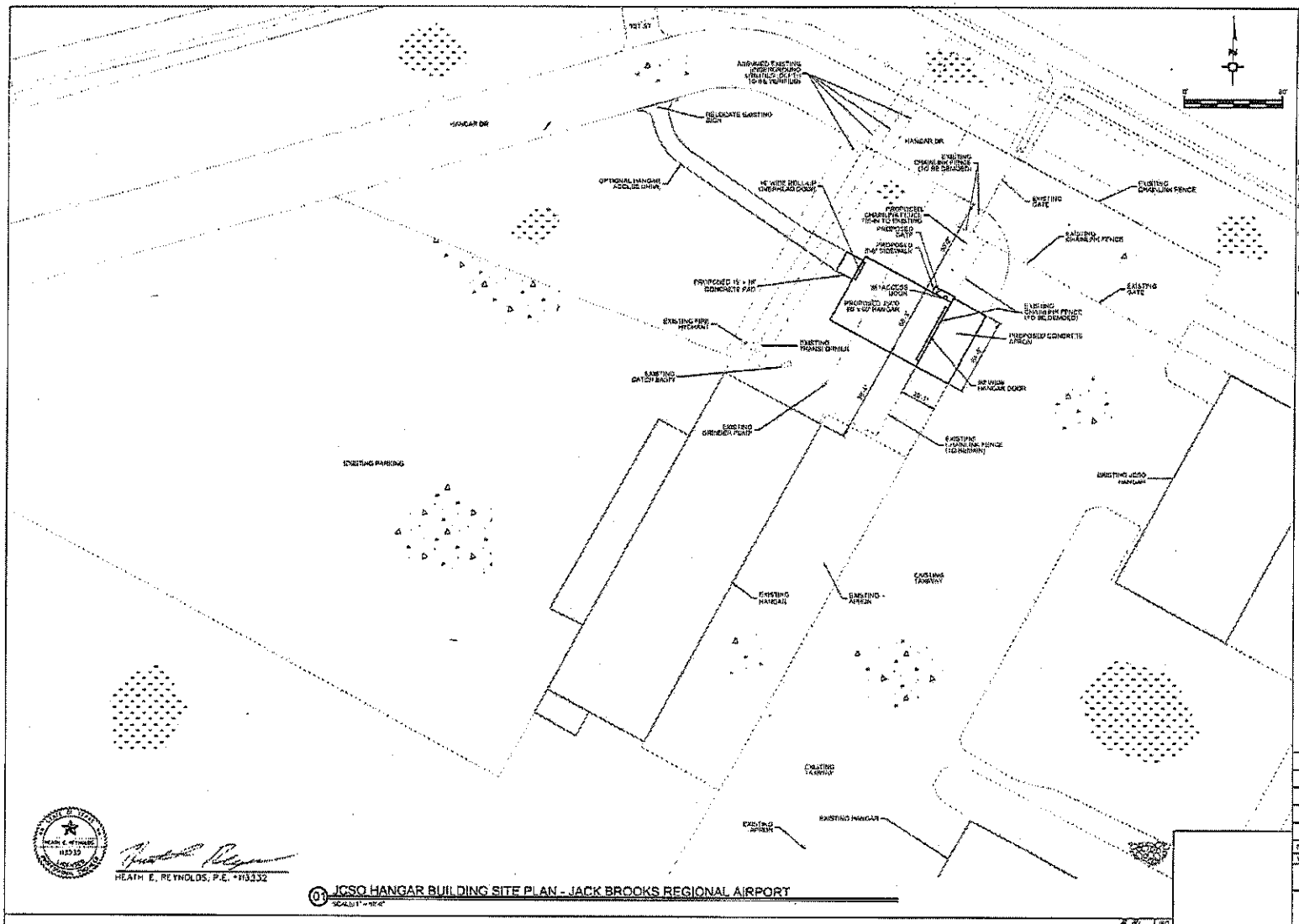
CONSTRUCTION DOCUMENTS
HANGAR BUILDING COVER SHEET
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLG | SCALE: NTS | DATE: Dec 07, 2016
APPROVED: HDR | CHECKED: JLG | NO. G1.01 | REV 2

HEATH E. REYNOLDS, P.E. #113232

LJA Engineering, Inc.
Millenium Infrastructure
Phone 409.813.1862
Beaumont, Texas 77701
LJA Project No. 8073-1013

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or projects other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visitor contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.



01 JCSO HANGAR BUILDING SITE PLAN - JACK BROOKS REGIONAL AIRPORT
SCALE: 1" = 60'-0"

HEATH E. REYNOLDS, P.E. #113332

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH ACI 302.1R-04.
3. CONCRETE SHALL BE 3,000 P.S.I. 5 SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNER'S PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO SETTLE UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBAR IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE SHOULD BE SCARIFIED TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN 6IN TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 KSI. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" IN CONCRETE CAST DIRECTLY AGAINST EARTH, AND 1 1/2" OF COVERAGE OVER WHERE EXPOSED.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST 25 PLACE CONCRETE:
   a) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 5" AND TIES TO IF CONTRACTOR USES A SUPERPLASTERICIZING ADMIXTURE.
   b) ASTM C31 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF. PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:
      (1) 3 @ 7 DAYS
      (2) 3 @ 28 DAYS
   ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DISCRETION OF THE ENGINEER IN RECORD. IF 28 DAY STRENGTH IS ACHIEVED, THIS ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APP'D DATE
4				
3				
2		ISSUED FOR CONSTRUCTION	JJG 6/25/17	HER 6/26/17
1		ISSUED FOR OWNER'S REVIEW	JJG 6/7/17	
0		ISSUED FOR CONSTRUCTION	JJG 3/1/17	

WORK ORDER #3

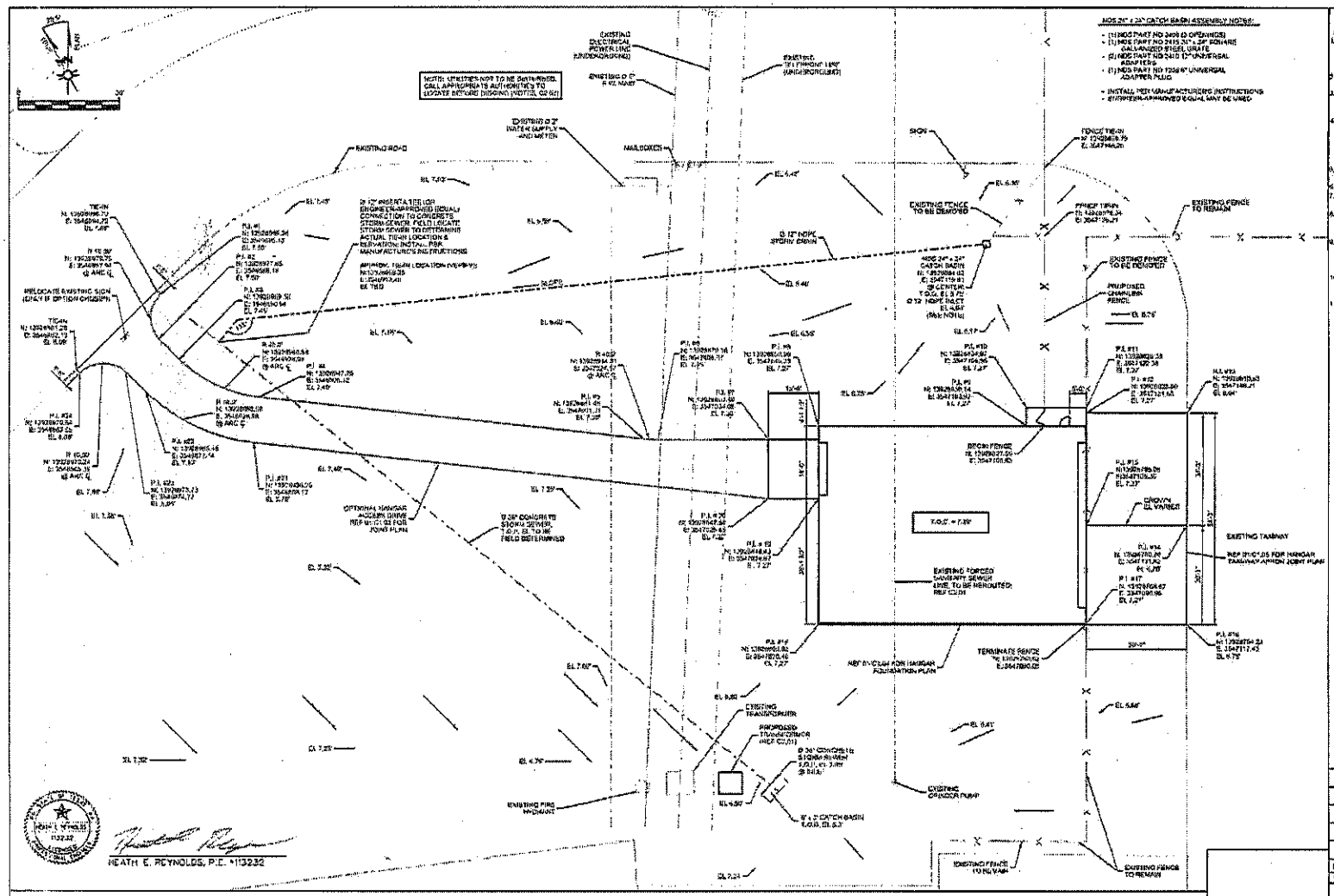
Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
HANGAR BUILDING SITE PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JJG | SCALE: 1" = 60'-0" | DATE: Aug 25, 2016
APPROVED: HER | CHECKED: JJG | NO. C1.01 | REV 2

LJA Engineering, Inc.
Millennium II Subdivision
905 Orleans Street
Beaumont, Texas 77701
LJA Project No. 8070-1013
Phone 409.813.3402
Fax 409.813.1918
FRN - F-2386

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.



HEATH E. REYNOLDS, P.E. 113232

01 JCSO HANGAR BUILDING GRADING AND PAVING PLAN

SCALE: 1" = 30'-0"

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH ACI 301, 10-08.
3. CONCRETE SHALL BE 3,000 P.S.I. 3-SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNER'S PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO DEFLECT UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL PAVING IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE SHOULD BE SCARIFIED TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL VELOCITY FILL AND COMPACTED IN SIX TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 KSI. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" IN CONCRETE CAST DIRECTLY AGAINST EARTH, AND 1-1/2" OF COVERAGE IN FORMED SURFACES.
10. JOINTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON EACH PLACE CONCRETE:
   A) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTERIZING ADMIXTURE.
   B) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. FIVE DOUBLE CYLINDERS (QUANTITIES AND TEST AGE AS FOLLOWS:
      (1) AT 7 DAYS
      (2) AT 28 DAYS
   ONE ADDITIONAL RESERVE CYLINDER IS TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER IF REQUIRED, IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDERS MAY BE DISCARDED.

NO	DESCRIPTION OF REVISION	DRAWN	APPR
2	REVISED FOR CONSTRUCTION	JLC	HER
1	ISSUED FOR OWNER'S REVIEW	AS NOTED	AS NOTED
0	ISSUED FOR CONSTRUCTION	JLC	7/2017

WORK ORDER NO.

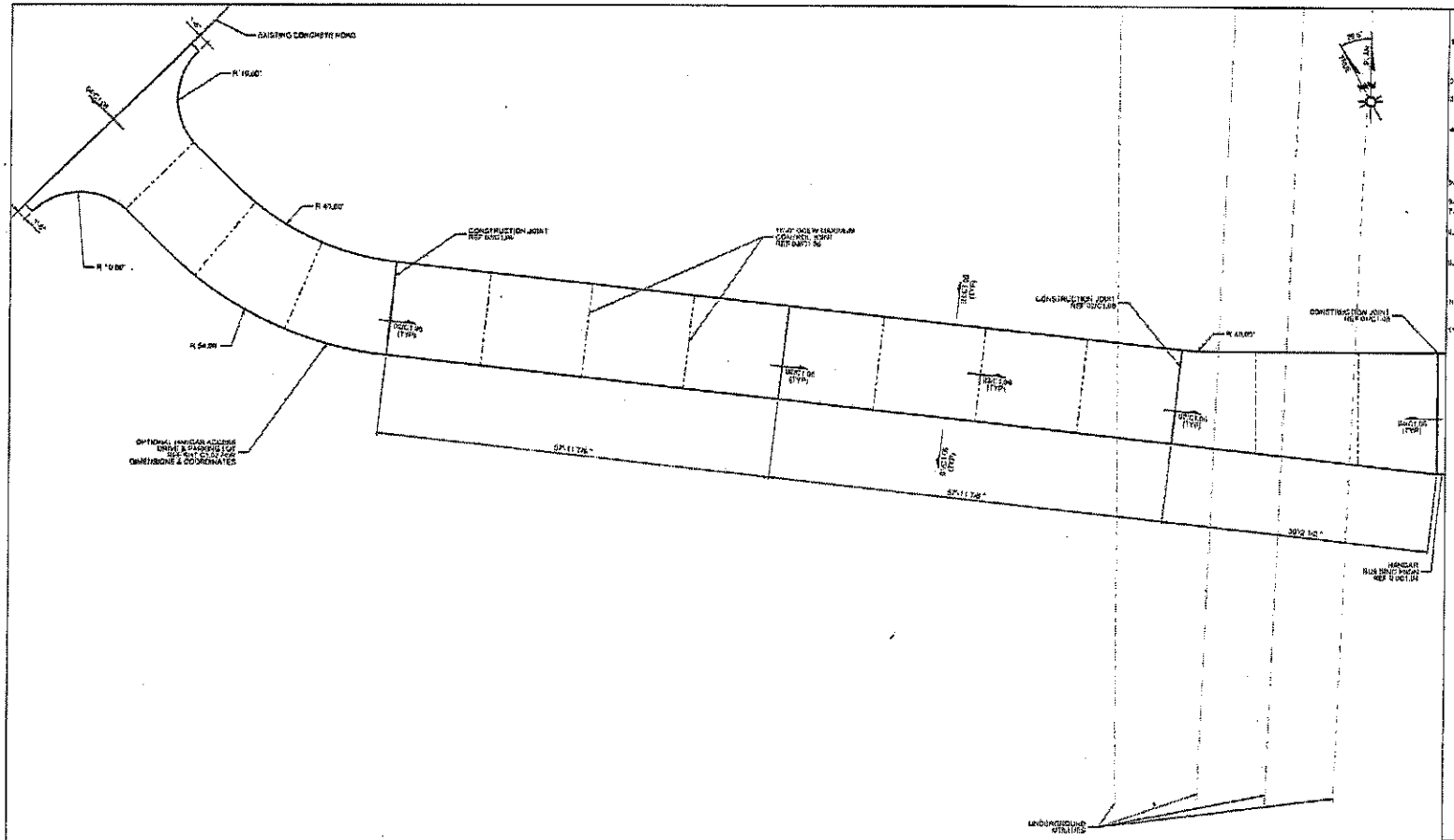
Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
PROPOSED GRADING & PAVING PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLC | SCALE: 1" = 30'-0" | DATE: Aug 29, 2018
APPROVED: HEP | CHECKED: DGH | NO.: C1.02 | REV: 2

LJA Engineering, Inc.
Address (Physical or Mailing)
405 Orleans Street
Beaumont, Texas 77701
LJA Project No. 8073-1013
Phone 409.813.1662
Fax 409.813.1918
FRN - F-1386

This plans, drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineer and no part thereof shall be copied, disclosed to others or used in connection with any other work on project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineer. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.



01 HANGAR ACCESS DRIVE/PARKING JOINT PLAN/BID AS OPTION
SCALE: 1"=8' = 1'-0"

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, ZONING, PARKING, ETC. SHALL BE IN ACCORDANCE WITH IFC (IC) 19-104.
3. CONCRETE SHALL BE 3,000 P.S.I. 3 SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNER'S PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO BE SOFT UNDER LOAD SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBAR IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE SHOULD BE SCARIFIED TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN SIX TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 KSI. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" BY CONCRETE CAST DIRECTLY AGAINST EARTH AND 2" OF COVERAGE EVERYWHERE ELSE.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE.
    A) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTICIZING ADMIXTURE.
    B) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. REQUIRED CYLINDER DIAMETER AND TEST AGE AS FOLLOWS:
    (1) AT 7 DAYS
    (2) AT 28 DAYS
    ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDERS MAY BE DISCARDED.

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
4				
3				
2		REVISED FOR CONSTRUCTION	JLC 8/25/16	HER 8/25/16
1		ISSUED FOR OWNER'S REVIEW	JLC 8/17/16	
0		ISSUED FOR CONSTRUCTION	JLC 7/19/16	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
OPTIONAL HANGAR ACCESS DRIVE JOINT PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

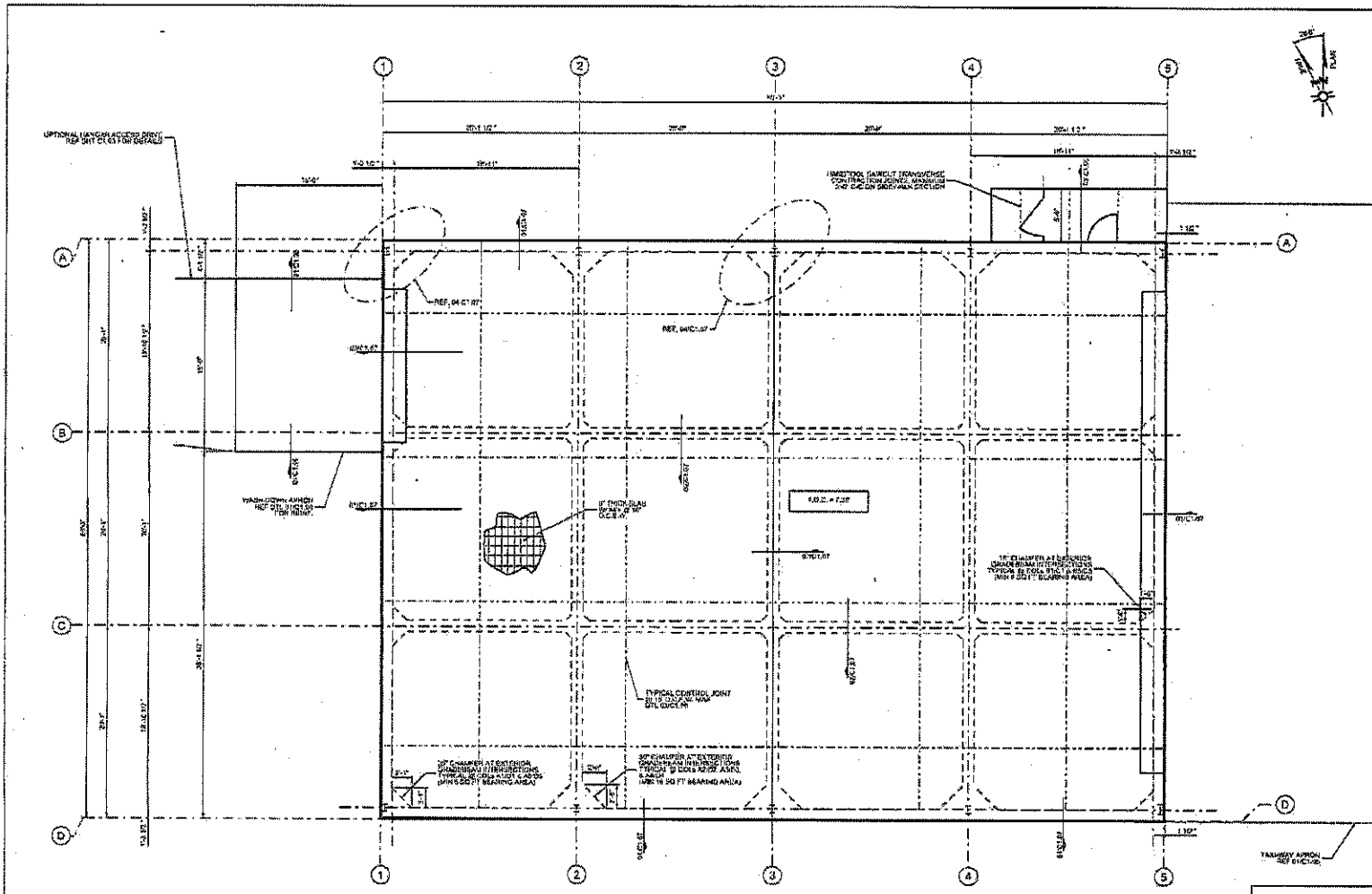
DRAWN: JLS SCALE: 1/16" = 1'-0" DATE: Aug 25, 2016
APPROVED: HER CHECKED: BCH NO. C1.03 REV 2

HEATH E. REYNOLDS, P.E. - 113252

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
(Originator of Instruments)
1104 Orleans Street
Beaumont, Texas 77701
LJA Project No. 16175-1013
Phone 409.813.1800
Fax 409.813.1816
FIRM # F-1386

ISO PAGE XX



01 HANGAR FOUNDATION PLAN
SCALE: 3/32" = 1'-0"

NOTE: METAL BUILDING FOUNDATION DESIGN SUBJECT TO CHANGE UPON RECEIVING METAL BUILDING DESIGN

FOR REVIEW ONLY
HEATH E. REYNOLDS P.E. 113232
NOT TO BE USED FOR CONSTRUCTION PURPOSES

GENERAL NOTES

1. INSTALLATIONS SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH ACI 302.1R-15.
3. CONCRETE SHALL BE 3,000 P.S.I. 5 SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OBTAINING PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF-ROLLED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO BE UNSUITABLE SHALL BE OVEREXCAVATED AND BACK-FILLED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY L/A ENGINEERING, INC.
6. ALL REBARS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 12" FOR PICKING TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN SIX TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 BAR. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" IN CONCRETE CAST DIRECTLY AGAINST EARTH, AND 1 1/2" OF COVERAGE EVERYWHERE ELSE.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:
   a) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS HIGH RANGE WATER REDUCER/SUPERPLASTICIZING ADMIXTURE.
   b) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, PER EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. PREPARED CYLINDERS/SPECIMENS AND TEST AGE AS FOLLOWS:
      (1) AT 7 DAYS
      (2) AT 28 DAYS
   ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

ATTENTION:
ERON + BUILDING HAS BEEN PROVIDED. METAL BUILDING SYSTEM MANUFACTURER'S DETAILS WITH SEALED FOR CONSTRUCTION DRAWINGS SHALL BE PROVIDED TO L/A ENGINEERING FOR FINAL FOUNDATION DESIGN.

NO	LOC	DESCRIPTION OF REVISION	BY	APPD / CHK'D
4				
3				
2		REVISED FOR BIDDING PURPOSES	AJG 4/29/17	HDR 4/29/17
1		ISSUED FOR OWNER'S REVIEW	AJG 3/1/2017	
0		ISSUED FOR BIDDING PURPOSES	AJG 2/17/17	

WORK ORDER NO.

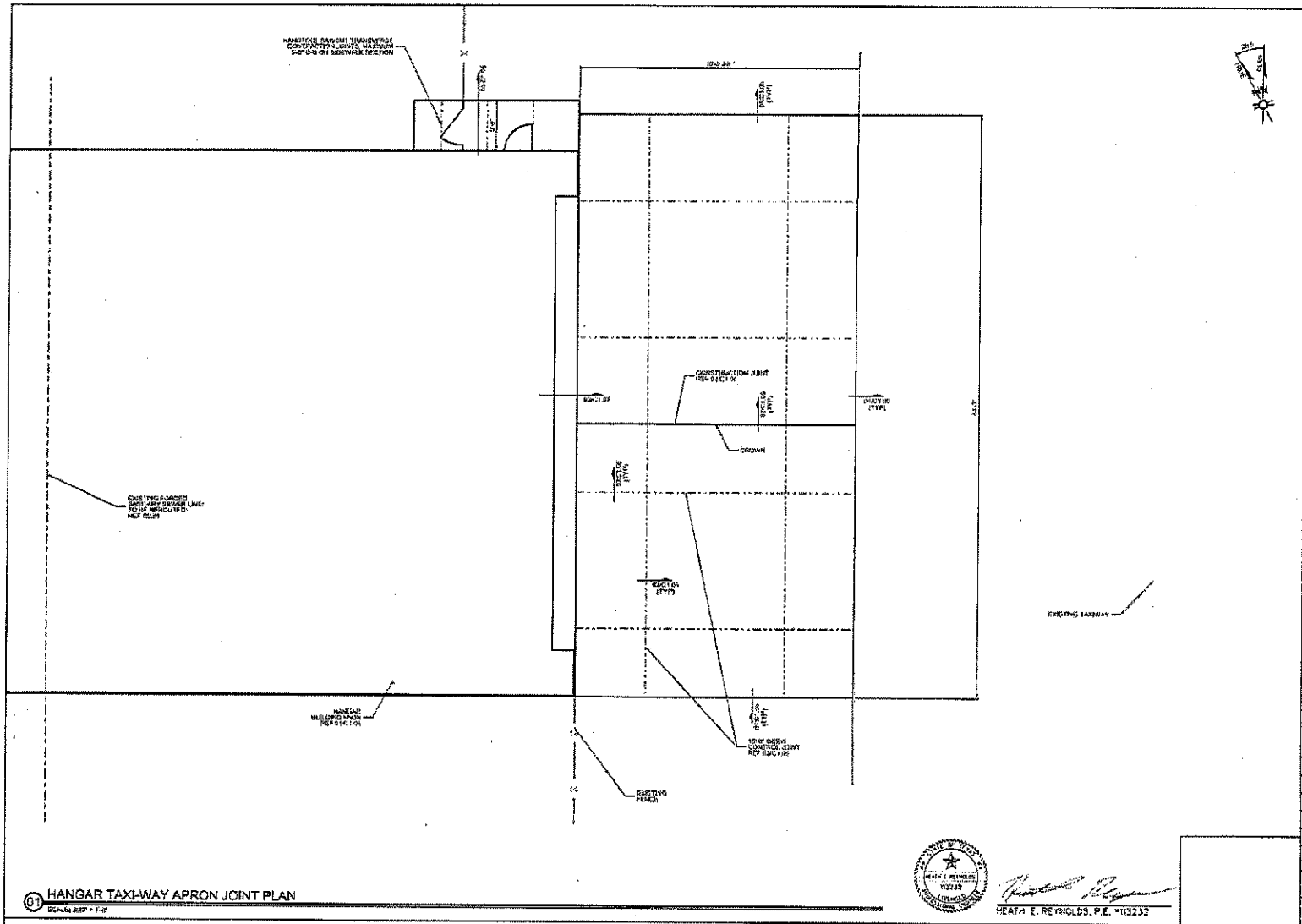
Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
HANGAR FOUNDATION PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLG | SCALE: 3/32" = 1'-0" | DATE: Aug 26, 2016
APPROVED: HDR | CHECKED: DCH | NO. C1.04 | REV 2

The above drawings and specifications, and ideas, designs and arrangements represented thereon are and shall remain the property of the architect/engineer and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineer. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

L/A Engineering, Inc.
Architecture Interiors Planning
905 Orleans Street
Beaumont, Texas 77701
L/A Project No. 8070-1513
Phone 409.813.1902
Fax 409.813.1916
TBPE - F-1386



01 HANGAR TAXI-WAY APRON JOINT PLAN

SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IN NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, CURING, FINISHING ETC. SHALL BE IN ACCORDANCE WITH ACI 302.1R-15M.
3. CONCRETE SHALL BE 3,000 PSI, 5 SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNERS PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE "PROOF" ROLLED IN ACCORDANCE WITH THDOT SPECIFICATION ITEM 204 TO LOCATE ANY SOFT OR UNSUITABLE AREAS. AREAS FOUND TO DEFLECT UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBAR IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE CUT/FILLS TO BE SCARIFIED TO 12" ONSITE DEPTH OR SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL BACKFILL AND COMPACTED IN 8" TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL JOINT ORIENTED SHALL BE GRADE M-II. JOINT ORIENTED SHALL HAVE MINIMUM COVERAGE OF 3" IN "ORIENTED CAST DIRECTLY AGAINST EARTH, AND 1-1/2" OF COVERAGE EVERYWHERE ELSE.
10. SAW CUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. INSPECTION AND TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON EACH IN-PLACE CONCRETE:
   A) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPER PLASTICIZING ADMIXTURE.
   B) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS. FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY, REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:
      1) AT 7 DAYS
      2) AT 28 DAYS
   ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED, IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

NO	LOC	DESCRIPTION OF REVISION	BY (INIT)	APPR (INIT)
4				
3				
2		REISSUED FOR CONSTRUCTION	JLG 8/22/17	HER 8/22/17
1		ISSUED FOR OWNER'S REVIEW	JLG 8/11/17	
0		ISSUED FOR CONSTRUCTION	JLG 7/31/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
HANGAR TAXI-WAY APRON JOINT PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

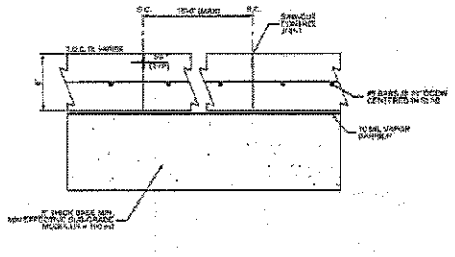
DRAWN: JLG | SCALE: 3/32" = 1'-0" | DATE: Aug 29, 2016
APPROVED: HER | CHECKED: DCH | NO. C1.05 | REV 2

HEATH E. REYNOLDS, P.E. #113233

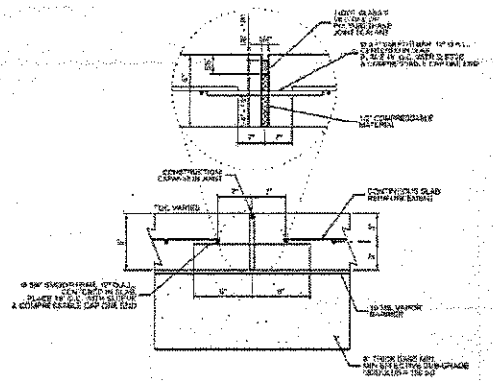
LJA Engineering, Inc.
Mississippi Headquarters
965 Chimney Street
Beaumont, Texas 77701
LJA Project No. 8079-1013
Phone 409.813.1660
Fax 409.813.1196
FRN - F-1386

ISSUE SHEET
PAGE XX

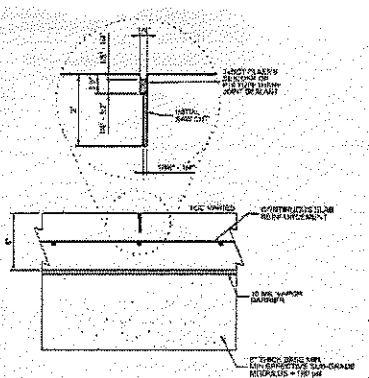
The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.



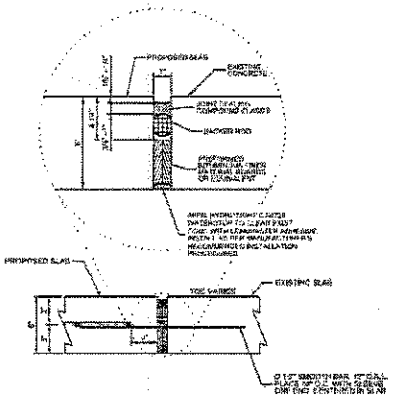
01 TYPICAL PAVEMENT SECTION



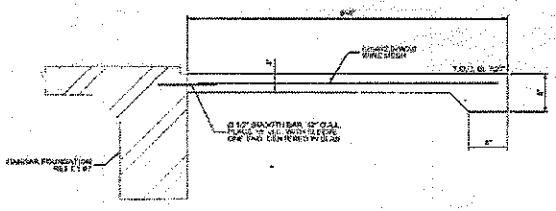
02 CONSTRUCTION JOINT DETAIL



03 CONTROL JOINT DETAIL



04 TIE-IN TO EXISTING CONCRETE



05 TYP SIDEWALK SECTION

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (2012 EDITION) PARTS IV AND V OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, TORQUING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH ACI 302.1R-104.
3. CONCRETE SHALL BE 3,000 PSI AT 28 DAYS MIN UNLESS OTHERWISE NOTED. DO NOT INCREASE ANY ADMIXTURE WITHOUT OWNER'S PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TxDOT SPECIFICATION ITEM 216 TO ESTABLISH ANY SOFT OR LOOSE AREAS. AREAS FOUND TO BE SOFT, OR UNDER LOAD DEFLECTION AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AT A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBAR IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. JOTE SINGLES BY SCARIFYING TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN 8IN LOOSE LIFTS (NOMINAL) TO 95% OF MAXIMUM DRY DENSITY.
9. ALL SLAB DEPRESSMENT SHALL BE GRADE NO 4S. SLAB DEPRESSMENT SHALL HAVE MINIMUM CO-EFFICIENT OF 3 IN CONCRETE TO CAST DIRECTLY AGAINST EARTH, AND 1 1/2" OF LUMP RAISE FOR FINISHING SLAB.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:
   a) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTICIZING ADMIXTURE.
   b) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A MINIMUM TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. REQUIRED CYLINDER(S), QUANTITIES AND TEST ARE AS FOLLOWS:
      1) AT 7 DAYS
      2) AT 28 DAYS
   ONE ADDITIONAL CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER IF REQUIRED IF 28 DAY STRENGTH IS ACHIEVED THE ADDITIONAL CYLINDERS MAY BE DISCARDED.

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPRV DATE
4				
3				
2		PROGRESS FOR CONSTRUCTION	JLS 8/20/21	HER 8/20/21
1		ISSUED FOR OWNER'S REVIEW	JLS 8/20/21	
0		ISSUED FOR CONSTRUCTION	JLS 03/08/21	

WORK ORDER NO.

Jefferson County Sheriff's Department

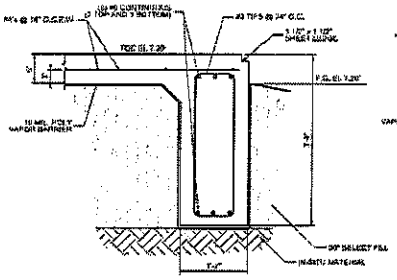
CONSTRUCTION DOCUMENTS
HANGAR ACCESS DRIVE/TAXI-WAY APRON DTL3
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLS | SCALE: 1/16" = 1'-0" | DATE: Aug. 20, 2018
APPROVED: HER | CHECKED: | DCN | NO. C1.06 | REV 2

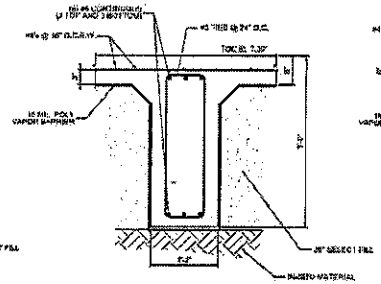
HEATH E. REYNOLDS, P.E. #113232

LJA Engineering, Inc.
Midtown Infrastructure
855 Gessner Street
Houston, Texas 77024
LJA Project No. 0179-1215
Phone 713.953.1900
Fax 713.953.1999
TBPE F-1386

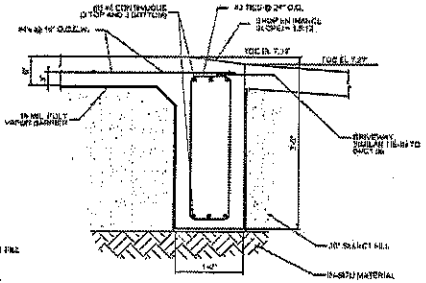
The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineer and no part thereof shall be loaned, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineer. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.



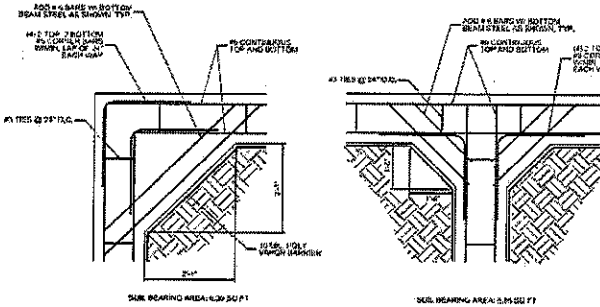
01 TYP EXT. SECTION @ GRADE



02 TYP INT. SECTION



03 TYP EXT. SECTION @ DOOR



04 GRADEBEAM INTERSECTION

NOTE: METAL BUILDING FOUNDATION DESIGN SUBJECT TO CHANGE UPON RECEIVING METAL BUILDING DESIGN

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS THAT APPLY, INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALL ANCHOR TUNING PER SECTION 5.1.1, SHALL BE IN ACCORDANCE WITH ACI 307-98.
3. CONCRETE SHALL BE f'c = 3,000 PSI 5 SACK MIX UNLESS OTHERWISE NOTED, DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNER'S PRIOR APPROVAL.
4. WITH RADIATION TYPE FOOTING SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO DISPLACE UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED NO 4 SHOVEL POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBARS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS
7. SITE SHOULD BE SCARIFIED TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN 8" TO 10" LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REBAR PLACEMENT SHALL BE GRADE 60 MIN. REBAR PLACEMENT SHALL HAVE MINIMUM COVERAGE OF 3" BY CONCRETE CAST DIRECTLY AGAINST EARTH AND 1 1/2" OF COVERAGE ELSEWHERE ELSE.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:
   A) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTICIZING ADMIXTURE.
   B) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMEN." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS PER EVERY 50 CUBIC YARDS OR A FRACTION THEREOF PLACED PER DAY. REQUIRED CYLINDER QUANTITIES AND TEST AGE AS FOLLOWS:
      1) AT 7 DAYS
      2) AT 28 DAYS
   ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDERS MAY BE DISCARDED.

ATTENTION:

DETAILS & NOTES SHOWN ARE FOR HORIZONTAL METAL BUILDING COLUMN LOCATIONS ALONG WITH SHOWN FOR CONSTRUCTION DRAWINGS. SHALL BE REVIEWED TO LJA ENGINEERING FOR FINAL FOUNDATION LAYOUT.

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APP'D DATE
4				
3				
2		ISSUED FOR BIDDING PURPOSES	JLC 8/24/18	HER 8/24/18
1		ISSUED FOR OWNER'S REVIEW	JLC 8/21/18	
0		ISSUED FOR BIDDING PURPOSES	JLC 8/17/18	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
HANGAR FOUNDATION DETAILS
Southeast Texas Regional Airport
Jefferson County, Texas

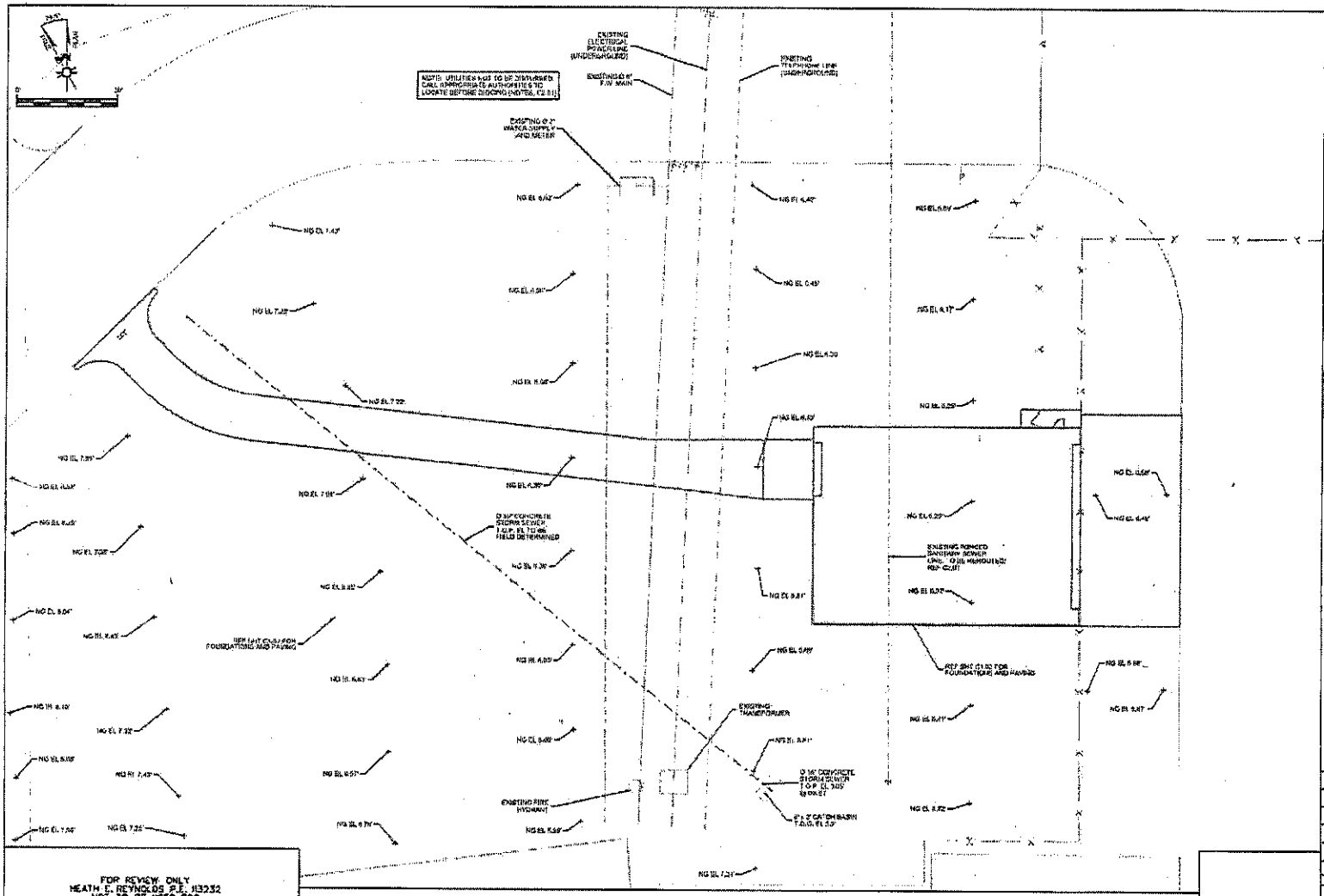
DRAWN: JLG | SCALE: 1/16" = 1'-0" | DATE: Aug 29, 2018
APPROVED: HER | CHECKED: BCH | NO. C1.07 | REV 2

FOR REVIEW ONLY
HEATH E. REYNOLDS P.E. 113233
NOT TO BE USED FOR
CONSTRUCTION PURPOSES

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineer and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineer. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
(Formerly LJA Engineering & Surveying, Inc.)
1904 Grinnell Street
Beaumont, Texas 77701
LJA Project No. 0675-1013
Phone 409.813.1802
Fax 409.813.1186
FIRM # 1386

ISO PAGE
PAGE 9.x



FOR REVIEW ONLY
HEATH E. REYNOLDS P.E. #83232
NOT TO BE USED FOR CONSTRUCTION PURPOSES

01 JCSO HANGAR BUILDING EXISTING NATURAL GRADE PLAN
SCALE: 1" = 30'-0"

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE.
2. INSTALLATION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH ACI 302.1R-15M.
3. CONCRETE SHALL BE 3,000 P.S.I. 5 SACK MIX UNLESS OTHERWISE NOTED. DO NOT INCLUDE ANY ADMIXTURE WITHOUT OWNERS PRIOR APPROVAL.
4. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO DEFLECT UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY LJA ENGINEERING, INC.
6. ALL REBAR TO BE SUPPORTED ON STANDING SUPPORT CHAIRS.
7. SITE SHOULD BE SCARIFIED TO MINIMUM DEPTH OF SIX INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN SIX TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 KSI. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" IN CONCRETE CAST DIRECTLY AGAINST EARTH, AND 1-1/2" OF COVERAGE EVERYWHERE ELSE.
10. SAWCUTS SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL EXTEND TO A DEPTH OF 25% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON EACH PLACE CONCRETE:
   A) ASTM C143 "STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTICIZING ADMIXTURE.
   B) ASTM C39 "STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. REQUIRED CYLINDERS SHALL BE COMPRESSED AND TEST AGE AS FOLLOWS:
      (1) AT 7 DAYS
      (2) AT 28 DAYS
   ONE ADDITIONAL REQUIRED CYLINDER SHALL BE TESTED UNDER THE DIRECTION OF THE ENGINEER IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

NO	DATE	DESCRIPTION OF REVISION	BY	APPD
4				
3				
2				
1		REVISED FOR OWNER'S REVIEW	JLC	HER
0		ISSUED FOR OWNER'S REVIEW	JLC	HER

WORK ORDER NO.

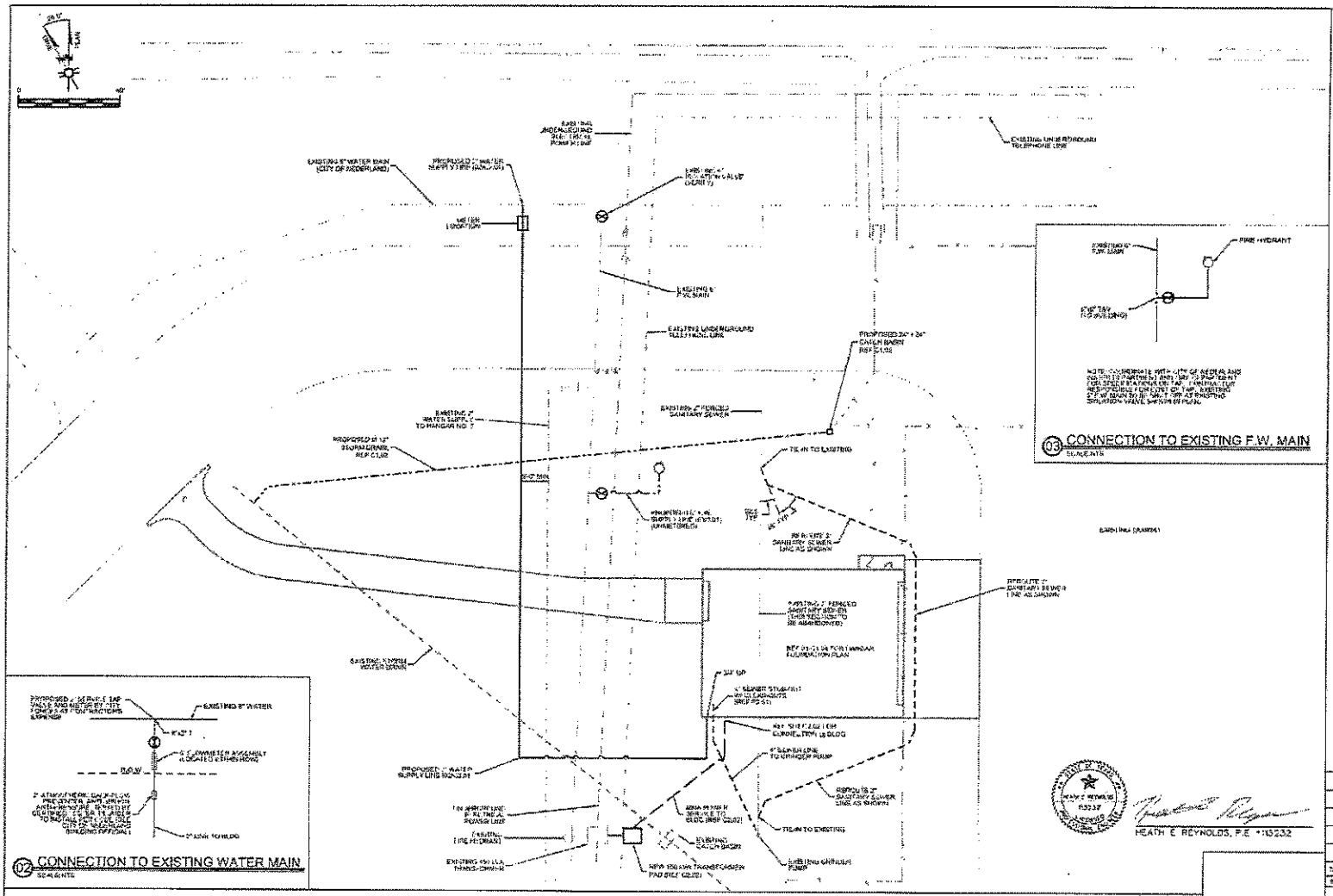
Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
EXISTING NATURAL GRADE PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLC | SCALE: 1" = 30'-0" | DATE: April 10, 2017
APPROVED: HER | CHECKED: SDH | NO. C1.06 | REV 1

The ideas, drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
Missouri Infrastructure
363 Dilworth Street
Beaumont, Texas 77701
LJA Project No. 8070-1013
Phone 409.813.1602
Fax 832.813.1616
TBPE: F-1386



03 CONNECTION TO EXISTING F.W. MAIN
SCALE: NTS

02 CONNECTION TO EXISTING WATER MAIN
SCALE: NTS

01 JCSO HANGAR BUILDING UTILITIES PLAN
SCALE: 1" = 20'-0"

GENERAL NOTES

1. UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT (800) 245-4545 AND "ONESTEAR ONE CALL" AT (817) 695-0911 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.

SYMBOLOGY LEGEND

- FIRE HYDRANT = USE CITY OF NEDERLAND SPECS
- VALVE = USE CITY OF NEDERLAND SPECS
- METER = USE CITY OF NEDERLAND SPECS

HEATH E. REYNOLDS, P.E. #103232

NO	DESCRIPTION OF REVISION	BY	APPR.
4			
3			
2	ISSUED FOR CONSTRUCTION	JLC	HER
1	ISSUED FOR OWNER'S REVIEW	JLC	
0	ISSUED FOR CONSTRUCTION	JLC	

WORK ORDER NO.

Jefferson County Sheriff's Department

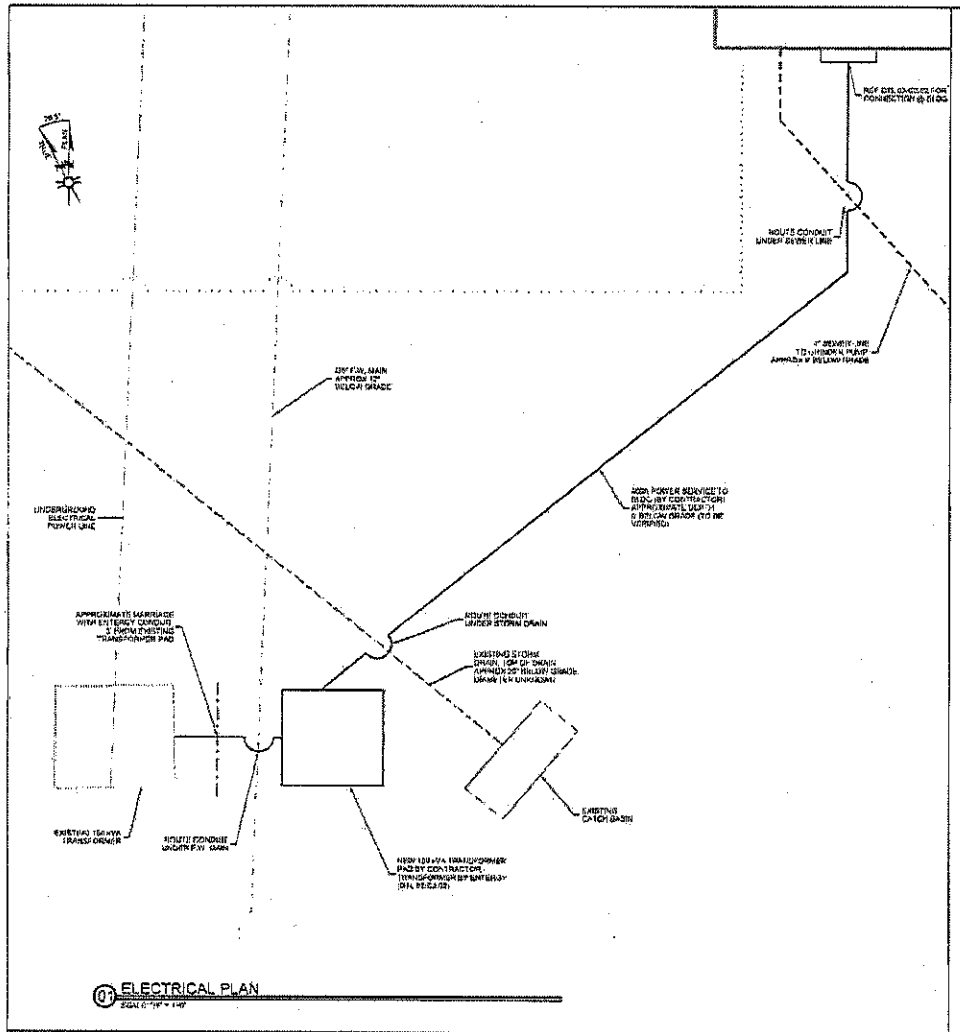
CONSTRUCTION DOCUMENTS
PROPOSED UTILITIES PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: JLC | SCALE: 1" = 40'-0" | DATE: Aug. 28, 2018
APPROVED: HER | CHECKED: SCH | NO.: C2.01 | REV: 2

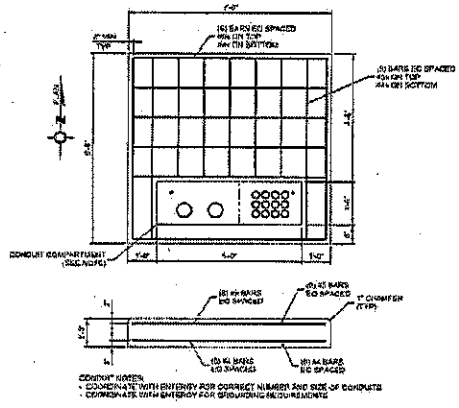
The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
Address: 1104 Main Street
Beaumont, Texas 77701
LJA Project No. BC16-0103
Phone: 409.813.1662
Fax: 409.813.1918
TBPE - F-1386

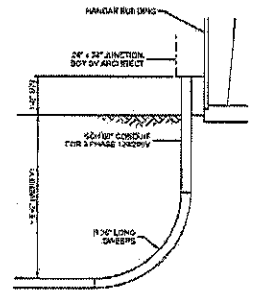
750



01 ELECTRICAL PLAN



02 TRANSFORMER PAD



CONDUIT NOTES:
1. COORDINATE WITH ENTERGY FOR CORRECT NUMBER AND SIZE OF CONDUITS

03 CONDUIT TERMINUS

HEATH C. REYNOLDS, P.E. #113232

GENERAL NOTES

1. INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, AND REGULATIONS (THAT APPLY. INTERNATIONAL BUILDING CODE (IBC) GOVERNS IF NONE OF THE ABOVE ARE IN PLACE).
2. INSTALLATION DURING RAINSTORMS ETC. SHALL BE IN ACCORDANCE WITH ACI 305.1/5.1.1.
3. CONCRETE SHALL BE 3,000 P.S.I. 4 SACK SLUMP UNLESS OTHERWISE NOTED. DO NOT ADD LIME. ANY ADMIXTURE WITHOUT OWNERS PRIOR APPROVAL.
4. AFTER EXCAVATION THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH TXDOT DESCRIPTION ITEM 216 TO LOCATE ANY SOFT OR LOOSE AREAS. AREAS FOUND TO DEFLECT UNDER LOAD SHOULD BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED STRUCTURAL FILL.
5. CONCRETE TO BE PLACED AS A SINGLE POUR UNLESS APPROVED BY L.J.A. ENGINEERING, INC.
6. ALL REBAR IS TO BE SUPPORTED ON STANDARD SUPPORT CHAIRS.
7. SITE SHALL BE SCARIFIED TO MINIMUM DEPTH OF 30 INCHES TO REMOVE ANY ORGANIC MATERIAL.
8. ANY ADDITIONAL FILL PLACED AT SITE SHOULD BE STRUCTURAL SELECT FILL AND COMPACTED IN 200 TO EIGHT INCH LIFTS TO 95% OF MAXIMUM DRY DENSITY.
9. ALL REINFORCEMENT SHALL BE GRADE 60 KSI. REINFORCEMENT SHALL HAVE MINIMUM COVERAGE OF 3" IN CONCRETE IN CAST DIRECTLY AGAINST EARTH, AND 1-1/2" OF COVERAGE EVERYWHERE ELSE.
10. BACKFILL SHALL BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT AND SHALL UNIFORM TO A DEPTH OF 30% OF THE SLAB THICKNESS.
11. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTING FOR IN PLACE CONCRETE:
   A) ASTM C143 STANDARD TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE." ALL CONCRETE SHALL CONTAIN A MAXIMUM SLUMP OF 4" UNLESS THE CONTRACTOR USES A SUPERPLASTICIZING ADMIXTURE.
   B) ASTM C39 STANDARD TEST FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS OR A FRACTION THEREOF, PLACED PER DAY. MINIMUM CYLINDERS) SHALL BE AS FOLLOWS:
      (1) AT 7 DAYS
      (2) AT 28 DAYS
   ONE ADDITIONAL CYLINDER TO BE TESTED UNLESS THE INSPECTOR OR THE ENGINEER IF REQUIRED, IF 28 DAY STRENGTH IS ACHIEVED THE ADDITIONAL CYLINDERS MAY BE DISCARDED.

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APP'R DATE
4				
3				
2		PERMIT FOR CONSTRUCTION	AJC 8/30/17	JCM 8/30/17
1		ISSUED FOR OWNER'S REVIEW	AJC 8/11/17	
0		ISSUED FOR CONSTRUCTION	AJC 12/11/16	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
PROPOSED ELECTRICAL PLAN
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: AJC	SCALE: 1/8" = 1'-0"	DATE: Aug 29, 2016	NO C2.02	REV 2
APPROVED: HCR	CHECKED: BCH			

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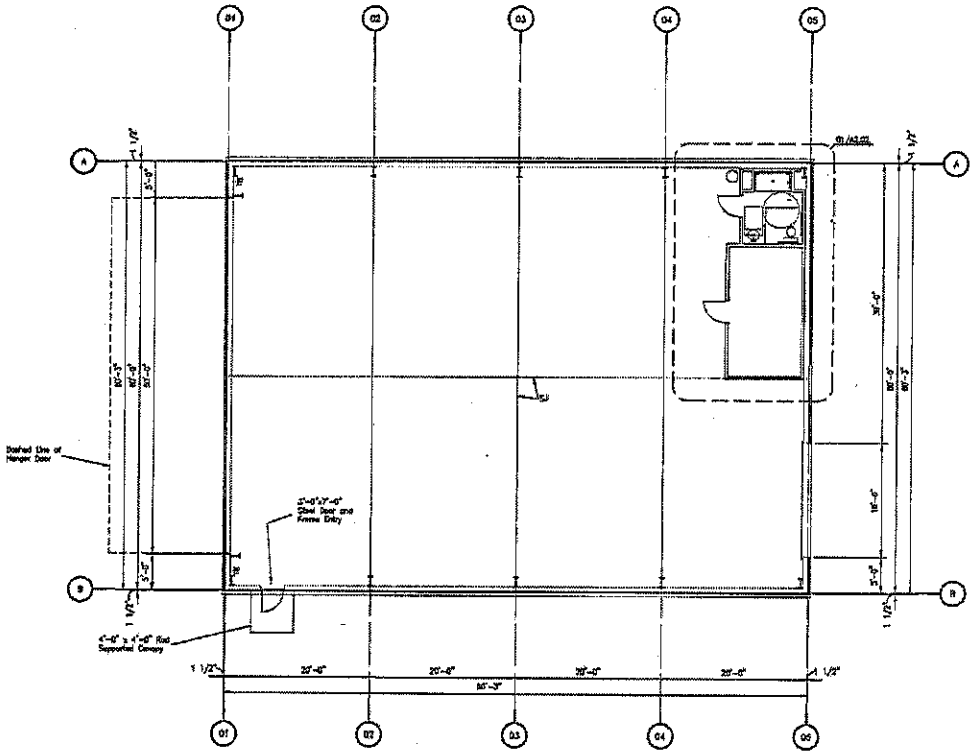
L/A Engineering, Inc.
Infrastructure
909 Orleans Street
Beaumont, Texas 77701
L/A Project No. 2015.1015
Phone 409.813.1600
Fax 409.813.1616
FRN - F-1286

SHEET NO. C2.02



01 FLOOR PLAN - ARCHITECTURAL

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

Sheet File Name: County-TX-Jefferson\SPT\Hangar\Drwg\FLOR-FINAL-02-A0201.dwg

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
(Firm Reg. State (BR 2962) Permit Number 22)
Phone 713.953.5200
Fax 713.953.5026
RRH-R4396

WRS
White Rock Studio
1807 Ross Ave. Floor
Dallas, Texas 75201
Office 214.514.4444
Texas Registered Architectural Firm

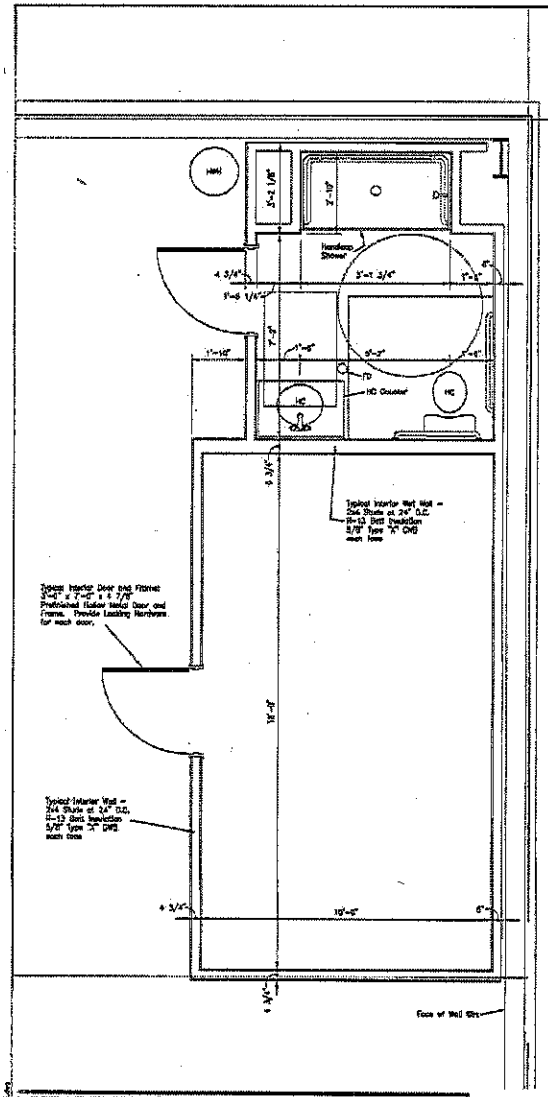
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
4				
3				
2				
1				
0		Issued for Construction	WRS 08/23/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. A2.01 REV 0



01 ENLARGED FLOOR PLAN - ARCHITECTURAL

Sheet File Name: County=TX~Jefferson\ARFT\Merged\Dist=\PLOT-FINAL-02-A0202.dwg

Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio ER 2643 Project Number 221
Phone 713.953.5000
Fax 713.953.5026
(TBPE-FirmID)

WRS
White Rock Studio

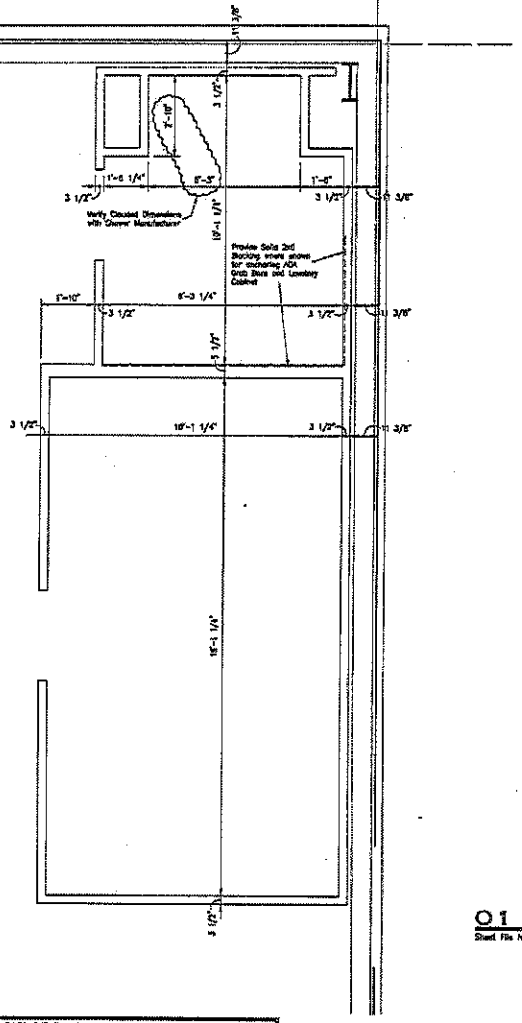
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPD DATE
4				
3				
2				
1				
0		Issued for Construction	WAZ 8/23/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. A2.02 REV 0



01 ENLARGED FRAMING PLAN - ARCHITECTURAL

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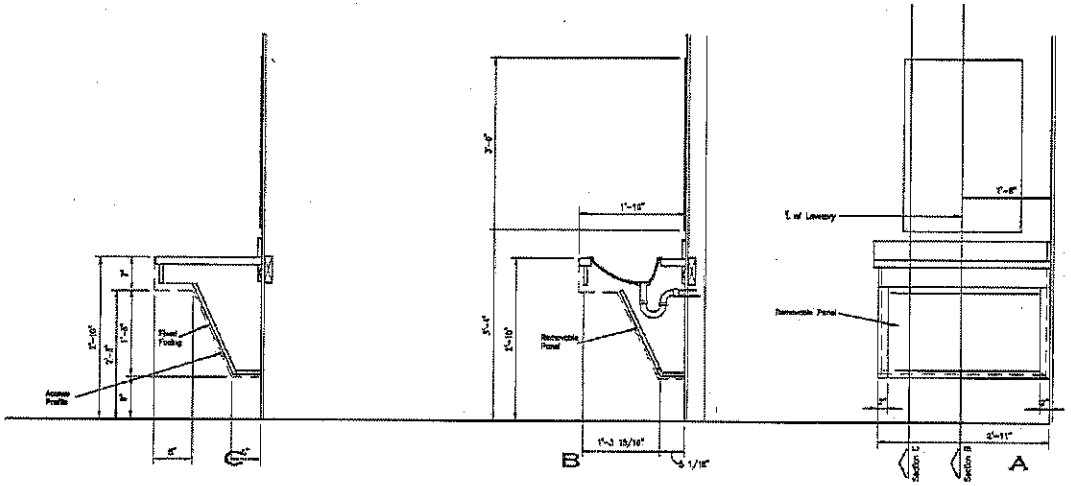

02 ENLARGED DETAILS - ACCESSIBLE LAVATORY

Full Size Scale: 1" = 1'-0" Half Size Scale: 1/2" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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L.I.A Engineering, Inc.
2907 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (ER 2012) Project Number 221
Phone 713.953.1200
Fax 713.953.1228
FRN - F-1386

WRS White Rock Studio

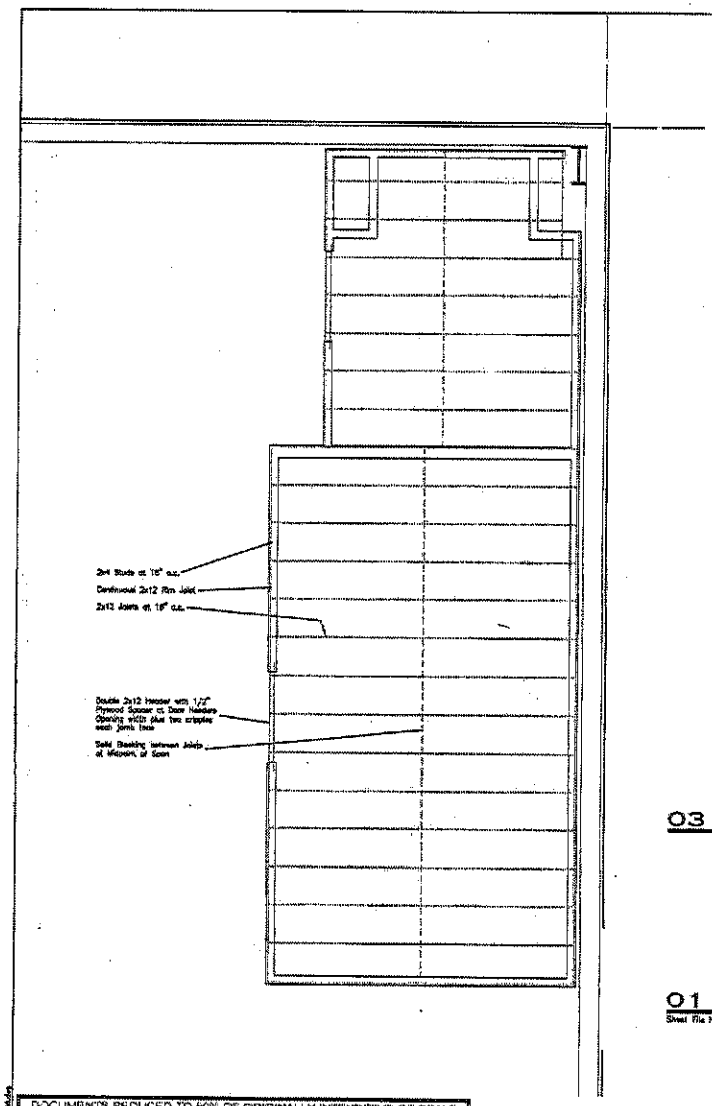
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
4				
3				
2				
1				
0		Issued for Construction	WAC 08/30/17	

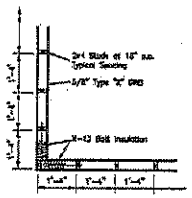
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug. 23, 2017
APPROVED: CHECKED: NO. A2.03 REV 0





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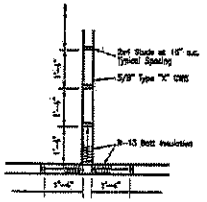

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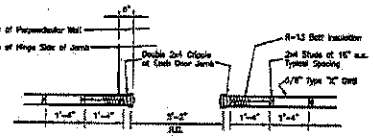

A

04 ENLARGED PLAN DETAILS - OFFICE FRAMING

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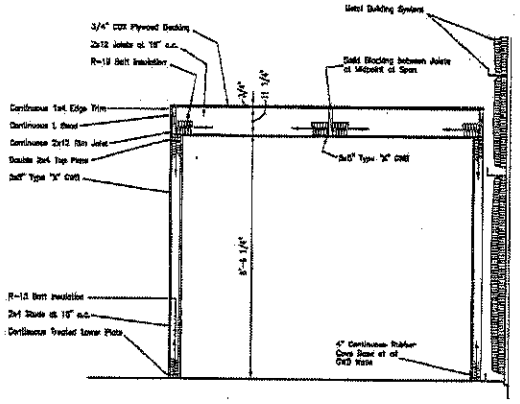

03 ENLARGED SECTION DETAIL - OFFICE FRAMING

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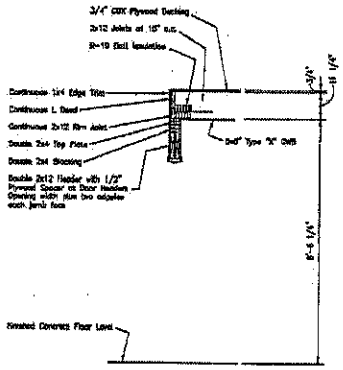

02 ENLARGED SECTION DETAIL - OFFICE FRAMING

Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

01 ENLARGED FRAMING PLAN - ARCHITECTURAL

Sheet File Name: County-TX-Jefferson\BPT\Images\Base\PLOT-PRNL-02-A0204.dwg Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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L&A Engineering, Inc.
2929 Briarpark Drive Phone 713.953.5020
Suite 600 Fax 713.953.5025
Houston Texas 77042 FIRM - F-41 867
White Rock Studio (BR 2642) Project Number 221

WRS White Rock Studio
Dallas, Texas 75206

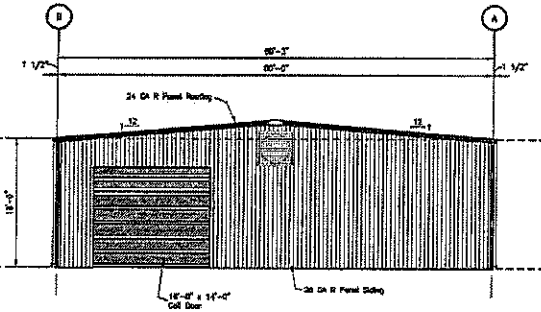
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APVR DATE
4				
3				
2				
1				
0		Issued for Construction	WRL 04/07/17	

WORK ORDER NO.

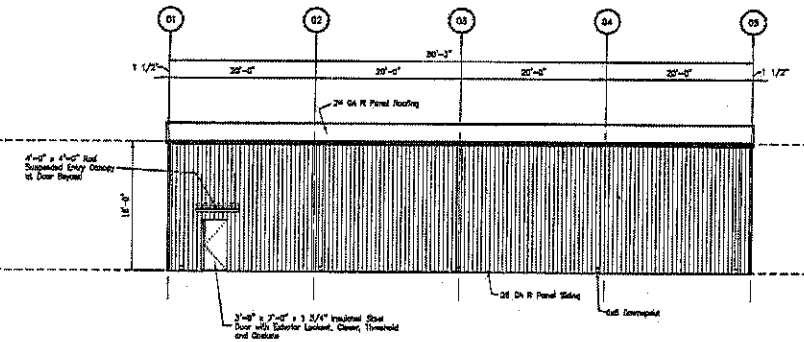
Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

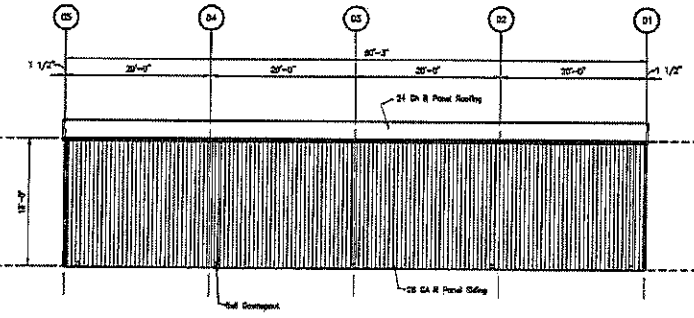
DRAWN: SCALE: DATE: Aug 25, 2017
APPROVED: CHECKED: NO. A2.04 REV 0



04 WEST ELEVATION - ARCHITECTURAL

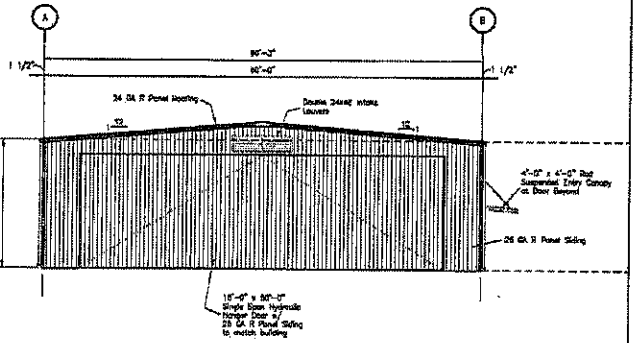


03 NORTH ELEVATION - ARCHITECTURAL



02 SOUTH ELEVATION - ARCHITECTURAL

Color Selections:
Building panel colors for siding, roof and trim shall match adjacent hangar building to the north (assuming use of manufacturer's standard, low color palette.



01 EAST ELEVATION - ARCHITECTURAL

BUILDING ELEVATIONS - ARCHITECTURAL

Sheet File Name: County-TX-Jefferson\SPI\Hangar\Dwg\PLOT-Plot-02-A3301.dwg

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (DR 26428 Project Number 221
Phone: 713.953.5200
Fax: 713.953.5070
FRN- F-1386

WRS
White Rock Studio

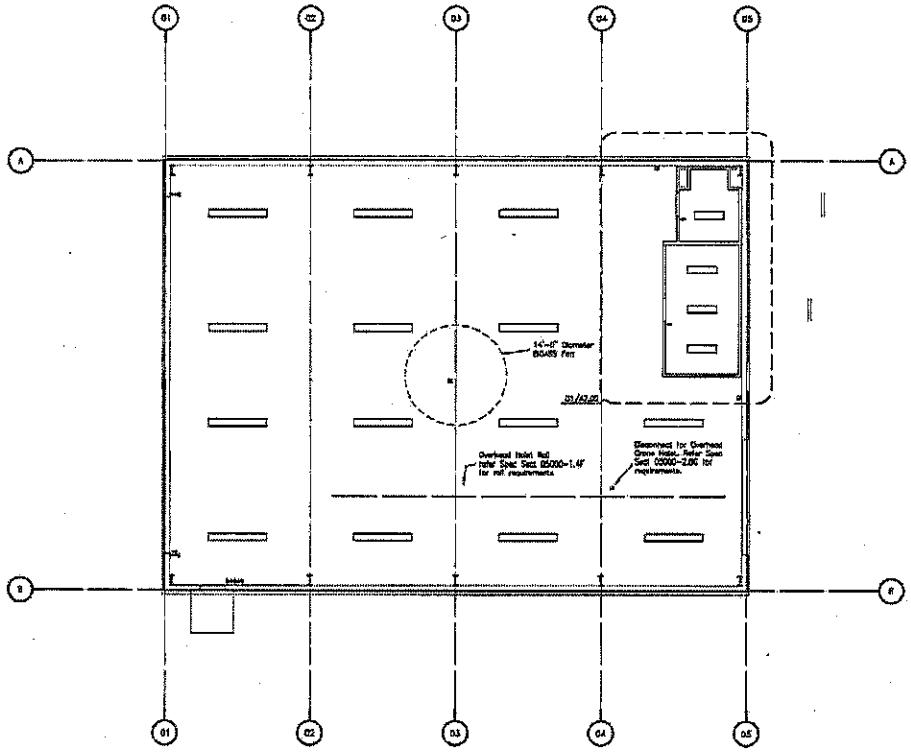
NO	LOC	DESCRIPTION OF REVISION	BY DATE	CHKD DATE
4				
3				
2				
1				
0		Issued for Construction	MAC 08/07/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. A3.01 REV 0



01 REFLECTED CEILING PLAN - ARCHITECTURAL

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

Sheet File Name: County-TX-Jefferson\SPT\Hangar\Draw\PLOT-FINAL-01-A7701.dwg

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
7500 Rialto Blvd
Suite 600
Austin, Texas 78735
Phone 713.953.5200
Fax 713.953.5026
FIRM # F-1386
White Rock Studio (BR 2ND) Project Number 221

WRS
White Rock Studio
Dallas, Texas 75214
Office 214.761.9116

NO	LOC	DESCRIPTION OF REVISION	BY / APPR	DATE / DATE
4				
3				
2				
1				
0		Issued for Construction	MAC	08/04/17

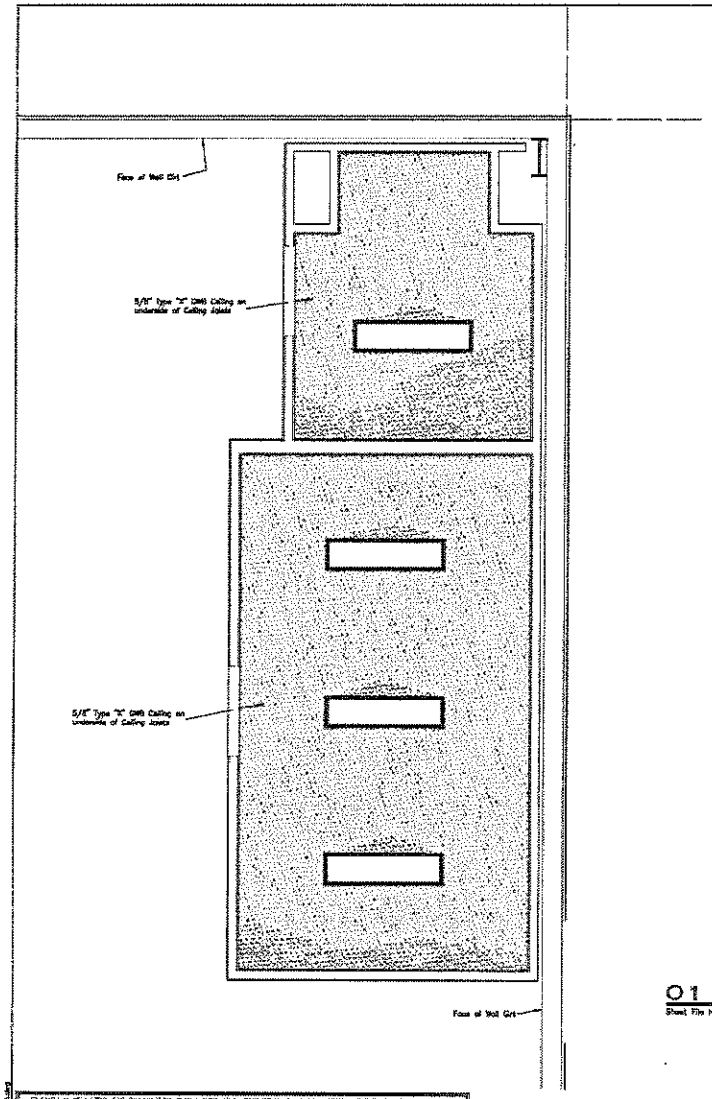
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. A7.01 REV 0

PAGE XX



01 ENLARGED REFLECTED CEILING PLAN - ARCHITECTURAL

Sheet File Name: County-TX-Jefferson\BPT\Hangar\Draw\PLOT-FINAL-02-NEW.dwg Full Size Scale: 1/4" = 1'-0" Half Size Scale: 1/8" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio\BR Series\Project Number 221
Phone 713.953.5200
Fax 713.953.5026
FIRM # 1386

WRS White Rock Studio

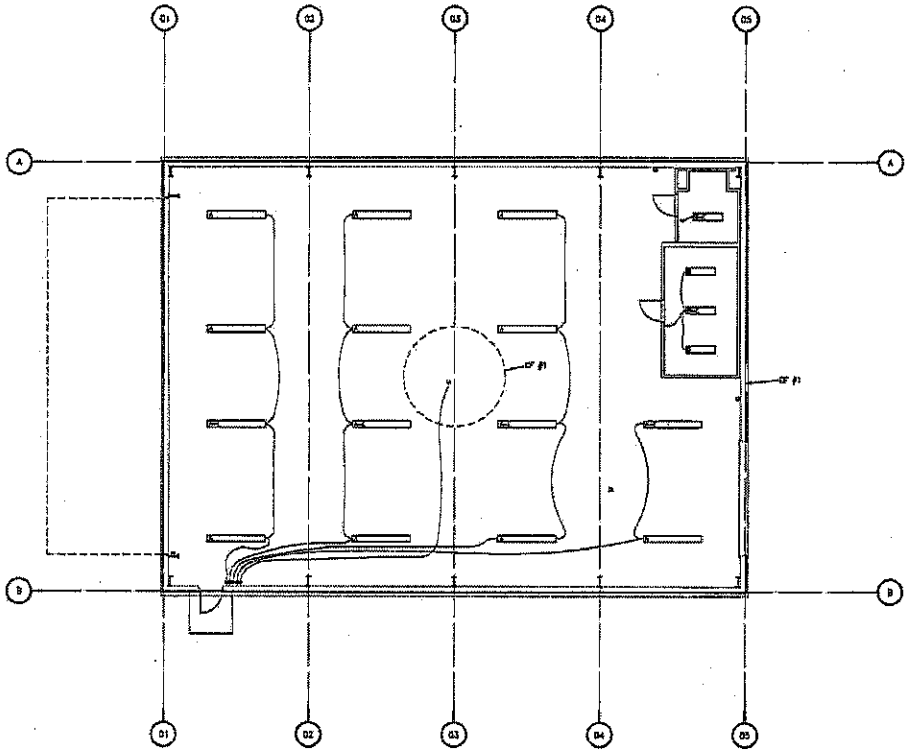
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
4				
3				
2				
1				
0		Issued for Construction	MRC 04/20/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWING: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. A7.02 REV 0



01 REFLECTED CEILING PLAN - ELECTRICAL LIGHTING

Sheet File Name: County-TX-Jefferson\SPT\Hangar\Sheet\PLOT-FINAL-02-ELETOT.dwg

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
Phone: 713.953.5200
Fax: 713.953.5026
FIRM # F-1386
White Rock Studio (SR 2542) Project Number 221

White Rock Studio
1407 Kinkaid Drive
Dallas, Texas 75214
Office: 214.324.4656
Jefferson Architect: Jay Flanigan

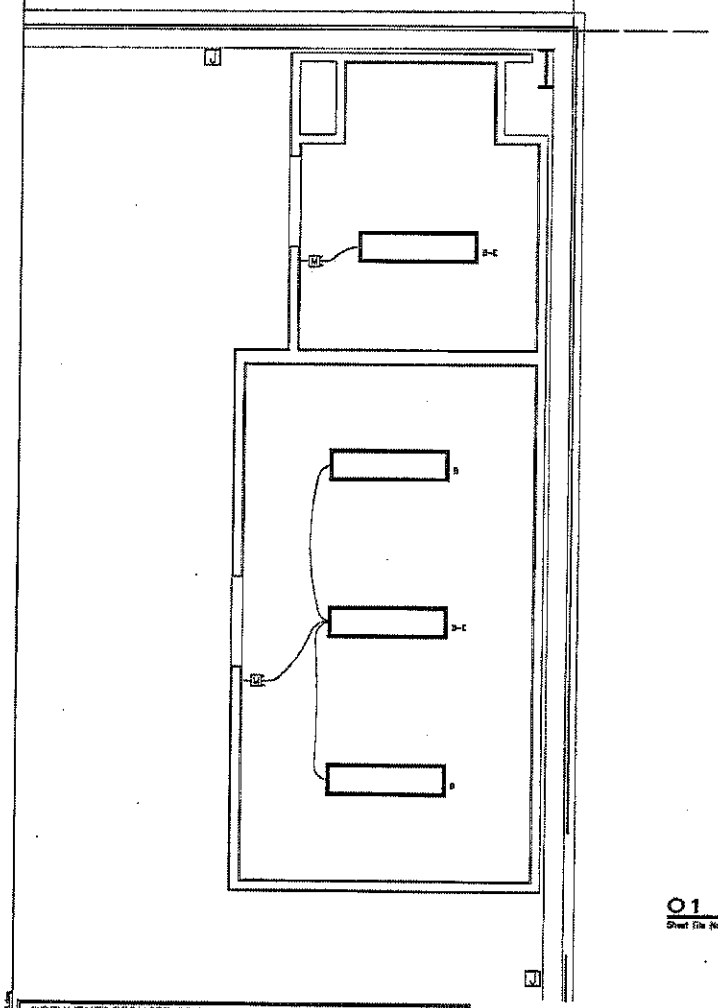
NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
4				
3				
2				
1				
0		Issued for Construction		

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug. 23, 2017
APPROVED: CHECKED: NO. EL7.01 REV 0



Lighting Fixture Selections

Fixture Designation	Fixture Manufacturer	Model Number	Connect Power Requirements	Lamp Type & Quantity	Mounting
A	Lithonia	TWD32T 4 32 SLD WD 120 1/4 GEBTWPS	120V	8 – 32W T8	Suspended 14'-0" AFF
A-E	Lithonia	TWD32T 4 32 SLD WD 120 1/4 GEBTWPS ELEC	120V	8 – 32W T8	Suspended 14'-0" AFF
B	Lithonia	SW2 32 120 GEBTWPS	120V	2 – 32W T8	Surface (Ceiling) Mounted
B-E	Lithonia	SW2 32 120 GEBTWPS EL	120V	2 – 32W T8	Surface (Ceiling) Mounted

01 CEILING PLAN - ENLARGED REFLECTED ELECTRICAL LIGHTING

Sheet File Name: County-Tx-Jefferson\EPT\Images\Draw\FLOT-FINAL-02-EP0702.dwg Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and re-publications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineer and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Verbal contact with these drawings and/or specifications shall constitute constitutes evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (BR 2H-35) Project Number 22
Phone 713.953.5000
Fax 713.953.5025
FRN-F-1386

White Rock Studio
1 Mill Run Valley Drive
Suite 104
Conroe, Texas 77304

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPD DATE
6		Issued for Construction	MAE 08/30/17	
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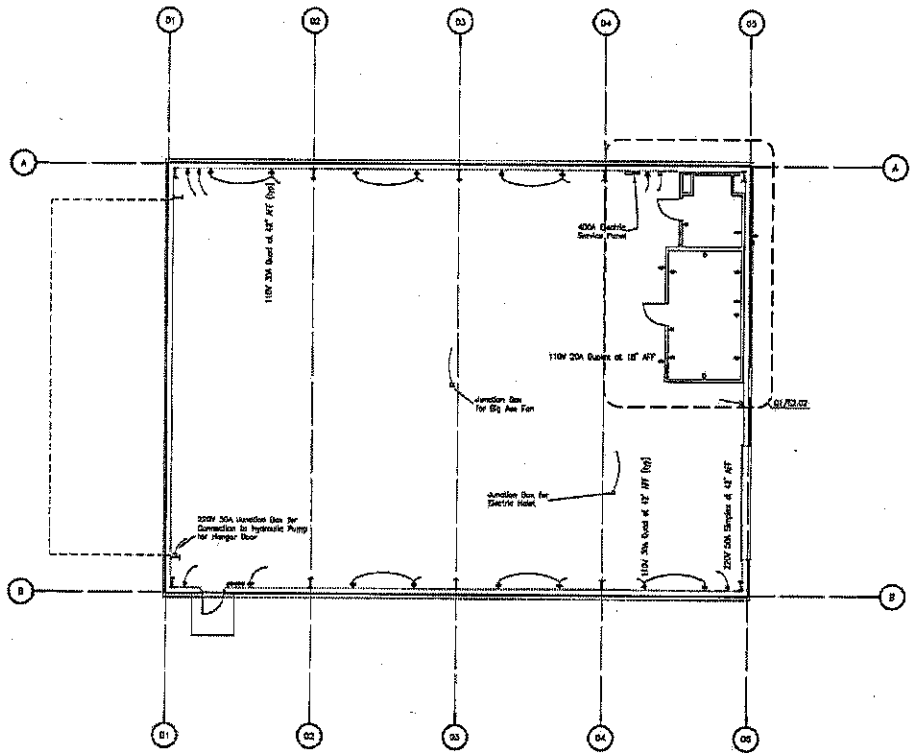
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug. 23, 2017
APPROVED: CHECKED: NO. EL7.02 REV 0



01 FLOOR PLAN - ELECTRICAL POWER

Sheet File Name: County-TX-Jefferson\SPT\Hangar\Draw\PLOT-FINAL-02-ELP201.dwg

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed in whole or part in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (BR 2640 Project Number 221)
Phone: 713.953.5200
Fax: 713.953.5026
FIRM # F-1386

WRS
White Rock Studio

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPR DATE
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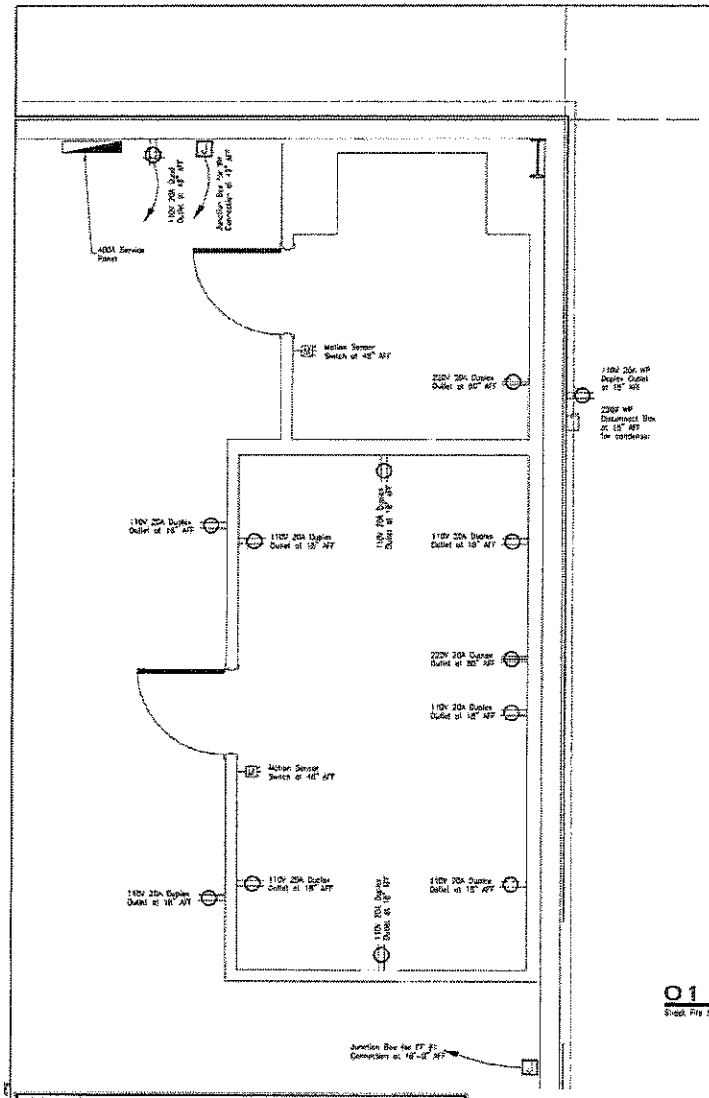
WORK ORDER NO.

