

SPECIAL, 4/15/2019 1:30:00 PM

BE IT REMEMBERED that on April 15, 2019, 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

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 (ABSENT)

CHIEF SCHAUBERGER

Honorable Carolyn L. Guidry , County Clerk

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

Notice of Meeting and Agenda and Minutes
April 15, 2019

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
April 15, 2019**

Notice is hereby given that the Commissioners' Court of Jefferson County, Texas, will meet at **1:30 PM**, on the **15th** day of **April 2019** 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:

11:00 a.m.-Announcement of an executive (closed) session pursuant to Texas Government Code Section § 551.071 for the purpose of receiving information from its counsel regarding pending or anticipated litigation with the County.

INVOCATION: Everette "Bo" Alfred, Commissioner, Precinct Four

PLEDGE OF ALLEGIANCE: Eddie Arnold, Commissioner, Precinct One

PURCHASING:

1. Consider and approve a bid due date extension for (IFB 19-025/JW), Dump Trucks for Jefferson County Precinct No. 4 (To Replace Unrepairable Dump Trucks Damaged By Hurricane Harvey) from 11:00 am CT, Tuesday, April 30, 2019 to 11:00 am CT, Tuesday, May 21, 2019; this invitation for bid is pursuant to Chapter 262, Texas Local Government Code, the County Purchasing Act and 2 CFR Sections 200.318 – 326.

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

2. Consider and approve a contract renewal for (IFB 17-010/YS), Term Contract Crushed Slag (Gr. 1, Type D, Class 2) and Asphalt Products for Jefferson county for a second one (1) year renewal with Martin Asphalt Company from April 29, 2019 through April 28, 2020.

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

3. Consider and approve, execute, receive and file a contract for (IFB 17-043/JW), Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County to BDS Constructors, LLC dba MK Constructors in the amount of \$6,699,693.20. This project is funded by grants from the National Fish and Wildlife Foundation (NFWF) and the North American Wetlands Conservation Act (NAWCA). Any construction cost not covered by these two grants will be funded from the County's settlement with BP.

SEE ATTACHMENTS ON PAGES 9 - 326

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal

Opposed: Commissioner Alfred

Action: APPROVED

Notice of Meeting and Agenda and Minutes
April 15, 2019

4. Consider and approve, execute, receive and file (JOC 19-026/DC) with SpawGlass Building Services for the removal and replacement of 2 flagpoles at the Jefferson County Courthouse the amount of \$15,066.00. This is in accordance with the BuyBoard Contract 520-ez1QC.

SEE ATTACHMENTS ON PAGES 327 - 327

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

5. Consider and approve, execute, receive and file (JOC 19-027/DC) with SpawGlass Building Services for the repair wall and floor tiles in 4 bathrooms at the Jefferson County Courthouse in the amount of \$11,905.00. This is in accordance with the BuyBoard Contract 520-ez1QC.

SEE ATTACHMENTS ON PAGES 328 - 328

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

COUNTY AIRPORT:

6. Consider, possibly approve, authorize the County Judge to execute, receive and file Utility Easement from Jefferson County to Entergy Texas, Inc. (Entergy) to allow Entergy to construct and maintain electrical power lines upon Jefferson County Airport property.as part of its Port Arthur Reliability Project.

SEE ATTACHMENTS ON PAGES 329 - 348

Motion by: Commissioner Sinegal

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

Notice of Meeting and Agenda and Minutes
April 15, 2019

7. Receive and file Private Hangar Lease between Jefferson County and ACS Executive Air, LLC for property at the Jack Brooks Regional Airport.

Motion by: Commissioner Sinegal

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

COUNTY AUDITOR:

8. Consider and approve budget transfer - Beaumont Maintenance - additional cost for replacement of two flag poles and increase cost for repairs to restroom walls.