Jefferson County Sheriff's Department

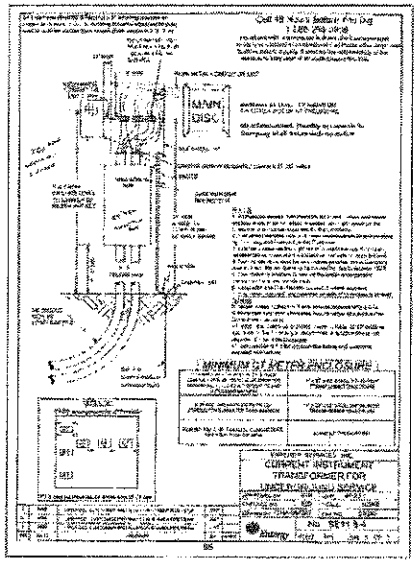
CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

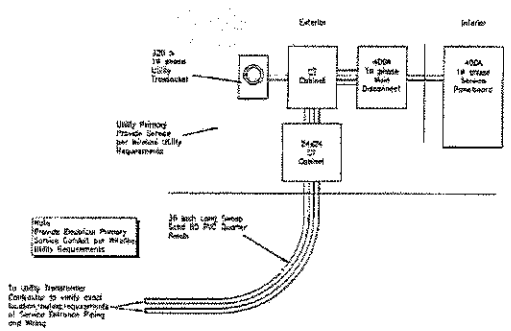
DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. EP2.01 REV 0



Power Notes

1. Installation of all fixtures, control and wiring shall comply with all Federal, State and Local Laws and Regulations having jurisdiction over the installation of electrical lighting and power.
2. Height of all user accessible controls shall comply with requirements of the Americans with Disabilities Act and Texas Accessibility Standards.





Electrical Riser Diagram

01 ENLARGED FLOOR PLAN - ELECTRICAL POWER

Sheet File Name: Sandy-TX-Jefferson\BPS\Design\Drawings\PLOT-Sheet-02-EP0202.dwg Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
(White Rock Studio-WR 2640) Project Number 221
Phone 713.953.5200
Fax 713.953.5026
FIRM # F-1386

White Rock Studio
Fort Worth, Texas
Dallas, Texas 75214
Cell: (214) 213-6686

NO	DATE	DESCRIPTION OF REVISION	BY	APPRD
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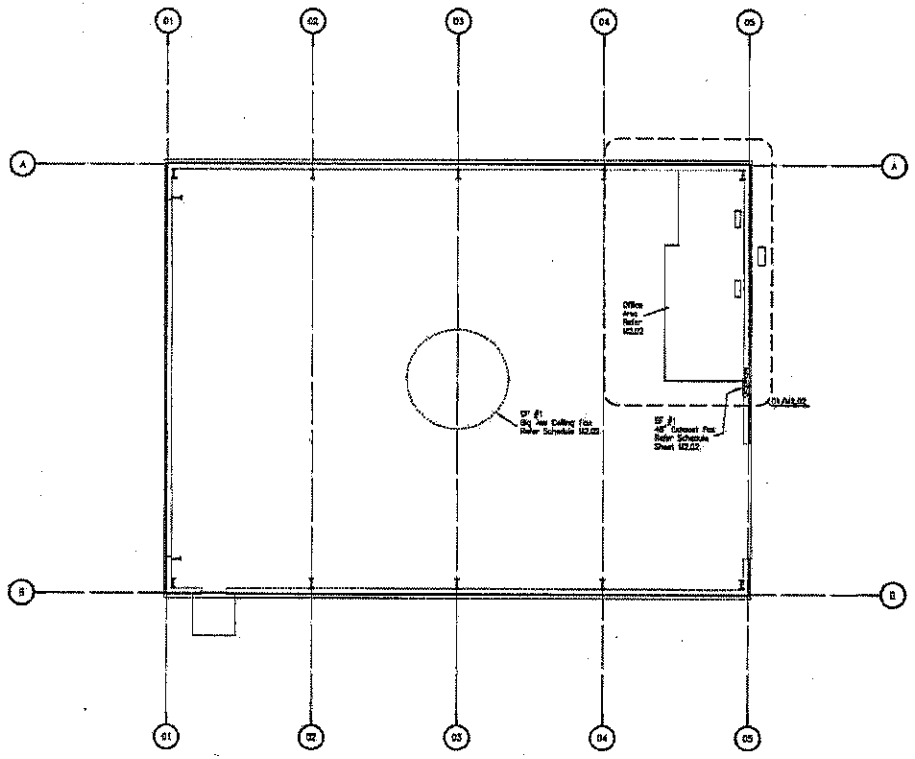
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: SHEET NO. EP2.02 REV 0



01

FLOOR PLAN - MECHANICAL

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

Sheet File Name: County-TX-Jefferson\JEFF\Design\Drwg\PLOT-FINAL-02-M2201.dwg

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements representing thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
7500 Bridgeport Drive
Suite 610
Houston, Texas 77042
White Rock Studio (LJA Job #) Project Number 201

Phone 713.953.5200
Fax 713.953.5026
FRN-F-1386

WRS
White Rock Studio
4447 North Central Expy
Dallas, Texas 75205
Phone 214.219.0414

NO	LOC	DESCRIPTION OF REVISION	BY DATE	APPRD DATE
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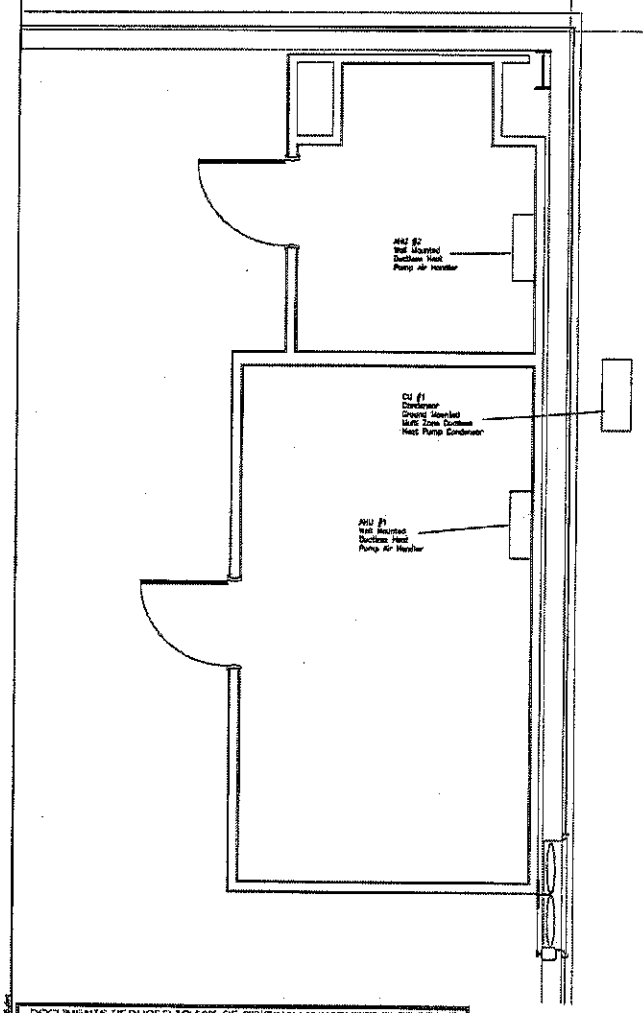
0		Issued for Construction	MK 04/28/17	

WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: JAN 23, 2017
APPROVED: CHECKED: NO. M2.01 REV 0



HVAC Equipment Selections

Equipment Designation	Equipment Manufacturer	Model Number	Cooling Capacity	Heating Capacity	Electrical Power Requirements
AHU #1	Mitsubishi	MSZ-GL09NA	9,000 BTU/h /W	10,900 BTU/h /W	208/230V, 1-Phase, 60Hz
AHU #2	Mitsubishi	MSZ-GL06NA	6,000 BTU/h /W	7,100 BTU/h /W	208/230V, 1-Phase, 60Hz
CU #1	Mitsubishi	MXZ-2B20NA	20,000 BTU/h /W	22,000 BTU/h /W	208/230V, 1-Phase, 60Hz

Ceiling Fan

Equipment Designation	Equipment Manufacturer	Model Number	Fan Diameter	Electrical Power Requirements
CF #1	CRAIG Fans	F-FP81-1401534	14'-0"	110-120V, 1-Phase, 50/60Hz

Exhaust Fan

Equipment Designation	Equipment Manufacturer	Model Number	Fan Diameter
EF #1	Fantech	1SDC200R	48"

01 ENLARGED FLOOR PLAN - MECHANICAL

Sheet File Name: County-TX-JeffHanson\SPT\Hangar\Dwg\PLOT-FINAL-02-M2202.dwg

Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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LJA Engineering, Inc.
3535 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (TBR 2542) Project Number 021
Phone 713.953.5200
Fax 713.953.5201
FIRM #F-726

ISD PAGE: White Rock Studio
PAGE:
JOE:

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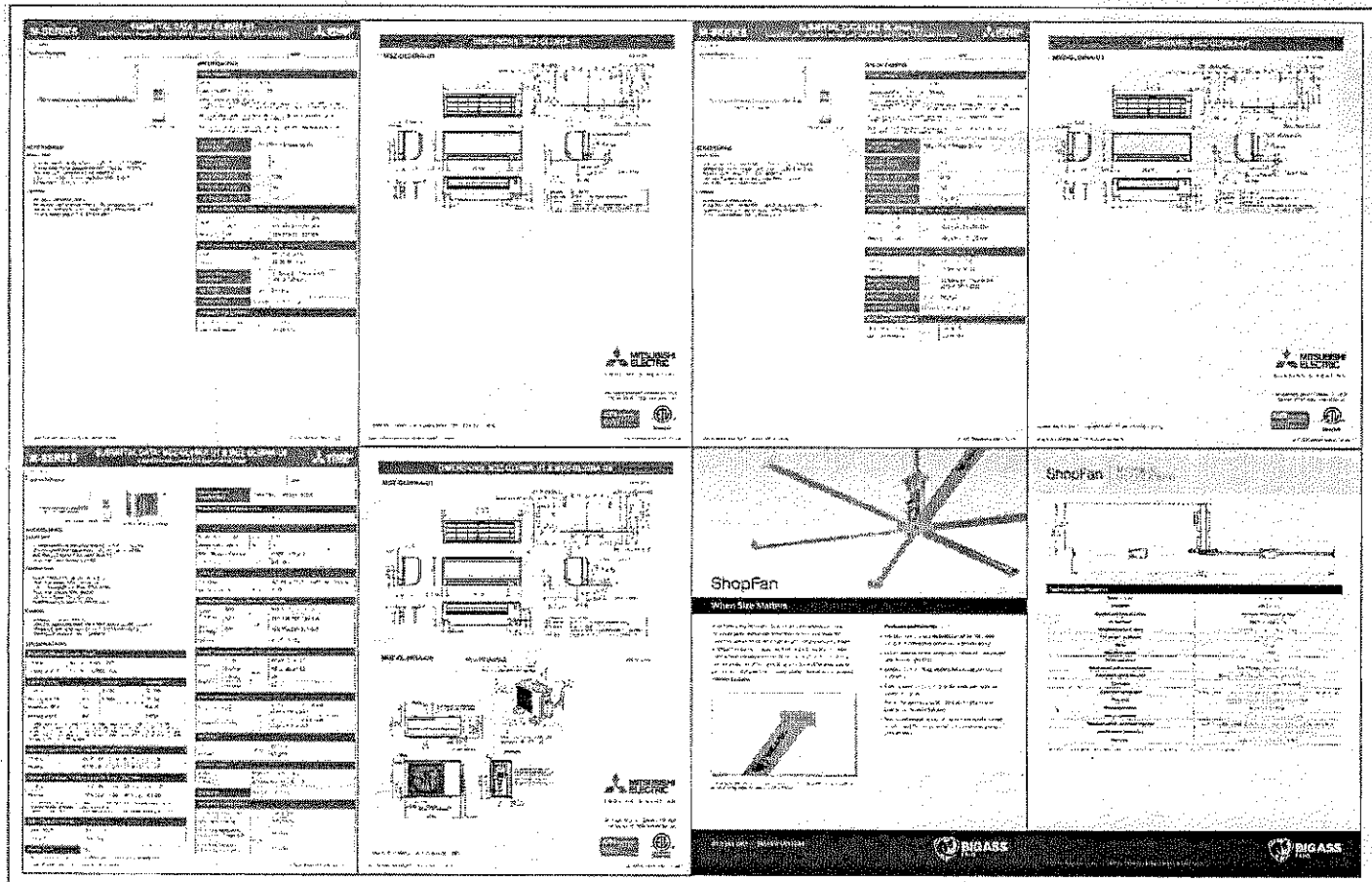
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. M2.02 REV 0



01 CUT SHEETS - MECHANICAL

Sheet File Name: County-TX-Jefferson\DFT\Design\Show\PLOT-FINAL-12-M2003.dwg

DOCUMENTS REDUCED TO 86% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio (LJA 2012) Project Number 227
Phone 713.953.5030
Fax 713.953.5078
FIRM # F438

White Rock Studio
1801 Main Street
Dallas, Texas 75201
Other Info Needed

Registered Architect
State of Texas
Expires Dec-31-2014

NO	LOC	DESCRIPTION OF REVISION	BY	APPD DATE	DWN DATE
4					
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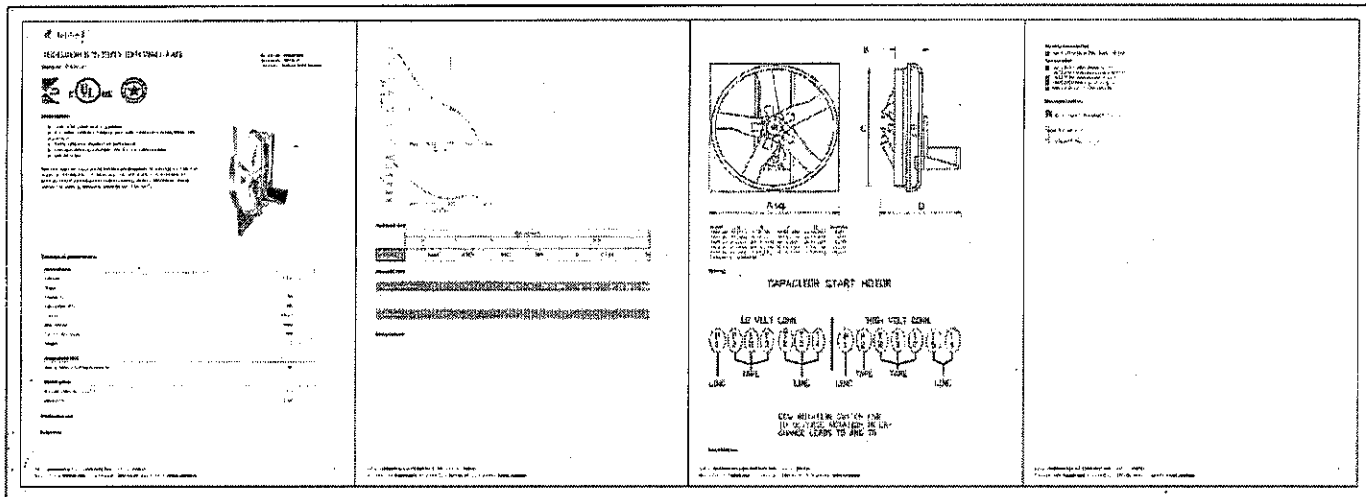
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: | SCALE: | DATE: Jun 23, 2013
APPROVED: | CHECKED: | NO. M2.03 | REV 0



01 CUT SHEETS - MECHANICAL

Sheet File Name: County-Tx-Jefferson\BPS\Manager\Drawings\PLOT-Sheet-02-Mechanical.dwg

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be loaned, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
Phone 713 953 5200
Fax 713 953 5026
(TBPE) F-1386
White Rock Studio (TBR 2642) Project Number 221

WRS
White Rock Studio

NO	LOC	DESCRIPTION OF REVISION	INT. DATE	APPR. DATE
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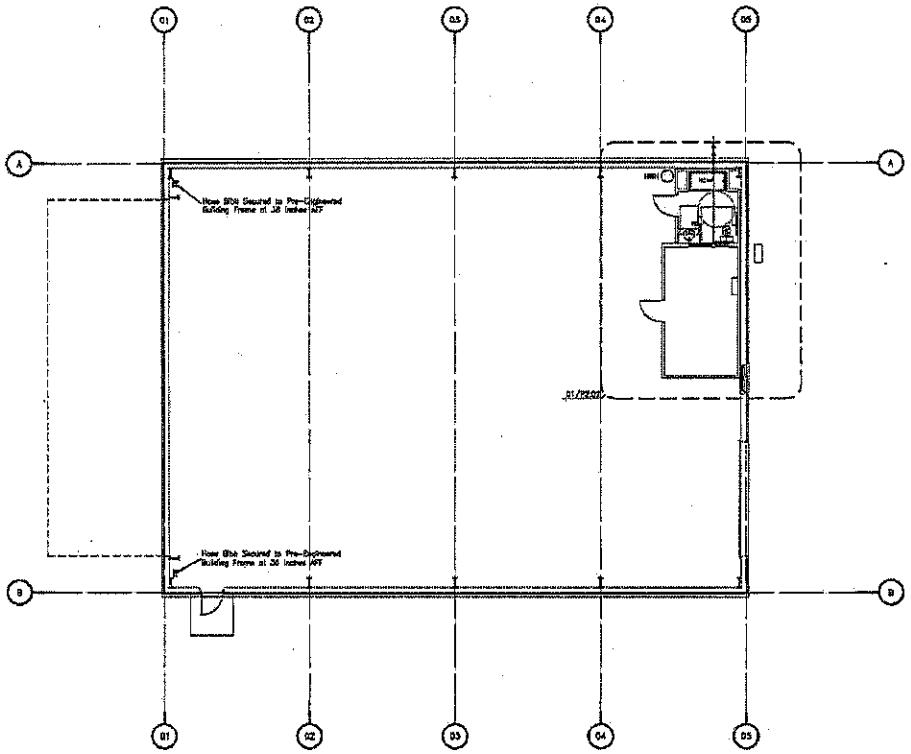
WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DATE: Aug 23, 2019
DRAWN:
SCALE:
APPROVED:
CHECKED:
NO. M2.04
REV 0



01 FLOOR PLAN - PLUMBING

Sheet File Name: County-Tx-Jefferson\SPT\Manger\Drwn\PLOT-FINAL-02-P020.dwg

Full Size Scale: 1/8" = 1'-0" Half Size Scale: 1/16" = 1'-0"

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WORK ORDER NO.:

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

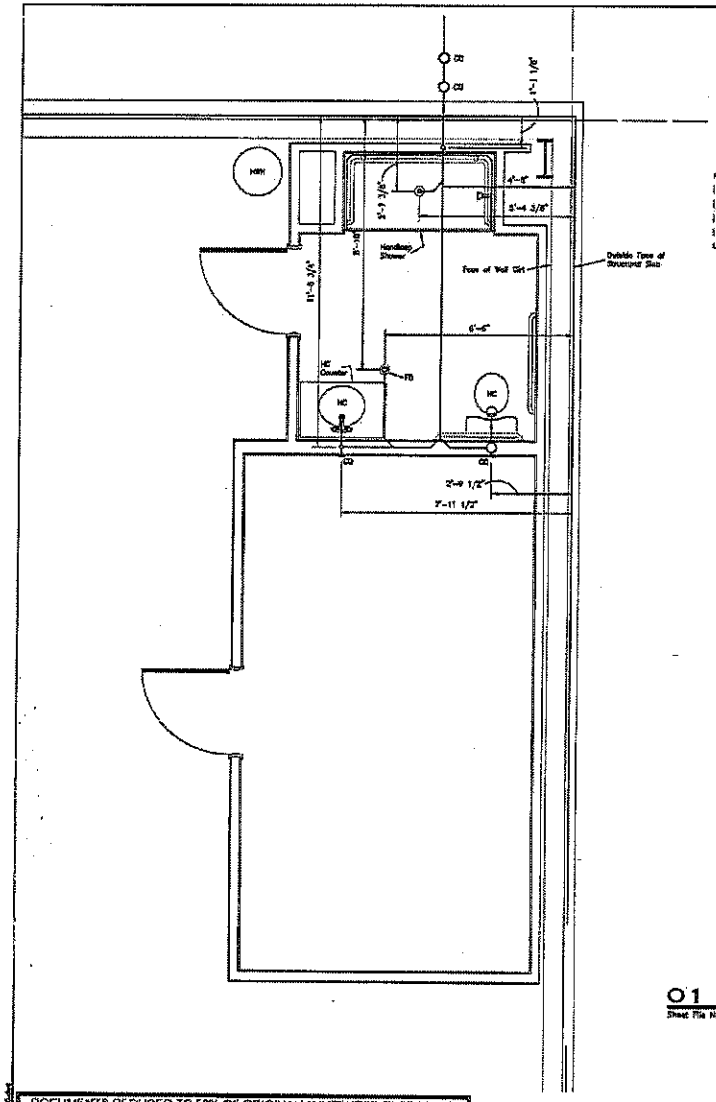
DRAWN: | SCALE: | DATE: Aug 25, 2017
APPROVED: | CHECKED: | NO. P2.01 | REV 0

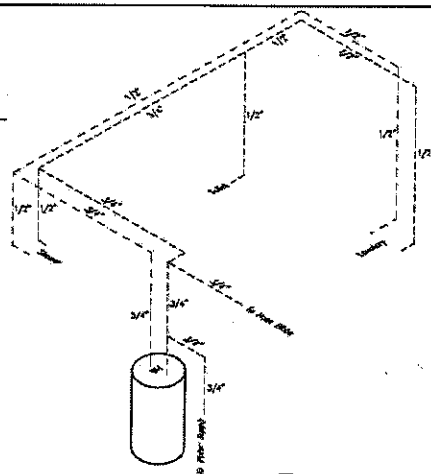
DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

The above drawings and specifications, and ideas, designs and arrangements represented thereby are and shall remain the property of the architect/engineers and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared and developed, without the written consent of the architect/engineers. Visual contact with these drawings and/or specifications shall constitute conclusive evidence of acceptance of these restrictions.

LJA Engineering, Inc.
2929 Briarpark Drive
Suite 600
Houston, Texas 77042
White Rock Studio LJA 2542 Project Number 231
Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

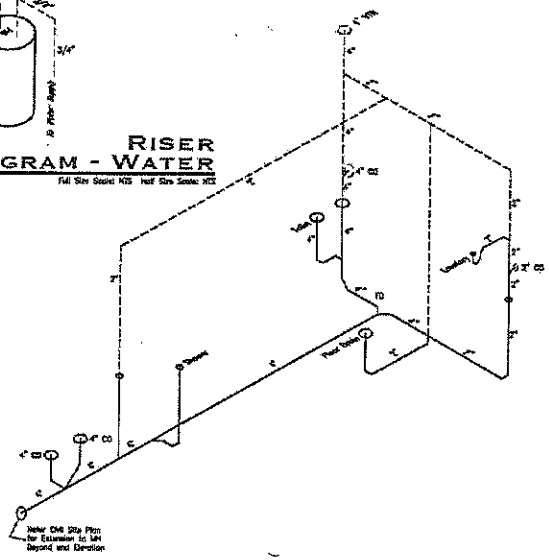
White Rock Studio
1417 East Kelly Drive
Baton Rouge, LA 70806
Phone 225.715.9445





03 RISER DIAGRAM - WATER

Full Size Scale: NTS Half Size Scale: NTS



02 RISER DIAGRAM - SANITARY

Full Size Scale: NTS Half Size Scale: NTS

01 ENLARGED FLOOR PLAN - PLUMBING

Sheet File Name: County-DX-Jefferson\SPT\Design\Dms\P\01-PWAL-02-P0202.dwg

Full Size Scale: 1/2" = 1'-0" Half Size Scale: 1/4" = 1'-0"

Equipment Selections

Fixture	Manufacturer	Model Number	Color	Capacity	Notes
Shower	Fiberglass Systems, Inc.	1333604.75	white	-	-
Shower Control Valve	-	-	-	-	-
Toilet	American Standard	2467.100	White	1.6 GPF	Control Valve is lo on Open Side of Tank
Toilet Seat	Church	9500SSC	White	-	-
Lavatory	American Standard	0476047.020	White	-	-
Lavatory Control Valve	American Standard	7075000.002	-	-	-
Water Heater	A.O. Smith	DEL-20	-	20 Gallon	-
Floor Drain	Jeorn	30000-A	-	-	6" Diam with Satin Nickley Strainer, C.I. Flashing Collar and Trap Primer Connection
Trap Primer	Precision Plumbing Products	P2-500	-	-	All Drain with Distribution Unit. Provide trap primer on all Floor Drain and Shower Drain.
Wall Cleanout	Jeorn	Series 28910	-	-	Cantral C.I. Cleanout Tee with Recessed Tapped Plug and Polished Stainless Steel Cover.
-	-	-	-	-	-

Plumbing Notes

1. Plumbing Materials and Installation of Components shall comply with all Federal, State and Local laws and Regulations having jurisdiction over installation.
2. Plumbing Materials and Installation shall comply with the Americans with Disabilities Act and the Texas Accessibility Standards.
3. Verify Flow Line of Drain Elevation on Civil Documents prior to installation of drainage piping.
4. Dimensions shown are from the OUTSIDE face of the Structural Slab to the Centerline of Pipe Penetration through the Slab.
5. Piping layout is schematic in nature. Exact locations of piping to be coordinated with building structure and work of other contractors and trades.
6. General Contractor shall coordinate exact locations of all water and drain connections of Plumbing Fixtures with architectural wall layout.
7. All Hot and Cold Water Lines shall be insulated with Armaflex insulation, or other closed cellular foam product. Fiberglass insulation around cold water piping is not acceptable.
8. Support Cast Iron Sanitary Piping not in vertical on 5'-0" centers, all steel piping on 10'-0" centers, all PVC piping on 3'-0" centers, and copper piping on 6'-0" centers.
9. Run all water lines level.
10. Maintain a minimum of 10'-0" clear between domestic water and sanitary sewer piping at building entrance.
11. All fixtures shall be equipped with stop valves in accessible locations.
12. Contractor shall provide vent-off valve at each branch line connecting to the main.
13. Main water shut-off shall be accessible.
14. Provide accessible cleanouts at not more than 30'-0" apart in horizontal sanitary drainage lines 4" size, or less, diameter, and not more than 100'-0" apart for larger pipe.
15. Provide accessible cleanouts as required by code.
16. Water Heater shall have both water and electrical shut-offs at easily accessible locations.
17. An atmospheric vacuum breaker or backflow prevention device must be installed on all hose bibbs inside and outside of the building.
18. Contractor is responsible for all new, existing, and upgraded utility services contractor shall contact local utility company (sewer, water, etc.) and coordinate new service sizes and meter.

DOCUMENTS REDUCED TO 50% OF ORIGINALLY INTENDED PLOT SCALE

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L/A Engineering, Inc.
3000 Eastside Drive
Suite 650
Houston, Texas 77042
White Rock Studio
Houston, Texas

NO	LOC	DESCRIPTION OF REVISION	BY / DATE
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WORK ORDER NO.

Jefferson County Sheriff's Department

CONSTRUCTION DOCUMENTS
FACILITY CONSTRUCTION
Southeast Texas Regional Airport
Jefferson County, Texas

DRAWN: SCALE: DATE: Aug 23, 2017
APPROVED: CHECKED: NO. P2.02 REV 0

JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah L. Clark, Purchasing Agent

1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

NOTICE OF AWARD

October 30, 2017

BDS Constructors, LLC
d/b/a MK Constructors
PO Box 1208
Vidor, TX 77670
Attention: Mr. Michael Brown, Vice President

Dear Mr. Brown:

Thank you for your company's response to Invitation for Bid (IFB 17-008/JW), Cheek Phase V- Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No. 7216231).

On Monday, October 30, 2017, Jefferson County Commissioners' Court awarded the above-referenced project to your company BDS Constructors, LLC d/b/a MK Constructors, as the low responsive responsible bidder; for a Base Bid amount of $161,965.00 and Alternate Bid amount of $43,899.00; for a total of $205,864.00; with ninety (90) days for the completion of the project. This project is funded by a Texas Community Development Block Grant from The Texas Department of Agriculture.

Your company's bid has been reviewed and checked for accuracy. Please find accompanying this letter a copy of the certified bid tabulation.

Within ten (10) days after the date of the signing of a contract, your company shall furnish all bonds, and insurance requirements to the County.

The effective date of the Notice to Proceed will be established after contract documents have been executed.

Please be advised that this letter simply serves to notify you of the award. Do not order any materials or equipment, begin work, or make any other financial commitments concerning this project until you have received a County purchase order containing an authorized signature.

Jefferson County looks forward to working with you on this project.

Sincerely,

Deborah Clark

Deborah L. Clark
Purchasing Agent
Jefferson County, Texas

JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT
1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number: (IFB 17-008/JW)

IFB Title: Cheek Phase V- Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No.7216231)

IFB Due: **11:00 am CDT, Tuesday, October 24, 2017**

Addendum No.: 2

Issued (Date): October 17, 2017

TO BIDDER: This Addendum is an integral part of the IFB package under consideration by you as a Bidder in connection with the subject matter herein identified. Jefferson County deems all sealed proposals to have been proffered in recognition and consideration of the entire IFB package – **including all addenda.** For purposes of clarification, **receipt of this present Addendum by a Bidder should be evidenced by returning it (signed) as part of the Bidder's sealed proposal.** If the Proposal has already been received by the Jefferson County Purchasing Department, Bidder should return this addendum in a separate sealed envelope, clearly marked with the IFB Title, IFB Number, and Opening Date and Time, as stated above.

Reason for Issuance of this addendum:

-Responses/Clarifications for Technical and Bid Submission Requirement Questions Received for this Invitation for Bid.

-Revised Bid Proposal Form and Alternate Bid Proposal Form:
These forms replace any previous versions of the Bid Proposal Form and Alternate Bid Proposal Form for this Invitation for Bid. Bidders are to utilize the Revised Bid Proposal Form and Alternate Bid Proposal Form included in this addendum for bid submission.

-Revised Scope of Work for Specifications:
Please replace Pages 111 – 113 with the revised pages included in this addendum. These pages reflect revisions to the installation locations (addresses) to be included in the bid within both the Bid Proposal Form and Alternate Bid Proposal Form. These pages replace any previous version of the specifications.

-Revised Plan Sheet:
Please replace Page 2 of 6 of the Plan Sheets with the revised page included in this addendum. This page reflects the revisions to installation locations (addresses) included in the bid. This page replaces any previous version of the specifications.

Responses/Clarification for Technical and Bid Submission Requirement Questions Received from Potential Bidders:

Question: Where is grinder unit to be installed? **Answer: To be installed on side of the house that is closest to the septic tank.**
Question: How will the contractor proceed for a home that has two (2) septic systems? **Answer: TDA grant funds may only be utilized for one grinder unit per home.**
Question: For homes that have two (2) septic systems, who will be responsible for making the determination on what septic system to utilize? **Answer: The homeowner will be consulted and give consent for which septic system to utilize.**
Question: Is property restoration work included for this project? **Answer: The contractor will be required to level up trench line and septic tank backfill and any other ruts contractor makes in yard installing grinder unit and service line. There will be no sodding.**

The information included herein is hereby incorporated into the documents of this present Bid matter and supersedes any conflicting documents or portion thereof previously issued.

Receipt of this Addendum is hereby acknowledged by the undersigned Bidder:

ATTEST: [signature]

* [signature]
Authorized Signature (Bidder)

Witness

Vice President
Title of Person Signing Above

Witness

Mike Braun
Typed Name of Business or Individual

Approved by ____ Date: _____

16736 IH 10
Address Vidor TX 77662

Addendum No. 2 Revised Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
1	MOBILIZATION AND DEMOBILIZATION	L.S.	1	Sixteen thousand four hundred fifty		16,450	00	16,450	00
2	FURNISH & INSTALL LPSS GRINDER PUMP STATION INCLUDING PUMP, FIBERGLASS TANK, CONTROLS & HOUSING INCLUDING ELECTRICAL INSTALLATION , AND 4" SEWER CONNECTION FROM HOUSE COMPLETE IN PLACE PER SUMMARY OF WORK	EA.	15	Five thousand five hundred sixty		5560	00	83,400	00
3	ABANDON EXISTING SEPTIC TANK	EA.	15	Seven hundred fifty		750	00	11,250	00
4	1.1/4" HDPE SDR-11 SANITARY SEWER SERVICE LINE, COMPLETE IN PLACE, FROM VALVE BOX TO GRINDER UNIT	LF	1,560	Four	dollars	4	50	7,020	00
5	2" PVC SDR-26 SEWER FORCE MAIN COMPLETE IN PLACE INCLUDING SAND ENCASEMENT PER DETAIL	L.F.	532	Thirty Five		35	00	18,620	00
6	DRIVEWAY BORE FOR 2" SEWER FORCE MAIN	L.F.	40	Twenty five		25	00	1,000	00
7	2" 45 DEG. BEND DI-MJ, RESTRAINED W/ MEGA-LUGS	EA.	1	one hundred fifty		150	00	150	00
8	2" GATE VALVE DI-MJ RESTRAINED W/MEGA-LUGS	EA.	1	Four hundred fifty		450	00	450	00
9	6"x2" WYE DI-MJ, RESTRAINED W/MEGA-LUG INSTALLED ON EXISTING FORCE MAIN LOCATED ON BROOKS RD. & DENLEY COMPLETE IN PLACE	EA.	1	Five hundred		500	00	500	00

Addendum No. 2 Revised Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
10	2" TERMINAL CLEANOUT W/VAULT (SEE DETAILS SHEET 5 OF 6) COMPLETE IN PLACE	EA.	1	Four hundred		400	00	400	00
11	LONG SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE , 1-1/4" SDR-11 HDPE, FITTINGS, VALVES, & ROADWAY BORE COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	8	Eight hundred		800	00	6,400	00
12	SHORT SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE, 1-1/4" SDR-11 HDPE, FITTINGS, & VALVES COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	7	Five hundred		500	00	3,500	00
13	"610" ROCK FOR DRIVEWAYS, LOOSE DUMP AND SPREAD MIN. 6" THICK	TON	120	Fifty five		55	00	6,600	00
	ITEMS TO BE USED WHEN DIRECTED BY ENGINEER								
14	MANHOURS WHEN AUTHORIZED BY THE ENGINEER	HOUR	5	Twenty		20	00	100	00
15	TRUCK HOURS WHEN AUTHORIZED BY THE ENGINEER	HOUR	5	Seventy five		75	00	375	00
16	BACK HOE / LOADER HOUR WHEN AUTHORIZED BY THE ENGINEER	HOUR	5	one hundred		100	00	500	00
17	FURNISH & INSTALL 4" PVC FOR ADDITIONAL LINES WHEN AUTHORIZED BY THE ENGINEER.	LF	100	Eight		8	00	800	00

Addendum No. 2 Revised Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
18	CEMENT STABILIZED SAND BACKFILL 1-1/2 SACK/C.Y. WHEN AUTHORIZED BY THE ENGINEER	TON	5	Ninety		90	00	450	00
19	EXTRA CLASS-A CONCRETE - BULK, COMPLETE IN PLACE WHEN AUTHORIZED BY THE ENGINEER	C.Y.	5	three hundred		300	00	1,500	00
20	EXTRA CLASS-A CONCRETE - FORMED, COMPLETE IN PLACE WHEN AUTHORIZED BY THE ENGINEER	C.Y.	5	five hundred		500	00	2,500	00
						TOTAL		161,965	00
	STATEMENT FOR SEPARATED CONTRACT COMPLIANCE:								
	NON-CONSUMABLE MATERIALS AND EQUIPMENT.....					64,786 00		$ 64,786	00
	SKILLED LABOR, MATERIALS, EQUIPMENT AND TOOLS.....					97,179 00		$ 97,179	00
						TOTAL		$ 161,965	00

The undersigned agrees to commence work within ten (10) days after the date of written notice to commence work and to substantially complete the work on which he has bid within 90 calendar days as provided in the General Conditions of the Agreement. Enclosed herewith is a cashier's check, certified check, or bid bond in the sum of 5% of the greatest amount bid which it is agreed shall be collected and retained by the **OWNER** as liquidating damages in the event this proposal is accepted by the **OWNER** within sixty (60) days after the date advertised for the reception of bids and the undersigned fails to execute the contract and the required bond with the **OWNER**, under the conditions hereof, within ten (10) days after the date said proposal is accepted, otherwise said check or bond shall be returned to the undersigned upon demand.

CONTRACTOR: 3DS Construction LLC dba MK Construction

BY: * Michael Bass

ADDRESS: 16736 IH 10 Vidor TX 77662

DATE: 10/23/17

Phone: 409-769-0089

Addendum No. 2 Revised Alternate Addition Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
1	FURNISH & INSTALL LPSS GRINDER PUMP STATION INCLUDING PUMP, FIBERGLASS TANK, CONTROLS & HOUSING INCLUDING ELECTRICAL INSTALLATION , AND 4" SEWER CONNECTION FROM HOUSE COMPLETE IN PLACE PER SUMMARY OF WORK	EA.	7	Four thousand three hundred thirty nine		4,339	00	30,373	00
2	ABANDON EXISTING SEPTIC TANK	EA.	7	Seven hundred fifty		750	00	5,250	00
3	1 1/4" HDPE SDR-11 SANITARY SEWER SERVICE LINE, COMPLETE IN PLACE, FROM VALVE BOX TO GRINDER UNIT	LF	728	Four	FIFTY	4	50	3,276	00
4	SHORT SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE, 1-1/4" SDR-11 HDPE, FITTINGS, & VALVES COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	2	Five hundred		500	00	1,000	00
5	LONG SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE , 1-1/4" SDR-11 HDPE, FITTINGS, VALVES, & ROADWAY BORE COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	5	Eight hundred		800	00	4,000	00
						TOTAL		43,899	00
	STATEMENT FOR SEPARATED CONTRACT COMPLIANCE:								
	NON-CONSUMABLE MATERIALS AND EQUIPMENT.....					17,559	00	$ 17,559	00
	SKILLED LABOR; MATERIALS, EQUIPMENT AND TOOLS.....					26,340	00	$ 26,340	00
						TOTAL		$ 43,899	00

JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT
1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number:	(IFB 17-008/JW)
IFB Title:	Cheek Phase V- Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No.7216231)
IFB Due:	**11:00 am CDT, Tuesday, October 24, 2017**
Addendum No.:	1
Issued (Date):	October 12, 2017

TO BIDDER: This Addendum is an integral part of the IFB package under consideration by you as a Bidder in connection with the subject matter herein identified. Jefferson County deems all sealed proposals to have been proffered in recognition and consideration of the entire IFB package – **including all addenda.** For purposes of clarification, **receipt of this present Addendum by a Bidder should be evidenced by returning it (signed) as part of the Bidder's sealed proposal.** If the Proposal has already been received by the Jefferson County Purchasing Department, Bidder should return this addendum in a separate sealed envelope, clearly marked with the IFB Title, IFB Number, and Opening Date and Time, as stated above.

Reason for Issuance of this addendum: Cut-Off Date for Responses to Question Submissions

Bidders must submit technical questions via email to Mark Kelly with Action Civil Engineers at mkelly@acecivilengineers.com by 9:00 am CDT, Monday, October 16, 2017.

Bidders must submit bid submission requirement questions via email to Jamey West, Assistant Purchasing Agent for Jefferson County at jwest@co.jefferson.tx.us by 9:00 am CDT, Monday, October 16, 2017.

Responses to both technical and bid submission requirement questions will be addressed via addendum.

Questions must be received by this cut-off date to receive a response.

ADDENDUM NO. 1 (Continued) **(IFB 17-008/JW)**

The information included herein is hereby incorporated into the documents of this present Bid matter and supersedes any conflicting documents or portion thereof previously issued.

Receipt of this Addendum is hereby acknowledged by the undersigned Bidder:

ATTEST: [signature]

* Michael Brown
Authorized Signature (Bidder)

Witness

(CV) Mike Brown
Title of Person Signing Above

Witness

3DS Construction LLC
dba MK Construction
Typed Name of Business or Individual

Approved by ____ Date: _____

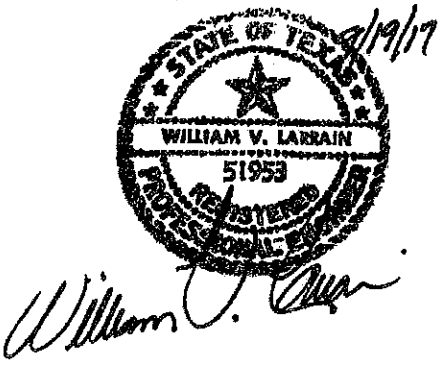
16736 IH 10
Address Vidor TX 77662

CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS
FOR
JEFFERSON COUNTY

CHEEK PHASE V – CHEEK COMMUNITY SEWER IMPROVEMENTS, GRINDER PUMP AND FORCE MAIN INSTALLATION

CHEEK AREA COMMUNITY
JEFFERSON COUNTY, TEXAS

"Texas Community Development Block Grant Program"
TXCDBG Contract No. 7216231
ACE Job No. 115-02



Action Civil Engineers, PLLC.
8460 Central Mall Drive
Port Arthur, TX. 77642
Phone: 409-983-6263
Fax: 409-983-6265
Firm Registration No.: F-16376
Email: ace@aceclvilengineers.com

JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah L. Clark, Purchasing Agent
1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

LEGAL NOTICE
Advertisement for Invitation for Bids
September 25, 2017

Notice is hereby given that sealed bids will be accepted by the Jefferson County Purchasing Department for IFB 17-008/JW, Cheek Phase V – Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation).

Bids are to be sealed and addressed to the Purchasing Agent with the bid number and name marked on the outside of the envelope. Bidders shall forward an original and three (3) copies of their bid to the address shown below. Jefferson County does not accept bids submitted electronically. Late bids will be rejected as non-responsive. Bids will be publicly opened and read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Bidders are invited to attend the sealed bid opening.

BID NAME:	**Cheek Phase V – Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No. 7216131)**
BID NO:	**IFB 17-008/JW**
DUE DATE/TIME:	**11:00 AM CDT, Tuesday, October 24, 2017**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department 1149 Pearl Street, 1st Floor Beaumont, Texas 77701**

A Mandatory Pre-bid Conference and Walk-through will be held on Thursday, October 12, 2017 at 10:00 AM CDT in the Jefferson County Engineering Department Conference Room located on the fifth floor of the Jefferson County Courthouse, 1149 Pearl Street, Beaumont, Texas 77701.

The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

Specifications and plans are available for a non-refundable $100.00 charge at Action Civil Engineers, PLLC, 8460 Central Mall Dr. Suite J, Port Arthur, Texas 77642. Contact Number 409-983-6263. Any questions relating to these requirements should be directed to Jamey West, Assistant Purchasing Agent, at 409-835-8593 or jwest@co.jefferson.tx.us. Bidders may submit technical questions to: Mark Kelly, with Action Civil Engineers at 409-983-6263 or mkelly@acecivilengineers.com

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, as issued by the Texas Department of Agriculture Office of Rural Affairs and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex, sexual identity, gender identity, or national origin.

Funding for this project is covered under Section 3 of the Housing and Urban Development Act of 1968. All eligible bidders must comply with Section 3 requirements in regards to meeting or exceeding the required objectives for both hiring and subcontracting. In accordance with these objectives, contractors are required to direct their newly created employment and/or subcontracting opportunities to Section 3 Residents and Business Concerns.

Jefferson County reserves the right to reject any or all bids or to waive any informalities in the bidding. Bids may be held by Jefferson County for a period not to exceed 60 days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidder's qualifications prior to the contract award.

All contractors/subcontractors that are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project.

Jefferson County encourages Disadvantaged Business Enterprises to participate in the bidding process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

All interested firms are invited to submit a bid in accordance with the terms and conditions stated in this bid.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.

Deborah Clark

Deborah L. Clark, Purchasing Agent
Jefferson County, Texas

Publish: Beaumont Enterprise & Port Arthur News – September 27, 2017 and October 4, 2017

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IFB 17-008/JW, Cheek Phase V – Cheek Community Sewer Improvements, Grinder Pump and Force Main Installation

Bids due: 11:00 AM CDT, Tuesday, October 24, 2017

Bid Submissions:

Bidder is responsible for submitting:

- One (1) *original* bid copy to include a completed copy of this specifications packet, in its entirety.
- Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

Additionally, Bidder must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

http://www.co.jefferson.tx.us/purchasing/main.htm

Bidder Information Form

Instructions: Complete the form below. Please provide legible, accurate, and complete contact information. PLEASE PRINT.

Bid Name & Number: Cheek Phase V – Cheek Community Sewer Improvements, Grinder Pump and Force Main Installation BID NO: IFB 17-008/JW

Bidder's Company/Business Name: BDS Construction LLC dba MK Construction

Bidder's TAX ID Number: 46-3567082

Contact Person: Carrie Vincent **Title:** Ops mngr

Phone Number (with area code): 409-769-0089

Alternate Phone Number if available (with area code):

Fax Number (with area code): 409-769-1288

Email Address: carrie@mkconstruction.com

Mailing Address (Please provide a physical address for bid bond return, if applicable):

P.O. Box 1208
Address
Vidor TX 77670
City, State, Zip Code

16736 I-10
Vidor TX 77662

Instructions to Bidders

1. Bid Submission

Bids must be submitted in complete original form by mail or messenger to the following address:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud.

Bidder shall submit bid in a tightly sealed opaque envelope or box, plainly marked "SEALED BID." The outside of the envelope of box shall also include the Bid Number, Bid Name, Bid Due Date, and the Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

All bids submitted in response to this invitation shall become the property of Jefferson County and will be a matter of public record available for review.

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 County 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. Bids determined as late will not be accepted and will be returned unopened to the bidder.

Opening of Bids: The County 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.

2. 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.

3. Bid Submissions During Time of Inclement Weather, Disaster, or Emergency

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the county of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the IFB and urgent County requirements preclude amendment to the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

4. Courthouse Security

Bidders are advised that all visitors to the Courthouse must pass through Security. Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal. Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

5. Preparation of Bids

The bid shall be legibly printed in ink or typed.

The County requests that bid submissions NOT be bound by staples or glued spines.

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

If a unit price or extension already entered is to be altered, it shall be crossed out and initialed in ink by the bidder.

The bid shall be legally signed and shall include the complete address of the bidder.

Jefferson County is exempt from Federal and State Sales Taxes, and such taxes shall not be included in bid prices.

6. Signatures

All bids, notifications, claims, and statements must be signed by an individual authorized to bind the bidder. The individual signing certifies, under the penalty of perjury, that he or she has the legal authorization to bind the bidder.

7. County Holidays – 2017:

January 16	Monday	Martin Luther King, Jr. Day
February 20	Monday	President's Day
April 14	Friday	Good Friday
May 29	Monday	Memorial Day
July 4	Tuesday	Independence Day
September 4	Monday	Labor Day
November 10	Friday	Veteran's Day
November 23 & 24	Thursday & Friday	Thanksgiving
December 25 & 26	Monday & Tuesday	Christmas
January 1, 2018	Monday	New Year's

8. Rejection or Withdrawal

Submission of additional terms, conditions or agreements with the bid document are grounds for deeming a bid non-responsive and may result in bid rejection. Jefferson County reserves the right to reject any and all bids and to waive any informalities and minor irregularities or defects in bids. Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within thirty (30) days after opening date.

9. Emergency/Declared Disaster Requirements

In the event of an emergency or if Jefferson County is declared a disaster area, by the County, State, or Federal Government, this Acceptance of Offer may be subjected to unusual usage. Contractor shall service the county during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing as specified in this Acceptance of Offer shall apply to serving the County's needs regardless of the circumstances. If Contractor is unable to supply the services under the terms of the Acceptance of Offer, then Contractor shall provide proof of such disruption and a copy of the invoice from Contractor's supplier(s).

Additional profit margin as a result of supplying services during an emergency or declared disaster shall not be permitted. In the event that additional equipment, supplies, and materials are required during the declared disaster, additional shipping, handling and drayage fees may apply.

10. Award

The bid will be awarded to the responsible, responsive bidder(s) whose bid, conforming to the solicitation, will be most advantageous to Jefferson County – price and other factors considered. Unless otherwise specified in this IFB, Jefferson County reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of Jefferson County. Any bidder who is in default to Jefferson County at the time of submittal of the bid shall have that bid rejected. Jefferson County reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial nonconformity in the offer, as determined by Jefferson County, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Jefferson County shall consider the qualifications of the bidders, and, where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, Jefferson County may conduct such investigation as it deems necessary to assist in the evaluation of a bid and to establish the responsibility, qualifications, and financial ability of the bidders to fulfill the contract.

Jefferson County reserves the right to consider as unqualified to do the work any bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in this contract.

Jefferson County reserves the right to award this contract on the basis of **lowest and best bid** in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, and/or to reject any or all bids. In the event the lowest dollar offeror meeting specifications is not a awarded a contract, Offeror may appear before the Commissioners' Court and present evidence concerning Offeror responsibility after officially notifying the Office of the Purchasing Agent of Offeror's intent to appear.

11. Contract

A response to an IFB is an offer to contract with Jefferson County based upon the terms, conditions, and specifications contained in the IFB. Bids do not become contracts unless and until they are executed by Jefferson County, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions is modified by an IFB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

12. Waiver of Subrogation

Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Jefferson County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.

13. Fiscal Funding

A multi-year contract (if requested by the specifications) continuing as a result of an extension option must include fiscal funding out. If, for any reason, funds are not appropriated to continue the contract, said contract shall become null and void.

14. Bid Results

Bid results are not provided in response to telephone inquiries. A preliminary tabulation of bids received will be posted on the Purchasing web page (http://co.jefferson.tx.us/ purchasing/main.htm) as soon as possible following bid opening. A final tabulation will be posted following bid award, and will also be available for review in the Purchasing Department.

15. Changes and Addenda to Bid Documents

Each change or addendum issued in relation to this IFB document will be on file in the Office of the Purchasing Agent, and will be posted on the Purchasing web site as soon as possible. It shall be the bidder's responsibility to make inquiry as to change or addenda issued, and to monitor the web site. All such changes or addenda shall become part of the contract and all bidders shall be bound by

such addenda. Information on all changes or addenda issued will be available at the Office of the County Purchasing Agent.

16. Specifications

Unless otherwise stated by the bidder, the bid will be considered as being in accordance with Jefferson County's applicable standard specifications, and any special specifications outlined in the bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of Jefferson County, and should not be construed as excluding bids on other types of materials, equipment, and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid. Jefferson County reserves the right to determine if equipment/ product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of the bid, may be considered non-responsive.

17. 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 County will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

18. Alternate Bid Items

No alternate bids or bid items will be considered unless they are specifically requested by the technical specifications.

19. Delivery

Bids shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the bidder (in writing on the included Bid Form), prices bid will be considered as being based on F.O.B. destination/delivered freight included.

20. Interpretation of Bid and/or Contract Documents

All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening, in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. Inquiries received that are not made in a timely fashion may or may not be considered.

21. Currency

Prices calculated by the bidder shall be stated in U.S. dollars.

22. Pricing

Prices shall be stated in units of quantity specified in the bid documents. In case of discrepancy in computing the amount of the bid, the unit price shall govern.

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.

23. Notice to Proceed/Purchase Order

The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.

24. Certification

By signing the offer section of the Offer and Acceptance page, bidder certifies:

- The submission of the offer did not involve collusion or other anti-competitive practices.
- The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to any public servant in connection with the submitted offer.
- The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.

25. Definitions

"County" – Jefferson County, Texas.
"Contractor" – The bidder whose proposal is accepted by Jefferson County.

26. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

General Conditions of Bidding and Terms of Contract

By execution of this document, the vendor accepts all general and special conditions of the contract as outlined below and in the specifications and plans.

1. Bidding

1.1 **Bids.** All bids must be submitted on the bid form furnished in this package.

1.2 **Authorized Signatures.** The bid must be executed personally by the vendor, duly authorized partner of the partnership, or duly authorized officer of the corporation. If executed by an agent, a power of attorney or other evidence of authority to act on behalf of the vendor shall accompany the bid to become a valid bid.

1.3 **Late Bids.** Bids must be in the office of the Jefferson County Purchasing Agent before or at the specified time and date bids are due. Bids received after the submission deadline shall be rejected as non-responsive and returned unopened.

1.4 **Withdrawal of Bids Prior to Bid Opening.** A bid may be withdrawn before the opening date by submitting a written request to the Purchasing Agent. If time allows, the bidder may submit a new bid. Bidder assumes full responsibility for submitting a new bid before or at the specified time and date bids are due. Jefferson County reserves the right to withdraw a request for bids before the opening date.

1.5 **Withdrawal of Bids after Bid Opening.** Bidder agrees that its offer may not be withdrawn or cancelled by the vendor for a period of thirty (30) days following the date and time designated for the receipt of bids unless otherwise stated in the bid and/or specifications.

1.6 **Bid Amounts.** Bids shall show net prices, extensions where applicable and net total. In case of conflict between unit price and extension, the unit price will govern. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be interpreted in the favor of Jefferson County.

1.7 **Exceptions and/or Substitutions.** All bids meeting the intent of the specifications and plans will be considered for award. Vendors taking exception to the specifications and plans, or offering substitutions, shall state these exceptions in the section provided. If bid is made on an article other than the one specified, which a bidder considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany same to permit thorough evaluation. The absence of stated exceptions and/or substitutions shall indicate that the vendor has not taken any exceptions to the specifications and shall be responsible to perform in strict accordance with the specifications. As a matter of practice, Jefferson County rejects exception(s) and /or substitutions as non-responsive but reserves the right to accept any and/or all of the exception(s) and/or substitution(s) deemed to be in the best interest of Jefferson County.

1.8 **Descriptions.** Unless otherwise specified, any reference to make, manufacturer and/or model used in the bid specifications is merely descriptive and not restrictive, and is used only to indicate type, style, or quality of material desired.

1.9 **Bid Alterations.** Bids cannot be altered or amended after submission deadline. Any interlineations, alterations, or erasures made before opening time must be initialed by the signer of the bid, guaranteeing authenticity.

1.10 **Tax Exempt Status.** Jefferson County is exempt from federal excise tax and state sales tax. Unless the bid form or specifications specifically indicate otherwise, the bid price must be net, exclusive of above-mentioned taxes and will be so construed. Therefore, the bid price shall not include taxes.

1.11 **Quantities.** Quantities indicated are estimated quantities only and are not a commitment to buy. Approximate usage does not constitute an order, but only implies the probable quantity that will be used. Commodities will be ordered on an as-needed basis. Bidder is responsible for accurate final counts.

1.12 **Bid Award.** Award of contract shall be made to the most responsible, responsive bidder, whose offer is determined to be the best value, taking into consideration the relative importance of price. Jefferson County reserves the right to be the sole judge as to whether items bid will serve the purpose intended. Jefferson County reserves the right to accept or reject in part or in whole any bid submitted, and to waive any technicalities or informalities for the best interest of the County. Jefferson County reserves the right to award based upon individual line items, sections or total bid.

1.13 **Silence of Specifications for Complete Units.** All materials, equipment and/or parts that will become a portion of the completed work, including items not specifically stated herein but, necessary to render the service(s) complete and operational per the specifications, are to be included in the bid price. Vendor may be required to furnish evidence that the service, as bid, will meet or exceed these requirements.

1.14 **Interpretations or Addenda**

No oral interpretations will be made to any bidder. Each request for clarification shall be made in writing to the Grant Recipient or engineer no less than seven (7) days prior to the bid opening. Each interpretation made 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 Grant Recipient 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.

1.15 **General Bid Bond/Surety Requirements.** Failure to furnish bid bond/surety, if requested, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.16 **General Insurance Requirements.** Failure to furnish Affidavit of Insurance, if required in these specifications, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.17 **Responsiveness.** A responsive bid shall substantially conform to the requirements of this Invitation to Bid and/or specifications contained herein. Bidders who substitute any other terms, conditions, specifications and/or requirements or who qualify their bids in such a manner as to nullify or limit their liability to the contracting entity shall have their bids deemed non-responsive. Also, bids containing any clause that would limit contracting authority shall be considered nonresponsive. Examples of non-responsive bids include but shall not be limited to: a) bids that fail to conform to required delivery schedules as set forth in the bid request; b) bids with prices qualified in such a manner that the bid price cannot be determined, such as with vague wording that may include "price in effect at the time of delivery," and c) bids made contingent upon award of other bids currently under consideration.

1.18 **Responsible Standing of Bidder.** To be considered for award, bidder must at least: have the ability to obtain adequate financial resources, be able to comply with required or proposed delivery/completion schedule, have a satisfactory record of performance; have a satisfactory record of integrity and ethics, and be otherwise qualified and eligible to receive award.

1.19 **Proprietary Data.** Bidder may, by written request, indicate as confidential any portion(s) of a bid that contain proprietary information, including manufacturing and/or design processes exclusive

to the vendor. Jefferson County will protect from public disclosure such portions of a bid, unless directed otherwise by legal authority, including existing Open Records Acts.

1.20 **Public Bid Opening.** Bidders are invited to be present at the opening of bids. After the official opening of bids, a period of not less than one week is necessary to evaluate bids. The amount of time necessary for bid evaluation may vary and is determined solely by the County. Following the bid evaluation, all bids submitted are available for public review.

2. Performance

2.1 **Design, Strength, and Quality.** Design, strength, and quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practices. The apparent silence of specifications and/or plans as to any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications and/or plans shall be made on the basis of this statement.

2.2 **Age and Manufacture.** All tangible goods being bid must be new and unused, unless otherwise specified, in first-class condition, of current manufacture, and furnished ready to use. All items not specifically mentioned that are required for a complete unit shall be furnished.

2.3 **Delivery Location.** All deliveries will be made to the address(es) specified on the purchase order during normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, unless otherwise authorized by the Purchasing Agent or designee.

2.4 **Delivery Schedule.** Delivery time may be an important consideration in the evaluation of best value. The maximum number of days necessary for delivery ARO shall be stated in the space, if provided, on the bid form.

2.5 **Delivery Charges.** All delivery and freight charges, F.O.B. destination shown on Jefferson County purchase order, as necessary to perform contract are to be included in the bid price.

2.6 **Installation Charges.** All charges for assembly, installation and set-up shall be included in the bid price. Unless otherwise stated, assembly, installation and set-up will be required.

2.7 **Operating Instructions and Training.** Clear and concise operating instructions and descriptive literature will be provided in English, if requested. On-site detailed training in the safe and efficient use and general maintenance of item(s) purchased shall be provided as needed at the request of Jefferson County. Instructions and training shall be at no additional cost to the County.

2.8 **Storage.** Bidder agrees to provide storage of custom ordered materials, if requested, for up to thirty (30) calendar days.

2.9 **Compliance with Federal, State, County, and Local Laws.** Bids must comply with all federal, state, county and local laws, including, but not limited to, all applicable standard safety, emission, and noise control requirements. Any vehicles or equipment shall contain all standard safety, emission, and noise control requirements required for the types and sizes of equipment at the time of their manufacture. The contractor agrees, during the performance of work or service, to comply with all applicable codes and ordinances of Jefferson County or the State of Texas as they may apply, as these laws may now read, or as they may hereafter be changed or amended.

2.10 **OSHA.** The bidder will certify all equipment complies with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The successful bidder will further certify that all items furnished under this project will conform and comply with federal and State of Texas OSHA standards. The successful bidder will agree to indemnify and hold harmless Jefferson County for any and all damages that may be assessed against the County.

2.11 **Patents and Copyrights.** The successful vendor agrees to protect the County from claims involving infringements of patents and/or copyrights.

2.12 **Samples, Demonstrations and Testing.** At Jefferson County's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested at any point prior to or following bid award. Samples, demonstrations and/or testing may be requested upon delivery and/or any

point during the term of resulting contract. All samples (including return thereof), demonstrations, and/or testing shall be at the expense of the bidder/vendor.

2.13 **Acceptability.** All articles enumerated in the bid shall be subject to inspection by an officer designated for that purpose by Jefferson County. If found inferior to the quality called for, or not equal in value to the specifications, deficient in workmanship or otherwise, this fact shall be certified to the Purchasing Agent, who shall have the right to reject the whole or any part of the same. Items and/or work determined to be contrary to specifications must be replaced at the vendor's expense. Inferior items not retrieved by the vendor within thirty (30) calendar days, or an otherwise agreed upon time, shall become the property of the County. If disposal of such items warrants an expense, an amount equal to the disposal expense will be deducted from amounts payable to the vendor.

2.14 **Maintenance.** Maintenance required for equipment bid should be available in Jefferson County by a manufacturer authorized maintenance facility. Cost for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Jefferson County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

2.15 **Material Safety Data Sheets.** Under the "Hazardous Communications Act," common known as the "Texas Right to Know Act," a bidder must provide the user department, with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the bidder to furnish this documentation, will be cause to reject any bid applying thereto.

2.16 **Evaluation.** Evaluation shall be used as a determinant as to which services are the most efficient and/or most economical for the County. It shall be based on all factors having a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Jefferson County Purchasing Department and recommendation to Jefferson County Commissioners' Court. Compliance with all bid requirements and needs of the using department are considered in evaluating bids. Pricing is not the only criteria for making a recommendation. The Jefferson County Purchasing Department reserves to right to contact any bidder, at any time, to clarify, verify or requirement information with regard to this bid.

3. Purchase Orders and Payment

3.1 **Purchase Orders.** A purchase order(s) shall be generated by the Jefferson County Purchasing Agent to the successful vendor. The purchase order number must appear on all itemized invoices and packing slips. The County will not be held responsible for any work orders placed and/or performed without a valid current purchase order number. Payment will be made for all services rendered and accepted by the contract administrator for which a valid invoice has been received.

3.2 **Invoices.** All invoices shall reference the Purchase Order number. Invoices shall reference the bid item number or a detailed description for each item invoiced. If an item purchased and itemized on the invoice does not correspond to an item in any of the categories awarded to the vendor, invoice shall reference the item as "N/C" to indicate that it is a non-contract item. This requirement is to assist the County in verifying contract pricing on all invoices. Payment will be made under terms of net thirty (30) days unless otherwise agreed upon by seller and the purchasing department.

3.3 **Prompt Payment.** In accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S., payment will be made after receive and acceptance by the County of the merchandise ordered and of a valid invoice. Successful bidder(s) is required to pay subcontractors within ten (10) days after the successful bidder receives payment from the County.

3.4 **Funding.** Jefferson County is operated and funded on an October 1 to September 30 basis; accordingly, the County reserves the right to terminate, without liability to the County, any contract for which funding is not available.

4. Contract

4.1 **Contract Definition.** The General Conditions of Bidding and Terms of Contract, Specifications, Plans, Bidding Forms, Addenda, and any other documents made a part of this bid shall constitute the complete bid. This bid, when duly accepted by Jefferson County, shall constitute a contract equally binding between the successful bidder and Jefferson County.

4.2 **Change Order.** No different or additional terms will become part of this contract with the exception of a change order. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing and at the discretion and approval of Jefferson County. No change order will be binding unless signed by an authorized representative of the County and the vendor.

4.3 **Price Re-determination.** A price re-determination may be requested at the time of annual renewal. All requests for price re-determination shall be in written form. Cause for such request, i.e., manufacturer's direct cost, postage rates, Railroad Commission rates, Federal/State minimum wage law, Federal/State unemployment taxes, F.I.C.A, Insurance Coverage Rates, etc., shall be substantiated in writing by the source of the cost increase. The bidder's past experience of honoring contracts at the bid price will be an important consideration in the evaluation of the lowest and best bid. Jefferson County reserves the right to accept or reject any/all requests for price re-determination as it deems to be in the best interest of the County.

4.4 **Termination.** Jefferson County reserves the right to terminate the contract for default if the bidder breached any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Jefferson County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or service within the proper amount of time, and/or to properly perform any and all services required to Jefferson County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days' written notice to either party unless otherwise specified. Jefferson County reserves the right to award canceled contract to the next lowest bidder. Bidder, in submitting this bid, agrees that Jefferson County shall not be liable to prosecution for damages in the event that the County declares the bidder in default.

4.5 **Conflict of Interest.** Employees of the County are not permitted to maintain financial interest in, or receive payment, directly or indirectly, borrow from, lend to, invest in, or engage in any substantial financial transaction with any individual, organization, supplier, or subcontractor who does business with the County without disclosure. When conflict of interest is discovered, it shall be grounds for termination of contract.

4.6 **Injuries or Damages Resulting from Negligence.** Successful vendor shall defend, indemnify and save harmless Jefferson County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful vendor, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful vendor shall pay any judgment with cost which may be obtained against Jefferson County growing out of such injury or damages.

4.7 **Interest by Public Officials.** No public official shall have interest in this contract, in accordance with Texas Local Government Code.

4.8 **Warranty.** The successful vendor shall warrant that all materials utilized in the performance of this contract shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title.

4.9 **Uniform Commercial Code.** The successful vendor and Jefferson County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

4.10 **Venue.** This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in the County of Jefferson, Texas.

4.11 **Sale, Assignment, or Transfer of Contract.** The successful vendor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of Jefferson County.

4.12 **Silence of Specifications.** The apparent silence of these specifications as to any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

Special Requirements/Instructions

The following requirements and instructions supersede General Requirements where applicable.

1. **Bid Requirement**

   Each bidder shall ensure that required parts of the bid (included by not limited to a completed specifications packet in its entirely, the bid bond(s), the contractor's certifications, local opportunity plan, and the statement of the bidder's qualifications, shall be tightly sealed in an opaque envelope or box and plainly marked "SEALED BID." The outside of the envelope or box shall also include: Bid Number, Bid Name, Bid Due Date and Time of Opening, and Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

   Bidder is responsible for submitting one (1) *original* bid copy to include a completed copy of this specifications packet in its entirety; and three (3) numbered bid *hard copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

   Jefferson County shall not be responsible for any effort or cost expended in the preparation of a response to this IFB. All protests should be coordinated through the Purchasing Office prior to award recommendation to Commissioners' Court.

   All contractors/subcontractors that are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project.

   All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including the Drawings.

   All bids must be regular in every respect and no interlineation, excisions or special conditions may be made or included by the bidder.

   The County 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.

   If a contract is awarded, it will be awarded to a responsible bidder on the basis of 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.

2. **Bid Bond**

   The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

   The bid bond will be returned to the bidder as soon as practical after the opening of the bids.

2. **Section 3**

   Attention is called to the required Section 3 contracting and hiring objectives specified in the Contract Documents. These minimum objectives for hiring and contracting must be enforced. It is therefore the responsibility of the Bidder to inform themselves as to these requirements.

3. **Vendor Registration: SAM (System for Award Management).**

   Vendors doing business with Jefferson County are required to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS.

There is NO fee to register for this site. Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Bid Respondents are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Bid Submission.

4. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

As of January 1, 2016, per House Bill 1295, the Texas Ethics Commission (TEC) requires all awarded vendors to complete a Certificate of Interested Parties (FORM 1295) at time of notification of award. Awarded Vendors must visit the TEC website link below, enter the required information on Form 1295, and print a copy of the completed form. The form will include a certification of filing that will contain a unique certification number.

At the time of award, the Jefferson County Purchasing Department will submit a request to the Awarded Vendor to both:

1. Submit FORM 1295 online via the Texas Ethics Commission website link below.

2. Submit a printed copy of FORM 1295, signed by an Authorized Agent of the Awarded Vendor and notarized to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: **https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm**

5. Statement of Bidders Qualifications

Each bidder shall submit on the form (Page 61) furnished for that purpose a statement of the bidder's qualifications. The County 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 County 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 County that the bidder is qualified to carry out properly the terms of the contract.

6. Multiple Vendor Award

Jefferson County reserves the right to award this contract to more than one vendor at the County's discretion.

7. Delivery

If delivery is required, all items must be packaged so as to be protected from damage during shipping and handling. Any item(s) damaged in shipping must be replaced in kind, or repaired, by the contractor, at the discretion of, and at no additional charge to, Jefferson County.

8. Payment

Jefferson County will pay original invoices that clearly itemize the goods and/or services provided as to quantity, part number, description, price, applicable discount (if any), labor charges showing time differential, if applicable and if previously agreed to, and delivery, installation, and set-up costs, if applicable and if previously agreed to. Only charges as stated on the Bid Form(s) submitted as a part of the bid will be considered.

Invoices must indicate Jefferson County as applicable, the address to which the product(s) and/or service(s) were delivered, and the applicable purchase order number. Invoices will be matched to delivery tickets prior to payment; therefore, all delivery tickets should have an accurate description of the product(s) and/or service(s).

Invoices shall be submitted to: **Jefferson County Auditing Department, Attention: Accounts Payable, 1149 Pearl Street, 7th floor, Beaumont, TX 77701.**

9. Wages and Salaries

Attention is particularly called to the requirement of paying not less than the prevailing Davis Bacon Related Acts (DBRA) wage rates specified in the Contract Documents. These rates are minimums to be paid during the life of the contract. It is therefore the responsibility of the Bidder to inform themselves as to local labor conditions.

10. 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. (See Guidelines – Document A1001, Page 18)

11. Certification Regarding Lobbying

Contractors who apply or bid for an award 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 of 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 a Federal contract, grant or any other award covered by 31 USC § 1352.

12. Usage Reports

Jefferson County reserves the right to request, and receive at no additional cost, up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this IFB. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by Jefferson County department, description of each item purchased, including manufacturer, quantity of each item purchased, per unit and extended price of each item purchased, and total amount and price of all items purchased.

13. Insurance

The contractor (including any and all subcontractors as defined in Section 13.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
- Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
- Builder's Risk Policy: Structural Coverage for Construction Projects
- Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation	Statutory Coverage (see Section 13 below)

14. Workers' Compensation Insurance

~~14.1 Definitions:~~

14.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

14.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

14.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

14.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

14.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 13 above.

14.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

14.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

14.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

14.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

14.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

14.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

14.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

14.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

14.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas

Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

14.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

14.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

14.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

14.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

14.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

14.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

14.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

14.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 14.1. – 14.7., with the certificates of coverage to be provided to the person for whom they are providing services.

14.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

14.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

15. Execution of Agreement/Performance and Payment Bonds

The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

The failure of the successful bidder to execute the agreement and supply the required bonds within thirty (30) 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.

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR BID.

REFERENCE ONE

Government/Company Name: (CV) City of Pine Forest

Address: Pine Forest

Contact Person and Title: Nester (CV) Barreta

Phone: 409-782-7771 Fax: 409-866-0337

Email Address: nbarreta@spi-eng.com Contract Period: 2014

Scope of Work: Grinder Station

REFERENCE TWO

Government/Company Name: City of Beaumont

Address: 1350 Langham Rd Bmt TX 77707

Contact Person and Title: Molly (CV) Villarreal

Phone: 409-785-3016 Fax: 409-861-4836

Email Address: Molly.Villarreal@Beaumontstexas.com Contract Period: 2015

Scope of Work: Grinder Station

REFERENCE THREE

Government/Company Name: City of Beaumont

Address: 1350 Langham Rd Bmt TX 77707

Contact Person and Title: Molly Villarreal

Phone: 409-785-3016 Fax: 409-861-4836

Email Address: Molly.Villarreal@Beaumontstexas.com Contract Period: 2016

Scope of Work: Grinder Station

Bidder Shall Return Completed Form with Offer.

A1001

Equal Opportunity Guidelines for Construction Contractors

Note: To be included in bid packet and distributed at the preconstruction conference (optional)

1. **What are the responsibilities of the offeror or bidder to ensure equal employment opportunity?**
   For contracts over $ 10,000, 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 ensure a legal 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 Section 3 or minority and female recruitment sources?**
   Yes, construction contractors must establish a current list of Section 3, 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 Section 3 residents, 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 Section 3, 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 TDA.

7. **What efforts are made by construction contractors to create entry-level positions for Section 3 residents, 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 Section 3 residents, 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 Section 3 residents, minorities and women?**
The construction contractor must notify both orally and in writing, Section 3, 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 insure that personnel policies are in accordance with the EEO policy?**
Personnel policies in regard to job practices, work assignments, etc. should be continually monitored to insure 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 ensure privacy.

14. **What efforts should be utilized to include minority and female contractors and suppliers?**
Take affirmative steps to ensure that small, minority, and women owned businesses are included on all lists for contractors/service providers. Solicit these businesses when issuing RFPs and RFQs and soliciting construction bids. Divide project activities into small tasks to allow participation. Keep records 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 equal opportunity affirmative action standards, does that show his/her failure to comply?**
No, the construction contractor is responsible for its own compliance.

16. **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.

17. **What effort has been taken by the construction contractor to monitor all employment to insure 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.

Executed Section 3 Plan (Form A1002)

A1002

Section 3 Policy

In accordance with 12 U.S.C. 1701u the County of Jefferson agrees to implement the following steps, which, to *the greatest extent feasible*, will provide job training, employment and contracting opportunities for Section 3 residents and Section 3 businesses of the areas in which the program/project is being carried out.

A. Introduce and pass a resolution adopting this plan as a policy to strive to attain goals for compliance to Section 3 regulations by increasing opportunities for employment and contracting for Section 3 residents and businesses.

B. Assign duties related to implementation of this plan to the designated Civil Rights Officer.

C. Notify Section 3 residents and business concerns of potential new employment and contracting opportunities as they are triggered by TxCDBG grant awards through the use of: Public Hearings and related advertisements; public notices; bidding advertisements and bid documents; notification to local business organizations such as the Chamber(s) of Commerce or the Urban League; local advertising media including public signage; project area committees and citizen advisory boards; local HUD offices; regional planning agencies; and all other appropriate referral sources. Include Section 3 clauses in all covered solicitations and contracts.

D. Maintain a list of those businesses that have identified themselves as Section 3 businesses for utilization in TxCDBG funded procurements, notify those businesses of pending contractual opportunities, and make this list available for general Grant Recipient procurement needs.

E. Maintain a list of those persons who have identified themselves as Section 3 residents and contact those persons when hiring/training opportunities are available through either the Grant Recipient or contractors.

F. Require that all Prime contractors and subcontractors with contracts over $100,000 commit to this plan as part of their contract work. Monitor the contractors' performance with respect to meeting Section 3 requirements and require that they submit reports as may be required by HUD or TDA to the Grant Recipient.

G. Submit reports as required by HUD or TDA regarding contracting with Section 3 businesses and/or employment as they occur; and submit reports within 20 days of the federal fiscal year end (by October 20) which identify and quantify Section 3 businesses and employees.

H. Maintain records, including copies of correspondence, memoranda, etc., which document all actions taken to comply with Section 3 regulations.

As officer and representative of Jefferson County, I the undersigned have read and fully agree to this plan, and become a party to the full implementation of this program.

Signature

JEFF R. BRANICK,
COUNTY JUDGE

Date: 02-13-2017

09/01/2016

A1014

RESOLUTION Regarding Civil Rights

Whereas, the County of Jefferson, Texas, has been awarded TxCDBG funding through a TxCDBG - Community Development Grant 7216231 from the Texas Department of Agriculture (hereinafter referred to as "TDA");

Whereas, the County of Jefferson, in accordance with Section 109 of the Title I of the Housing and Community Development Act. (24 CFR 6); the Age Discrimination Act of 1975 (42 U.S.C. 6101-6107); and Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and for construction contracts greater than $10,000, must take actions to ensure that no person or group is denied benefits such as employment, training, housing, and contracts generated by the CDBG activity, on the basis of race, color, religion, sex, national origin, age, or disability;

Whereas, the County of Jefferson, in consideration for the receipt and acceptance of federal funding, agrees to comply with all federal rules and regulations including those rules and regulations governing citizen participation and civil rights protections;

Whereas, the County of Jefferson, in accordance with Section 3 of the Housing and Urban Development Act of 1968, as amended, and 24 CFR Part 135, is required, to the greatest extent feasible, to provide training and employment opportunities to lower income residents and contract opportunities to businesses in the TxCDBG project area;

Whereas, the County of Jefferson, in accordance with Section 104(1) of the Housing and Community Development Act, as amended, and State's certification requirements at 24 CFR 91.325(b)(6), must adopt an excessive force policy that prohibits the use of excessive force against non-violent civil rights demonstrations;

Whereas, the County of Jefferson, in accordance with Section 504 of the Rehabilitation Act of 1973, does not discriminate on the basis of disability and agrees to ensure that qualified individuals with disabilities have access to programs and activities that receive federal funds; and

Whereas, the County of Jefferson, in accordance with Section 808(e)(5) of the Fair Housing Act (42 USC 3608(e)(5)) that requires HUD programs and activities be administered in a manner affirmatively to further the policies of the Fair Housing Act, agrees to conduct at least one activity during the contract period of the TxCDBG contract, to affirmatively further fair housing;

A1014

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSIONERS COURT OF THE COUNTY OF JEFFERSON, TEXAS, that the COUNTY OF JEFFERSON ADOPTS/REAFFIRMS THE FOLLOWING:

1. Citizen Participation Plan and Grievance Procedures (Form A1013);
2. Section 3 Policy (Form A1002);
3. Excessive Force Policy (Form A1003);
4. Section 504 Policy and Grievance Procedures (Form A1004); and
5. Fair Housing Policy (Exhibit 1015).

Passed and approved this 13th **day of** February, **2017.**

JUDGE JEFF R. BRANICK
County Judge
Jefferson County, Texas

COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHEAEL S. SINEGAL
Precinct No. 2

COMMISSIONER BRENT A. WEAVER
Precinct No. 3

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

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
CERTIFICATION OF FILING

Certificate Number:
2017-283712

Date Filed:
11/14/2017

Date Acknowledged:
11/16/2017 JWest

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
BDS Constructors LLC dba MK Constructors
Vidor, TX United States

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

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.
IFB17-008/JW/TxCDBG#7216231
Cheek Sewer Improvement

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. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

CARRIE EVE VINCENT
Notary Public, State of Texas
Comm. Expires 04-13-2020
Notary ID 128955139

AFFIX NOTARY STAMP / SEAL ABOVE

Kenneth Stewart
Signature of authorized agent of contracting business entity

Sworn to and subscribed before me, by the said Kenneth D. Stewart, this the 14 day of NOV, 20 17, to certify which, witness my hand and seal of office.