120-6083-416-6003	BUILDING - COURTHOUSE	\$20,000.00	
120-6083-416-1072	MAINTENANCE CREW		\$20,000.00

SEE ATTACHMENTS ON PAGES 349 - 349

Motion by: Commissioner Alfred

Second by: Commissioner Arnold

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

9. Consider and approve budget transfer - Constable Pct. 1 - additional cost for uniforms.

120-3065-425-3017	CLOTHING	\$700.00	
120-3065-425-4011	EQUIPMENT- MISCELLANEOUS		\$300.00
120-3065-425-5021	DUES/SUBSCRIPTIONS		\$400.00

SEE ATTACHMENTS ON PAGES 350 - 350

Motion by: Commissioner Alfred

Second by: Commissioner Arnold

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

10. Regular County Bills - check #457919 through checks #458193.

SEE ATTACHMENTS ON PAGES 351 - 360

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

COUNTY COMMISSIONERS:

11. Receive and file executed Professional Services Agreement between Jefferson County and Lone Star PACE.

SEE ATTACHMENTS ON PAGES 361 - 410

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

12. Consider and possibly approve a Proclamation / Older Americans Month.

SEE ATTACHMENTS ON PAGES 411 - 411

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

13. Consider, possibly approve and authorize the County Judge to execute a Consent Form for Demolition of an Unsafe Structure located at 7710 Tram Road, Beaumont, Texas.

SEE ATTACHMENTS ON PAGES 412 - 423

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

CRIME LAB:

14. Consider, possibly approve, authorize the County Judge to execute, receive and file Inter-local Agreement between Jefferson County and Orange County for the Jefferson County Crime Laboratory to provide crime laboratory testing and services suitable for investigations.

SEE ATTACHMENTS ON PAGES 424 - 428

Motion by: Commissioner Arnold

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

HUMAN RESOURCES:

15. Presentation of the 2018 Employee Excellence Award.

Motion by: Commissioner Weaver

Second by: Commissioner Arnold

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

16. Consider and possibly approve Resolution for the 2018 Employee Excellence Award Winner.

SEE ATTACHMENT ON PAGE 432

2nd - Mercy LaPoint, 1st - Haylee Fournier, Winner - Yolanda Delaney

Motion by: Commissioner Weaver

Second by: Commissioner Arnold

In favor: County Judge Branick, Commissioner Arnold, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred

Action: APPROVED

MANAGEMENT INFORMATION SYSTEMS:

17. Consider, possibly approve and authorize the County Judge to execute receive and file an agreement between Jefferson County Management Information Systems and GMO GlobalSign, Inc. for EV SSL Certificate.

SEE ATTACHMENTS ON PAGES 429 - 431

Motion by: Commissioner Sinegal

Second by: Commissioner Weaver

In favor: County Judge Branick, Commissioner Arnold, 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

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 or 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 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.

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 the 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-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) 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 (1) 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 (1) 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 with 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, DWVC-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: BDS Construction LLC dba
mk construction

Bidder's TAX ID Number: 45-3567082

Contact Person: Kenneth Stewart **Title:** President

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: Ken@mkconstructors.com

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

P.O. Box 1208

Vidor TX 77670

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): 1, 2, 3, 4.

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

BDS CONSTRUCTORS LLC
dba MK CONSTRUCTORS
Company Name

For clarification of this offer, contact:

P.O. Box 1208
Address

Kenneth D. Stewart
Name

Vidor IX 72670
City State Zip

409-769-0089 409-769-1288
Phone Fax

* Kenneth D. Stewart
Signature of Person Authorized to Sign

Kem@mkconstructors.com
E-mail

Kenneth D. Stewart
Printed Name

President
Title

Bidder Shall Return Completed Form with Offer.

Acceptance of Offer

The Offer is hereby accepted 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.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the Invitation for Bid, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by Jefferson County.

This contract shall henceforth be referred to as Contract No. 17-043/JW, Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County

The Contractor has not been authorized to commence any billable work or to provide any material or service under this contract until Contractor receives a purchase order and/or a notice to proceed from the Jefferson County Purchasing Agent.

Countersigned:

Jeff R. Branick
County Judge

April 15, 2019
Date

Attest:

Carolyn L. Guidry
County Clerk



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.