C Vincent
Signature of officer administering oath

Carrie Vincent
Printed name of officer administering oath

County Judge
Title of officer administering oath

CONSTRUCTION CONTRACT

Project Number: (IFB 17-008/JW)
Project Name: Cheek Phase V – Cheek Community Sewer Improvements, (Grinder Pump and Force Main Installation)

THIS AGREEMENT made this the 27th day of November, 2017, by and between **BDS Constructors, LLC, d/b/a MK Constructors, PO Box 1208, Vidor, TX 77670,** (*a corporation organized and existing under the laws of the State of* Texas) hereinafter called the "*Contractor*", and Jefferson County, Texas hereinafter called the "*County.*"

Scope of Work: In accordance with Jefferson County Invitation for Bid (IFB 17-008/JW), Cheek Phase V – Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation), CONTRACTOR will: furnish all labor, material and equipment, and perform all work necessary for the installation of twenty-three (23) new Grinder Pump Units and a Low Pressure Sewer Force Main in the Cheek Community; in accordance with drawings, specifications, and addenda-if applicable as prepared by LJA Engineering, Inc. and Action Civil Engineers, PLLC. Funding for this project has been made available by Texas Community Development Block Grant funds from the Texas Department of Agriculture.

WITNESSETH, that the Contractor and the County 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, Cheek Phase V – Cheek Community Sewer Improvements, (Grinder Pump and Force Main Installation) for the Cheek Community Texas Community Development Block Grant (TxCDBG) project, all in strict accordance with the contract documents including all addenda thereto, numbered 1 & 2, dated October 12, 2017 & October 17, 2017, all as prepared by LJA Engineering, Inc. & Action Civil Engineers, PLLC., acting and in these contract documents preparation, referred to as the "*Engineer*".

That for and inconsideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (OWNER) and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follow: and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at his (or their) own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction, in accordance with the Notice to Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore, as prepared by LJA Engineering, Inc. & Action Civil Engineers, PLLC., herein entitled the ENGINEER, each of which has been identified by the CONTRACTOR and the ENGINEER, together with the CONTRACTOR'S written proposal, the General Conditions of the Agreement, the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

ARTICLE 2. The Contract Price. The County 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 as provided in Bid Proposal hereof.

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 (*as listed in the Schedule of Drawings*)
j. [Add any applicable documents]

ARTICLE 4. Performance. Work, in accordance with the Contract dated November 27, 2017, shall commence on or before December 4, 2017, and Contractor shall complete the WORK within 90 consecutive calendar days thereafter. The date of completion of all WORK is therefore March 4, 2018.

This Agreement, together with other documents enumerated in this ARTICLE 3, which said other documents are as 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 any other 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 *triplicate* (Note 3) original copies on the day and year first above written. (Note 3)

BDS Constructors, LLC, d/b/a MK Constructors
(The Contractor)

By Mike Brown *[Note 4]*

Title Vice President

Date 11/2/17

Jefferson County
(County)

By Jeff R. Branick

Title Jefferson County Judge

Date November 27, 2017

ATTEST
DATE 11/27/17

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

Corporate Certifications

I, Michael Brown, certify that I am the Vice President of the corporation named as Contractor herein; that Michael Brown, who signed this Agreement on behalf of the Contractor, was then Vice President 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

*Michael
~~(Corporate Secretary)~~ Vice President

GENERAL CONDITIONS - PART I FOR CONSTRUCTION

1. Contract and Contract Documents

(a) The project to be constructed pursuant to this contract will be financed with assistance from the Texas Department of Agriculture - Office of Rural Affairs through a Community Development Block Grant (TxCDBG) 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 in defined:

(a) The term "Contract" means the Contract executed between (Jefferson County), hereinafter called the "County" and BDS Constructors, LLC, d/b/a MK Constructors, PO Box 1208, Vidor, TX., 77670, 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 "Engineer" means (LJA Engineering, Inc.), Engineer in charge, serving the County with architectural or engineering services, his successor, or any other person or persons, employed by the County for the purpose of directing or having in charge the work embraced in this Contract.

(d) 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 Engineer, 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 County except for cause.

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

(d) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work and required compliance by each subcontractor with the applicable provisions of the Contract, including Section 3 requirements.

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

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 Engineer 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 Engineer.

2) Monthly or partial payments made by the County 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 County. Such payments shall not constitute a waiver of the right of the County 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 County in all details.

(b) Final Payment

1) After final inspection and the acceptance by the County 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, County 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 County 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 County under Liquidated Damages shall be deducted from the final payment due the contractor.

(c) Payments Subject to Submission of Certificates

Each payment to the Contractor by the County shall be made subject to submission by the Contractor of all written certifications required of it and its subcontractors.

(d) Withholding Payments

The County may withhold any payment due the Contractor as deemed necessary to protect the County, 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 County and will not require the County 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 County elects to do so. The failure or refusal of the County 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 County 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. Additionally, all such change orders must be approved by TxCDBG prior to execution of same.

(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 County 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 County 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 the total amount by eighteen percent (18%).

(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 County, 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 bench marks, 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 County and work shall not proceed except at the Contractor's risk, until written instructions have been received from the County.

(d) If, on the basis of the available evidence, the County 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 County to Terminate Contract for Convenience

County may at any time and for any reason terminate Contractor's services and work at County'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 County; (3) plus ten percent (10%) of the cost of the work referred to in subparagraph (1) above for overhead and profit. 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 County for any additional compensation or damages in the event of such termination and payment.

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

In the event that any of the provisions of this contract are violated by the Contractor, or by any subcontractors, the County 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 County 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 County 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 County for any excess cost incurred. In such event the County 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 County as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of 500.00 dollars for each calendar day of delay, until the work is completed. The Contractor and Contractor's sureties shall be liable to the County 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 County;

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 County, 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 County within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the County 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 County 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 County. 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 County for review. Contractor shall be liable for any issues or expenses in the event the discrepancy is not submitted to the County.

12. Disputes – Reserved.

13. Shop Drawings

(a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in
6 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 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 of 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 County 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.

14. Requests for Supplementary Information

It shall be the responsibility of the Contractor to make timely requests of the County for any additional information which should be furnished by the County 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 so as 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 Engineer 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.

15. 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 particular standard, the Engineer shall decide the question of equality.

(b) The Contractor shall furnish to the County 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 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 County may require the Contractor to dismiss from the work such employee or employees as the County or the Engineer may deem unqualified.

16. 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 Engineer, 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 Engineer. 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 Engineer 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 County's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he 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 Engineer 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 Engineer;

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 County will pay all other expenses.

17. 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 County. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the County 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) If necessary, the Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time work is commenced until final completion and acceptance.

(c) 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 County.

(d) 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.

(e) 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.

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

(g) 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 County, shall moisten the surrounding area to prevent a dusty condition.

18. 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 County is authorized to act to prevent such threatened loss or injury. Contractor shall follow all instructions of County.

(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 County 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 County may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

19. 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 County with reports concerning these matters.

(d) The Contractor shall indemnify and hold harmless the County 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 County, 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 County at the expense of the Contractor.

20. 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.

21. 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 County, 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 County and all existing federal, state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

22. 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.

23. Inspection

(a) All materials and workmanship shall be subject to inspection, examination, or test by the County and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The County 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 County 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 County.

(b) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the County 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 County 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 County, the Contractor shall uncover for inspection and recover such facilities at Contractor's expense, when so requested by the County.

(d) Should it be considered necessary or advisable by the County 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 County 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.

24. Review by County

The County 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 County through its authorized representatives or agents.

25. Final Inspection

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

26. Deduction for Uncorrected Work

If the County 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 County 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 (as specified in Bid Specifications) have been secured and approved by the County.

(a) Public Liability (Including Products & Competed Operations), Excess Liability, and Property Insurance:
The contractor shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements as specified in the bid specifications. Such insurance is to be provided at the

sole cost of the contractor. These requirements do not establish limits of the contractor's liability. All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

(b) 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 to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.

(c) Proof of Insurance: The Contractor shall furnish the County 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 County." The Certificate of Insurance shall name Jefferson County as additional insured, with actual policy wording or endorsement showing as such.

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 County 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 County 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. Job Offices

(a) The Contractor and its subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site. The County shall be consulted with regard to locations

(b) Upon completion of the improvements, or as directed by the County, the Contractor shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

31. Partial Use of Site Improvements

The County 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.

(c) The period of guarantee stipulated in Section 29 hereof shall not begin to run until the date of final acceptance of all work which the Contractor is required to construct under this Contract.

32. Local Program Liaison

For purposes of this Agreement, the [*e.g. County Judge* _____] or equivalent authorized person 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.

33. Access to Information

(a) The U.S. Department of Housing and Urban Development (HUD), Inspectors General, the Comptroller General of the United States, the Texas Department of Agriculture (TDA), and the County, or any of their authorized representatives, shall have access to any documents, papers, or other records of the Contractor which are pertinent to the TxCDBG award, in order to make audits, examinations, excerpts, and transcripts, and to close out the County's TxCDBG contract with TDA.

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

34. Records Retention

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

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

35. 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 TxCDBG 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. *[This section may also provide for the qualifications of the mediator(s), the locale of meetings, time limits, or any other item of concern to the parties.]*

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.

36. Compliance with Davis-Bacon Act

All laborers and mechanics employed upon the work covered by this Contract shall be paid unconditionally and not less often than once each week, and without subsequent deduction or rebate on any account (except such payroll deductions as are made mandatory by law and such other payroll deductions as are permitted by the applicable regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to the Anti-

Kickback Act hereinafter identified), the full amount due at time of payment computed at wage rates not less than those contained in the wage determination decision of said Secretary of Labor (**a copy of which is attached as Attachment and herein incorporated by reference**), regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontractor and such laborers and mechanics. All laborers and mechanics employed upon such work shall be paid in cash, except that payment may be by check if the employer provides or secures satisfactory facilities approved by the County for the cashing of the same without cost or expense to the employee. For the purpose of this clause, contributions made or costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section 5.5 (a) (1) (iv) of Title 29, Code of Federal Regulations. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

The Contractor and its subcontractors shall not, by any means, induce any person employed in the construction, completion, or repair of public work, give up any part of the compensation to which he or she is otherwise entitled. The County must report all suspected or reported violations to TDA.

37. Conflicts of interest.

(a) Governing Body. No member of the governing body of the County and no other officer, employee, or agent of the County, who exercises any functions or responsibilities in connection with administration, construction, engineering, or implementation of TxCDBG award between TDA and the County, shall have any personal financial interest, direct or indirect, in the Contractor or this Contract; and the Firm 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 TxCDBG award between TDA and the County, 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.

(d) The Contractor and Employees. The Contractor warrants and represents that it has no conflict of interest associated with the TxCDBG award between TDA and the County 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 TxCDBG award between TDA and the County 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.

38. 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."

39. Anti-Lobbying

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.

40. Overtime Requirements

No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit

any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 40 hours in such work week, as the case may be.

41. Clean Air Act and the Federal Water Pollution Control Act

The Contractor or subcontractor shall 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 Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

42. Equal Opportunity Clause [applicable to contracts and subcontracts over $10,000].

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.

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

The Contractor shall comply with the provisions of 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, religion, 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.

44. 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.

45. Age Discrimination Act of 1975.

The Contractor shall comply with the Age Discrimination Act of 1975 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.

[If this Contract is greater than $100,000, include the following Section 3 language:]

46. Economic Opportunities for Section 3 Residents and Section 3 Business Concerns.

(a) The work to be performed under this Contract is subject to the requirements of section 3 of the Housing and Urban Development (HUD) Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities

generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low -and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(b) The parties to this Contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this Contract, the parties to this Contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

(c) The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(d) The Contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

(e) The Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the Contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR part 135.

- 24 CFR part 135 establishes the following minimum numerical thresholds:
  - For Hiring: 30% (1 in 3) of the aggregate number of project new hires must be Section 3 Residents.
  - For Contracting: At least 10% of the total dollar amount of all Section 3 covered work must be awarded to Section 3 Business Concerns.
- A Section 3 Resident is a low- or very-low income individual residing in the County in which project is taking place, and whose annual household income does not exceed specified HUD limits for said County.
- A Section 3 Business Concern is defined as (1) A business that is 51% or more owned by Section 3 residents; or (2) Whose permanent, full time employees include persons, at least 30% of whom are currently Section 3 Residents, or within three years of date of first employment with business concern were Section 3 Residents; or (3) That provides evidence of a commitment to subcontract in excess of 25% of the dollar award of all subcontracts to business concerns that meet the qualifications set forth in paragraphs

(1) or (2) in this definition of "Section 3 Business Concern."

(f) Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this Contract for default, and debarment or suspension from future HUD assisted contracts.

(g) With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this Contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

47. Contract Documents and Drawings

The County will furnish the Contractor without charge 2 copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

48. Contract Period

The work to be performed under this contract shall commence within the time stipulated by the County in the Notice to Proceed, and shall be fully completed within 90 calendar days thereafter.

49. 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 County the sum of Five Hundred Dollars ($ 500.00) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for completion

50. 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.

§ 135.38 Section 3 clause.

~~§ 135.38 Section 3 clause.~~

All section 3 contracts shall include the following clause (referred to as the section 3 clause):

A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3 shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (1) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not inderogation of compliance with section 7(b).

Local Opportunity Plan

LOCAL OPPORTUNITY PLAN
SECTION 3 PLAN FORMAT
CONTRACTOR or SUBCONTRACTOR
(if either contract exceeds $100,000.00)

BDS Construction LLC
dba MK Construction
(NAME OF CONTRACTOR) agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within the City/County of Jefferson.

A. To ascertain from the locality's CDBG/DRS program official the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.

B. To attempt to recruit from within the City/County the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U. S. Employment Service.

C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.

D. * To insert this Section 3 Plan in all bid documents, and to require all bidders on subcontracts to submit a Section 3 Plan including utilization goals and the specific steps planned to accomplish these goals.

E. * To ensure that subcontracts, which are typically let on a negotiated rather than a bid basis, in areas other than Section 3 covered project areas, are also let on a negotiated basis whenever feasible, if let in a Section 3 covered project area.

F. To formally contact unions, subcontractors, and trade associations to secure their cooperation for this program.

G. To ensure that all appropriate project area business concerns are notified of pending sub-contractual opportunities.

H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.

I. To appoint or recruit an executive official of the company or agency as the Equal Opportunity Officer to coordinate the implementation of this Section 3 Plan.

TABLE A

PROPOSED SUBCONTRACT BREAKDOWN

CONTRACT NUMBER: 7216231

PROJECT NAME: Cheek Community Sewer Installation

CONSTRUCTION CONTRACTOR: _____

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
TYPE OF CONTRACT (BUSINESS OR PROFESSION)	TOTAL NUMBER OF CONTRACTS	TOTAL APPROXIMATE DOLLAR AMOUNT	ESTIMATED NUMBER OF CONTRACTS TO PROJECT AREA BUSINESSES*	ESTIMATED DOLLAR AMOUNT TO PROJECT AREA BUSINESSES*
H & H	1	$183,149	0	0

*The Project Area is coextensive with the County of Jefferson, Texas 's boundaries.

EEO Officer's Signature

11/17/2017

Date

TABLE B

ESTIMATED PROJECT WORKFORCE BREAKDOWN

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Job Category	Total Estimated Positions	No. Positions Currently Occupied By Permanent Employees	No. Positions Not Currently Occupied	No. Positions To Be Filled w/LIPAR*
Officers/Supervisors	1	1	0	0
Professionals	1	1	0	0
Technicians				
Housing Sales/Rental/Mgmt.				
Office Clerical	1	1	0	0
Service Workers				
Others				

SPECIFY TRADE CLASSIFICATION: Operator

Journeymen	1	1	0	0
Apprentices				
Maximum No. Trainees				
Others				

SPECIFY TRADE CLASSIFICATION: Finisher

Journeymen	2	2	0	0
Apprentices				
Maximum No. Trainees				
Others				

SPECIFY TRADE CLASSIFICATION: Laborer

Journeymen	6	6	0	0
Apprentices				
Maximum No. Trainees				
Others				

*Lower Income Project Area Residents. Individuals residing within the ~~City~~/County of Jefferson, Texas whose family income does not exceed 80% of the median income in the State.

[signature]

(EEO Officer's Signature)

BDS Constructors LLC, dba MK Constructors

(COMPANY NAME)

USE ADDITIONAL PAGES IF NECESSARY

SECTION 3 CERTIFICATION OF SELECTED BIDDER

Completed by Prime Contractor Only

MK Constructors
Name of Prime Contractor

Cheek Community Sewer Installation, Jefferson Co. 7216231
Project Name and Number

The undersigned hereby certifies that:

(Complete Section I or II)

I. A. The positions listed under part B that have been filled by _____
(Name of Prime Contractor)

since being notified of contract selection on _____
(Date of Award/Selection)

were not filled to circumvent the contractor's obligations to provide employment opportunities, including training positions, for Section 3 residents, as required by Section 3 residents of the Housing & Urban Development Act of 1968 and the implementing regulations, 24 CFR Part 135.

B. Employment Positions filled since _____.
(Date of Contract Award/Selection)

OR

II. No employment positions have been filled since 10/30/2017.
(Date of Contract Award/Selection)

Michael Brown
Name of Signatory (print or type)

Vice President
Title of Signatory

Signature

11/03/2017
Date

NOTICE: This certification must be made BEFORE contract execution (24 CFR 135 135.38 (e))

CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING SECTION 3 AND SEGREGATED FACILITIES

BDS Construction LLC dba MK Constructors
Name of Subcontractor

Cheek Phase V Cheek Community Sewer Improvements
Project Name

Contract Number

The undersigned hereby certifies that:

(a) Section 3 provisions are included in the Contract;

(b) A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000);

(c) Tables A and B were prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000); and

(d) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

Mike Brown V.P.
Name & Title of Signer (Print or Type)

Signature

10/20/17
Date

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347inst.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false,..... shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. **Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds $100,000.

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

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

TITLE 29--Labor

Subtitle A--OFFICE OF THE SECRETARY OF LABOR

PART 3--CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

SEC.

3.1 Purpose and Scope
3.2 Definitions
3.3 Weekly Statement with respect to payment of wages
3.4. Submission of weekly statement and the preservation and inspection of weekly payroll records
3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
3.7 Applications for the approval of the Secretary of Labor
3.8 Action by the Secretary of Labor upon applications.
3.9 Prohibited payroll deductions
3.10 Method of payment of wages
3.11 Regulations part of contract

AUTHORITY: The provisions of this Part 3 issued under R.S. 161; sec.2, 48 STAT. §48:Reorg.Plan No. 14 of 1950, 64 Stat. 1267,5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 3 appear at 29 F.R. 97, Jan.4, 1964, unless otherwise noted.

§ 3.1 Purpose and scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with federally assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby, sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work, and delineates the methods of payment permissible on such work.

§ 3.2 Definitions.

As used in the regulations in this part:

(a) The terms *building* or *work* generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a *building* or *work* within the meaning of the regulations in this part.

(b) The terms *construction, prosecution, completion,* or *repair* mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms *public building* or *public work* include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal

agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term *building or work financed in whole or in part by loans or grants from the United States* includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is *employed* and receiving *wages*, regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term *any affiliated person* includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary, or otherwise, and an officer or agent of such corporation.

(g) The term *Federal agency* means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

[29 FR 97, Jan. 4, 1964, as amended at 38 FR 32575, Nov. 27, 1973]

§ 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term *employee* shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by this part 3 and part 5 of this title during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and shall be on the back of Form WH 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Copies of Form WH 347 may be obtained from the Government contracting or sponsoring agency or from the Wage and Hour Division Web site at *http://www.dol.gov/esa/whd/forms/wh347instr.htm* or its successor site.

(c) The requirements of this section shall not apply to any contract of $2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

[29 FR 97, Jan. 4, 1964, as amended at 33 FR 10186, July 17, 1968; 47 FR 23679, May 28, 1982; 73 FR 77511, Dec. 19, 2008] **§ 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.**

(a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or, if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

(Reporting and recordkeeping requirements in paragraph (b) have been approved by the Office of Management and Budget under control number 1215-0017)

[29 FR 97, Jan. 4, 1964, as amended at 47 FR 145, Jan. 5, 1982]

§ 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A *bona fide prepayment* of wages is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor, or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: *Provided, however,* That the following standards are met:

(1) The deduction is not otherwise prohibited by law.

(2) It is either:

(i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or

(ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees;

(3) No profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and

(4) The deductions shall serve the convenience and interest of the employee.

(e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: *Provided, however,* That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and part 531 of this title. When such a deduction is made the additional records required under §516.25(a) of this title shall be kept.

(k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own property for his personal protection in his work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the

employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a third person, and if the deduction is either

(1) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or

(2) Provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees.

[29 FR 97, Jan. 4, 1964, as amended at 36 FR 9770, May 28, 1971]

§ 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under §3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;

(b) The deduction is not otherwise prohibited by law;

(c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee.

§ 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

(a) The application shall be in writing and shall be addressed to the Secretary of Labor.

(b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of §3.6, and specifies any conditions which have changed in regard to the payroll deductions.

(c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.

(d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

[29 FR 97, Jan. 4, 1964, as amended at 36 FR 9771, May 28, 1971]

§ 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

§ 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under §3.6 are prohibited.

§ 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

§ 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

Statement of Bidders Qualifications Form

All questions must be answered and the data given must be clear and comprehensive. **This statement must be notarized.** If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

Date: 10/23/17

Bidder (Legal Name of Firm): BDS Constructors LLC dba MK Constructors

Date Organized: 10/2011

Address: 16736 IH 10
Vidor TX 77662

Date Incorporated: 10/2011

Federal ID Number: 45 - 3567082

Number of Years in contracting business under present name 6 years

List all other names under which your business has operated in the last 10 years:

N/A

Work Presently Under Contract:

Contract	Amount $	Completion Date
See attached		

Type of work performed by your company: Civil - ROW - Underground Utilities

Total Staff employed by Firm (Break down by Managers and Trades on separate sheet):
~~Foreman - 1~~ See attached

Have you ever failed to complete any work awarded to you? ☐ Yes ☑ No
(If yes, please attach summary of details on a separate sheet. Include brief explanation of cause and resolution)

Have you ever defaulted on a contract? ☐ Yes ☑ No
(If yes, please attach summary of details on a separate sheet.)

Continued on Next Page

Statement of Bidders Qualifications Form (Continued)

Has your organization had any disbarments or suspensions that have been imposed in the past five years or that was still in effect during the five year period or is still in effect? ☐ Yes ☑ No

(If yes, list and explain; such list must include disbarments and suspensions of officers, principals, partners, members, and employees of your organization.)

List the projects most recently completed by your firm (include project of similar importance):

Project	Amount $	Mo/Yr Completed
See attached		

Major equipment available for this contract: See attached

Are you in compliance with all applicable EEO requirements? ☑ Yes ☐ No
(If no, please attach summary of details on a separate sheet.))

Bank References

Address: 329 Dowlen Rd Suite C Contact Name: Joel Foxworth

City & State: Bmt TX Zip: 77706 Phone Number: 409-861-2700

Credit available: $ 2M

Has the firm or predecessor firm been involved in a bankruptcy or reorganization? ☐ Yes ☐ No
(If yes, please attach summary of details on a separate sheet.)

List on a sheet attached hereto all judgements, claims, arbitration proceedings, or suits pending or outstanding against bidder over the last five (5) years with amount of claim and brief description.

List on a sheet attached hereto all lawsuits or requested arbitration with regard to construction contracts which bidder has initiated within the last five (5) years and brief explanation of claim and outcome.

Attach resume(s) for the principal member(s) of your organization, including the officers as well as the proposed superintendent for the project.

Signed this 23 day of Oct, 2017.

* Michael Brown
Signature

Mike Brown President
Printed Name and Title

BDS Constructors LLC dba MK Constructors
Company Name

Continued on Next Page

Statement of Bidders Qualifications Form (Continued)

Notary Statement:

Mike Brown, being duly sworn, says that he/she is the V.P. Position/Title of PBS Construction LLC (Firm Name), and hereby swears that the answers to the foregoing questions and all statements therein contained are true and correct. He/she hereby authorizes and requests any person, firm, or corporation to furnish any information requested County of Johnson in verification of the recitals comprising this Statement of Bidder's Qualifications.

Subscribed and sworn before me this 20 day of Oct, 2017.

Notary Public

* Signature

Carrie Vincent
Printed Name

My Commission Expires: 4/13/20.

CARRIE EVE VINCENT
Notary Public, State of Texas
Comm. Expires 04-13-2020
Notary ID 128955139

The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

Bidder Shall Return Completed Form with Offer.

CONTRACTOR CERTIFICATIONS

U.S. Department of Housing and Urban Development

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)

BDS Construction LLC dba MK Construction
16736 I H 10 Vidor TX 77662

CERTIFICATION BY BIDDER

Bidder has participated in a previous contract or subcontract subject to Civil Rights Laws and Regulations.

☑ Yes ☐ No

The undersigned hereby certifies that:

☑ The Provision of Local Training, Employment, and Business Opportunities clause (Section 3 provision) is included in the Contract. A written Section 3 plan (Local Opportunity Plan) was prepared and submitted as part of the bid proceedings (if bid equals or exceeds $100,000).

☑ The Equal Opportunity clause is included in the Contract (if bid equals or exceeds $10,000).

Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?

☐ Yes ☑ No

NAME AND TITLE OF SIGNER (Please type) Mike Brown V.P.

Michael Brown
SIGNATURE

10/20/17
DATE

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CONTRACTOR'S CERTIFICATION

CONCERNING LABOR STANDARDS AND PREVAILING WAGE REQUIREMENTS

TO (appropriate recipient) Jefferson County	DATE 10/20/17
	PROJECT NUMBER (if any)
C/O	PROJECT NAME Cheek Phase V. Cheek Community Sewer Imp.

1. The undersigned, having executed a contract with Jefferson County for the construction of the above-identified project, acknowledges that:

   (a) The Labor Standards provisions are included in the aforesaid contract,

   (b) Correction of any infractions of the aforesaid conditions, including infractions by any subcontractors and any lower tier subcontractors, is Contractor's responsibility.

2. Certifies that:

   (a) Neither Contractor nor any firm, partnership or association in which it has substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5) or pursuant to Section 3(a) of the Davis-Bacon Act, as amended.

   (b) No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions.

3. Contractor agrees to obtain and forward to the aforementioned recipient within ten days after the execution of any subcontract, including those executed by subcontractors and any lower tier subcontractors, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements executed by the subcontractors.

4. Certifies that:

   (a) The legal name and the business address of the undersigned are:
   BDS Construction LLC
   dba MK Constructors

   (b) The undersigned is (choose one):

(1) A SINGLE PROPRIETORSHIP	(3) A CORPORATION ORGANIZED IN THE STATE OF Texas
(2) A PARTNERSHIP	(4) OTHER ORGANIZATION (Describe)

   (c) The name, title and address of the owner, partners or officers of the undersigned are:

NAME	TITLE	ADDRESS
Kenneth D Stewart	President	4615 Regina Ln Bmt TX 77706
Michael Braun	V.P.	4340 HWY 1131 Vidor TX 77662

(d) The names and addresses of all other persons having a substantial interest in the undersigned, and the nature of the interest are:

NAME	ADDRESS	NATURE OF INTEREST
	N/A	

(e) The names, addresses and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are:

NAME	ADDRESS	TRADE CLASSIFICATION
	N/A	

BDS Constructon LLC
dba MK Constructon
(Contractor)

Date 10/20/17

By * Michael Ben

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/24/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
McElveen Insurance LLC
700 W. Prien Lake Road Ste 200
Lake Charles LA 70601

CONTACT NAME: Monica Broussard
PHONE (A/C, No, Ext): 337-475-7441 **FAX (A/C, No):** 337-564-6934
E-MAIL ADDRESS: mbroussard@mcelveenins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Navigators Specialty Insurance Comp	36056
INSURER B : Technology Insurance Company, Inc	42376
INSURER C : Texas Mutual Insurance Company	22945
INSURER D : XL Specialty Insurance Company	37885
INSURER E :	
INSURER F :	

INSURED STEWGRO-01
BDS Constructors, LLC dba M K Constructors
16736 IH 10
Vidor TX 77662

COVERAGES **CERTIFICATE NUMBER:** 1343420671 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:	Y	Y	HO17CGL148449IC	3/19/2017	3/19/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Contractors Pollutio	$1,000,000 $100,000 $5,000 $1,000,000 $2,000,000 $2,000,000 $1,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS [ ] SCHEDULED AUTOS X HIRED AUTOS [X] NON-OWNED AUTOS	Y	Y	TPP106138102	3/19/2017	3/19/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000 $ $ $ $
A	[ ] UMBRELLA LIAB [X] OCCUR X EXCESS LIAB [ ] CLAIMS-MADE DED [ ] RETENTION $	Y	Y	HO17EXC832996IC	3/19/2017	3/19/2018	EACH OCCURRENCE AGGREGATE	$10,000,000 $10,000,000 $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] N/A If yes, describe under DESCRIPTION OF OPERATIONS below		Y	TSF0001288663	3/19/2017	3/19/2018	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
D	Equipment Floater			UM00055257MA17A	3/19/2017	3/19/2018	Rented Leased Item Rented Leased Total	500,000 3,500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Holder is additional insured on the general liability with ongoing operations (CG2010 10/01) and completed operations(CG2037 10/01)and auto (CA990187 07/15) with waiver of subrogation on the auto, general liability and workers compensation as required by written contract. General Liability and Umbrella include contractors pollution coverage. Umbrella is follow form. Coverage is primary and noncontributory on the General Liability and Auto as required by written contract.

CERTIFICATE HOLDER

Jefferson County Texas
1149 Pearl Street
Beaumont TX 77701

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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The ACORD name and logo are registered marks of ACORD

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of Texas

County of Jefferson

Michael Braun being first duly sworn, deposes and says that:

(1) He/She is (a) Vice President of BDS Constructors LLC dba MK Constructors, the Bidder that has submitted the attached Bid;

(2) He/She 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) * Michael Braun

Vice President
Title

Subscribed and sworn to me this 20 day of Oct, 17

By: _____
Notary Public

My commission expires 4/13/20

CARRIE EVE VINCENT
Notary Public, State of Texas
Comm. Expires 04-13-2020
Notary ID 128955139

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, BDS Constructors, LLC dba M K Constructors as PRINCIPAL, and Hartford Fire Insurance Company, as SURETY are held and firmly bound unto (County) hereinafter called the "Local Public Agency", in the penal sum of Five Percent of Amount Bid Dollars, ($ --5%--), 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 October 24, 2017, for Cheek Phase V - Cheek Community Sewer Improvements (Grinder Pump and Force Main Installation) (TxCDBG No. 7216131)

NOW, THEREFORE, 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 therefor, 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 Local Public Agency 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 Local Public Agency 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 parties have executed this instrument this 24th day of October, 2017, 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)

BDS Constructors, LLC dba M K Constructors

(SEAL)

Attest:

By: *

Attest:

Hartford Fire Insurance Company

Affix Corporate Seal

By:

Douglas N. McElveen

Affix
Corporate
Seal

Attest: [signature]

By: * [signature]

Countersigned

By [signature]

* Attorney-in-Fact, State of Texas

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, Mike Brown, certify that I am the Secretary of the Corporation named as Principal in the bid bond; that Mike Brown, who signed the said bond on behalf of the Principal was then V.P. of said corporation; that I know his/her signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed, and attested to, on behalf of said corporation by authority of its governing body.

Corporate
Seal

Title: Vice President

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

THE AMERICAN INSTITUTE OF ARCHITECTS

Bond No. 43BCSHU1121

AIA Document A311

Labor and Material Payment Bond

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

KNOW ALL MEN BY THESE PRESENTS: that BDS Constructors, LLC dba MK Constructors
(Here insert full name and address or legal title of Contractor)

P O Box 1208, Vidor, TX 77670

as Principal, hereinafter called Principal, and, Hartford Fire Insurance Company
(Here insert full name and address or legal title of Surety)

One Hartford Plaza, Hartford, CT 06155-0001

as Surety, hereinafter called Surety, are held and firmly bound unto Jefferson County
(Here insert full name and address or legal title of Owner)

1149 Pearl Street, 1st Floor, Beaumont, TX 77701

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the

amount of Two Hundred Five Thousand Eight Hundred Sixty Four Dollars and 00/100
(Here insert a sum equal to at least one-half of the contract price) Dollars ($ 205,864.00),

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated October 30, 2017 , entered into a contract with Owner for
(Here insert full name, address and description of project) Cheek Phase V-Cheek Community Sewer Improvements TxCDBG No. 7216231

in accordance with Drawings and Specifications prepared by
(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

POWER OF ATTORNEY

Direct Inquiries/Claims to:
THE HARTFORD
BOND, T-12
One Hartford Plaza
Hartford, Connecticut 06155
Bond.Claims@thehartford.com
call: 888-266-3488 *or fax:* 860-757-5835

Agency Name: MCELVEEN INSURANCE LLC
Agency Code: 43-483928

KNOW ALL PERSONS BY THESE PRESENTS THAT:

- [X] **Hartford Fire Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
- [X] **Hartford Casualty Insurance Company**, a corporation duly organized under the laws of the State of Indiana
- [X] **Hartford Accident and Indemnity Company**, a corporation duly organized under the laws of the State of Connecticut
- [ ] **Hartford Underwriters Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
- [ ] **Twin City Fire Insurance Company**, a corporation duly organized under the laws of the State of Indiana
- [ ] **Hartford Insurance Company of Illinois**, a corporation duly organized under the laws of the State of Illinois
- [ ] **Hartford Insurance Company of the Midwest**, a corporation duly organized under the laws of the State of Indiana
- [ ] **Hartford Insurance Company of the Southeast**, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, ***up to the amount of*** Unlimited :
Christine Baker, Douglas N. McElveen, Amanda McElveen, Kathy Peters of LAKE CHARLES, Louisiana

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.

John Gray, Assistant Secretary

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT }
COUNTY OF HARTFORD } ss. Hartford

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.

Nora M. Stranko
Notary Public
My Commission Expires March 31, 2018

CERTIFICATE

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of October 24, 2017
Signed and sealed at the City of Hartford.

Kevin Heckman, Assistant Vice President

LABOR AND MATERIAL PAYMENT BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The owner shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

b) After the expiration of one (1) year following the date on which principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

c) Other than in state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety or mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this day of

ATTEST:

By: _____ (Witness)

BDS Constructors, LLC dba MK Constructors
(Principal) (Seal)

By: _____ (Title) V.P.

WITNESS:

By: _____ (Witness)
Monica Broussard

Hartford Fire Insurance Company
(Surety) (Seal)

By: _____ (Title)
Douglas N. McElveen Attorney-in-Fact

POWER OF ATTORNEY

Direct Inquiries/Claims to:
THE HARTFORD
BOND, T-12
One Hartford Plaza
Hartford, Connecticut 06155
Bond.Claims@thehartford.com
call: **888-266-3488** *or fax:* **860-757-5835**

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: MCELVEEN INSURANCE LLC
Agency Code: 43-483928

- [X] **Hartford Fire Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
- [X] **Hartford Casualty Insurance Company**, a corporation duly organized under the laws of the State of Indiana
- [X] **Hartford Accident and Indemnity Company**, a corporation duly organized under the laws of the State of Connecticut
- [ ] **Hartford Underwriters Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
- [ ] **Twin City Fire Insurance Company**, a corporation duly organized under the laws of the State of Indiana
- [ ] **Hartford Insurance Company of Illinois**, a corporation duly organized under the laws of the State of Illinois
- [ ] **Hartford Insurance Company of the Midwest**, a corporation duly organized under the laws of the State of Indiana
- [ ] **Hartford Insurance Company of the Southeast**, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, ***up to the amount of*** Unlimited :
Christine Baker, Douglas N. McElveen, Amanda McElveen, Kathy Peters of LAKE CHARLES, Louisiana

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.

John Gray, Assistant Secretary

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT }
COUNTY OF HARTFORD } ss. Hartford

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.

Nora M. Stranko
Notary Public
My Commission Expires March 31, 2018

CERTIFICATE

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of
Signed and sealed at the City of Hartford.

Kevin Heckman, Assistant Vice President

THE AMERICAN INSTITUTE OF ARCHITECTS

Bond No. 43BCSHU1121

AIA Document A311

Performance Bond

KNOW ALL MEN BY THESE PRESENTS: that BDS Constructors, LLC dba MK Constructors
(Here insert full name and address or legal title of Contractor)

P O Box 1208, Vidor, TX 77670
as Principal, hereinafter called Contractor, and, Hartford Fire Insurance Company
(Here insert full name and address or legal title of Surety)

One Hartford Plaza, Hartford, CT 06155-0001
as Surety, hereinafter called Surety, are held and firmly bound unto Jefferson County
(Here insert full name and address or legal title of Owner)

1149 Pearl Street, 1st Floor, Beaumont, TX 77701
as Obligee, hereinafter called Owner, in the amount of Two Hundred Five Thousand Eight Hundred Sixty Four Dollars and 00/100 Dollars ($ 205,864.00),

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated October 30, 2017 , entered into a contract with Owner for
(Here insert full name, address and description of project) Cheek Phase V-Cheek Community Sewer Improvements TxCDBG No. 7216231

in accordance with Drawings and Specifications prepared by
(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

PERFORMANCE BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

1) Complete the Contract in accordance with its terms and conditions, or

2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

Signed and sealed this day of

ATTEST:

By: _____ (Witness)

BDS Constructors, LLC dba MK Constructors
(Principal) (Seal)

By: _____ (Title) V.P.

WITNESS:

By: _____ (Witness)
Monica Broussard

Hartford Fire Insurance Company
(Surety) (Seal)

By: _____ (Title)
Douglas N. McElveen Attorney-in-Fact

POWER OF ATTORNEY

Direct Inquiries/Claims to:
THE HARTFORD
BOND, T-12
One Hartford Plaza
Hartford, Connecticut 06155
Bond.Claims@thehartford.com
call: **888-266-3488** *or fax:* **860-757-5835**

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: MCELVEEN INSURANCE LLC
Agency Code: 43-483928

- [X] **Hartford Fire Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
- [X] **Hartford Casualty Insurance Company**, a corporation duly organized under the laws of the State of Indiana
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- [ ] **Hartford Underwriters Insurance Company**, a corporation duly organized under the laws of the State of Connecticut
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- [ ] **Hartford Insurance Company of the Midwest**, a corporation duly organized under the laws of the State of Indiana
- [ ] **Hartford Insurance Company of the Southeast**, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, ***up to the amount of*** Unlimited :
Christine Baker, Douglas N. McElveen, Amanda McElveen, Kathy Peters of LAKE CHARLES, Louisiana

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.

John Gray, Assistant Secretary

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT
COUNTY OF HARTFORD } ss. Hartford

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.

Nora M. Stranko
Notary Public
My Commission Expires March 31, 2018

CERTIFICATE

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of
Signed and sealed at the City of Hartford.

Kevin Heckman, Assistant Vice President

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned, _____, the duly authorized and acting legal representative of the _____, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and am of the opinion that each of the agreements may be duly executed by the proper parties, acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties; and that the agreements shall constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Attorney's signature: _____ Date: _____

Print Attorney's Name: _____

Texas State Bar Number: _____

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/7/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Monica Broussard
McElveen Insurance LLC 700 W. Prien Lake Road Ste 200 Lake Charles LA 70601	PHONE (A/C, No, Ext): 337-475-7441 FAX (A/C, No): 337-564-6934 E-MAIL ADDRESS: mbroussard@mcelveenins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Navigators Specialty Insurance Comp	36056
INSURER B : Technology Insurance Company, Inc	42376
INSURER C : Texas Mutual Insurance Company	22945
INSURER D : XL Specialty Insurance Company	37885
INSURER E :	
INSURER F :	

INSURED	STEWGRO-01
BDS Constructors, LLC dba M K Constructors 16736 IH 10 Vidor TX 77662	

COVERAGES **CERTIFICATE NUMBER:** 449757696 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:	Y	Y	HO17CGL148449IC	3/19/2017	3/19/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Contractors Pollutio	$1,000,000 $100,000 $5,000 $1,000,000 $2,000,000 $2,000,000 $1,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	Y	Y	TPP106138102	3/19/2017	3/19/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000 $ $ $
A	UMBRELLA LIAB [X] OCCUR X EXCESS LIAB [ ] CLAIMS-MADE DED RETENTION $	Y	Y	HO17EXC832996IC	3/19/2017	3/19/2018	EACH OCCURRENCE AGGREGATE	$10,000,000 $10,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] N/A If yes, describe under DESCRIPTION OF OPERATIONS below		Y	TSF0001288663	3/19/2017	3/19/2018	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
D	Equipment Floater			UM00055257MA17A	3/19/2017	3/19/2018	Rented Leased Item Rented Leased Total	500,000 3,500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Holder is additional insured on the general liability with ongoing operations (CG2010 10/01) and completed operations(CG2037 10/01)and auto (CA990187 07/15) with waiver of subrogation on the auto, general liability and workers compensation as required by written contract. General Liability and Umbrella include contractors pollution coverage. Umbrella is follow form. Coverage is primary and noncontributory on the General Liability and Auto as required by written contract.
Cheek Phase V Cheek Community Sewer Improvements IFB17-008JW

CERTIFICATE HOLDER

Jefferson County Purchasing Department
1149 Pearl Street 1st Floor
Beaumont TX 77701

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Certification Regarding Lobbying

Certification Regarding Lobbying

Contract Number: 7216231 Grantee/Locality: Hoonah City

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 BDS Construction LLC dba MK Construction, 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.

* Michael Brown

Signature of Contractor's Authorized Official

Michael Brown / Vice President

Printed Name and Title of Contractor's Authorized Official

10/23/17

Date

APPLICABLE DAVIS-BACON WAGES

Wage Rate Issuance Notice

A702

The Davis-Bacon Act requires a valid Wage Decision be included in the bid package and construction contract specifications before bids are opened and be in effect on the date of the construction contract award. Obtain the most current Davis-Bacon wage decisions at www.wdol.gov.

TxCDBG Contract:

Grant Recipient Name: County of Jefferson, TX

TxCDBG Contract #: 7216231

LSO Name:	Wesley McPhail
Detailed Description of Bid Activity:	Installation of first time sewer connections for twenty-three (23) low to moderate income home sites, including replacement of failing septic systems through the installation of approximately two thousand one hundred fifty-six linear feet (2,156 l.f.) of one and one forth inch (1-1/4") low pressure sanitary service lines, twenty three (23) low pressure sanitary grinder pump units, approximately one hundred fifty linear feet (150 l.f.) of four inch (4") sewer service line from the house connections to the grinder units, mitigation of all existing septic tanks, and all associated appurtenances.
Date LSO Issued Wage Rates:	September 19, 2017
Estimated Bid Opening Date:	October 24, 2017

I have determined that the following General Wage Decision to be applicable for this construction work:

Wage Decision Number: TX79 M0 Published: 1/06/2017

Type of Work (check one): ☑ Heavy ☐ Highway ☐ Building ☐ Residential

ISSUED BY:

Name: Wesley McPhail Date: September 19, 2017

Address: P.O. Drawer 900 City: Jasper

State: Texas Zip: 75951 Phone No: (409) 384 - 3458

*****Attach wage decision to this form and retain copy in local files.**
Do not send a copy of this form to TDA***

09/01/2016

General Decision Number: TX170079 01/06/2017 TX79

Superseded General Decision Number: TX20160079

State: Texas

Construction Type: Heavy

Counties: Hardin, Jefferson and Orange Counties in Texas.

HEAVY CONSTRUCTION PROJECTS (Including Water and Sewer Lines and Excluding Industrial and Processing Plants, and Refineries)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017

* ELEC0479-003 09/26/2016

	Rates	Fringes
ELECTRICIAN	$ 28.50	12.30

SUTX2000-002 02/11/2000

	Rates	Fringes
Carpenters:		
Form Building/Form Setting	$ 13.15	
All Other Work	$ 13.56	
Concrete Finisher	$ 13.50	
Laborers:		
Common	$ 7.41	
Pipelayer	$ 8.29	
Painters:		
Spray and Brush	$ 12.07	
PILEDRIVERMAN	$ 13.65	

PLUMBER	$ 18.28	4.69
Power equipment operators:		
Backhoe	$ 15.55	1.89
Bulldozer	$ 15.00	
Crane	$ 13.77	
Front End Loader	$ 10.63	
Trackhoe	$ 15.60	
Truck drivers:		
Dump	$ 10.00	

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed

in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISION

CERTIFICATE OF PAYROLL OFFICER

CERTIFICATE FROM CONTRACTOR APPOINTING OFFICER OR EMPLOYEE TO SUPERVISE PAYMENT OF EMPLOYEES

Note: This certificate must be executed by an authorized officer of a corporation, by a member of a partnership, or the sole owner and submitted with the first payroll. Should the appointee be changed, a new certificate must accompany the first payroll for which the new appointee executes a statement of compliance required by the Copeland Act.

Locality/Grantee: Jefferson County Contract #: 7216231
Project Name: Cheek Phase V Cheek Community Sewer Improvement

Firm BDS Constructors LLC dba MK Constructors Date: 10/23/17

I do hereby certify that I am a contractor on the above-mentioned project and that I have appointed Carrie Vincent whose signature appears below, to supervise the payment of my employees. I further certify that he/she is in the position to have full knowledge of the facts set forth in the payroll documents and in the statement of compliance required by the Copeland "Anti-Kickback" Act which he/she is to execute with my full authority and approval until such time as I submit to the grantee/locality a new certificate appointing some other person for the purposes herein above stated.

Name: Carrie Vincent

Insert name, address, phone number & email address of person appointed as payroll officer

Address: 16736 TH 10

City: Vidor State: TX Zip Code: 77662

Telephone No: 409-769-0089 Email Address: CarrieV@mkconstructors.com

Carrie Vincent

Identifying Signature of Appointee

Michael Ben Title: President

Signature of Appointing Officer:

HUD COMPLAINT REGISTER

Complaint Register
Under Section 3 of the Housing
And Urban Development Act of 1968

U.S. Department of Housing and Urban Development
Office of Fair Housing
and Equal Opportunity

OMB Approval No. 2529-0043 (revised)
(Expires11/30/2018)

Instructions: This form is to be used to report allegations of noncompliance with Section 3 of the Housing and Urban Development Act of 1968, as amended and implementing regulations at 24 CFR Part 135.

1. Complainant Information:

Name of Complainant (Person or organization)	Home Phone
Street Address	Work Phone
City, State, Zip code	
Email Address:	

2. You are: (check all that apply)

- ☐ Low/Very Low Income Person
- ☐ Public Housing Resident
- ☐ HUD Youthbuild Participant
- ☐ A Representative of any of the above listed Individuals (Such as: a Low-Income Person or Public Housing Resident)
- ☐ Section 3 Business
- ☐ A Representative of a Section 3 Business
- ☐ Other: _____

3. Basis for alleged noncompliance with Section 3:

☐ Denied Training ☐ Denied Employment ☐ Denied Contracting ☐ Other (see below in item 6)

4. Complaint is against: (check one or more boxes)

☐ Recipient of HUD Funds (Such: as a PHA, city/county agency, etc.) ☐ Contractor ☐ Subcontractor ☐ Other (please specify): _____

5. Who is this complaint being filed against?

Name of agency, organization, or company:	Business Phone
Street Address	
City, State, Zip code	
Name and identify others (if any) who allegedly violated Section 3 in this case:	

Previous Editions are Obsolete Page 1 of 9 form HUD-958 (5/2016)

8. **How did the HUD recipient, contractor, or subcontractor violate the requirements of Section 3? (Check all that apply – provide documentation, if available)**

HUD Recipient	Contractor and/or Subcontractor
☐ Failed to notify Section 3 businesses about contracting opportunities	☐ Failed to certify that all employment vacancies filled prior to contract execution were not filled to circumvent Section 3
☐ Failed to incorporate the Section 3 Clause into covered Section 3 bid solicitations or contracts	☐ Failed to notify potential subcontractors about Section 3 requirements
☐ Failed to provide priority consideration to Section 3 businesses for covered contracting opportunities	☐ Failed to post notices at the work site regarding Section 3 requirements in accordance with the Section 3 Clause
☐ Failed to select Section 3 businesses in accordance with the order of priority consideration as set forth in 24 CFR 135.36	☐ Failed to send to each labor organization or representative of workers a notice of Section 3 obligations in accordance with the Section 3 Clause
☐ Failed to award contracts to Section 3 businesses	☐ Failed to ensure that its subcontractors complied with Section 3
☐ Failed to ensure that its contractors/ subcontractors complied with Section 3 requirements	☐ Failed to train and/or hire Section 3 residents for new employment opportunities
☐ Knowingly entered into contracts with contractors/ subcontractors that failed to comply with Section 3 requirements	☐ Failed to provide priority consideration to Section 3 residents for employment or training opportunities in accordance with 24 CFR Part 135.34
☐ Failed to notify Section 3 residents about training and/or employment opportunities	☐ Failed to ensure that contracts awarded to subcontractors included the Section 3 Clause
☐ Failed to provide priority consideration to Section 3 residents for employment or training opportunities	☐ Failed to award subcontracts to Section 3 businesses
☐ Failed to select Section 3 residents for training or employment opportunities in accordance with the order of priority consideration set forth in 24 CFR 135.34	☐ Failed to award subcontracts to Section 3 businesses in accordance with the order of priority consideration set forth in 24 CFR 135.34
☐ Failed to hire Section 3 residents for new employment opportunities	☐ Retaliated against the complainant because complainant sought to enforce Section 3 requirements or participated in an investigation or proceeding regarding Section 3
☐ Retaliated against the complainant because complainant sought to enforce Section 3 requirements or participated in an investigation or proceeding regarding Section 3	☐ Other _____
☐ Other _____	

7. **When did the act(s) checked above occur?** (Include the most recent date if several dates are involved):

_____/ _____/ _____
Month Day Year

* The date of the last alleged violation or occurrence must be less than 180 days from the date of submission to HUD.

8. **Project name or location where alleged violation occurred? (If applicable):**

Project Name (if applicable): _____ Project Number: _____

Project Location: _____

Local Contracting Agency (LCA): _____

9. **Identify the type of HUD funding used by the HUD funding recipient, organization, or contractor that this complaint is filed against: (Check all that apply)**

☐ PIH Operating Subsidy	☐ Other PIH Assistance	☐ Neighborhood Stabilization Program (NSP) Assistance	☐ Section 811 Supportive Housing for the Disabled
☐ PIH Capital Fund Subsidy	☐ Community Development Block Grants (CDBG)	☐ Other Community Development Assistance	☐ Project Based Housing Vouchers
☐ Choice Neighborhood Initiative Grant	☐ HOME Investment Partnership Funding	☐ Lead-Based Paint	☐ Other HUD Housing Assistance
☐ HOPE VI Grant	☐ McKinney Homeless Assistance	☐ Section 202Supportive Housing for the Elderly	☐ Other Covered HUD Funding

10. **Description of act(s) or incident(s) involving alleged violation of Section 3:** Summarize what happened? Attach additional information if necessary	
11. **Declaration Statement** **I declare under penalty of perjury that I have read this complaint (including any attachments) and that all information is accurate and correct.**	
Signature	Date

Section 3 of the Housing and Urban Development Act of 1968

Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB number.

The information is given voluntarily and provides the basis for HUD's investigation of the complaint to determine if the allegations of noncompliance are valid. The Department will use the information provided as the basis for its determination of jurisdiction over a complainant's allegations. All information collected complies with the Privacy Act of 1974 and OMB Circular A-108. The information is unique to the processing of complaints alleging noncompliance with the Section 3 statute or implementing regulations. The information collected on this form will only be used by HUD during the investigation and resolution of complaints and will not be shared with persons or parties that are not directly involved with the complaint.

What is Section 3 of the Housing and Urban Development Act of 1968?

Section 3 is a provision of the Housing and Urban Development (HUD) Act of 1968 that helps foster local economic development, neighborhood economic improvement, and individual self-sufficiency. The Section 3 requirements ensure that ***when*** new jobs or contracts are created during the usage of certain HUD funds, priority consideration is given to low- and very low-income persons residing in the community in which the funds are spent (regardless of race or gender), and to the businesses that substantially employ these persons.

Who are Section 3 residents and businesses?

Section 3 residents are:

- Public housing residents; or
- Persons who live in the area where a HUD-assisted project is located and who have a household income that falls below HUD's income limits for low- and very low-income.

Please visit: http://www.huduser.org/portal/datasets/il.html to determine the income limits for residents of your community.

A Section 3 business is one that meets one of the following criteria:

- Is 51 percent or more owned by Section 3 residents;
- Employs Section 3 residents for at least 30 percent of its full-time, permanent staff; or
- Provides evidence of a commitment to subcontract to Section 3 business concerns, 25 percent or more of the dollar amount of the awarded contract.

What HUD funding does Section 3 cover?

Section 3 applies to any of the following:

A. Public and Indian Housing programs that receive: (1) Annual contributions for low income housing projects provided pursuant to section 5 of the U.S. Housing Act of 1937, as amended by the Quality Housing and Work Responsibility Act of 1998 (QWHRA); (2) Capital Fund Project assistance provided pursuant to Section 9 of QHWRA; (3) Operating Subsidy assistance provided pursuant to Section 9 of QHWRA.

B. Housing and community development assistance extended for: (1) housing rehabilitation (including reduction and abatement of lead based paint hazards); (2) housing construction or (3) other public construction projects; and for which the contract and subcontract exceeds $100,000; and

C. Certain competitive HUD grant funding, such as: HOPE VI, Choice Neighborhoods, etc.).

What can you do about violations of the Law?

Remember, Section 3 applies to the awarding of jobs, training programs, and contracts, generated from projects receiving HUD financial assistance. If you believe that, as a low-income person or a Section 3 business concern, the responsibilities to provide economic opportunities under Section 3 have been violated, you have a right to file a complaint within **180 days** of the last alleged occurrences of noncompliance.

Complaints alleging violations of the Section 3 regulatory requirements must be submitted to the appropriate HUD Regional Office of Fair Housing and Equal Opportunity listed below. Please be certain to sign and date this form, where indicated, to ensure prompt complaint processing.

HUD will send the complaint to the appropriate HUD recipient for resolution. If resolution by the recipient fails, HUD will investigate. If HUD finds that the complaint has merit, it will try to end the violation by informal resolution. If conciliation fails, HUD may initiate other steps to enforce the law, including but not limited to suspension and debarment of the recipient or contractors as applicable.

You can obtain assistance in learning about more Section 3 by visiting www.hud.gov/section3 or by contacting one of the HUD's Regional Offices of Fair Housing and Equal Opportunity.

Authority: Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1968, as amended by the Housing and Community Development Act of 1992, U.S.C. 1701u and implementing regulations at 24 CFR Part 135.

Purpose: The information requested on this form is to be used to investigate and process Section 3 complaints.

Use: The information requested will be used to process a complaint filed under Part 135. HUD may disclose certain information for Federal, State, and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law.

Penalty: Failure to provide some or all of the requested information will result in delayed processing or rejection of this complaint for investigation.

Privacy Act of 1974 (P.L.93-579)
All information collected is provided voluntarily and complies with the Privacy Act of 1974 and OMB Circular A-108. The information is unique to the processing of complaints alleging noncompliance with the Section 3 statute or implementing regulations. The information collected on this form will only be used by HUD during the investigation and resolution of complaints and will not be shared with persons or parties that are not directly involved with the complaint.

Instructions for completing the Section 3 Complaint Register

Box 1: Enter the requested information for the person that is filing the complaint (i.e., the complainant). This person must meet the definition of a Section 3 resident or business.

Box 2: Select the appropriate statement that describes your status as a Section 3 resident, businesses, or representative of either.

Box 3: Select the appropriate basis for the complaint which you are filing.

Box 4: Select the appropriate option that best describes the person or entity that you are filing this complaint against.

Box 5: Provide the name, address, and contact information for the person or entity that you are filing this complaint against.

Box 6: Select the statement(s) that best describe the alleged actions or omissions undertaken by the person or entity that you are filing this complaint against that are in violation of the requirements of Section 3. If you select "other", please briefly describe the alleged violation on the appropriate line.

Box 7: Provide the date that the alleged violation or action occurred. If the alleged act or violation is continuing in nature, please provide the date of the most recent occurrence.

Box 8: If this complaint is based upon acts or omissions that occurred at a specific job site, project, or location, please provide information that will allow HUD to identify the specific project that is the subject of the complaint that you are filing.

Box 9: Select the appropriate type of covered HUD funding that the recipient, organization, contractor/ subcontractor received or administered.
NOTE: In order for the complaint to be jurisdictional, covered HUD funding must be administered by the recipient, organization, contractor/subcontractor.

Box 10: Provide a detailed description of the acts or omissions undertaken by the person or entity that you filing this complaint against. Provide enough specific information to enable HUD to clearly understand the alleged violation and whether it demonstrates noncompliance with the requirements of Section 3.

Box 11: Please sign the complaint and enter the current date.
NOTE: By signing and dating this complaint you are affirming that your statements and allegations are true and accurate by penalty of perjury. Complaints **must** be signed and dated prior to acceptance by HUD for investigation.

Where to file your complaint:
Please fax or mail your complaint to the appropriate HUD Regional Office of Fair Housing and Equal Opportunity that has jurisdiction over the state for which you are located or where the alleged violation occurred. Inquiries regarding the status of your complaint should be directed to the appropriate Regional office of FHEO by telephone or email.

BOSTON REGIONAL OFFICE U.S. Department of Housing and Urban Development New England Office 10 Causeway Street, Suite 308 Boston, MA 02222 (617) 994-8300 (800) 827-5005 Fax®617) 565-7313 Email: complaints_office_01@hud.gov *Covers the following states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	**FORT WORTH REGIONAL OFFICE** U.S. Department of Housing and Urban Development Southwest Office 801 Cherry St., Unit 45, Suite 2500 Fort Worth, TX 76102 (817) 978-5900 (888)560-8913 Fax®817) 978-5876 Email: complaints_office_06@hud.gov *Covers the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
NEW YORK REGIONAL OFFICE U.S. Department of Housing and Urban Development New York and New Jersey Office 26 Federal Plaza New York, NY 10278 (212) 264-1290 (800) 496-4294 Fax: (212) 264-9829 Email: complaints_office_02@hud.gov *Covers the following states: New Jersey and New York	**KANSAS CITY REGIONAL OFFICE** U.S. Department of Housing and Urban Development Great Plains Office 400 State Avenue Kansas City, KS 66101 (913) 551-6958 (800) 743-5323 Fax: (913) 551-6856 Email: complaints_office_07@hud.gov *Covers the following states: Iowa, Kansas, Missouri, and Nebraska
PHILADELPHIA REGIONAL OFFICE U.S. Department of Housing and Urban Development Mid-Atlantic Office 100 Penn Square East, 12th Floor Philadelphia, PA 19107 (215) 861-7646 (888) 799-2085 Fax: (215) 656-3449 Email: complaints_office_03@hud.gov *Covers the following states: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	**DENVER REGIONAL OFFICE** U.S. Department of Housing and Urban Development Rocky Mountain Office 1670 Broadway Denver, CO 80202 (303) 672-5437 (800) 877-7353 Fax: (303) 672-5026 Email: complaints_office_08@hud.gov *Covers the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

ATLANTA REGIONAL OFFICE U.S. Department of Housing and Urban Development Southeast Office 40 Marietta Street Atlanta, GA 30303 (404) 331-5140 (800) 440-8091 Fax: (404) 331-1021 Email: complaints_office_04@hud.gov *Covers the following states: Alabama, Puerto Rico, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and the Virgin Islands	**SAN FRANCISCO REGIONAL OFFICE** U.S. Department of Housing and Urban Development Pacific/Hawaii Office 600 Harrison Street Third Floor San Francisco, CA 94107 (415) 489-6536 (800) 347-3739 Fax: (415) 489-6560 Email: complaints_office_09@hud.gov *Covers the following states: Arizona, California, Guam, Hawaii, and Nevada
CHICAGO REGIONAL OFFICE U.S. Department of Housing and Urban Development Midwest Office 77 W. Jackson Boulevard, Suite 2101 Chicago, IL 60604 (312) 353-7776 (800) 765-9372 Fax: (312) 886-2837 Email: complaints_office_05@hud.gov *Covers the following states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	**SEATTLE REGIONAL OFFICE** U.S. Department of Housing and Urban Development Northwest/Alaska Office 909 First Avenue Seattle, WA 98104 (206) 220-5170 (800)877-0246 Fax: (206) 220-5447 Email: complaints_office_03@hud.gov *Covers the following states: Alaska, Idaho, Oregon, and Washington

Signature Page

As permitted under Article 4413 (32c) V.A.C.S., other governmental entities may wish to participate under the same terms and conditions contained in this contract (i.e., piggyback). In the event any other entity participates, all purchase orders will be issued directly from and shipped directly to the entity requiring supplies/services. Jefferson County shall not be held responsible for any orders placed, deliveries made or payment for supplies/services ordered by another entity. Each entity reserves the right to determine their participation in this contract.

Would bidder be willing to allow other governmental entities to piggyback off this contract, if awarded, under the same terms and conditions? ..... **Yes** ☐ **No** ☑

This bid shall remain in effect for thirty (30) days from bid opening and shall be exclusive of federal excise and state and local sales tax (exempt).

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price and upon the terms and conditions contained in the Invitation for Bid, Conditions of Bidding, Terms of Contract, and Specifications and all other items made a part of the accepted contract.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

BDS Constructors LLC dba MK Constructors
Bidder (Entity Name)

Michael Brown
Signature

16736 I-10
Street & Mailing Address

Mike Brown
Print Name

Vidor TX 77662
City, State & Zip

10/20/17
Date Signed

409-769-0089
Telephone Number

409-769-1288
Fax Number

CarrieV@mkconstructors.com
E-mail Address

Bidder Shall Return Completed Form with Offer.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE — FORM CIQ

For vendor doing business with local governmental entity

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

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY
Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

N/A

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** N/A

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information in this section is being disclosed.**

_____ N/A

Name of Officer

This section (item 3 including subparts A, B, C, & D) must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more?

☐ Yes ☐ No

D. Describe each employment or business and family relationship with the local government officer named in this section.

Not Applicable to this Project

4 * Michael Ben 11/20/17 — 11/20/17

Signature of vendor doing business with the governmental entity — Date

Adopted 8/7/2015

Bidder Shall Return Completed Form with Offer.

Local Government Officer Conflicts Disclosure Statement - OFFICE USE ONLY

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

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**

N/A

4 **Description of the nature and extent of employment or other business 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 **AFFIDAVIT**

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

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, 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

Adopted 8/7/2015

Good Faith Effort (GFE) Determination Checklist

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☑ Yes ☐ No

Instructions: In order to determine if a "Good Faith Effort" was made in soliciting HUBs for subcontracting opportunities, the following checklist and supporting documentation shall be completed by the Prime Contractor/Consultant, and returned with the Prime Contractor/ Consultant's bid. This list contains the **minimum** efforts that should be put forth by the Prime Contractor/Consultant when attempting to achieve or exceed the goals of HUB Subcontractor participation. The Prime Contractor/Consultant may extend his/her efforts in soliciting HUB Subcontractor participation beyond what is listed below.

Did the Prime Contractor/Consultant . . .

☑ Yes ☐ No 1. To the extent practical, and consistent with standard and prudent industry standards, divide the contract work into the smallest feasible portions, to allow for maximum HUB Subcontractor participation?

☑ Yes ☐ No 2. **Notify** in writing a reasonable number of HUBs, allowing sufficient time for effective participation of the planned work to be subcontracted?

☑ Yes ☐ No 3. **Provide** HUBs that were genuinely interested in bidding on a subcontractor, adequate information regarding the project (i.e., plans, specifications, scope of work, bonding and insurance requirements, and a point of contract within the Prime Contractor/Consultant's organization)?

☑ Yes ☐ No 4. **Negotiate** in good faith with interested HUBs, and not reject bids from HUBs that qualify as lowest and responsive bidders?

☑ Yes ☐ No 5. **Document** reasons HUBs were rejected? Was a written rejection notice, including the reason for rejection, provided to the rejected HUBs?

☑ Yes ☐ No 6. If Prime Contractor/Consultant has zero (0) HUB participation, **please explain the reasons why.**

If "No" was selected, please explain and include any pertinent documentation with your bid.
If necessary, please use a separate sheet to answer the above questions.

Mike Brown
Printed Name of Authorized Representative

Michael Brown
Signature

Vice President
Title

10/24/17
Date

Bidder Shall Return Completed Form with Offer.

Notice of Intent (NOI)
to Subcontract with Historically Underutilized Business (HUB)

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions for Prime Contractor/Consultant: Bidder shall submit this form with the bid; however, the information below may be submitted after contract award, but prior to beginning performance on the contract. Please submit one form for each HUB Subcontractor/Subconsultant with proper signatures, per the terms and conditions of your contract.

Contractor Name: BDS Construction LLC dba MK Constructors HUB: ☐ Yes ☐ No

Address: 16736 IH 10 Vidor TX 77662
Street City State Zip

Phone (with area code): 409-769-0089 Fax (with area code): 409-769-1288

Project Title & No.: Cheek Phase V Sewer Improvements

Prime Contract Amount: $ 205,864.-

HUB Subcontractor Name: Not applicable to this Project

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Printed Name of Contractor Representative	Signature of Representative	Date
Printed Name of HUB	Signature of Representative	Date

NOTE: NOTHING ON THIS NOTICE OF INTENT FORM IS INTENDED TO CONFER ANY RIGHTS, EXPRESSED OR IMPLIED, TO ANY THIRD PARTIES.

Pre-Approval for Subcontractor Substitutions must be obtained from the Jefferson County Purchasing Agent's Representative. The "HUB Subcontractor/Subconsultant Change Form" must be completed and faxed to 409-835-8456.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/subconsultants in the fulfillment of this contract (if awarded).
☐ Yes ☑ No

Prime Contractor: BDS Construction LLC dba MK Construction HUB: ☐ Yes ☐ No

HUB Status (Gender & Ethnicity): Male | White

Address: 16736 IH 10 Vidor TX 77662
Street City State Zip

Phone (with area code): 409-769-0089 Fax (with area code): 409-769-1288

Project Title & No.: Cheek Phase V IFB/RFP No.: 17-008/JW

Total Contract: $ 205,864.00 Total HUB Subcontract(s): $ N/A

Construction HUB Goals: 12.8% MBE:: N/A % 12.6% WBE: N/A %

Sub-goals: 1.7 African-American, 9.7% Hispanic, 0.7% Native American, 0.8% Asian American.
Use these goals as a guide to diversify.

FOR HUB OFFICE USE ONLY:

Verification date HUB Program Office reviewed and verified HUB Sub information Date: _____ Initials: _____

PART I. HUB SUCONTRACTOR DISCLOSURE

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Texas Bldg & Procurement Comm. ☐ Texas Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

HUB SUBCONTRACTOR DISCLOSURE

PART I: Continuation Sheet **(Duplicate as Needed)**

HUB Subcontractor Name: Not applicable to this Project

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

All HUB Subcontractor Participation may be verified with the HUB Subcontractor(s) listed on Part I.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

PART II: STATEMENT OF NON-COMPLIANCE FOR NOT MEETING HUB SUBCONTRACTING GOALS

Please complete Good Faith Effort (GFE) Checklist and attach any supporting documentation.

Our firm was unable to meet the HUB goals for this project for the following reasons:

- ☐ All subcontractors to be utilized are "Non-HUBs." *(Complete Part III)*
- ☐ HUBs were solicited but did not respond.
- ☐ HUBs solicited were not competitive.
- ☑ HUBs were unavailable for the following trade(s):
- ☐ Other: _____

Was the Jefferson County HUB Office contacted for assistance in locating HUBs? ☑ Yes ☐ No

PART III: DISCLOSURE OF OTHER "NON-HUB" SUBCONTRACTS

The bidder shall use this area to provide a listing of all "Non-HUB" Subcontractors, including suppliers, that will perform under this project. A list of those "Non-HUB" Subcontractors the bidder selects, after bid submission, shall be provided to the Purchasing Office not later than five (5) calendar days after being notified that bidder is the apparent low bidder. A list of those "Non-HUB" Subcontractors that are selected after contract award must be provided **immediately** after their selection.

Subcontractor Name: Not Applicable to this Project

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

Subcontractor Name: N/A

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: N/A

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

I hereby certify that I have read the *HUB Program Instructions and Information*, truthfully completed all applicable parts of this form, and **attached any necessary support documentation as required.** I fully understand that intentionally falsifying information on this document may result in my not receiving a contract award or termination of any resulting contract.

Name (print or type): Michael Brown

Title: Vice President

Signature: Michael Brown

Date: 11/20/17

E-mail address: CarrieV@mkconstructors.com

Contact person that will be in charge of Invoicing for this project:

Name (print or type): Mike Sura

Title: Estimator

Date: 11/20/17

E-mail address: mikes@mkconstructors.com

Bidder Shall Return Completed Form with Offer.

Residence Certification/Tax Form

Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Jefferson County requests Resident Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

I certify that BDS Construction LLC dba MK Construction [company name] is a Resident Bidder of Texas as defined in Government Code §2252.001.

I certify that _____ [company name] is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____ _____ (city and state).

Taxpayer Identification Number (T.I.N.):	45-3567082
Company Name submitting bid/proposal:	BDS Construction LLC dba MK Construction
Mailing address:	P.O. Box 1208 Vidor TX 77670
If you are an individual, list the names and addresses of any partnership of which you are a general partner:	

Property: List all taxable property owned by you or above partnerships in Jefferson County.

Jefferson County Tax Acct. No.*	Property address or location**
	116736 I H 10 - Vidor TX 77662

* This is the property amount identification number assigned by the Jefferson County Appraisal District.

** For real property, specify the property address or legal description. For business property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored as a warehouse or other location.

Bidder Shall Return Completed Form with Offer.

Bid Affidavit

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the specifications and the Notice to Bidders.

STATE OF Texas COUNTY OF Orange

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas,

on this day personally appeared Mike Brown (name), who

after being by me duly sworn, did depose and say:

"I, Mike Brown (name) am a duly authorized officer of/agent

for 3DS Construction LLC dba MK Construction (name of firm) and have been duly authorized to execute the

foregoing on behalf of the said 3DS Constructon LLC dba. MK Construction (name of firm).

I hereby certify that the foregoing bid has not been prepared in collusion with any other bidder or other person or persons engaged in the same line of business prior to the official opening of this bid. Further, I certify that the bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities bid on, or to influence any person or persons to bid or not to bid thereon."

Name and address of bidder: 3DS Constructon LLC dba. MK Construction

Fax: 409-769-1288 Telephone# 409-769-0089

by: Mike Brown (print name) Title: Vice President

Signature: Michael Brown

SUBSCRIBED AND SWORN to before me by the above-named Mike Brown on

this the 20 day of Oct, 2017.

CARRIE EVE VINCENT
Notary Public, State of Texas
Comm. Expires 04-13-2020
Notary ID 128955139

Notary Public in and for the State of TX

Bidder Shall Return Completed Form with Offer.

Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231|ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
1	MOBILIZATION AND DEMOBILIZATION	L.S.	1						
2	FURNISH & INSTALL LPSS GRINDER PUMP STATION INCLUDING PUMP, FIBERGLASS TANK, CONTROLS & HOUSING INCLUDING ELECTRICAL INSTALLATION , AND 4" SEWER CONNECTION FROM HOUSE COMPLETE IN PLACE PER SUMMARY OF WORK	EA.	17						
3	ABANDON EXISTING SEPTIC TANK	EA.	17						
4	1 1/4" HDPE SDR-11 SANITARY SEWER SERVICE LINE, COMPLETE IN PLACE, FROM VALVE BOX TO GRINDER UNIT	LF	1,775						
5	2" PVC SDR-26 SEWER FORCE MAIN COMPLETE IN PLACE INCLUDING SAND ENCASEMENT PER DETAIL	L.F.	532						
6	DRIVEWAY BORE FOR 2" SEWER FORCE MAIN	L.F.	40						
7	2" 45 DEG. BEND DI-MJ, RESTRAINED W/ MEGA-LUGS	EA.	1						
8	2" GATE VALVE DI-MJ RESTRAINED W/MEGA-LUGS	EA.	1						
9	6"x2" WYE DI-MJ, RESTRAINED W/MEGA-LUG INSTALLED ON EXISTING FORCE MAIN LOCATED ON BROOKS RD. & DENLEY COMPLETE IN PLACE	EA.	1						

Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
10	2" TERMINAL CLEANOUT W/VAULT (SEE DETAILS SHEET 5 OF 6) COMPLETE IN PLACE	EA.	1						
11	LONG SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE , 1-1/4" SDR-11 HDPE, FITTINGS, VALVES, & ROADWAY BORE COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	10						
12	SHORT SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE, 1-1/4" SDR-11 HDPE, FITTINGS, & VALVES COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	7						
13	"610" ROCK FOR DRIVEWAYS, LOOSE DUMP AND SPREAD MIN. 6" THICK	TON	120						
	ITEMS TO BE USED WHEN DIRECTED BY ENGINEER								
14	MANHOURS WHEN AUTHORIZED BY THE ENGINEER	HOUR	5						
15	TRUCK HOURS WHEN AUTHORIZED BY THE ENGINEER	HOUR	5						
16	BACK HOE / LOADER HOUR WHEN AUTHORIZED BY THE ENGINEER	HOUR	5						
17	FURNISH & INSTALL 4" PVC FOR ADDITIONAL LINES WHEN AUTHORIZED BY THE ENGINEER.	LF	100						

Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
18	CEMENT STABILIZED SAND BACKFILL 1-1/2 SACK/C.Y. WHEN AUTHORIZED BY THE ENGINEER	TON	5						
19	EXTRA CLASS-A CONCRETE - BULK, COMPLETE IN PLACE WHEN AUTHORIZED BY THE ENGINEER	C.Y.	5						
20	EXTRA CLASS-A CONCRETE - FORMED, COMPLETE IN PLACE WHEN AUTHORIZED BY THE ENGINEER	C.Y.	5						
						TOTAL			
	STATEMENT FOR SEPARATED CONTRACT COMPLIANCE:								
	NON-CONSUMABLE MATERIALS AND EQUIPMENT.....							$	
	SKILLED LABOR, MATERIALS, EQUIPMENT AND TOOLS.....							$	
						TOTAL		$	

The undersigned agrees to commence work within ten (10) days after the date of written notice to commence work and to substantially complete the work on which he has bid within (_____) calendar days as provided in the General Conditions of the Agreement. Enclosed herewith is a cashier's check, certified check, or bid bond in the sum of 5% of the greatest amount bid which it is agreed shall be collected and retained by the **OWNER** as liquidating damages in the event this proposal is accepted by the **OWNER** within sixty (60) days after the date advertised for the reception of bids and the undersigned fails to execute the contract and the required bond with the **OWNER**, under the conditions hereof, within ten (10) days after the date said proposal is accepted, otherwise said check or bond shall be returned to the undersigned upon demand.

CONTRACTOR: _____ ADDRESS: _____ Phone: _____

BY: _____ DATE: _____

Alternate Addition Bid Proposal

Cheek Community Sewer Improvements - Cheek Phase V

Grinder Pump Installation & Force Main

Jefferson County, Texas

TXCDBG Contract No. 7216231 | ACE Job No. 115-02

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE BID WRITTEN IN WORDS		UNIT PRICE WRITTEN IN FIGURES		TOTAL PRICE BID WRITTEN IN FIGURES	
				DOLLARS	CENTS	DOLLARS	CENTS	DOLLARS	CENTS
1	FURNISH & INSTALL LPSS GRINDER PUMP STATION INCLUDING PUMP, FIBERGLASS TANK, CONTROLS & HOUSING INCLUDING ELECTRICAL INSTALLATION , AND 4" SEWER CONNECTION FROM HOUSE COMPLETE IN PLACE PER SUMMARY OF WORK	EA.	5						
2	ABANDON EXISTING SEPTIC TANK	EA.	5						
3	1 1/4" HDPE SDR-11 SANITARY SEWER SERVICE LINE, COMPLETE IN PLACE, FROM VALVE BOX TO GRINDER UNIT	LF	525						
4	SHORT SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE, 1-1/4" SDR-11 HDPE, FITTINGS, & VALVES COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	2						
5	LONG SIDE SANITARY SEWER LOW PRESSURE SERVICE LINE FROM FORCE MAIN TO AND INCLUDING VALVE BOX AT PROPERTY LINE INCLUDING TAP SADDLE , 1-1/4" SDR-11 HDPE, FITTINGS, VALVES, & ROADWAY BORE COMPLETE IN PLACE (SEE DETAILS, SHEET 4 OF 6)	EA.	3						

Special Provisions

Cheek Phase V – Cheek Community Sewer Improvements,
Grinder Pump and Force Main Installation
Jefferson County, Texas
IFB 17-008/JW
ACE Job No. 115-05

1. The selection of a CONTRACTOR for this project shall be determined by the low responsive, responsible bid for the proposal. The price bid should include the cost of all items outlined in the summary of work to accomplish the respective task.

   Please indicate the number of Calendar Days in the space provided on the ***PROPOSAL FORMS****.*

   Bidders are advised that when an Addendum is issued each Addendum must be recognized by signature and a copy of all signed Addendums must be submitted with Bid.

   It is the intent of these specifications to pay the CONTRACTOR for those items in the proposal, which he performs on. The CONTRACTOR will not be due profit or any other compensation for those items in the proposal, which are not used, not used completely, or for items deleted from this contract.

2. The CONTRACTOR shall provide the OWNER, upon request, with a financial statement and experience record.
3. **A mandatory Pre-Bid Conference will be held on Thursday October 12, 2017 at 10:00 AM CST. The conference will be held in the Jefferson County Engineering Department Conference Room located on the fifth floor of the Jefferson County Courthouse, 1149 Pearl Street, Beaumont, Texas 77701.** Any questions should be directed to the ENGINEER, in writing, prior to the bid opening.
4. Where there is conflict of measurement designation between the Specification and the Proposal, the unit of measurement indicated on the Proposal shall prevail.
5. When conflicts exist between the Special Provisions and General Specifications, the Special Provisions shall control.
6. Safety Standards and Accident Prevention

   With respect to all work performed under this contract, the CONTRACTOR shall:

   a) Comply with safety standard provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction", published by the

Associated General CONTRACTORS of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of Code Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971.

b) Exercise every precaution at all times for the prevention of accidents and the protection of person (including employees and property).

7. Any questions arising on the plans and specifications must be submitted to the ENGINEER in writing prior to **BID OPENING.**

8. Regardless of culpability, the CONTRACTOR shall not be allowed to take advantage of any errors or omissions in these plans and specifications or his work orders. The CONTRACTOR is required to notify the ENGINEER of all errors or omissions as soon as he becomes aware of them. Suitable instructions will be given to the CONTRACTOR by the ENGINEER when such errors or omissions are discovered. No compensation for any delay or down time, including time to receive the ENGINEER'S instructions or approval, shall be allowed. Further, any errors and/or omissions contained in the plans and/or specifications do not absolve the CONTRACTOR from ultimate and final responsibility for the successful completion of this project to the satisfaction of the ENGINEER. The degree of detail reflected in the plans or lack of same does not absolve the CONTRACTOR from the necessity of conducting an extensive investigation of the project area prior to submission of his/her bid. The CONTRACTOR will not be due any additional compensation for difficulties arising out of his/her failure to inspect, analyze the actual job site prior to submission of his/her bid.

9. The CONTRACTOR is expected to be completely familiar with the provisions contained in these specifications. The CONTRACTOR will not be allowed any additional payment or extension of time due to difficulties caused by his/her failure to acquaint himself/herself with this document.

10. Any and all work which, in the opinion of the ENGINEER, is necessary to complete the project and which is neither specifically listed and/or identified in the bid proposal items not elsewhere in these specifications, shall be considered incidental to the work and the CONTRACTOR will not be due any additional payment for completion of said required work.

11. Liquidation damages for delay beyond specified time for completion are **$500.00** per day.

12. WARRANTY

The CONTRACTOR and/or his Surety will be required by the OWNER to repair, replace, restore, and/or to make to comply strictly in all things with the contract, and the plans and specifications, and any and all of said work and/or materials which within a period of ***One Year*** from and after the date of the passing, approval, and/or acceptance of any such work or materials are found to be defective, or to fail in any way to comply with this contract or with the plans and specifications.

13. The OWNER reserves the right to control the sequence of work.
14. Permits, Licenses and Laws
15. The CONTRACTOR shall obtain at his own expenses, all necessary permits and licenses from the proper authorities and shall give all notice required by law or ordinance and shall pay all fees and charges incidental to the due and lawful prosecution for the work and shall comply with all laws, ordinances and regulations relating thereto.
16. Although trade names for materials may have been used in the Proposals and Plans for this project, it is intended that materials of equal quality will be acceptable on approval of the ENGINEER and the OWNER. Approval shall be obtained prior to receiving bids.
17. All materials for this project shall meet AWWA Specifications and requirements.
18. This contract is issued by an organization which qualifies for exemption pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act as codified in Chapter 151 of the Texas Tax Code.
19. House Bill 1859 provides that retainage can be withheld from payment due the CONTRACTOR, from monthly progress payments for completed work. A 10% retainage will be retained until final payment is made in keeping with the "Texas Community Development Block Grant Program" requirements.
20. Bidders are advised that OWNER reserves the right to reduce any proposal by any amount, in accordance with General Conditions of the Agreement.
21. If a bidder desires to make qualifications in his bid, it shall be done in writing, attached to and submitted with his sealed bid.
22. The CONTRACTOR is responsible for any damage resulting from negligence. The CONTRACTOR will take the necessary steps to prevent these occurrences and damage to OWNERS property or adjacent properties.
23. Utilities: It shall be the CONTRACTOR'S responsibility to contact public and private utility companies in advance of construction, allowing each their respective lead time to locate

and to make adjustment as necessary, of water, electric, telephone and gas mains or service lines. The CONTRACTOR shall also notify various utility companies of proposed work and work schedule. The CONTRACTOR will verify the existing utility or pipelines horizontal and vertical locations prior to initiation of construction. No extra payment will be allowed for any extra excavation incurred or downtime, which results from the required location of existing utilities. CONTRACTOR shall keep a notebook of all location requests. Each notation will contain the following information: **Date, Time, Brief Location Summary, Request ID Number, and Call Back Repair Number**. Any damage to utilities as a result of the CONTRACTOR'S negligence will be repaired to the satisfaction of the OWNER of the damaged utility with no compensation due the CONTRACTOR.

24. All suitable surplus excavated materials will remain the property of the OWNER for use as directed by the engineer. Suitable material may be retained to facilitate site drainage as directed by the ENGINEER.
25. CONTRACTOR shall furnish temporary sanitary facilities at the site, as provided herein, for the needs of all construction workers and others performing work or furnishing services of the project. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 workers, and serviced at least once a week. CONTRACTOR shall enforce the use of such sanitary facilities by all personnel at the site.
26. Cement stabilized sand for this Project shall contain 1½ sacks of cement per cubic yard of sand.
27. The cleanup for each respective task shall be included in the unit price bid for each item and shall be full compensation for all labor, materials, equipment, etc., required to complete work as directed by the ENGINEER. This item includes the removal of all surplus materials and debris, final grading as required including the import of material required to raise grade to proper elevation following backfill settlement or excessive soil removal. Any ditches disturbed by the construction shall be restored to their original grade.
28. Ditches along roadways shall be restored to original shape and grade. No additional compensation will be made for restoring ditches rutted during construction.
29. The CONTRACTOR shall notify the Jefferson County Sheriff's Department, Fire Department, prior to closing any existing street or roadway.

30. The CONTRACTOR shall maintain streets and roadways as directed by the ENGINEER. This maintenance shall be limited to that amount required to enable suitable traffic movement. Road shell or other suitable material shall be used to provide suitable surface for traffic on streets, driveways, and shoulders. This task is considered incidental to the work and the CONTRACTOR will not be due any additional payment for this required work.
31. Concrete for this project, when directed, shall be Class A, 4000 psi in 28 days using 1½" maximum size aggregate.
32. Abandon existing septic tanks in place, including plugging all influent and effluent lines, vacuum out wastewater and sludge, hauling and disposal of the wastewater and sludge to an approved facility licensed to receive the waste (contractor will be required to furnish proof of this activity by disposal tickets prior to final payment), break down top and sides one foot (1') below natural ground, backfill and restore surface area to the original shape. Surplus excavated material from Grinder Pump installation, or 1 ¼ Grinder Pump service line may be used for this task.
33. Unit Price Bid for Simplex Grinder Station shall include all the parts and accessories required for fully functional unit and per summary of work and specifications. Control, Electrical Rack and electrical wiring from residents house or service pole to will be included in the Unit Price Bid for Simplex Grinder Station.

All electrical work performed on this project shall be performed by a licensed Electrician. The licensed Electrician shall adhere to all Local and National Electrical Codes.