BDS CONSTRUCTORS LLC
d/b/a MR CONSTRUCTORS

Bidder (Entity Name)

116736 I#10-Vidor, dx 771602
P.O. Box 1208-Vidor, dx 771670

Street & Mailing Address

City, State & Zip

409-769-0089

Telephone Number

* Kenneth Stewart

Signature

Kenneth Stewart

Print Name

1/5/18

Date Signed

409-769-1288

Fax Number

ken@mrconstructors.com

E-mail Address

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: _____

See attached

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.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity		FORM CIQ				
<p>This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.</p> <p>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).</p> <p>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.</p> <p>A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; padding: 2px;">OFFICE USE ONLY</th> </tr> </thead> <tbody> <tr> <td style="width: 50%; padding: 2px;">Date Received</td> <td style="width: 50%;"></td> </tr> </tbody> </table>		OFFICE USE ONLY		Date Received	
OFFICE USE ONLY						
Date Received						
<p>1 Name of vendor who has a business relationship with local governmental entity.</p> <p style="text-align: center; font-size: 1.2em;">N/A</p>						
<p>2 <input type="checkbox"/> Check this box if you are filing an update to a previously filed questionnaire.</p> <p style="text-align: right; font-size: 1.2em;">N/A</p> <p>(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.)</p>						
<p>3 Name of local government officer about whom the information in this section is being disclosed.</p> <p style="text-align: center;">_____</p> <p style="text-align: center; font-size: 0.8em;">Name of Officer</p> <p>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.</p> <p>A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>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?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p style="text-align: right; font-size: 1.5em;">N/A</p> <p>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?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>D. Describe each employment or business and family relationship with the local government officer named in this section.</p>						
<p>4</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="font-size: 1.5em; border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">(D)</p> <p style="font-size: 1.5em; margin-left: 20px;">N/A</p> </div> <div style="width: 45%; text-align: right;"> <p style="font-size: 1.5em;">NA</p> </div> </div> <p style="font-size: 0.8em;">Signature of vendor doing business with the governmental entity Date</p>						

* Kenneth Stewart 1/9/18 Adapted 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
<p>This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.</p> <p>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.</p>		OFFICE USE ONLY
1	Name of Local Government Officer	Date Received
N/A		
2	Office Held	
N/A		
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	
N/A		
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 _____		
N/A		
(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		Title of officer administering oath

Adopted 6/7/2015

✱

Kenneth Stewart

11/9/18

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 contact 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? **NO HUBS showed interest in the project.**
- 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.

Kenneth Stewart
Printed Name of Authorized Representative

* Kenneth Stewart
Signature

President
Title

11/5/18
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: Yes 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: _____

KENNETH STEWART
Printed Name of Contractor Representative

* Kenneth Stewart
Signature of Representative

1/9/18
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.

No. Hub contractors showed interest in this contract.
Jefferson County / Invitation for Bid (IFB 17-043/JW)

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

PAGE 1 OF 4

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: N/A % 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 SUBCONTRACTOR 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

PAGE 2 OF 4

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: \$ _____ *N/A* 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

PAGE 3 OF 4

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) **For now.**
- 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): Kenneth D. Stewart

Title: President

Signature: * Kenneth D. Stewart

Date: 1/9/18

E-mail address: Ken@mkconstructors.com

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

Name (print or type): Mike Swire

Title: Estimator

Date: 1/9/18

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 (company name) is a Resident Bidder of Texas as defined in Government Code §2252.001.
dba MK Construction
- 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 - Vidler 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**

* 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 SX COUNTY OF Orange

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

on this day personally appeared Kenneth D. Stewart, who
(name)

after being by me duly sworn, did depose and say:

"I, Kenneth D. Stewart am a duly authorized officer of/agent
(name)
for BDS CONSTRUCTION LLC dba MK CONSTRUCTORS and have been duly authorized to execute the
(name of firm)
foregoing on behalf of the said BDS CONSTRUCTORS LLC dba MK CONSTRUCTORS
(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."

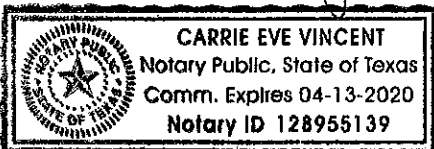
Name and address of bidder: BDS CONSTRUCTORS LLC dba MK CONSTRUCTORS

Fax: 409-769-1288 Telephone# 409-769-0089
by: Kenneth D. Stewart Title: President
(print name)

Signature: * Kenneth D. Stewart

SUBSCRIBED AND SWORN to before me by the above-named Kenneth D. Stewart on

this the 5 day of January, 2018



[Signature]
Notary Public in and for the State of SX

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 ninety (90)** 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 be 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 Statute 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 (REVISED FORM - Addendum No. 1)

Proposal of BDS Constructors LLC dba MK Constructors (hereinafter called

"BIDDER"), organized and existing under the laws of the State of TX doing business as MK Constructors *

To the Jefferson County (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Siphon Central Structures @ at Ditch and Salt Bayou Gulf Intracoastal Waterway 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 120 working days.