Summary of Work

CONTRACTOR shall furnish all labor, materials, equipment, insurance, payroll, taxes, permits and supervision to **Install twenty three (23) new Simplex Grinder Pump Units.** Work task includes but not limited to the following sanitary sewer improvement activities:

1. Install Simplex Grinder Pump Units (23 NEW)

Furnish and install **twenty three (23)** fully operational Grinder Pump Units per plans and specifications including but not limited to the following parts and accessories necessary for a complete functional grinder pump unit:

1) *One (1)* – Hydromatic HPG200M2-2
2) *Four (4)* – Stainless steel pump feet and bolts
3) *One (1)* – 24" X 60" fiberglass tank with solid lid and neoprene gasket.
4) *One (1)* – Simplex control panel 230 volt 1 phase, with alarm light.
5) *Three (3)* – Float switches Conery 21813A302
6) *One (1)* – Simplex pipe kit consisting of the following:
   a) 5' section of schedule 80 PVC 1 ¼"
   b) PVC elbow 1 ¼".
   c) PVC check valve TBCD style 1 ¼".
   d) PVC union.1 ¼"
   e) PVC ball valve 1 ¼".
   f) 1 ¼" male adaptor.
   g) 1 ¼" adapt-o-flex grommet. (for pump discharge)
   h) 2" adapt-o-flex grommet. (for electrical conduit)
   i) 4" adapt-o-flex grommet. (for incoming line)

Work task will also include 1 ¼" SDR-11 HDPE service line from grinder pump to valve box at the property line, connecting 4" gravity line from house plumbing to proposed grinder pump, and abandon existing septic tank.

Contractor is to excavate and install the 24" dia. x 60" deep fiberglass basin, install the grinder pump unit and grinder pump electrical. Contractor is to furnish and place four sacks of sackcrete on the retainer ring and backfill with select material to be provided by the contractor. Set the pump in the basin on existing slide rails, set control box, and 30 amp disconnect (**Contractor Provided**), all necessary electrical conduit, and connect to existing house electrical (contractor may be required to install a separate breaker box to accommodate new grinder pump along with any conduit, wiring and breakers) with a licensed Electrician, all in accordance with National and Local Electrical codes.

Work task will also include 1 ¼" SDR-11 HDPE service line from grinder pump to valve box at the property line, connecting 4" gravity line from house plumbing to proposed grinder pump, and abandon existing septic tank.

Contractor is to excavate and install the 24" dia. x 60" deep fiberglass basin, install the grinder pump unit and grinder pump electrical. Contractor is to furnish and place four sacks of sackcrete on the retainer ring and backfill with select material to be provided by the contractor. Set the pump in the basin on existing slide rails, set control box, and 30 amp disconnect (**Contractor Provided**), necessary electrical conduit and connect to house electrical with a licensed Electrician, all in accordance with National and Local Electrical codes.

2. Abandon Existing Septic tanks as Identified

Abandon existing septic tanks in place, including plugging all influent and effluent lines, vacuum out wastewater and sludge, hauling and disposal of the wastewater and sludge to an approved facility licensed to receive the waste (contractor will be required to furnish proof of this activity by disposal tickets prior to final payment), break down top and sides one foot (1') below natural ground, backfill and restore surface area to the original shape. Surplus excavated material from Grinder Pump installation, or 1 ¼ Grinder Pump service line may be used for this task.

3. Residential Grinder Pump Sewage System (LPSS) and Service Lines

Residential Grinder Pump Sewage System (LPSS) Service Lines location will be determined in the field between the contractor, and engineer. The following are the twenty three (23) addresses:

10129 Lawhon	9819 Lawhon	9524 Lawhon
10262 Brooks Road	6602 Boyt Road	7139 Boyt Road
7257 Boyt Road	7446 Boyt Road	7538 Boyt Road
7779 Boyt Road	7948 Boyt Road	8909 MLK
10247 Brooks Road	4408 Denley	7099 Faith
8643 Phillips Street	7145 Faith	

CONTRACTOR shall furnish all labor, materials, equipment, insurance, payroll, taxes, permits and supervision to **Install Low Pressure Sewer Force Main.** Work task includes following sanitary sewer improvement activities:

4. Installation of Low Pressure Sewer Force Main

Install approximately **532 L.F. of 2", PVC SDR-26 Class 161** Sewer Force Mains including "Mega-Lug" joint restraints for all valves and fittings. Work task also includes hydrostatic testing of new force main per specifications.

Contractor shall install a detector tape in the same trench as a force main pipe and must be located above and parallel to the force main. The detector tape must bear the label "**PRESSURIZED WASTEWATER**" continuously repeated in at least 1.5 inch letters. Unit bid price for the force main installation shall include a detector tape. There will be no separate pay item for installing a detector tape.

5. Service Lines (See No. 3 Above)

Short side services consist of installing the 1 ¼" FM size Tap Saddle, (Premier), 1 ¼" SDR-11 HDPE, 1 ¼" shut off valve, 1 ¼" check valve and valve box at the property line per Plan Details ***(See Detail "A" Sheet 4 of 6)***.

Long sides services will be as noted above but will also include a bore under the roadway. Roadway bore is to be included in price for Long Side Service. Contractor shall take care not to damage the road surface.

6. Alternate Bid Addition Additional Address

~~10307 Brooks Road~~	~~9508 Lawhon~~	~~8787 MLK~~
8811 MLK	8567 Landry	7084 Faith
7145 Faith		

Specifications for Sanitary Sewer Construction

1. DEFINITIONS

Whenever the following terms are used in these specifications, their meaning will be construed in accordance with the definitions listed below:

A. OWNER – Jefferson County (Grantee), acting by and through its duly authorized representative.
A. ENGINEER – The Director of Public Works and/or authorized firms or individuals.
B. Inspector – A representative of the Director of Public Works, OWNER or ENGINEER stationed at the site of the work to secure conformity with the plans and specification, to keep a record of the work performed by the CONTRACTOR, and to serve in such other capacities as the ENGINEER may direct.
C. Plans – The plans shall include all drawings adopted by the OWNER pertaining to the work under this contract and shall include the printed detail drawings, which are a part of these specifications.
D. Profile – That portion of the plans showing a vertical section along the centerline location of the sewer.
E. ASTM Specifications – Specifications adopted by the American Society for Testing Materials governing the methods and procedures for manufacturing and testing materials and which bear appropriate alphabetical and numerical designations pertinent to the various items involved.
F. ASA Specifications – Specifications adopted by the American Standards Association governing the methods and procedures for manufacturing and testing materials and which bear appropriate alphabetical and numerical designations pertinent to various items involved.

2. ABBREVIATIONS

The following abbreviations will be used in these specifications and in proposals and contracts:

Cu. Yd. Or C.Y.	Cubic Yards	M.f.b.m.	Thousand feet board meas.
Sq. Yd. Or S.Y.	Square Yards	Lbs.	Pounds Lin. Ft. or
L.F.	Linear Foot	L.S.	Lump Sum
Sq. Ft. or S.F.	Square Foot	R.C.	Reinforced Concrete
Sq. In.	Square Inch	M.R.C.	Monolithic Reinf. Concrete
Min.	Minimum	Max.	Maximum

Other abbreviations, where used, shall be given their generally accepted meaning.

3. OTHER SPECIFICATIONS

Special specifications will be furnished where items to be furnished or constructed under the Contract are not covered by these Standard Sewer Specifications. Where provisions of such Special Provisions or Special Specification are in conflict with the Standard Specifications, the Special Specifications shall govern.

4. ACCESS

The ENGINEER and his duly authorized representatives shall have access to any part of the work at all times.

5. USAGE

The OWNER shall have the right to use any complete portion of the work at any time prior to the completion of the entire Contract where in the judgment of the ENGINEER, such use will not interfere with the operation of the CONTRACTOR. The use of completed portion of the work by the OWNER does not constitute an acceptance of the work by the OWNER.

6. SITE OF WORK

The OWNER will furnish all right-of-ways considered necessary by the ENGINEER for the construction of the work under contract as set forth in the General Conditions, however, whenever the CONTRACTOR deems it necessary to make use of private property for field office, space storage yard equipment or materials or for spoiling excess excavated materials, he shall make his own arrangements with OWNERS of such property and shall indemnify and save harmless the OWNER from any damages or claims resulting from such use.

7. TRAFFIC

A. The CONTRACTOR is referred to the General Conditions in regard to closing streets to traffic. In general, materials will not be stored in the streets without permission from the ENGINEER, however, when such permission is granted, materials shall be stored so as to obstruct public travel as little as possible and in no case shall there be less than 12 feet width of unobstructed road. Materials and/or parked equipment near the path of traffic shall be protected by warning lights at night. Where sewer trenches are excavated, blocking private driveways, the CONTRACTOR shall provide at his own expense suitable temporary bridges, to permit safe access to the private driveways. Suitable bridges for pedestrians shall be constructed at intersecting walk lines.

B. Not less than 24 hours before closing any street to traffic, the CONTRACTOR shall notify the Director of the Department of Traffic and Transportation of such necessary closing.

C. When any sewer trench crosses a dead-end street, the CONTRACTOR shall construct a bridge not less than 16 feet in width to permit ingress and egress to such dead-end street. Such bridge shall be of sufficient strength to carry the traffic normally using such street. The bridge shall be constructed immediately behind the excavating equipment. The start of excavation operations will not be permitted until sufficient material is on hand on the job-site to construct the bridge.

8. BARRICADES, WARNING AND DETOUR SIGNS

A. The safety of the public and convenience of traffic shall be regarded as of prime importance during construction. In all respects, public safety and convenience and

provisions therefor, made necessary by the work, shall be the direct responsibility of the CONTRACTOR and shall be performed at his entire expense.

B. When any section of a street is closed to traffic, the CONTRACTOR shall furnish and maintain at each end of the closed section and at all intersecting streets at a distance of one block on each side of the work, Department of Public Works standard barricades, adequate warning and directing signs, lights, and red flags. All lights shall be kept burning from sunset to sunrise. The CONTRACTOR shall provide and maintain such standard barricades, signs, lights, and flags within the closed portion of the street as may be necessary to protect the work and safeguard local traffic, and only standard signs and barricades shall be used.

C. The CONTRACTOR will not be permitted to start any operation that will close a street or streets until the required barricades are in place.

D. Between sunset and sunrise, and at all times when construction operations are not in progress, the CONTRACTOR will provide and maintain a watchman on the site of the work whose prime duty shall be to maintain in a proper position and condition all barricades, warning and directing signs, lights and flags.

E. No direct compensation will be made to the CONTRACTOR for furnishing watchmen; furnishing, installing and maintaining barricades, warning and detour signs and their subsequent removal; and all other incidentals necessary for the proper direction, safety, and convenience of traffic during the contract period as this work is to be considered subsidiary to the several items for which unit prices are requested in the proposal.

9. UNDER-GROUND PIPES, DUCTS AND UTILITIES

A. It is the intention of the OWNER to show on the plans, the approximate location of all-underground utility lines, and structures except service connections to buildings. Where gas, water and sewer lines exist in the vicinity, the CONTRACTOR should assume that service connections exist to each building.

B. Where pipes, ducts and other structures are encountered in the excavation, but are not shown on the plans (except service connections as set out above, the ENGINEER will measure in place, all excavation necessary for construction of the sewer that cannot, by reason of the presence of said pipe, duct, or other structure, be performed by the normal trenching machine, or other methods in use on the job. Measurement will be by the cubic yard, in place, without deduction for the space occupied by portions of the pipe, duct or other structure that are left in place across the trench. Payment will be made for the sewer and other installed appurtenances at the contract price in addition to the price paid for the "SPECIAL EXCAVATION".

C. Payment of the contract price for "SPECIAL EXCAVATION", measured as set out herein, shall be full compensation for all additional expense occasioned by encountering said underground pipe, duct or other structure, including additional equipment, additional work, additional use of equipment, delays, in completion of the work and delays to men and equipment, additional cost of excavation and disposal of excavated materials and of sheeting and shoring and every other item of expense occasioned by encountering said underground pipe, duct or other structure except that where the ENGINEER orders the CONTRACTOR to cut into or patch said pipe, duct or other structure, the CONTRACTOR will be paid for said cutting or patching as extra work.

D. Where underground pipes, ducts, or other structures are encountered in the excavation for sewer installation the CONTRACTOR shall, at his own expense, take adequate measures to protect them from damage.

E. Where shown on the plans that the sewer construction will require the removal and replacement of culverts, bridges or other structures, or of excavating beneath such culverts, bridges or other structures, such removal and replacement or otherwise crossing shall be at the CONTRACTOR'S expense, excepting the removal and replacement of surfacing which will be paid for at the contract price.

F. It shall be the responsibility of the CONTRACTOR to locate such underground installations sufficiently in advance of the trench excavation to preclude damage to same. Sewer pipe crossing trench and carrying small volumes of water may be temporarily disconnected to permit machine excavation at such location provided that any pipe damage in such removal shall be replaced at the expense of the CONTRACTOR with new pipe meeting the same specifications as the old pipe removed. In event pipe removed is not damaged in removal, it shall be reconnected immediately after location is cleared by the excavating machine at no expense to the OWNER. It is the responsibility of the CONTRACTOR to provide and install all necessary bracing, shoring, and sheeting necessary to support all sewer lines or other utilities crossing, projecting into or located near the sewer trench excavation at his own expense. Where it is necessary to plug an existing sewer it shall be the responsibility of the CONTRACTOR to supply suitable plugs on the site before cutting the same.

G. Where it is considered necessary by the ENGINEER to provide supporting concrete beams for cross sewers due to excessive trench plans or other conditions the CONTRACTOR will make such installation in accordance with detail drawings or instructions issued by the ENGINEER. Payment for such an installation will be made under appropriate items, such as "Extra Reinforcing Steel", "Extra Excavation" and "Extra Concrete".

H. Payment for "Extra Material", as stated in Specifications – General Conditions, will be made for new material ordered placed in bridges and culverts when the material in the existing structures is not suitable for reuse. Any sound material damaged in removal shall be replaced by the CONTRACTOR and no payment for such material will be made.

10. BUILDINGS, POLES, PAVEMENT, TREES, ETC.

A. Buildings or other structures along the location of the work shall be fully protected by the CONTRACTOR from damage, which may result from slides or undermining, by adequate underpinning, shoring or bracing as the particular circumstances may require.

B. Fences located within any permanent or temporary construction easement or along the boundary line between any two adjoining easements may be removed by the CONTRACTOR, but any fences removed shall be replaced in their original conditions and location by men experienced in erecting that type of fence. Unless otherwise specified no additional payment will be made for removing or replacing fences.

C. Telephone poles, light and power and other poles of similar nature and privately owned signs and similar structures which are not located on private property will be protected and supported by the OWNER, but the CONTRACTOR shall not undermine

or endanger such items until the OWNER has been notified and has taken necessary precautions to protect his interest. Poles within the limits of the required operation will be moved by their OWNERs.

D. Any damage to sidewalks, street pavements, curb and gutter, driveways, drainage structures, street signs, traffic lights or signs, or other public or privately owned property, made by CONTRACTOR'S construction operations and lying outside the normal lines of excavation will be made good by the CONTRACTOR at his own expense. The CONTRACTOR will not be held responsible for damage to the surface of streets resulting from the operation of trucks in connection with the work, provided they are not loaded beyond the legal limit, but he will be held responsible for damage caused by the operation of Crawler type or steel wheeled equipment.

E. Plants, trees, and shrubbery which are within the right of way within the normal limits of the excavation and between the outside edges of the trenching machine shall, unless otherwise provided, by removed and disposed of by the CONTRACTOR, but the CONTRACTOR shall, where possible, shift the conveyor of the machine from side to side as necessary to avoid cutting plats, trees and shrubbery.

F. Other plants and trees along the location of the sewer line that may be injured by the trenching operation shall be protected to the satisfactions of the ENGINEER at no expense to the OWNER. Where the plans state the plants, trees and shrubbery shall be removed and replaced, the CONTRACTOR shall employ a competent nurseryman to supervise the removal, care and replanting thereof, and shall replace with equal stock any of the plants, trees, or shrubs that die due to negligence or mishandling. Where the sewer construction is in an easement across private property, the CONTRACTOR may make his own arrangements with the OWNER of the property relative to removal of trees and shrubbery lying outside the limits of the trenching machine.

11. FINAL CLEANUP

A. Upon completion of the work and before acceptance and final payment, the CONTRACTOR shall remove rubbish, unused materials and temporary structures from the limits of the project and restore, in a manner acceptable to the ENGINEER, all property both public and private that has been damaged during the prosecution of the work, and shall level and grade all portions of the work where the surface of the natural ground or street surface has been disturbed during construction, and shall leave the site of the work in a neat and presentable condition, free from ruts or holes.

B. Materials cleared from the limits of the project shall not be deposited on adjacent property unless prior approval is obtained from the property OWNER involved.

C. No payment will be made for this work, its cost being included in the unit price bid.

12. ORDER OF COMPLETION

A. Unless otherwise specified or agreed, construction shall start at the lowest point of the sewer and proceed upgrade without gaps so that all completed portions of the sewer will be connected to the outlet and so that any old sewers crossing through the new sewer trench can, if the ENGINEER so orders, be connected to the sewer immediately.

B. When any portion of the work has been started, the CONTRACTOR shall proceed vigorously with the work through its various phases, including laying of the sewer, manhole construction, backfill, water tamping and cleanup and no extended lapse of time between the completion of one operation and the beginning of the next will be permitted, the various operations being carried on simultaneously where possible.

C. No more than 900 feet of sewer larger than 24" or 1500 feet of sewer 24" or smaller, within traveled streets, for each trenching machine operation, shall be allowed to remain uncompleted at any one time.

D. Manhole construction, street replacement, and cleanup are included in these requirements, except that the ENGINEER may order a delay in replacement of street surface material if, in his opinion, the trench is too soft to support same. An authorized delay in one operation does not extend to the other operations, as for example, an authorized delay in setting a manhole casting does not excuse the CONTRACTOR from his obligation to immediately complete cleanup work. The ENGINEER is authorized to refuse to give grades and to stop trenching operations at any time when such additional trench would exceed the 900 foot and 1500 foot limits herein.

E. Where the work includes a system of sewers on parallel (or nearly parallel) streets in the same area, no excavation shall be started in any street within one block of any parallel street previously excavated, until the said previously excavated street has been backfilled, water tamped and opened to traffic and the order in which the various street are excavated shall otherwise be arranged to minimize interference with fire protection and access to homes and other buildings within the area.

13. DAILY REPORTS

Inspectors are required to make daily reports, which, except for the ENGINEER'S record of grades and final measurement, are the sole record of the work performed. The CONTRACTOR shall arrange to have these records signed each day by his authorized representative. It shall be the duty of the CONTRACTOR'S representative to note upon the face of these reports any matter in which his records differ from those of the Inspector. The absence of any such entry CONTRACTOR indicates by the agreement with the Inspector's records, both as to accuracy and as to completeness. All work covered by verbal or written instruction, authorized deviation from the plans or specifications, and a complete record of all regular and extra work performed shall be entered on the daily reports. Should the CONTRACTOR be in complete disagreement with the Daily Report as prepared by the Inspector, he shall so note thereon and make reference thereon to this separate report which shall be submitted to the ENGINEER within two days (Sundays and Legal Holidays excepted).

14. TRENCH SAFETY SYSTEMS

A. DESCRIPTION: This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the protection system. A trench shall be defined as a narrow excavation (in relation to its length) made below the

surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet.

15. CONSTRUCTION METHODS

A. Trench safety systems shall be accomplished in accordance with the design set out in the provision of Excavations, Trenching and Shoring, Federal Occupational Safety and Health Administration Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No 72) on Wednesday, April 15, 1987, and any revisions to the "Proposed Rules" issued prior to the bid date. The specifications by reference include Sections 1926-650 through 1926-653. Legislation that has been enacted by the Texas Legislature (H.B. No. 662 and H.B. No. 665) with regard to Trench Safety Systems, is hereby incorporated, by reference, into these specifications.

B. If the CONTRACTOR elects to use a trench protective system that, in the Proposed Rules, requires "Design by a qualified person or a qualified ENGINEER", (for example, see 1926.652 (b)(3) and 1926.652 (c)(4)), the qualified person or qualified ENGINEER shall be a Professional ENGINEER registered in the State of Texas.

16. INSPECTION

The CONTRACTOR shall make daily inspections of the trench safety systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a competent person, provided by the CONTRACTOR. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the CONTRACTOR to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the CONTRACTOR, not the OWNER or ENGINEER, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The CONTRACTOR shall maintain a permanent record of daily inspections.

17. INDEMNIFICATION

The CONTRACTOR shall indemnify and hold harmless the OWNER, its employees and agents, including the ENGINEER, from any and all damages, costs (including, without limitation, legal fees, court costs, and the cost of investigation), judgements or claims by any one for injury or death of persons resulting from the collapse or failure of trenches constructed under this contract.

18. SEWER TRENCHES

A. Except as otherwise specified or shown on the plans, all sewers shall be constructed in open cut trenches with vertical slides excavated with a ladder type trenching machine. Excavation for inlet leads and for sewer stubs to be laid transversely across the street may be made with a trench hoe. Excavation, which, because of surface or underground obstruction, would be inaccessible to a ladder type trenching machine, may be made with other suitable types of equipment. Where machines other than ladder-type trenching machines are sued, excavated material

composed of large chunks and clods shall not be used for backfilling, and such material shall be disposed of by the CONTRACTOR and other suitable material for backfill shall be provided without additional expense to the OWNER.

B. Trenches for pipe sewers smaller than 30-inch pipe shall have a width below the top of the pipe bell or other joint of not less than the outside diameter of the pipe plus 12 inches and not more than the outside diameter of the pipe plus 18 inches. Trenches for pipe sewers 30 inches and larger shall have a width below the top of the pipe of not less than the outside diameter of the pipe plus 16 inches and shall be wide enough to permit making up the joints but shall not be wider than the outside diameter of the pipe plus 24 inches.

C. Where the available right-of-way is not sufficient to permit the use of a trenching machine, the trench may be excavated by other suitable methods. Trenches for sewers 30 inches and larger laid with Class "A" Bedding, having rubber type joints on concrete pipe or joints having resilient properties on clay pipe, made as provided herein under Item 3, 16, per (d) shall have a width below the top of the pipe, of not less than the outside diameter of the pipe, plus 12 inches and not more than the outside diameter of the pipe plus 18 inches. Where test boring logs are shown on the plans, these represent one man's interpretation of borings, usually made by power augers, and were primarily for the ENGINEER'S use in design and in determining approximate quantities of various types of construction. Such information is not in any way guaranteed and the OWNER assumes no responsibility whatever for the accuracy thereof.

D. Trenches for monolithic sewers shall have a width adjacent to the sewer section equal to the outside diameter of the sewer plus the thickness of any sheathing timber extending below the top of the concrete. Above the tops of pipe bells or monolithic concrete sewers, the width of the trenches may be greater than the limits specified above by an amount sufficient only to permit placing sheathing and bracing timers and to permit installation of well point headers or manifolds and pumps in the trench where the depth of trench is such as to make it uneconomical to pump from surface installation. Sufficient space must be provided between cross braces to permit handling of forms, pipe, and other materials.

E. No excavated material shall be deposited on the gravel, shell, asphalt, concrete or other paved area of any roadway or sidewalk, or on any lawn, garden or shrubbery and such material shall be handled in such manner as not to obstruct drainage. Where necessary for compliance with this provision, the material shall be hauled.

19. DEWATERING TRENCH

No sewer pipe or monolithic sewer shall be laid in a trench in the presence of water. All water shall be removed from trench sufficiently ahead of the sewer placing operation to insure a dry, firm bed on which to place the sewer, and the trench will continue to be dewatered until after all concrete and mortar is set. Removal of water may be accomplished by bailing, pumping, or pumping in connection with well point installation ass the particular situation may warrant.

20. SHEETING AND BRACING

A. Where necessary in the ENGINEER'S opinion, the sides of the trench or other excavation shall be braced and rendered secured to the satisfaction of the ENGINEER.

B. In sewer trenches and other excavations having vertical sides, sheeting and bracing necessary to support the sides of the excavation in a vertical plane shall be installed. In trenches for monolithic sewers, flooring shall be installed as bracing to support the bottom of the vertical sheeting. Flooring shall be set solidly against undisturbed earth in the bottom of the trench. Where voids are left below the flooring the boards shall be spaced approximately two inches apart to permit the concrete to flow between the boards to fill the voids. In no case shall loose earth be permitted to remain beneath the flooring.

C. After the excavation has been backfilled and water tamped, steel or other sheeting may be pulled, otherwise sheeting and bracing, once installed may not be removed without the consent of the ENGINEER.

21. SURPLUS EXCAVATED MATERIALS

A. Any surplus excavated material shall be hauled and disposed of as directed by the ENGINEER. If the ENGINEER notifies the CONTRACTOR that the OWNER does not have use for this material, it shall become the property of the CONTRACTOR to dispose of as he wishes without injury to the OWNER or any individual. Where the ENGINEER orders the surplus material removed to some definite place, the CONTRACTOR will be paid for all haul in excess of one quarter mile (1320 feet) at the price bid per yard quarter. No extra compensation will be paid for this work where the haul is within the 1320 limit.

B. The route over which earth haul is to be made and paid for by the OWNER will be designated by the ENGINEER and shall be the shortest practical route. Earth haul shall be computed by use of cubic yard volume quantities measured in place prior to excavation, and the actual average hauled distance measured to the nearest one-eight mile from the center of gravity of the site of excavation to the center of gravity of the volume filled ad directed. Under conditions of excavation and haul where measurement of volume prior to excavation and haul where measurement of volume prior to excavation is impractical the OWNER may elect to determine such volume quantities by truck measure and the CONTRACTOR will be required to sue such methods as necessary to permit obtaining the best practical accuracy.

C. If excavated material is left on the street, and this material becomes mixed with material excavated by the Water Department, paving CONTRACTORS, the Gas Company, or other public corporations or with that of any other firm, corporation or individual excavating on any of the OWNER'S streets and if the CONTRACTOR does not protect himself by removing his material before anyone else can mix other material with his, or if he does not put up proper partitions or barriers to keep this material separated from the other man's material, then the ENGINEER shall be the sole judge as to who is responsible for this excavated material, and his decision shall be binding on all parties. If the CONTRACTOR does not remove this material when directed by the ENGINEER, the ENGINEER has the right, under this contract and

these specifications to hire trucks and men to remove this material and to deduct the cost of same from any estimate due to the said CONTRACTOR.

22. BACKFILLING

A. Backfilling shall not be started over pipe sewers until all of the steps required under "Pipe Bedding" of "Pipe Sewer, Leads and Stubs" of this specifications, have been completed. Backfilling over pipe sewers with Class "A" bedding shall not be started until the day following the placing of the cement stabilized sand. Backfilling over monolithic reinforced concrete sewers shall not be started until the concrete has a compressive strength of 1000 lbs. per sq. in., for curricular sewer, or 2000 lbs. per sq. in., for box sewers.

B. Loose earth backfill shall be placed to the top of the existing trench and then the backfill shall be jetted with water by the use of jets from the bottom. These jets shall remain in place until the water appears on the surface. No surface flooding will be allowed for this section of the backfill. After the backfill takes its initial settlement, if the settlement is more than one foot below the proposed or existing pavement or the original ground surface, more earth backfill shall be placed to bring the backfill up to one foot below the proposed or existing pavement. This additional backfill shall be water tamped by surface flooding. The last one foot of backfill up to the existing or proposed pavement or original ground shall be backfilled in layers and compacted by the use of power equipment, tractors, trucks, etc., to not less than 100% of the density of the original undisturbed soil.

C. The cost of backfilling as described above, together with all work and expense incidental thereto, shall be included in the price of the work constructed and no separate compensation will be made thereof.

23. SPECIAL BACKFILL

A. Where backfill with special materials is included as a pay item ("Special Backfill") the materials used will be paid for as indicated on bid proposal, which shall be full compensation for furnishing and placing the material, for disposal of excess earth displaced thereby and for all other work and expense incident thereto necessary to complete the work.

B. Where "Special Backfill" is placed in a trench which has been cut wider than is permitted by "SEWER TRENCHES" of "EXCAVATION" in this specification, or has been allowed to cave to a greater width than that specified, the trench shall be backfilled for its entire width with the special material ordered, but no payment will be made for the additional material required on account of the excess trench width.

24. EXTRA EXCAVATION

Work performed under this item shall consist of the excavation of material at locations specifically designated by the ENGINEER, and which is not included under other bid items contained in these specifications. "Extra Excavation" will be measured by the cubic yard in its original locations.

25. BASIS OF PAYMENT

A. No direct payment will be made for trench excavation, handling and disposal of excavated material, or backfilling trenches and the cost of such work shall be included in the prices for the sewers, manholes, inlets and other structures and appurtenances. Payment as herein described will be made for "Extra Hauling", "Special Backfill", "Extra Excavation", "Dewatering Trench", "Sheeting and Bracing", and as described under "UNDERGROUND PIPE, DUCTS AND UTILITIES" of "GENERAL" for "Special Excavation" where such work has been ordered by the ENGINEER and performed by the CONTRACTOR. No additional payment will be made for any subsequent additional settlement, which might occur in the backfill after its original completion.

B. When sewer trenches are excavated through ground that has been previously filled and foreign matter is found in the fill, covered with earth in such a manner as not to be evident from the surface and such foreign matter cannot be removed by the trenching machine, the CONTRACTOR will be paid for necessary removal of such foreign matter, as provided for in extra work. In such cases, no additional payment will be made on account of old trench sheeting or bracing encountered where the excavation crosses old trenches.

26. MONOLITHIC REINFORCED CONCRETE SEWERS

A. DESCRIPTION: The work to be performed under this specification shall consist of the construction of monolithic reinforced concrete sewers complete in place.

B. Otherwise specified, sewers constructed under this item shall conform to drawings prepared by the OWNER, which drawings are included with these specifications unless pipe sewer or special construction is in accordance with this item.

27. CONSTRUCTION METHODS

A. After the trench has been excavated in accordance with "EXCAVATION" of these specifications, that portion of the sides of the trench that will be in contract with the concrete shall be hand trimmed and shaped to conform to the section of the sewer to be constructed and the bottom of the trench shall be fine-graded to the grade established. Below the grade line so established, no backfill will be permitted. Where time sheathing or flooring is used, proper allowances for time thickness shall be made.

B. Upon completion of the trench the CONTRACTOR shall place the reinforcing steel and forms and securely brace them in the proper position and place concrete in accordance with "CONCRETE FOR SEWERS AND APPURTENANCES" of this specification. The top of sewer shall be finished by hand with a wooden float, and thickness shall be checked with a wire gauge.

C. The CONTRACTOR shall, at his own expense, furnish and place in position as directed by the ENGINEER, all necessary stakes, grade and batter boards for locating the work. The grade boards shall be one inch by three inches, and planed on all four sides to truly parallel faces. The boards and all location stakes must be protected from injury or change in location. The sound twilled lines for use in giving lines and grades and the necessary plummets and graduated poles approved by the ENGINEER.

28. FORMS

A. Suitable collapsible centers or forms with smooth surfaces of ample strength shall be provided and rigidly braced. The bracing shall be adequate to prevent deviation from the correct lines. All steel forms shall be neatly and accurately made with all similar parts in each longitudinal section interchangeable with other sections. Bent plates required to fit shall be rolled and fabricated to the correct curves before assembly. Suitable forms shall be provided for bends in the sewer. Steel filler plate shall be furnished. All wooden forms shall be built of clean, sound lumber, reasonable free from knots, dressed on all sides, and neatly fitted. Tongued and grooved material shall be used where required. The form surface shall be watertight, securely fastened to the ribs or supports. No forms built up in the trench not ribs with separated pieces of wooden lagging will be allowed except for specials or curves. No center no form shall be used, which is not clean, is of improper shape or strength or in any way unsuitable. Before placing concrete or reinforcement, the forms shall be coated with lubricants to prevent the adherence of concrete.

B. Circular forms shall be set on concrete blocks of proper thickness approximately 4" X 6" in dimensions, spread about 5 ft. on centers along the sewer and depth to provide for proper support and cover of reinforcement.

C. Forms must remain in place until the concrete has set sufficiently to carry its own weight in addition to any external load which shall be applied at the time of removal, or shortly thereafter.

D. When the prevailing air temperature is above 50° F and for sewers 72 inches and smaller, forms must not be removed in less than 15 hours.

E. When temperatures are below 50° F or the sewers are larger than 72 inches in diameter forms shall not be removed until concrete has attained a compressive strength of 500 pounds per square inch.

F. Rangers, struts, or other bracing immediately above the sewer shall not be removed until the concrete has attained a minimum compressive strength of 1000 pounds per square inch.

G. The strength of the concrete shall be determined by cylinder tests. Cylinders for these tests shall be kept at job temperatures and under job conditions and shall be made and broken by the laboratory designated by the owner's expense.

29. REINFORCING STEEL

A. Reinforcing steel shall comply with the General Specifications for Reinforcing Steel, Item 9, with the exception that the price bid for monolithic reinforced concrete sewer shall include standard reinforcement as shown on the OWNER'S drawings.

B. Circumferential reinforcement shall be elliptical in shape with the minimum cover of concrete as shown on drawings. Splices in circumferential reinforcement shall be centered on a diameter of 45 degrees from the vertical and shall alternate on each side of the vertical diameter.

C. Bends shall be reinforced in accordance with Drawings in these Specifications when the type of bend shown thereon is constructed.

30. CONCRETE

Concrete for monolithic reinforced concrete sewers shall conform to Class "A", and shall be placed in accordance with "CONCRETE FOR SEWERS AND APPURTENANCES" and shall be proportioned in accordance with the pertinent specifications.

31. JUNCTION OF MONOLITHIC SEWERS

Unless special structures are approved, junction of monolithic sewers shall be made by fitting the form of the branch sewer to the side of larger diameter sewer. Any additional concrete or reinforcing steel in top or bottom that may be ordered by the ENGINEER shall be paid at the unit price bid for concrete Class "A" and Reinforcing Steel.

32. STUBS

A. Stubs of monolithic sewers shall consist of short lengths constructed from a trunk or main sewer, or a short length of different size extended for future connection only.
B. Stubs shall not exceed 75 feet in length and all sewers longer than 75 feet shall be classified as sewer for its length.

33. METHOD OF MEASUREMENT

A. (Monolithic Sewers and Stubs) Longitudinal measurement shall be made along the centerline of the sewer from face of headwall or outfall structure or inside face of box sewers or special structures and shall continue through manholes to point of change in size. Where no special structures are provided at junctions, measurements shall be made from the centerline of sewers. Where bends are constructed in accordance with drawing measurement will be made to the intersection of the two long tangents if the center tangent is less than two feet. If the center tangent connecting the two long tangents is longer than ten feet, measurement will be made along the center tangent.
B. Depths shall be measured along the centerline of sewer from the surface of the ground to the flow line of the sewer at intervals not to exceed fifty (50) feet and at break in the profile of the natural ground. The method of measurement across ditches and gullies described in "METHOD OF MEASUREMENT" of "PIPE SEWERS, LEADS AND STUB" of this specification for pipe sewers shall apply also to monolithic sewers.

34. BASIS OF PAYMENT

A. All monolithic reinforced concrete sewers, laterals, and stubs measured as set out above shall be paid for at the unit price bid by the CONTRACTOR, complete in place, of the type, size, and depth constructed.
B. The unit price bid for monolithic reinforced concrete sewer shall include full compensation for furnishing all labor, equipment, and material, including all reinforcing steel, and concrete for all excavation, shaping of trench bottoms, bracing, sheeting and excavation, and flooring; for all backfilling, tamping backfill, removed or surplus excavated materials as set out and included under

"EXCAVATION", of these specifications; and for all cleanup and incidentals necessary to construct the sewer complete in place.

35. PIPE SEWERS, LEADS AND STUBS

A. DESCRIPTION: The work to be performed under the specifications shall consist of the furnishing and the installation of pipe sewer main, laterals and stubs including all excavation, backfill, and disposal of surplus excavation. The type or types of pipe to be furnished and installed under the contract will conform to the type or types designated on the plans and as set out on the bid proposal sheet.

36. PIPES

A. Pipe shall be furnished in accordance with the sizes and types indicated on the plans and set on the proposal sheets and shall conform to the pertinent specifications listed below or to other specifications that may be on the plans or in the Special Provisions. Where the plans or Special Provisions do not indicate the specification under which the pipe is to be furnished, the pipe supplied shall be in conformity with the ASTM Specification listed below which provides strength requirements not less than those shown in the table herein of "Types of Pipe Required for Various Depths to Flow Line".

B. Pipe shall be supplied which has been manufactured in accordance with the latest revision published by the American Society for Testing Materials of the following specifications:

Concrete Sewer Pipe (Non-Reinforced, Standard Strength and Extra Strength) shall be ASTM Designation C-14.

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (usually referred to on plans and proposals as Reinforced Concrete Pipe or R. C. Pipe) shall be "Classes I, II, III, IV and V, ASTM Designation C-76, Clay Sewer Pipe, ASTM Designation C-700, Extra Strength Clay Sewer Pipe, ASTM Designation C-700.

C. Reinforced concrete pipe to be used with cold compound joints, as herein described, may have bell and spigot, or tongue and groove joints. Reinforced concrete pipe for use with rubber or neoprene gaskets, and clay pipe with joints using materials having resilient properties shall have joints designed and precision made for use with joint material supplied. Pipe to be used with hot poured compound joints shall have bell and spigot joints.

D. All reinforced and non-reinforced concrete pipe shall be subject to the requirements of "Hydrostatic Test" as described in ASTM Designation C-700. Other methods of testing that will demonstrate the required water tightness of the pipe may be approved by the ENGINEER. These tests will be made as directed by the ENGINEER by a testing laboratory employed by OWNER. On private contracts, the CONTRACTOR shall supply the OWNER with a Certificate of Compliance with the tests from a recognized testing laboratory. The certificate shall be made available to the Inspector at the time the pipe is delivered on the job, and before the pipe is laid in the trench.

E. Types of Pipe and Pipe Bedding Required for Various Depths To Flow Line. Pipe shall be laid in trenches in accordance with these flowing specifications: (These requirements govern where the kinds of pipe bedding have been shown on the Plans or in the Special Provisions of Proposal Sheets).

FOR WASTEWATER COLLECTION (SANITARY SEWER) LINES

Polyvinyl Chloride (PVC) Pipe SDR ASTM D3034	All available sizes	Class of Bedding and Max. Depth in accordance with current recommendations
Polyvinyl Chloride Truss Pipe ASTM D2680	All available sizes	Class of Bedding and Max. Depth in accordance with current recommendations
Ductile Iron Pipe ANSI/AWWA C150/A21.5	All available sizes	Class of Bedding and Max. Depth in accordance with current recommendations

37. TRENCH INSPECTION OF PIPE

Previous to laying the pipes and specials, which have been delivered along the trenches, they shall be subjected to rigid trench inspection, and those which do not meet the requirement set forth in the specifications, will not be used.

38. PIPE BEDDING

A. The pipe shall be bedded in the trench as described herein for the class of bedding required by the plans and specifications. Unless otherwise specified, pipe 15" or less in size shall be laid with Class "B" Bedding and pipe larger than 15" shall be laid with Class "A" Bedding. In every case where trenches have been excavated below the specified depth for Class "B" Bedding, the pipe shall be laid with Class "A" Bedding, Class "A" Bedding shall be done in the following manner:

1) The bottom of the trench for the pipe barrel shall be excavated to a line parallel to the flow line of the pipe and to a depth of not less than one (1) inch below the bell when bell and spigot is used, and not less than three (3) inches below the outside surface of the pipe barrel when tongue and groove pipe is used. The cement-stabilized sand shall be spread over the entire bottom of the sewer trench to the flow line grade of the sewer after which a subgrade conforming to the outside shape of the pipe shall be prepared.

B. Cement stabilized sand shall be composed of San Jacinto sand or bank sand that is free from clay lumps and not less than one and one-half (1½) sacks of Portland cement per cubic yard of mixture, mixed in a mill type mixer. This material will be used to backfill the sewer trench up to the horizontal diameter of the pipe after it loses its moisture content or dries out. This mixture shall be rodded in the trench and the area between the horizontal diameter of the pipe and the bottom of the trench shall be free of cavities.

C. Loose earth backfill materials shall be placed to a depth of six (6) inches above the pipe before ceasing operations for the day. No backfill in excess of six (6) inches above the top of the pipe shall be placed on the same day the pipe is laid and bedded. Backfill above the pipe shall be done as set out in "SPECIAL BACKFILL" of "EXCAVATION". Where the trench bottom makes water to the extent soft unstable conditions are produced, washed shell must be substituted for cement stabilized sand under the pipe.

D. Class "B" Bedding shall be done in the following manner:

2) The bottom of the sewer trench shall be accurately shaped by hand to conform to the slope of the lowest 90 degrees, 45 degrees on each side of the centerline of the circumference of the pipe taking special care to provide uniform bearing for the entire length of the pipe and to provide depressions for bell ends of each pipe. Clay or other material, free from large lumps, shall be place over and around the pipe in layers and hand tamped up to a minimum of one (1) foot above the top of the pipe, after which the remainder of the trench may be backfilled as set out in "SPECIAL BACKFILL" of "EXCAVATION". Where Class "B" Bedding has been specified, the CONTRACTOR may, at his option, substitute Class "A" Bedding, but no extra compensation will be allowed for the substitution.

E. Where there is likelihood, because of soil conditions, that various parts of the sewer will be laid with different types of bedding, separate contract items such as "Washed Shell in Trench Bottom", where such items shave been provided, payment for these items, when constructed will be made in addition to the price for "Sewer".

F. Attention is directed to the fact that the use of well points may be required where Special Section No. 5 is not ordered. The unit price bid for well pointing shall be full compensation for the entire will pointing operation.

39. INSTALLATION OF PIPE SEWERS

A. No pipe shall be installed in the trench until the excavation has been completed, the bottom of the trench shaped, and the trench has been approved for condition, line and grade by the ENGINEER.

B. The CONTRACTOR shall, at his own expense, furnish and place in position as directed by the ENGINEER, all necessary stakes, grade and batter boards for locating the work. The grade boards shall be of such size timber as the ENGINEER directs and be substantially supported. The batter boards shall be one (1) inch by three (3) inches, planed on all four sides to truly parallel faces. The boards and all location stakes must be protected from injury or change of location. The CONTRACTOR must also furnish, at his own expense, good sounds twilled lines for use in giving lines and grades, the necessary plummets and graduated poles made of a form approved by the ENGINEER.

C. The pipe and specials shall be so laid in the trench that after the sewer is completed, the interior surface there of shall conform accurately to the grades and alignments fixed and given to the ENGINEER.

D. All sewers must be laid in perfectly straight lines, so that a light can be seen from one manhole to the other, even for the smaller size of sewers.

E. The pipe shall be fitted together and matched so that when laid in the work they will form a sewer with a smooth and uniform invert.

40. WASHED SHELL (OR OTHER SPECIFIED MATERIAL) IN TRENCH BOTTOM

A. Where the earth in the trench bottom does not, in the opinion of the ENGINEER, provide a suitable foundation for the sewer, the CONTRACTOR shall, where ordered by the ENGINEER, place washed shell (or other specified material) in the trench bottom under, around and over the sewer. Where this work is ordered, the CONTRACTOR may be provided with a special plan, or will be given special instructions showing the depth of this material to be placed below the grade of the sewer and the height of material to be placed above the grade of the sewer.

B. Payment of the contract price for "Washed Shell (or other specified material) in Trench Bottom" shall be full compensation for all excavation of additional trench depth (which will in no case exceed twelve (12) inches below the bottom of the pipe) necessary to place the material ordered, disposing of excess excavated material, supplying and placing the material including the necessary compacting and fine grading, and all other work and delay incident to placing the material in the trench as above described. No payment will be made for washed shell substituted for cement stabilized sand in Class "A" Bedding.

C. Measurement will be based on verified basic quantities indicated for material on Bid Proposal, usually per linear foot of trench for designated sewer size.

D. When, in the opinion of the ENGINEER, soil conditions in the bottom of the trench are such that "Wet Sand Construction" is necessary, the CONTRACTOR shall, in orders from the ENGINEER, construct the sewer in accordance with the details shown on the drawing for special trench "Wet Sand Construction", which drawing is included in these specifications.

E. Payment of the contract price per lin. ft. for "Wet Sand Construction" in addition to the price for constructing the sewer, shall be full compensation for all additional work, materials, equipment use, delays, and all other items of expense incident to construction of the "Wet Sand Construction". No payment will be made for "Washed Shell" in trench bottom, where "Wet Sand Construction" is paid for, except that any "Washed Shell" ordered in the trench bottom in excess of that shown on the drawings will be paid for as "Washed Shell" in the trench bottom.

F. Special plans for other types of construction of sewers in unstable soil will be provided as found necessary during the progress of the work. The CONTRACTOR will be paid for such work at the contract prices for the items involved.

41. METHOD OF MEASUREMENT

All pipe installed in accordance with the above specifications and accepted by the ENGINEER shall be measured by linear foot of the size and at the depth installed. The depth shall be measured from the flow line of the pipe to ground surface over the centerline of the pipe at the time of construction.

A. Depth measurements shall be made at manholes, at intervals not to exceed fifty (50) feet between manholes, and at breaks in the profile of the ground, at the time of construction.
B. The length of sewer mains and laterals will be measured between centers of manholes where in installation involves the connection of sewer into a manhole at each end of the line being measured.
C. When the installation involves a connection to an existing stub, the measurement shall be made from the end of the stub to the center of the manhole on the work being measured. Sewer stubs shall measured from the end of the stub to the center of the manhole to which the stub is connected. Single joints of pipe constructed with a manhole are considered a part of that manhole and no additional payment will be allowed for manhole stub.
D. Storm sewer leads connecting an inlet with a manhole shall be measured from the center of the manhole to the center of the nearest edge of the inlet grate or plate.
E. Where the lines of the sewer cross a ditch or fully which is less than fifty (50) feet wide between the breaks of the banks on each side and the average slope of the banks is 1½:1 or steeper, the cuts shall be computed downward from a line drawn between the tops of the two banks at their break points. Where the sewer crosses earth embankments, the OWNER shall have the option of requiring their removal prior to a trenching machine cut, on a labor and equipment rental basis, and paying trench cuts from the new ground line, if such operation would result in an overall savings to the OWNER.

42. BASIS OF PAYMENT

A. All sewer mains, laterals, stubs, and inlet leads, measured as set out above, shall be paid for at the unit price bid by the CONTRACTOR for "Sewer" or "Inlet Leads" per linear foot complete in place, of the type, size and depth constructed.
B. The unit price bid for "Sewer" or "Inlet Leads", shall include full compensation for furnishing all labor, for furnishing and installing all pipe, for furnishing all material and equipment, for hauling excavation, for shaping of the trench bottom, and for all backfilling, tamping backfill, and removal of surplus excavated material, all as set out and included under "Excavation" of these specifications, and for all clean-up and incidentals necessary to furnish sewer pipe and inlet leads complete in place.
C. Payment of the unit price bid for "Extra Sewer Pipe", shall be full compensation for furnishing pipe, hand grading, laying and completing joints in same and hand tamping around same. Any extra excavation involved will be paid for in addition to the price for this item, such payment to be made as "Extra Excavation", or "Excavation" of this specification.

43. SPECIAL STRUCTURES FOR SEWERS

A. General: Special structures, outfalls, headwalls, and special manholes shall be constructed in accordance with at locations shown on the plans. Before starting work, the CONTRACTOR shall inform the ENGINEER as to the methods and equipment to be used and their adequacy shall be subject to the ENGINEER'S approval.

B. Excavation: Excavation for special structures shall conform to "UNCLASSIFIED STRUCTURAL EXCAVATION" of this specification.

C. Forms: Forms shall be built mortar-tight and of material sufficient in strength to prevent bulging between supports and shall be set and maintained to the lines designated until the concrete is sufficiently hardened to permit form removal. During the elapsed time between the building of the forms and placing of the concrete, the forms shall be maintained in a manner to eliminate warping and shrinking. All details of form construction shall be subject to the approval of the ENGINEER, and permission to place concrete will not be given until all of such work is completed to his satisfaction.

1) Forms shall be designed for the pressure exerted by a liquid weighing one hundred fifty (150) pounds per cubic foot. The rate of placing the concrete shall be taken into consideration in determining the depth of equivalent liquid. An additional live load of fifty (50) pounds per square foot shall be allowed on horizontal surfaces. The maximum unit stresses shall not exceed one hundred twenty-five (125) percent of the allowable stress used by the ENGINEER for the design of structures.

2) If, at any stage of the work the forms show signs of building or sagging, that portion of the concrete causing such condition shall be immediately removed, and the forms shall be reset and securely braced against further movements.

3) Lumber for forms shall be properly seasoned and of good quality. It shall be free from loose or unsound knots, knotholes, twists, shakes, decay and other imperfections, which would affect its strength or impair the finished surface of the concrete. The lumber used for facing of sheathing shall be surfaced on all sides and shall be sized to uniform thickness.

4) Nominal one (1) inch thickness lumber will be permitted for general use if backed by a sufficient number of studs and wales. Form for exposed exterior surfaces and for inside walls of pumping stations shall be lined with clean, smooth and plywood, masonite, or other clean, smooth material approved by the ENGINEER as equal to plywood or masonite.

5) Forms or form lumber to be reused shall be maintained clean and in good condition as to accuracy, shape, strength, rigidity, tightness and smoothness of surface. Any lumber which is split, warped, bulged, marred, or has defects that may produce work inferior to that resulting from using new material shall not be re-used.

6) Studs shall not be less than two (2) inches by four (4) inches nominal section and shall be spaced center to center not more than twenty (2) times the actual thickness of the facing lumber. Wherever, practicable, studs shall be capped at the top with a plate of not less than two (2) inches by six (6) inches nominal size, carefully selected as to straightness. All joints in plates shall be scabbed at least four (4) feet each way to provide continuity.

7) Wales shall be spaced at such intervals as to hold forms securely to the designated lines. All wales shall be scabbed at least four (4) feet on each

side of joints to provide continuity. A row of wales shall be placed within six (6) inches of the bottom of each placement.

8) Forms for walls or columns shall not be erected on concrete footings until the concrete in the footing has cured at least two curing days.

9) Forms shall be rigidly braced to prevent movement while placing the concrete.

10) All fact form material shall be fastened to all studs and shall have true horizontal and vertical joints. Facing material on horizontal and other surfaces shall be placed with parallel and square joints.

11) Metal form ties of an approved type shall be used to hold forms in place. Such ties shall be of a type especially designed for use in connection with concrete work, and they shall have provisions to permit ease or removal of the metal as hereinafter specified. The use of wire forms ties will not be permitted except for minor or special form areas where the use of rigid type metal ties would be impracticable.

12) All metal appliances used inside of forms to hold them in correct alignment shall be removed to a depth of at least one-half (½) inch from the surface of the concrete and shall be so constructed that the metal may be removed without undue injury to the surface by chipping or spalling. Such devices, when removed shall leave a smooth opening in the concrete surface. Burning off of rods, bolts, or ties will not be permitted.

13) Metal ties shall be held in place by devices attached to wales. Each device shall be capable of developing the strength of the tie.

14) Pipe spreaders will not be permitted.

15) Metal and wooden spreaders, which are separate from the forms, shall be entirely removed as the concrete is being replaced.

16) Where wires ties are used, all wires, upon removal of the forms shall be entirely removed as the concrete is being replaced.

17) All cavities produced by the removal of metal ties shall be carefully cleaned and completely filled with retempered cement-sand mortar mixed in proportion of one to three, and the concrete shall be left smooth and even.

18) For narrow walls and other locations where access to the bottom of the forms is not readily attainable otherwise, adequate clean-out openings shall be provided.

19) At the time of placing concrete, the forms shall be clean and entirely free from all chips, dirt, sawdust and other extraneous matter.

20) The facing of all forms shall be treated with oil before concrete is placed. In hot weather, both sides of fact forms may be required to be treated with oil to prevent warping and to secure tight joints. The oil must be applied before the reinforcement is placed. The oil used for this purpose shall be a light clean oil, which will not discolor or otherwise injuriously affect the concrete surface.

21) In general, all forms shall be thoroughly wetted before the concrete is placed therein.

22) The foregoing specifications for "Forms" as regards design, mortar-tightness, filleted corners, beveled projections, bracing, alignment,

removal, re-use, oiling and wetting, shall apply with equal force to metal forms.

23) The metal used for forms shall be of such thickness that the forms will remain true to shape. All bolts and rivet heads on the facing sides shall be countersunk. Clamps, pins, or other connecting devices shall be designed to hold the forms rigidly together and to allow removal without injury to the concrete. Metal forms, which do not present a smooth surface, shall not be used.

D. Finish: Where surface finish is required on plans the operation of surface finish shall be in accordance with the following provisions:

1) As soon as forms are removed, all necessary pointing shall be done. When the pointing has set sufficiently to permit it, all surface requiring surface finish shall be wet with a brush and given a first surface rubbing with a No. 16 Carborundum Stone or an abrasive of equal quality. The rubbing shall be continued sufficiently to bring the surface to a paste, to remove all form marks and projections and to produce a smooth dense surface without pits or irregularities. The use of cement to form a surface past will not be permitted. The material, which has been ground to a paste in this process, shall be carefully spread or brushed uniformly over the surface and allowed to take a reset.
2) In general, chamfered corners shall not be rubbed in the first surface rubbing.
3) During the process of conditioning the completed structure for final acceptance, the surfaces of the entire structure requiring finish shall be cleaned free from drip marks and discoloration and shall be given a final rubbing with a #30 Carborundum Stone or an abrasive of equal quality. On completion of this rubbing, the surface shall be neatly striped with a brush and the mortar on the surface shall be allowed to take a reset. The surface shall then be washed down with clean water. The entire structure shall be left with a clean, neat and uniform appearing finish and shall be uniform in color.
4) The surface of concrete slabs shall be finished by floating.

44. MEASUREMENT OF CONCRETE

The quantities of concrete of the various classifications, which constitute the completed and accepted structure, will be measured by the cubic yard in place. Only accepted work will be included, and the dimensions used will be those shown on the plans or ordered in writing by the ENGINEER. No deductions in measurement will be made for paneling less than three (3) inches in width by one (1) inch deep, for chamfers less than two (2) inches, for embedded reinforcing steel, or for embedded portions of structural steel members. Deductions will be made for embedded portions of piling.

45. BASIS OF PAYMENT, CONCRETE

A. The concrete quantities, measured as provided above will be paid for at the unit price bid per cubic yard for the various classifications of concrete shown, which prices shall be full compensation for furnishing, hauling, and mixing all concrete materials; placing, curing, and finishing all concrete, all grouting and pointing; furnishing and placing all

drains, all manhole steps, except as hereinafter provided; furnishing and placing metal flashing strips, and for all forms and false-work, labor, tools, equipment, and incidentals necessary to complete the work.

B. The above provisions for payment shall not be interpreted to provide payment for concrete, in railing, pilings, concrete sewer or leads or other concrete items for which provisions is otherwise made in the contract.

46. BASIS OF PAYMENT SPECIAL STRUCTURES

A. The special structures shall be paid at the unit prices bid for "UNCLASSIFIED STRUCTURAL EXCAVATION", "CONCRETE FOR SEWERS AND APPURTENANCES", "BASIS OF PAYMENT, CONCRETE", of "SPECIAL STRUCTURES FOR SEWERS", "REINFORCING STEEL", "BRICK MASONRY", and "CAST IRON CASTINGS" (except for manhole steps) of this specification.

B. To avoid the grouping of work and material of widely differenced character into a single bid item, the proposal may show the bid items divided into items relating to individual structures, to parts of structures, or to groups of structures, as for example, "Outfall Structures"; "Junction Chamber", etc., and the unit prices bid for the various items entering the construction of the special structure shall be full compensation for completion of that structure in accordance with plans and specifications.

C. Where the proposal shows a "Lump Sum" bid item for a structure "Complete in Place", in accordance with plans and specifications, this price shall include all excavation, concrete, reinforcing steel, and all material and labor and backfill in accordance with plans and these specifications.

47. MANHOLES

A. Description: The work to be performed under this item shall consist of the construction of manholes complete in place, including the furnishing, adjusting to grade, and installation of manhole casting and cover.

B. Construction Methods: Manholes will be constructed at locations shown on the plans, and of the type and depth indicated thereon. Manholes are to be Fiberglass.

C. The inverts of the sewer lines or several sewer lines entering the manhole at or near the flow line elevation of the manhole shall be shaped and routed across the floor of the manhole using mortar to obtain the proper contour.

48. CAST IRON

A. Cast iron for manhole frame, covers, shall conform to the shape and dimensions shown on the drawings and shall be clean, and perfect, free from sand or blowholes, or other defects. Holes in cover must be free from plugs and shall be clean. Bearing surfaces of manhole frames and covers are to be machined so that even bearing may be had in any position in which manhole cover is seated in the frame. Cast iron shall conform to ASTM Specifications A-48 for Class 20 Gray Cast Iron.

B. Clear Opening of Manholes shall be thirty (30) inches minimum as required by TCEQ §217.55(k).

49. DROP ON SANITARY SEWER MANHOLE

This item consists of constructing one standard drop connection on one side only of a sanitary sewer manhole as shown on drawings in these specifications, being all work shown on the detail of a "Standard Drop Manhole" that is not included on the detail of a "Standard Sanitary Sewer Manhole", consisting of additional footing, sewer pipe vertical riser connecting quarter bend and tee.

50. BLIND DROP-ON SANITARY SEWER MANHOLE

This item is exactly the same as described under the preceding item, "Drop on Sanitary Sewer Manhole", except that the tee at the top of the drop shall be omitted. The vertical pipe riser shall terminate at the top with a plugged bell and the top of the concrete encasement shall be not less than six (6) inches below the top of the bell and not less than one foot above the top of the next lower bell.

51. PRECAST CONCRETE MANHOLE

A. Description: The work to be performed under this item shall consist of the construction of manholes complete in place, including the furnishing, adjusting to grade, and installation of manhole casting and cover.

B. Construction Methods: Manholes will be constructed at locations shown on the plans, and of the type and depth indicated thereon. Detailed drawings of the various types of manholes to be employed in the work are included in these specifications and each manhole shall be constructed in strict accordance with these detailed drawings included in these specifications.

C. Precast Concrete Bases:

1) Precast concrete manhole bases to be bedded on a minimum of 8 inches of cement-stabilized sand or crushed aggregate as used for pipe bedding. The dimensions of the bedding to be 12 inches greater than the precast manhole base in all directions. The bedding to be placed to provide a firm foundation for the manhole. CONTRACTOR to level and plumb the base section prior to setting the manhole riser sections on the precast concrete base.

2) All invert channels are to be constructed and shaped accurately so as to be smooth, uniform, and cause minimum resistance to the flow. The bench to be furnished smooth, with a slope of ½ inch per foot from the manhole walls to the edges of the invert channel. Invert channels to be formed so that with the incoming sewer flowing full, all of the flow will be continued within the invert channel, as shown on plans.

3) All invert channels to be constructed and shaped accurately so as to be smooth, uniform, and cause minimum resistance to flow. The bench to be finished smooth with a slope of 1 inch per foot from the manhole walls to the edges of the invert. Bench to rise vertically from centerline of pipe to crown of pipe. Edges of invert channels to be rounded with 1 inch radius.

4) Sewer pipe joints shall not be cast or constructed within the wall sections of manholes.

5) Gasket and joint surfaces on recessed O-ring joints to be lubricated with a lubricant suitable for use with confined rubber O-ring concrete pipe joints. Dust, dirt, and foreign matter must be removed from the joint surfaces. Lubricant can be applied with a brush, cloth, pad, sponge or glove. A smooth, round object should be inserted under the gasket and urn around the circumference two or three times to equalize stretch in the gasket.

6) Gasket and pipe surfaces at resilient pipe to manhole connections to have a smooth clean finish. Clean and lubricate pipe end a minimum of one-half the pipe diameter in length with a lubricant suitable for use with rubber O-ring concrete pipe joints. Lubricate the entire portion on the pipe, which will slide through the resilient connector. When pipe barrel is lubricated, pipe can be installed in either direction from inside or outside of manhole. If pipe is cut, no sharp edges to be allowed. A slight bevel is preferred, as a lead and this should also be lubricated. No mortar to be placed around the connector on the outside of the structure and no mortar to be placed around the top half of the connector on the inside when completing the invert.

7) Backfill must be placed on 12" maximum lifts and compacted evenly around the manhole, one layer at a time, to 90% proctor density.

8) Materials – Precast bases shall be constructed in accordance with ASTMC-478 and equal to Moor-Tex.

D. Method of Measurement:

Measurement shall be in accordance with paragraph 55.

52. FIBERGLASS MANHOLES

Prefabricated Fiberglass Manhole may be constructed in lieu of brick and precast concrete manhole. The unit shall have all joints precast in factory and be capable of supporting AH-20 Dynamic Wheel load with a vertical deflection of less than ¼" when supporting a 24,000 lb. Static load. Cylinder Axial Compressive Strength Min. 18,000 psi and shall be equal to Owens-Corning Reinforced Polyester Manhole.

- Steps are not required for Fiberglass Manhole.
- Ring and cover shall be 30" diameter Iron Casting per plan details.
- Installation shall be in strict accordance with manufacturer's recommendation.

53. BACKFILL

The space excavated around manhole location shall be backfilled in accordance with "BACKFILLING" of "EXCAVATION" in this specification.

54. METHOD OF MEASUREMENT - MANHOLES ON PIPE SEWERS

The depth of manholes completed in accordance with these specifications shall be determined by measuring the vertical distance from the flow line of the sewer main to the top of the manhole casting. With the exception of shallow manholes as shown on drawings included in these specifications, all manholes with a depth up to and including eight (8') feet when measured as set out above, shall be designated as Standard Manholes. All manholes exceeding eight (8') feet in depth shall be designated "Extra Depth Manholes". Shallow manholes will be measured as a unit complete in accordance with drawings included in these specifications.

55. SANITARY MANHOLE DROPS

A. The depth of drop on Type 1 sanitary sewer manholes will be measured from the flow line of the horizontal portion of the Tee to the flow line of the main sewer in the manhole. On Type 2 manholes, the depth of drops will be measured from the flow line of the Tee at the top to the inside top of the monolithic sewer in the manhole. If the depth of a drop exceeds three (3') feet, the CONTRACTOR will be paid for such excess at the unit price for "Extra Depth Manhole Drop".

B. The depth of "Blind Drop-On Sanitary Sewer Manhole" shall be from the top of the pipe bell down in the same manner as described for regular drop and any depth in excess of three (3') feet, will be paid for at the unit price bid for "Extra Depth Manhole Drop".

56. BASIS OF PAYMENT

A. All manholes measured as set out above, and not exceeding the dimensions specified for standard manholes of the type constructed, will be paid for at the unit price bid for Standard Manhole of that type. That portion of manhole exceeding the dimensions of "Standard Manhole" of the type constructed will be paid for at the unit price bid per foot for "Extra Depth Manhole" of that type for each foot or fraction thereof exceeding dimensions of "Standard Manhole".

B. The unit price bid for Standard Manholes, Standard Shallow Manholes, Extra Depth Manholes, Drop-On Sanitary Manhole and Blind Drop-On Sanitary Manholes shall be full compensation for furnishing all labor; furnishing and installing all materials including castings and cast iron manhole steps; and for all excavation, mixing and placing of concrete, brick, mortar and brickwork; pumping, hauling, excavation disposal of surplus earth; backfilling tamping; connection leads, stubs and sewer lines to the manhole, and all other incidentals necessary to complete the manhole.

57. INLETS

A. Description: The work to be performed under this specification shall consist of the construction of inlets complete in place, including the furnishing, installing, and adjusting cast iron frame and plate, and shall also include the connection of inlet leads to the inlet. Inlets constructed under this item shall be in accordance with detailed drawings in these Specifications and such special details as may be shown on the plans.

B. Construction Methods: All inlets shall be constructed to the line and grade at the locations shown on the plans and as established by the ENGINEER. All dimensions of inlets shall be in strict accordance with the drawings mentioned above. The box section of inlets may be constructed of Class "A" concrete or of brick. Brick inlets shall be plastered with one-half inch mortar on inside. The walls for brick inlets shall be aluminum of 8" thick. Regardless of materials used for the box section, the floor slab and beam for the inlet shall be Class "A" concrete. All inlet leads shall be neatly cut off at the inside face of inlet wall, pointed up with mortar. In general, forms will be required for both the outside and inside faces on inlet walls, however, if the nature of the material excavated for the inlet is such that it can be hand trimmed to a smooth vertical face, the outside forms may be omitted, when such omission is approved by the ENGINEER.

1) When the box section of the inlet has been completed, the floor of the inlet shall be shaped by filling with mortar to conform to the sections shown on the detailed drawings.
2) Cast iron inlet plate frames shall be accurately adjusted to line, grade and slope and grouted in place with mortar.
3) Cast iron for inlet frames and plates, bricks and brickwork shall conform to specifications for these items as set out under "MANHOLES" of this specification.
4) Mortar used for construction of inlets shall consist of one part Portland Cement and three parts sand meeting the specifications for fine aggregates set out in "METHOD OF MEASUREMENT" of "CONCRETE FOR SEWERS AND APPURTENANCES" of this specification.
5) Inlets shall be backfilled in accordance with "BACKFILLING" of "EXCAVATION" of this specification.

58. METHOD OF MEASUREMENT

The depth of inlets completed in accordance with these specifications shall be determined by measuring the vertical distance from the flow line of the inlet lead to the top of the curb-beam. A standard Single "B" type inlet shall have a depth of 3.60 feet (3' – 7¼") and a standard Double "B" type inlet shall have a depth of 4.05 feet (4'–0 "). Inlets exceeding the above depth shall be known as "Extra Depth Inlets" of the type involved.

59. BASIS OF PAYMENT

A. All inlets measured as set out above, and not exceeding the depth set out for Standard Inlets of the type in questions, shall be paid for at the unit price for Standard Single "B" or Standard Double "B" Inlets as the case may be. That portion of an inlet exceeding the standard depth will be paid for at the unit price per foot for extra depth inlet.
B. The unit price bid for Standard Inlets or Extra Depth Inlets shall be full compensation for furnishing all labor, tools and equipment, for furnishing and installing all materials including cast iron plate frames and plates for all excavation, mixing and placing of concrete, brick, mortar and brickwork, reinforcing steel,

pumping, hauling, form work, disposal of surplus excavated material, backfilling, compacting backfill and all other incidentals necessary to complete the inlet.

60. SEWER TUNNEL CONSTRUCTION

A. Description: The work to be performed under this item shall consist of the construction of sewer in tunnel of the size and type indicated on the plans.

B. General: This method of sewer installation will only be permitted at locations indicated on the plans, or where specifically authorized in writing by the ENGINEER. It shall be the responsibility of the CONTRACTOR to satisfy himself as to the soil conditions and types of geological formation in and through which the tunnel is to be installed, prior to submitting a proposal for doing the work. Where test borings are shown on the plans, such information is merely for the guidance of the CONTRACTOR and such information is not to be construed in any manner as a guarantee by the OWNER that such conditions of subsurface strata are infallible.

C. Construction Methods: Shafts will be excavated at points indicated on the plans or where directed by the ENGINEER, to such depth and location necessary to drive tunnels to the line grade established by the ENGINEER. When a shaft or shafts have been excavated to proper elevation and shored and braced adequately, the horizontal excavation for tunnel shall be started. Bracing, shoring, sheeting, and roofing, or metal tunnel linings, if used, shall be installed immediately upon completion of excavation to proper cross section, and in no circumstances shall the finished section of tunnel precede such installation by more than two feet. Suggested details of timber work for installation in a tunnel may be shown on the plan; however, it shall be the CONTRACTOR'S responsibility to check the same to satisfy himself as to the adequacy of the design prior to use. Any alternate plan proposed by the CONTRACTOR shall be submitted to the ENGINEER for checking.

1) Cylindrical metal linings, either tunnel liner plates fabricated in place in the tunnel or corrugated culvert pipe, jacked ahead as the tunnel excavation proceeds will, unless otherwise specified, by approved for use in lieu of timber linings. Liner places or culvert pipes shall have sufficient strength to provide safe support for all earth and other loads likely to be encountered and shall be equal in every respect to the strength of timber or other supports and linings that may be shown on the plans.
2) The inside diameter of tunnels for pipe sewers shall be ample to permit proper access to making up the joints. The inside diameter of tunnels for monolithic sewers shall be sufficient to provide for the inside diameter for the sewer plus twice the minimum thickness plus any additional diameter necessary to secure minimum wall thickness when forms cannot be placed in the exact center of the tunnel.
3) Where the length of tunnel is in excess of ten (10) feet, the CONTRACTOR shall be required to bore holes from the surface to and through the roof of tunnel for depositing concrete. These holes shall be of such numbers and spaced as directed by the ENGINEER and under no condition shall spacing of holes exceed ten (10) feet. Tremies will be used for depositing concrete as these intermediate points along the sewer tunnel. Where monolithic sewer is required, inside forms shall be carefully placed to true line and grade as

established by the ENGINEER and shall be securely blocked in place to prevent floating or misalignment during the concreting operation. The consistency of concrete placed in the sewer tunnel shall be carefully controlled in insure flow to all parts of sewer barrel without pocketing or honeycombing. Concrete shall be thoroughly puddled at all points. The interior form of the barrel of the sewer shall be thoroughly vibrated to insure monolithic construction.

4) In lieu of placing concrete though holes bored from the surface the CONTRACTOR will be permitted to place grout by means of suitable pumping equipment, in tunnels containing pipe sewers. Such methods shall not be used for construction of monolithic sewers.
5) The shafts and tunnel shall be maintained in a dry condition during the excavation period, and shall continue to be kept in a dewatered state until after concrete has attained its final set. This shall be accomplished by pumping, bailing, or well pointing at the CONTRACTOR'S own expense. Where precast concrete pipe is placed under this specification, it shall be encased in concrete in accordance with related drawings.
6) Where the plans call for cast iron or other pipe in a bored hole the work shall be done as follows: when only one length of pipe is to be installed so that the pipe bell or other joint will not enter the bore, the inside diameter of the bored hole shall not exceed the outside diameter of the pipe by more than one (1) inch. Where pipe bells or other types of joints must enter the bore, the inside diameter of the pipe bell or other type of joint by more than one (1) inch. Leaded joints to be installed in bored holes shall be caulked with extra care with the maximum amount of lead and fully protected against any bending action.
7) On gravity lines where leakage tests are not made, the ENGINEER may require that the pipe be plugged and filled with water to reveal any leakage. The tunnel shall be checked by the ENGINEER before the cast iron pipe is placed therein. If the tunnel at any point is more than 0.15 feet above grade, or more than ¼ the inside diameter of the pipe below grade, the hole shall be rebored or otherwise modified as directed by the ENGINEER, to come within these tolerances.

D. Materials

1) Concrete for work under this specification shall be furnished in accordance with "CONCRETE" of these specifications.
2) Where pipe Sewer is specified for installation in a tunnel it shall conform to specifications as set out elsewhere herein for the type required.

61. METHOD OF MEASUREMENT

Sewer installed in a tunnel in accordance with these specifications shall be measured by the linear foot between the faces of shafts or portals at the ends of the tunnel. When cast iron pipe is used, no additional payment will be made for cast iron pipe projecting outside of ends of the tunnel, or for concrete collars joining the same to concrete pipe.

62. BASIS OF PAYMENT

Sewer in a tunnel measured as set out above and accepted by the ENGINEER shall be paid for at the unit price bid by the CONTRACTOR for "Sewer Tunnel Construction" of the size indicated on the proposal sheet, which price shall be full compensation for furnishing all tools, equipment, labor, and materials; all excavation, disposal of excess excavation; all shoring, bracing and sheeting; all pumping, bailing, and operations used in dewatering; all fine grading and trimming; placing of all forms, mixing, placing, puddling, and finishing of all concrete; furnishing, fabricating, placing of all reinforcing steel, furnishing and placing pipe for sewer where required, all backfilling and other incidentals necessary to furnish complete the sewer installation in tunnel.

63. CONCRETE FOR SEWERS AND APPURTENANCES

A. Description: These specifications shall govern for the materials used for the storing, measuring and handling of materials, for Monolithic Sewers, Outfall Structures, Sewer Appurtenances, and incidental construction.

B. Concrete: Concrete shall be in accordance with the current ASTM Specifications for each specific method for transportation to the job site (dry batch, transit mix, etc.)

1) The OWNER will provide laboratory services to provide initial batch design from one supplier.
2) Batch designs required due to material variance or change in supplier will be performed by a laboratory selected by the OWNER, however, the CONTRACTOR shall be responsible for the costs derived from laboratory work.

C. Placing Concrete: The CONTRACTOR shall give the ENGINEER sufficient advance notice before starting to place concrete in any unit of the structure to permit the inspection of forms, the reinforcing steel placement, and preparations for casting. Unless authorized by the ENGINEER, no concrete shall be placed in any unit prior to the completion of the formwork and the placement of the reinforcement. No concrete shall be placed before the completion of all adjacent pile driving or other operations, which might prove detrimental to the concrete.

1) Whenever it is necessary to continue the mixing, placing, and finishing of the concrete after the daylight hours, the site of the work shall be brilliantly lighted so that all operations are plainly visible. In general, however, concrete placing shall be so regulated as to permit finishing operations to be completed in the daylight hours.
2) The ENGINEER reserves the right to order postponement of the placing operations when, in his opinion, impending whether conditions may result in rainfall or low temperatures which will impair the quality of the finished work. In case rainfall should occur after placing operations are stared, the CONTRACTOR shall provide ample covering to protect the work. In case of drop in temperature, the provisions set forth in "PLACING CONCRETE IN COLD WEATHER" of this section of this specification shall be applied.
3) The sequence of placing concrete shall be as provided on the plans or in the specifications. The operation of depositing and compacting the concrete shall

be conducted so as for form a compact, dense, impervious mass of uniform texture, which shall show smooth faces on all surfaces. The placing shall be so regulated that the pressures caused by the plastic concrete shall not exceed the loads used in the design of forms. No more than one (1) hour shall lapse between the placing of successive layers of concrete in any portion of the structure included in a continuous placement.

4) The method and manner of placing shall be such as to avoid the possibility of segregation or separation of the aggregate or the displacement of the reinforcement. Concrete will not have a free fall of more than three (3) feet except in the case of thin walls such as culvert walls. The spattering of forms or reinforcement bars shall be prevented if the concrete so spattered will dry or harden before being incorporated in the mass.
5) Each part of the forms shall be filled by depositing concrete directly as near its final position as possible. The coarse aggregate shall be worked back from the face and the concrete forced under and around the reinforcement bars without displacing them. Depositing large quantities at one point in the forms and running or working it along the forms will not be allowed.
6) After the concrete has taken initial set, the forms shall not be jarred or any strain placed on projecting reinforcement.
7) Chutes, troughs, or pipes used as aids in placing concrete shall be arranged and used so that the ingredients of the concrete will not be separated. When steep slopes are necessary, the chutes shall be equipped with baffle boards or bee made in short lengths that reverse the direction of movement. Open troughs and chutes shall extend, if necessary, down inside the forms, or the ends of such chutes shall terminate in vertical downspouts. All chutes, troughs, and pipes shall be kept clean and free from coatings of hardened concrete by a thorough flushing with water before and after each placement. Water used for flushing shall be discharged clear of the concrete in place. The use of chutes in excess of thirty-five (35) feet total length for conveying concrete will not be permitted except by specific authorization from the ENGINEER.
8) All concrete shall be well compacted and the mortar flushed to the surface of the forms by continuous working with concrete spading implements or mechanical vibrators of an approved type.
9) Vibrators of the type, which operate by attachment to forms or reinforcement, will not be permitted. The vibrators shall be applied to the concrete immediately after deposition and shall be moved throughout the mass, thoroughly working the concrete around the reinforcement, embedded fixtures, and into the corners and angles of the forms until it has been reduced to a plastic mass. The mechanical vibrator shall not be operated so that it will penetrate or disturb layers placed previously which have become partially set or hardened. The vibration shall be of sufficient duration to accomplish through compaction and complete embedding of reinforcement and fixtures, but shall not be done to an extent that will cause segregation. Vibration shall be supplemented by hand spading if necessary to insure the flushing or mortar to the surface of all forms.

64. PLACING CONCRETE IN COLD WEATHER

A. No concrete shall be placed when the atmospheric temperature is at or below 35°F., (taken in the shade away from artificial heat) unless permission to do so is given in writing by the ENGINEER. When such permission is given, or in cases where the temperature drops below 35°F after concreting operations have been started, the CONTRACTOR shall furnish sufficient canvas and framework or other type of housing to enclose the structure in such a way that the air around the forms and fresh concrete can be kept at a temperature not less than 40°F for a period of seventy two (72) hours after the concrete is placed. Sufficient heating apparatus such as stove, salamanders, or steam equipment and fuel to furnish all required heat shall be supplied. The treatment of mixing water and aggregates used in mixing concrete shall be as specified as follows:

1) All water used for mixing shall be heated to a temperature of at least 70°F but not over 150°F. Aggregates shall be heated wither by steam or dry heat to a temperature of at least 70°F but not over 150°F. The heating apparatus shall be such as to heat the mass of aggregates uniformly and preclude the occurrence of hot spots, which will burn the material.
2) Temperatures of mixed concrete shall not be less than 50°F at the time of placing in forms.
3) It is understood that the CONTRACTOR is responsible for the protection of concrete placed under any and all weather conditions. Permission given by the ENGINEER to place concrete during freezing weather will in no way relieve the CONTRACTOR of the responsibility for satisfactory results. Should concrete placed under such conditions prove unsatisfactory, it shall be removed and replaced.

65. METHOD OF MEASUREMENT

A. Unless otherwise specified, concrete furnished under this item, including all work set out herein and incidental to the furnishing, mixing, forming, placing, finishing, and concrete during, will not be paid for directly. The CONTRACTOR will include the cost of this item in the unit price for monolithic sewer, manholes, inlets or other lump sum structure.
B. Where prices are requested on the proposal sheet for "Extra Concrete" and where it is specifically authorized for use by the ENGINEER, such concrete will be measured by the cubic yard of the acceptable concrete complete in place.
C. Basis of Payment: "Extra Concrete" measured, as set out above will be paid for at the unit price bid per cubic yard for "Extra Concrete". This price shall be full compensation for furnishing all materials, hauling, mixing, forming, placing, finishing, curing, and for the furnishing of all tools, plant and incidentals necessary to furnish complete on cubic yard of concrete complete in place.

Where the proposal calls for "Extra Concrete Without Forms" and for "Extra Form Work" payment of both of these items shall be full compensation for supplying and placing concrete in forms and for the necessary form work. Class "C" concrete is

intended for use in seal slabs and the price for this item shall include the cost of excavation necessary to place the seal slab.

Timber troughs across trenches for concrete beams to be poured around pipes or ducts crossing the trench will not be considered as form work, such timber being considered as a part of the trench sheeting and bracing and no additional payment will be made for same.

66. REINFORCING STEEL

This item shall provide for the furnishing and placing of reinforcing steel of the type, size and quantity designated for use in sewers and appurtenance sewer structures as shown on the plans and in accordance with these specifications.

A. Materials: All bar reinforcement shall be open-hearth new billet steel of structural, intermediate, or hard grade.

1) New billet steel shall conform to the requirement of the Standard Specifications for Billet Steel Concrete Reinforcement Bars, ASTM Designation A-615.
2) Unless otherwise shown on the plans, all reinforcing bars shall be deformed bars conforming to the requirements of ASTM Specification A-498.
3) Wire for fabric reinforcement shall be cold-drawn from rods hot-rolled from open-hearth billets. Wire shall conform to the requirements of the Standard Specification for Cold Drawn Wire for Concrete Reinforcement, ASTM Designation A-185.
4) In cases where the provision so this item are in conflict with the provisions of the ASTM Designations, to which reference is made, the provisions of this item shall govern.

5) The nominal size and area and the theoretical weight of reinforcing steel bars covered by the specification are as follows:

(Note: Wherever bars of a given diameter or size are specified herein, or shown on the plans, bars other than round or square but providing an equivalent nominal area weight, will be considered acceptable unless specifically noted otherwise on plans.)

No.	Nominal Diameter Inches	Nominal Area Square Inch	Weight per Linear Foot
2	1/4"	0.05	0.167
3	3/8"	0.11	0.376
4	1/2"	0.20	0.668
5	5/8"	0.31	1.043
6	3/4"	0.44	1.502
7	7/8"	0.60	2.044
8	1.000"	0.79	2.670
9	1.128"	1.00	3.400
10	1.270"	1.27	4.303
11	1.410"	1.56	5.313

B. The weight of any lot (see note) of bars shall not vary more than three and one-half (3½) percent under the theoretical weight for bars three-eighths (1/8) inches and over in nominal size of diameter; not more than five (5) percent under theoretical weight for bars under three eighths (1/8) inch in nominal size or diameter. The weight of any individual bar shall not vary more than six percent under the theoretical weight for bars three-eighths inch in size or diameter. The theoretical weight of deformed bars shall be the same nominal size. Bars or lots which vary more than the above limits shall be rejected.

(Note: The term "lot" used in the above paragraph shall mean all of the bars of the same nominal weight per linear foot in a carload or in a consignment if less than a carload.)

C. Where wire is ordered by gauge number, the following relation between number and diameter, in inches shall apply unless otherwise specified:

Gauge Number	Equivalent Diameter Inches	Gauge	Equivalent Diameter Inches
0	.3065	8	.1610
1	.2830	9	.1483
2	.2625	10	.1350
3	.2437	11	.1205
4	.2253	12	.1055
5	.2070	13	.0915
6	.1920	14	.0800
7	.1770		

D. The dimensions of the wire on any diameter shall not vary more than 0.003 inches from the specified nominal diameter. The difference between the maximum diameters as measured on any given cross-section of the wire shall not be greater than 0.003 inches. Wire having a diameter, which varies more than 0.003 inches under the theoretical diameter, shall be rejected.

Specifications For Low Pressure Sewer System

1.0 GENERAL

1.1 SUMMARY

A. General Description of Equipment: The Manufacturer shall furnish complete factory-built and tested Residential Grinder Pump Sewage System(s), each consisting of a 2 HP centrifugal grinder pump, a collection basin constructed of fiberglass reinforced polyester resin, pump control float switches, shut off valve, pump disconnect and check valve, discharge pipe assembly and alarm panel. For ease of serviceability, all grinder pumps shall be of like type, impeller and horsepower throughout the system. To ensure single source responsibility for the equipment, the Residential Grinder Pump Sewage System(s) shall be by the single vendor as supplying the pump, collection tank, level control and alarm panel.

B. Qualifications: The Manufacturer shall demonstrate experience in the design, manufacture, and assembly of complete grinder pump systems for specific use in low-pressure sewer systems. The company shall submit detailed installation and user instructions for its product, submit evidence of an established service program including complete parts and service manuals, and be responsible for maintaining a continuing inventory of the grinder pump system replacement parts. The manufacturer shall provide a reference list of five (5) of its grinder pump system installations.

1.2 SYSTEM PERFORMANCE REQUIREMENTS

Grinder Pump shall be 2 horsepower, 230 volts, single phase, 60 Hertz, and 3450 RPM. Grinder pump, with three mercury level switches and shall be capable of delivering from 15 gallons per minute (gpm) against a total dynamic head (TDH) of 12 feet. Manufacturer shall provide pump characteristics diagrammed graphically on performance curve. Performance curve shall be established by measuring total dynamic head in feet of water against discharge flow in gallons per minute and shall contain at least 5 measured points. Each pump shall be expected to perform as its curve describes.

1.3 SHOP DRAWINGS

After receipt of notice to proceed, the manufacturer shall furnish a minimum of four (4) sets of shop drawings detailing the equipment to be furnished including dimensional data and materials of construction. The Engineer will promptly review this data, and return two (2) copies as accepted shop drawings. The Manufacturer shall proceed immediately with the fabrication of the equipment.

1.4 MANUFACTURER QUALITY ASSURANCE

Qualifications: Manufacturer shall demonstrate experience in the design, manufacture, and assembly of complete grinder pump systems for specific use in low pressure sewage systems. The company shall submit detailed installation and user instructions for its product, submit evidence of an established service program including complete parts and service manuals, and be responsible for maintaining a continuing inventory of the grinder pump system replacement parts. The manufacturer shall provide a reference list of three (3) local grinder pump systems installations.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing, Shipping, Handling, and Unloading: Manufacturer shall provide a complete Residential Grinder Pump Sewage System(s) on skid(s) or pallet(s) ready to install. Do not drop or impact the collection tank. If collection tank must be moved, be sure that ground traversed is smooth and free of rocks, debris, etc. When lifting the collection tank, only a pliable strap or rope should contact basin. Do not use chains or steel cables.

B. Storage and Protection: Store Residential Grinder Pump Sewage System(s) away from sun and weather exposure until installation.

1.6 WARRANTY

The Manufacturer shall furnish a one year written warranty as follows for the complete package grinder pump sewage system against any and all defects in material and factory workmanship provided product is installed, serviced, and operated under normal conditions according to Manufacturer's instruction. Defects found during the warranty period will be reported to the manufacturer by the owner. Repair or parts replacement required as a result of such defect will be made free of charge during this period upon return of defective parts or equipment to manufacturer.

2.0 PRODUCTS

2.1 MATERIALS

All components shall be constructed of corrosion resistant materials with proven history in residential sewage service. Painted steel or galvanized steel components exposed to effluent shall not be allowed.

2.2 MANUFACTURED UNIT

Vendor shall provide factory built and tested Residential Grinder Pump Sewage System(s) a fiberglass collection basin, shut-off valve, check valve and electrical alarm/disconnect panel, and all necessary internal wiring, piping, and controls.

2.3 CORE UNIT

Residential Grinder Pump Sewage System(s) shall have easily removable pump assembly. The pump assembly shall contain pump, motor, grinder, and I check valve. A ½" polypropylene lifting rope with knots in 12" increments with a breaking strength of 3750 Lbs. is to be provided to retrieve the pump from the collection basin for repair or replacement. Pump must be serviceable or repairable without special tools.

2.4 COMPONENTS

A. **Grinder Pump:** Grinder pump shall be a centrifugal design with mechanical seal, vertical shaft, motor driven, solids handling pump.

1) Grinder: Grinder unit shall be on suction side of pump impeller and discharge directly into impeller inlet leaving no exposed shaft to permit packing or wrapping of ground solids. Grinder shall include a stationary hardened, stainless steel, cutter ring spaced in accurate close annular alignment with the driven cutter element. The driven cutter shall carry two (2) hardened and ground type series 440 stainless steel cutters. This assembly shall operate without objectionable noise or vibration over the entire range of operating conditions. The grinder shall be designed and constructed so as to eliminate clogging and jamming under all normal operating conditions including

starting. Stationary cutter shall be reversible to provide new cutting surface without replacing with new material. Cutters shall be hardened to Rockwell 55-60C.

The grinder shall be capable of reducing all components in normal domestic sewage, including a reasonable amount of "foreign objects", such as paper, plastic, diapers, and the like, to finely-divided particles which will pass freely through the passages of the pump and the 1-1/2" diameter piping.

2) Electric Motor: Motor shall be a 2 HP, 3450 RPM, 230V, 60 Hertz, single phase, ball bearing, with Class F windings. Motor can be mounted in a sealed, dielectric oil filled, submersible housing to provide permanent lubrication and efficient cooling or air cooled with appropriate insulation. Start switch shall be of solid state design. Start and run capacitors shall be mounted inside control panel for ease of replacement. Motor design shall be adequate so that the pump is non-overloading throughout the pump performance curve. Stator windings shall be insulated with moisture resistant Class F or H insulation rated for a minimum 311°F (155°C) with heat sensor. The motor shall be designed for handling residential sewage of 104°F (40°C) and capable of up to thirty (30) evenly spaced starts per hour. Inherent protection against running overloads or locked rotor conditions for the pump motor shall be provided by the use of an automatic-reset, integral thermal and current overload protector incorporated into the motor windings. This motor protection shall have been specifically investigated and recognized by UL and certified by CSA for the application.

3) Pump Cable: The pumps shall be equipped with 35 feet of 14 AWG 4-conductor cable and shall be sealed at the motor end as it enters the motor casing by a two-part barrier to moisture intrusion. The barrier shall be the compression of the oil and chemical resistant grommet, which shall seal the outer jacket of the power cord. In the event that the outer jacket of the power cord should become damaged, then the second line of defense shall be the epoxy poured isolated conductors within the jacketed cable itself. The insulation shall be removed from the individual conductors and the epoxy shall be allowed to form a leak-proof seal against wicking of the power cable between the outer jacket and the insulation of the individual conductors. The outer jacket of the power cord shall be oil resistant and water-resistant. The power cable shall be rated for NEC type "SOW" or "SOOW".

4) Mechanical Seals: Grinder pump shall be provided with dual mechanical shaft seals to prevent leakage between the pump and motor. Seal interface shall be held in contact by stainless steel spring and hardware. Seal system shall be cooled and lubricated with dielectric oil from the motor housing. Seal system shall not rely upon the pumped media for lubrication. Seal system shall be protected from solids in pumped media by pump-out vanes on pump impeller back shroud.

5) Pump Construction: Motor housing, bearing housing and volute shall be of ASTM A-48 gray cast iron, with smooth surfaces devoid of blow holes or other irregularities. All exposed nuts or bolts shall be Type 304 stainless steel or brass construction. All metal surfaces coming into contact with the residential sewage other than stainless steel or brass, shall be protected by an electrocoat paint finish on the interior and exterior of the pump.

6) Pump/Motor Shaft: Shaft shall be constructed of solid 400 series stainless steel. Shaft length measured from lower ball bearing to end of shaft shall not exceed 2-3/4 inches to minimize deflection and prolong bearing and mechanical seal life.

7) Bearings: Pump/motor shaft shall rotate on two single row ball bearings. Motor bearings shall be permanently lubricated by complete submergence in dielectric oil. Bearings shall be designed to compensate for axial thrust and radial forces developed by pump operation at all points on the pump performance curve and a twenty (20) percent grinder duty cycle. Calculations shall be provided by the pump manufacturer upon request. Sleeve or grease packed bearings shall not be acceptable. Bearings which require lubrication according to a prescribed schedule shall not be acceptable.

8) Mechanical seals: Motor shall be protected by two mechanical seals mounted in tandem with a seal chamber between the seals. Seal chamber shall be oil filled to lubricate seal face and to transmit heat from shaft to outer shell. The rotor and stator in the motor housing shall be separated and protected from the pumped liquid by an oil filled seal housing incorporating two mechanical seals mounted in tandem. The seal housing shall be equipped with or without a moisture sensing probe installed between the seals, and the sensing of moisture in the seal chamber shall be automatic, continuous, and not require the pump to be stopped or removed from the wet well. Single seal protection will not be considered equal. Seal face shall be as a minimum carbon and ceramic and lapped to a flatness of one light band. All hardware is to 300 series stainless steel and sealing elastomers are to Buna-N Rubber.

9) Impeller: The impeller shall be design for rough duty service and shall be of a semi-open design with hydrodynamic pump out vanes on the rear shroud. The impeller may be constructed of (standard) engineered thermoplastic, or bronze. The impeller shall be of a non-overloading design.

B. **Collection basin:** Basin shall be made from a fiberglass reinforced polyester resin 24" diameter and 60" deep.

1) Cover is to be a green 900 lb. bearing weight molded polyethylene cover to fit a 24" fiberglass basin with two inch (2") mushroom vent.

C. **Piping and Valves:**

1) Internal Discharge Piping: Collection tank shall be equipped with schedule 80 PVC discharge piping joined by solvent cement.

2) Integral Check Valve: Pump discharge shall be equipped with a vendor supplied, gravity operated, self-cleaning, PVC flap valve to prevent drainage back into the collection tank. Check valve shall provide a full-port passageway and an access port for visual and physical inspection without disassembling the discharge piping. All working parts shall be non-metallic to ensure corrosion resistance.

3) Isolation Valve: Discharge piping shall be equipped with a PVC single union ¼ turn ball valve rated at 235 PSI at 73°F (23°C).

4) Compression Piping Seals: All pipe penetrations shall be sealed with compression pipe grommets injection molded from DuPont Alcryn®, or equal, thermoplastic.

D. **Primary Level Control:** Pump level control to be a sealed mercury float switch. Pump on, off, and alarm levels shall be controlled by three (3) mercury switches that will activate a

motor contactor in the control panel. Float shall be non-corrosive Polypropylene plastic for use in liquids up to 140° F (60°C). Float cables shall be 18 gauge, 2 conductors, UL/CSA SJOW neoprene, water resistant cord of sufficient length to reach the junction box with no splices.

E. **Seal Failure Indicator:** (If a seal failure probe is used) the control panel shall provide a means for connecting the seal failure probe for the pump. The control panel shall incorporate a seal failure warning light that provides a visual indication of moisture entry into the motor. The seal failure indication light shall not stop the pump.

F. **High Level Alarm:** Each pump will incorporate a high level pilot duty alarm float. The float will provide notification of main level control failure. If the primary level control should fail, the high level float, when tripped, will signal an external alarm panel.

G. **Alarm/Disconnect Panel:** Each grinder pump sewage system shall include a NEMA 4X, UL listed, Alarm/Disconnect Panel suitable for wall (indoor or outdoor) or pole mounting. The NEMA 4X enclosure shall be manufactured of thermoplastic or fiberglass to assure corrosion resistance. The enclosure shall include a hinged, lockable cover. The enclosure will act as the junction box for the main wiring coming in from the house and the wiring going to the collection basin.

Electrical specifications for each alarm/disconnect panel are as follows:

Input Voltage

- 230 VAC 60 Hz Single Phase (Pump)

Current

- Pump – 20 Amp Max
- Alarm - < 1 Amp

Circuit Breakers

- Pump – 20 Amp, 2 Pole
- Alarm – 10 Amp, 1 Pole
- Main feed to Alarm/Disconnect Panel – 30 Amp, 2 Pole

The Alarm/Disconnect Panel shall contain separate breakers for the pump and alarm electronics to allow the alarm to still function if the pump breaker has tripped. Power to the unit should be provided via a 30 Amp, 2 pole breaker to allow the provided 20 Amp pump breaker (located inside alarm box enclosure) to trip prior to the breaker in the house.

The Alarm/Disconnect Panel shall include the following features: HOA switch with light, HWA light and buzzer with silence switch, seal failure light (if seal failure probe is used), motor contactor with overload, pump circuit breaker. In the event the high water alarm float is triggered, a horn and light will activate. The Alarm/Disconnect Panel shall include a momentary push button linked to a relay silence circuit that will allow the user to deactivate the horn while keeping the light ON. The visual alarm remains illuminated until the water level in the basin drops below the OFF setting of the alarm float. HOA switch allows for either "Hand" (manual), "Off" or Automatic pump operation. The entire Alarm/Disconnect Panel as manufactured shall be listed by *Underwriters Laboratories, Inc.*

Specifications for Jacking, Boring or Tunneling of Pipe

1. GENERAL

This item shall govern for furnishing and installing of pipe by the methods of jacking, boring or tunneling as shown on the plans and in accordance with this item.

2. MATERIALS

Pipe may be either steel pipe, corrugated metal pipe or reinforced concrete pipe, or other types as may be specified by the ENGINEER of shown on the plans. Steel pipe exterior shall be coated with two coats of coal-tar enamel.

3. CONSTRUCTION METHODS

1) General – If the grade of the pipe at the jacking, boring or tunneling end is below the ground surface, suitable pits or trenches shall be excavated for the purpose of conducting the jacking, boring or tunneling operations and for placing end joints of the pipe. Excavations greater than five (5) feet in depth shall be protected as specified in "Trench Safety Plan".

   Where pipe is required to be installed under railroad embankments, highways, streets, or other facilities by jacking, boring or tunneling methods, construction shall be made in such manner that will not interfere with the operation of the railroad, street, highway, or other facility, and shall not weaken or damage any embankment or structure.

   Pipe damaged in jacking, boring or tunneling operations shall be repaired in place to the satisfaction of the ENGINEER. Pipe damaged beyond repair will be removed and replaced. Repair or removal and replacement of damaged pipe will be done at the CONTRACTOR'S expense.

   The pits or trenches excavated to facilitate jacking, boring or tunneling operations shall be backfilled immediately after the installation of the pipe has been completed.

2) Jacking – Heavy-duty jack suitable for forcing the pipe through the embankment shall be provided. In operating jacks, even pressure shall be applied to all jacks used. A suitable jacking head and suitable bracing between the jacks and the jacking head shall be provided so that pressure will be applied to the pipe uniformly around the ring of the pipe. Joint cushioning material of plywood or other material may be used as approved by the ENGINEER. A suitable jacking frame or backstop shall be provided. The pipe to be jacked shall be set on guides, properly braced together, to support the section of the pipe and to direct the pipe in the proper line and grade. The whole jacking assembly shall be placed so as to line up with the direction and grade of the pipe. In general, the embankment material shall be excavated just ahead of the pipe, the material removed through the pipe, and the pipe forced through the embankment with jacks, into the space thus provided.

   The excavation for the underside of the pipe, for at least one-third of the circumference of the pipe, shall conform to the contour and grade of the pipe.

Over-excavation to provide not more than two- (2) inches of clearance may be provided for the upper half of the pipe. This clearance shall be tapered to zero at the point where the excavation conforms to the contour of the pipe. Over-excavation in excess of one (1) inch shall be pressure grouted the entire length of the installation.

Preferably, the pipe shall be jacked from the low or downstream end. The final position of the pipe shall not vary from the line and grade shown on the plans, or established by the ENGINEER.

The CONTRACTOR may use a cutting edge of steel plate around the head end of the pipe extending a short distance beyond the end of the pipe with inside angles or lugs to keep the cutting edge from slipping back onto the pipe.

When jacking of pipe has begun, the operation shall be carried on without interruption, insofar as practicable; to prevent the pipe from becoming firmly set in the embankment.

3) Boring – The boring shall proceed from a pit provided for the boring equipment and workmen. The location of the pit shall be approved by the ENGINEER. The boring shall be done mechanically either using a pilot hole or by the auger method.

When the pilot hole method is used an approximate two (2) inch pilot hole shall be bored the entire length of the crossing and shall be checked for line and grade on the opposite end of the bore from the work pit. This pilot hole shall serve as the centerline of the larger diameter hole to be bored.

When the auger method is used, a steel encasement pipe of the appropriate diameter equipped with a cutter head to mechanically perform the excavation shall be used. Augers shall be of sufficient diameter to convey the excavated material to the work pit.

Excavated material shall be disposed of by the CONTRACTOR, as approved by the ENGINEER. The use of water or other fluids in connection with the boring operation will be permitted only to the extent necessary to lubricate cuttings; jetting will not be permitted.

In unconsolidated soil formations, a gel-forming colloidal drilling fluid consisting of at least 10 percent of high grade carefully processed bentonite may be used to consolidate cuttings of the bit, seal the walls of the hole, and furnish lubrication for subsequent removal of cuttings and immediate installation of the pipe. Overcutting in excess of one (1) inch shall be remedied by pressure grouting the entire length of the installation.

4) Tunneling – Where the characteristics of the soil, the size of the proposed pipe, or the use of monolithic sewer would make the use of tunneling more satisfactory than jacking or boring; or when shown on the plans, a tunneling method may be used, with the approval of the ENGINEER.

When tunneling is permitted, the lining of the tunnel shall be of sufficient strength to support the overburden. The CONTRACTOR shall submit the proposed liner method to the ENGINEER for approval. Approval by the ENGINEER shall not relieve the CONTRACTOR of the responsibility for the adequacy of the liner method.

The space between the liner plate and the limits of excavation shall be pressure-grouted or mud-jacked.

Access hole for placing concrete shall be spaced at maximum intervals of 10 feet.

5) Joints – If corrugated metal pipe is used, joints may be made by field bolting or by connecting bands, whichever is feasible. If reinforced concrete pipe is used, the joints shall be approved by the ENGINEER. Smooth steel pipe shall be welded.

6) Carrier Pipe – Carrier Pipe placed in bore or tunnel casing shall be supported with wood (timber) spacers and skids strapped to carrier pipe. The spacer/skids shall support 60% of laying length of carrier pipe and be secured with 3 stainless steel straps for each set of skids, minimum of 3 sets of skids are required for each pipe length. Skids shall be fabricated from hardwood or southern pipe stock.

7) Measurement – This item will be measured by the linear foot between the ends of the pipe along the flow line. For casing or tunnel, bores shall be measured by the linear foot from end to end.

8) Payment – Payment will be made in accordance with the unit price bid for various items set out in the Bid Proposal, usually as "Bore and Casing" for designated size of water or sewer line, or bore for designated size of water or sewer line. The unit price bid for "Bore and Casing" or bore for specific size line, shall not include the carrying pipe, which will be paid for at the unit price bid for designated size and depth.

Specifications for Hot-Mix Asphaltic Concrete Pavement

1. DESCRIPTION

This specification shall consist of a surface coat composed of a compacted mixture of mineral aggregate and asphaltic materials. The pavement shall be placed on an approved subgrade; base or wearing surfaces in accordance with details shown on the Plans.

2. MATERIALS

All materials, mineral aggregate, asphaltic materials, prime coat tack coat and additives shall be in accordance with Item 340 Texas Department of Transportation Standard Specification for Construction of Highways, Streets and Bridges.

3. PLACING

Materials shall be placed in accordance with Item 340, TxDOT and compacted as set out in Item 340 and as directed by the ENGINEER.

4. MEASUREMENT

Measurement shall be in units designated on Bid Proposal of specified thickness.

5. PAYMENT

Payment for completed and acceptable surface coat shall be made at the unit price bid on Bid Proposal and the unit price bid shall be full compensation for tack coat, prime coat, materials, rolling, all equipment, labor machinery, supervision required for completion of work.

Specifications for Cement Stabilized Sand Backfill

1.0 DESCRIPTION

This item shall govern the material, basis for payment, and measurement of cement stabilized sand.

2.0 MATERIALS

Cement stabilized sand shall be composed of River sand (P.I. of 4 of less) or equal and not less than one and one-half (1½) sacks of Portland Cement per cubic yard thoroughly mixed, in a mill type mixer.

3.0 BASIS OF PAYMENT

Basis of payment shall be at the unit price bid for designated unit as it appears on bid proposal. The unit price bid of specified unit shall be full compensation for all materials, labor, machinery, or other operations required to place cement stabilized sand.

4.0 MEASUREMENT

Measurement will be made by weight ticket showing pounds of material per truckload and shall be acknowledged by the OWNER'S representative on the job.

Specifications for Crushed Limestone Flexible Base

4. DESCRIPTION

This item shall consist of a foundation course for surface course; and shall be composed of crusher-run broken stone; and shall be constructed as herein specified in courses not over 6" thick after compaction in conformity with the typical sections shown on the plans and to lines and grades as established by the ENGINEER.

5. MATERIALS

2.1 The material shall be obtained from an approved source, shall be crushed, shall consist of durable particles of crushed stone graded from coarse to fine; shall be screened or otherwise manipulated prior to crushing to remove all soil, clay, or other objectionable material, and shall contain approved binding material produced in the crushing process.

2.2 When properly slaked and tested by current standard laboratory methods, materials shall meet the following requirements:

Retained on 1 ¾" screen	0%
Retained on ¾" screen	15-45%
Retained on ¼" screen	45-75%
Retained on 40 mesh sieve	60-85%

2.3 When tested by current standard laboratory methods, the soil binder (material passing the 40 mesh sieve) shall meet the following requirement:

The liquid limit shall not exceed	40
The Plasticity index shall not exceed	10

2.4 When tested by the Wet Ball Method for determining disintegration of Flexible Base Material, the material shall not have a wet ball mill wear exceeding 40%.

6. CONSTRUCTION METHODS

3.1 Preparation of Subgrade – The area to be surfaced shall be excavated and shaped to conform with the typical sections shown on the plans and to the lines and grades established by the ENGINEER. All unstable or otherwise objectionable material shall be removed from the subgrade and replaced with approved material. All holes, ruts, and depressions shall be filled with approved material, and if required, the subgrade shall be thoroughly wetted and reshaped and rolled to the extent directed in order to place the subgrade in an acceptable condition to receive the base material. The surface of the subgrade shall be finished to line and grade within a tolerance of ½" in cross section, and ½" in a length of 16" longitudinally. Material excavated in preparing the subgrade shall be utilized in filling adjacent areas, or otherwise disposed of as directed.

3.2 First Course – The material shall be delivered in vehicles of an approved capacity, and it shall be the responsibility of the CONTRACTOR that the required amount of

material shall be delivered and spread to provide the required compacted thickness. Material deposited on the subgrade shall be spread the same day. The material shall be sprinkled, if the moisture content is less than the optimum required for compaction, and shall then be bladed, and shaped to conform to the typical section shown on the plan. Sufficient moisture shall be added to the material to minimize segregation of the coarse or fine aggregate, and any "nests" of segregated coarse or fine material shall be corrected or removed and replaced with well graded material. If additional binder is necessary after the material is spread and shaped, it shall be furnished and applied in the amounts required to fill the voids of the coarser aggregate. Additional binder material shall be carefully and evenly incorporated with the material in place by blading, scarifying, harrowing, or other approved methods. The course shall be sprinkled as required and rolled until an uniformed compaction is secured. Irregularities, depressions or weak sport which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and re-compacting by sprinkling and rolling. Blading and rolling shall continue until the base is compacted to a minimum of 95% of Standard Proctor Density.

3.3 Rollers shall be pneumatic tired rollers with not less than nine (9) pneumatic tired wheels, running on axles in such a manner that the rear group of tires will not follow in the tracks of the forward group, and mounted in a rigid frame provided with a platform or body suitable for ballast loading. The pneumatic tired roller shall have an effective rolling width of approximately 60" and shall be so designed that by ballast loading, the load may be varied uniformly from 100 pounds to 325 pounds per inch of width of tire tread. The pneumatic tired roller may be either the self-propelled type, or towed type roller drawn by a pneumatic tired tractor. Rollers shall be maintained in good repair and operating condition, and shall be approved by the ENGINEER.

3.4 Succeeding Courses – Construction methods and requirements shall be the same for succeeding courses as prescribed for the first course, except that the surface of the final course shall be finish rolled with a steel wheeled roller, if required, to obtain a smooth and uniform surface.

7. MEASUREMENT

Measurement shall be made in the units designated on the bid proposal, usually by the square yard, in place, and compacted.

8. PAYMENT

Payment shall be made at the unit price bid for designated unit on Bid Proposal and the unit price bid and shall be full compensation for all materials, labor, machinery, equipment, preparation shaping, compaction, etc., necessary to meet Plans and Specifications, in accordance with and acceptable to, the ENGINEER.

Specifications for Mobilization and Demobilization

1.0 GENERAL

1.1 MOBILIZATION

This section covers the mobilization of personnel, equipment, materials and supplies, and their transport to the job site, insurance, payment and, performance bonds. Also included is setting up the CONTRACTOR's complete construction plant, field office and other construction facilities, as required for the CONTRACTOR's operation, all in adequate time for satisfactory performance of all Work under the Contract.

1.2 DEMOBILIZATION

Demobilization shall include the removal of all construction plant, equipment and accessories, materials, supplies, appurtenances, construction debris and the like from the job site upon completion of the Work.

2.0 MEASUREMENT AND PAYMENT

2.1 MEASUREMENT

No measurement for Work of this Section will be made.

2.2 PAYMENT

Payment for Mobilization and Demobilization Work of this Section will be made at the lump sum price for Bid Item No. 1, Mobilization and Demobilization, in the Schedule of Quantities and Prices, which shall not exceed 10 percent of the Bid Subtotal. Payment for mobilization will be made with the first progress payment and will be equal to 90% of the amount bid for Bid Item No. 1. The remaining 10% will be paid with the final project payment and will be proportional to the amount of the CONTRACTOR Use Areas that have been cleaned and restored to their original condition in a total amount of 10 (Ten) % of the amount bid.

Specifications for Man Hours and Equipment Time

1.0 DESCRIPTION

It is the intent and purpose of these specifications to govern the use of man time and equipment time where required and authorized by the ENGINEER.

1.1 MAN HOURS: The labor of one able-bodied man working for one (1) hour with tools.

1.2 TRUCK HOURS: A truck in good and acceptable repair rated at 2 ½ tons but capable of hauling a minimum of three (3) cubic yards of material, with a competent drive and with all necessary fuel, lubricating oil and grease furnished, operating on the work for one hour.

1.3 BULLDOZER HOURS: A bulldozer in good and acceptable repair, having a minimum rated capacity of 35 HP with a competent operator and with all necessary fuel, lubricating oil and grease furnished, operating on the work for one hour.

1.4 LOADER/BACKHOE HOURS: A rubber tired or tracked Loader/Backhoe in good and acceptable repair, with a minimum size loader of 1 ¼ C.Y. and backhoe bucket of a minimum size of 24" with a competent operator and with all necessary fuel, lubricating oil and grease furnished, operating on the work for one hour.

1.5 MOTOR GRADER HOURS: A motor grader in good and acceptable repair, having a mould-board or blade twelve (12) feet in length, with a competent operator and with all necessary fuel, lubricating oil and grease furnished, operating on the work for one hour.

2.0 MEASUREMENT AND PAYMENT

2.1 MEASUREMENT: Measurement for the above personnel and equipment will be made by the hour.

2.2 PAYMENT: Payment for the above equipment and personnel will be made at the unit price bid per hour for each item which price shall be full compensation for furnishing the above described items, which includes all supervisory personnel, including foremen, all Social Security, Old Age Benefits, Insurance, Overhead, Profit, Fuel, Lubrication, Tools, and Maintenance required to efficiently operate man and equipment. Insurance requirements shall meet or exceed State and other governing agency requirements.

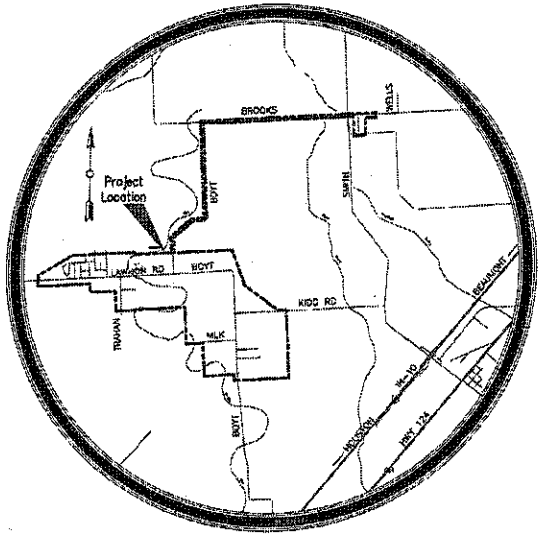
CONSTRUCTION PLANS
FOR
JEFFERSON COUNTY
CHEEK COMMUNITY SEWER IMPROVEMENT PROJECT

CHEEK PHASE V

JEFFERSON COUNTY, TEXAS

"Texas Community
Development Block Grant
Program"
TXCDBG Contract No. 7216231
ACE Job No. 115-02

SHEET	DRAWING NAME
1	TITLE SHEET
2	OVERALL PROJECT LAYOUT
3	PLAN - DENLEY ROAD
4	GRINDER PUMP DETAILS
5	DETAILS
6	PROJECT SIGN



Vicinity Map
N.T.S.

JEFFERSON COUNTY
COMMISSIONERS COURT:

JEFF BRANICK, COUNTY JUDGE

EDDIE ARNOLD, COMMISSIONER PRECINCT 1

BRENT WEAVER, COMMISSIONER PRECINCT 2

MICHAEL SINEGAL, COMMISSIONER PRECINCT 3

EVERETT "BO" ALFRED, COMMISSIONER PRECINCT 4

Prepared by:

ACTION CIVIL ENGINEERS, PLLC.
6460 CENTRAL MALL DR
P.O. BOX DRAWER 2150
PORT ARTHUR, TX 77642
PHONE: (409) 983-0283
FAX: (409) 983-0285
EMAIL: ace@actioncivilengineers.com

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM V. LABRAM, P.E. 91553 on 2/28/17

Action Civil Engineers, PLLC
F-10276

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CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS

TITLE

REVISIONS
4.
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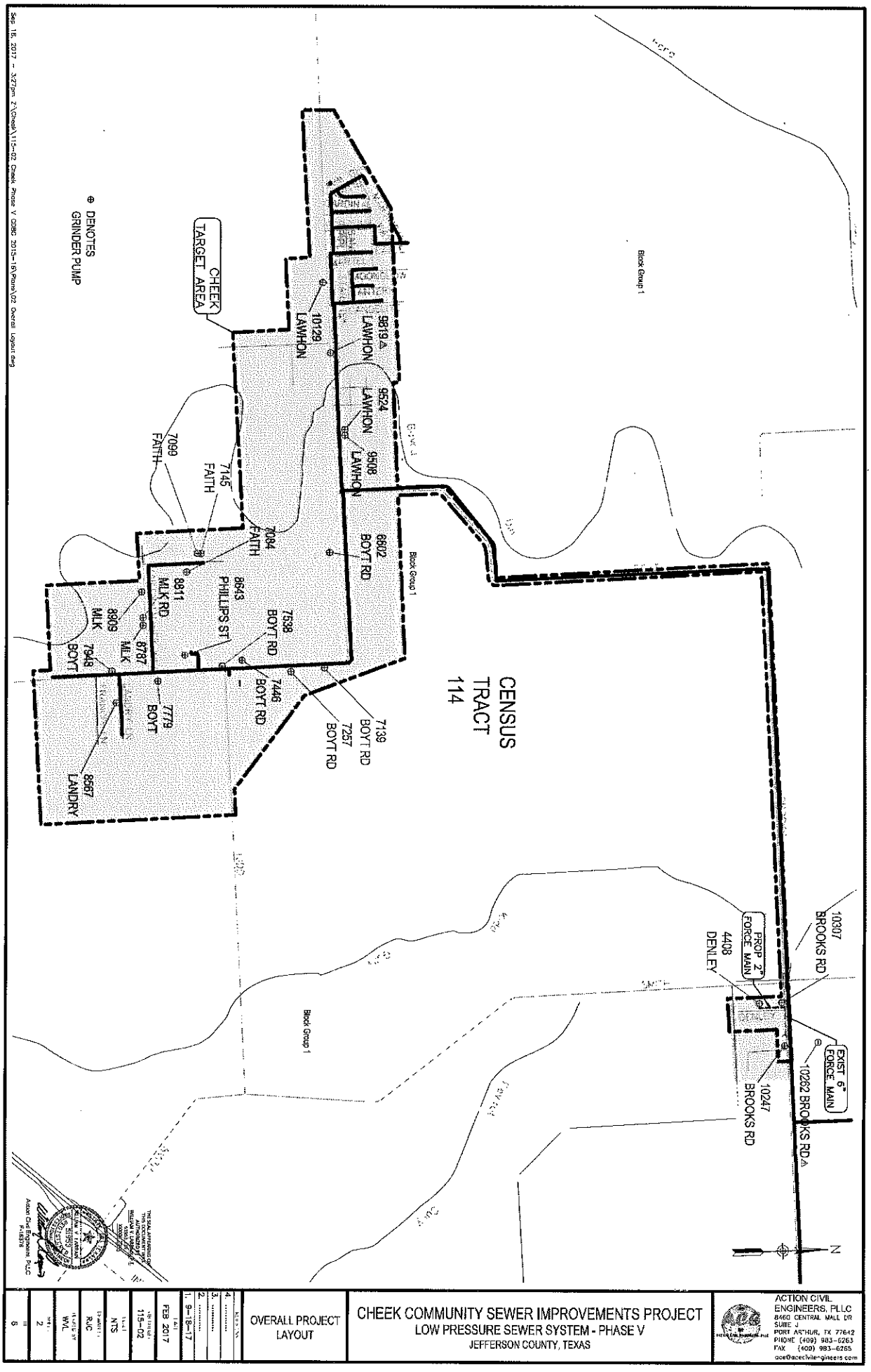
1.

DATE: FEB 2017
JOB NUMBER: 115-02
SCALE: NTS
DRAWN BY: RJC
CHECKED BY: WVL
SHEET: 1
OF: 6


DENOTES GRINDER PUMP
CHEEK TARGET AREA
10129 LAWHON
9819 LAWHON
9524 LAWHON
9508 LAWHON
7099 FAITH
7145 FAITH
7084 FAITH
6802 BOYT RD
8811 MLK RD
8643 PHILLIPS ST
8809 MLK
8787 MLK
7538 BOYT RD
7948 BOYT
7779 BOYT
7446 BOYT RD
7139 BOYT RD
7257 BOYT RD
8587 LANDRY
CENSUS TRACT 114
Block Group 1
PROP 2" FORCE MAIN
4408 DENLEY
10307 BROOKS RD
EXIST 6" FORCE MAIN
10282 BROOKS RD
10247 BROOKS RD
N
OVERALL PROJECT LAYOUT
CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS
ACTION CIVIL ENGINEERS, PLLC
8460 CENTRAL MALL DR SUITE J
PORT ARTHUR, TX 77642
PHONE (409) 983-6263
FAX (409) 983-6265
ace@acecivilengineers.com
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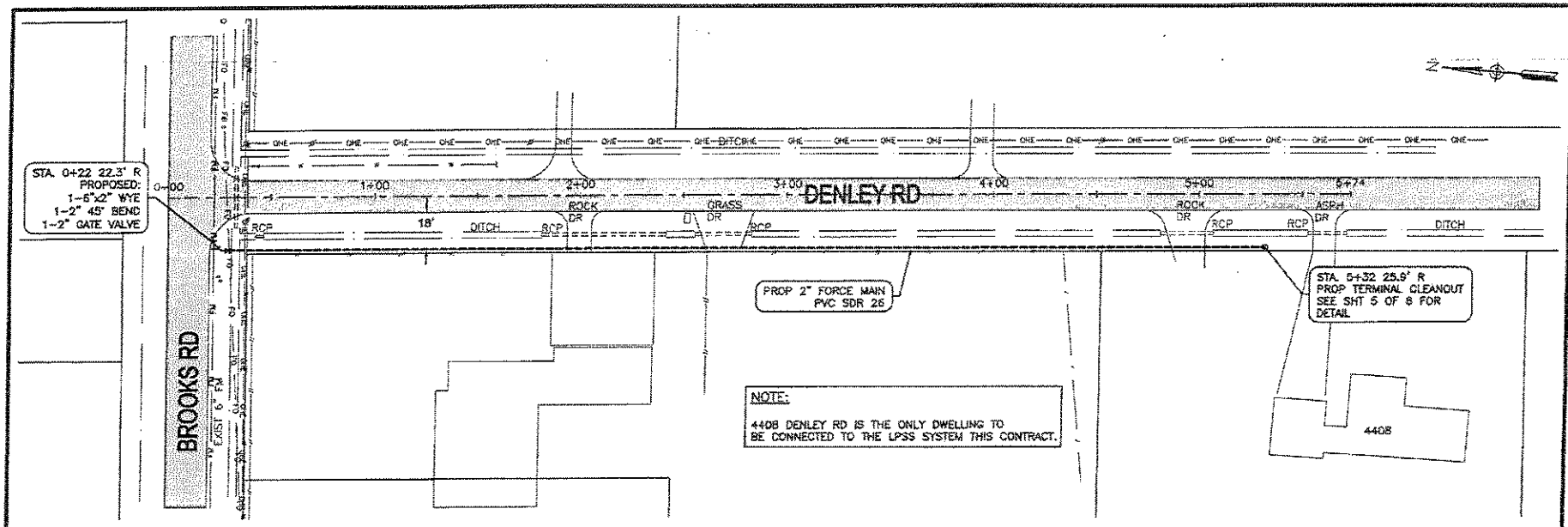
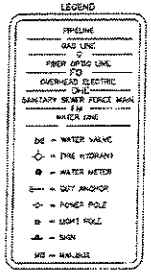
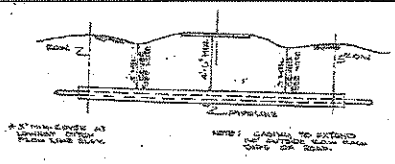


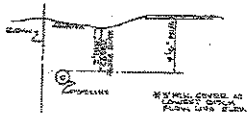
CONTRACTOR NOTE:

1. CONTRACTOR IS TO VERIFY EXISTING PIPELINE OR UTILITY HORIZONTAL AND VERTICAL LOCATION PRIOR TO INITIATION OF CONSTRUCTION.
2. CONTRACTOR TO FOLLOW THE MINIMUM CLEARANCE FROM EXISTING UTILITIES BASED ON TCEQ GUIDELINES 217/317 DESIGN CRITERIA FOR SEWERAGE SYSTEM.
3. CONTRACTOR TO USE THE DISTANCE FROM THE EDGE OF ASPHALT TO LOCATE THE PROPOSED FORCE MAIN.





1. STANDARD PIPELINE CROSSING



2. STANDARD PARALLEL LINE

JEFFERSON COUNTY
ENGINEERING DEPARTMENT
PIPELINE DETAILS (STD)
12-1-78 | NO SCALE

NOTE:

CONTRACTOR TO FOLLOW JEFFERSON COUNTY PIPELINE DETAILS (STD) FOR FORCE MAIN CROSSING.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM V. LARRAIN, P.E. 51953, ON XXXXX, 20XX

STATE OF TEXAS
WILLIAM V. LARRAIN
51953
REGISTERED PROFESSIONAL ENGINEER

Action Civil Engineers, PLLC
F-16376

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8480 CENTRAL MALL DR
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PHONE (409) 963-8883
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actionciviengineers.com

CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS

DENLEY RD
STA 0+00 TO END

REVISIONS	
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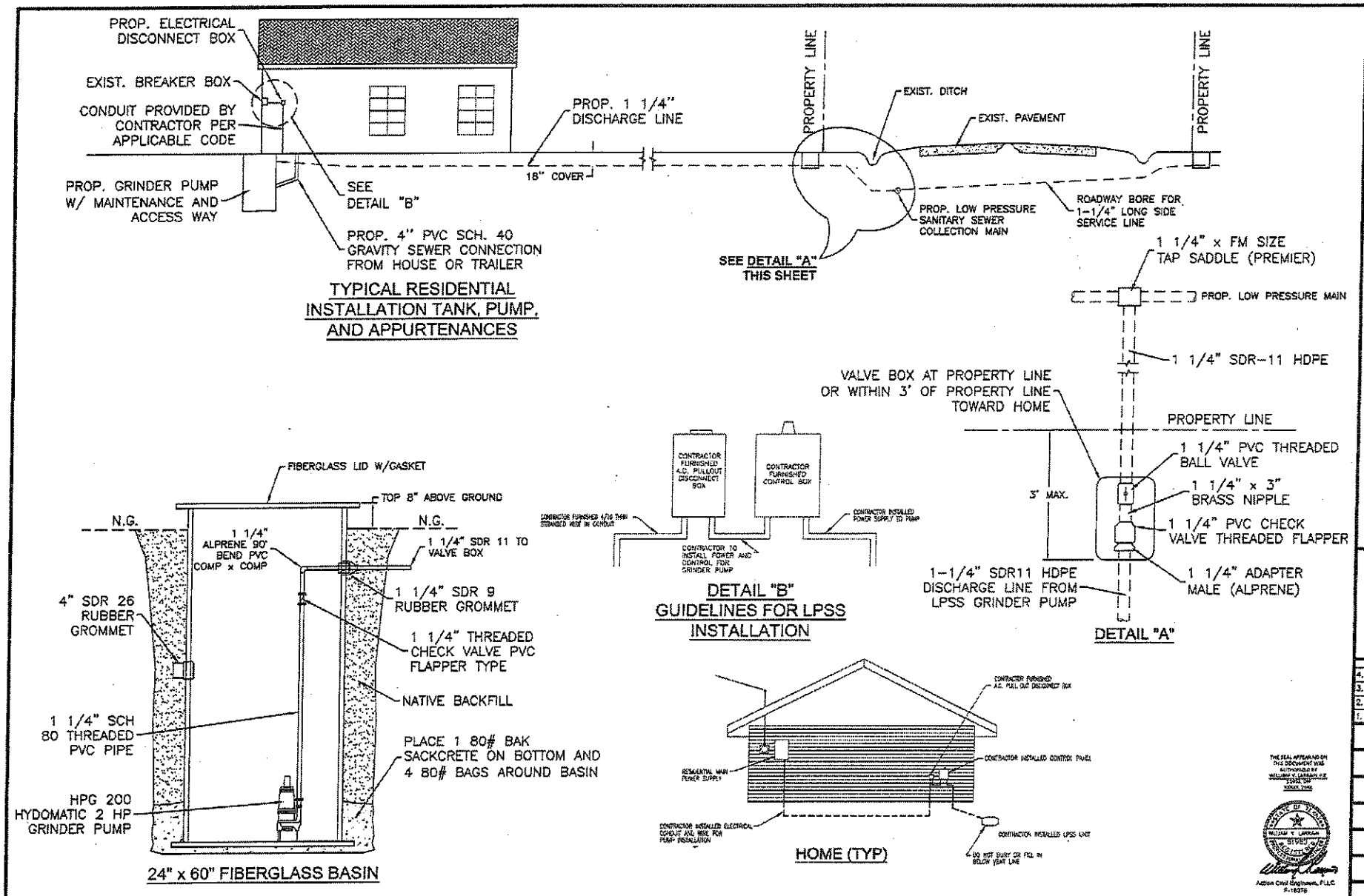
DATE	FEB 2017
JOB NUMBER	115-02
SCALE	1" = 50'
DRAWN BY	PJC
CHECKED BY	WVL
SHEET	3
OF	6



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SUITE J
BEAUMONT, TX 77642
PHONE (409) 983-6262
FAX (409) 983-6263
mail@actionciviltexas.com

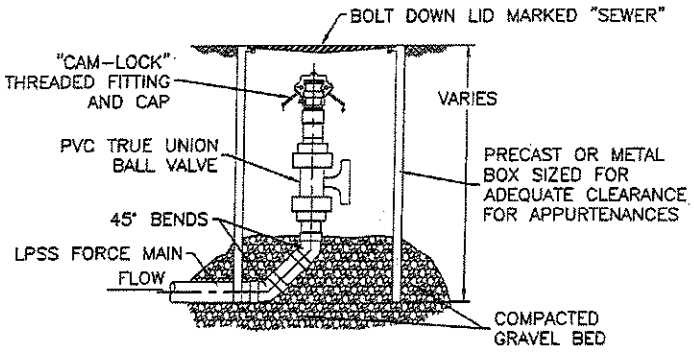
CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS

GRINDER PUMP DETAILS

DATE	FEB 2017
JOB NUMBER	115-02
SCALE	NTS
DRAWN BY	RJC
CHECKED BY	WVL
SHEET	4
OF	6

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM V. LARRAMORE, P.E. 115702 ON MARCH, 2017

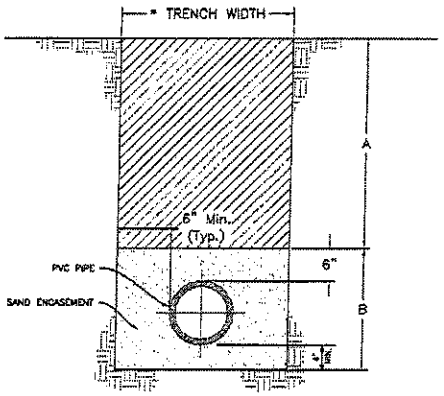
Action Civil Engineers, PLLC
F-18276



TERMINAL CLEANOUT FOR SEWER FORCE MAIN

NOTE:

- PVC FITTINGS SHALL BE OF THE SAME SIZE AND SPECIFICATIONS OF PROPOSED FORCE MAIN.
- PVC FITTINGS SHALL BE SOLVENT WELD.



CLASS "B" BEDDING
(FOR USE WITH PVC PIPE)

NOTES:

A = NATIVE BACKFILL IN ACCORDANCE WITH SEWER CONSTRUCTION SPECIFICATIONS

B = BACKFILL WITH FIRMLY TAMPED SAND

* PIPE LESS THAN 30-INCH
MAX 1'-6"+ø
MIN. 1'-0"+ø
PIPE 30-INCH AND LARGER
MAX 2'-0"+ø
MIN. 1'-4"+ø

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM V. LARRAIN, P.E. 51953 ON 2/28/17

STATE OF TEXAS
WILLIAM V. LARRAIN
51953
REGISTERED
PROFESSIONAL ENGINEER

Action Civil Engineers, PLLC
F-18376

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FAX (409) 984-4083
mail@actionengineering.com

CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS

DETAILS

REVISIONS
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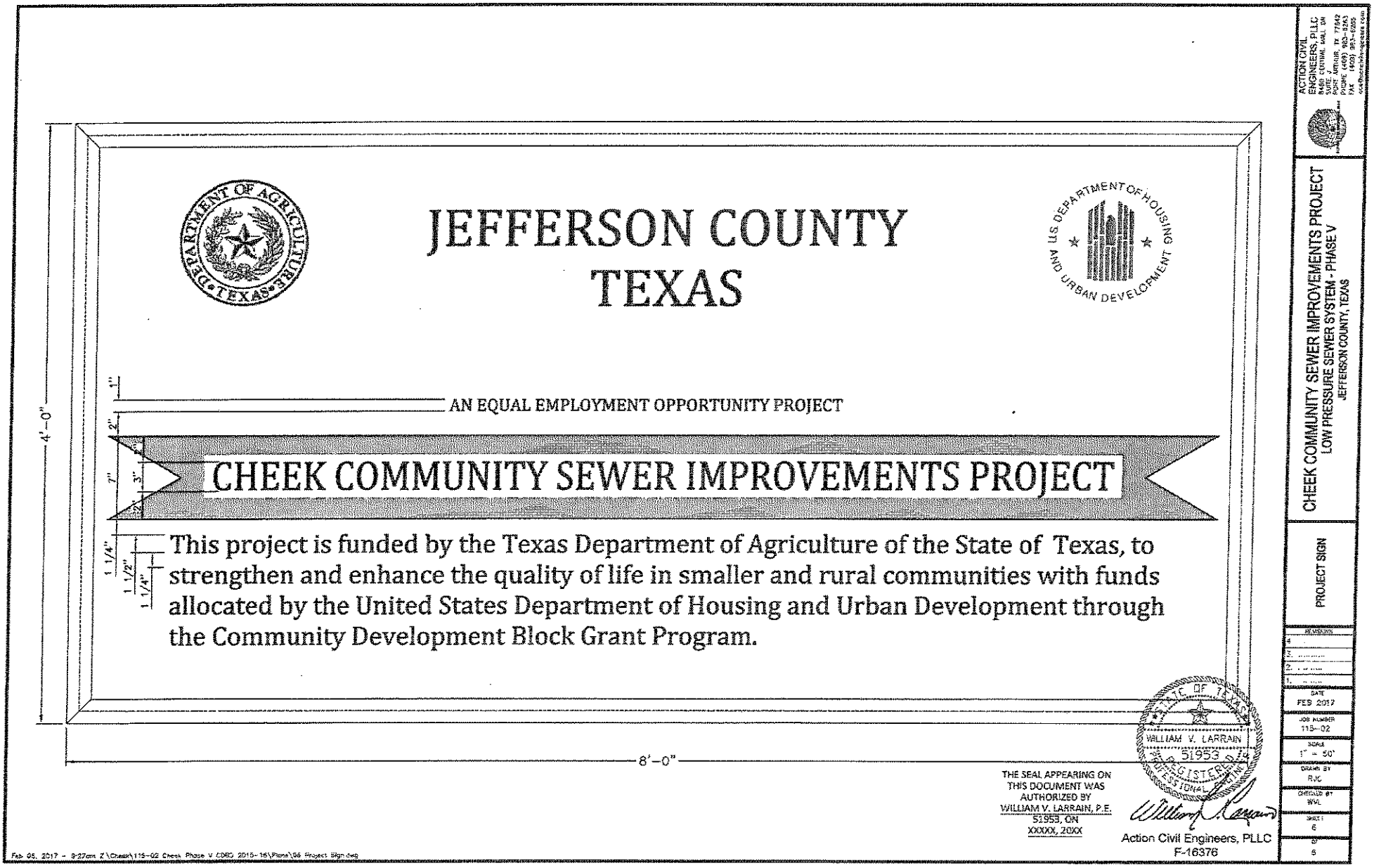
1.

DATE: FEB 2017
JOB NUMBER: 115-02
SCALE: 1" = 50'
DRAWN BY: RJC
CHECKED BY: WVL
SHEET: 5
OF: 6



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM V. LARRAIN, P.E. 51953, ON XXXXX, 20XX

STATE OF TEXAS
WILLIAM V. LARRAIN
51953
REGISTERED PROFESSIONAL ENGINEER

Action Civil Engineers, PLLC
F-16376

ACTION CIVIL ENGINEERS, PLLC
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FAX (409) 983-3765

CHEEK COMMUNITY SEWER IMPROVEMENTS PROJECT
LOW PRESSURE SEWER SYSTEM - PHASE V
JEFFERSON COUNTY, TEXAS

PROJECT SIGN

REVISIONS
4
3
2
1

DATE: FEB 2017
JOB NUMBER: 115-02
SCALE: 1" = 50'
DRAWN BY: RJC
CHECKED BY: WVL
SHEET: 6
OF: 6

Feb. 06, 2017 - 9:27am Z:\Cheek\115-02 Cheek Phase V CDBG 2015-16\Plans\06 Project Sign.dwg

ATTACHMENT A

IFB 11-054/AW
Term Contract for Snack and Drink Vending Machines for Jefferson County
Awarded: December 5, 2011

Renewal 1: 11/30/2016 – 11/29/2017

Current Pricing

Product Category	Vend Price	Commission	Requested Price (with $0.25 increase)
12 oz. Soft Drink	0.75	3%	1.00
16 oz. Soft Drink	1.25	3%	1.50
20 oz. Soft Drink	1.50	3%	1.75
20 oz. Bottled Water	1.50	3%	1.75
20 oz. Gatorade	1.50	3%	1.75
Orange juice	1.50	3%	1.75
16 oz. Canned Energy Drink	2.00	3%	2..25
Vitamin Water	1.75	3%	2.00
Small Candy	0.75	3%	1.00
Chocolate Candy	1.00	3%	1.25
Chips – large bag	1.00	3%	1.25
Chips – small bag	0.75	3%	1.00
Pastry	1.00	3%	1.25
Crackers	0.50	3%	0..75
Guaranteed minimum on all products	1,200.00	3%	

John Paul's Food Service, LLC
6625 Knollwood Drive
Beaumont TX 77706
Attn: David Brack
Phone: 409-454-5171
Fax: 409-860-9769
johnpaulscafe@aol.com

CONTRACT RENEWAL FOR IFB 11-054/AW
TERM CONTRACT FOR SNACK AND DRINK VENDING MACHINES FOR JEFFERSON COUNTY

The County entered into a contract with John Paul's Food Service, LLC for one (1) year, from December 5, 2011 to December 4, 2012, with an option to renew the contract for up to a five (5) year period.

Pursuant to the contract, Jefferson County hereby exercises its second one-year option to renew the contract for one (1) additional year from November 29, 2017 to November 28, 2018.

ATTEST:

Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT JEFFERSON COUNTY, TEXAS

JEFFERSON COUNTY, TEXAS

Jeff Branick, County Judge

CONTRACTOR:
John Paul's Food Service, LLC

(Name)

YS

CONTRACT RENEWAL FOR IFB 15-023/JW
TERM CONTRACT FOR HVAC MAINTENANCE, REPAIR, & EMERGENCY SERVICES FOR FORD PARK

The County entered into a contract with Industrial Commercial Mechanical for one (1) year, from January 11, 2016 to January 10, 2017, with an option to renew the contract for up to a five (5) year period.

Pursuant to the contract, Jefferson County hereby exercises its second one-year option to renew the contract for one (1) additional year from January 9, 2018 to January 8, 2019.

ATTEST:

Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT JEFFERSON COUNTY, TEXAS

JEFFERSON COUNTY, TEXAS

Jeff Branick, County Judge

CONTRACTOR:
Industrial Commercial Mechanical

(Name)

JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah Clark, Purchasing Agent

1149 Pearl Street, Beaumont, TX 77701 Phone: 409-835-8593 Fax: 409-835-8456

MEMORANDUM

To: Commissioners' Court

From: Deborah Clark
Purchasing Agent

Date: November 16, 2017

Re: Inter-Department Transfer of County Property

Consider and possibly approve inter-department transfer of a 2008 Ford Crown Victoria VIN # 2FAFP71V88X167959 from Sheriff to Service Center as authorized by Local Government Code §262.011 (j).

Thank you.

JEFFERSON COUNTY, TEXAS
1149 PEARL STREET
BEAUMONT, TX 77701

TRANFER OF VEHICLE
November 27, 2017

DESCRIPTION OF PROPERTY	DEPARTMENT TRANSFERRING PROPERTY	VIN NO.	ASSET NO.	DEPARTMENT RECEIVING PROPERTY
2008 Ford Crown Victoria	Sheriff	2FAFP71V88X167959	33233	Service Center

Approved by Commissioners' Court: _____

Texas Traffic Safety eGrants

Fiscal Year 2018

Organization Name: Jefferson County Sheriff's Office

Legal Name: County of Jefferson

Payee Identification Number: 17460002912052

Project Title: STEP Comprehensive

ID: 2018-Jefferso-S-1YG-0054

Period: 10/01/2017 to 09/30/2018

FOR REVIEW ONLY - NOT A LEGAL DOCUMENT

TEXAS TRAFFIC SAFETY PROGRAM GRANT AGREEMENT

THE STATE OF TEXAS
THE COUNTY OF TRAVIS

THIS AGREEMENT IS MADE BY and between the State of Texas, acting by and through the Texas Department of Transportation, hereinafter called the Department and the, **County of Jefferson** hereinafter called the Subgrantee, and becomes effective then fully executed by both parties. For the purpose of this agreement, the Subgrantee is designated as a(n) **Local Government/Transit District.**

AUTHORITY: Texas Transportation Code, Chapter 723, the Traffic Safety Act of 1967, and the Highway Safety Performance Plan for the Fiscal Year 2018.

Name of the Federal Agency: **National Highway Traffic Safety Administration**

CFDA Number: **20.600**
CFDA Title: **State and Community Highway Safety Grant Program**
Funding Source: Section **402**
DUNS: **010807535**
FAIN:
18X9204020TX17
69A37518300004020TX0

Project Title: **STEP Comprehensive**
This project is **Not Research and Development**

Grant Period: This Grant becomes effective on **10/01/2017** or on the date of final signature of both parties, whichever is later, and ends on **09/30/2018** unless terminated or otherwise modified.

Total Awarded: **$47,192.87**
Amount Eligible for Reimbursement by the Department: **$36,998.05**
Match Amount provided by the Subgrantee: **$10,194.82**

Texas Department Of Transportation - Traffic Safety
Electronic Signature Authorization Form

This form identifies the person(s) who have the authority to sign grant agreements and amendments for the Grant ID listed at the bottom of the page.

Name Of Organization: County of Jefferson

Project Title: STEP Comprehensive

Authorizing Authority
The signatory of the Subgrantee hereby represents and warrants that she/he is an officer of the organization for which she/he has executed this agreement and that she/he has full and complete authority to enter into the agreement on behalf of the organization. I authorize the person(s) listed under the section "Authorized to Electronically Sign Grant Agreements and Amendments" to enter into an agreement on behalf of the organization.

Name:	JUDGE JEFF R. BRANICK
Title:	COUNTY JUDGE
Signature:	
Date:	11/20/17
Under the authority of Ordinance or Resolution Number (if applicable)	

Authorized to Electronically Sign Grant Agreements and Amendments
List Subgrantee Administrators who have complete authority to enter into an agreement on behalf of the organization.

	Print Name of Subgrantee Administrator in TxDOT Traffic Safety eGrants	Title
1.	TRISH MOLFINO	SHERIFF DEPARTMENT STEP COORDINATOR
2.	PATRICK SWAIN	COUNTY AUDITOR
3.		

FOR REVIEW ONLY - NOT A LEGAL DOCUMENT

TEXAS TRAFFIC SAFETY PROGRAM GRANT AGREEMENT

The signatory of the Subgrantee hereby represents and warrants that she/he is an officer of the organization for which she/he has executed this agreement and that she/he has full and complete authority to enter into this agreement on behalf of the organization.

Subgrantee Signature

By checking this box, I agree to use electronic signatures. Furthermore, I confirm that I have signature authority to execute this document and it is an electronic representation of my signature for all purposes when I use it on documents, including legally binding contracts—just the same as a pen-and-paper signature.

Name:

Title:

Date:

TxDOT Signature

By checking this box, I agree to use electronic signatures. Furthermore, I confirm that I have signature authority to execute this document and it is an electronic representation of my signature for all purposes when I use it on documents, including legally binding contracts—just the same as a pen-and-paper signature.

Name:

Title:

Date:

Texas Traffic Safety Program

GRANT AGREEMENT GENERAL TERMS AND CONDITIONS

Definitions: For purposes of these Terms and Conditions, the "Department" is also known as the "State" and the "prospective primary participant" and the "Subgrantee" is also known as the "Subrecipient" and "prospective lower tier participant"

ARTICLE 1. COMPLIANCE WITH LAWS

The Subgrantee shall comply with all federal, state, and local laws, statutes, codes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this agreement, including, without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, nondiscrimination laws and regulations, and licensing laws and regulations. When required, the Subgrantee shall furnish the Department with satisfactory proof of compliance.

ARTICLE 2. STANDARD ASSURANCES

The Subgrantee assures and certifies that it will comply with the regulations, policies, guidelines, and requirements, including 2 CFR, Part 200; and the Department's Traffic Safety Program Manual, as they relate to the application, acceptance, and use of federal or state funds for this project. Also, the Subgrantee assures and certifies that:

A. It possesses legal authority to apply for the grant; and that a resolution, motion, or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained in the application, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide any additional information that may be required.

B. It and its subcontractors will comply with Title VI of the Civil Rights Act of 1964 (Public Law 88-352), as amended, and in accordance with that Act, no person shall discriminate, on the grounds of race, color, sex, national origin, age, religion, or disability.

C. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970, as amended; 42 USC (United States Code) §§4601 et seq.; and United States Department of Transportation (USDOT) regulations, "Uniform Relocation and Real Property Acquisition for Federal and Federally Assisted Programs," 49 CFR, Part 24, which provide for fair and equitable treatment of persons displaced as a result of federal and federally assisted programs.

D. It will comply with political activity (Hatch Act) (applies to subrecipients as well as States). The State will comply with provisions of the Hatch Act (5 U.S.C. 1501-1508) which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

E. It will comply with the federal Fair Labor Standards Act's minimum wage and overtime requirements for employees performing project work.

F. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

G. It will give the Department the access to and the right to examine all records, books, papers, or documents related to this Grant Agreement.

H. It will comply with all requirements imposed by the Department concerning special requirements of law, program requirements, and other administrative requirements.

I. It recognizes that many federal and state laws imposing environmental and resource conservation requirements may apply to this Grant Agreement. Some, but not all, of the major federal laws that may affect the project include: the National Environmental Policy Act of 1969, as amended, 42 USC §§4321 et seq.; the Clean Air Act, as amended, 42 USC §§7401 et seq. and sections of 29 USC; the Federal Water Pollution Control Act, as amended, 33 USC §§1251 et seq.; the Resource Conservation and Recovery Act, as amended, 42 USC §§6901 et seq.; and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 USC §§9601 et seq. The Subgrantee also recognizes that the U.S. Environmental Protection Agency, USDOT, and other federal agencies have issued, and in the future are expected to issue, regulations, guidelines, standards, orders, directives, or other requirements that may affect this Project. Thus, it agrees to comply, and assures the compliance of each contractor and each subcontractor, with any federal requirements that the federal government may now or in the future promulgate.

J. It will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973, 42 USC §4012a(a). Section 102(a) requires, on and after March 2, 1975, the purchase of flood insurance in communities where that insurance is available as a condition for the receipt of any federal financial assistance for construction or acquisition purposes for use in any area that has been identified by the Secretary of the Department of Housing and Urban Development as an area having special flood hazards. The phrase "federal financial assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any form of direct or indirect federal assistance.

K. It will assist the Department in its compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (16 USC 470 et seq.), Executive Order 11593, and the Antiquities Code of Texas (National Resources Code, Chapter 191).

L. It will comply with Chapter 573 of the Texas Government Code by ensuring that no officer, employee, or member of the Subgrantee's governing board or the Subgrantee's subcontractors shall vote or confirm the employment of any person related within the second degree of affinity or third degree by consanguinity to any member of the governing body or to any other officer or employee authorized to employ or supervise that person. This prohibition shall not apply to the employment of a person described in Section 573.062 of the Texas Government Code.

M. It will ensure that all information collected, assembled, or maintained by the applicant relative to this project shall be available to the public during normal business hours in compliance with Chapter 552 of the Texas Government Code, unless otherwise expressly provided by law.

N. If applicable, it will comply with Chapter 551 of the Texas Government Code, which requires all regular, special, or called meetings of governmental bodies to be open to the public, except as otherwise provided by law or specifically permitted in the Texas Constitution.

ARTICLE 3. COMPENSATION

A. The method of payment for this agreement will be based on actual costs incurred up to and not to exceed the limits specified in the Project Budget. The amount included in a Project Budget category will be deemed to be an estimate only and a higher amount can be reimbursed, subject to the conditions specified in paragraph B of this Article. If the Project Budget specifies that costs are based on a specific rate, per-unit cost, or other method of payment, reimbursement will be based on the specified method.

B. All payments will be made in accordance with the Project Budget.

1. The Subgrantee's expenditures may overrun a budget category (I, II, or III) in the approved Project Budget without a grant (budget) amendment, as long as the overrun does not exceed a total of five (5) percent of the maximum amount eligible for reimbursement (TxDOT) in the attached Project Budget for the current fiscal year. This overrun must be off-set by an equivalent underrun elsewhere in the Project Budget.

2. If the overrun is five (5) percent or less, the Subgrantee must provide written notification to the Department, through the TxDOT Electronic Grants Management System (eGrants), prior to the Request for Reimbursement being approved. The notification must indicate the amount, the percent over, and the specific reason(s) for the overrun.

3. Any overrun of more than five (5) percent of the amount eligible for reimbursement (TxDOT) in the attached Project Budget requires an amendment of this Grant Agreement.

4. The maximum amount eligible for reimbursement shall not be increased above the Grand Total TxDOT Amount in the approved Project Budget, unless this Grant Agreement is amended, as described in Article 5 of this agreement.

5. For Selective Traffic Enforcement Program (STEP) grants only: In the Project Budget, Subgrantees are not allowed to use underrun funds from the TxDOT amount of (100) Salaries, Subcategories A, "Enforcement," or B, "PI&E Activities," to exceed the TxDOT amount listed in Subcategory C, "Other." Also, Subgrantees are not allowed to use underrun funds from the TxDOT amount of (100) Salaries, Subcategories A, "Enforcement," or C, "Other," to exceed the TxDOT amount listed in Subcategory B, "PI&E Activities." The TxDOT amount for Subcategory B, "PI&E Activities," or C, "Other," can only be exceeded within the five (5) percent flexibility, with underrun funds from Budget Categories II or III.

C. To be eligible for reimbursement under this agreement, a cost must be incurred in accordance with the Project Budget, within the time frame specified in the Grant Period of this Grant Agreement, attributable to work covered by this agreement, and which has been completed in a manner satisfactory and acceptable to the Department.

D. Federal or TxDOT funds cannot supplant (replace) funds from any other sources. The term "supplanting," refers to the use of federal or TxDOT funds to support personnel or an activity already supported by local or state funds.

E. Payment of costs incurred under this agreement is further governed by the cost principles outlined in 2 CFR Part 200.

F. The Subgrantee agrees to submit monthly Requests for Reimbursement, as designated in this Grant Agreement, within thirty (30) days after the end of the billing period. The Request for Reimbursement and appropriate supporting documentation must be submitted through eGrants.

G. The Subgrantee agrees to submit the final Request for Reimbursement under this agreement within forty-five (45) days of the end of the grant period.

H. Payments are contingent upon the availability of appropriated funds.

I. Project agreements supported with federal or TxDOT funds are limited to the length of this Grant Period specified in this Grant Agreement. If the Department determines that the project has demonstrated merit or has potential long-range benefits, the Subgrantee may apply for funding assistance beyond the initial agreement period.

Preference for funding will be given to projects based on (1) proposed cost sharing and (2) demonstrated performance history.

ARTICLE 4. LIMITATION OF LIABILITY

Payment of costs incurred under this agreement is contingent upon the availability of funds. If at any time during this Grant Period, the Department determines that there is insufficient funding to continue the project, the Department shall notify the Subgrantee, giving notice of intent to terminate this agreement, as specified in Article 11 of this agreement. If at the end of a federal fiscal year, the Department determines that there is sufficient funding and performance to continue the project, the Department may notify the Subgrantee to continue this agreement.

ARTICLE 5. AMENDMENTS

This agreement may be amended prior to its expiration by mutual written consent of both parties, utilizing the Grant Agreement Amendment in eGrants. Any amendment must be executed by the parties within the Grant Period, as specified in this Grant Agreement.

ARTICLE 6. ADDITIONAL WORK AND CHANGES IN WORK

A. If the Subgrantee is of the opinion that any assigned work is beyond the scope of this agreement and constitutes additional work, the Subgrantee shall promptly notify the Department in writing through eGrants. If the Department finds that such work does constitute additional work, the Department shall advise the Subgrantee and a written amendment to this agreement will be executed according to Article 5, Amendments, to provide

compensation for doing this work on the same basis as the original work. If performance of the additional work will cause the maximum amount payable to be exceeded, the work will not be performed before a written grant amendment is executed.

B. If the Subgrantee has submitted work in accordance with the terms of this agreement but the Department requests changes to the completed work or parts of the work which involve changes to the original scope of services or character of work under this agreement, the Subgrantee shall make those revisions as requested and directed by the Department. This will be considered as additional work and will be paid for as specified in this Article.

C. If the Subgrantee submits work that does not comply with the terms of this agreement, the Department shall instruct the Subgrantee to make any revisions that are necessary to bring the work into compliance with this agreement. No additional compensation shall be paid for this work.

D. The Subgrantee shall make revisions to the work authorized in this agreement that are necessary to correct errors or omissions, when required to do so by the Department. No additional compensation shall be paid for this work.

E. The Department shall not be responsible for actions by the Subgrantee or any costs incurred by the Subgrantee relating to additional work not directly associated with or prior to the execution of an amendment.

ARTICLE 7. REPORTING AND MONITORING

A. Not later than thirty (30) days after the end of each reporting period, the Subgrantee shall submit a performance report through eGrants. Reporting periods vary by project duration and are defined as follows:

1. For short term projects, the reporting period is the duration of the project. Subgrantee shall submit a performance report within 30 days of project completion.

2. For longer projects, the reporting period is monthly. Subgrantee shall submit a performance report within 30 days of the completion of each project month and within 30 days of project completion.

3. For Selective Traffic Enforcement Program (STEP) Wave projects, the reporting period is each billing cycle. Subgrantee shall submit a performance report within 30 days of the completion of each billing cycle.

B. The performance report will include, as a minimum: (1) a comparison of actual accomplishments to the objectives established for the period, (2) reasons why established objectives and performance measures were not met, if appropriate, and (3) other pertinent information, including, when appropriate, an analysis and explanation of cost underruns, overruns, or high unit costs.

C. The Subgrantee shall promptly advise the Department in writing, through eGrants, of events that will have a significant impact upon this agreement, including:

1. Problems, delays, or adverse conditions, including a change of project director or other changes in Subgrantee personnel, that will materially affect the ability to attain objectives and performance measures, prevent the meeting of time schedules and objectives, or preclude the attainment of project objectives or performance measures by the established time periods. This disclosure shall be accompanied by a statement of the action taken or contemplated and any Department or federal assistance needed to resolve the situation.

2. Favorable developments or events that enable meeting time schedules and objectives sooner than anticipated or achieving greater performance measure output than originally projected.

D. The Subgrantee shall submit the Final Performance Report through eGrants within thirty (30) days after completion of the grant.

ARTICLE 8. RECORDS

The Subgrantee agrees to maintain all reports, documents, papers, accounting records, books, and other evidence pertaining to costs incurred and work performed under this agreement (called the "Records"), and shall make the Records available at its office for the time period authorized within the Grant Period, as specified in this Grant Agreement. The Subgrantee further agrees to retain the Records for four (4) years from the date of final

payment under this agreement, until completion of all audits, or until pending litigation has been completely and fully resolved, whichever occurs last.

Duly authorized representatives of the Department, the USDOT, the Office of the Inspector General, Texas State Auditor, and the Comptroller General shall have access to the Records. This right of access is not limited to the four (4) year period but shall last as long as the Records are retained.

ARTICLE 9. INDEMNIFICATION

A. To the extent permitted by law, the Subgrantee, if other than a government entity, shall indemnify, hold, and save harmless the Department and its officers and employees from all claims and liability due to the acts or omissions of the Subgrantee, its agents, or employees. The Subgrantee also agrees, to the extent permitted by law, to indemnify, hold, and save harmless the Department from any and all expenses, including but not limited to attorney fees, all court costs and awards for damages incurred by the Department in litigation or otherwise resisting claims or liabilities as a result of any activities of the Subgrantee, its agents, or employees.

B. To the extent permitted by law, the Subgrantee, if other than a government entity, agrees to protect, indemnify, and save harmless the Department from and against all claims, demands, and causes of action of every kind and character brought by any employee of the Subgrantee against the Department due to personal injuries to or death of any employee resulting from any alleged negligent act, by either commission or omission on the part of the Subgrantee.

C. If the Subgrantee is a government entity, both parties to this agreement agree that no party is an agent, servant, or employee of the other party and each party agrees it is responsible for its individual acts and deeds, as well as the acts and deeds of its contractors, employees, representatives, and agents.

ARTICLE 10. DISPUTES AND REMEDIES

This agreement supersedes any prior oral or written agreements. If a conflict arises between this agreement and the Traffic Safety Program Manual, this agreement shall govern. The Subgrantee shall be responsible for the settlement of all contractual and administrative issues arising out of procurement made by the Subgrantee in support of work under this agreement. Disputes concerning performance or payment shall be submitted to the Department for settlement, with the Executive Director or his or her designee acting as final referee.

ARTICLE 11. TERMINATION

A. This agreement shall remain in effect until the Subgrantee has satisfactorily completed all services and obligations described in this agreement and these have been accepted by the Department, unless:

1. This agreement is terminated in writing with the mutual consent of both parties; or

2. There is a written thirty (30) day notice by either party; or

3. The Department determines that the performance of the project is not in the best interest of the Department and informs the Subgrantee that the project is terminated immediately.

B. The Department shall compensate the Subgrantee for only those eligible expenses incurred during the Grant Period specified in this Grant Agreement that are directly attributable to the completed portion of the work covered by this agreement, provided that the work has been completed in a manner satisfactory and acceptable to the Department. The Subgrantee shall not incur nor be reimbursed for any new obligations after the effective date of termination.

ARTICLE 12. INSPECTION OF WORK

A. The Department and, when federal funds are involved, the USDOT, or any of their authorized representatives, have the right at all reasonable times to inspect or otherwise evaluate the work performed or being performed under this agreement and the premises in which it is being performed.

B. If any inspection or evaluation is made on the premises of the Subgrantee or its subcontractor, the Subgrantee shall provide and require its subcontractor to provide all reasonable facilities and assistance for the safety and

convenience of the inspectors in the performance of their duties. All inspections and evaluations shall be performed in a manner that will not unduly delay the work.

ARTICLE 13. AUDIT

The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under this agreement or indirectly through a subcontract under this agreement. Acceptance of funds directly under this agreement or indirectly through a subcontract under this agreement acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

ARTICLE 14. SUBCONTRACTS

A subcontract in excess of $25,000 may not be executed by the Subgrantee without prior written concurrence by the Department. Subcontracts in excess of $25,000 shall contain all applicable terms and conditions of this agreement. No subcontract will relieve the Subgrantee of its responsibility under this agreement.

ARTICLE 15. GRATUITIES

A. Texas Transportation Commission policy mandates that employees of the Department shall not accept any benefit, gift, or favor from any person doing business with or who, reasonably speaking, may do business with the Department under this agreement. The only exceptions allowed are ordinary business lunches and items that have received the advanced written approval of the Department's Executive Director.

B. Any person doing business with or who reasonably speaking may do business with the Department under this agreement may not make any offer of benefits, gifts, or favors to Department employees, except as mentioned here above. Failure on the part of the Subgrantee to adhere to this policy may result in termination of this agreement.

ARTICLE 16. NONCOLLUSION

The Subgrantee warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Subgrantee, to solicit or secure this agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon or resulting from the award or making of this agreement. If the Subgrantee breaches or violates this warranty, the Department shall have the right to annul this agreement without liability or, in its discretion, to deduct from the agreement price or consideration, or otherwise recover the full amount of such fee, commission, brokerage fee, contingent fee, or gift.

ARTICLE 17. CONFLICT OF INTEREST

The Subgrantee represents that it or its employees have no conflict of interest that would in any way interfere with its or its employees' performance or which in any way conflicts with the interests of the Department. The Subgrantee shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the Department's interests.

ARTICLE 18. SUBGRANTEE'S RESOURCES

A. The Subgrantee certifies that it presently has adequate qualified personnel in its employment to perform the work required under this agreement, or will be able to obtain such personnel from sources other than the Department.

B. All employees of the Subgrantee shall have the knowledge and experience that will enable them to perform the duties assigned to them. Any employee of the Subgrantee who, in the opinion of the Department, is incompetent or whose conduct becomes detrimental to the work, shall immediately be removed from association with the project.

C. Unless otherwise specified, the Subgrantee shall furnish all equipment, materials, supplies, and other

resources required to perform the work.

ARTICLE 19. PROCUREMENT AND PROPERTY MANAGEMENT

The Subgrantee shall establish and administer a system to procure, control, protect, preserve, use, maintain, and dispose of any property furnished to it by the Department or purchased pursuant to this agreement in accordance with its own procurement and property management procedures, provided that the procedures are not in conflict with (1) the Department's procurement and property management standards and (2) the federal procurement and property management standards provided by 2 CFR §§ 200.310-.316, 200.318-.324.

ARTICLE 20. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Upon completion or termination of this Grant Agreement, whether for cause or at the convenience of the parties, all finished or unfinished documents, data, studies, surveys, reports, maps, drawings, models, photographs, etc. prepared by the Subgrantee, and equipment and supplies purchased with grant funds shall, at the option of the Department, become the property of the Department. All sketches, photographs, calculations, and other data prepared under this agreement shall be made available, upon request, to the Department without restriction or limitation of their further use.

A. Intellectual property consists of copyrights, patents, and any other form of intellectual property rights covering any databases, software, inventions, training manuals, systems design, or other proprietary information in any form or medium.

B. All rights to Department. The Department shall own all of the rights (including copyrights, copyright applications, copyright renewals, and copyright extensions), title and interests in and to all data, and other information developed under this contract and versions thereof unless otherwise agreed to in writing that there will be joint ownership.

C. All rights to Subgrantee. Classes and materials initially developed by the Subgrantee without any type of funding or resource assistance from the Department remain the Subgrantee's intellectual property. For these classes and materials, the Department payment is limited to payment for attendance at classes.

ARTICLE 21. SUCCESSORS AND ASSIGNS

The Department and the Subgrantee each binds itself, its successors, executors, assigns, and administrators to the other party to this agreement and to the successors, executors, assigns, and administrators of the other party in respect to all covenants of this agreement. The Subgrantee shall not assign, sublet, or transfer interest and obligations in this agreement without written consent of the Department through eGrants.

ARTICLE 22. CIVIL RIGHTS COMPLIANCE

A. Compliance with regulations: The Subgrantee shall comply with the regulations relative to nondiscrimination in federally-assisted programs of the United States Department of Transportation (USDOT): 49 CFR, Part 21; 23 CFR, Part 200; and 41 CFR, Parts 60-74, as they may be amended periodically (called the "Regulations"). The Subgrantee agrees to comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 and as supplemented by the U.S. Department of Labor regulations (41 CFR, Part 60).

B. Nondiscrimination: (applies to subrecipients as well as States) The State highway safety agency and Subgrantee will comply with all Federal statutes and implementing regulations relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), which prohibits discrimination on the basis of race, color or national origin (and 49 CFR Part 21); (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681-1683 and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and the Americans with Disabilities Act of 1990 (Pub. L. 101-336), as amended (42 U.S.C. 12101, et seq.), which prohibits discrimination on the basis of disabilities (and 49 CFR Part 27); (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (e) the Civil Rights Restoration Act of 1987 (Pub. L. 100-259), which requires Federal-aid recipients and all subrecipients to prevent discrimination and ensure nondiscrimination in all of their programs and activities; (f) the Drug Abuse Office and Treatment Act of 1972 (Pub. L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (Pub. L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (h) Sections 523 and 527 of the Public Health Service Act of 1912, as amended (42 U.S.C. 290dd-3 and 290ee-3), relating to

confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968, as amended (42 U.S.C. 3601, et seq.), relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (k) the requirements of any other nondiscrimination statute(s) which may apply to the application.

C. Solicitations for subcontracts, including procurement of materials and equipment: In all solicitations either by competitive bidding or negotiation made by the Subgrantee for work to be performed under a subcontract, including procurements of materials and leases of equipment, each potential subcontractor or supplier shall be notified by the Subgrantee of the Subgrantee's obligations under this agreement and the regulations relative to nondiscrimination on the grounds of race, color, sex, national origin, age, religion, or disability.

D. Information and reports: The Subgrantee shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department or the USDOT to be pertinent to ascertain compliance with the Regulations or directives. Where any information required of the Subgrantee is in the exclusive possession of another who fails or refuses to furnish this information, the Subgrantee shall certify that to the Department or the USDOT, whichever is appropriate, and shall set forth what efforts the Subgrantee has made to obtain the requested information.

E. Sanctions for noncompliance: In the event of the Subgrantee's noncompliance with the nondiscrimination provision of this agreement, the Department shall impose such sanctions as it or the USDOT may determine to be appropriate.

F. Incorporation of provisions: The Subgrantee shall include the provisions of paragraphs A. through E. in every subcontract, including procurements of materials and leases of equipment, unless exempt by the regulations or directives. The Subgrantee shall take any action with respect to any subcontract or procurement that the Department may direct as a means of enforcing those provisions, including sanctions for noncompliance. However, in the event a Subgrantee becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Subgrantee may request the Department to enter into litigation to protect the interests of the state; and in addition, the Subgrantee may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE 23. DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

A. The parties shall comply with the DBE Program requirements established in 49 CFR Part 26.

B. The Subgrantee shall adopt, in its totality, the Department's federally approved DBE program.

C. The Subgrantee shall set an appropriate DBE goal consistent with the Department's DBE guidelines and in consideration of the local market, project size, and nature of the goods or services to be acquired. The Subgrantee shall have final decision- making authority regarding the DBE goal and shall be responsible for documenting its actions.

D. The Subgrantee shall follow all other parts of the Department's DBE program referenced in TxDOT Form 2395, Memorandum of Understanding Regarding the Adoption of the Texas Department of Transportation's Federally-Approved Disadvantaged Business Enterprise by Entity and attachments found at web address http://www.txdot.gov/business/partnerships/dbe.html

E. The Subgrantee shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any USDOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The Subgrantee shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure non- discrimination in award and administration of USDOT-assisted contracts. The Department's DBE program, as required by 49 CFR Part 26 and as approved by USDOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the Subgrantee of its failure to carry out its approved program, the Department may impose sanctions as provided for under 49 CFR Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 USC 1001 and the Program Fraud Civil Remedies Act of 1986 (31 USC 3801 et seq.).

F. Each contract the Subgrantee signs with a contractor (and each subcontract the prime contractor signs with a sub-contractor) must include the following assurance: The contractor, sub-recipient, or sub- contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor

shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this agreement, which may result in the termination of this agreement or such other remedy as the recipient deems appropriate.

ARTICLE 24. CERTIFICATION REGARDING DEBARMENT AND SUSPENSION (applies to subrecipients as well as States)

Instructions for Primary Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and coverage sections of 49 CFR Part 29. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification , in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded 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 record, making false statements, 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 of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(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.

(2) Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.

5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

ARTICLE 25. CERTIFICATION REGARDING FEDERAL LOBBYING (applies to subrecipients as well as States)

Certification for Contracts, Grants, Loans, and Cooperative Agreements

In executing this agreement, each signatory certifies to the best of his or her knowledge and belief, that:

1. 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 any 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.

2. 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.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grant, 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 section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

ARTICLE 26. CHILD SUPPORT CERTIFICATION

Under Section 231.006, Texas Family Code, the Subgrantee certifies that the individual or business entity named in this agreement is not ineligible to receive the specified grant, loan, or payment and acknowledges that this agreement may be terminated and payment may be withheld if this certification is inaccurate. If the above certification is shown to be false, the Subgrantee is liable to the state for attorney's fees and any other damages provided by law or the agreement. A child support obligor or business entity ineligible to receive payments because of a payment delinquency of more than thirty (30) days remains ineligible until: all arrearages have been paid; the obligor is in compliance with a written repayment agreement or court order as to any existing delinquency; or the court of continuing jurisdiction over the child support order has granted the obligor an exemption from Subsection (a) of Section 231.006, Texas Family Code, as part of a court-supervised effort to improve earnings and child support payments.

ARTICLE 27. FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT REQUIREMENTS

A. Any recipient of funds under this agreement agrees to comply with the Federal Funding Accountability and Transparency Act and implementing regulations at 2 CFR Part 170, including Appendix A. This agreement is subject to the following award terms: http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf and http://edocket.access.gpo.gov/2010/pdf/2010-22706.pdf.

B. The Subgrantee agrees that it shall:

1. Obtain and provide to the State a System for Award Management (SAM) number (48 CFR subpt. 4.11) if this award provides for more than $25,000 in Federal funding. The SAM number may be obtained by visiting the SAM web-site at: https://www.sam.gov

2. Obtain and provide to the State a Data Universal Numbering System (DUNS) number, a unique nine-character number that allows the Federal government to track the distribution of federal money. The DUNS number may be requested free of charge for all businesses and entities required to do so by visiting the Dun & Bradstreet (D&B) on-line registration website http://fedgov.dnb.com/webform; and

3. Report the total compensation and names of its top five (5) executives to the State if:
i. More than 80% of annual gross revenues are from the Federal government, and those revenues are greater than $25,000,000; and

ii. The compensation information is not already available through reporting to the U.S. Securities and Exchange Commission.

ARTICLE 28. SINGLE AUDIT REPORT

A. The parties shall comply with the requirements of the Single Audit Act of 1984, P.L. 98-502, ensuring that the single audit report includes the coverage stipulated in 2 CFR Part 200.

B. If threshold expenditures of $750,000 or more are met during the Subgrantee's fiscal year, the Subgrantee must submit a Single Audit Report and Management Letter (if applicable) to TxDOT's Audit Office, 125 East 11th Street, Austin, TX 78701 or contact TxDOT's Audit Office at singleaudits@txdot.gov

C. If expenditures are less than $750,000 during the Subgrantee's fiscal year, the Subgrantee must submit a statement to TxDOT's Audit Office as follows: "We did not meet the $750,000 expenditure threshold and therefore, are not required to have a single audit performed for FY_____."

D. For each year the project remains open for federal funding expenditures, the Subgrantee will be responsible for filing a report or statement as described above. The required annual filing shall extend throughout the life of the agreement, unless otherwise amended or the project has been formally closed out and no charges have been incurred within the current fiscal year.

ARTICLE 29. BUY AMERICA ACT (applies to subrecipients as well as States)

The State and Subgrantee will comply with the provisions of the Buy America Act (49 U.S.C. 5323(j)), which contains the following requirements:

Only steel, iron and manufactured products produced in the United States may be purchased with Federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for the purchase of non- domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

ARTICLE 30. RESTRICTION ON STATE LOBBYING (applies to subrecipients as well as States)

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or

local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

ARTICLE 31. NONGOVERNMENTAL ENTITY'S PUBLIC INFORMATION [This article applies only to non-profit entities.]

The Subgrantee is required to make any information created or exchanged with the Department pursuant to this Grant Agreement and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the Department. [SB-1368, 83rd Texas Legislature, Regular Session, Effective 9/1/13]

ARTICLE 32. PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE (applies to subrecipients as well as States)

The State and each Subgrantee will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

ARTICLE 33. INTERNAL ETHICS AND COMPLIANCE PROGRAM

Subgrantee shall comply with Title 43 Texas Administrative Code §25.906(b). Subgrantee certifies it has adopted an internal ethics and compliance program that satisfies the requirements of Title 43 Texas Administrative Code §10.51 (relating to Internal Ethics and Compliance Program). Subgrantee shall enforce compliance with that program.

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RESPONSIBILITIES OF THE SUBGRANTEE

A. Carry out all performance measures established in the grant, including fulfilling the law enforcement objectives by implementing the Operational Plan contained in this Grant Agreement.

B. Submit all required reports to the Department (TxDOT) fully completed with the most current information, and within the required times, as defined in Article 3 and Article 7 of the General Terms and Conditions of this Grant Agreement. This includes reporting to the Department on progress, achievements, and problems in monthly Performance Reports and attaching necessary source documentation to support all costs claimed in Requests for Reimbursement (RFR).

C. Attend grant related training as requested by the Department.

D. Attend meetings according to the following:
1. The Department will arrange for meetings with the Subgrantee to present status of activities and to discuss problems and the schedule for the following quarter's work.
2. The project director or other appropriate qualified persons will be available to represent the Subgrantee at meetings requested by the Department.

E. Support grant enforcement efforts with public information and education (PI&E) activities. Salaries being claimed for PI&E activities must be included in the budget.

F. When applicable, all newly developed PI&E materials must be submitted to the Department for written approval, through the TxDOT Electronic Grants Management System (eGrants) system messaging, prior to final production. Refer to the Traffic Safety Program Manual regarding PI&E procedures.

G. For out of state travel expenses to be reimbursable, the Subgrantee must have obtained the written approval of the Department, through eGrants system messaging, prior to the beginning of the trip. Grant approval does not satisfy this requirement.

H. Maintain verification that all expenses, including wages or salaries, for which reimbursement is requested is for work exclusively related to this project.

I. Ensure that this grant will in no way supplant (replace) funds from other sources. Supplanting refers to the use of federal funds to support personnel or any activity already supported by local or state funds.

J. Ensure that each officer working on the STEP project will complete an officer's daily report form. The form should include at a minimum: name, date, badge or identification number, type of grant worked, grant site number, mileage (including starting and ending mileage), hours worked, type of citation issued or arrest made, officer and supervisor signatures.

K. All STEP agencies must provide the following provision in all daily activity report forms: "I understand that this information is being submitted to support a claim against a federally-funded grant program. False statements on this form may be prosecutable under 18 USC 1001. This information on this form is true, correct, and complete to the best of my knowledge and ability."

L. Ensure that no officer above the rank of Lieutenant (or equivalent title) will be reimbursed for enforcement duty, unless the Subgrantee received specific written authorization from the Department, through eGrants system messaging, prior to incurring costs.

M. Subgrantee may work additional STEP enforcement hours on holidays or special events not covered under the Operational Plan. However, additional work must be approved in writing by the Department, through eGrants system messaging, prior to enforcement. Additional hours must be reported in the Performance Report for the time period for which the additional hours were worked.

N. If an officer makes a STEP-related arrest during the shift, but does not complete the arrest before the shift is scheduled to end, the officer can continue working under the grant to complete that arrest.

O. Subgrantees with a traffic unit will utilize traffic personnel for this grant, unless such personnel are unavailable for assignment.

P. Prior to conducting speed enforcement, the Subgrantee must select and survey enforcement sites that comply with existing state mandated speed limits in accordance with the Texas Transportation Code, Sections 545.352 through 545.356.