BIDDER acknowledges receipt of the following ADDENDUM:

1 - 2 - 3 - 4

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

REVISED CONTRACTOR'S BID

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:

Spec. No.	Alt.	Description	Estimate Quantity	Unit	Unit Price	Unit Price (Written)	Total
100	001	PREPARING ROW (DITCH)	3.10	AC			
110	001	EXCAVATION (DITCH)	14,048.00	CY	231.452	two hundred thirty one and four hundredths	3,251,521.76
132	001	EMBANKMENT (TY D)	789.00	CY	9.00	Nine	7,101.00
164	001	SEEDING FOR EROSION CONTROL (DITCH)	6,304.00	SY	33.00	thirty three	208,032.00
400	001	EXCAVATION FOR SIPHON STRUCTURE	157.00	CY	1.00	one	157.00
400	002	EXCAVATION FOR ARTICULATED CONCRETE MAT	2,508.00	CY	10.00	Ten	25,080.00
400	003	CEMENT STABILIZED BACKFILL	315.00	CY	149.00	one hundred forty nine	46,935.00
403	001	TEMPORARY SPECIAL SHORING	4,135.00	SF	45.00	forty five	186,120.00
500	001	MOBILIZATION	1.00	LS	642.171	six hundred forty two and one tenth	642.171
618	001	HIGH DENSITY POLYETHYLENE PIPE (6" HDPE)	32.00	LF	238.00	two hundred thirty eight	7,616.00
618	002	HIGH DENSITY POLYETHYLENE PIPE (6" HDPE)(HDD METHOD)	6,520.00	LF	583.00	five hundred eighty three	3,800,160.00
2000	001	FILTER FABRIC	18,564.00	SF	.25	eighty five	4,641.00
8000	001	DEWATERING	1.00	LS	35,000.00	thirty five thousand	35,000.00
9000	001	ARTICULATED CONCRETE MATS (6')	2,046.00	SY	63.00	sixty three	128,898.00
9010	001	VINYL SHEET PILE (SG-425)	2,220.00	SF	13.00	thirteen	28,860.00
9010	002	VINYL SHEET PILE (SG-425) WITH WALL SYSTEM	3,500.00	SF	14.00	fourteen	49,000.00
9020	001	SIPHON STRUCTURE (HEIGHT=9.0' W/ STUB-OUT	8.00	EA	27,091.00	twenty seven thousand nine hundred	216,728.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.0' W/ STUB-OUT & FLAP GATE	8.00	EA	26,610.00	twenty six thousand six hundred	212,880.00
9020	003	SIPHON STRUCTURE (HEIGHT=6.0' W/ STUB-OUT & FLAP GATE	2.00	EA	72,210.00	seventy two thousand two hundred	144,420.00
9030	001	BREAKWATER (INSTALL)	408.00	CY	291.00	two hundred ninety one	118,728.00
9030	002	BREAKWATER (REMOVE & RELOCATE)	110.00	CY	281.00	two hundred eighty one	30,910.00
SUBTOTAL							1,699,693.20
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 be awarded 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 90 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 90 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 90 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:

1-2-3-4
By BDS Constructors LLC
dba mk constructors
Name of Contracting Firm
P.O. Box 1208
Address
Vidor TX 77670
City State Zip
409-769-0089
(Area Code) Phone Number
ken@mkconstructors.com
Email Address

*Kenneth D. Stewart 1/5/18
Authorized Signature Date
Kenneth D Stewart
Printed Name
President
Title
409-769-1288
(Area Code) Fax Number
409-769-0089
(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: BDS CONSTRUCTION LLC dba MK CONSTRUCTION

Address: P.O. Box 1208

City: Vidor State: TX Zip Code 77670 Tel. 409-7109-0089

Individual Partnership Corporation incorporated under the laws of the State of TX

With principal place of business in: City Vidor, State TX

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.