Q. Officers assigned to speed sites should be trained in the use of radar or laser speed measurement devices.

R. The Subgrantee should have a safety belt use policy. If the Subgrantee does not have a safety belt use policy in place, a policy should be implemented, and a copy maintained for verification during the grant year.

S. Officers working DWI enforcement must be trained in the National Highway Traffic Safety Administration/International Association of Chiefs of Police Standardized Field Sobriety Testing (SFST). In the case of a first year subgrantee, the officers must be trained, or scheduled to be SFST trained, by the end of the grant year. For second or subsequent year grants, all officers working DWI enforcement must be SFST trained.

T. The Subgrantee should have a procedure in place for contacting and using drug recognition experts (DREs) when necessary.

U. The Subgrantee is encouraged to use the DWI On-line Reporting System available through the Buckle Up Texas Web site at www.buckleuptexas.com.

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RESPONSIBILITIES OF THE DEPARTMENT

A. Monitor the Subgrantee's compliance with the performance obligations and fiscal requirements of this Grant Agreement using appropriate and necessary monitoring and inspections, including but not limited to:

1. review of periodic reports

2. physical inspection of project records and supporting documentation

3. telephone conversations

4. e-mails and letters

5. quarterly review meetings

6. eGrants

B. Provide program management and technical assistance.

C. Attend appropriate meetings.

D. Reimburse the Subgrantee for all eligible costs as defined in the project budget. Requests for Reimbursement will be processed up to the maximum amount payable as indicated in the project budget.

E. Perform an administrative review of the project at the close of the grant period to:

1. Ascertain whether or not the project objectives were met

2. Review project accomplishments (performance measures completed, targets achieved)

3. Account for any approved Program Income earned and expended

4. Identify exemplary performance or best practices

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PROGRAM ELEMENT SELECTION

YEAR LONG

X	DWI	DWI: Driving While Intoxicated
X	Speed	Speed: Speed Enforcement
X	OP	OP: Occupant Protection (Safety Belt and Child Safety Seat)
	ITC	ITC: Intersection Traffic Control
	DD	DD: Distracted Driving

WAVE

DWI	Jurisdiction wide (DWI enforcement effort must be focused at locations where there is an over-representation of alcohol-related crashes and/or DWI arrests)
Speed	Jurisdiction wide (Speed enforcement should be focused on areas where there is at least a 50% noncompliance with the posted speed limits and/or a higher number of speed-related crashes)
OP	Jurisdiction wide
DD	Jurisdiction wide

CMV

Speed,OP&HMV	CMV: Commercial Motor Vehicle; HMV: Hazardous Moving Violations

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GOALS AND STRATEGIES

Goal:	To increase effective enforcement and adjudication of traffic safety-related laws to reduce crashes, fatalities, and injuries.
Strategies:	Increase and sustain high visibility enforcement of traffic safety-related laws.
	Increase public education and information campaigns regarding enforcement activities.
Goal:	To reduce the number of alcohol impaired and driving under the influence of alcohol and other drug-related crashes, injuries, and fatalities.
Strategy:	Increase and sustain high visibility enforcement of DWI laws.
Goal:	To increase occupant restraint use in all passenger vehicles and trucks.
Strategy:	Increase and sustain high visibility enforcement of occupant protection laws.
Goal:	To reduce the number of speed-related crashes, injuries, and fatalities.
Strategy:	Increase and sustain high visibility enforcement of speed-related laws.
Goal:	To reduce Distracted Driving motor vehicle crashes, injuries, and fatalities.
Strategies:	Increase and sustain high visibility enforcement of state and local ordinances on celluar and texting devices.
	Increase public information and education on Distracted Driving related traffic issues.

[X] I agree to the above goals and strategies.

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BASELINE INFORMATION

Baseline Year (12 months) From 9/1/2015 to 9/30/2016

Baseline Measure	Baseline Number
Number of Driving While Intoxicated (DWI) arrests	66
Number of Driving Under Influence (DUI) of Alcohol by Minor Arrests/Citations	1
Number of speed citations	333
Number of safety belt citations	1
Number of child safety seat citations	2
Number of Distracted Driving Citations	

	Baseline Number	Month/Year of Survey
Percentage of speed compliance	42 %	09/2016
Percentage of safety belt usage	68 %	09/2016

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LAW ENFORCEMENT OBJECTIVE/PERFORMANCE MEASURE

Objective/Performance Measure	Target Number
1. Number and type citations/arrests to be issued under STEP	
a. Increase DWI arrests by	31
b. Increase DUI of Alcohol by Minor arrests/citations by	0
c. Increase speed citations by	631
d. Increase Safety Belt citations by	400
e. Increase Child Safety Belt citations by	21
f. Increase Distracted Driving citations by	
2. Proposed total number of traffic-related crashes	
a. Reduce the number of alcohol-related crashes to	105
b. Reduce the number of speed-related crashes to	77
3. Increase speed compliance	
a. Increase the Speed compliance rate to	51%
4. Increase safety belt usage	
a. Increase the Safety Belt usage rate among drivers and front seat passengers to	76%
5. Number of Enforcement Hours	723.5

Note: Nothing in this agreement shall be interpreted as a requirement, formal or informal, that a peace officer issue a specified or predetermined number of citations in pursuance of the Subgrantee's obligations hereunder. Department and Subgrantee acknowledge that Texas Transportation Code Section 720.002 prohibits using traffic-offense quotas and agree that nothing in this Agreement is establishing an illegal quota.

In addition to the STEP enforcement activities, the subgrantee must maintain baseline non-STEP funded citation and arrest activity due to the prohibition of supplanting.

Step Indicator	2.52

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PI&E OBJECTIVE/PERFORMANCE MEASURE

Objectives/Performance Measure	Target Number
Support Grant efforts with a public information and education (PI&E) program	
a. Conduct presentations	4
b. Conduct media exposures (e.g. news conferences, news releases, and interviews)	4
c. Conduct community events (e.g. health fairs, booths)	4
d. Produce the following number of public information and education materials	0
e. Number of public information and education materials distributed	350

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Operational Plan

Page Title: Operational Plan Pg#1

Site Number	Type (Speed, OP, ITC)	Site Description (include Miles Per Hour)	Survey Results (Compliance Percentage)	Enforcement Period (Days & Times)
1. countywide	DWI	Jefferson County Wide Jurisdiction	n/a%	Sunday through Saturday 8:00 pm to 6:00 am
2. countywide	OP	Jefferson County Wide Jurisdiction *(2016-2017) post OP enforcement surveys were used/uploaded for 2017-2018 STEP Grant proposal	n/a%	Sun-Sat / 24 hours daily
3. 1	Speed	South Pine Island Road: between U.S. Highway 90 & Brooks Road in Beaumont; having two varying speed zones. Approx 2.5 miles	15.5%	Sun-Sat / 24 hours daily
4. 1a	Speed	South Pine Island Road: between Brooks Rd & Walden Rd = 45 mph	18%	Sun-Sat / 24 hours daily
5. 1b	Speed	South Pine Island Road: between Walden Rd & U.S. Hwy 90 = 40 mph	13%	Sun-Sat / 24 hours daily
6. 2	Speed	FM Highway 365: In the Gilbert Woods; between the 24,000 block (approximately) in Fannett & the Port Arthur City Limits (@ Road Air Gully)in P.A. *numerous varying speed limits; approx. miles 17.5	29.6%	Sun-Sat / 24 hours daily

7. 2a	Speed	FM Highway 365: between the 24,000 block & Gator Country in Fannett = 60 mph	28%	Sun-Sat / 24 hours daily

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Operational Plan

Page Title: Operational Plan Pg#2

Site Number	Type (Speed, OP, ITC)	Site Description (include Miles Per Hour)	Survey Results (Compliance Percentage)	Enforcement Period (Days & Times)
1. 2b	Speed	FM Highway 365: between Gator Country to the 18,693 block (approximately) in Fannett = 55 mph	43%	Sun-Sat / 24 hours daily
2. 2c	Speed	FM Highway 365: between the 18,693 block (approximately) & the 17,066 block (approximately) in Fannett = 60 mph	30%	Sun-Sat / 24 hours daily
3. 2d	Speed	FM Highway 365: between the 17,066 block (approximately) in Fannett & the 14,076 block (approximately) in Labelle = 70 mph	45%	Sun-Sat / 24 hours daily
4. 2e	Speed	***FM Highway 365: between the 14,076 block (approximately) & the 12,390 block (approximately) in Labelle = 65 mph ***no survey conducted; this section is a very short distance w/a caution light	%	Sun-Sat / 24 hours daily
5. 2f	Speed	FM Highway 365: between the 12,390 block (approximately) in Labelle to the Port Arthur City Limits (@ Road Air Gully) in Port Arthur = 60 mph	2%	Sun-Sat / 24 hours daily
		Beauxart Garden Road: between U.S.		

6. 3	Speed	Hwy 69 & South Garden Road in Nederland = 30 mph. Approx 1.2 miles in length	10%	Sun-Sat / 24 hours daily
7. 4	Speed	Spurlock Road: between U.S. Highway 69 & Twin City Highway (Hwy 347) in Nederland = 30 mph. Approx 1.4 miles in length (with school zone)	10%	Sun-Sat / 24 hours daily

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Operational Plan

Page Title: Operational Plan Pg#3

Site Number	Type (Speed, OP, ITC)	Site Description (include Miles Per Hour)	Survey Results (Compliance Percentage)	Enforcement Period (Days & Times)
1. 5	Speed	U.S. Highway 90: between the China City Limit & the Beaumont City Limits @ Keith Road. (with school zone in China)	46%	Sun-Sat / 24 hours daily
2. 5a	Speed	U.S. Highway 90: between China City Limit to 401 Highway 90 (approximately) in China = 55 mph (with school zone)	16%	Sun-Sat / 24 hours daily
3. 5b	Speed	U.S. Highway 90: between 401 Highway 90 (approximately) & 333 Highway 90 (approximately) in China = 50 mph	12%	Sun-Sat / 24 hours daily
4. 5c	Speed	U.S. Highway 90: between (approximately) 333 Highway 90 in China to the Beaumont City limits (@ Keith Road) in Beaumont = 75 mph	48%	Sun-Sat / 24 hours daily
5. 6	Speed	U.S. Highway 105: between Major Drive in Beaumont to the Hardin County line in Bevil Oaks. approx. 5.3 (with school zone)	36.6%	Sun-Sat / 24 hours daily
6. 6a	Speed	U.S. Highway 105: between Major Drive & Keith Road in Beaumont = 55 mph (with Legacy Christian Academy School Zone = 35 mph)	35%	Sun-Sat / 24 hours daily

7. 6b	Speed	U.S. Highway 105: between Keith Road & (approximately) the 11,700 block of Highway 105 in Beaumont = 65 mph	44%	Sun-Sat / 24 hours daily

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Operational Plan

Page Title: Operational Plan Pg#4

Site Number	Type (Speed, OP, ITC)	Site Description (include Miles Per Hour)	Survey Results (Compliance Percentage)	Enforcement Period (Days & Times)
1. 6c	Speed	U.S. Highway 105: between the 11,700 block of Highway. 105 (approximately) & the Hardin County Line in Bevil Oaks = 60 mph	31%	Sun - Sat / 24 hours daily
2.			%	
3.			%	
4.			%	
5.			%	
6.			%	
7.			%	

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BUDGET SUMMARY

Budget Category		TxDOT	Match	Total
Category I - Labor Costs				
(100)	Salaries:	$36,998.05	$0	$36,998.05
(200)	Fringe Benefits:	$0	$9,194.02	$9,194.02
	Sub-Total:	$36,998.05	$9,194.02	$46,192.07
Category II - Other Direct Costs				
(300)	Travel:	$0	$1,000.80	$1,000.80
(400)	Equipment:	$0	$0	$0
(500)	Supplies:	$0	$0	$0
(600)	Contractual Services:	$0	$0	$0
(700)	Other Miscellaneous:	$0	$0	$0
	Sub-Total:	$0	$1,000.80	$1,000.80
Total Direct Costs:		$36,998.05	$10,194.82	$47,192.87
Category III - Indirect Costs				
(800)	Indirect Cost Rate:	$0	$0	$0
Summary				
	Total Labor Costs:	$36,998.05	$9,194.02	$46,192.07
	Total Direct Costs:	$0	$1,000.80	$1,000.80
	Total Indirect Costs:	$0	$0	$0
Grand Total		$36,998.05	$10,194.82	$47,192.87
	Fund Sources (Percent Share):	78.40%	21.60%	

Salary and cost rates will be based on the rates submitted by the Subgrantee in its grant application in Egrants.

JEFFERSON COUNTY, TEXAS

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS

YEAR ENDED SEPTEMBER 30, 2016

Federal Grantor/Pass-through Grantor/ Program Title	Federal CFDA Number	Grantor's ID Number	Federal Expenditures	Pass Through Expenditures
FEDERAL PROGRAMS				
U. S. Department of Agriculture				
Passed through the Texas Department of Agriculture				
Summer Food Service Program	10.559	123-1007	$ 1,146	$ -
Total Passed through the Texas Department of Agriculture			1,146	-
Total U. S. Department of Agriculture			1,146	-
U. S. Department of Housing and Urban Development				
Passed through the Texas General Land Office				
Community Development Block Grant/States Program - Ike	14.228	DRS-010219	394,244	-
Community Development Block Grant/States Program - Ike Round 2.2	14.228	DRS-220219	2,591,341	-
Community Development Block Grant/States Program - Katrina/Rita	14.228	16-272-000-9786	45,000	-
Total Passed through the Texas General Land Office			3,030,585	-
Passed through the Texas Department of Agriculture				
Cheek Step Sewer Improvement, Phase #4	14.228	TDCP-713250	3,000	-
Total Passed through the Texas Department of Agriculture			3,000	-
Total U. S. Department of Housing and Urban Development			3,033,585	-
U.S. Department of the Interior				
Passed through the U.S. Fish and Wildlife Service				
Coastal Impact Assistance	15.668	F16AF00129	150,494	-
Total Passed through the U.S. Fish and Wildlife Service			150,494	-
U. S. Department of Justice				
Passed through the City of Beaumont				
Edward Byrne Memorial Formula Grant Program	16.579	2014DJBX0530	3,124	-
Edward Byrne Memorial Formula Grant Program	16.579	2015DJBX1005	16,371	-
Total Passed through the City of Beaumont			19,495	-
Passed through the Office of the Governor, Criminal Justice Division				
Crime Victim Assistance - Crime Victim's Clearinghouse	16.575	21032-07	82,637	-
Juvenile Accountability Block Grants	16.540	28091-02	122,212	-
Violence Against Women Formula Grants	16.588	13466-19	7,104	-
Total Passed through the Office of the Governor, Criminal Justice Division			211,953	-
Direct Program				
State Criminal Alien Assistance Program (SCAAP)	16.606	2015APBX0654	20,214	-
Total Program 16.606			20,214	-
Total U. S. Department of Justice			251,662	-
U. S. Department of Transportation				
Construction of Taxiway D Reconstruction, Runway Safety Area Grading, RW 16/34 Rehabilitation, Design of Partial Reconstruction for RW 12/30, Taxiway E & F and and DBE/ACDBE Program Update	20.106	3-48-0018-030-2014	235,748	-
Reconstruct 1,000 feet of pavement from the 30 end of Runway	20.106	3-48-0018-031-2015	2,739,386	-
12-30 Design and Construction of Rehabilitation of Taxiway Delta (Phase III), Design Taxiway Delta (Phase IV), and Replacement of Rotating Beacon	20.106	3-48-0018-032-2016	27,900	-
Total Passed through Federal Aviation Administration			3,003,034	-

JEFFERSON COUNTY, TEXAS

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS

YEAR ENDED SEPTEMBER 30, 2016

Federal Grantor/Pass-through Grantor/ Program Title	Federal CFDA Number	Grantor's ID Number	Federal Expenditures	Pass Through Expenditures
U. S. Department of Transportation				
Passed through Texas Department of Transportation				
Selective Traffic Enforcement Program - Impaired Driver Mobilization	20.601	2016-Jefferson-S-IYG-0092	$ 35,490	$ -
Total Passed through Texas Department of Transportation			35,490	-
Total U. S. Department of Transportation			3,038,524	-
U. S. Department of Health and Human Services				
Passed through the Office of Attorney General				
Title IV-D Fees - Constable	93.563	N/A	56,885	-
Title IV-D Fees - District Clerk	93.563	N/A	249,930	-
Title IV-D Fees - Child Support Customer Service	93.563	N/A	1,522	-
Total Passed through the Office of Attorney General			308,337	-
Passed through Texas Department of Family & Protective Services				
Foster Care - Title IV-E Child Welfare Services	93.658	23939002	17,941	-
Foster Care - Title IV-E Legal Services	93.658	23939003	45,053	-
Total Passed through Texas Department of Family & Protective Services			62,994	-
Total U. S. Department of Health and Human Services			371,331	-
U. S. Department of Homeland Security				
Passed through the Texas Division of Emergency Management				
Homeland Security Grant Program - 2014 LETPA/LEAP	97.073	EMW-2014-22-00029	551	-
Total Program 97.073			551	-
Passed through the Texas Division of Emergency Management				
Emergency Management Performance Grant	97.042	16TX-EMPG-0389	59,244	-
Total Passed through the Texas Division of Emergency Management			59,244	-
Direct Programs				
2015 Port Security Grant	97.056	EMW2015PU00143	318,478	-
Passed through the Office of the Governor, Criminal Justice Division				
Homeland Security Grant Program - 2015 LETPA	97.067	29593-01	23,856	-
Total Passed through the Office of the Governor, Criminal Justice Division			23,856	-
Total U. S. Department of Homeland Security			402,129	-
Total Expenditures of Federal Awards			$ 7,248,871	$ -

JEFFERSON COUNTY, TEXAS

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS

YEAR ENDED SEPTEMBER 30, 2016

State Grantor/Pass-through Grantor/ Program Title	Grantor's ID Number	State Expenditures	Pass Through Expenditures
Texas Department of Motor Vehicles			
Motor Vehicle Salvage/Theft Reduction Program	608-16-1230100	$ 75,304	$ -
Total Department of Motor Vehicles		75,304	-
Texas Department of Transportation			
Routine Airport Maintenance Grant	M1620BMPT	50,000	-
County Transportation Infrastructure Fund Grant	N/A	185,882	-
Total Department of Transportation		235,882	-
Texas Department of Criminal Justice			
Family Treatment Drug Court	1869010	33,945	-
Family Treatment Drug Court	1869011	3,328	-
Drug Court	1604515	60,744	-
Total Department of Criminal Justice		98,017	-
Texas Indigent Defense Commission			
Indigent Defense Formula Grant FY 16	N/A	211,034	-
Total Indigent Defense Commission		211,034	-
Texas Commission on Law Enforcement			
Law Enforcement Officer Standards and Education	N/A	31,060	-
Total Texas Commission on Law Enforcement		31,060	-
Office of the Governor, Criminal Justice Division			
Violence Against Women Formula Grants	13466-18	65,879	-
Juvenile Accountability Block Grants	28091-03	775	-
Total Texas General Land Office		66,654	-
Texas Historical Commission			
Texas Historical Courthouse Preservation Program	CTH-JEFFERSON-08-2014	395,160	-
Total Texas Historical Commission		395,160	-
Texas Attorney General's Office			
Crime Victims Compensation Fund - Sexual Assault Exam (CVC)	N/A	14,130	-
Total Texas Attorney General's Office		14,130	-
Texas General Land Office			
Coastal Erosion Planning & Response Act	13-242-0000-7440	140,375	-
Total Texas General Land Office		140,375	-
Total Expenditures of State Awards		$ 1,267,616	$ -
Total Expenditures of Federal and State Awards		$ 8,516,487	$ -

NAME	AMOUNT	CHECK NO.	TOTAL
JURY FUND			
TRI-CITY COFFEE SERVICE	176.45	440346	
DAWN DONUTS	45.50	440457	
			221.95**
ROAD & BRIDGE PCT.#1			
RB EVERETT & COMPANY, INC.	597.36	440307	
ENTERGY	93.04	440310	
M&D SUPPLY	8.55	440321	
MUNRO'S	29.65	440324	
WHEELER TRUCK BODY EQUIPMENT	75.00	440348	
SOUTHERN TIRE MART, LLC	53.50	440351	
ADVANCE AUTO PARTS	51.35	440423	
REPUBLIC SERVICES	58.50	440456	
			966.95**
ROAD & BRIDGE PCT.#2			
AT&T	95.88	440337	
CENTERPOINT ENERGY RESOURCES CORP	61.65	440381	
REPUBLIC SERVICES	94.38	440456	
			251.91**
ROAD & BRIDGE PCT. # 3			
CITY OF PORT ARTHUR - WATER DEPT.	29.32	440297	
ENTERGY	27.60	440310	
MUNRO'S	38.40	440324	
OFFICE DEPOT	296.47	440325	
TIME WARNER COMMUNICATIONS	90.87	440339	
TRIANGLE ENGINE DIST.	27.71	440345	
CENTERPOINT ENERGY RESOURCES CORP	34.63	440381	
SPURLOCK ROAD VETERINARY CLINIC	53.12	440417	
ON TIME TIRE	145.00	440418	
FELIX AAA AUTO & TRUCK PARTS LLC	298.32	440450	
			1,041.44**
ROAD & BRIDGE PCT.#4			
ABLE FASTENER, INC.	429.22	440285	
CHEM SEARCH	194.75	440296	
COASTAL WELDING SUPPLY	55.80	440300	
M&D SUPPLY	2.00	440321	
MUNRO'S	74.65	440324	
OIL CITY TRACTORS, INC.	165.92	440327	
SMART'S TRUCK & TRAILER, INC.	118.92	440334	
AT&T	77.92	440337	
MARTIN PRODUCT SALES LLC	642.56	440386	
SAM'S CLUB DIRECT	856.99	440420	
ASCO	4,385.98	440424	
LONE STAR TRENCHER PARTS LLC	10,144.00	440428	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	403.51	440432	
GCR TIRES & SERVICE	537.74	440437	
MARTIN MARIEETA MATERIALS	406.14	440447	
REPUBLIC SERVICES	94.38	440456	
GULF COAST	170.68	440466	
WAUKESHA-PEARCE INDUSTRIES LLC	100.96	440471	
			18,862.12**
ENGINEERING FUND			
UNITED STATES POSTAL SERVICE	.40	440363	
			.40**
PARKS & RECREATION			
ADAMS BACKHOE SERVICE	65.00	440286	
ALL-PHASE ELECTRIC SUPPLY	225.00	440301	
GULF COAST SCREW & SUPPLY	164.09	440309	
M&D SUPPLY	223.10	440321	
LOWE'S HOME CENTERS, INC.	16.12	440368	
			693.31**
GENERAL FUND			
TAX OFFICE			
UNITED STATES POSTAL SERVICE	1,041.72	440363	

NAME	AMOUNT	CHECK NO.	TOTAL
PEREGRINE SERVICES INC	19,237.53	440474	
COUNTY HUMAN RESOURCES			20,279.25*
UNITED STATES POSTAL SERVICE	8.17	440363	
AUDITOR'S OFFICE			8.17*
UNITED STATES POSTAL SERVICE	11.90	440363	
COUNTY CLERK			11.90*
UNITED STATES POSTAL SERVICE	271.58	440363	
RICOH USA INC	322.35	440422	
COUNTY JUDGE			593.93*
LAIRON DOWDEN, JR.	500.00	440303	
OFFICE DEPOT	272.85	440325	
ANITA F. PROVO	500.00	440329	
UNITED STATES POSTAL SERVICE	2.82	440363	
RICHARD N EVANS II	500.00	440402	
JAN GIROUARD & ASSOCIATES LLC	400.00	440460	
ELIZABETH MCKIM	500.00	440468	
RISK MANAGEMENT			2,675.67*
UNITED STATES POSTAL SERVICE	2.40	440363	
COUNTY TREASURER			2.40*
OFFICE DEPOT	554.09	440325	
UNITED STATES POSTAL SERVICE	119.19	440363	
PURCHASING DEPARTMENT			673.28*
OFFICE DEPOT	137.35	440325	
UNITED STATES POSTAL SERVICE	100.69	440363	
GENERAL SERVICES			238.04*
B&L MAIL PRESORT SERVICE	1,530.48	440294	
CASH ADVANCE ACCOUNT	50.00	440318	
TIME WARNER COMMUNICATIONS	208.87	440341	
ADVANCED STAFFING	97.50	440353	
UNIVERSAL OPERATIONS LLC	6,530.77	440470	
DATA PROCESSING			8,417.62*
BLACK BOX CORPORATION	197.75	440295	
OFFICE DEPOT	196.86	440325	
SIRIUS COMPUTER SOLUTIONS INC.	22,934.69	440370	
MICHAEL BAIN	310.39	440390	
FORMAX	1,037.00	440459	
VOTERS REGISTRATION DEPT			24,676.69*
UNITED STATES POSTAL SERVICE	203.45	440363	
ELECTIONS DEPARTMENT			203.45*
TOI A LINTON	11.50	440399	
AT&T MOBILITY	3,320.29	440453	
AT&T MOBILITY	296.62	440454	
PV RENTALS LLC	368.50	440458	
DISTRICT ATTORNEY			3,996.91*
KIRKSEY'S SPRINT PRINTING	25.95	440320	
TEXAS DISTRICT & COUNTY ATTY ASSN.	350.00	440344	
CDW COMPUTER CENTERS, INC.	2,404.62	440357	
UNITED STATES POSTAL SERVICE	164.85	440363	
CHILD ABUSE & FORENSIC SERVICES	125.00	440367	

NAME	AMOUNT	CHECK NO.	TOTAL
SUMMER TANNER	210.00	440387	
ASSN OF CERTIFIED FRAUD EXAMINERS	195.00	440392	
KATHLEEN KENNEDY	391.70	440436	
FUNCTION 4 LLC	360.00	440469	
			4,227.12*
DISTRICT CLERK			
UNITED STATES POSTAL SERVICE	221.61	440363	
PCM-G	311.40	440403	
AERIALINK INC	139.21	440465	
			672.22*
CRIMINAL DISTRICT COURT			
GAYLYN COOPER	800.00	440287	
TRAVIS EVANS	800.00	440306	
WENDELL RADFORD	800.00	440330	
KEVIN S. LAINE	1,600.00	440354	
CHARLES ROJAS	800.00	440358	
UNITED STATES POSTAL SERVICE	41.90	440363	
TEMPLETON & BRINKLEY	700.00	440371	
JASON ROBERT NICKS	800.00	440408	
ALEX BILL III	800.00	440414	
BRITTANIE HOLMES	2,300.00	440421	
AMY TOMLINSON	1,500.00	440455	
			10,941.90*
58TH DISTRICT COURT			
UNITED STATES POSTAL SERVICE	.40	440363	
			.40*
172ND DISTRICT COURT			
LEXIS-NEXIS	56.00	440364	
			56.00*
252ND DISTRICT COURT			
GAYLYN COOPER	800.00	440287	
RIFE KIMLER, LAW OFFICE OF	800.00	440319	
KEVIN S. LAINE	600.00	440354	
UNITED STATES POSTAL SERVICE	34.15	440363	
SUMMER TANNER	1,435.60	440387	
ANTOINE FREEMAN	900.00	440394	
BRITTANIE HOLMES	900.00	440421	
SAMUEL & SON LAW FIRM PLLC	800.00	440438	
AMY TOMLINSON	800.00	440455	
			7,069.75*
279TH DISTRICT COURT			
GAYLYN COOPER	325.00	440287	
PHILLIP DOWDEN	325.00	440291	
ANITA F. PROVO	225.00	440329	
NATHAN REYNOLDS, JR.	75.00	440331	
BRACK JONES JR.	325.00	440352	
CHARLES ROJAS	325.00	440358	
JOEL WEBB VAZQUEZ	75.00	440377	
KIMBERLY PHELAN, P.C.	75.00	440383	
WILLIAM FORD DISHMAN	375.00	440430	
MATUSKA LAW FIRM	150.00	440433	
TARA SHELANDER	75.00	440434	
DANE DENNISON	75.00	440435	
MELANIE AIREY	112.50	440442	
			2,537.50*
317TH DISTRICT COURT			
ANITA F. PROVO	400.00	440329	
NATHAN REYNOLDS, JR.	500.00	440331	
JOEL WEBB VAZQUEZ	600.00	440377	
ALLEN PARKER	75.00	440409	
P DEAN BRINKLEY	75.00	440412	
BRITTANIE HOLMES	1,575.00	440421	
MELANIE AIREY	650.00	440442	
LAW OFFICE OF J SCOTT FREDERICK	75.00	440443	
THE DAWS LAW FIRM PLLC	500.00	440472	
			4,450.00*
JUSTICE COURT-PCT 1 PL 1			

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	37.18	440363	
			37.18*
JUSTICE COURT-PCT 4			
AT&T	77.92	440337	
			77.92*
JUSTICE COURT-PCT 6			
UNITED STATES POSTAL SERVICE	49.12	440363	
			49.12*
COUNTY COURT AT LAW NO.1			
OFFICE DEPOT	80.25	440325	
LEXIS-NEXIS	55.00	440364	
			135.25*
COUNTY COURT AT LAW NO. 2			
TRAVIS EVANS	300.00	440306	
KARLA J. M. ROGERS	250.00	440332	
SEAN NGUYEN	1,250.00	440461	
THOMAS WILLIAM KELLEY	250.00	440463	
			2,050.00*
COUNTY COURT AT LAW NO. 3			
DAVID GROVE	250.00	440288	
SOUTHERN COMPUTER WAREHOUSE	426.65	440292	
LAURIE PEROZZO	250.00	440406	
			926.65*
COURT MASTER			
UNITED STATES POSTAL SERVICE	1.32	440363	
			1.32*
MEDIATION CENTER			
UNITED STATES POSTAL SERVICE	2.02	440363	
			2.02*
SHERIFF'S DEPARTMENT			
EQUINE MEDICINE & SURGERY	56.00	440305	
GT DISTRIBUTORS, INC.	97.33	440308	
JEFFERSON CTY. SHERIFF'S DEPARTMENT	1,726.00	440315	
JEFFERSON CTY. SHERIFF'S DEPARTMENT	1,146.00	440316	
CASH ADVANCE ACCOUNT	2,132.28	440318	
MOORMAN & ASSOCIATES, INC.	900.00	440323	
AT&T	134.06	440337	
UNITED STATES POSTAL SERVICE	298.26	440363	
BEAUMONT OCCUPATIONAL SERVICE, INC.	65.90	440366	
FIVE STAR FEED	120.75	440373	
BEAUMONT BLINDS AND SHUTTERS	1,242.96	440396	
ATTABOY TERMITE & PEST CONTROL	55.00	440405	
RITA HURT	275.00	440416	
GALLS LLC	83.00	440445	
REPUBLIC SERVICES	45.00	440456	
			8,377.54*
CRIME LABORATORY			
SIGMA-ALDRICH, INC.	153.15	440284	
CASH ADVANCE ACCOUNT	1,536.18	440318	
SOUTHEAST TEXAS WATER	79.90	440335	
EXCEL MEDICAL WASTE LLC	35.00	440446	
ATTAINIT	20,183.88	440452	
			21,988.11*
JAIL - NO. 2			
HERTZ CORPORATION	379.40	440313	
AT&T	1,393.58	440337	
TEXAS GAS SERVICE	314.02	440372	
INTERCONTINENTAL JET CORP	850.00	440380	
WORLD FUEL SERVICES	2,009.74	440407	
REPUBLIC SERVICES	2,853.00	440456	
BRUCE'S CUSTOM COVERS	401.25	440475	
			8,200.99*
JUVENILE PROBATION DEPT.			

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	9.67	440363	
LATONYA DOUCET	28.89	440397	
			38.56*
JUVENILE DETENTION HOME			
ALL STAR PLUMBING	551.82	440289	
HYDRO-CLEAN SERVICES, INC.	560.00	440314	
FLOWERS FOODS	115.97	440374	
BEN E KEITH FOODS	129.71	440375	
CENTERPOINT ENERGY RESOURCES CORP	166.90	440381	
REPUBLIC SERVICES	550.55	440456	
			2,074.95*
CONSTABLE PCT 1			
OFFICE DEPOT	16.17	440325	
UNITED STATES POSTAL SERVICE	28.21	440363	
			44.38*
CONSTABLE-PCT 2			
DISCOUNT UNIFORM INTERNATIONAL INC	35.94	440384	
			35.94*
CONSTABLE-PCT 4			
OFFICE DEPOT	234.90	440325	
AT&T	38.96	440337	
DISH NETWORK	56.50	440389	
WATCH GUARD VIDEO	4,820.00	440391	
			5,150.36*
CONSTABLE-PCT 6			
UNITED STATES POSTAL SERVICE	15.83	440363	
			15.83*
CONSTABLE PCT. 7			
BEST BUY BUSINESS ADVANTAGE ACCOUNT	379.72	440431	
			379.72*
CONSTABLE PCT. 8			
THOMSON REUTERS-WEST	168.21	440427	
			168.21*
AGRICULTURE EXTENSION SVC			
TEXAS A&M AGRILIFE EXTENSION SERVIC	75.00	440462	
			75.00*
HEALTH AND WELFARE NO. 1			
CITY OF BEAUMONT	40.00	440290	
CLAYBAR FUNERAL HOME, INC.	999.00	440298	
ENTERGY	70.00	440312	
MERCY FUNERAL HOME	1,500.00	440322	
OFFICE DEPOT	405.89	440325	
UNITED STATES POSTAL SERVICE	58.95	440363	
TINA CHAMPAGNE	42.80	440398	
CENTERPOINT ENERGY RESOURCES	3.38	440476	
			3,120.02*
HEALTH AND WELFARE NO. 2			
CLAYBAR FUNERAL HOME, INC.	1,998.00	440299	
PETTY CASH - N C WELFARE	135.09	440328	
			2,133.09*
NURSE PRACTITIONER			
OFFICE DEPOT	349.30	440325	
			349.30*
INDIGENT MEDICAL SERVICES			
LOCAL GOVERNMENT SOLUTIONS LP	3,773.00	440395	
			3,773.00*
MAINTENANCE-BEAUMONT			
CITY OF BEAUMONT - LANDFILL	16.50	440293	
M&D SUPPLY	32.23	440321	
ACE IMAGEWEAR	193.45	440333	

NAME	AMOUNT	CHECK NO.	TOTAL
COASTAL SPRINKLER COMPANY	1,500.00	440355	
MEMBER'S BUILDING MAINTENANCE LLC	22,687.76	440429	
REPUBLIC SERVICES	1,651.65	440456	
			26,081.59*
MAINTENANCE-PORT ARTHUR			
ALL-PHASE ELECTRIC SUPPLY	239.61	440301	
CURETON & SON	21.00	440302	
TIME WARNER COMMUNICATIONS	75.36	440340	
TIME WARNER COMMUNICATIONS	300.57	440343	
LOWE'S HOME CENTERS, INC.	117.16	440368	
PARKER LUMBER	71.86	440411	
FRED MILLER'S OUTDOOR EQUIPMENT LLC	115.70	440444	
			941.26*
MAINTENANCE-MID COUNTY			
CENTERPOINT ENERGY RESOURCES CORP	82.85	440381	
REPUBLIC SERVICES	141.70	440456	
			224.55*
SERVICE CENTER			
AT&T	63.92	440337	
JEFFERSON CTY. TAX OFFICE	22.00	440360	
JEFFERSON CTY. TAX OFFICE	7.50	440361	
FIRST CALL	210.03	440369	
BUMPER TO BUMPER	474.53	440379	
AMERICAN TIRE DISTRIBUTORS	5,536.00	440400	
C & I OIL COMPANY INC	1,466.40	440401	
MIGHTY OF SOUTHEAST TEXAS	35.96	440415	
ADVANCE AUTO PARTS	471.89	440423	
1800RADIATOR & AC	169.00	440440	
REPUBLIC SERVICES	94.38	440456	
MIDNIGHT AUTO	109.95	440464	
			8,661.56*
			186,845.62**
MOSQUITO CONTROL FUND			
MUNRO'S	82.20	440324	
UNITED PARCEL SERVICE	13.21	440347	
FASTENAL	145.44	440356	
CENTERPOINT ENERGY RESOURCES CORP	48.15	440381	
JEFFERSON COUNTY AGRICUTLURE COMM	150.00	440410	
REPUBLIC SERVICES	94.38	440456	
			533.38**
FEMA EMERGENCY			
JACK BROOKS REGIONAL AIRPORT	345.47	440317	
OFFICE DEPOT	29.53	440326	
ROLLINS TRUCK & TRAILER REPAIR	2,393.40	440350	
SHI GOVERNMENT SOLUTIONS, INC.	241.00	440365	
PETROLEUM SOLUTIONS, INC.	335.25	440376	
ALLIANCE MECHANICAL SERVICES	15,600.00	440378	
PCM-G	1,139.00	440404	
ASCO	1,982.68	440425	
MARTIN MARIEETA MATERIALS	393.38	440448	
REPUBLIC SERVICES	2,266.65	440456	
GULF COAST	141.55	440467	
			24,867.91**
SECURITY FEE FUND			
KWP TELECOM LLC	1,540.00	440449	
			1,540.00**
GRANT A STATE AID			
HAYS COUNTY	8,432.00	440349	
BI INCORPORATED	478.34	440359	
4M YOUTH SERVICES	3,388.19	440385	
			12,298.53**
COMMUNITY SUPERVISION FND			
TIME WARNER COMMUNICATIONS	164.79	440342	
UNITED STATES POSTAL SERVICE	97.87	440363	
LOCAL GOVERNMENT SOLUTIONS LP	6,965.00	440395	

NAME	AMOUNT	CHECK NO.	TOTAL
JCCSC	203.00	440413	
HIGGINBOTHAM INSURANCE AGENCY INC	581.00	440441	
			8,011.66**
JEFF. CO. WOMEN'S CENTER			
ECOLAB	87.10	440304	
SYSCO FOOD SERVICES, INC.	1,107.78	440338	
BEN E KEITH FOODS	1,231.86	440375	
ATTABOY TERMITE & PEST CONTROL	50.00	440405	
MATERA PAPER COMPANY INC	50.40	440426	
HIGGINBOTHAM INSURANCE AGENCY INC	581.00	440441	
EXCEL MEDICAL WASTE LLC	35.00	440446	
REPUBLIC SERVICES	117.39	440456	
			3,260.53**
CRIME VICTIMS CLEARING.			
KIMBERLY PHELAN, P.C.	500.00	440383	
			500.00**
LAW OFFICER TRAINING GRT			
CASH ADVANCE ACCOUNT	876.64	440318	
			876.64**
COUNTY RECORDS MANAGEMENT			
UNITED STATES POSTAL SERVICE	2.03	440363	
			2.03**
CONST. PCT. 4 EDUCATION			
TEXAS STATE UNIVERSITY SAN MARS	150.00	440336	
			150.00**
HOTEL OCCUPANCY TAX FUND			
DISH NETWORK	113.51	440388	
MATERA PAPER COMPANY INC	1,355.77	440426	
REPUBLIC SERVICES	94.38	440456	
			1,563.66**
AIRPORT FUND			
ENTERGY	22.78	440311	
AT&T	613.00	440337	
UNITED STATES POSTAL SERVICE	.46	440363	
CENTERPOINT ENERGY RESOURCES CORP	770.41	440381	
MEGAN LANDRY	13.18	440439	
REPUBLIC SERVICES	713.84	440456	
			2,133.67**
SETEC FUND			
INDUSTRIAL & COMMERCIAL MECHANICAL	1,652.00	440419	
REPUBLIC SERVICES	100.19	440456	
			1,752.19**
LIABILITY CLAIMS ACCOUNT			
CALVERT EAVES CLARKE & STELLY LLP	4,696.36	440451	
STEVENS BALDO & LIGHTY PLLC	70.00	440473	
			4,766.36**
WORKER'S COMPENSATION FD			
TRISTAR RISK MANAGEMENT	8,659.08	440382	
			8,659.08**
PAYROLL FUND			
JEFFERSON CTY. - FLEXIBLE SPENDING	13,600.50	440257	
CLEAT	288.00	440258	
JEFFERSON CTY. TREASURER	15,521.03	440259	
RON STADTMUELLER - CHAPTER 13	530.00	440260	
INTERNAL REVENUE SERVICE	475.00	440261	
JEFFERSON CTY. ASSN. OF D.S. & C.O.	4,420.00	440262	
JEFFERSON CTY. COMMUNITY SUP.	9,667.52	440263	
JEFFERSON CTY. TREASURER - HEALTH	463,759.83	440264	
JEFFERSON CTY. TREASURER - GENERAL	20.00	440265	
JEFFERSON CTY. TREASURER - PAYROLL	1,656,439.82	440266	
JEFFERSON CTY. TREASURER - PAYROLL	651,085.24	440267	
MONY LIFE INSURANCE OF AMERICA	126.84	440268	

NAME	AMOUNT	CHECK NO.	TOTAL
POLICE & FIRE FIGHTERS' ASSOCIATION	2,638.66	440269	
TGSLC	572.78	440270	
UNITED WAY OF BEAUMONT& N JEFFERSON	8.00	440271	
US DEPARTMENT OF EDUCATION	205.11	440272	
JEFFERSON CTY. TREASURER - TCDRS	617,059.47	440273	
OPPENHEIMER FUNDS DISTRIBUTOR, INC	1,614.99	440274	
JEFFERSON COUNTY TREASURER	2,639.28	440275	
JEFFERSON COUNTY - TREASURER -	6,600.99	440276	
NECHES FEDERAL CREDIT UNION	48,493.71	440277	
JEFFERSON COUNTY - NATIONWIDE	71,591.58	440278	
WILLIAM E HEITKAMP	748.53	440279	
JOHN TALTON	2,066.15	440280	
IL DEPT OF HEALTCARD AND FAMILY SER	49.85	440281	
BELINDA M ZURITA	230.77	440282	
CONSERVE	147.27	440283	
JEFFERSON CTY. TREASURER - PAYROLL	53,015.00	440477	
			3,623,615.92**
MARINE DIVISION			
AT&T	83.38	440337	
THE DINGO GROUP-PETE JORGENSON MARI	3,880.82	440393	
			3,964.20**
ASAP - CONSTABLE			
DISCOUNT UNIFORM INTERNATIONAL INC	72.89	440384	
			72.89**
			3,907,452.35***

NAME	AMOUNT	CHECK NO.	TOTAL
JURY FUND			
ALISA RAUMAKER, CSR	204.76	440487	
CURTIS 1000, INC.	7,372.00	440506	
			7,576.76**
ROAD & BRIDGE PCT.#2			
MUNRO'S	40.00	440539	
RITTER @ HOME	52.18	440548	
BUMPER TO BUMPER	116.11	440619	
NEW WAVE WELDING TECHNOLOGY	6.82	440646	
ASCO	15.86	440675	
			230.97**
ROAD & BRIDGE PCT. # 3			
HILO / O'REILLY AUTO PARTS	140.96	440480	
FARM & HOME SUPPLY	45.73	440513	
ENTERGY	106.72	440520	
LOUIS' YAZOO SALES & SERVICE, LLC	249.70	440532	
MUNRO'S	23.40	440539	
MUSTANG CAT	51.70	440540	
OFFICE DEPOT	85.95	440543	
SOUTHERN TIRE MART, LLC	361.37	440580	
FASTENAL	24.50	440585	
TEXAS GAS SERVICE	158.10	440612	
FIVE STAR FEED	38.75	440615	
ON TIME TIRE	202.99	440668	
PRO CHEM INC	397.46	440670	
SHOPPA'S FARM SUPPLY	137.04	440699	
FELIX AAA AUTO & TRUCK PARTS LLC	74.08	440715	
TRINITY VALLEY TRACTORS INC	38.81	440728	
			2,137.26**
ROAD & BRIDGE PCT.#4			
ABLE FASTENER, INC.	384.20	440479	
RB EVERETT & COMPANY, INC.	195.27	440509	
FED EX	54.21	440514	
ISI COMMERCIAL REFRIGERATION	12.25	440522	
M&D SUPPLY	108.26	440533	
OIL CITY TRACTORS, INC.	18.37	440544	
SOUTHEAST TEXAS WATER	66.20	440556	
TRIANGLE AIR CARE, INC.	290.00	440569	
BEAUMONT FREIGHTLINER STERLING	1,126.60	440625	
MARTIN PRODUCT SALES LLC	2,668.80	440633	
ALLSERV OF TEXAS LLC	117.75	440664	
ON TIME TIRE	174.99	440668	
SAM'S CLUB DIRECT	286.37	440672	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	61.06	440689	
GCR TIRES & SERVICE	967.28	440697	
TRINITY VALLEY TRACTORS INC	323.80	440728	
GULF COAST	130.56	440731	
			6,985.97**
ENGINEERING FUND			
DLT SOLUTIONS LLC	541.56	440489	
OFFICE DEPOT	74.97	440543	
UNITED STATES POSTAL SERVICE	1.21	440599	
			617.74**
PARKS & RECREATION			
JIFFY TROPHIES	300.00	440530	
LOWE'S HOME CENTERS, INC.	66.47	440607	
SPRINT WASTE SERVICES LP	310.80	440690	
			677.27**
GENERAL FUND			
TAX OFFICE			
OFFICE DEPOT	498.94	440543	
ACE IMAGEWEAR	20.74	440552	
TERRY WUENSCHEL	384.60	440584	
UNITED STATES POSTAL SERVICE	1,410.85	440599	
RT LAWRENCE CORPORATION	6,582.00	440671	

NAME	AMOUNT	CHECK NO.	TOTAL
WORLD DATA CORPORATION	300.00	440688	
KATHLEEN SPENCER	384.60	440706	
ALLISON GETZ	570.90	440710	
CINTAS CORPORATION	129.03	440725	
KAREN WHYNOT	104.00	440757	
			10,385.66*
COUNTY HUMAN RESOURCES			
CASH ADVANCE ACCOUNT	753.39	440529	
MOORMAN & ASSOCIATES, INC.	600.00	440538	
SOCIETY FOR HUMAN RESOURCE	209.00	440555	
UNITED STATES POSTAL SERVICE	15.54	440599	
SOUTHEAST TEXAS OCCUPATIONAL MEDICI	350.00	440724	
			1,927.93*
AUDITOR'S OFFICE			
OFFICE DEPOT	133.03	440543	
UNITED STATES POSTAL SERVICE	14.14	440599	
			147.17*
COUNTY CLERK			
ULINE SHIPPING SUPPLY SPECIALI	32.68	440571	
UNITED STATES POSTAL SERVICE	314.70	440599	
ICRM	200.00	440636	
			547.38*
COUNTY JUDGE			
JEFFERSON CTY. BAR ASSOCIATION	100.00	440526	
UNITED STATES POSTAL SERVICE	4.43	440599	
ROCKY LAWDERMILK	2,000.00	440608	
THE YOES LAW FIRM, LLP	500.00	440626	
HARVEY L WARREN III	1,600.00	440654	
JAN GIROUARD & ASSOCIATES LLC	400.00	440723	
			4,604.43*
RISK MANAGEMENT			
CASH ADVANCE ACCOUNT	653.34	440529	
UNITED STATES POSTAL SERVICE	272.81	440599	
			926.15*
COUNTY TREASURER			
UNITED STATES POSTAL SERVICE	201.00	440599	
			201.00*
PURCHASING DEPARTMENT			
OFFICE DEPOT	349.73	440543	
UNITED STATES POSTAL SERVICE	96.60	440599	
			446.33*
GENERAL SERVICES			
CASH ADVANCE ACCOUNT	105.00	440529	
SPINDLETOP MHMR	32,990.75	440531	
TIME WARNER COMMUNICATIONS	610.90	440565	
ADVANCED STAFFING	78.00	440581	
TOWER COMMUNICATIONS, INC.	2,435.00	440597	
RR DONNELLEY	244.89	440717	
			36,464.54*
DATA PROCESSING			
OFFICE DEPOT	125.04	440543	
CDW COMPUTER CENTERS, INC.	88.98	440586	
SPS VAR, LLC	770.00	440611	
ALEX OULAPOUR	137.00	440756	
			1,121.02*
VOTERS REGISTRATION DEPT			
UNITED STATES POSTAL SERVICE	199.71	440599	
			199.71*
ELECTIONS DEPARTMENT			
FREDRICK C CRIBBS II	18.78	440705	
PV RENTALS LLC	1,056.75	440720	
			1,075.53*
DISTRICT ATTORNEY			

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	300.89	440599	
			300.89*
DISTRICT CLERK			
OFFICE DEPOT	692.19	440543	
UNITED STATES POSTAL SERVICE	327.01	440599	
ENGINEERING INNOVATION	275.61	440729	
			1,294.81*
CRIMINAL DISTRICT COURT			
CRISTY SMITH	82.45	440498	
OFFICE DEPOT	365.61	440543	
RENE MULHOLLAND	8,084.95	440572	
KEVIN S. LAINE	800.00	440582	
UNITED STATES POSTAL SERVICE	74.02	440599	
			9,407.03*
136TH DISTRICT COURT			
UNITED STATES POSTAL SERVICE	1.40	440599	
PCM-G	2,278.00	440648	
			2,279.40*
172ND DISTRICT COURT			
UNITED STATES POSTAL SERVICE	6.56	440599	
			6.56*
252ND DISTRICT COURT			
DAVID W BARLOW	4,000.00	440493	
BRUCE N. SMITH	6,485.00	440554	
UNITED STATES POSTAL SERVICE	90.70	440599	
LANGSTON ADAMS	900.00	440609	
SUMMER TANNER	24.50	440637	
THOMSON REUTERS-WEST	100.21	440679	
FLASHBACK DATA LLC	11,624.98	440751	
			23,225.39*
279TH DISTRICT COURT			
ANITA F. PROVO	75.00	440547	
CHARLES ROJAS	150.00	440587	
UNITED STATES POSTAL SERVICE	2.20	440599	
LEXIS-NEXIS	56.00	440600	
LANGSTON ADAMS	75.00	440609	
JONATHAN L. STOVALL	575.00	440658	
WILLIAM FORD DISHMAN	75.00	440682	
BRYAN E MCEACHERN PC	500.00	440683	
THE DAWS LAW FIRM PLLC	500.00	440743	
			2,008.20*
317TH DISTRICT COURT			
ALISA RAUMAKER, CSR	27.90	440487	
JUDY PAASCH	2,393.61	440621	
			2,421.51*
JUSTICE COURT-PCT 1 PL 1			
UNITED STATES POSTAL SERVICE	52.69	440599	
			52.69*
JUSTICE COURT-PCT 6			
UNITED STATES POSTAL SERVICE	26.84	440599	
SIERRA SPRING WATER CO. - BT	17.81	440601	
			44.65*
COUNTY COURT AT LAW NO.1			
UNITED STATES POSTAL SERVICE	2.82	440599	
SIERRA SPRING WATER CO. - BT	107.56	440602	
			110.38*
COUNTY COURT AT LAW NO. 2			
GAYLYN COOPER	250.00	440481	
CDW COMPUTER CENTERS, INC.	256.36	440586	
UNITED STATES POSTAL SERVICE	3.22	440599	
			509.58*
COUNTY COURT AT LAW NO. 3			

NAME	AMOUNT	CHECK NO.	TOTAL
THOMAS J. BURBANK PC	250.00	440497	
BRUCE W. COBB	1,000.00	440503	
A. MARK FAGGARD	250.00	440512	
OFFICE DEPOT	52.19	440543	
KEVIN S. LAINE	300.00	440582	
CHARLES ROJAS	250.00	440587	
UNITED STATES POSTAL SERVICE	8.92	440599	
THE BYRD LAW FIRM PC	250.00	440627	
ALEX BILL III	250.00	440660	
			2,611.11*
COURT MASTER			
JUDGE LARRY GIST	8,150.74	440516	
UNITED STATES POSTAL SERVICE	1.32	440599	
			8,152.06*
MEDIATION CENTER			
SOUTHEAST TEXAS WATER	36.75	440556	
UNITED STATES POSTAL SERVICE	43.25	440599	
KARA HAWTHORN	1,003.61	440662	
			1,083.61*
SHERIFF'S DEPARTMENT			
EQUINE MEDICINE & SURGERY	28.00	440508	
CASH ADVANCE ACCOUNT	1,203.60	440529	
M&D SUPPLY	104.89	440533	
MCNEILL INSURANCE AGENCY	71.00	440536	
MOORE SUPPLY, INC.	337.50	440537	
OFFICE DEPOT	56.42	440543	
CDW COMPUTER CENTERS, INC.	54.01	440586	
VERIZON WIRELESS	3,191.22	440596	
UNITED STATES POSTAL SERVICE	644.93	440599	
FIVE STAR FEED	3,977.30	440615	
MARK ELLIS	120.00	440634	
JOEL PICOU	150.00	440667	
GALLS LLC	439.57	440709	
CINTAS CORPORATION	30.57	440725	
KYLE JOSEPH HEBERT	150.00	440754	
BRANDON DWAYNE TAYLOR	150.00	440755	
			10,596.17*
CRIME LABORATORY			
INDIANA UNIVERSITY	1,500.00	440645	
JULIE HANNON	600.00	440680	
			2,100.00*
JAIL - NO. 2			
BRIGGS EQUIPMENT	4,300.00	440482	
JOHNSTONE SUPPLY	25.07	440484	
BOB BARKER CO., INC.	2,550.75	440492	
BELL FENCE MFG. CO.	170.00	440494	
CITY OF BEAUMONT - WATER DEPT.	13,243.06	440499	
COASTAL WELDING SUPPLY	41.85	440502	
COBURN'S, BEAUMONT BOWIE (1)	95.32	440504	
ECOLAB	724.54	440507	
W.W. GRAINGER, INC.	1,248.26	440517	
M&D SUPPLY	18.32	440533	
MCNEILL INSURANCE AGENCY	213.00	440536	
MOORE SUPPLY, INC.	396.24	440537	
OFFICE DEPOT	356.52	440543	
RALPH'S INDUSTRIAL ELECTRONICS	13.06	440549	
SANITARY SUPPLY, INC.	2,376.47	440551	
SYSCO FOOD SERVICES, INC.	7,095.14	440562	
WHOLESALE ELECTRIC SUPPLY CO.	370.60	440577	
WORTH HYDROCHEM	327.00	440578	
LOWE'S HOME CENTERS, INC.	207.73	440607	
ULTRA-CHEM, INC.	465.82	440610	
C S & A - FRANKLIN	9,157.00	440618	
MODERN AG PRODUCTS LTD	649.70	440640	
ICS	145.80	440642	
FIRETROL PROTECTION SYSTEMS, INC.	5,000.00	440647	
WORLD FUEL SERVICES	900.59	440653	
INDEPENDENT STATIONERS	2,331.80	440659	

NAME	AMOUNT	CHECK NO.	TOTAL
SAM'S CLUB DIRECT	88.32	440672	
CONMED INC	263,884.33	440674	
MATERA PAPER COMPANY INC	4,292.10	440678	
BEST BUY BUSINESS ADVANTAGE ACCOUNT	43.14	440687	
GALLS LLC	687.97	440709	
THE MONOGRAM SHOP	9.00	440742	
FOOD MARKETING CONCEPTS INC	1,981.99	440745	
HARDIE'S FRESH FOODS	1,632.30	440746	
HODGE PRODUCTS INC	2,150.00	440752	
			327,192.79*
JUVENILE PROBATION DEPT.			
EDWARD B. GRIPON, M.D., P.A.	1,275.00	440518	
G. FRAN HUDGINS	723.00	440521	
UNITED STATES POSTAL SERVICE	7.19	440599	
NISHA AMIN	2,400.00	440644	
			4,405.19*
JUVENILE DETENTION HOME			
CITY OF BEAUMONT - WATER DEPT.	2,453.30	440499	
BEN E KEITH FOODS	2,670.52	440616	
ATTABOY TERMITE & PEST CONTROL	80.00	440650	
			5,203.82*
CONSTABLE PCT 1			
OFFICE DEPOT	321.92	440543	
TEXAS STATE UNIVERSITY SAN MARS	750.00	440558	
UNITED STATES POSTAL SERVICE	43.22	440599	
			1,115.14*
CONSTABLE-PCT 6			
UNITED STATES POSTAL SERVICE	12.90	440599	
			12.90*
CONSTABLE PCT. 7			
AT&T	31.96	440559	
			31.96*
CONSTABLE PCT. 8			
THOMSON REUTERS-WEST	76.86	440679	
HIGGINBOTHAM INSURANCE AGENCY INC	71.00	440703	
TND WORKWEAR CO LLC	80.00	440739	
			227.86*
AGRICULTURE EXTENSION SVC			
UNITED STATES POSTAL SERVICE	16.52	440599	
			16.52*
HEALTH AND WELFARE NO. 1			
CLAYBAR FUNERAL HOME, INC.	1,500.00	440501	
AUSTIN CECIL WALKES MD PA	3,245.08	440575	
UNITED STATES POSTAL SERVICE	81.71	440599	
EQUIFAX WORKFORCE SOLUTIONS	256.30	440730	
			5,083.09*
HEALTH AND WELFARE NO. 2			
BROUSSARD'S MORTUARY	1,500.00	440496	
TIME WARNER COMMUNICATIONS	117.14	440566	
AUSTIN CECIL WALKES MD PA	3,245.08	440575	
SAM'S CLUB DIRECT	32.78	440672	
EXCEL MEDICAL WASTE LLC	35.00	440712	
EQUIFAX WORKFORCE SOLUTIONS	256.30	440730	
			5,186.30*
NURSE PRACTITIONER			
GEORGE V. ZUZUKIN, M.D.	1,000.00	440485	
SIERRA SPRING WATER CO. - BT	6.00	440603	
			1,006.00*
CHILD WELFARE UNIT			
BEAUMONT OCCUPATIONAL SERVICE, INC.	922.00	440604	
J.C. PENNEY'S	4,727.89	440605	
SEARS COMMERICAL CREDIT	1,836.39	440606	

NAME	AMOUNT	CHECK NO.	TOTAL
TYMIR WILSON PAYEE	20.00	440631	
J'LYNN HENDRIX	20.00	440649	
ANDREW REISNER	20.00	440656	
ANTHONY DISOMBA PAYEE	20.00	440666	
FATIMA ZAVALA	20.00	440692	
TYRE A WELLS	20.00	440693	
TRELIN FARR	20.00	440694	
TYTIANNA WELLS SIGARST	20.00	440696	
DONALD ORCHID	20.00	440702	
JAVIER ZAVALA FC	20.00	440708	
AALIYAH J EMERSON	20.00	440711	
MYA ARCENEAUX	20.00	440716	
SERENITY WOODLEY FC	15.00	440721	
SHAWN MOUTON	20.00	440726	
LARRY DOYLE	20.00	440740	
FAITH DOYLE	20.00	440741	
CLYDE GAUTHIER III	20.00	440744	
ZION GREEN	15.00	440758	
RO'NIYA WILLIAMS	15.00	440759	
LENIYAH JOHNSON	15.00	440760	
LAMAR MCDANIEL JR	15.00	440761	
KESHAWN PROVENCHER TOS	50.00	440762	
LACI ANDREWS	30.00	440763	
GUILLERMO GONZALES	15.00	440764	
ARMANDEE DAIGLE	15.00	440765	
ASHTON EMERSON	50.00	440766	
AARON BANKS	15.00	440767	
			8,056.28*
ENVIRONMENTAL CONTROL			
JACKSON-HIRSH, INC.	95.17	440525	
AT&T	61.92	440559	
TRANSIT & LEVEL CLINIC LLC	197.99	440722	
			355.08*
INDIGENT MEDICAL SERVICES			
KING'S PHARMACY	324.55	440486	
CARDINAL HEALTH 110 INC	835.83	440681	
DANA JOHNSON	1,500.00	440700	
			2,660.38*
EMERGENCY MANAGEMENT			
VERIZON WIRELESS	150.00	440595	
			150.00*
MAINTENANCE-BEAUMONT			
CITY OF BEAUMONT - WATER DEPT.	8,050.93	440499	
CITY OF BEAUMONT - WATER DEPT.	113.79	440500	
ENTERGY	44,744.68	440519	
OFFICE DEPOT	45.40	440543	
ACE IMAGEWEAR	167.90	440552	
AT&T	159.40	440559	
AT&T GLOBAL SERVICES	2,763.00	440613	
PRO CHEM INC	120.12	440670	
			56,165.22*
MAINTENANCE-PORT ARTHUR			
TEXAS GAS SERVICE	341.45	440612	
			341.45*
MAINTENANCE-MID COUNTY			
NOACK LOCKSMITH	9.00	440541	
RITTER @ HOME	32.78	440548	
ACE IMAGEWEAR	92.24	440552	
SHERWIN-WILLIAMS	508.40	440553	
FRED MILLER'S OUTDOOR EQUIPMENT LLC	131.80	440707	
			774.22*
SERVICE CENTER			
SPIDLE & SPIDLE	9,173.56	440483	
J.K. CHEVROLET CO.	242.82	440524	
M&D SUPPLY	80.90	440533	
MUNRO'S	39.70	440539	

NAME	AMOUNT	CHECK NO.	TOTAL
PHILPOTT MOTORS, INC.	72.35	440545	
RITTER @ HOME	94.57	440548	
VIN'S PAINT & BODY, INC.	4,091.32	440583	
FASTENAL	218.42	440585	
JEFFERSON CTY. TAX OFFICE	7.50	440591	
JEFFERSON CTY. TAX OFFICE	7.50	440592	
JEFFERSON CTY. TAX OFFICE	7.50	440593	
JEFFERSON CTY. TAX OFFICE	7.50	440594	
MIGHTY OF SOUTHEAST TEXAS	131.37	440665	
1800RADIATOR & AC	113.00	440701	
			14,288.01*
VETERANS SERVICE			
UNITED STATES POSTAL SERVICE	11.57	440599	
			11.57*
			556,534.67**
MOSQUITO CONTROL FUND			
HILO / O'REILLY AUTO PARTS	49.99	440480	
FISHER SCIENTIFIC	206.23	440515	
JACK BROOKS REGIONAL AIRPORT	305.60	440527	
MUNRO'S	39.20	440539	
SANITARY SUPPLY, INC.	32.66	440551	
			533.70**
FEMA EMERGENCY			
CRABTREE BARRICADE SYSTEMS, INC.	282.00	440505	
RB EVERETT & COMPANY, INC.	255,202.00	440510	
RB EVERETT & COMPANY, INC.	49,961.00	440511	
ISI COMMERCIAL REFRIGERATION	1,231.95	440523	
M&D SUPPLY	369.40	440534	
AT&T	66.59	440560	
VULCAN MATERIALS CO.	3,323.57	440573	
TOTAL SAFETY, INC.	890.00	440588	
TOTAL SAFETY, INC.	990.00	440589	
PATHMARK TRAFFICE PRODUCTS OF TEXAS	576.00	440614	
UNITED RENTALS	3,718.58	440622	
UNITED RENTALS	1,100.80	440623	
UNITED RENTALS	4,880.15	440624	
DRC EMERGENCY SERVICES, LLC	166,207.87	440629	
BLUE GLOBES	9,468.00	440643	
L.A. POLICE GEAR	2,159.92	440655	
ASCO	1,074.07	440676	
ASCO	9,396.53	440677	
SILSBEE FORD INC	24,640.50	440684	
SILSBEE FORD INC	27,140.50	440685	
SILSBEE FORD INC	26,140.50	440686	
SPRINT WASTE SERVICES LP	69.70	440691	
MARTIN MARIEETA MATERIALS	5,003.30	440713	
MARTIN MARIEETA MATERIALS	101.50	440714	
GULF COAST	945.88	440732	
GULF COAST	217.55	440733	
GULF COAST	1,044.48	440734	
GULF COAST	1,089.36	440735	
GULF COAST	738.48	440736	
GULF COAST	403.24	440737	
GULF COAST	1,349.80	440738	
ADVANTAGE INTEREST INC	11,115.00	440747	
SERVPRO OF FRIENDSWOOD/PEARLAND	5,068.17	440748	
SERVPRO OF FRIENDSWOOD/PEARLAND	62,025.48	440749	
BLACKTOP INDUSTRIES	139.50	440753	
			678,131.37**
BREATH ALCOHOL TESTING			
EMILY ESQUIVEL	192.75	440617	
INDIANA UNIVERSITY	1,500.00	440645	
			1,692.75**
J.C. FAMILY TREATMENT			
JUDY PAASCH	40.00	440620	
JUDY PAASCH	50.00	440621	
PATRICIA VELASCO	1,400.00	440718	
PATRICIA VELASCO	20.00	440719	
			1,510.00**
EMPG GRANT			

NAME	AMOUNT	CHECK NO.	TOTAL
SOUTHEAST TEXAS WATER	29.80	440557	
TIME WARNER COMMUNICATIONS	85.43	440567	
VERIZON WIRELESS	130.35	440595	
			245.58**
JUVENILE DETENTION - TJPC			
CASH ADVANCE ACCOUNT	500.00	440529	
			500.00**
GRANT A STATE AID			
CASH ADVANCE ACCOUNT	187.52	440529	
OFFICE DEPOT	1,297.31	440543	
HARRIS COUNTY	1,790.70	440635	
			3,275.53**
COMMUNITY SUPERVISION FND			
UNITED STATES POSTAL SERVICE	73.76	440599	
HIGGINBOTHAM INSURANCE AGENCY INC	581.00	440704	
			654.76**
JEFF. CO. WOMEN'S CENTER			
BELL'S LAUNDRY	1,921.62	440495	
ENTERGY	1,815.27	440519	
KIM MCKINNEY, LPC, LMFT	375.00	440535	
OFFICE DEPOT	183.88	440543	
PREMIUM PLUMBING	512.63	440546	
AT&T	136.86	440559	
SUPREME SALES CO., INC.	787.00	440561	
SYSCO FOOD SERVICES, INC.	1,110.00	440562	
BURT WALKER PARTNERS, LTD	4,500.00	440574	
TEXAS FIRE & COMMUNICATIONS	95.00	440590	
BEN E KEITH FOODS	1,302.41	440616	
SAM'S CLUB DIRECT	32.96	440672	
			12,772.63**
LAW OFFICER TRAINING GRT			
CASH ADVANCE ACCOUNT	667.73	440529	
			667.73**
DRUG INTERVENTION COURT			
SOUTHEAST TEXAS COUNCIL ON ALCOHOL	5,580.00	440528	
REDWOOD TOXICOLOGY LABORATORY	17,300.00	440638	
			22,880.00**
COUNTY RECORDS MANAGEMENT			
VISTA SG	13,722.20	440639	
			13,722.20**
HOTEL OCCUPANCY TAX FUND			
ENTERGY	1,201.01	440519	
CASH ADVANCE ACCOUNT	719.00	440529	
MUNRO'S	236.28	440539	
TIME WARNER COMMUNICATIONS	110.53	440564	
TRI-CITY COFFEE SERVICE	44.55	440570	
TEXAS TRAVEL INDUSTRY ASSOCIATION	407.00	440630	
KATHI HUGHES	43.17	440632	
CMS IP TECHNOLOGIES	169.00	440651	
SAM'S CLUB DIRECT	197.26	440672	
SOUTHERN SUPPLY	38.50	440727	
			3,166.30**
CAPITAL PROJECTS FUND			
THE LABICHE ARCHITECTURAL GROUP	345.00	440491	
LJA ENGINEERING INC	2,236.75	440669	
			2,581.75**
AIRPORT FUND			
AAAE / DEPT.	275.00	440478	
FJORD AVIATION FUELING	164.37	440488	
W.W. GRAINGER, INC.	55.20	440517	
PHILPOTT MOTORS, INC.	54.34	440545	
RITTER @ HOME	99.99	440548	
SABINE NECHES CHIEFS ASSOCIATION	250.00	440550	

NAME	AMOUNT	CHECK NO.	TOTAL
TIME WARNER COMMUNICATIONS	84.15	440563	
TEXAS COMMISSION ON FIRE	170.00	440568	
WHITE TUCKER COMPANY INC	1,624.50	440576	
US FLAG & FLAGPOLE SUPPLY	22.48	440579	
UNITED STATES POSTAL SERVICE	13.93	440599	
LOWE'S HOME CENTERS, INC.	358.30	440607	
HERBERT "DUKE" YOUMANS	64.00	440628	
HLAVINKA EQUIPMENT COMPANY	1,623.28	440641	
UNIFIRST HOLDINGS INC	145.83	440652	
EZ-LINER INDUSTRIES	47.77	440661	
CRAWFORD ELECTRIC SUPPLY COMPANY	603.57	440673	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	156.36	440689	
EASTERN AVIATION FUELS INC	51,353.76	440698	
MACRO COMPANIES	220.00	440750	
			57,386.83**
SE TX EMP. BENEFIT POOL			
GROUP ADMINISTRATIVE CONCEPTS INC	868.00	440657	
			868.00**
SHERIFF'S FORFEITURE FUND			
VERIZON WIRELESS	75.98	440596	
			75.98**
GUARDIANSHIP FEE			
DUNHAM HALLMARK PLLC	200.00	440663	
			200.00**
MARINE DIVISION			
M&D SUPPLY	107.61	440533	
BUMPER TO BUMPER	10.30	440619	
ATTABOY TERMITE & PEST CONTROL	55.00	440650	
ARROW AVIATION CO LLC	4,150.00	440695	
			4,322.91**
ASAP - CONSTABLE			
CLASSIC TINT	279.00	440490	
			279.00**
2015 PORT SECURITY GRANT			
LJA ENGINEERING INC	1,925.00	440669	
			1,925.00**
			1,382,152.66***

Resolution

STATE OF TEXAS § COMMISSIONERS COURT
§
COUNTY OF JEFFERSON § OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

WHEREAS, Patricia Nantz, started her career with Jefferson County Road & Bridge Precinct 1 in 1997 devoting 20 years of her life serving the people of Jefferson County with pride and professionalism; and,

WHEREAS, Patricia Nantz has dedicated her talents and valuable services as an Administrative Assistant serving her first 8 years with Commissioner Jimmie Cokinos and her remaining 12 years with Eddie Arnold, Commissioner of Jefferson County Road & Bridge Precinct 1; and,

WHEREAS, Patricia Nantz, known for her high standards of professionalism and personal integrity, Patricia won the respect of her colleagues, elected officials and other county employees; and,

WHEREAS, Patricia Nantz, unselfishly volunteered to delay her initial retirement date of August 31, 2017, in order to help the Jefferson County Road & Bridge Precinct 1 team accumulate and assimilate critical data regarding Hurricane Harvey damage to County property; and,

WHEREAS, having made a significant contribution to the Jefferson County Road & Bridge Precinct 1 department, Patricia Nantz, is recognized for her unequivocal devotion to the common good and welfare of the citizens of Jefferson County; and will be missed by her friends, co-workers and especially Commissioner Arnold.

NOW, THEREFORE, BE IT RESOLVED that the Commissioners' Court of Jefferson County, Texas does hereby honor and commend Patricia Nantz for her dedicated service as a valuable employee of Jefferson County and wishes her well in retirement.

SIGNED this 27th day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

AGENDA ITEM **November 27, 2017**

Consider, possibly approve and adopt an order levying taxes for Port of Port Arthur Navigation District of Jefferson County, Texas Unlimited Tax Port Improvement Bonds, Series 2017A.

CERTIFICATE FOR ORDER

STATE OF TEXAS §
COUNTY OF JEFFERSON §

We, the undersigned officers of Jefferson County, Texas (the "County"), hereby certify as follows:

1. The Commissioners Court of the County convened in a REGULARLY SCHEDULED MEETING on the 27TH DAY OF NOVEMBER, 2017, at the County Courthouse in Beaumont, Texas (the "Meeting"), and the roll was called of the duly constituted Commissioners Court of the County, to-wit:

Jeff Branick - County Judge
Eddie Arnold - County Commissioner, Precinct 1
Brent Weaver - County Commissioner, Precinct 2
Michael Sinegal- County Commissioner, Precinct 3
Everette "Bo" Alfred - County Commissioner, Precinct 4

and all of the persons were present, except the following absentees: Eddie Arnold, thus constituting a quorum. Whereupon, among other business, the following was transacted at the Meeting: a written

Order Levying Taxes for Port of Port Arthur Navigation District of Jefferson County, Texas Unlimited Tax Port Improvement Bonds, Series 2017A

was duly introduced for the consideration of the Commissioners Court. It was then duly moved and seconded that the Order be passed; and, after due discussion, said motion carrying with it the passage of the Order, prevailed and carried by the following vote:

AYES: 4

NOES: 0

2. A true, full and correct copy of the Order passed at the Meeting described in the above and foregoing paragraph is attached to and follows this Certificate; that the Order has been duly recorded in the Commissioners Court's minutes of the Meeting; that the above and foregoing paragraph is a true, full and correct excerpt from the Commissioner Court's minutes of the Meeting pertaining to the passage of the Order; that the persons named in the above and foregoing paragraph are the duly chosen, qualified and acting county officials as indicated therein; that each of the elected officials and members of the Commissioners Court was duly and sufficiently notified officially and personally, in advance, of the time, place and purpose of the Meeting, and that the Order would be introduced and considered for passage at the Meeting, and

each of the elected officials and members consented, in advance, to the holding of the Meeting for such purpose, and that the Meeting was open to the public and public notice of the time, place and purpose of the meeting was given, all as required by Chapter 551, Government Code, as amended.

3. The County Judge of the County has approved and hereby approves the Order; that the County Judge and the County Clerk of the County have duly signed the Order; and that the County Judge and the County Clerk of the County hereby declare that their signing of this Certificate shall constitute the signing of the attached and following copy of the Order for all purposes.

SIGNED AND SEALED the 27th day of November, 2017.

Carolyn L Guidry
County Clerk

County Judge

[COUNTY SEAL]

ORDER LEVYING TAXES FOR PORT OF PORT ARTHUR NAVIGATION DISTRICT OF JEFFERSON COUNTY, TEXAS UNLIMITED TAX PORT IMPROVEMENT BONDS, SERIES 2017A

STATE OF TEXAS
COUNTY OF JEFFERSON

WHEREAS, the Port of Port Arthur Navigation District of Jefferson County, Texas (the "District") has authorized the issuance of the District's Unlimited Tax Port Improvement Bonds, Series 2017A in an aggregate principal amount not to exceed $60,150,000 (collectively, the "Bonds") and has requisitioned the Commissioners Court to levy taxes to pay such Bonds; and

WHEREAS, Chapter 197, Acts of the 58th Texas Legislature, Regular Session, 1963, as amended, requires the Commissioners Court, upon such requisition, to levy such taxes; therefore

BE IT ORDERED, ADJUDGED AND DECREED BY THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS:

That during each year while any of the Bonds or interest thereon are outstanding and unpaid, there shall be computed and ascertained a rate and amount of ad valorem tax that will be sufficient to raise and produce the money necessary to pay the interest on the Bonds and to create a sinking fund to retire the principal of the Bonds as such principal matures; and said tax shall be based on the latest approved tax rolls of the District, with full allowance being made for tax delinquencies and the cost of tax collection and said rate and amount of ad valorem tax is hereby levied, and is hereby ordered to be levied, against all taxable property in the District for each year while any of the Bonds or interest thereon are outstanding and unpaid. Said ad valorem taxes sufficient to provide for the payment of the interest on and principal of the Bonds as such interest comes due and such principal matures are hereby pledged for such payment, without limit as to rate or amount.

PASSED AND APPROVED this 27th day of November, 2017.

County Judge

ATTEST:

County Clerk

(COM.CT.SEAL)

AGENDA ITEM **November 20, 2017**

Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 1 in accordance with Section 312.204, Tax Code.

AMENDED TAX ABATEMENT AGREEMENT BETWEEN JEFFERSON COUNTY AND GOLDEN PASS PRODUCTS LLC FOR TRAIN 1 FOR PROPERTY LOCATED IN THE GOLDEN PASS REINVESTMENT ZONE

1. Jefferson County, Texas ("County") and Golden Pass Products LLC ("Owner"), (together, the "Parties") entered into a Tax Abatement Agreement ("Agreement") on June 22, 2015 with respect to the abatement of certain *ad valorem* property taxes on a new plant facility to be constructed by OWNER, as Train 1 in the Golden Pass Reinvestment Zone (the "Project").

2. Golden Pass Products LLC is the owner of record in County's real property records of the real property on which Project is being constructed, and the owner of the improvements to the real property that constitute the Project and this addendum is sought to clarify the real interests and obligations outlined in the abatement agreement; and,

3. It was and continues to be the intent of the Parties that the all of the rights, duties and obligations granted or imposed by the Agreement with respect to the tax abatement reside with and are the property of the owner of the Project.

4. The Parties acknowledge that circumstances beyond the control of Owner have delayed the commencement of construction of not only Train 1 but also Trains 2 and 3 and that Owner will suffer the loss of the intended benefits of the original abatement agreements and, for these reasons, the parties agree that the Tax Abatement Agreement for Train shall be amended only with respect to:

> Article 4:
> "The Term of the Abatement Granted in the Abatement Schedule, pursuant to this AGREEMENT, shall be 100% per year beginning on January 1, 2020 and shall terminate on December 31, 2029, unless sooner terminated pursuant to other provisions of this AGREEMENT. Should OWNER not begin the construction of the PROJECT by December 31, 2019, this AGREEMENT shall be null and void."

5. The Parties further acknowledge and agree that all other terms and conditions of the original Abatement Agreement shall remain in full force and effect unless amended by written agreement and it is understood that purchases for the project will be invoiced locally that Jefferson County will be credited with sales taxes for purchases.

.

Signed this _____ day of _____, 2017.

FOR THE COUNTY:

_____
Hon. Jeff R. Branick, County Judge
Jefferson County, Texas

By: _____

_____

Title:

Golden Pass Products LLC "Owner"

AGENDA ITEM **November 20, 2017**

Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 2 in accordance with Section 312.204, Tax Code.

AMENDED TAX ABATEMENT AGREEMENT BETWEEN JEFFERSON COUNTY AND GOLDEN PASS PRODUCTS LLC FOR TRAIN 2 FOR PROPERTY LOCATED IN THE GOLDEN PASS REINVESTMENT ZONE

1. Jefferson County, Texas ("County") and Golden Pass Products LLC ("Owner"), (together, the "Parties") entered into a Tax Abatement Agreement ("Agreement") on June 22, 2015 with respect to the abatement of certain *ad valorem* property taxes on a new plant facility to be constructed by OWNER, as Train 1 in the Golden Pass Reinvestment Zone (the "Project").

2. Golden Pass Products LLC is the owner of record in County's real property records of the real property on which Project is being constructed, and the owner of the improvements to the real property that constitute the Project and this addendum is sought to clarify the real interests and obligations outlined in the abatement agreement; and,

3. It was and continues to be the intent of the Parties that the all of the rights, duties and obligations granted or imposed by the Agreement with respect to the tax abatement reside with and are the property of the owner of the Project.

4. The Parties acknowledge that circumstances beyond the control of Owner have delayed the commencement of construction of not only Train 1 but also Trains 2 and 3 and that Owner will suffer the loss of the intended benefits of the original abatement agreements and, for these reasons, the parties agree that the Tax Abatement Agreement for Train shall be amended only with respect to:

Article 4:

"The Term of the Abatement Granted in the Abatement Schedule, pursuant to this Agreement shall be 100% per year beginning on January 1, 2021 and shall terminate on December 31, 2030, unless sooner terminated pursuant to other provisions of this AGREEMENT. Should OWNER not begin the construction of the PROJECT by December 31, 2020, this AGREEMENT shall be null and void."

5. The Parties further acknowledge and agree that all other terms and conditions of the original Abatement Agreement shall remain in full force and effect unless amended by written agreement and it is understood that purchases for the project will be invoiced locally that Jefferson County will be credited with sales taxes for purchases.

Signed this _____ day of _____, 2017.

FOR THE COUNTY:

_____

Hon. Jeff R. Branick, County Judge
Jefferson County, Texas

By: _____

_____

Title:

Golden Pass Products LLC "Owner"

AGENDA ITEM **November 20, 2017**

Consider and possibly approve an Amended Tax Abatement Agreement between Jefferson County and Golden Pass Products LLC for Train 3 in accordance with Section 312.204, Tax Code.

AMENDED TAX ABATEMENT AGREEMENT BETWEEN JEFFERSON COUNTY AND GOLDEN PASS PRODUCTS LLC FOR TRAIN 3 FOR PROPERTY LOCATED IN THE GOLDEN PASS REINVESTMENT ZONE

1. Jefferson County, Texas ("County") and Golden Pass Products LLC ("Owner"), (together, the "Parties") entered into a Tax Abatement Agreement ("Agreement") on June 22, 2015 with respect to the abatement of certain *ad valorem* property taxes on a new plant facility to be constructed by OWNER, as Train 1 in the Golden Pass Reinvestment Zone (the "Project").

2. Golden Pass Products LLC is the owner of record in County's real property records of the real property on which Project is being constructed, and the owner of the improvements to the real property that constitute the Project and this addendum is sought to clarify the real interests and obligations outlined in the abatement agreement; and,

3. It was and continues to be the intent of the Parties that the all of the rights, duties and obligations granted or imposed by the Agreement with respect to the tax abatement reside with and are the property of the owner of the Project.

4. The Parties acknowledge that circumstances beyond the control of Owner have delayed the commencement of construction of not only Train 1 but also Trains 2 and 3 and that Owner will suffer the loss of the intended benefits of the original abatement agreements and, for these reasons, the parties agree that the Tax Abatement Agreement for Train shall be amended only with respect to:

Article 4:

> "The Term of the Abatement Granted in the Abatement Schedule, pursuant to this Agreement shall be 100% per year beginning on January 1, 2022 and shall terminate on December 31, 2031, unless sooner terminated pursuant to other provisions of this AGREEMENT. Should OWNER not begin the construction of the PROJECT by December 31, 2021, this AGREEMENT shall be null and void."

5. The Parties further acknowledge and agree that all other terms and conditions of the original Abatement Agreement shall remain in full force and effect unless amended by written agreement and it is understood that purchases for the project will be invoiced locally that Jefferson County will be credited with sales taxes for purchases.

Signed this _____ day of _____, 2017.

FOR THE COUNTY:

_____
Hon. Jeff R. Branick, County Judge
Jefferson County, Texas

By: _____

_____

Title:

Golden Pass Products LLC "Owner"

AGENDA ITEM **November 20, 2017**

Consider and possibly approve a Resolution Authorizing the Jefferson County Tax-Assessor Collector to Engage in the Early Turn-Over of Business Personal Property Taxes for Collection.

Resolution

STATE OF TEXAS § COMMISSIONERS' COURT
§
COUNTY OF JEFFERSON OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

AUTHORIZING THE JEFFERSON COUNTY TAX-ASSESSOR COLLECTOR TO ENGAGE IN THE EARLY TURN-OVER OF BUSINESS PERSONAL PROPERTY TAXES FOR COLLECTION

WHEREAS, the JEFFERSON COUNTY COMMISSIONERS' COURT wishes to authorize the collection of business personal property taxes pursuant to Section 33.11 of the Tax Code; and

WHEREAS, the JEFFERSON COUNTY COMMISSIONERS' COURT agreed to an amendment of the contract signed on May 19, 2014 with a private law firm to authorize the collection of the early turnover of business personal property taxes pursuant to Section 33.11 of the Tax Code (See Exhibit A); and

WHEREAS, the JEFFERSON COUNTY TAX-ASSESSOR COLLECTOR is responsible for collecting business personal property taxes; and

WHEREAS, the JEFFERSON COUNTY TAX-ASSESSOR COLLECTOR wishes to defray its costs of collection, as authorized by TEX. TAX CODE § 33.11, that it incurs under a contract for collection of delinquent property taxes between said COUNTY and a private law firm entered into pursuant to TEX. TAX CODE § 6.30; and

WHEREAS, under said Section 33.11, the Commissioners Court as the governing body of JEFFERSON COUNTY is empowered to authorize the addition of a collection penalty in an amount that does not exceed the amount of compensation specified in the contract with the private law firm; and

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE COMMISSIONERS' COURT OF JEFFERSON COUNTY THAT:

SECTION I: The Order approving the amendment of the contract with a private law firm entered on May 19, 2014 to authorize the early collection of business personal property taxes pursuant to Section 33.11 of the Tex. Tax Code is hereby confirmed.

SECTION II: An additional penalty on delinquent personal property taxes for tax years 2017 and subsequent years is hereby authorized and imposed, as provided by Section 33.11, Texas Tax Code, in the amount of 20% of the delinquent tax, penalty and interest if the tax becomes delinquent on or after February 1 of a year and remains delinquent on the 60th day thereafter.

SECTION III: This Resolution shall become effective upon final passage.

SIGNED this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

AGREEMENT MODIFYING WRITTEN CONRACT FOR TAX COLLECTION SERVICES

This agreement is between Linebarger Goggan Blair & Sampson, LLP (hereinafter referred to as the "Firm") and JEFFERSON COUNTY (hereinafter referred to as the "Client".)

The Firm and Client previously entered into a contract entitled "Agreement for Tax Collection Services" on the 19th day of May 2014. A copy of that contract is attached, marked Exhibit B, and, insofar as it is not inconsistent with the terms of this agreement, made a part of this agreement.

The Firm and client desire to, and do hereby modify the contract, Exhibit B attached, in the following respects: Section 2.03 under Article 1 of the contract is hereby deleted, and the following italicized language is substituted:

2.03 Taxes owed to the Client shall become subject to this agreement upon the following dates, whichever occurs first:

(a) On February 1 of the year in which the taxes become delinquent if a previously filed tax suit is then pending against the property subject to the tax;

(b) On the date any lawsuit is filed with respect to the recovery of the tax if the tax is delinquent and is required to be included in the suit pursuant to TEX. TAX CODE § 33.42(a);

(c) On the date of filing any application for tax warrant where recovery of the tax or estimated tax is sought and where the filing of an application for tax warrant by the Firm is at the request of Client's Tax Assessor-Collector;

(d) On the date of filing any claim in bankruptcy where recovery of the tax is sought;

(e) In the case of delinquent tangible personal property, on the 60th day after the February 1 delinquency date; or

(f) On July 1 of the year in which the taxes become delinquent.

This modification agreement is executed on behalf of the Firm and of the Client by the duly authorized persons whose signatures appear below.

JEFFERSON COUNTY

By: _____

Date: November 27, 2017

Linebarger Goggan Blair & Sampson, LLP

By: _____

Date: _____

ORDER

THE STATE OF TEXAS §

COUNTY OF Jefferson §

The Commissioners Court of JEFFERSON County, Texas, convened at a meeting of said Court at the JEFFERSON County Courthouse in the City of Beaumont, Texas, on the 27th day of November, 2017, with the following members present, to-wit:

Jeff Branick, County Judge
_____, Commissioner, Precinct 1
Brent Weaver, Commissioner, Precinct 2
Micahel Shane Sinegal, Commissioner, Precinct 3
Everette D. Alfred, Commissioner, Precinct 4

and the following members absent, to-wit:
Eddie Arnold, Comm, Pct 1, constituting a quorum, when among other business, the following was transacted:

ORDER APROVING THE AMENDMENT OF THE CONTRACT WITH A PRIVATE LAW FIRM ENTERED ON MAY 19, 2014 TO AUTHORIIZE THE EARLY COLLECTION OF BUSINESS PERSONAL PROPERTY TAXES PURSUANT TO SECTION 33.11 OF THE TEX. TAX CODE;

ORDER AUTHORIZING EARLY ADDITIONAL PENALTY ON DELINQUENT PERSONAL PROPERTY TAXES UNDER TEX. TAX CODE § 33.11 IN ORDER TO DEFRAY COSTS OF COLLECTION.

Commissioner Everette D. Alfred introduced an order and made a motion that the same be adopted. Commissioner Brent Weaver seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

AYES:	4
NAYS:	0
ABSTENTIONS:	0

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted follows:

WHEREAS, JEFFERSON County wishes to defray its costs of collection, as authorized by TEX. TAX CODE § 33.11, that it incurs under a contract

for collection of delinquent property taxes between said county and a private law firm entered into pursuant to TEX. TAX CODE § 6.30;

WHEREAS, under said Section 33.11, Commissioners Court is empowered to authorize the addition of a collection penalty in an amount that does not exceed the amount of the compensation specified in the contract with the private law firm;

NOW, THEREFORE,

BE IT ORDERED BY THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS, SITTING AS THE GOVERNING BODY OF SAID COUNTY, THAT:

Section 1: *THE RECITALS SET FORTH IN THIS ORDER ARE TRUE AND CORRECT.* ORDER APPROVING THE AMENDMENT OF THE CONTRACT WITH A PRIVATE LAW FIRM ENTERED ON MAY 19, 2014 TO AUTHORIZE THE EARLY COLLECTION OF BUSINESS PERSONAL PROPERTY TAXES PURSUANT TO SECTION 33.11 OF THE TEX. TAX CODE.

Section 2: *AN ADDITIONAL PENALTY ON DELINQUENT PERSONAL PROPERTY TAXES FOR TAX YEAR 2017 AND SUBSEQUENT YEARS IS HEREBY AUTHORIZED AND IMPOSED, AS PROVIDED BY SECTION 33.11, TEXAS TAX CODE, IN THE AMOUNT OF 20% OF THE DELINQUENT TAX, PENALTY AND INTEREST IF THE TAX BECOMES DELINQUENT ON OR AFTER FEBRUARY 1 OF A YEAR AND REMAINS DELINQUENT ON THE 60TH DAY THEREAFTER.*

PASSED, APPROVED, ADOPTED and SIGNED this 27th day of November, 2017.

JEFFERSON COUNTY

BY: _____

County Judge

Jefferson County, Texas

ATTEST:

_____

County Clerk

COMMISSIONERS COURT JEFFERSON COUNTY, TEXAS

AGENDA ITEM **November 27, 2017**

Consider and possibly approve a resolution authorizing Amendment to the Contract for Collection and Assessment Services between Jefferson County and individual Taxing Entities authorizing the Jefferson County Tax-Assessor Collector to conduct necessary activities for the collection of delinquent taxes.

Amendment

STATE OF TEXAS §
§
COUNTY OF JEFFERSON

COMMISSIONERS' COURT
OF JEFFERSON COUNTY, TEXAS

AMENDMENT TO
CONTRACT FOR COLLECTION AND ASSESSMENT SERVICES

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Amendment was adopted:

WHEREAS, Jefferson County, Texas hereinafter called "County" and the individual Taxing Entities, hereinafter called "Parties", entered into a Contract for Collection and Assessment Services on the 14th day of October, 1982, and the parties desire to amend that agreement; now therefore Section 8 of the contract is hereby amended as follows:

WHEREAS, it is the desire and in the best interest of all the parties to amend the existing contract to add section 8.3 pursuant to Section 791.001, Texas Government Code to recite therein that:

SECTION 8 DELINQUENT TAX SUITS

8.3 This contract is being executed pursuant to Section 791.011 of the Texas Government Code which allows an inter-local agreement to be established between local government entities to provide a governmental function or service that each party to the contract is authorized to perform individually.

RECITALS:

The parties agree as follows:

Each party to this agreement is authorized to collect delinquent taxes.

Each party agrees that is entitled to receive proceeds from a sheriff or constable sale.

Thus, each party to this contract agrees that JEFFERSON COUNTY, a party to a judgment, taken for the collection of delinquent taxes is authorized to conduct a sheriff sale of property, a re-sale of property not sold at the initial Sheriff's Sale, or to receive bids for the sale of property not sold at either the Sheriff's sale or a re-sale. In instances where a property has been bid-in to Jefferson County in trust for the entities for whom it collects, and has been through one (1) or more re-sales, and the period after the date on which the owner's right of redemption has terminated, then, each taxing unit authorizes JEFFERSON COUNTY to act on its behalf to sell such property at a private sale to any bidder at what it considers a reasonable price. Accordingly, JEFFERSON COUNTY shall not be required to seek approval from a taxing unit's governing body to accept and transfer said property to a purchaser at a non-public sale. Payments to each taxing unit will be allocated as provided under the Texas Property Tax Code.

At JEFFERSON COUNTY'S discretion, each party further agrees that where necessary JEFFERSON COUNTY shall be permitted to sell the property at a private sale for an amount less than the lesser of

1) The market value specified in the judgment of foreclosure; or
2) The total amount of the judgment against the property.

Each party understands and agrees that a property that is sold for an amount equal to or lesser than the judgment, its market or appraised value discharges and extinguishes all liens foreclosed by the judgment.

EACH PARTY AGREES THAT ANY ENTITY THAT DOES NOT CONSENT TO A SALE FOR AN AMOUNT EQUAL TO OR LESSER THAN THE JUDGMENT AND/OR ITS MARKET OR APPRAISED VALUE WILL BE LIABLE TO JEFFERSON COUNTY FOR A PRO RATA SHARE OF THE COSTS INCURRED IN PURCHASING AND MAINTAINING PROPERTY, INCLUDING THE COSTS OF PREVENTING THE PROPERTY FROM BECOMING A PUBLIC NUISANCE, A DANGER TO THE PUBLIC OR A THREAT TO PUBLIC HEALTH.

The amended provisions supersede all prior oral and written agreements between the parties regarding Delinquent Tax Suits as provided in Section 8 of the Original agreement. All other terms and provisions of the original Contract for Assessment and Collection Services shall remain in full force.

IT IS THEREFORE RESOLVED THAT the contracts between Jefferson County and the individual taxing entities shall be amended as to each party that executes the amended agreement and that each executed amended agreement is hereby approved.

Signed this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

State of Texas

County of Jefferson

AMENDED CONTRACT FOR ASSESSMENT AND COLLECTION SERVICES

On the _____ day of _____, 1982 Jefferson County and _____ entered into a contract a contract for Jefferson County to perform various services regarding the collection of property taxes pursuant to the authority granted by Sec. 6.24, Property Tax Code and Tex. Rev. Civ. Stat. Ann. Art 4413(32c) (Vernon 1979); and

WHEREAS, the parties agree that it is in the best interest of the parties to amend that contract Section 8, pursuant to the authority granted by Section 791.001, Texas Government Code to authorize Jefferson County to perform additional services.

IT IS THEREFORE AGREED that the contract be amended to include the additional clause:

SECTION 8 DELINQUENT TAX SUITS

8.3 This contract is being executed pursuant to Section 791.011 of the Texas Government code which allows an interlocal agreement to be established between local government entities to provide a governmental function or service that each party to the contract is authorized to perform individually.

RECITALS:

The parties agree as follows:

Each party to this agreement is authorized to collect delinquent taxes.

Each party agrees that is entitled to receive proceeds from a sheriff or constable sale.

Thus, each party to this contract agrees that JEFFERSON COUNTY, a party to a judgment, taken for the collection of delinquent taxes is authorized to conduct a sheriff sale of property, a re-sale of property not sold at the initial Sheriff's Sale, or to receive bids for the sale of property not sold at either the Sheriff's sale or a re-sale. In instances where a property has been bid-in to Jefferson County in trust for the entities for whom it collects, and has been through one (1) or more re-sales, and the period after the date on which the owner's right of redemption has terminated, then, each taxing unit authorizes JEFFERSON COUNTY to act on its behalf to sell such property at a private sale to any bidder at what it considers a reasonable price. Accordingly, JEFFERSON COUNTY shall not be required to seek approval from a taxing unit's governing body to accept and transfer said property to a purchaser at a non-public sale. Payments to each taxing unit will be allocated as provided under the Texas Property Tax Code.

At JEFFERSON COUNTY'S discretion, each party further agrees that where necessary JEFFERSON COUNTY shall be permitted to sell the property at a private sale for an amount less than the lesser of

1) The market value specified in the judgment of foreclosure; or
2) The total amount of the judgment against the property.

Each party understands and agrees that a property that is sold for an amount equal to or lesser than the judgment, its market or appraised value discharges and extinguishes all liens foreclosed by the judgment.

EACH PARTY AGREES THAT ANY ENTITY THAT DOES NOT CONSENT TO A SALE FOR AN AMOUNT EQUAL TO OR LESSER THAN THE JUDGMENT AND/OR ITS MARKET OR APPRAISED VALUE WILL BE LIABLE TO JEFFERSON COUNTY FOR A PRO RATA SHARE OF THE COSTS INCURRED IN PURCHASING AND MAINTAINING PROPERTY, INCLUDING THE COSTS OF PREVENTING THE PROPERTY FROM BECOMING A PUBLIC NUISANCE, A DANGER TO THE PUBLIC OR A THREAT TO PUBLIC HEALTH.

The amended provisions supersede all prior oral and written agreements between the parties regarding Delinquent Tax Suits as provided in Section 8 of the Original agreement. All other terms and provisions of the original Contract for Assessment and Collection Services shall remain in full force.

Signed this ____ day of _____, 2017

Entity:

_____

By: _____

Jefferson County:

_____

Jeff R. Branick, County Judge

PROCLAMATION

STATE OF TEXAS	§	COMMISSIONERS' COURT
	§	
COUNTY OF JEFFERSON	§	OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Brent Weaver, Commissioner of Precinct No. 2, and seconded by Michael Shane Sinegal Commissioner of Precinct No. 3, the following Proclamation was adopted:

WHEREAS, The Tzu Chi Foundation has established an on-going partnership with Jefferson County since 2005; and

WHEREAS, the Tzu Chi Foundation has provided millions of dollars in financial aid to the citizens of Jefferson County in times of our greatest need; and

WHEREAS, The Tzu Chi Foundation has raised funds all over the world to assist citizens of Jefferson County affected by Hurricane Harvey; and

WHEREAS, The Tzu Chi Foundation and its members have provided personal guidance and comfort to individuals in Jefferson County.

NOW, THEREFORE, BE IT RESOLVED that the Commissioners' Court of Jefferson County, Texas does hereby proclaim the week of November 27, 2017 as Tzu Chi Foundation Appreciation Week in Jefferson County and we urge all citizens to join us in making the community aware of the many fine people who make up the Tzu Chi Foundation and the support that they continue to give to Jefferson County.

SIGNED this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

AGENDA ITEM **November 27, 2017**

Consider, possibly approve and authorize the County Judge to execute a Consent Form for Demolition of Unsafe Structure (a duplex) located at 2460-62 Park St., Beaumont, Texas.

RECEIVED NOV 16 2017

BEAUMONT
TEXAS

CITY OF BEAUMONT
BUILDING CODES DIVISION
CONSENT FORM FOR DEMOLITION OF UNSAFE STRUCTURE

I, Jefferson County - _____, do hereby give the City of Beaumont, Jefferson County, Texas, my consent as owner of the property and structure identified below to demolish and remove said structure. In consideration for the demolition I agree as follows:

1. I understand that the demolition may result in ruts in the property and the potential of damage to real and personal property remaining on the property.

2. ~~I hereby indemnify the City, its employees, officers and agent against any and all claims for injuries or damages arising from demolition on my property, expressly including injuries to persons or damages to real or personal property arising from negligence by the City, its employees, officers or agents.~~

***** **Any personal property should be removed immediately because the spoils from the demolition will be discarded according to city policies and procedures.**

PROPERTY DESCRIPTION:
2460-62 Park St - Duplex
ELLIS L 14 L 15 B 2 2456-60-62 PARK ST ABSTRACT 019200

_____
Telephone Number

_____
Signature
Judge Jeff R. Branick

_____
Signature

Date: 11.27.2017

STATE OF TEXAS
COUNTY OF JEFFERSON

BEFORE ME, the undersigned authority, on this day appeared Jefferson County - Judge Jeff R. Branick known to me to be the person(s) whose name(s) is (are) sub scribed to the foregoing instrument and acknowledged to me that he (they) executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 27th day of November, 2017.

Loma C George
Notary Public in and for
Jefferson, **Texas**
My Commission Expires:
Feb. 7, 2019

LOMA C. GEORGE
Notary Public State of Texas
Commission Expires
FEBRUARY 7, 2019

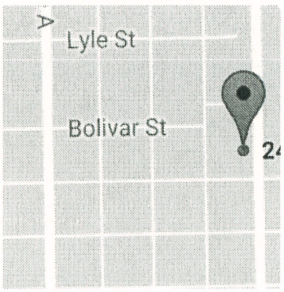
Google Maps 2450 Park St

Image capture: Jan 2012 © 2017 Google

Beaumont, Texas

Google, Inc.

Street View - Jan 2012



AGENDA ITEM **November 27, 2017**

Consider and possibly approve an Order to establish the Dow Chemical Reinvestment Zone pursuant to Sec. 312.401, Texas Tax Code.

STATE OF TEXAS	§	IN THE COMMISSIONERS COURT
COUNTY OF JEFFERSON	§	OF JEFFERSON COUNTY, TEXAS

AN ORDER OF THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS DESIGNATING A REINVESTMENT ZONE PURSUANT TO SEC 312. 401 OF THE TAX CODE (THE PROPERTY REDEVELOPMENT AND TAX ABATEMENT ACT)

BE IT REMEMBERED at a meeting of Commissioners Court of Jefferson County, Texas, held on the 27th day of November, 2017 on motion made by Everette Alfred, Commissioner of Precinct No 4, and seconded by Michael Shane Sinegal, Commissioner of Precinct No 3, the following Order was adopted

WHEREAS, the Commissioners Court of Jefferson County, Texas desires to create the proper economic and social environment to induce the Investment of private resources in productive business enterprises located in the county and to provide employment to residents of the area; and,

WHEREAS, it is in the best interest of the County to designate the Dow Chemical Reinvestment Zone facility in the Beaumont, TX ETJ as reinvestment zone, pursuant to Sec. 312. 401, Tax Code (The Property Redevelopment and Tax Abatement Act)

IT IS THEREFORE ORDERED BY THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS

Section 1. That the Commissioners Court hereby designates the property, P.O. Box 4950, Beaumont, TX (mailing purposes only), Jefferson County, Texas 77704, further described in the legal description attached hereto as Exhibit *"A"*, and made apart hereof for all purposes, as a Reinvestment Zone (the "Zone")

Section 2 That the Commissioners Court finds that the Zone area meets the qualifications of the Texas Redevelopment and Tax Abatement Act (hereinafter referred to as the "Act".)

Section 3. That the Commissioners Court has heretofore adopted Guidelines and Criteria for Granting Tax Abatements in Reinvestment Zones in Jefferson County, Texas

Section 4 That the Commissioners Court held a public hearing to consider this Order on the 27th day of November, 2017.

Section 5. The Commissioners Court finds that such improvements are feasible and will benefit the Zone after the expiration of the agreement

Section 6. The Commissioners Court finds that creation of the Zone is likely to contribute to the retention or expansion of primary employment in the area and/or would contribute to attract major investments that would be a benefit to the property and that would contribute to the economic development of the community

Section 7. That this Order shall take effect from and after its passage as the law in such cases provides.

Signed this 27th day of November, 2017.

JEFF R. BRANICK
County Judge

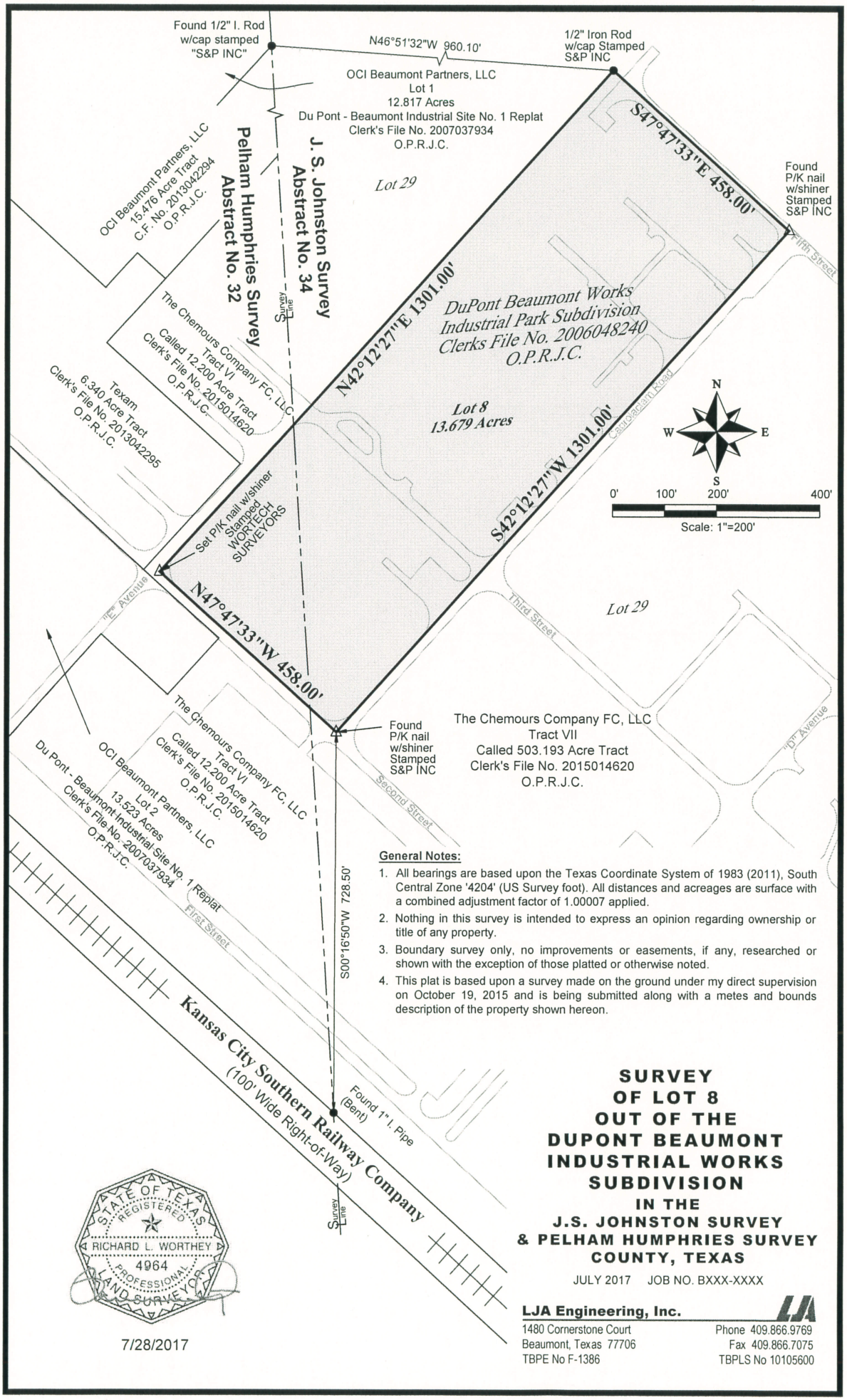
ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No 4

EXHIBIT "A"



General Notes:

1. All bearings are based upon the Texas Coordinate System of 1983 (2011), South Central Zone '4204' (US Survey foot). All distances and acreages are surface with a combined adjustment factor of 1.00007 applied.
2. Nothing in this survey is intended to express an opinion regarding ownership or title of any property.
3. Boundary survey only, no improvements or easements, if any, researched or shown with the exception of those platted or otherwise noted.
4. This plat is based upon a survey made on the ground under my direct supervision on October 19, 2015 and is being submitted along with a metes and bounds description of the property shown hereon.

STATE OF TEXAS
REGISTERED
RICHARD L. WORTHEY
4964
PROFESSIONAL
LAND SURVEYOR

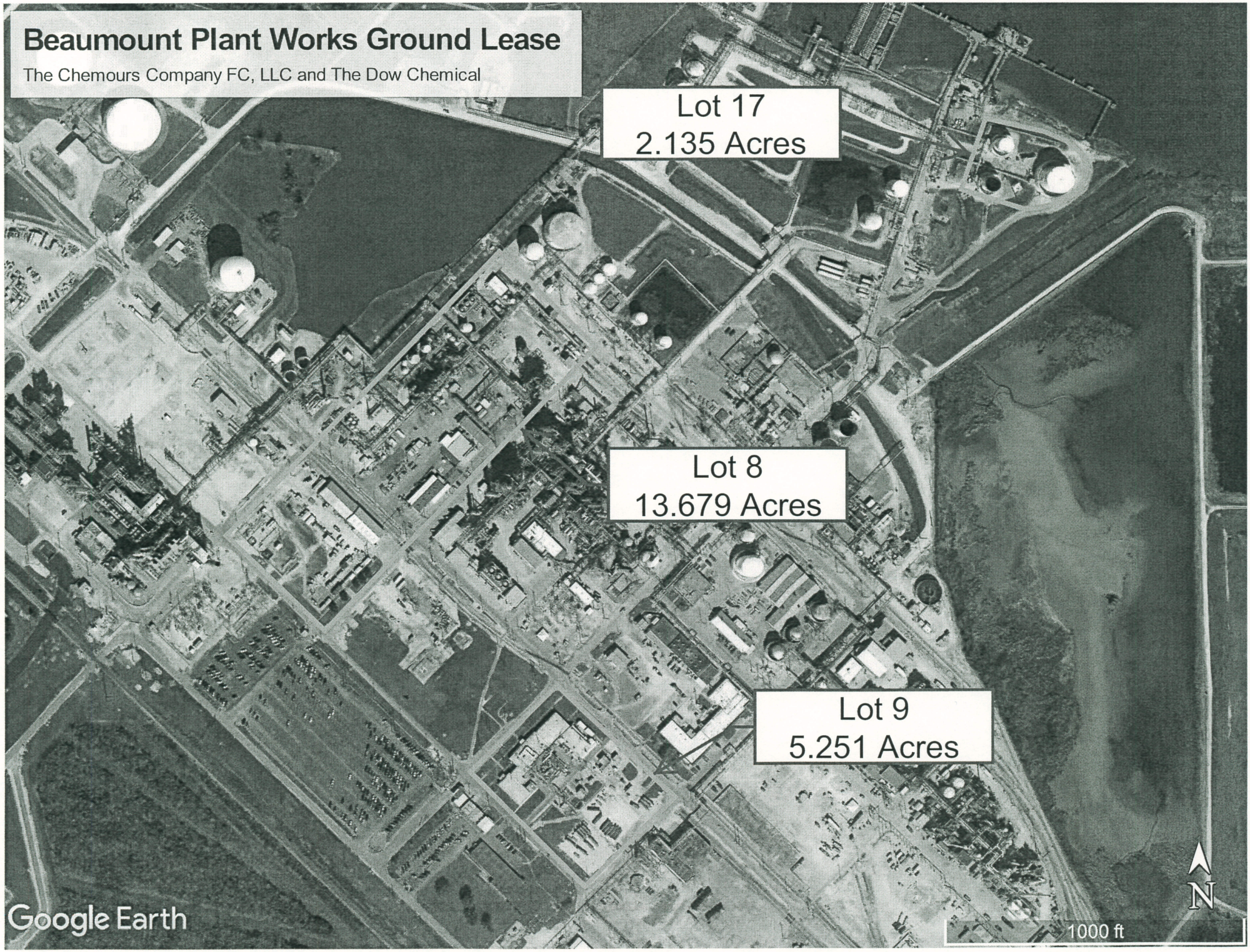
7/28/2017

SURVEY OF LOT 8 OUT OF THE DUPONT BEAUMONT INDUSTRIAL WORKS SUBDIVISION

IN THE J.S. JOHNSTON SURVEY & PELHAM HUMPHRIES SURVEY COUNTY, TEXAS

JULY 2017 JOB NO. BXXX-XXXX

LJA Engineering, Inc.
1480 Cornerstone Court
Beaumont, Texas 77706
TBPE No F-1386
Phone 409.866.9769
Fax 409.866.7075
TBPLS No 10105600


Beaumount Plant Works Ground Lease
The Chemours Company FC, LLC and The Dow Chemical
Lot 17
2.135 Acres
Lot 8
13.679 Acres
Lot 9
5.251 Acres
Google Earth
N
1000 ft

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Carolyn L Guidry

2016 Feb 29 12:34 PM Fee: $ 170.00

2016006279

CAROLYN L. GUIDRY, COUNTY CLERK
JEFFERSON COUNTY TEXAS
Electronically Recorded

THE STATE OF TEXAS §

§ KNOW ALL BY THESE PRESENTS:

COUNTY OF JEFFERSON §

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT (this "Agreement"), dated as of January 1, 2016 (the "Effective Date"), is made by and among THE CHEMOURS COMPANY FC, LLC, a Delaware limited liability company ("Chemours"), as successor in interest to E.I. DU PONT DE NEMOURS AND COMPANY, a Delaware corporation ("DuPont"), LUCITE INTERNATIONAL, INC., a Missouri corporation ("Lucite"), and THE DOW CHEMICAL COMPANY, a Delaware corporation ("Dow"). Each of Chemours, Lucite and Dow is sometimes referred to herein as a "Party." More than one Party is sometimes collectively referred to herein as the "Parties."

WITNESSETH:

WHEREAS, as of December 23, 1991, DuPont was the owner of a tract of land situated in the County of Jefferson, State of Texas, commonly known as the Beaumont Complex Plant Works at 5470 North Twin City Highway, Nederland, TX 77627, and being more particularly shown on the map attached hereto as Exhibit A and made a part hereof (the "Beaumont Complex"); and

WHEREAS, in 1993, ICI Acrylics Inc., predecessor in interest to Lucite, leased a portion of the Beaumont Complex from DuPont pursuant to that certain Ground Lease dated July 1, 1993, and filed with the Official Records of Real Property of Jefferson County, Texas (the "Official Records of Real Property") at Instrument No. 9324399, as amended and restated by that certain First Amended and Restated Ground Lease dated as of July 22, 1994 and filed with the Official Records of Real Property at Instrument No. 2000000053 (collectively, the "ICI Lease"); and

WHEREAS, in 2005, Lucite leased a portion of the Beaumont Complex from DuPont (the "Lucite Parcel") pursuant to that certain Lease, dated as of September 15, 2005, as amended from time to time, with a Memorandum of Ground Lease recorded in the Official Records of Real Property as Instrument No. 2005037284, a First Amendment to Memorandum of Ground Lease dated as of March 30, 2007 and recorded in the Official Records of Real Property as Instrument No. 2007012439, a Second Amendment to Memorandum of Ground Lease dated as of December 20, 2013 and recorded in the Official Records of Real Property as Instrument No. 2013042293 and a Third Amendment to Memorandum of Ground Lease dated as of the date hereof which will also be recorded in the Official Records of Real Property (as the same and may hereafter be amended and together with the ICI Lease, collectively, the "Lucite Lease"); and

WHEREAS, in 2007, DuPont conveyed to Lucite certain services infrastructure located throughout the Beaumont Complex, including, without limitation, those assets listed on Exhibit B attached hereto and incorporated herein by reference (collectively, the "Site Services Infrastructure") which Lucite uses to provide site services to itself, Chemours and other site users at the Beaumont Complex; and

WHEREAS, on April 28, 2015, DuPont conveyed all of its remaining property and interest in the Beaumont Complex to Chemours, pursuant to a deed filed in the Official Records of Real Property as Instrument No. 2015014620, Correctional Deed, and being more particularly shown and described on Exhibit A-1, attached hereto and made a part hereof ("Chemours Parcel"); and

WHEREAS, Chemours operates an aniline plant (the "Aniline Facility") on approximately 21.065 acres of land on the Chemours Parcel, as shown on the map attached hereto as Exhibit C, upon which Chemours from time to time may own, operate, maintain, repair, replace, renovate or construct certain improvements for the operation of the Aniline Facility; and

WHEREAS, Chemours entered into an Asset Purchase Agreement, dated as of November 19, 2015, by and between Chemours and Dow, in connection with which Chemours intends to enter into a ninety-nine (99) year ground lease and easement agreement with Dow (the "Lease"), pursuant to which Chemours will lease Dow the real property associated with the Aniline Facility as described and depicted in Exhibit D (the "Aniline Land"); and

WHEREAS, the Parties recognize that in order for them to continue operation of their respective businesses on the Beaumont Complex compatibly and without undue interference by any Party upon the other, it is necessary to establish certain easements and covenants on and over certain portions of the Beaumont Complex.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS, that Chemours, Lucite and Dow, in consideration of One Dollar ($1.00) and other good and valuable consideration, hereby covenant and agree as follows:

1. **Easements**.

a. Easements Granted by Chemours. Chemours hereby grants to Lucite the following easements (collectively, the "Lucite Easements"):

(i) Non-Exclusive Access to the Aniline Land. A perpetual, nonexclusive easement, right and privilege over, upon, across and through the portions of the Aniline Land reasonably necessary for the purpose of operating, maintaining, repairing, removing, upgrading, replacing and inspecting the Site Services Infrastructure owned by Lucite and required for Lucite to provide site services to itself, to Chemours, to Dow and to all other service users of the Beaumont Complex. This easement shall also include rights of vehicular and pedestrian ingress and egress over and within the portions of the Aniline Land as reasonably necessary to exercise its rights under any of the Lucite Easements granted hereby.

(ii) Roadways on Aniline Land. A perpetual, nonexclusive easement, right and privilege to access and use existing roadways located on the Aniline Land (i.e., 3rd Street, 5th Street and Caprolactam Road and excluding any internal roads that run through the Aniline Facility) reasonably necessary for the purpose of operating, maintaining, repairing, upgrading, replacing and inspecting such roadways.

(iii) Utility/Raw Material Services Across Aniline Land. A perpetual, nonexclusive easement, right and privilege over, under, upon, across and through the portions of the Aniline Land reasonably necessary for the purpose of constructing, installing, operating, maintaining, repairing, inspecting and replacing (i) various pipelines and canals owned by Lucite for the distribution of utility services and for the delivery of raw materials and other services, including, without limitation, those pipelines referenced on Exhibit B attached hereto and (ii) the associated ancillary facilities required by any of the service users for the operation of their respective businesses.

(iv) Stormwater/Wastewater Drainage Across Aniline Land. A perpetual, nonexclusive easement, right and privilege over, under, upon, across and through the Aniline Land reasonably necessary for the purpose of the operation, maintenance, inspection, repair and replacement of the stormwater drainage system (including any associated piping, equipment or facilities) owned by Lucite and the wastewater drainage system (including any associated piping, equipment or facilities) owned by Lucite located thereon and required by Lucite, Chemours and other service users for the operation of their respective businesses.

(v) SAFER System/Communication Equipment on Aniline Land. A perpetual, nonexclusive easement, right and privilege over, under, upon, across and through the Aniline Land, including access to the building now commonly known as "Building #7," reasonably necessary for the purpose of using, operating, maintaining, repairing, removing, upgrading, replacing and inspecting (a) the system commonly known as the "SAFER" system and (b) Lucite's communications and security equipment (including the phone closets and wiring, network communications, site security and camera systems, and the red phone and yellow phone systems).

(vi) Fresh Water Canals on Entire Chemours Parcel. A perpetual, exclusive easement, right and privilege, the right in and use of, including the right to maintain and operate and the exclusive right to withdraw water from all existing fresh water canals located on the Chemours Parcel (including the Aniline Land) and including that existing canal across the Kansas City Southern Railway Company railroad right of way described in the Crossing Easement between The Kansas City Southern Railway Company and DuPont acknowledged October 22, 1952, recorded in the Official Records of Real Property in volume 879, page 438.

(vii) Railroads on Entire Chemours Parcel. A perpetual, exclusive easement, right and privilege, over, under, upon, across and through the Aniline Land where Lucite's railroad lines are currently located reasonably necessary for the purpose of using, operating, maintaining, repairing, removing, upgrading, replacing and inspecting such existing railroad lines, rail spur and related facilities.

b. Easements Reserved and Granted by Chemours and Consented to by Lucite. Chemours hereby reserves unto itself and grants and conveys to Dow, and Lucite hereby acknowledges, accepts and agrees to such reservation, grant and conveyance, commencing on the effective date of the Lease through the earlier of the expiration or earlier termination of the Lease, the following easement on, over, across, under and through the Lucite Parcel (collectively, the "Chemours Easement"):

(i) Electrical Services. A perpetual, nonexclusive easement, right and privilege over, upon, across and through the portions of the Lucite Parcel reasonably necessary for the purpose of installing, operating, maintaining, repairing, inspecting and replacing electrical transmission poles and lines located thereon which provide electrical power from any or all electrical substations (currently owned by Entergy Corporation (formerly Gulf States Utilities)) located within the Beaumont Complex to Lucite and other electricity users in the Beaumont Complex for the operation of their respective businesses.

c. Limitation and Lucite Covenants. Notwithstanding any provisions of this Agreement to the contrary, Lucite further agrees as follows:

(i) Lucite's rights under the Lucite Easements granted hereby are subject in all respects to any rights of third parties in or to the Aniline Land existing as of the date hereof.

(ii) The exercise of any rights by Lucite pursuant to this Agreement shall be conducted in a manner that (A) complies with the site security and safety procedures adopted by Chemours and/or Dow with respect to the applicable portion of the Aniline Land from time to time and (B) does not interfere in any material respect with Chemours' ownership of the Aniline Land, Dow's leasehold interest in the Aniline Land, Chemours' or Dow's use of the Aniline Land, or the operation of their respective businesses thereon.

d. Limitation and Chemours and Dow Covenants. Notwithstanding any provisions of this Agreement to the contrary, Chemours and Dow further agree as follows:

(i) Chemours' and Dow's rights under the Chemours Easement granted hereby are subject in all respects to any rights of third parties in or to the Lucite Parcel existing as of the date hereof.

(ii) The exercise of any rights by Chemours or Dow pursuant to this Agreement shall be conducted in a manner that (A) complies with the site security and safety procedures adopted by Lucite with respect to the Lucite Parcel from time to time and (B) does not interfere in any material respect with Lucite's ownership and use of the Lucite Parcel and the operation of its business thereon.

(iii) Chemours and Dow agree that the Lease will be subordinate and subject to the Lucite Easements granted herein.

e. Chemours Release of any Ownership Claim. Chemours hereby agrees to unconditionally release and waive any claim of ownership to any of the assets relating to or used in connection with the Lucite Easements above, including, without limitation, the Site Services Infrastructure, main plant roads and canals. Chemours separately acknowledges and agrees that the railroads on the Beaumont Complex, including, without limitation, the west marshalling yards and the "S" curve rail line (collectively, the "Railroads"), were sold by Chemours to Lucite and no other party has any ownership interest in such Railroads and Chemours unconditionally releases and waives any claim of ownership in such Railroads.

2. **Aniline Appurtenant Easement Rights.**

a. Easements Granted by Chemours and Lucite. Chemours hereby grants and conveys to Dow, and Lucite hereby acknowledges, accepts and agrees to such grant and conveyance, the following rights as appurtenances to the Aniline Land (collectively, the "Aniline Appurtenant Easement Rights" and, together with the Lucite Easements and the Chemours Easement, the "Easements"):

(i) Dow Access Easements. Nonexclusive, appurtenant easement rights commencing on the effective date of the Lease through the earlier of the expiration or earlier termination of the Lease upon, over and across all roads on the Lucite Parcel and those portions of the Chemours Parcel located outside of the boundaries of the Aniline Land which are reasonably necessary to provide Dow ingress, egress and regress to the Aniline Land for the ownership and operation of its business thereon, including and not limited to Lucite's general parking lot and Dow's sulfuric acid pumps, sulfuric acid lines, deepwells, deepwell piping, and aniline and ammonia tank and dock lines and related pipe bridges and supports.

(ii) Utility/Raw Material Easements. Nonexclusive, appurtenant easement rights commencing on the effective date of the Lease through the earlier of the expiration or earlier termination of the Lease, over the Lucite Parcel and those portions of the Chemours Parcel located outside of the boundaries of the Aniline Land which are reasonably necessary to continue to receive the existing utility services supplied to the Aniline Facility, including, but not limited to, the aniline pipeline and the existing pipelines providing caustic soda, hydrogen and benzene to the Aniline Facility.

(iii) Site Service Easements. A nonexclusive, appurtenant easement commencing on the effective date of the Lease through the earlier of the expiration or earlier termination of the Lease, over the Lucite Parcel and those portions of the Chemours Parcel located outside of the boundaries of the Aniline Land for the operation, maintenance, repair, removal, upgrade, replacement and inspection of those service assets as described on Exhibit E attached hereto (collectively, the "Aniline Assets") which are necessary to exercise or caused to be exercised all rights granted to or obligations imposed on Dow, as assignee from Chemours, of that certain Second Amended and Restated Leasehold Services Agreement dated as of March 30, 2007 between Lucite and Chemours, as amended by the Amendment to Second Amended and Restated Leasehold Services Agreement dated as of December 20, 2013 and the Second Amendment to Second Amended and Restated Leasehold Services Agreement dated as of the date hereof (the "Services Agreement").

b. Limitation and Dow's Covenants.

(i) Dow's rights under the Aniline Appurtenant Easement Rights granted hereby are subject in all respects to any rights of third parties in or to the Lucite Parcel existing as of the date hereof.

(ii) The exercise of any rights by Dow pursuant to this Section 2 shall be conducted in a manner that (A) complies with the site security and safety procedures adopted by Lucite with respect to the Lucite Parcel from time to time and (B) does not interfere in any material respect with Lucite's ownership and use of the Lucite Parcel and the operation of its business thereon.

3. **Further Assurances**.

a. To the extent the exact location of any Easements have not been determined as of the date hereof, the Parties agree such locations shall be determined by them in cooperation, acting in good faith and taking into consideration the needs or requests of Lucite and/or Dow, as applicable, so as (i) to afford Lucite and/or Dow the practical benefits of the Easements granted herein and (ii) to avoid any disruption or interference with the operation of Lucite's, Chemours' and Dow's businesses.

b. Chemours, Dow and Lucite agree that, in establishing the location of the Easements, the same shall be located in such a manner as to provide the most reasonably cost effective routes, rights of way and easements for their intended purpose, subject to and taking into account, in all respects, the Aniline Facility site conditions, Lucite's site conditions on the Lucite Parcel, any remediation activities, the operations of the various Parties at the Aniline Facility (including Dow, Lucite and Chemours), Lucite's operations of its facilities and provision of site services on the Beaumont Complex, any future plans for the Aniline Facility site or the Lucite Parcel and any other legitimate business needs of the Parties hereto or other concerns regarding the Aniline Facility or Lucite's facilities, including health, safety and environmental concerns or added cost or expense to Chemours, Dow or Lucite in providing the same.

c. Chemours, Lucite and Dow agree that the Easements are intended to include all easements and rights of way reasonably necessary (i) for Lucite to operate, maintain, repair, upgrade, replace and inspect the Lucite owned Site Services Infrastructure and to provide site services to itself, to Chemours and to other service users at the Beaumont Complex and for Lucite to use and operate its facilities on the Lucite Parcel; (ii) for Chemours to operate, maintain, repair, upgrade, replace and inspect the electrical grid for the Chemours Parcel (including the Lucite Parcel and the Aniline Land) and to provide electrical service to itself, to Lucite and to any other tenant; (iii) for Dow to operate, maintain, repair, upgrade, replace and inspect all existing pipelines and other existing facilities owned by Dow necessary to provide site services to itself, to Chemours, to Lucite and to other service users at the Beaumont Complex in accordance with the Services Agreement and for Dow to use and operate the Aniline Facility. The Parties agree that in the event that the Easements granted above do not include all of the rights necessary to achieve the purpose set forth in this Section 3(c), the Parties shall cooperate in good faith to identify, grant and appropriately document any additional necessary easement rights.

4. **Relocation of Easements.**

a. Relocation. Chemours, Lucite and Dow shall, each at its sole cost and expense, have the right to relocate any of the Easements located on the Aniline Land and granted pursuant to this Agreement in accordance with this Section 4.

b. Conditions to Relocation. Any relocation of any Easement pursuant to this Section 4 shall be subject to the following terms and conditions:

(i) No relocation may be made without the prior written consent of the Party to whose parcel (whether owned or leased) the applicable Easement is appurtenant when such relocation would materially adversely affect the operation of that Party's facility or business.

(ii) Lucite shall not, without the prior written consent of Chemours and Dow, relocate, modify or eliminate any roads which constitute or are a part of the Aniline Appurtenant Easement Rights if the effect of such relocation, modification or elimination would be to deprive Chemours, Dow, their contractors or invitees of access to the parcel upon which they conduct their business.

(iii) Neither Lucite nor Chemours shall relocate any Easements granted pursuant to Sections 1(a) and 1(b) hereof without the prior written consent of the other Party, which consent shall not be unreasonably withheld, delayed or conditioned; it being agreed that such relocation shall not (A) result in any disruption of the Party's business; or (B) increase the costs of (1) operating and maintaining the equipment or facilities which are the subject of such Easement; or (2) operating and administering any Party's business generally, in either case, other than to a de minimis extent. Anything to the contrary provided in this Section 4 notwithstanding, each Party shall, at its sole expense, have the right,

without the prior consent of the other (but with advance written notice to such Party), to relocate any easement with respect to the first Party's parcel if such relocation is required by applicable law.

(iv) Upon written request by any Party to relocate any Easement in accordance with this Section 4, all Parties shall promptly execute, acknowledge, and deliver an amendment to this Agreement effecting such relocation.

(v) Any dispute arising with respect to the relocation of any Easement pursuant to this Section 4 shall be resolved pursuant to the dispute resolution provisions in Section 8 of this Agreement.

5. **Indemnification Obligations Relating to Easements.**

a. Indemnification by Parties. Each Party hereto, including its successors, purchasers, lessees, and permitted assigns, shall be subject to this Agreement (the "Indemnifying Party") and shall defend, indemnify and hold harmless any other Party (the "Indemnified Party") from and against any loss, liability (including settlements, judgments, fines and penalties) or costs (including reasonable attorneys' fees, court costs and other litigation expenses) relating to any action, suit or proceeding (whether civil, criminal, administrative, arbitral, investigative or otherwise) against the Indemnified Party (including by any governmental agency) (a "Claim", or collectively, "Claims") in connection with this Agreement to the extent that any such Claim (i) arises from the negligence, willful misconduct or breach of this Agreement by the Indemnifying Party, its contractors and/or invitees; or (ii) is for injury or death of any person (including employees of any Party, to the extent caused by the Indemnifying Party, its contractors and/or invitees); (iii) is for loss of or damage to any property (including property of the employees of any Party, to the extent caused by the Indemnifying Party, its contractors and/or invitees); or (iv) is for environmental impairment or contamination, to the extent resulting from the acts or omissions (including breach of contract) of the Indemnifying Party, its contractors and/or invitees. The Indemnifying Party shall indemnify the Indemnified Party from any costs incurred in connection with enforcing this Section 5.

b. Contribution. If any claim (whether brought against one or more Parties) entitles any such Party to indemnification from the other(s) under this Section 5, then the Parties shall allocate among themselves any loss, liability or costs relating to such claim according to each Party's relative share of liability. Contributory negligence, or any analogous principle, shall not be a defense to any such allocation of loss, liability or costs.

c. Limitation of Liability. No Party shall be liable to any other Party for any indirect, incidental, special, consequential or punitive damages arising from any indemnification obligation under this Section 5.

6. **Insurance.** Each Party agrees that until it has terminated its rights under this Agreement, such Party shall maintain insurance, the limits of which shall be set forth in a separate agreement among the Parties hereto.

7. **Sale of Chemours' Aniline Plant to Dow**

a. Dow's Operation of the Aniline Facility. The Lucite Lease was drafted with the understanding and expectation that Chemours would be the operator of the Aniline Facility. Chemours now desires to sell, lease, assign or otherwise transfer the Aniline Facility assets to Dow but will retain ownership of the land where the Aniline Facility is located. To the extent Chemours has obligations under the Lucite Lease regarding the Aniline Facility, including, without limitation, the standards of operation at the Aniline Facility, compliance with Environmental Laws (as defined in the Lucite Lease) in the operation of the Aniline Facility, storage and disposal of Hazardous Substances (as defined in the Lucite Lease), immediate notice of any unauthorized Release (as defined in the Lucite Lease) of any Hazardous Substance on the Lucite Parcel, meetings regarding management of any post-Release cleanup, and requirements for maintenance of a service agreement for perimeter security, Dow agrees to be bound to Lucite by all of such terms in every respect as if the Lucite Lease were between Dow and Lucite.

b. Dow's Environmental Indemnification Obligation for Operation of the Aniline Facility. Dow agrees to indemnify, release, defend and hold harmless Lucite, its affiliates and any of their officers, directors, employees and agents from and against all Environmental Claim(s) and/or Losses (as such terms are defined in the Lucite Lease) which arise, or are alleged to arise, from or in connection with:

(i) Any Release (as defined in the Lucite Lease) by Dow or their employees, agents or contractors of a Hazardous Substance onto, off of, near, under, at or otherwise affecting or impacting the Lucite Parcel;

(ii) Any non-compliance with any applicable Environmental Law by Dow or its employees, agents or contractors relating to or impacting the Lucite Parcel on or after the Effective Date in connection with the operation of the Aniline Facility or other Dow activities affecting the Lucite Parcel on or after the Effective Date (for purposes of clarification only, and without limiting the foregoing, Dow shall not be responsible for any non-compliance with applicable Environmental Law arising as a result of any condition existing on the Aniline Land prior to the Effective Date); and

(iii) The generation, manufacture, refining, transportation, treatment, storage or handling by Dow or its employees, agents or contractors of any Hazardous Substance at, or impacting, the Lucite Parcel on or after the Effective Date in connection with the operation of the Aniline Facility or other Dow activities affecting the Lucite Parcel on or after the Effective Date.

c. Lucite's Environmental Indemnification Obligation for Operation of the Lucite Facility. Lucite agrees to indemnify, release, defend and hold harmless Dow, its affiliates and any of their officers, directors, employees and agents from and against all Environmental Claims and/or Losses which arise, or are alleged to arise, from or in connection with:

(i) Any Release by Lucite or its employees, agents or contractors of a Hazardous Substance onto, off of, near, under, at or otherwise affecting or impacting the Aniline Land;

(ii) Any non-compliance with any applicable Environmental Law by Lucite or its employees, agents or contractors relating to or impacting the Aniline Land arising in connection with Lucite's presence, activities or operations on the Lucite Parcel, provided, that Lucite shall not be responsible for any non-compliance with applicable Environmental Law arising as a result of the presence of Pre-Existing Conditions (as defined in the Lucite Lease) on the Lucite Parcel;

(iii) The generation, manufacture, refining, transportation, treatment, storage or handling by Lucite or its employees, agents or contractors of any Hazardous Substance at, or impacting, the Aniline Land on or after the Effective Date in connection with the operation of the Lucite's facilities or other Lucite activities affecting the Aniline Land on or after the Effective Date.

d. Dow's Non-Environmental Indemnification. Except as otherwise provided in any services agreement between Lucite and Dow, Dow agrees to defend, indemnify and hold harmless Lucite, its affiliates and any of their officers, directors, employees and agents from and against any and all Losses (as defined in the Lucite Lease) which (a) are solely and directly or indirectly caused by the negligence or willful misconduct on or after the Effective Date of Dow or its agents, employees, subcontractors, licensees or invitees or arising from the performance (or nonperformance) of Dow's obligations under Section 7(a) of this Agreement on or after the Effective Date, including any failure to comply with any pertinent Law; or (b) are caused jointly by any such negligence or willful misconduct by Dow and its agents, employees or subcontractors, licensees or invitees on and after the Effective Date and any negligence or willful misconduct by any third party or parties acting by, through or under Dow on or after the Effective Date. For purposes of Dow's indemnification obligations herein, the term "Losses" shall include any strict liability and other liability without fault, however named, asserted against Lucite.

e. Lucite's Non-Environmental Indemnification. Except as otherwise provided in any services agreement between Lucite and Dow, Lucite agrees to defend, indemnify and hold harmless Dow, its affiliates and any of their officers, directors, employees and agents, from and against any and all Losses which (a) are solely and directly or indirectly caused by the negligence or willful misconduct on or after the Effective Date of Lucite or its agents, employees, subcontractors, licensees or invitees or arising from the performance (or non-performance) of Lucite's obligations under this Agreement on or after the Effective Date or (b) are caused jointly by any such negligence or willful misconduct by Lucite and its agents, employees, subcontractors, licensees or invitees on or after the Effective Date and any negligence or willful misconduct by any third party or parties acting by, through or under Lucite on and after the Effective Date. For purposes of Lucite's indemnification obligation herein, the term "Losses" shall include any strict liability and other liability without fault, however named, asserted against Dow.

e. Limitation of Liability. Neither Lucite nor Dow shall be liable to the other for any indirect, incidental, special, consequential or punitive damages arising from any indemnification obligation under this Section 7.

f. No Release. Chemours agrees that nothing herein shall be deemed to release Chemours from any of its obligations under the Lucite Lease.

8. **Dispute Resolution/Remedies**

a. Meetings Between or Among the Parties. Pursuant to the terms of this Agreement, in the event of any claim or controversy under this Agreement, the Parties agree that within ten (10) business days after notification thereof an authorized representative of each Party involved in the claim or controversy shall meet to resolve such claim or controversy. If, within fifteen (15) business days after the date of the first meeting of the authorized representatives, the Parties involved in the claim or controversy have not agreed to a resolution, then the issue shall be determined in the manner set forth in Section 8(b) below.

b. Reference to Courts. Should the Parties fail to resolve the dispute pursuant to Section 8(a), then each of the Parties hereby consents exclusively to the jurisdiction and venue of the state and federal courts located in Jefferson County, Texas for all purposes in connection with any action or proceeding that arises from or relates to this Agreement and agrees not to initiate any proceeding in any other jurisdiction, court or tribunal except as provided under Section 8(c). Each Party hereby waives any objection it might have to personal jurisdiction of any such court and waives any rights it may have to personal service of summons, complaint, or other process in connection therewith.

c. Preliminary Injunction Relief. Nothing in Sections 8(a) or 8(b) shall prohibit a Party from commencing, prior to twenty five (25) business days following the dispute notice, an appropriate action in the state or federal courts located in Jefferson County, Texas (or if the state or federal courts located in Jefferson County, Texas do not have jurisdiction in a court of appropriate jurisdiction wherever located) to seek preliminary injunction relief to prevent irreparable harm that is occurring or imminent.

d. Exclusive Remedies. Subject to Section 8(c) above, the Parties agree that their exclusive remedy with respect to any claims against each other relating to this Agreement shall be pursuant to the indemnification provisions set forth in this Agreement.

9. **Miscellaneous**

a. Grants Run with the Land.

(i) Easements. The Easements established by this Agreement shall constitute a servitude on the property of the grantor thereof and, shall (A) be an appurtenance to the property of the grantee, (B) survive the total or partial destruction of the subject matter of such grant, and (C) run with the land.

(ii) Covenants. It is intended that each and all of the promises and agreements in this Agreement to be performed by any Party (including any tenant or any other person or entity which has acquired an interest in the Chemours Parcel, the Aniline Land or the Lucite Parcel), whether affirmative or negative in nature, shall be construed as covenants and not as conditions. To the fullest extent legally possible, all such covenants shall bind the Party making such covenant and run with the land owned or leased by such Party and shall benefit the Party in whose favor the covenant has been made and the land owned or leased by such Party.

b. Compliance with Laws. Each Party and any other person or entity which has acquired an interest in the Chemours Parcel, the Aniline Land or the Lucite Parcel shall exercise the rights and privileges granted to such party by this Agreement and shall conduct all activities with respect thereto in material compliance with all applicable laws, including, without limitation, environmental laws.

c. Real Estate Taxes. Except as otherwise agreed by the Parties in writing, each Party or any other person or entity which has acquired an interest in the Chemours Parcel, the Aniline Land or the Lucite Parcel shall pay, prior to delinquency, all real estate taxes assessed with respect to (i) the parcel(s) owned, leased or occupied by such party and (ii) any improvements thereon that are owned by such party, including, without limitation, any improvements owned by such party that are constructed in any easement area created by this Agreement for the purpose of exercise of any rights by such party with respect to such easement. The obligations of each Party pursuant to this Section 9(c) shall be subject to the right of any Party to contest in good faith the validity or amount of real estate taxes assessed against its applicable parcel or parcels.

d. Amendment. No amendment, termination or waiver of any provision of this Agreement shall in any event be effective unless the same shall be in writing and executed by each of Chemours, Lucite, Dow and any other person or entity which has acquired an interest in the Chemours Parcel, the Aniline Land or the Lucite Parcel.

e. Notices, Etc. All notices and other communications provided for hereunder shall be in writing and shall be delivered to the appropriate Party at the address set forth in this Section 9(e) (subject to change from time to time by written notice to all other Parties to this Agreement). All such notices and other communications shall be considered as properly given if delivered personally (including via nationally recognized overnight courier) or sent by first class United States Postal Service mail, postage prepaid, except that any notice of a default hereunder shall be sent by certified mail, return receipt requested, or by Overnight Express Mail or by overnight commercial courier service by a nationally recognized overnight courier, charges prepaid. Notices and other communications so sent shall be effective three (3) days after mailing, if mailed by first class mail, and otherwise upon receipt; provided, however, that non-receipt of any notice or other communication as the result of either (i) any change of address of which the sending Party was not notified, or (ii) a refusal to accept delivery, shall be deemed receipt of such notice or other communication. For purposes of notice, the address of the Parties shall be:

Chemours:

The Chemours Company FC, LLC
Real Estate Department
1007 Market Street
Wilmington DE 19899

Lucite:

Lucite International, Inc.
6350 North Twin City Hwy
Nederland, TX 77627
Attention: Beaumont Site Manager

With a copy to:

Lucite International, Inc.
7275 Goodlett Farms Parkway
Cordova, TN 38076
Attention: Assistant General Counsel

Dow:

The Dow Chemical Company
2030 Dow Center
Midland, Michigan 48647
Attention: Executive Vice President and General Counsel

with a copy to:

Mayer Brown LLP
71 South Wacker Drive
Chicago, Illinois 60606
Attention: Marc F. Sperber

f. Easement Binding on Successors. All covenants, terms and conditions of this Agreement shall be binding upon and inure to the benefit of the Parties hereto (including any tenant or any other person or entity which has acquired an interest in the Chemours Parcel, the Aniline Land or the Lucite Parcel) and their respective successors in interest, purchasers, lessees, sublessees and assigns.

g. Interpretation and Headings. The Article and Section headings contained in this Agreement are for reference purposes only and will not affect in any way the meaning or interpretation of this Agreement.

h. Partial Invalidity. If any covenant, term or condition of this Agreement or any application thereof shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement and any other application of such covenant, term or condition shall not be affected thereby; and, to the extent permitted and possible, the invalid or unenforceable covenant, term or condition shall be deemed replaced by a covenant, term or condition that is valid and enforceable and that comes closest to expressing the intention of such invalid or unenforceable covenant, term or condition.

i. Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Texas.

j. Entire Agreement This Agreement constitutes the entire understanding of the Parties with respect to the grant of the Easements granted hereby and the Parties' respective rights, duties and obligations with respect thereto. No other understanding or agreement, whether verbal or written, shall be binding or effective unless the same has been incorporated by reference herein.

[Remainder of Page Intentionally Blank; Signature Pages to Follow]

IN WITNESS WHEREOF, this Agreement has been duly executed and delivered as of the date first above written.

THE CHEMOURS COMPANY FC, LLC,
a Delaware limited liability company

By: Mark P. Vergnano
Title: President + CEO
Signature:

STATE OF Delaware)
) ss:
COUNTY OF New Castle)

Before me, the undersigned authority, on this day personally appeared Mark P. Vergnano the President + CEO of **THE CHEMOURS COMPANY FC, LLC**, a Delaware limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this 22nd day of February, 2016.

Elizabeth A. Bakere
Notary Public (Seal)

My commission expires: 08.29.2016

LUCITE INTERNATIONAL, INC.,
a Missouri corporation

By: PAUL F. MOYER

Title: PRESIDENT

Signature: Paul F. Moyer

STATE OF Tennessee)
) ss:
COUNTY OF Shelby)

Before me, the undersigned authority, on this day personally appeared Paul F. Moyer, the President of **LUCITE INTERNATIONAL, INC.**, a Missouri corporation, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this 22 day of February, 2016.

Susan A. Hartig
Notary Public (Seal)

SUSAN A. HARTIG
STATE OF TENNESSEE
NOTARY PUBLIC
SHELBY COUNTY
MY COMMISSION EXPIRES 8-11-2018

My commission expires: 8/11/2018

THE DOW CHEMICAL COMPANY,
a Delaware corporation

By: Daniel Dub
Title: Authorized Representative
Signature: _____

STATE OF MICHIGAN)
) ss:
COUNTY OF MIDLAND)

Before me, the undersigned authority, on this day personally appeared DANIEL DUB ON 01-30, 2016 the AUTHORIZED REPRESENTATIVE of THE DOW CHEMICAL COMPANY, a Delaware corporation, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this 30th day of JANUARY, 2016.

_____
Notary Public (Seal)

My commission expires: KIMBERLY S BIRCH
Notary Public — Michigan
Midland County
My Commission Expires Mar 16, 2019

EXHIBIT A

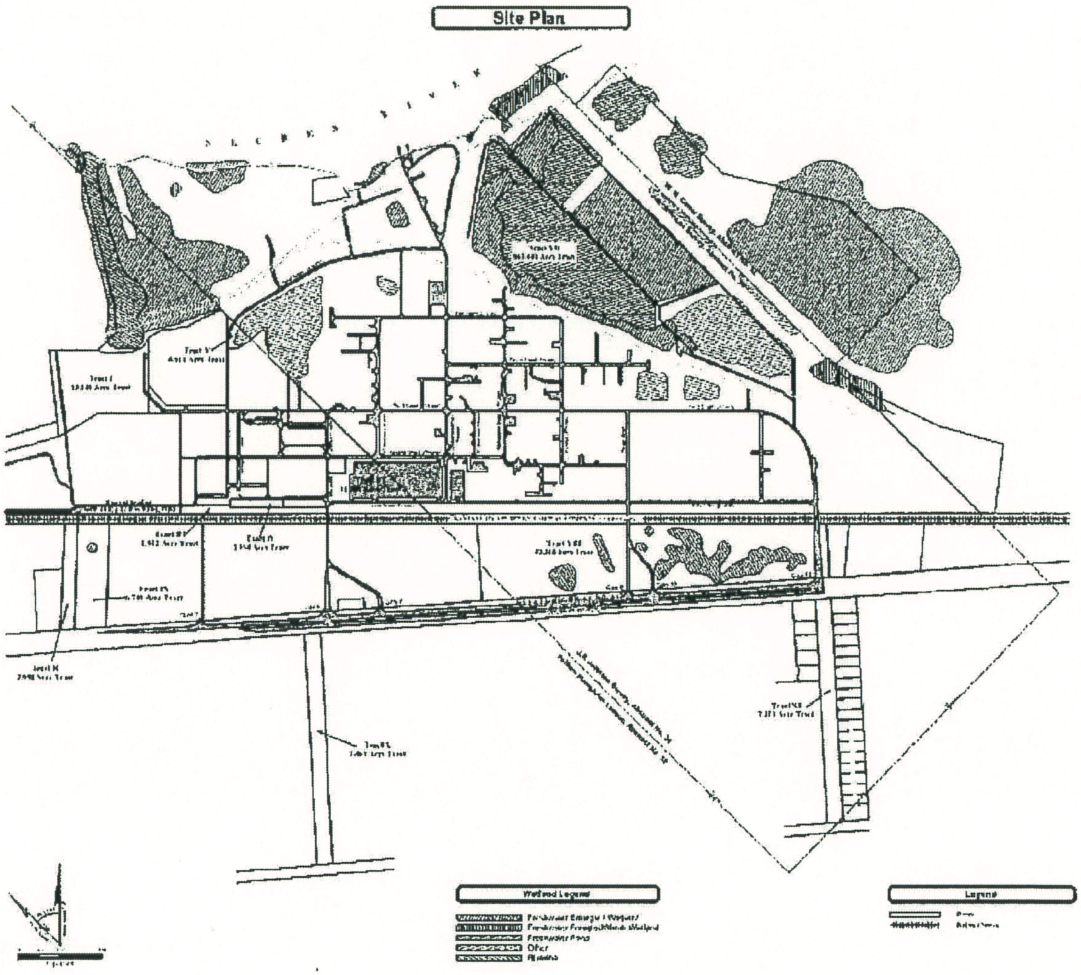


EXHIBIT A-1

Tract I

BEING all of that certain 13.148 acre tract or parcel of land designated as Lot 3 of Replat of Lot 3 of the DuPont - Beaumont Industrial Site No. 1 in the Pelham Humphries League, Abstract No. 32 Jefferson County, Texas, as recorded in Clerk's File No. 2007047667 of the Official Public Records of Jefferson County, Texas.

Tract II

BEING all of that certain 2.951 acre tract or parcel of land designated as Lot 3 out of the DuPont - Beaumont Works Industrial Park in the Pelham Humphries League, Abstract No. 32 Jefferson County, Texas, as recorded in Clerk's File No. 20060048240 of the Official Public Records of Jefferson County, Texas.

Tract III

BEING all of that certain 1.912 acre tract or parcel of land designated as Lot 3B of Replat of Lot 3 of the DuPont - Beaumont Industrial Site No. 1 in the Pelham Humphries League, Abstract No. 32 Jefferson County, Texas, as recorded in Clerk's File No. 2007047667 of the Official Public Records of Jefferson County, Texas.

Tract IV

BEING all of that certain 2.034 acre tract or parcel of land designated as Lot 3C of Replat of Lot 3 of the DuPont - Beaumont Industrial Site No. 1 in the Pelham Humphries League, Abstract No. 32 Jefferson County, Texas, as recorded in Clerk's File No. 2007047667 of the Official Public Records of Jefferson County, Texas.

Tract V

BEING a 0.910 acre tract of land out of and a part of that certain E.I. DuPont de Nemours and Company called 124.708 acre tract of land, more fully described and recorded in Volume 845, Page 63 of the Deed Records of Jefferson County, Texas, same being out of and a part of that certain Lot 3 of the DuPont-Beaumont Industrial Site No. 1 subdivision as recorded in Volume 15, Page 4 of the Map Records of Jefferson County, Texas, same being out of and a part of those certain Lots 28 and 29 of the DuPont-Beaumont Works Industrial Park Subdivision as recorded in Clerk's File No. 2006048240 of said Official Public Records, same being out of and a part of that certain Lot 3 of the DuPont-Beaumont Industrial Site No. 1 Replat, as recorded in Clerk's File No. 2007037934 of said Official Public Records and also being out of and a part of Lot 3E of that certain Replat of Lot 3 of the DuPont-Beaumont Industrial Site No. 1 Replat, as recorded in Clerk's File No. 2007047667 of said Official Public Records. Said 0.910 acre tract of land being situated in the Pelham Humphries League, Abstract No. 32, Jefferson County, Texas and being more particularly described as follows;

BEGINNING at a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS" found for the North corner of that certain OCI Beaumont Partners, LLC., called 15.476 acre tract of land as recorded in Clerk's File No. 2013042294 of said Official Public Records, same being in the Northwest line of said Lot 3E and the Southeast line of that certain OCI Beaumont Partners, LLC called Lot 1 (12.817 acre tract) as recorded in said Clerk's File No. 2007037934 of said Official Public Records. From said point of beginning a 1/2 inch iron rod with cap stamped "SPI INC" found for the South corner of said Lot 1 bears South 45 deg. 52 min. 19 sec. West a distance of 530.27 feet;

THENCE North 45 deg. 52 min. 19 sec. East along and with the Southeast line of said Lot 1 and the Northwest line of said Lot 3E a distance of 308.36 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for the East corner of said Lot 1 and the North corner of said Lot 3E, same being in the East line of said Abstract No. 32 and the West line of that certain J.S. Johnston Survey, Abstract No. 34, Jefferson County, Texas;

THENCE South 00 deg. 10 min. 10 sec. West along and the West line of said Abstract No. 34 and the East line of said Abstract No. 32, same being the East line of said Lot 3E a distance of 315.91 feet to point on the South bank of a water supply canal from which a 1 Inch iron pipe, found bent, for the South corner of said Lot 3 bears South 00 deg. 10 min. 10. sec. West, a distance of 2345.41 feet;

THENCE in a Northwesterly direction along and with said water supply canal bank the following calls and distances;

North 81 deg. 47 min. 42 sec. West a distance of 19.31 feet to a point;

North 90 deg. 00 min. 00 sec. West a distance of 40.67 feet to a point;

North 70 deg. 54 min. 47 sec. West a distance of 103.71 feet to a point;

THENCE North 44 deg. 07 min. 41 sec. West over and across said water supply canal a distance of 89.92 feet to the **POINT OF BEGINNING**, containing 0.910 acre of land, more or less.

Tract VI

BEING a 12.200 acre tract of land out of and a part of that certain E.I. DuPont de Nemours and Company called 124.708 acre tract of land, more fully described and recorded in Volume 845, Page 63 of the Deed Records of Jefferson County, Texas, same being out of and a part of that certain Lot 3 of the DuPont-Beaumont Industrial Site No. 1 subdivision, as recorded in Volume 15, Page 4 of the Map Records of Jefferson County, Texas, same being out of and a part of those certain Lots 6, 8, and 29 of the DuPont-Beaumont Works Industrial Park Subdivision as recorded in Clerk's File No. 2006048240 of said Official Public Records, same being out of and a part of that certain Lot 3 of the DuPont-Beaumont Industrial Site No. 1 Replat, as recorded in Clerk's File No. 2007037934 of said Official Public Records, and also being out of and a part of Lot 3E of that certain Replat of Lot 3, of the DuPont-Beaumont Industrial Site No. 1 Replat, as recorded in Clerk's File No. 2007047667 of said Official Public Records. Said 12.200 acre tract of land

being situated in the Pelham Humphries League, Abstract No. 32, Jefferson County, Texas and being more particularly described as follows;

BEGINNING at a 1 inch iron pipe, found bent, for the South corner of said DuPont called 124.708 acre tract and Lot 3E, same being the Southwest corner of that certain E.I. DuPont de Nemours and Company called 52.667 acre tract of land, more fully described and recorded in Volume 845, Page 73 of said Deed Records, and also being at the intersection of the Northeasterly line of that certain Kansas City Southern Railway Company (KCS Railroad) called 100 feet wide right-of-way, with the East line of said Pelham Humphries League, same being the West line of that certain J.S. Johnston Survey, Abstract No. 34;

THENCE North 44 deg. 06 min. 57 sec. West along and with the Southwesterly line of said DuPont Called 124.708 acre tract and Lot 3E, same being the Northeasterly line of said KCS Railroad right-of-way line, a distance of 947.76 feet to a PK nail in asphalt, found for the South corner of Lot 3B of said Clerk's File No. 2007047667 of said Official Public Records, same being most Westerly Corner of the herein described tract;

THENCE North 45 deg. 52 min. 19 sec. East along and with Southeast line of said Lot 3B, passing at 50.00 feet, a PK nail in asphalt found for the East corner of said Lot 3B and that certain Lot 3C of said Clerk's File No. 2007047667 of said Official Public Records, passing at 155.80 feet, a railroad spike found for the East corner of said Lot 3C and the West corner of that certain Lot 2 (13.523 acre tract of land), as recorded in said Clerk's File No. 2007037934 of said Official Public Records, continuing in all, a total distance of 377.80 feet to a 1/2 inch iron rod with cap stamped "SPI INC", found for an Ell corner of said Lot 2;

THENCE South 44 deg. 07 min. 41 sec. East along and with a Southwest line of said Lot 2, same being a Northeast line of said Lot 3E, a distance of 173.00 feet to a 1/2 inch iron rod with cap stamped "SPI INC", found for the South corner of said Lot 2 and an Ell corner of Said Lot 3E;

THENCE North 45 deg. 52 min. 19 sec. East along and with the Southeast line of said Lot 2, same being a Northwest line of said Lot 3E, a distance of 146.00 feet to a railroad spike, found for the East corner of said Lot 2 and an Ell Corner of Lot 3E;

THENCE North 44 deg. 07 min. 41 sec. West along and with the Northeast line of said Lot 2, same being a Southwest line of said Lot 3E, a distance of 195.00 feet to a PK nail in asphalt, found for the South corner of that certain Texam called 6.340 acre tract of land, as recorded in Clerk's File No. 2013042295 of said Official Public Records;

THENCE North 45 deg. 52 min. 19 sec. East along and with the Southeast line of said 6.340 acre tract and the Northwest line of said Lot 3E, a distance of 274.00 feet to a PK nail in asphalt, found for the Southeast corner of said 6.340 acre tract;

THENCE North 44 deg. 07 min. 41 sec. West along and with the Southernmost Northeast line of said 6.340 acre tract, a distance of 345.54 feet to a PK nail in asphalt, found for an Ell corner of said 6.340 acre tract;

THENCE North 45 deg. 52 min. 19 sec. East along and with the Northernmost Southeast line of said 6.340 acre tract and the Southeast line of that certain OCI Beaumont Partners, LLC., called 15.476 acre tract of land, as recorded in Clerk's File No. 2013042294 of said Official Public Records, passing at 167.00 feet, a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS", found for the East corner of said 6.340 acre tract, same being the South corner of said 15.476, continuing on for a total distance of 485.45 feet to a point for the Southeast corner of said 15.476 acre tract, same being the North corner of the herein described tract of land. Said point being in the East line of said Abstract No. 32 and West line of said Abstract No. 34, from which a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS", found for reference, bears South 45 deg. 52 min. 19 sec. West a distance of 15.00 feet;

THENCE South 00 deg. 10 min. 10 sec. West along and with the East line of said Abstract No. 32 and the West line of said Abstract No. 34, a distance of 1837.73 feet to the **POINT OF BEGINNING**, containing 12.200 acres of land, more or less.

Tract VII

BEING a 503.193 acre tract of land, being out of and a part of those certain tracts deeded to E. I. du Pont de Nemours and Company, more fully described as a 235.11 acre tract, as recorded in Volume 845, Page 48, a called 49.839 acre tract and a called 124.708 acre tract, as recorded in Volume 845, Page 63, a called 52.667 acre tract and a called 82.072 acre tract, as recorded in Volume 845, Page 73, a called 7.69 acre tract, as recorded in Volume 1507, Page 91, a called 11.918 acre tract, as recorded in Volume 2227, Page 209 of the Deed Records of Jefferson County, Texas, a called 65.00 acre tract, as recorded in Clerk's File No. 9433962 of the Official Public Records of Jefferson County, Texas, same being the remainder of that certain E.I. du Pont de Nemours and Company Tract 4 (629.895 acre tract) as recorded in Clerk's File No. 2006048240 of said Official Public Records. Said 503.193 acre tract being situated in the Pelham Humphries League, Abstract No. 32, J.S. Johnson Survey, Abstract No. 34, and W. M. Carroll Survey, Abstract No. 13, Jefferson County, Texas and being more particularly described as follows;

BEGINNING at a 3/4 inch iron pipe found for the South corner of said 11.918 acre tract and being the West corner of that certain Kansas City Southern Railway Company called 11.84 acre tract of land, as recorded in Clerk's File No. 2004000575, being more fully described in Volume 141, Page 384 of said Deed Records, same being in the Northeasterly line of the Kansas City Southern Railroad Company (KCS RR) 100 foot wide right-of-way;

THENCE North 44 deg. 07 min. 29 sec. West along and with the Northeasterly line of said KCS RR and the Southwest line of said 11.918 acre tract, a distance of 1110.87 feet, to a 1-1/2 inch iron pipe with cap in concrete for the West corner of said 11.918 acre tract of land and the Southwest corner of said 235.116 acre tract of land;

THENCE North 44 deg. 07 min. 17 sec. West continuing along and with the Northeasterly line of said KCS RR and the Southwest line of said 235.116 acre tract of land and said 52.667 acre tract of land, a distance of 4184.35 feet, to a 1 inch iron pipe (Bent) found for the most Westerly corner of said 52.667 acre tract, same being the South corner of that certain E.I. du Pont de

Nemours and Company Lot 3E tract (called 21.455 acres) as recorded in Clerk's File No. 2007047667 of said Official Public Records, same being on the West line of said Abstract No. 34 and East line of said Abstract No. 32;

THENCE North 00 deg. 10 min. 10 sec. East along and with the East line of said Abstract No. 32 and West line of said Abstract No. 34, same being the Southeast line of said Lot 3E, a distance of 1837.73 feet, to a point for corner of that certain OCI Beaumont Partners, LLC 15.476 acre tract of land, as recorded in Clerk's File No. 2013042294 of said Official Public Records, from which a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS", found for reference, in the Southeast line of said 15.476 acre tract, bears South 45 deg. 52 min. 19 sec. West, a distance of 15.00 feet;

THENCE North 00 deg. 10 min. 10 sec. East continuing along and with the East line of said Abstract No. 32 and West line of said Abstract No. 34, same being the East line of said 15.476 acre tract of land, a distance of 275.06 to a point for corner of said 15.476 acre tract;

THENCE in a Northerly direction along the Easterly line of said 15.476 acre tract, same being over and across the remainder of said 629.895 acre tract of land, the following courses and distances:

North 47 deg. 08 min. 12 sec. East a distance of 37.40 feet to a point for corner;

North 28 deg. 27 min. 01 sec. East a distance of 118.32 feet to a point for corner;

North 54 deg. 27 min. 52 sec. East a distance of 46.52 feet to a point for corner;

North 37 deg. 48 min. 52 sec. East a distance of 44.25 feet to a point for corner;

North 20 deg. 18 min. 15 sec. West a distance of 15.20 feet to a point for corner;

North 74 deg. 51 min. 48 sec. West a distance of 51.71 feet to a point for corner;

North 81 deg. 47 min. 42 sec. West a distance of 93.84 feet to a point for corner, said point being on the East line of said Abstract No. 32 and West line of said Abstract No. 34, same being on the East line of said 15.476 acre tract;

THENCE North 00 deg. 10 min. 10 sec. East along and with the East line of Abstract No. 32 and West line of said Abstract No. 34, a distance of 315.91 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for the Southernmost East corner of that certain OCI Beaumont Partners, LLC 12.817 acre tract of land, as recorded in Clerk's File No. 2007037934 of said Official Public Records;

THENCE in a Northwesterly direction along and with the boundary lines of said 12.817 acre tract the following courses and distances:

North 00 deg. 08 min. 41 sec. East a distance of 63.67 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 02 deg. 52 min. 10 sec. East a distance of 16.26 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 44 deg. 07 min. 41 sec. West a distance of 20.30 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 70 deg. 19 min. 41 sec. West a distance of 351.07 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 44 deg. 07 min. 41 sec. West a distance of 40.00 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 62 deg. 33 min. 47 sec. West a distance of 110.68 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 44 deg. 07 min. 41 sec. West a distance of 75.00 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

North 71 deg. 32 min. 16 sec. West, a distance of 152.07 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for the North corner of said 12.817 acre tract, same being the East corner of that certain E.I. du Pont de Nemours and Company Lot 3 (called 13.148 acres) as recorded in Clerk's File No. 2007047667 of said Official Public Records;

THENCE in a Northwesterly direction along and with the boundary lines of said Lot 3 the following courses and distances:

South 70 deg. 35 min. 17 sec. West a distance of 96.15 feet to a 5/8 inch rod with cap stamped "WORTECH SURVEYORS" found for corner;

North 65 deg. 32 min. 11 sec. West a distance of 136.26 feet to a 5/8 inch rod with cap stamped "WORTECH SURVEYORS" found for corner;

North 46 deg. 34 min. 24 sec. West a distance of 222.34 feet to a 5/8 inch rod with cap stamped "WORTECH SURVEYORS" found for corner;

North 28 deg. 19 min. 38 sec. West a distance of 92.61 feet to a 1/2 inch iron rod found for corner of said Lot 3, same being a Northwesterly corner of said 124.708 acre tract, same being a South corner for that certain Oiltanking Beaumont Partners, L.P. 461.42 acre tract of land as recorded in Clerk's File No. 2001014848 of said Official Public Records

THENCE in a Northeasterly direction along and with the Northwesterly line of said 124.708 acre tract and the Southeast line of said 461.42 acre tract the following courses and distances:

South 85 deg. 41 min. 08 sec. East a distance of 102.91 feet to a point for corner;

South 89 deg. 59 min. 45 sec. East a distance of 147.54 feet to a point for corner;

North 41 deg. 41 min. 15 sec. East a distance of 269.89 feet to a point for corner;

North 32 deg. 01 min. 15 sec. East a distance of 1427.44 feet to a point for corner;

North 02 deg. 52 min. 06 sec. East a distance of 87.44 feet to a point for corner on the Southern bank of the Neches River, same being the North corner of said 629.895 acre tract;

THENCE in a Southeasterly direction along and with the meanders of the Southerly bank of said Neches River, same being the Northeast line of said 629.895 acre tract the following courses and distances:

South 34 deg. 35 min. 35 sec. East a distance of 15.75 feet to a point for corner;

South 02 deg. 20 min. 05 sec. East a distance of 80.28 feet to a point for corner;

South 27 deg. 05 min. 25 sec. East a distance of 325.32 feet to a point for corner;

South 61 deg. 06 min. 12 sec. East a distance of 317.83 feet to a point for corner;

South 26 deg. 42 min. 34 sec. East a distance of 538.99 feet to a point for corner;

South 50 deg. 47 min. 00 sec. East a distance of 150.11 feet to a point for corner;

North 72 deg. 38 min. 01 sec. East a distance of 17.24 feet to a point for corner;

South 46 deg. 53 min. 52 sec. East a distance of 181.17 feet to a point for corner;

South 76 deg. 26 min. 41 sec. East a distance of 43.07 feet to a point for corner;

South 48 deg. 03 min. 42 sec. East a distance of 114.54 feet to a point for corner;

South 23 deg. 35 min. 48 sec. East a distance of 36.92 feet to a point for corner;

South 52 deg. 03 min. 02 sec. East a distance of 160.53 feet to a point for corner;

South 41 deg. 57 min. 42 sec. East a distance of 228.12 feet to a point for corner;

South 32 deg. 59 min. 52 sec. East a distance of 365.88 feet to a point for corner;

South 06 deg. 08 min. 04 sec. East a distance of 48.50 feet to a point for corner, same being the East corner of that certain OCI Beaumont called 1.544 acre tract as recorded in Clerk's File No. 2011021593 of said Official Public Records, also being the same tract of land (Lot 18) as recorded in Clerk's File No. 2006048240 of said Official Public Records;

THENCE North 53 deg. 39 min. 58 sec. West along and with the Northeast line of said 1.544 acre tract, passing at 36.00 feet a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS" found for reference, continuing on a total distance of 235.47 feet to a 5/8 inch iron rod found for the North corner of said 1.544 acre tract;

THENCE South 45 deg. 57 min. 52 sec. West along and with the Northwest line of said 1.544 acre tract a distance of 235.11 feet to a 5/8 inch iron rod found for the West corner of said 1.544 acre tract;

THENCE South 55 deg. 22 min. 21 sec. East along and with the Southwest line of said 1.544 acre tract a distance of 357.81 feet to nail spike with shiner found for the South corner of said 1.544 acre tract;

THENCE North 15 deg. 47 min. 48 sec. East along and with the Southeast line of said 1.544 acre tract a distance of 107.43 feet to a point in the Southeast line of said 1.544 acre tract, same being in the Northeast line of said 629.895 acre tract and the Southerly Bank of the Neches River;

THENCE in a Southeasterly direction along and with the meanders of the Southerly bank of said Neches River, same being the Northeast line of said 629.895 acre tract the following courses and distances:

South 02 deg. 23 min. 55 sec. East a distance of 51.02 feet to a point for corner;

South 58 deg. 37 min. 58 sec. East a distance of 193.33 feet to a point for corner;

South 82 deg. 26 min. 29 sec. East a distance of 205.63 feet to a point for corner;

North 50 deg. 02 min. 56 sec. East a distance of 35.43 feet to a point for corner;

North 88 deg. 01 min. 01 sec. East a distance of 109.70 feet to a point for corner;

South 67 deg. 43 min. 14 sec. East a distance of 219.02 feet to a point for corner;

South 57 deg. 28 min. 11 sec. East a distance of 324.40 feet to a point for corner;

South 79 deg. 44 min. 28 sec. East a distance of 69.81 feet to a point for corner;

South 58 deg. 21 min. 53 sec. East a distance of 90.68 feet to a point for corner;

South 43 deg. 53 min. 59 sec. East a distance of 102.73 feet to a point for corner;

North 78 deg. 28 min. 31 sec. East a distance of 206.26 feet to a point for corner;

South 47 deg. 09 min. 37 sec. East a distance of 79.82 feet to a point for corner;

South 17 deg. 31 min. 34 sec. East a distance of 25.60 feet to a point for corner;

North 88 deg.17 min. 08 sec. East a distance of 52.61 feet to a point for corner;

North 09 deg. 19 min. 05 sec. East a distance of 49.21 feet to a point for corner;

North 86 deg. 38 min. 35 sec. East a distance of 81.53 feet to a point for corner;

South 73 deg. 11 min. 23 sec. East a distance of 524.53 feet to a point for an Easterly Corner of said 629.895 acre tract, same being in the East line of said Abstract No. 34 and the West line of said Abstract No. 13;

THENCE South 00 deg. 44 min. 58 sec. West along and with the East line of said Abstract No. 34 and the West line of said Abstract No. 13 a distance of 382.73 feet to a 5/8 inch iron rod with cap stamped "WORTECH SURVEYORS" found for an Easterly Ell corner of said 629.895 acre tract, same being the Northwest corner of said 65.00 acre tract;

THENCE South 89 deg. 15 min. 08 sec. East a distance 538.00 feet to a 1 inch iron pipe with cap stamped "WORTECH SURVEYORS" found for the Northeast corner of said 65.00 acre tract;

THENCE South 00 deg. 44 min. 52 sec. West a distance of 1444.00 feet to a 1 inch iron pipe with cap stamped "WORTECH SURVEYORS" found for an angle point in the East line of said 65.00 acre tract;

THENCE South 30 deg. 22 min. 04 sec. East a distance of 1202.73 feet to a 1 inch iron pipe with cap stamped "WORTECH SURVEYORS" for an angle point in the East line of said 65.00 acre tract;

THENCE South 00 deg. 44 min. 52 sec. West a distance of 1018.16 feet to a 1 inch iron pipe with cap stamped "WORTECH SURVEYORS" for the Southeast corner of said 65.00 acre tract;

THENCE North 89 deg. 15 min. 08 sec. West a distance of 1159.53 feet to a point for corner for the Southwest corner of said 65.00 acre tract, same being on the East line of said Abstract No. 34 and the West line of said Abstract No. 13;

THENCE South 00 deg. 44 min. 52 sec. West along and with the East line of said Abstract No. 34 and the West line of said Abstract No. 13, a distance of 630.40 feet to a 1-1/2 inch iron pipe with cap stamped "WORTECH SURVEYORS" found in the Southernmost East line of said 629.985 acre tract, same being the North corner of said 11.918 acre tract;

THENCE South 00 deg. 43 min. 52 sec. West along and with the East line of said Abstract No. 34 and West line of said Abstract No. 13, same being the East line of said 629.985 acre tract and 11.918 acre tract a distance of 1325.57 feet to the **POINT OF BEGINNING**, containing 503.193 acres of land, more or less.