<u>Kenneth D. Stewart</u>	<u>50</u>
Name	%
<u>Michael Brown</u>	<u>50</u>
Name	%
Name	%
Name	%

FIRM HISTORY:

List firm history including any other business names used.

From 10/2011 to Current Firm Name BDS CONSTRUCTION LLC dba MK CONSTRUCTION
Address P.O. Box 1208 City Vidor State TX 77670

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.	<i>See attached</i>	
5.		
6.		
7.		
8.		
9.		
10.		

FIRM'S WORK VOLUME: Indicate average annual construction volume \$ 35 mil.

Indicate percentage of this volume by construction categories:

Utility Plants	_____ %	Concrete	<u>20</u> %	Marine	<u>5</u> %
Utility Lines	_____ %	Site Work	<u>5</u> %	Other PIPELINE.	<u>40</u> %
Electrical.....	_____ %	Highway / Roads	<u>20</u> %		
Plumbing.....	_____ %	Earthwork	<u>10</u> %		

BONDING REFERENCES:

Jefferson County / Invitation for Bid (IFB 17-043/JW)

Indicate agency through which bonding requirements will be obtained.

Agency McElveen Insurance, LLC Address 700 W. Prien Lake Rd. Suite 200

City Lake Charles State La Zip 70601

Agent's Name Douglas N. McElveen Tel. (337) 475-7441

Agent(s) with Power of Attorney from Bonding Company (name(s) Christine Baker, Douglas N. McElveen,
Amanda McElveen, Kathy Peters , Expiration Date of Power of Attorney 3/31/2018

BONDING COMPANY: Hartford Fire Insurance Co. Address One Hartford Plaza

City Hartford State Connecticut Zip 06155

Bonding Company representative to contact for verification:

Name Susan McElveen Tel. (337) 475-7474

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 _____

See attached

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.

MK Constructed

 Name of Firm
President

 Title of Person Signing

** Kenneth Stewart*

 Signature of Owner or Officer

 1/9/18

 Date

CONDITIONS OF THE CONTRACT

Client	Name of Project	Bid \$	Type of Work	Job #
GT Logistics, LLC	Underground Pipeline Project	\$ 884,606.00	Underground Pipeline Project	MK12-0001
Troy Construction	Asphalt Work	\$ 30,100.00	Asphalt Work	MK12-0002
Will Call	Grinding Work	\$ 5,040.00	Grinding Work	MK12-0003
Bredero Shaw	Final Plumbing Connection	\$ 7,775.00	Final Plumbing Connection	MK12-0004
Jefferson County-DD7	Rhodair Gully Lateral 3	\$ 1,110,695.78	Concrete Ditch Liner	MK12-0005
City of Liberty	Boomer-rang	\$ 32,882.32	Meter Vault	MK12-0006
Eagle Rock	Million Dollar Baby	\$ 293,704.00	Pipeline	MK12-0007
Jefferson County-DD7	Rhodair Gully Phase 3	\$ 761,926.02	Drainage Ditch Re-shaping	MK12-0008
Eagle Rock	Panotex Pipeline System	\$ 987,441.25	Pipeline-Rehab-Canadian Tx	MK12-0010
Chambers County	Smith Point	\$ 1,287,350.00	Install of 155 swg grinders	MK12-0011
2012 Completed Jobs				
Sunland	Transcanada Pipeline Project	\$ 1,839,905.30	(9) Valve Site Foundations	MK13-0012
Eagle Rock	Blanket Bid	\$ 2,299,217.00	Pipeline Project	MK13-0013
KAI	Nederland Store	\$ 5,850.00	Concrete Driveway	MK13-0014
Brown and Gay	Clearing and Grubbing	\$ 373,062.21	Clearing and Grubbing	MK13-0015
H.B. Neild	First Baptist Church	\$ 269,725.62	Underground Utilities	MK13-0016
Evergreen	Caldwell Project	\$ 1,153,640.60	3.5 mile dual 20" Gas Pipelines-Marietta Ohio	MK13-0017
EHRA	Sugarland Project	\$ 96,500.00	Clearing and Grubbing	MK13-0018
Chambers County	Turtle Bayou Road and Drainage Rehab	\$ 2,472,941.35	Drainage	MK13-0019
Superior Pipeline	Pipeline ROW	\$ 172,500.00	ROW Clearing & Grubbing	MK13-0020
GT Logistics, LLC	Firewater Project	\$ 128,000.00	Pipeline 10" HDPE Fireline	MK13-0021
Snappy Services	Misc. Welders	\$ 12,600.00	Misc. Welders	MK13-0022
Orange County	Sewer System Install	\$ 134,839.00	Sewer System Install	MK13-0023
City of Port Arthur	(2) 500K Gal Water Storage Tanks	\$ 1,999,454.00	Storage Tank Project	MK13-0024
City of Silsbee	Knuppel Project	\$ 293,088.75	Concrete lined drainage	MK13-0025
Orange County	Sewer System Install	\$ 25,200.00	Sewer System Install	MK13-0026
DD7	Main B Diversion	\$ 3,157,641.03	Drainage Ditch & Overshot Gates	MK13-0027
PA EDC	Misc. Elect.	\$ 9,590.00	Electric Conduit Install	MK13-0028
City of Pinehurst	Lexington Bridge	\$ 209,520.00	Box culvert bridge	MK13-0029
City of Pine Forest	Grinder Station Installation	\$ 185,122.00	Multiple Sewer Grinder Install	MK13-0030
DD7	Lateral 3A Concrete Liner	\$ 1,008,173.00	Concrete Liner	MK13-0031
UPS	Ineos Plant-Victoria, Tx.	\$ 367,605.82	Methane Gas Pipeline	MK13-0032
City of West Orange	Culverts	\$ 424,994.00	Multiple Culvert Crossings	MK13-0033
2013 Completed Jobs				
Eagle Rock	2014 Blanket Bid	\$ 2,085,654.82	Pipeline	MK14-0034
Luca	Baton Rouge Job	\$ 481,300.00	Gas wellpad Tie-In	MK14-0035
City of Pinehurst	Lift Station	\$ 196,520.00	Lift Station Re-hab	MK14-0037
City of China	Lift Station	\$ 638,000.00	Lift Station Re-hab	MK14-0038
Signature Ind.	Conveyor-Replacement International	\$ 59,447.00	Materials conveyor replacement	MK14-0039