Tract VIII

BEING a 47.265 acre tract of land being out of and a part of those certain tracts deeded to E.I. du Pont de Nemours and Company, more fully described as a 2.092 acre tract, as recorded in Volume 845, Page 73, a called 20.000 acre tract, as recorded in Volume 2077, Page 217, a called 10.270 acre tract, as recorded in Volume 1865, Page 128, a called 18.33 acre tract, as recorded in Volume 1865, Page 300 of Deed Records of Jefferson County, Texas, same being the remainder of that certain E.I. du Pont de Nemours and Company Lot 5 (115.030 acre tract), as recorded in Clerk's File No. 2006048240 of the Official Public Records of Jefferson County, Texas. Said 47.265 acre tract of land being situated in the Pelham Humphries League, Abstract No. 32 and the J.S. Johnson Survey, Abstract No. 34, Jefferson County Texas and being more particularly described as follows;

BEGINNING at a 1-1/2 inch iron pipe with cap in concrete found for the South corner of said 2.092 acre tract and said Lot 5, same being the West corner of that certain Air Liquide Large Industrial U S LP called 1.950 acre tract, as recorded in Clerk's File No. 2005011370 of said Official Public Records, same being in the Northeast line of State Highway No. 347 (200 foot wide right-of-way);

THENCE North 47 deg. 42 min. 19 sec. West along and with the Southwesterly line of said 2.092 acre tract and said Lot 5, same being the Northeasterly line of said State Highway No. 347, a distance of 149.83 feet to a 1-1/2 inch iron pipe with cap in concrete, found for the West corner of said 2.092 acre tract, same being the South corner of said 18.33 acre tract of land;

THENCE North 48 deg. 01 min. 08 sec. West continuing along and with the Southwesterly line of said Lot 5 and said 18.33 acre tract, a distance of 1425.90 feet, to a concrete monument (broken) found for the West corner of said 18.33 acre tract, same being the South corner of said 20.000 acre tract;

THENCE North 47 deg. 57 min. 51 sec. West continuing along and with the Southwesterly line of said Lot 5 and said 20.000 acre tract, a distance of 469.07 feet to a 1/2 inch iron rod with cap stamped "SPI INC" found for corner;

THENCE North 47 deg. 55 min. 44 sec. West continuing along and with the Southwesterly line of said Lot 5 and 20.000 acre tract, passing at 221.71 feet, a 3/4 inch iron rod in concrete found, continuing on, a total distance of 867.04 feet, to a 3/4 inch iron rod in concrete for the West corner of said 20.000 acre tract, same being the South corner of said 10.270 acre tract;

THENCE North 47 deg. 54 min. 13 sec. West continuing along and with the Southwesterly line of said Lot 5 and 10.270 acre tract, a distance of 437.61 feet, to a 5/8 inch iron rod with cap on the Southwesterly line of said Lot 5 and 10.270 acre tract;

THENCE North 42 deg. 22 min. 19 sec. East over and across said Lot 5 and 10.270 acre tract, a distance of 726.24 feet, to a 5/8 inch iron rod with cap, found on the Northeasterly line of said Lot 5 and 10.270 acre tract, same being the Southwesterly line of the Kansas City Southern Railroad Company 100 foot wide right-of-way;

THENCE South 44 deg. 07 min. 30 sec. East along and with the Northeasterly line of said Lot 5, 10.270 acre tract, 20.000 acre tract, and 18.33 acre tract, same being the Southwesterly line of said KCS RR, a distance of 3209.82 feet, to a 1" iron rod in concrete found for the East corner of said 18.33 acre tract, same being the North corner of said 2.092 acre tract;

THENCE South 43 deg. 55 min. 23 sec. East continuing along and with the Northeasterly line of said Lot 5 and 2.092 acre tract, a distance of 150.24 feet, to a 1-1/2 inch iron pipe with cap in concrete, found for the East corner of said 2.092 acre tract, same being the North corner of said 1.950 acre tract;

THENCE South 42 deg. 52 min. 08 sec. West along and with the Southeast line of said Lot 5 and 2.092 acre tract, a distance of 501.09 feet to the **POINT OF BEGINNING**, containing 47.265 acres of land, more or less.

Tract IX

BEING all of that certain 6.749 acre tract or parcel of land designated as Lot 4 out of the DuPont - Beaumont Works Industrial Park, in the Pelham Humphries League, Abstract No. 32, Jefferson County, Texas, as recorded in Clerk's File No. 20060048240 of the Official Public Records of Jefferson County, Texas.

Tract X

BEING all of that certain 7.467 acre tract or parcel of land designated as Lot 1 out of the DuPont - Beaumont Works Industrial Park in the Pelham Humphries League, Abstract No. 32, Jefferson County, Texas, as recorded in Clerk's File No. 20060048240 of the Official Public Records of Jefferson County, Texas.

Tract XI

BEING all of that certain 7.217 acre tract or parcel of land designated as Lot 2 out of the DuPont - Beaumont Works Industrial Park in the Pelham Humphries League, Abstract No. 32 and J.S. Johnson Survey, Abstract No. 34, Jefferson County, Texas, as recorded in Clerk's File No. 20060048240 of the Official Public Records of Jefferson County, Texas.

Included in the above Exhibit A description is the "ANILINE LAND" with the legal description as set forth below:

GROUND LEASE TRACTS

BEING all of Lot No.'s 8 (13.679 Acres), 9 (5.251 Acres) and Lot 17 (2.135 Acres) being more fully described in DuPont Beaumont Works Industrial Park Subdivision recorded in Clerk's File No. 2006048240 of the Official Public Records of Jefferson County, Texas. Said Lots being situated in the J. S. Johnston Survey, Abstract No. 34 and the Pelham Humphries Survey, Abstract No. 32, Jefferson County, Texas, containing 21.065 acre of land, more or less.

EASEMENT TRACT

BEING 2.665 acres out of Lot 15, said Lot 15 being more fully described in DuPont Beaumont Works Industrial Park Subdivision recorded in Clerks File No. 2006048240 of the Official Public Records of Jefferson County, Texas. Said 2.665 acre tract of land being situated in the J. S. Johnson Survey, Abstract No. 34, Jefferson County, Texas and being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod with cap found at the North corner of said Lot 15;

THENCE South 47 deg. 47 min. 33 sec. East along and with the Northeast line of said Lot 15, a distance of 417.00 feet to a 1/2 inch iron rod with cap found at the East corner of said Lot 15;

THENCE South 42 deg. 12 min. 27 sec. West along and with the Southeast line of said Lot 15, a distance of 135.98 feet to a cotton spindle set for corner;

THENCE North 47 deg. 53 min. 58 sec. West, a distance of 121.06 feet to a Punch Mark set for corner;

THENCE South 41 deg. 56 min. 40 sec. West, a distance of 82.56 feet to a Punch Mark set for corner;

THENCE North 48 deg. 02 min. 59 sec. West, a distance of 22.14 feet to a PK nail with shiner set for corner;

THENCE South 42 deg. 30 min. 30 sec. West, a distance of 127.11 feet to a Punch Mark set for corner in the Southwest line of said Lot 15;

THENCE North 47 deg. 47 min. 33 sec. West along and with the Southwest line of said Lot 15, a distance of 273.62 feet to a 5/8 inch iron rod set at the West corner of said Lot 15;

THENCE North 42 deg. 12 min. 27 sec. East along and with the Northwest line of said Lot 15, a distance of 346.00 feet to the PLACE OF BEGINNING, containing 2.665 acres of land, more or less.

GENERAL MAP OF PLANT SITE

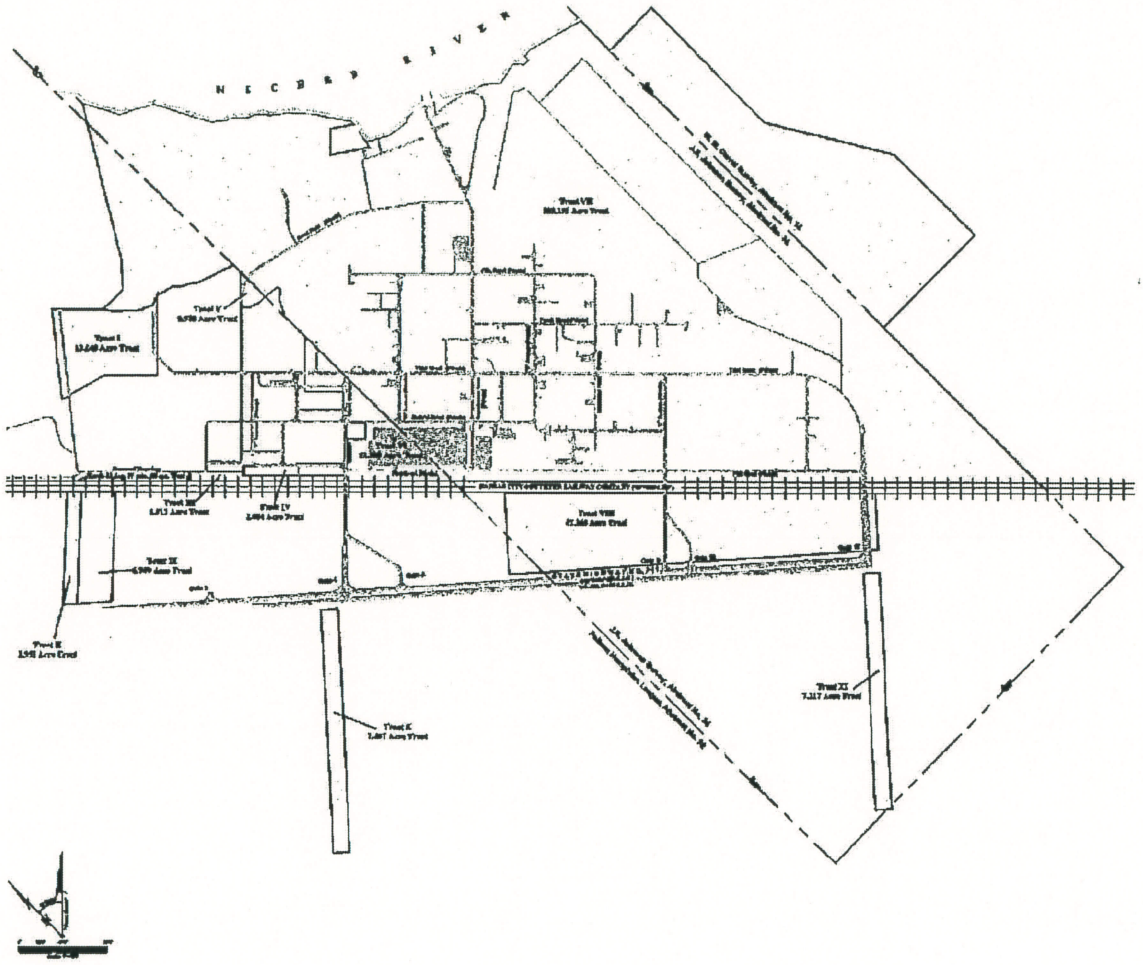


EXHIBIT B

SITE SERVICES INFRASTRUCTURE

Roadways (3rd Street and 5th Street)

Ditches

Storm water drains

Sanitary sewer

Fire protection pipelines

Electrical service (which is owned and operated by Chemours/Dow, while substations are owned by Entergy Corporation)

Communications cables/wiring

Steam lines (175# and 300#)

Rail tracks (except those within the concrete curbed Aniline loading spots, which are owned by Chemours/Dow)

Nitrogen pipeline

Natural Gas (low and high pressure) pipelines

Filtered water pipeline

Drinking water pipeline

Propylene pipeline (after the Texaco metering station)

Boiler Feed Water pipeline

Waste Water pipeline to Deep Wells and Diversion Tanks

Methanol pipeline

#4 Ditch sampler (located south of Aniline CCR/Office building in ditch from HCN plant)

Computer servers (located in Number 7 Office Building)

Site emergency alarm and communication systems (located in Number 7 Office Building)

Safer System (release plume modeling) (located in Number 7 Office Building)

EXHIBIT C

MAP OF ANILINE FACILITY

(see attached)

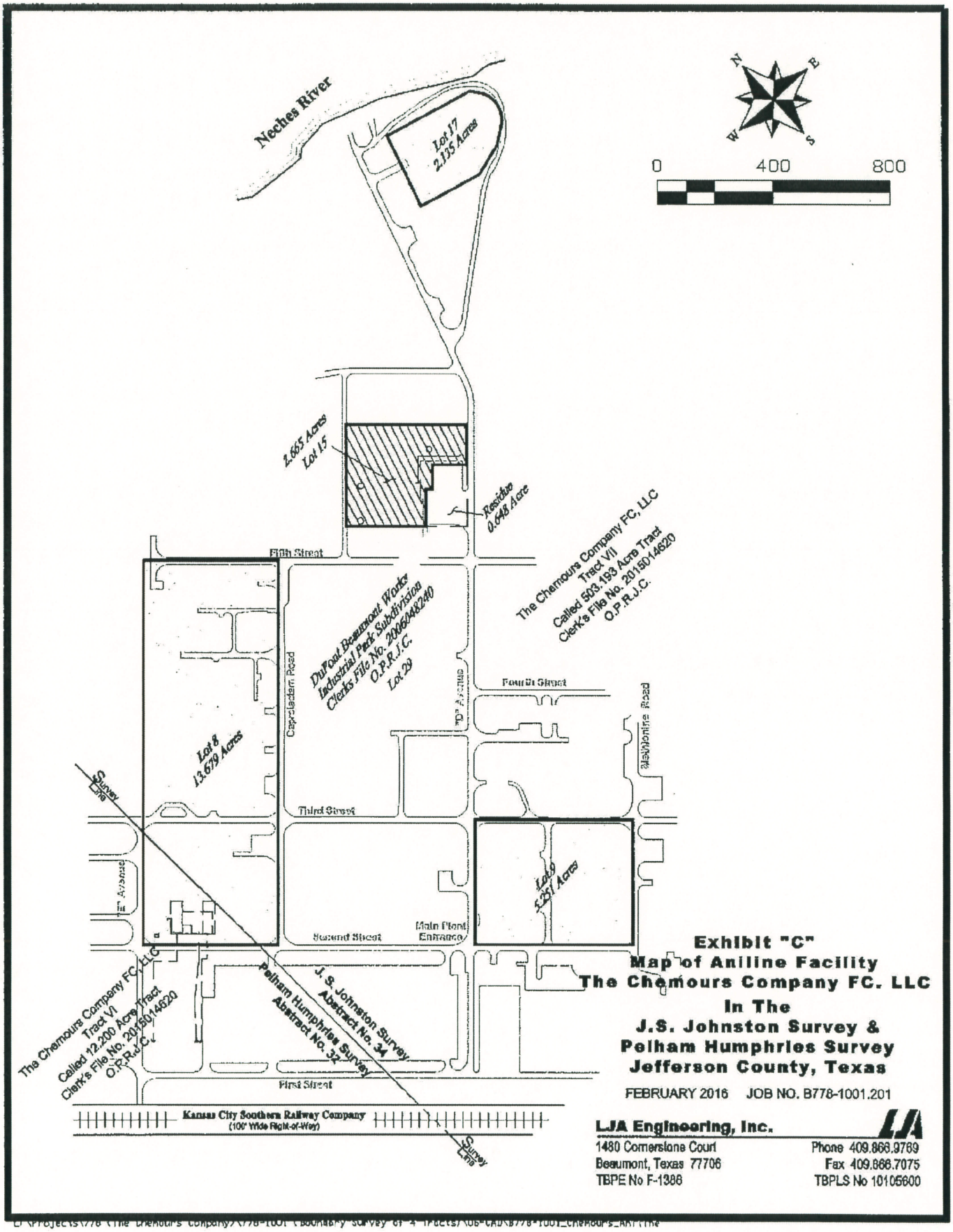


Exhibit "C"
Map of Aniline Facility
The Chemours Company FC. LLC
In The
J.S. Johnston Survey &
Pelham Humphries Survey
Jefferson County, Texas

FEBRUARY 2016 JOB NO. B778-1001.201

LJA Engineering, Inc.
1480 Cornerstone Court
Beaumont, Texas 77706
TBPE No F-1386
Phone 409.866.9769
Fax 409.866.7075
TBPLS No 10105600

EXHIBIT D

DESCRIPTION OF ANILINE LAND

Those certain tracts of land situated in Jefferson County, Texas and being more particularly described as:

GROUND LEASE TRACTS

BEING all of Lot No.'s 8 (13.679 Acres), 9 (5.251 Acres) and Lot 17 (2.135 Acres) being more fully described in DuPont Beaumont Works Industrial Park Subdivision recorded in Clerk's File No. 2006048240 of the Official Public Records of Jefferson County, Texas. Said Lots being situated in the J. S. Johnston Survey, Abstract No. 34 and the Pelham Humphries Survey, Abstract No. 32, Jefferson County, Texas, containing 21.065 acre of land, more or less.

EASEMENT TRACT

BEING 2.665 acres out of Lot 15, said Lot 15 being more fully described in DuPont Beaumont Works Industrial Park Subdivision recorded in Clerks File No. 2006048240 of the Official Public Records of Jefferson County, Texas. Said 2.665 acre tract of land being situated in the J. S. Johnson Survey, Abstract No. 34, Jefferson County, Texas and being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod with cap found at the North corner of said Lot 15;

THENCE South 47 deg. 47 min. 33 sec. East along and with the Northeast line of said Lot 15, a distance of 417.00 feet to a 1/2 inch iron rod with cap found at the East corner of said Lot 15;

THENCE South 42 deg. 12 min. 27 sec. West along and with the Southeast line of said Lot 15, a distance of 135.98 feet to a cotton spindle set for corner;

THENCE North 47 deg. 53 min. 58 sec. West, a distance of 121.06 feet to a Punch Mark set for corner;

THENCE South 41 deg. 56 min. 40 sec. West, a distance of 82.56 feet to a Punch Mark set for corner;

THENCE North 48 deg. 02 min. 59 sec. West, a distance of 22.14 feet to a PK nail with shiner set for corner;

THENCE South 42 deg. 30 min. 30 sec. West, a distance of 127.11 feet to a Punch Mark set for corner in the Southwest line of said Lot 15;

THENCE North 47 deg. 47 min. 33 sec. West along and with the Southwest line of said Lot 15, a distance of 273.62 feet to a 5/8 inch iron rod set at the West corner of said Lot 15;

THENCE North 42 deg. 12 min. 27 sec. East along and with the Northwest line of said Lot 15, a distance of 346.00 feet to the PLACE OF BEGINNING, containing 2.665 acres of land, more or less.

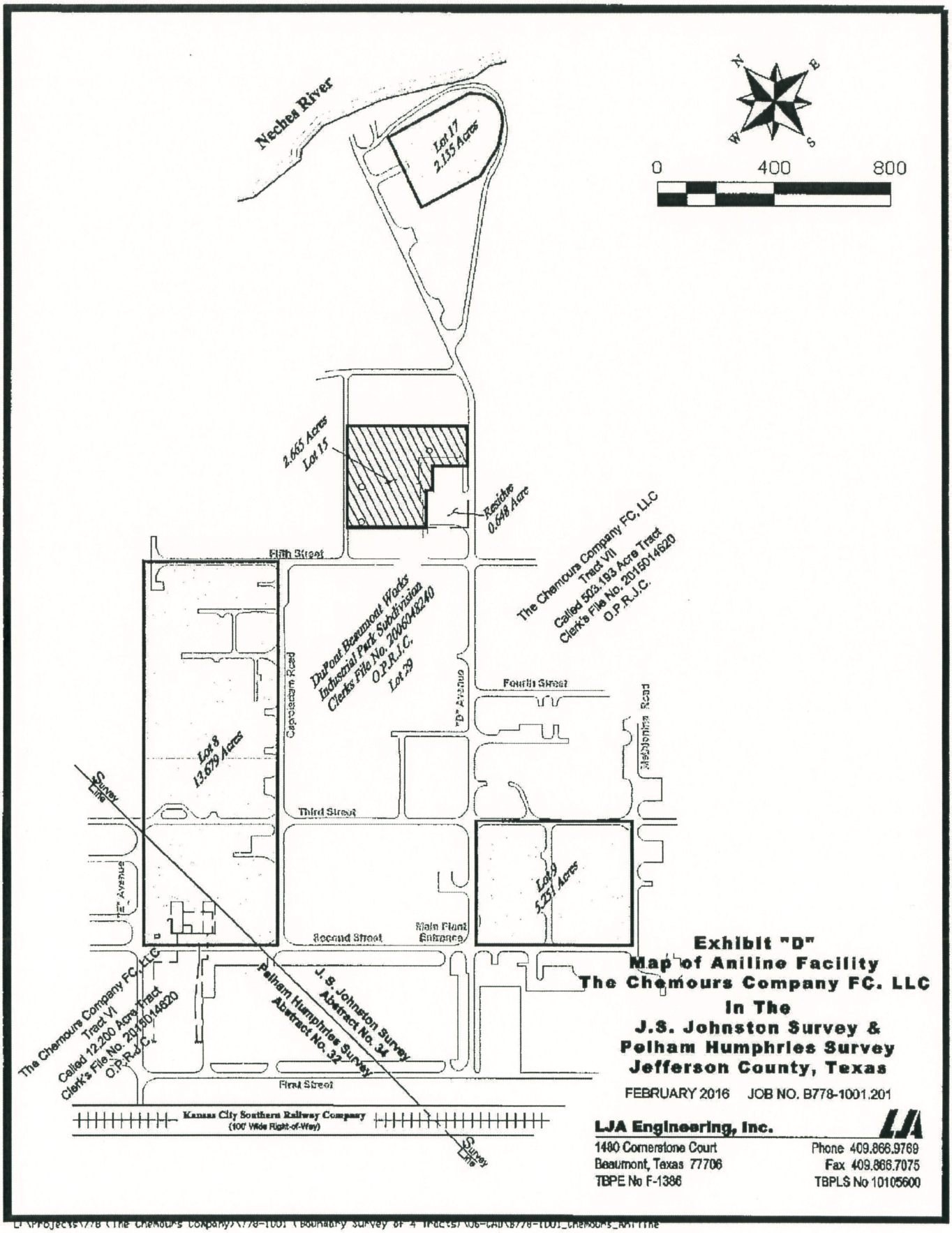


Exhibit "D"
Map of Aniline Facility
The Chemours Company FC. LLC
In The
J.S. Johnston Survey &
Pelham Humphries Survey
Jefferson County, Texas

FEBRUARY 2016 JOB NO. B778-1001.201

LJA Engineering, Inc.
1400 Cornerstone Court
Beaumont, Texas 77706
TBPE No F-1386
Phone 409.866.9769
Fax 409.866.7075
TBPLS No 10105600

L:\Projects\778 (The Chemours Company)\778-1001 (Boundary Survey of 4 Tracts)\06-CAD\B778-1001_Chemours_Rail.dwg

EXHIBIT E

ANILINE ASSETS

Electrical Infrastructure (except substations, which are owned by Entergy Corporation).

Caustic Soda Pipeline

Hydrogen Pipeline

Aniline Pipeline

Nitrobenzene Pipeline

Benzene Pipeline

Ammonia Pipeline

Sulfuric Acid Pipeline

Nitric Acid Pipeline

AGENDA ITEM **November 27, 2017**

Consider and possibly approve a Resolution Authorizing Audits Necessary for the Collection of Delinquent Hotel Taxes pursuant to Sec. 352, Tax Code.

Resolution

STATE OF TEXAS § COMMISSIONERS' COURT
§
COUNTY OF JEFFERSON OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

RESOLUTION AUTHORIZING AUDITS NECESSARY FOR THE COLLECTION OF DELILNQUENT HOTEL TAXES

WHEREAS, the Jefferson County Commissioners' Court has authorized the imposition of a hotel tax pursuant to Chapter 352, Tax Code; and

WHEREAS, the Jefferson County Tax-Assessor is responsible for auditing collecting and maintaining records regarding hotel taxes; and

WHEREAS, each hotel and motel is required to timely file reports with the Jefferson Tax Assessor-Collector to verify hotel taxes which are due and owing by them; and

WHEREAS, The Jefferson County Tax Assessor-Collector has reported that there are numerous hotels and motels who have not filed the mandated reports and who are delinquent in paying hotel taxes; and

WHEREAS, the hotel taxes are part of the Jefferson County General Funds and Jefferson County is required to utilize reasonable and necessary measures allowed by law to collect such taxes for the benefit of the citizens of Jefferson County, Texas; and

WHEREAS, Section 352.004(e) authorizes the County to determine whether necessary reports were properly filed by hotels subject to the hotel tax and, if proper reports were not filed as required by law, the County, by its Tax Assessor-Collector and his/her agents may, as authorized by the Commissioners Court, the County Auditor shall perform examinations on a fixed-fee basis upon first giving the delinquent party thirty (30) day's written notice of the examination; and

WHEREAS, Section 352.004 (d) allows the County Attorney to bring suit against the person who is delinquent in filing require reports and in paying hotel taxes to collect such taxes and enjoin the person from operating a hotel in the county until all required reports are filed and taxes are paid.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE COMMISSIONERS' COURT OF JEFFERSON COUNTY, THAT:

SECTION I: The Jefferson County Tax-Assessor shall take all actions prescribed by Chapter 352, Tax Code to assure that all required hotel tax reports are filed as required;

SECTION II: The Jefferson County Auditor is authorized to conduct reasonable and necessary examinations as allowed by statute; and

SECTION III: If delinquent reports are not filed or delinquent taxes not paid, suit may be filed, as allowed by statute to require the filing of necessary reports and payment of delinquent taxes and to enjoin the delinquent taxpayer from operating a hotel in the County until they are compliant.

SECTION IV: This Resolution shall become effective upon final passage.

SIGNED this 27th day of NOV., 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

AGENDA ITEM **November 27, 2017**

Consider, possibly approve and authorize the County Judge to execute TxCDGB Contract Amendment/Modification Request A1101 for Contract No. 7216231 to authorize payments for necessary easements.

TxCDBG CONTRACT AMENDMENT/MODIFICATION REQUEST A1101

Grant Recipient Name: JEFFERSON COUNTY Contract No 7216231 Region SETRPC

Modification No. 2 Start Date 12/30/2016 End Date 12/29/2018 Contract Amount $275,000.00

Check all contract provisions to be amended/modified (additional questions appear for some selections):

☒ Exhibit A Performance Statement ☒ Exhibit B Budget ☐ Contract Period (extension) ☐ Special Conditions

☐ Other _____

What changes are proposed for the contract? Change in method to accomplish purpose described in the original project

Why are the proposed revisions requested for this contract?

During the planning meetings it was discovered that that the low pressure sewer service line and the individual grinder units will require easements in order for West Jefferson County Municipal Water District to own and maintain the grinder unit and low pressure sewer service line. The Initial Acquisition Report was submitted in May 16, 2017. The County has completed the application intake and notification of the need to acquire an easement to the property owners. Several families are donating the easement. However some of the families wanted to accept the cash offer to purchase the easement. Jefferson County will need to move $3,000.00 of the construction grant funds to acquisition cost in order to buy the easement from the property owner. Some of the households that were indicated in the revised application did not meet low to moderate income criteria during the application in take process.

Is the contract on hold for non-compliance with audit, monitoring, or programmatic requirements? No *TDA concur* _____

For Performance Statement Amendment/Modification Requests

Do the proposed revisions address the same problem identified in the current Performance Statement? (Select One)

Yes, same activity addressing the same problem

Do the proposed revisions change the beneficiaries of the contract? (Select One)

Yes, the beneficiaries indicated in the Performance Statement will decrease by less than 25%.

Do the proposed revisions change the locations as described in the Performance Statement? (Select One)

Yes, the attached map shows the original project locations and proposed project locations.

How significant are the proposed revisions? (Select One)

For project with target area benefit: all work within same target area.

Is a previously conducted Environmental Review still valid? (Select One) *TDA concur*

Yes, the Review has been re-evaluated and remains valid.

Are all clearances previously submitted for contract Special Conditions still valid? (Select One)

Yes, the clearances have been re-evaluated and remain valid.

How will the proposed improvements be completed? (Select One)

New construction contract (through sealed bid or small purchase procurement).

Will the project be completed by the contract end date? (Select One)

Yes

Required as of September 1, 2016 for all requested changes to TxCDBG contracts.
For additional information on contract changes see TxCDBG Project Implementation Manual Chapter 11

For Budget Amendment/Modification Requests

Enter the entire project Exhibit B and proposed change(s), including activities with no change.

Activity	Original Budget	Current Budget	Present (+/-) $ Change	Revised Budget	+
03J - Sewer Improvement-Construction	$43,050.00	$43,050.00	($3,000.00)	$40,050.00	-
03J - Sewer Improvements-Engineering	$13,860.00	$13,860.00	$0.00	$13,860.00	-
03J - Sewer Improvements-Acquisition	$0.00	$0.00	$3,000.00	$3,000.00	-
14A - Rehab Single-Unit-Sewer Const	$178,950.00	$178,950.00	$0.00	$178,950.00	-
14A - Rehab Single-Unit-Sewer Engineering	$35,640.00	$35,640.00	$0.00	$35,640.00	-
21J - General Administration	$3,500.00	$3,500.00	$0.00	$3,500.00	-
Totals	$275,000.00	$275,000.00	$0.00	$275,000.00	

Do the proposed revisions move more than 20% of the total grant funds from one activity to another? ◉ No ○ Yes

Do the proposed revisions require new budget activities? ○ No ◉ Yes

Do the proposed revisions move funds from construction activities to administration or engineering activities? ◉ No ○ Yes

If Yes, describe additional adm/eng services: The budget is added acquisition for easements under sewer improvements activities

TDA Staff: Record change in IDIS ☐

Provide any other appropriate information about this request in the space below:

The low pressure line and the individual grinder pump will be installed in the easement on the low to moderate income property since West Jefferson County Municipal Waster District will need to have access to the grinder unit and low pressure sewer service line to maintain those elements of the first time sewer service.

Supporting Documents Attached (if applicable):

☐ Revised Exhibit A (using track changes) ☒ Revised Exhibit B (using track changes) ☐ Resolution and Notice of Public Hearing

☐ Engineer's letter ☐ Revised Project Map ☐ Revised Implementation Schedule

☐ Other

By my signature, I certify that the above is true and accurate and hereby request the contract change:

Signature of Authorized Signator | Title | Date

Notifications:

Mailing Address: Jefferson County Judge Office, P.O. Box 4025, Beaumont, Texas 77704

Email Address for Grant Recipient: jbranick@co.jefferson.tx.us

Other Email Address (list address for persons to be included in notification): randy.blanks@sbcglobal.net

TDA Action: ☐ Notes Attached

Contract Specialist	Team Lead	TxCDBG Director	ORA Administrator
Date	Date	Date	Date

Required as of September 1, 2016 for all requested changes to TxCDBG contracts.
For additional information on contract changes see TxCDBG Project Implementation Manual Chapter 11

Joleen E. Fregia
Chief Deputy
E-Mail
joleen@co.jefferson.tx.us

Tim Funchess
County Treasurer
1149 Pearl Street – Basement
Beaumont, Texas 77701

Office (409) 835-8509
Fax (409) 839-2347
E-Mail
tfunchess@co.jefferson.tx.us

November 17, 2017

Judge Jeff R. Branick and
Commissioners Court
Jefferson County Courthouse
Beaumont, Texas 77701

Gentlemen:

Enclosed is the Investment Schedule as of October 31, 2017, including interest earnings.

The weighted average yield to maturity on the County's investments is 1.485%. The interest rate on funds invested in an investment account at Wells Fargo is currently .30%.

The 90 day Treasury discount rate on September 30, 2017 was 1.130% and the interest on your checking accounts for the month of September was .30%

Included in the attached report are the balances for the County's pledged collateral.

This report meets the requirements for investment officers in compliance with the Texas Government Code. Title 10, Section 2256.023.

This should be on the agenda November 27, 2017, to be received and filed.

Sincerely,

Tim Funchess

Tim Funchess, CCT, CIO
Enclosure

Agenda should read:
Receive and File Investment Schedule for October, 2017,
including the year to date total earnings on County funds.

1095

JEFFERSON COUNTY
MONTH END OCTOBER 31, 2017 INVESTMENT SCHEDULE

SECURITY DESCRIPTION	SETTLEMENT DATE	PAR AMOUNT	AMOUNT PAID	PRICE PAID	EXP. YIELD	MATURITY Date	CALL DATE	# Days to mat.	# Days Invested	CUSIP/C.D. NUMBER	BROKER DEALER	CURRENT VALUE	Current Price	ACCRUED FROM PURCHASE/COUPON	Coupon paid TO DATE	BOOK VALUE ACCRUED INT.)
POOLED CASH ACCOUNT																
INVESTMENT ACCT	01-Oct-17	$7,739.41	$7,739.41	100	0.300%	31-Oct-17	NONE	31	31	7580310386	WELLS FARGO	$7,739.41				$7,739.41
CDs and Securities																
FNMA 1.375%	21-Jun-16	$2,000,000.00	$2,000,000.00	100	1.375%	21-Jun-19	21-Dec-16	598	1095	3136G3RD9	WELLS SECURITIES	$1,989,740.00	$99.49	$9,930.56	$13,750.00	$1,999,670.56
FNMA 1.40%	21-Jun-16	$2,000,000.00	$2,000,000.00	100	1.400%	21-Jun-19	21-Dec-16	598	1095	3136G3RM9	NATIONAL ALLIANCE	$1,988,920.00	$99.45	$10,111.11	$14,000.00	$1,999,031.11
FHLMC 1.25%	30-Sep-16	$2,000,000.00	$2,000,000.00	100	1.250%	30-Sep-19	30-Mar-16	699	1095	3134GAHW7	NATIONAL ALLIANCE	$1,968,940.00	$98.45	$2,152.78	$25,000.00	$1,971,092.78
FHLMC 1.30%	18-Oct-16	$2,000,000.00	$2,000,000.00	100	1.300%	18-Oct-19	18-Jan-17	717	1095	3134GAPF5	NATIONAL ALLIANCE	$1,971,060.00	$98.55	$938.89	$26,000.00	$1,971,998.89
FNMA 1.80%	16-Oct-17	$2,000,000.00	$2,000,000.00	100	1.800%	16-Oct-20	16-Apr-17	1081	1096	3136G4PQ0	COASTAL SECURITIES	$1,992,380.00	$99.62	$1,500.00	$0.00	$1,993,880.00
FHLMC 1.30%	23-Aug-16	$4,000,000.00	$4,000,000.00	100	1.300%	23-Aug-19	23-Jan-17	661	1095	3134GAAF1	COASTAL SECURITIES	$3,967,360.00	$99.18	$9,822.22	$52,000.00	$3,977,182.22
FNMA 1.55%	27-Dec-16	$2,000,000.00	$2,000,000.00	100	1.550%	27-Dec-19	27-Jun-17	787	1095	3136G4JK0	NATIONAL ALLIANCE	$1,983,220.00	$99.16	$10,677.78	$0.00	$1,993,897.78
FHLMC 1.70%	30-Jun-17	$2,000,000.00	$2,000,000.00	100	1.700%	29-Jun-20	29-Sep-17	972	1095	3134GBVT6	NATIONAL ALLIANCE	$1,991,100.00	$99.56	$11,427.78	$0.00	$2,002,527.78
FHLMC 1.85%	24-Jul-17	$2,000,000.00	$2,000,000.00	100	1.850%	24-Jul-20	24-Oct-17	997	1096	3134GBZE5	NATIONAL ALLIANCE	$1,999,160.00	$99.96	$9,969.44	$0.00	$2,009,129.44
ICD-BMW Bank 1.35%*	12-Feb-16	$248,000.00	$248,000.00	100	1.350%	12-Feb-19	None	469	1096	05580ADT8	WELLS SECURITIES	$248,000.00	$100.00	$724.64	$5,017.41	$248,724.64
ICD-Discover Bk 1.60%*	13-Nov-15	$248,000.00	$248,010.87	100	1.600%	13-Nov-18	None	378	1096	254672WL8	WELLS SECURITIES	$248,000.00	$100.00	$1,880.72	$5,946.56	$249,880.72
ICD-Ally Bank 1.60%*	13-Nov-15	$248,000.00	$248,010.87	100	1.600%	13-Nov-18	None	378	1096	02006LVQ3	WELLS SECURITIES	$248,000.00	$100.00	$1,880.72	$5,946.56	$249,880.72
ICD-Goldman S. 1.65%*	13-Nov-15	$248,000.00	$248,011.21	100	1.650%	13-Nov-18	None	378	1096	38148JZ53	WELLS SECURITIES	$248,000.00	$100.00	$1,939.50	$6,132.39	$249,939.50
* (Investment CD's)														$72,956.14		

	TOTAL PAR	AMT. INVESTED	WEIGHTED AVG. YLD	EQUIVALENT TREAS. RATE	WEIGHTED AVG.	MATURITY	TOTAL MARKET VALUE	TOTAL BOOK VALUE
INVESTMENT ACCT	$7,739.41	$7,739.41					$7,739.41	
CDs and Securities	$20,992,000.00	$20,992,032.95	1.485%	1.371%	759	DAYS	$20,843,880.00	
TOTALS ALL ACCTS:	**$20,999,739.41**	**$20,999,772.36**					**$20,851,619.41**	**$20,924,575.55**

PLEDGE COLLATERAL REPORT WELLS FARGO
ALL COUNTY FUNDS
AS OF OCTOBER 31, 2017

MARKET VALUE OF PLEDGE SECURITIES	**$66,517,513.56**
BALANCE IN ALL ACCOUNTS:	**$63,739,924.86**
OVER OR (UNDER) AMOUNT:	**$2,777,588.70**
	104.36%

COMPLIANCE STATEMENT

This in an unaudited statement made in accordance with provisions of Government Code Title 10 Section 2256.023 The Public Funds Investment Act

The investment portfolios of Jefferson County comply with the strategies in the Jefferson County Investment Policy and Procedures.

Tim Funchess

Tim Funchess, Jefferson County Investment Officer

OCTOBER, 2017, JEFFERSON COUNTY INVESTMENT MATURITIES
MATURED SECURITIES AND INTEREST EARNED

SECURITY DESCRIPTION	PURCHASE DATE	PAR AMOUNT	AMOUNT INVESTED	PRICE PAID	EXPECT. YIELD	MATURITY DATE	Coupon Pay DATE	# DAYS INVEST.	CUSIP/C.D. NUMBER	BROKER DEALER	INTEREST EARNINGS	
POOLED CASH ACCOUNT												
INVESTMENT ACCT	01-Sep-17	$7,739.41	$7,739.41		0.300%	31-Oct-17		31	7580310386	WELLS FARGO	$1.77	
FHLMC 1.30%	18-Oct-16	$2,000,000.00	$2,000,000.00	100	1.300%	18-Oct-19	18-Oct-17	1095	3134GAPF5	NATIONAL ALLIANCE	$13,000.00	COUPON
												$13,001.77
CHECKING INTEREST												
POOLED CASH ACCT		OCTOBER INTEREST			0.300%					WELLS FARGO	$9,258.53	
OTHER COUNTY ACCTS		OCTOBER INTEREST			0.300%					WELLS FARGO	$1,042.35	
TAX LICENSE ACCT		SEPTEMBER INTEREST			0.300%					WELLS FARGO	$110.61	$10,411.49
TOTAL 11/14/2017		**$2,007,739.41**	**$2,007,739.41**								**$23,413.26**	**$23,413.26**

FISCAL YEAR 2017-2018

YIELD TO MATURITY AND INTEREST EARNINGS

MONTH	90 DAY T. BILL YIELD	INVESTMENT INTEREST EARNED	CHECKING ACCOUNT YIELD
OCTOBER	1.130%	$23,413.26	0.300%
NOVEMBER			
DECEMBER			
JANUARY			
FEBRUARY			
MARCH			
APRIL			
MAY			
JUNE			
JULY			
AUGUST			
SEPTEMBER			
ANNUAL TOTALS		**$ 23,413.26**	

Permit No. 09-4-17

Precinct No. 4

NOTICE OF PROPOSED PLACEMENT OF
PUBLIC UTLITY LINE/COMMON CARRIER PIPELINE WITHIN
JEFFERSON COUNTY RIGHT-OF-WAY
(2003 REVISION)

Date 11-1-17

HONORABLE COMMISSIONERS' COURT
JEFFERSON COUNTY
BEAUMONT, TEXAS 77701

Gentlemen:

Cameron Communications Texas (Company) does hereby made application to use lands belonging to Jefferson County, for the purpose of constructing, maintaining or repairing a utility or common carrier pipeline for the distribution of BSF 12-22 Copper cable & All appurtenances location of which is fully described as follows:

ALONG League Rd

3 pages of drawings attached.

Construction will begin on or after November 27th, 2017.

It is understood that all work will comply with the requirements of the Utility and Common Carrier Pipeline Policy adopted by Jefferson County Commissioners' Court on _____, and all subsequent revisions thereof to date.

Company CAMERON Communications Texas

By Bobby Bult

Title Outside Plant Operations Manager

Address PO Box 2237

Sulphur, LA 70664-2237

Telephone 337-583-2064

Fax No. 337-583-9299

FOR COMMON CARRIER PIPELINE COMPANY ONLY

1. Common Carrier Determination form must be attached to application.
2. Corporation/Person product is to be purchased from/delivered to:

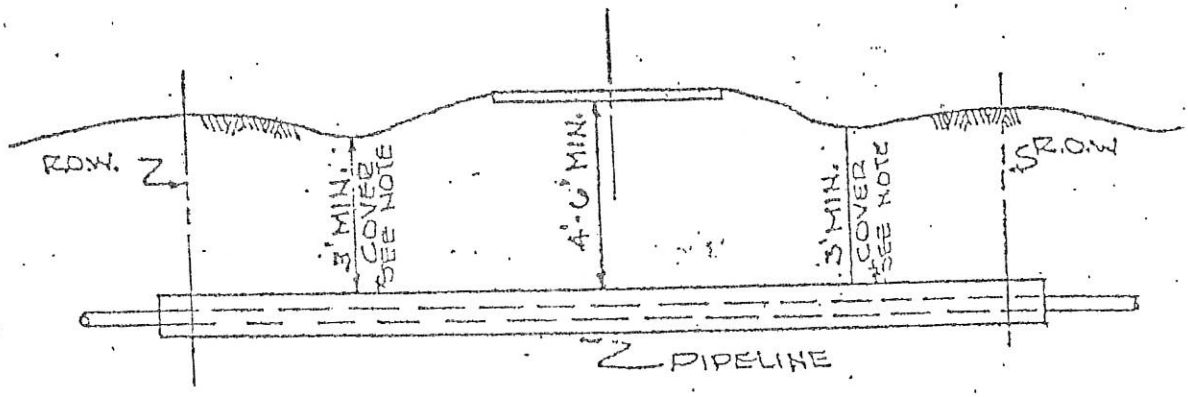
Enclosed, please find the required application fee:

1 road crossing @ $100.00 _____ $ N/A

_____ miles parallel @ $150.00/mile or fraction _____ $ N/A

TOTAL_____ $ N/A

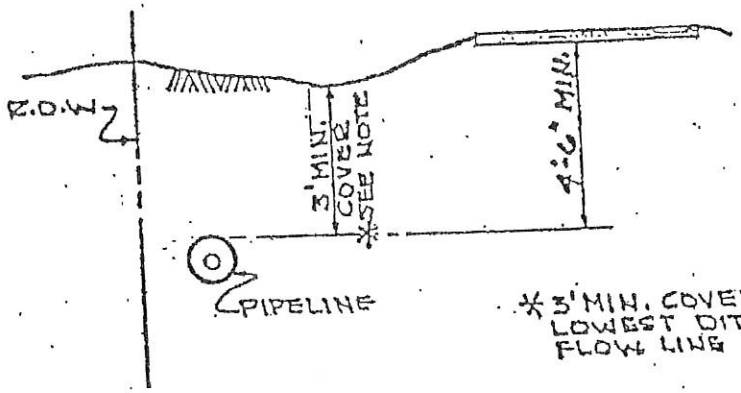
We understand that a Performance Bond will be required to protect against damage to Jefferson County's property. This will be $5,000.00 per crossing and $50,000.00 per mile or fraction thereof for parallel construction unless a special hazard to Jefferson County's property is judged to exist. No work will begin until the County Engineer has been furnished such bonds as Jefferson County Commissioners' Court may choose to require.



*3' MIN. COVER AT LOWEST DITCH FLOW LINE ELEV.

NOTE: CASING TO EXTEND 1'-0' OUTSIDE R.O.W EACH SIDE OF ROAD.

1. STANDARD PIPELINE CROSSING



*3' MIN. COVER AT LOWEST DITCH FLOW LINE ELEV.

2. STANDARD PARALLEL LINE

JEFFERSON COUNTY ENGINEERING DEPARTMENT.		
PIPELINE DETAILS (STD.)		
12-7-79	NO SCALE	[illegible]

ENGINEERING ACTION FORM

The minimum standard bond required is $ N/A

Donald M. Rao
Director of Engineering

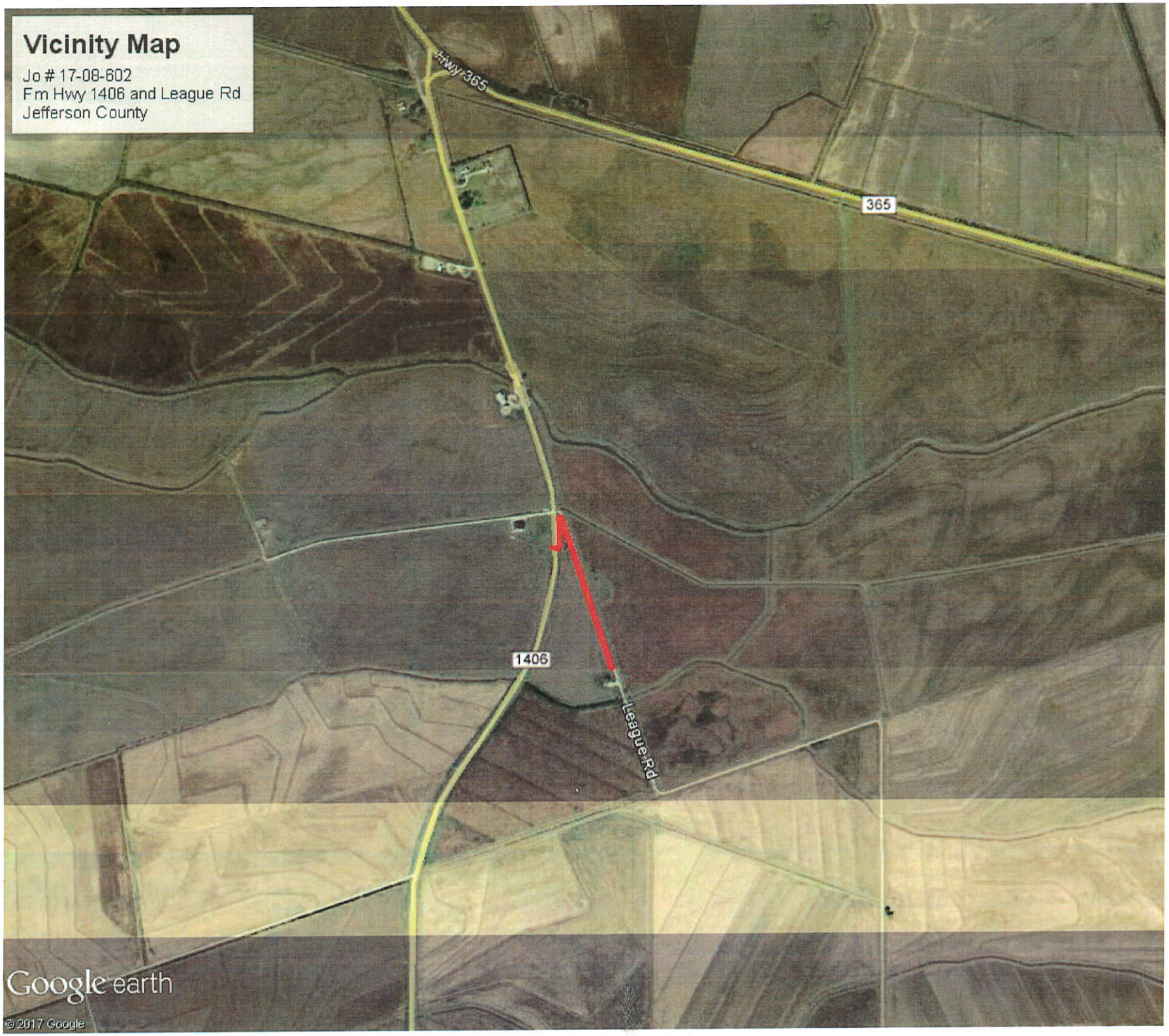
11/20/17
Date

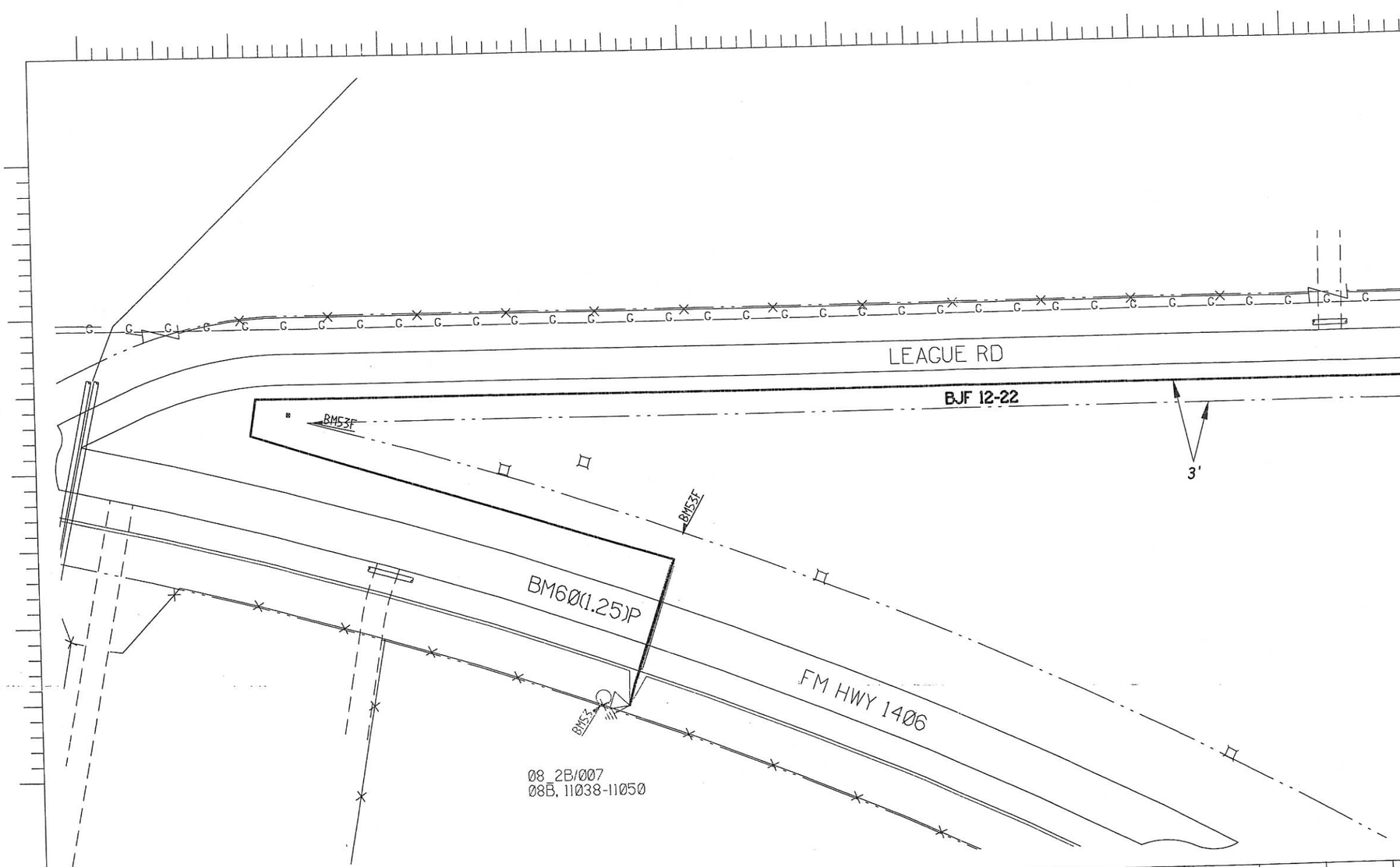
COMMISSIONERS COURT ORDER

On this date the attached application of a utility or common carrier pipeline came on for the Courts consideration, and the Court having considered the application is of the opinion that the applicant is a utility or common carrier pipeline company meeting all the requirements of County Policy for installation of a line in County roads and that the plans or details presented with said application did not appear to violate the County Regulations. It is ORDERED that said applicant shall comply with all provisions of the Pipe Line Policy adopted by this Court, and all subsequent revisions. The bond required shall be $ N/A . Special conditions of construction (are/are not) attached hereto.

COMMISSIONERS COURT

By _____
County Judge


Vicinity Map
Jo # 17-08-602
Fm Hwy 1406 and League Rd
Jefferson County
Hwy 365
365
1406
League Rd
Google earth
© 2017 Google



POLE OR PED NO.							BM 53			BM 60(1.25)P											
							2			80											
							2			80											

CO.	CTX
EXCH.: NOME	
COUNTY: JEFFERSON	
ROUTE	
2B-7L	
SHEET 1 OF 2	
REA PROJECT 1708602	
J.O. NO. 1708602	
CONST. SHT 1 OF 2	
AS BUILT DATE	

Cameron Communications

CONTRACTOR RESPONSIBLE FOR LOCATION OF EXISTING UTILITIES

National One Call 811

WARNING

The locations of facilities, as shown heron are based on above ground observations and proposed locations only, and May be inaccurate and incomplete. Use of this Information is at risk of contractor.

SHEETS NOT TO SCALE

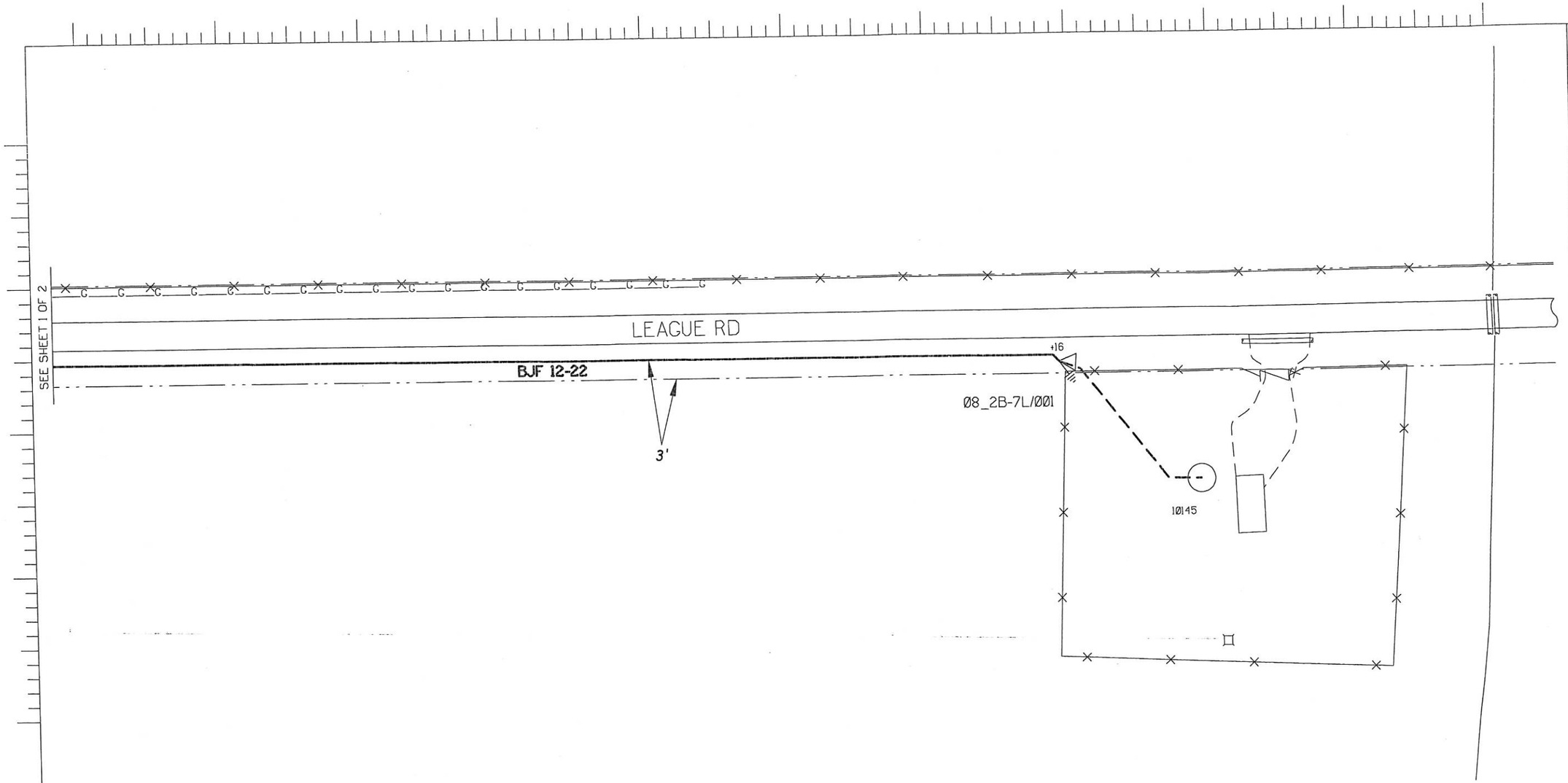
STAKED:	10/30/17
DRAWN:	11/1/17

Filename: SS_17086021

MISC. NOTES

Fiber cable to be left in facilities:

CO:	40' in + 40' out
PON:	70' in + 70' out
BD07MF:	70' in + 70' out
Last ped on route:	15' in
All other peds:	8' in + 8' out



CO.	CTX
EXCH.: NOME	
COUNTY: JEFFERSON	
ROUTE	
2B-7L	
SHEET 2 OF 2	
REA PROJECT 1708602	
J.O. NO. 1708602	
CONST. SHT 2 OF 2	
AS BUILT DATE	

Cameron Communications

CONTRACTOR RESPONSIBLE FOR LOCATION OF EXISTING UTILITIES

National One Call 811

WARNING
The locations of facilities, as shown heron are based on above ground observations and proposed locations only, and May be inaccurate and incomplete. Use of this Information is at risk of contractor.
SHEETS NOT TO SCALE

STAKED: 1Ø/3Ø/17

DRAWN: 11/1/17

Filename: SS_17Ø86Ø22

POLE OR PED NO.		BD 3			BWF 3-22	BJF 12-22			BM 2											
1		1			140	2024			1											
		1			140	2024			1											

MISC. NOTES

Fiber cable to be left in Facilities:

CO: 4Ø' in + 4Ø' out

PON: 7Ø' in + 7Ø' out

BDO7MF: 7Ø' in + 7Ø' out

Last ped on route: 15' in

All other peds: 8' in + 8' out

Cameron Communications
>>> POWERED BY FIBER

P.O. Box 2237 Sulphur, LA 70664-2237 337.583.2111
www.camtel.com

November 2, 2017

Cameron Telephone

Elizabeth Telephone

Cameron Long Distance

Cameron Systems

Carlyss Cablevision

Mr. Ernest Clement
Engineering Specialist
Jefferson County, Tx
1149 Pearl Street 5th Floor
Beaumont, TX 77701

Dear Mr. Clement:

Attached please find an application for the construction of a 12 pair 22 gauge calbe and all appurtenances thereto along and crossing the following roads: League Rd as indicated on the attached maps / drawings for JO 1708602. The routes for this project are 08_2B-7L.

If you have any questions concerning this matter, please call me at 337-583-2064. You may also contact me by E-Mail at bobby.bult@camtel.com.

Sincerely,

Robert J. Bult
OSP Operations Manager

Attachment:

Pepe Dominguez

From: Pepe Dominguez <peped@co.jefferson.tx.us>
Sent: Monday, November 13, 2017 9:52 AM
To: 'Commissioner Weaver' (bweaver@co.jefferson.tx.us)
Cc: Don Rao (drao@co.jefferson.tx.us); 'Commissioner Arnold' (eddiearnold@co.jefferson.tx.us); 'Commissioner Sinegal'; 'Commissioner Alfred'; 'Judge Branick'; 'Ronda Conlin'; Steve Stafford [sstafford@co.jefferson.tx.us] (sstafford@co.jefferson.tx.us)
Subject: Minor Plat of Boone Acres a Subdivision out of and part of Lot 7 Jiles Dugat Subdivision
Attachments: Minor Plat of Boone Acres_Comm Court.pdf

Commissioner Weaver ,

Attached is a Minor Plat of Boone Acres a Subdivision out of and part of Lot 7 Jiles Dugat Subdivision, located between State Highway 124 and Dugat Road in Precinct #2. This plat is not within any ETJ and has met all of our platting requirements.

I will be placing this plat on the Agenda for Monday, November 20th, 2017.

If you have any questions please contact either Don or myself.

Pepe Dominguez

Pepe Dominquez
Jefferson County Engineering
1149 Pearl 5th Floor
Beaumont, TX 77701
Offc. 409 835-8584
Fax. 409 835-8718
email: peped@co.jefferson.tx.us

The State of Texas
County of Jefferson

I, John Henry Boone, Owner of the property subdivided in the above and foregoing map of 2.9248 Acres of land, Part of the S. R. Perkins Survey, Abstract No. 187, Jefferson County, Texas.

Do hereby make subdivision of said property and dedicate to the public use, easements shown thereon forever; and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title to the lands so dedicated.

Witness our hands in Jefferson County, Texas this 23rd day of October, 2017.

By: John Henry Boone
John Henry Boone

The State of Texas
County of Jefferson

Before me, the undersigned authority, on this day personally appeared John Henry Boone, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein set forth.

Given under my hand and Seal of Office,
This 23rd day of October, 2017.

Jennifer Bean
Notary Public, State of Texas

JENNIFER BEAN
Notary Public, State of Texas
Comm. Expires 11-12-2020
Notary ID 125115650

STATE OF TEXAS
COUNTY OF JEFFERSON

Approved by the Commissioners Court of Jefferson County, Texas on the _____ day of _____, A.D. 2017, authorizing the filing for record of this plat. Jefferson County assumes no obligations for the maintenance of streets, roads, drainage or any other improvements.

Commissioner Precinct No. 1
Jefferson County, Texas

Commissioner Precinct No. 2
Jefferson County, Texas

Commissioner Precinct No. 3
Jefferson County, Texas

Commissioner Precinct No. 4
Jefferson County, Texas

County Judge
Jefferson County, Texas

I, Don Rao, Director of Engineering of Jefferson County, do hereby certify that the plat of this subdivision complies with all existing rules and regulations of this office as adopted by the Commissioner's Court of Jefferson County, Texas.

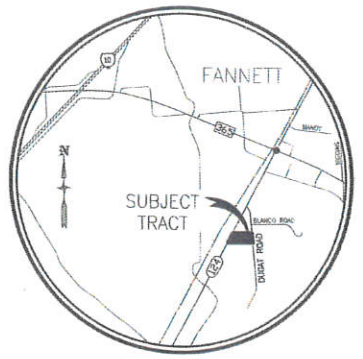
Director of Engineering

STATE OF TEXAS
COUNTY OF JEFFERSON

I, _____, County Clerk of Jefferson County, Texas, do hereby certify that the foregoing instrument of writing with its certificate of authentication was filed for record in my office on the _____ day of _____, 2017, at _ o'clock __m., and duly recorded on the _____ day of _____, 2017, at ____o'clock __m., in the Official Public Records of Jefferson County, Texas, in Clerk's File No. _____.

County Clerk, Jefferson County, Texas

Deputy County Clerk, Jefferson County, Texas



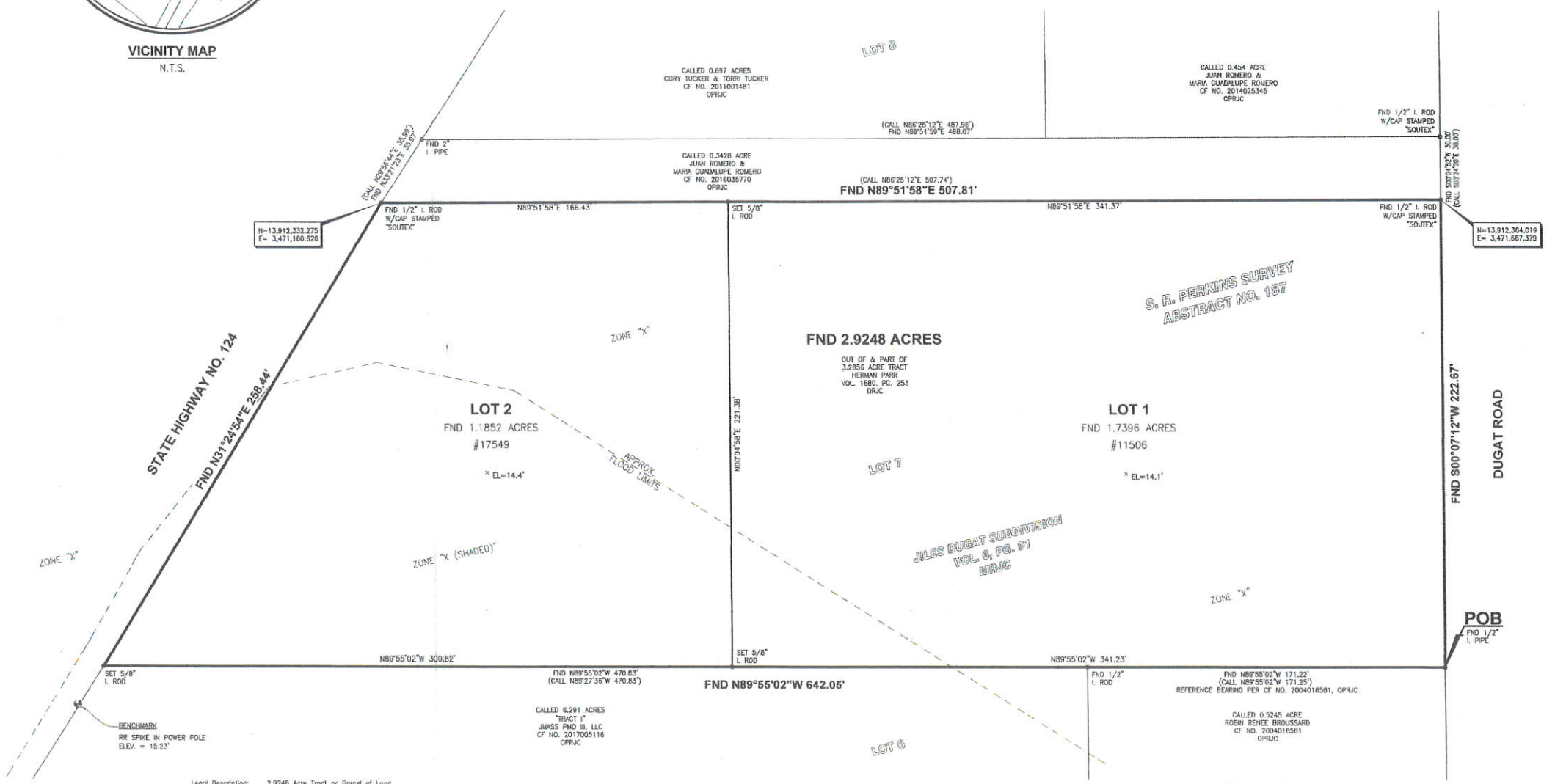
VICINITY MAP
N.T.S.

ON SITE SEWAGE FACILITY (OSSF)

TYPE OF FACILITY	USAGE RATE - GALLONS PER DAY (Without water saving devices)	Required Clear Area for OSSF (in Square Feet)	Usage Rate - Gallons per Day (Without water saving devices)	Required Clear Area for OSSF (in Square Feet)
SINGLE FAMILY (1-2 BEDROOMS)	225	6428	180	5143
LESS THAN 1500 SQ. FT.				
SINGLE FAMILY (3 BEDROOMS)	300	8571	240	6857
LESS THAN 2500 SQ. FT.				
SINGLE FAMILY (4 BEDROOMS)	375	10714	300	8571
LESS THAN 3500 SQ. FT.				
SINGLE FAMILY (5 BEDROOMS)	450	12857	360	10286
LESS THAN 4500 SQ. FT.				
SINGLE FAMILY (6 BEDROOMS)	525	15000	420	12000
LESS THAN 5500 SQ. FT.				

N

SCALE 1"=30'



ACRES: 2.9248 — 2 LOTS

NOTES:

1. PLAT IS DRAWN FOR PROPERTY CONVEYANCE ONLY. IMPROVEMENTS VISIBLE OR OTHERWISE, ARE NOT SHOWN ON THIS PLAT.
2. COORDINATES SHOWN ARE REFERENCED TO TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE NAD83 (2011).
3. BENCHMARK ELEVATION REFERENCED TO NAVD1929, DATUM REFERENCED TO FEMA BM 34.
4. NO CONSTRUCTION OR OTHER DEVELOPMENT WITHIN THIS SUBDIVISION MAY BEGIN UNTIL ALL JEFFERSON COUNTY DEVELOPMENT REQUIREMENTS HAVE BEEN MET.
5. NO PORTION OF THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF ANY MUNICIPALITY'S CORPORATE CITY LIMITS, OR AREA OF EXTRA TERRITORIAL JURISDICTION.
6. THIS SUBDIVISION IS WITHIN THE BOUNDARIES OF THE HAMSHIRE–FANNETT SCHOOL DISTRICT(S).
7. PLATTED PARCEL(S) OF THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF FLOOD ZONE "X" (WHITE) & "X" (SHADED) AS DELINEATED ON THE FEMA FLOOD INSURANCE RATE MAP FOR JEFFERSON COUNTY, COMMUNITY PANEL # 480285-0245 C, DATED AUGUST 6, 2002. FEMA FLOOD ZONE "X–WHITE" ARE AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN ZONE "X"–SHADED" ARE AREAS OF 500–YEAR FLOOD; AREAS OF 100–YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100–YEAR FLOOD.
8. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR TO AN ON–SITE WASTEWATER SYSTEM, WHICH HAS BEEN APPROVED AND PERMITTED BY JEFFERSON COUNTY.
9. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN INDIVIDUAL WATER SUPPLY, STATE APPROVED COMMUNITY WATER SYSTEM, OR ENGINEERED RAINWATER COLLECTION SYSTEM.
10. ELECTRIC UTILITY SERVICE WILL BE PROVIDED BY: ENTERGY TEXAS, INC.
    TELEPHONE UTILITY SERVICE WILL BE PROVIDED BY: AT&T
    GAS UTILITY SERVICE WILL BE PROVIDED BY: CENTERPOINT ENERGY
    WATER UTILITY SERVICE WILL BE PROVIDED BY: WEST JEFFERSON COUNTY MUNICIPAL WATER DISTRICT
    SEWER UTILITY SERVICE WILL BE PROVIDED BY: ON SITE WASTE WATER SYSTEM

Legal Description: 2.9248 Acre Tract or Parcel of Land
Out of and Part of Lot 7
Jiles Dugat Estate Subdivision
Volume 6, Page 91, Map Records
S. R. Perkins Survey, Abstract No. 187
Jefferson County, Texas

BEING a 2.9248 acre tract or parcel of land situated in the S.R. Perkins Survey, Abstract No. 187, Jefferson County, Texas and being out of and part of Lot 2 of the Jiles Dugat Estate Subdivision, a subdivision of Jefferson County, Texas, according to the plat thereof recorded in Volume 6, Page 91, Map Records, Jefferson County, Texas and being out of and part of that certain called 3.2855 acre tract of land as described in a deed from Martin R. Hebert, Sr. and C.L. Hebert to Herman Parr as recorded in Volume 1680, Page 253, Deed Records, Jefferson County, Texas, said 2.9248 acre tract being more particularly described as follows:

NOTE: All bearings are referenced to the North line of a called 0.5245 acre tract of land as described in a "Special Warranty Deed" from Carl Jacob Broussard to Robin Renee Broussard as recorded in Clerk's File No. 2004018581, Official Public Records of Real Property, Jefferson County, Texas as NORTH 89°55'02" WEST.

BEGINNING at a 1/2" iron pipe found for the Southeast corner of the tract herein described, said corner being the Southeast corner of the remainder of the said 3.2855 acre Parr tract and being the Northeast corner of that certain called 0.5245 acre tract of land as described in a "Special Warranty Deed" from Carl Jacob Broussard to Robin Renee Broussard as recorded in Clerk's File No. 2004018581, Official Public Records of Real Property, Jefferson County, Texas, the same being the Southeast corner of the said Lot 7 of the Jiles Dugat Estate Subdivision and the Northeast corner of Lot 6 of the said Jiles Dugat Estate Subdivision and being in the West right–of–way line of Dugat Road (also known as Old Beach Highway);

THENCE NORTH 89°55'02" WEST, along and with common line between the said Lots 6 and 7 and along and with the boundary between the tract herein described and the said 0.5245 acre Broussard tract, passing at a distance of 171.22 feet a 1/2" iron rod found for the Northwest corner of the said 0.5245 acre Broussard and the Northeast corner of that certain called 6.291 acre tract of land, identified as TRACT 1, as described in a "General Warranty Deed" from EMS USA, Inc. to JMASS PMO III, LLC as recorded in Clerk's File No. 2017005116, Official Public Records of Real Property, Jefferson County, Texas, and continuing along and with the boundary between the tract herein described and the said 6.291 acre JMASS PMO III, LLC tract, for a total distance of 642.05 feet to a 5/8" iron rod with a cap stamped "M.W. Whiteley & Associates" set for corner, said corner being the Northwest corner of the said 6.291 acre JMASS PMO III, LLC tract and in the Easterly right–of–way line of State Highway 124;

THENCE NORTH 31°24'54" EAST, along and with the Easterly right–of–way line of State Highway 124, for a distance of 258.44 feet to a 1/2" iron rod with a cap stamped "Soutex" found for corner, said corner being the Southwest corner of that certain called 0.3428 acre tract of land as described in a "General Warranty Deed" from John Boone to Juan Romero and Maria Guadalupe Romero as recorded in Clerk's File No. 2016035770, Official Public Records of Real Property, Jefferson County, Texas;

THENCE NORTH 89°51'58" EAST, along and with the boundary between the tract herein described and the said 0.3428 acre Romero tract, for a distance of 507.81 feet to a 1/2" iron rod with a cap stamped "Soutex" found for corner, said corner being the Southeast corner of the said 0.3428 acre Romero tract and in the West line of Dugat Road and the East line of the said Lot 7;

THENCE SOUTH 00°07'12" WEST, along and with the West line of Dugat Road and the East line of the said Lot 7, for a distance of 222.67 feet to the POINT OF BEGINNING and containing 2.9248 Acres, more or less.

KNOW ALL MEN BY THESE PRESENTS:

THAT I, THOMAS S. ROWE, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS CERTIFY THAT THIS PLAT HAS BEEN PREPARED FROM AN ACTUAL SURVEY ON THE GROUND, THAT ALL CORNERS WERE FOUND OR SET AS NOTED AND THAT THIS PLAT CORRECTLY REPRESENTS SAID SURVEY BY ME AND IS IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF JEFFERSON COUNTY.

THOMAS S. ROWE, REGISTERED PROFESSIONAL LAND SURVEYOR, NO. 5728

STATE OF TEXAS REGISTERED THOMAS S. ROWE 5728 PROFESSIONAL LAND SURVEYOR

THE STATE OF TEXAS
COUNTY OF JEFFERSON

SUBSCRIBED AND SWORN TO BEFORE ME BY THOMAS S. ROWE AND GIVEN UNDER MY AND SEAL OF OFFICE THIS 23rd DAY OF October, 2017.

NOTARY PUBLIC, STATE OF TEXAS

JENNIFER BEAN
Notary Public, State of Texas
Comm. Expires 11-12-2020
Notary ID 125115650

MINOR PLAT
OF
BOONE ACRES

A SUBDIVISION
OUT OF AND PART OF LOT 7
JILES DUGAT SUBDIVISION
VOLUME 6, PAGE 91, MAP RECORDS
S. R. PERKINS SURVEY, ABSTRACT NO. 187
JEFFERSON COUNTY, TEXAS

MARK W. WHITELEY
AND ASSOCIATES
INCORPORATED
CONSULTING ENGINEERS,
SURVEYORS, AND PLANNERS
P. O. BOX 5492
BEAUMONT, TEXAS 77726–5492
409–892–0421
3250 EASTEX FRWY.
BEAUMONT, TEXAS 77703
(FAX) 409–892–1346

OCTOBER 2017 — SCALE 1"=30'

Resolution

STATE OF TEXAS § COMMISSIONERS COURT
§
COUNTY OF JEFFERSON § OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Brent Weaver, Commissioner of Precinct No. 2, and seconded by Everette D. Alfred, Commissioner of Precinct No. 4, the following Resolution was adopted:

Whereas, Jerry Hinson has devoted 29 ½ years of his life serving the people of Jefferson County with pride and professionalism; and

Whereas, Jerry Hinson has made an outstanding contribution to Jefferson County Mosquito Control District. Previously, he gained extensive knowledge and experience while flying commercially and flight instructing, as well as aircraft maintenance for 12 years. During his career with Jefferson County he was very instrumental in implementing the aerial program for Jefferson County Sheriff's Department, as well as, Orange County Mosquito Control; and

Whereas, through hard work and commitment Jerry Hinson would earn the title of Chief Pilot. He holds ratings in Inspection Authorization, Aircraft Mechanic and Flight Instructor in Rotor Craft Helicopters, Single Engine and Multi-Engine Aircraft with Instrument Rating. He conducted all training for newly hired pilots and he has trained aspiring pilots to fly and earn their certifications. These pilots would include our very own Mosquito Control Pilots, Sheriff's Department, officials and local pilots of the community; and

Whereas, dedicated to his profession, after 43 years in aviation Jerry has received many accolades from his peers and rewards for flight safety and training from the Federal Aviation Administration and other Aviation Organizations; and

Whereas, having made a significant contribution to Jefferson County, Jerry Hinson is recognized for his dedication to our citizens of Jefferson County and will be missed by his friends and co-workers.

NOW THEREFORE, BE IT RESOLVED that the Jefferson County Commissioners Court does hereby honor and commend Jerry Hinson, for his service as a valuable employee of Jefferson County and wishes him well in his retirement.

SIGNED this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

JEFFERSON COUNTY SHERIFF'S OFFICE

SHERIFF ZENA STEPHENS

To: Honorable Jeff R. Branick
Commissioner – Eddie Arnold
Commissioner – Brent Weaver
Commissioner – Michael S. Sinegal
Commissioner – Everette Alfred

From: Jefferson County Sheriff's Office

Subject: Resolution for Retiring Deputy William B. Eichelberger
Agenda item for the week of November 27, 2017

Date: November 20, 2017

Consider and possibly approve a Resolution recognizing Deputy William B. Eichelberger for 22 years and 7 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

Sincerely,

Charlie E. Porter, Deputy Chief
Jefferson County Sheriff's Office

Resolution

STATE OF TEXAS § COMMISSIONERS COURT
§
COUNTY OF JEFFERSON § OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners Court of Jefferson County, Texas, held on the 27TH day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

WHEREAS, ***William B. "Ike" Eichelberger***, has devoted 22 years and 7 months of his life serving the people of Jefferson County with pride and professionalism; and

WHEREAS, ***William B. "Ike" Eichelberger***, has dedicated his talents and pledged his services as a Reserve Officer providing the highest quality reserve law enforcement to the citizens of Jefferson County for the Jefferson County Sheriff's Office from 1990 to 1993; and

WHEREAS, ***William B. "Ike" Eichelberger***, has pledged his services as a Peace Officer, making an outstanding contribution to law enforcement and the quality of criminal justice in Jefferson County, in the Patrol Unit – responsible for investigating all types of criminal activity, making the required reports and filing the appropriate charges in an attempt to deter criminal activity, as a Fugitive Warrant Deputy, arresting fugitives on outstanding warrants issued within the county or warrants sent from other counties, also, served as President of the Jefferson County Sheriff's Association, ensuring that members' rights and interests are protected by providing exceptional legal representation and assistance in union negotiations, for the Jefferson County Sheriff's Office; and

WHEREAS, through hard work and commitment to excellence, ***William B. "Ike" Eichelberger,*** has earned the respect of his colleagues and the citizens of Jefferson County; and

WHEREAS, having made a significant contribution to the Jefferson County Sheriffs' Office, ***William B. "Ike" Eichelberger,*** is recognized for his unselfish devotion to the common good and welfare of the citizens of Jefferson County; and will always be missed by his friends and co-workers.

NOW THEREFORE, BE IT RESOLVED that the Jefferson County Commissioners Court does hereby honor and commend ***William B. "Ike" Eichelberger***, for his dedicated service as a valuable employee of Jefferson County and wishes him well in his retirement.

SIGNED this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

JEFFERSON COUNTY SHERIFF'S OFFICE

SHERIFF ZENA STEPHENS

To: Honorable Jeff R. Branick
Commissioner – Eddie Arnold
Commissioner – Brent Weaver
Commissioner – Michael S. Sinegal
Commissioner – Everette Alfred

From: Jefferson County Sheriff's Office

Subject: Resolution for Retiring Sergeant Paul D. Stephenson
Agenda item for the week of November 27, 2017

Date: November 20, 2017

Consider and possibly approve a Resolution recognizing Sergeant Paul D. Stephenson for 29 years and 10 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

Sincerely,

Charlie E. Porter, Deputy Chief
Jefferson County Sheriff's Office

Resolution

STATE OF TEXAS § COMMISSIONERS COURT
§
COUNTY OF JEFFERSON § OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

WHEREAS, ***Paul D. Stephenson***, has devoted 29 years and 10 months of his life serving the people of Jefferson County with pride and professionalism; and

WHEREAS, ***Paul D. Stephenson***, has dedicated his talents and pledged his services as a Corrections Officer at the Correctional Facility for the Jefferson County Sheriff's Office; and

WHEREAS, ***Paul D. Stephenson***, has pledged his services as a Peace Officer, and Sergeant, making an outstanding contribution to law enforcement and the quality of criminal justice in Jefferson County, serving as a Peace Officer in the Forensics Division – responsible for the collection of physical evidence at crime scenes, a D.A.R.E. Officer – teaching youth why they should refuse alcohol, tobacco and other drugs, and to resist violence, as a Courthouse Security Officer – responsible for all security aspects of the courthouse, a Peace Officer in the Criminal Investigation Division, responsible for investigating crimes such as burglaries, homicides, assaults and other incidents to implicate perpetrators and as a Sergeant in the Patrol Unit – responsible for investigating all types of criminal activity, making the required reports and filing the appropriate charges in an attempt to deter criminal activity, for the Jefferson County Sheriff's Office; and

WHEREAS, through hard work and commitment to excellence, ***Paul D. Stephenson,*** has earned the respect of his colleagues and the citizens of Jefferson County; and

WHEREAS, having made a significant contribution to the Jefferson County Sheriffs' Office, ***Paul D. Stephenson,*** is recognized for his unselfish devotion to the common good and welfare of the citizens of Jefferson County; and will always be missed by his friends and co-workers.

NOW THEREFORE, BE IT RESOLVED that the Jefferson County Commissioners Court does hereby honor and commend ***Paul D. Stephenson***, for his dedicated service as a valuable employee of Jefferson County and wishes him well in his retirement.

SIGNED this 27th day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

JEFFERSON COUNTY SHERIFF'S OFFICE

SHERIFF ZENA STEPHENS

To: Honorable Jeff R. Branick
Commissioner – Eddie Arnold
Commissioner – Brent Weaver
Commissioner – Michael S. Sinegal
Commissioner – Everette Alfred

From: Jefferson County Sheriff's Office

Subject: Resolution for Retiring Deputy James H. LeBlanc
Agenda item for the week of November 27, 2017

Date: November 20, 2017

Consider and possibly approve a Resolution recognizing Deputy James H. LeBlanc for 33 years and 3 months of dedicated Law Enforcement service to the citizens of Jefferson County and in wishing him well in his retirement.

Sincerely,

Charlie E. Porter, Deputy Chief
Jefferson County Sheriff's Office

Resolution

STATE OF TEXAS § COMMISSIONERS COURT
§
COUNTY OF JEFFERSON § OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners Court of Jefferson County, Texas, held on the 27th day of November, 2017, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Brent Weaver, Commissioner of Precinct No. 2, the following Resolution was adopted:

WHEREAS, ***James H. LeBlanc***, has devoted 33 years and 3 months of his life serving the people of Jefferson County with pride and professionalism; and

WHEREAS, ***James H. LeBlanc***, has dedicated his talents and pledged his services as a Corrections Officer at the Correctional Facility for the Jefferson County Sheriff's Office; and

WHEREAS, ***James H. LeBlanc***, has pledged his services as a Peace Officer, making an outstanding contribution to law enforcement and the quality of criminal justice in Jefferson County, serving as a Peace Officer in the Patrol Unit - responsible for investigating all types of criminal activity, making the required reports and filing the appropriate charges in an attempt to deter criminal activity, as a Peace Officer in the Forensics Division/Criminal Records Division – responsible for the collection of physical evidence at crime scenes, using scientific methods to reveal latent or hidden characteristics, such as fingerprints, Criminal Records Division is the repository for rap sheets, mugshots, and fingerprints of all individuals arrested in Jefferson County, and responsible for registering sex offenders residing within the county, as a Bailiff – securing the courtroom, including ensuring that the judges and judicial staff, court employees and jurors are safe, for the Jefferson County Sheriff's Office; and

WHEREAS, through hard work and commitment to excellence, ***James H. LeBlanc,*** has earned the respect of his colleagues and the citizens of Jefferson County; and

WHEREAS, having made a significant contribution to the Jefferson County Sheriffs' Office, ***James H. LeBlanc,*** is recognized for his unselfish devotion to the common good and welfare of the citizens of Jefferson County; and will always be missed by his friends and co-workers.

NOW THEREFORE, BE IT RESOLVED that the Jefferson County Commissioners Court does hereby honor and commend ***James H. LeBlanc***, for his dedicated service as a valuable employee of Jefferson County and wishes him well in his retirement.

SIGNED this 27TH day of November, 2017.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

Special, November 27, 2017

There being no further business to come before the Court at this time, same is now here adjourned on this date, November 27, 2017