Completed Jobs
MK Co. Contractors

Client	Name of Project	Bid \$	Type of Work	Job #
Signature Ind.	Slaker Foundations-IP Paper	\$ 196,595.00	Misc. concrete foundation & elevated sub	MK14-0040
Signature Ind.	Slaker-T&M	\$ 54,619.50	Underground Pipeline Repairs	MK14-0041
Bomac	Transcanada Project	\$ 147,296.00	Bore under existing pipelines	MK14-0042
Signature Ind.	U-Drain- I.P.	\$ 85,724.00	Install concrete drain w/Material grates	MK14-0043
City of Groves	Lift Station	\$ 445,636.00	Lift Station	MK14-0044
City of Sour Lake	Water Line	\$ 108,622.00	Waterline	MK14-0045
WHC	Fire Water Line @ Valero Terminal	\$ 117,600.00	Fire Waterline	MK14-0046
L.D. Construction	POB Ditch Liner	\$ 52,900.00	POB Ditch Liner	MK14-0048
City of Bmt	LOEB	\$ 12,500.00	Water tank facility repair	MK14-0049
Gravity Drainage District	Arch Pipe Drainage	\$ 296,374.00	Install 72" Arch Pipe	MK14-0050
WWD	Water Filter	\$ 243,694.00	Water Filter Gallery Automation	MK14-0052
City of Port Arthur	66" R.C. Pipe repair	\$ 146,154.00	66" R.C. Pipe Repair	MK14-0054
City of Port Arthur	61st Street 2.4 mg Water Tank	\$ 2,825,250.00	Concrete foundation & Steel Tank Install	MK14-0055
Church of Christ	Parking Lot	\$ 14,693.06	Parking Lot	MK14-0056
Ineos Nitriles	Concrete Slab	\$ 14,873.00	Concrete Slab	MK14-0057
Regency Gas	Pipeline ROW	\$ 367,716.00	Pipeline	MK15-0058
City of Port Arthur	9th Street	\$ 769,395.52	Drainage & Street Project	MK15-0060
City of Vidor	Schoolhouse Ditch Xings	\$ 653,595.00	Schoolhouse Ditch Xings	MK15-0061
Bomac	Chevron Civil Work	\$ 453,999.80	Chevron Civil Work	MK14-0062
Carson County	Pipeline	\$ 7,650.00	Pipeline	MK14-0063
AWC	Cheniere Bore Project	\$ 11,702,950.00	12" x 24" Waterline Bores	MK14-0064
STI	Water & Sewer	\$ 203,885.00	Lift Station	MK14-0066
2014 Completed Jobs \$ 2,382,637.00				
City of Orange	Water Meter Retrofit	\$ 78,500.00	Water Meter Retrofit	MK15-0067
Regency	Panhandle	\$ 202,351.00	Pipelines	MK15-0068
Ineos Nitriles	Concrete Pad	\$ 40,000.00	Concrete Pad	MK15-0071
TGS	Fire Water Line	\$ 20,054.00	Firewater Line Valero Terminal	MK15-0072
Toledo Bend	Relief Wells	\$ 845,348.00	Install 4 Water Wells @ T.B. Dam	MK15-0073
City of Kirbyville	Lift Station Rail	\$ 1,900.00	Liftstation Rail	MK15-0075
Celanese	Fire Water line	\$ 104,570.00	Firewater Line	MK15-0076
Lockwood Holdings	Laydown Yard	\$ 225,435.00	Laydown Yard	MK15-0077
TGS	Pipe Repair	\$ 13,800.00	Pipe Repair	MK15-0080
Church of Christ	Dowlen Road Parking Lot	\$ 72,200.00	Parking lot expansion	MK15-0081
City of Nederland	12th Street	\$ 139,415.00	Drainage	MK15-0083
Orange County	Pine Bluff Pkg II	\$ 1,254,596.28	Arch Span Culvert Road Crossings	MK15-0085
Orange County	Bessie Height Pkg IV	\$ 811,765.96	Arch Span Culvert Road Crossings	MK15-0086
DCP	Pipeline Job Panhandle	\$ 1,624,993.20	Gathering System Pipelines/Compressor	MK15-0089
City of Bevil Oaks	Sewer Plant/Overflow Pond	\$ 1,377,827.00	Sewer Plant, Earthwork, Underground Utilities	MK15-0090
Matrix Services	Transcanda Bores	\$ 1,205,878.82	Pipeline Bores inside transcanda facility	MK15-0091
City of Anahuac	Detention Pond & Piping	\$ 1,807,789.51	Waterline, Earthwork, Pumps and Piping	MK15-0095

Completed Jobs
MK Contractors

Client	Name of Project	Bid \$	Type of Work	Job #
Bomac	ICI Bore	\$ 26,815.00	Boring	MK15-0097
Pleasure Island	Water Metering Facility	\$ 705,953.01	Water System Piping & Metering Sta.	MK15-0098
Cheniere	Keith Road Parking Lot	\$ 1,035,000.00	Boat Ramp Parking Lot & Entry Road	MK15-0100
Cheniere	Waterline Extension	\$ 7,398,958.20	12" x 24" Waterline Tie-In to Cheniere	MK15-0101
Excel Mulching	Clearing and Grubbing	\$ 268,180.00	Clearing and Grubbing	MK15-0102
City of Beaumont	Goodhue	\$ 1,177,990.00	Drainage & Sewer	MK15-0103
MFG	Clearing and Grubbing	\$ 21,100.00	Clearing and Grubbing	MK15-0104
County of Sabine	Water Improvements	\$ 105,007.50	Waterline Improvements	MK15-0105
Moore Land Ind	Clearing and Grubbing	\$ 38,910.00	Clearing and Grubbing	MK15-0106
LD Construction	Culvert Replacement	\$ 49,500.00	Culvert Replacement	MK15-0107
Celenese	Concrete Work	\$ 172,500.00	Concrete Work	MK15-0108
G2X	Install Building	\$ 57,908.00	Install Building	MK15-0109
2015 Completed Jobs				
		\$ 20,887,215.46		
Lockwood Holdings	Ditch Regrading	\$ 10,600.30	Ditch Regrading	MK16-0110
WCID 10	Lift Station/Piping	\$ 1,343,986.40	Install 2 new S.S. Lift Stations	MK16-0111
CCI	Clearing and Grubbing	\$ 278,900.00	Grind/Mulch Pipeline R.O.W.	MK16-0112
DCP	Pipeline Job Panhandle	\$ 207,490.00	Pipeline Tie-in	MK16-0114
Mariner's Cove	Concrete Work	\$ 28,600.00	Widen Conc. Drive	MK16-0115
Navitas	Tarzan Project #1	\$ 1,715,058.00	Tarzan Project #1-16' Pipeline	MK16-0116
LD Construction	12TH Street Drainage	\$ 29,900.00	12TH Street Drainage	MK16-0117
City of Beaumont	Avenue A	\$ 854,846.50	Replace Existing waterline	MK16-0118
Navitas	Tarzan Project #2	\$ 2,122,306.24	Tarzan Project #2-16" Pipeline	MK16-0120
Orescom	Electrical Bore #1	\$ 40,700.00	Electrical Bore #1	MK16-0121
Bomac	Cameron LNG	\$ 42,650.00	Cameron LNG	MK16-0122
LNVA	Atlantic Canal Improvement Project	\$ 2,422,351.18	Installed new 72" camp 8 Hobas Pipe Xings	MK16-0123
Kinder Morgan	Iowa Project	\$ 2,413,119.50	50+ Anomaly digs to repair 20" pipeline	MK16-0125
Navitas	Tarzan # 3	\$ 2,653,976.93	16" Pipeline	MK16-0126
Orescom	Electrical Bore #2	\$ 36,000.00	Electrical Condit Bores	MK16-0129
Navitas	Howard County 16"	\$ 5,569,319.82	16" Carbon Steel Pipeline 18mi	MK16-0130
Navitas	Bold Hamman 12"	\$ 109,872.00	12" Pipeline	MK16-0132
WCID No. 2	Airline Relocate	\$ 34,500.00	Drainage	MK16-0134
Orescom	Excel Boring	\$ 71,755.00	Boring Work	MK16-0136
Navitas	20" Project	\$ 9,897,122.99	20" Carbon Steel Pipeline 25 Miles	MK16-0138
City of Pinehurst	Wastewater Treatment	\$ 232,214.00	Wastewater	MK16-0139
Navitas	4" Take up and relay	\$ 847,126.00	RW/Rplc 4" CS Gas feed line	MK16-0141
Navitas	20" 2 Mile Run	\$ 5,706,937.61	20" Carbon Steel Pipeline 12 Miles	MK16-0143
Navitas	Midway Fue Gas Line	\$ 473,324.00	Polyline 20"	MK16-0144
Navitas	Howard County	\$ 80,835.00	"20" Polyline	MK16-0145
2016 Completed Jobs				
		\$ 37,233,914		

Current Projects
MK Contractors

Client	Name of Project	Bid Amount	Type of Work	Job Number
Landmark	Terminal Road	\$ 618,500.00	Water & Drainage	MK16-0119
Liberty County	Waterline	\$ 346,105.00	Waterline	MK16-0127
City of Beaumont	Lift Station Folsom	\$ 254,463.00	Lift Station	MK16-0131
City of Beaumont	Lift Station Arthur	\$ 594,133.00	Lift Station	MK16-0133
City of Beaumont	Northwest Parkway Major Dr	\$ 12,109,789.38	Drainage	MK16-0140
City of Rose City	Water System Improvement	\$ 95,800.00	Water & Drainage	MK16-0148
City of Beaumont	Manhole Rehab	\$ 1,097,587.00	Manhole Rehab	MK16-0152
City of Orange	Waterline	\$ 129,791.00	Waterline	MK17-0168
		\$ 15,246,168.38		

Company Owned
Equipment

	EQUIPMENT	
1977	Peterbuilt	18 Wheeler Haul Truck
2005	Mack	Dump Truck
2006	Peterbuilt	18 Wheeler Haul Truck
2006	JLG	6000LB 4X4 Telescopic Forklift
2007	CAT	420EIT Backhoe Loader
2011	Komatsu	D51PX-22 Dozer
2011	Komatsu	PC200LC-8 Excavator
2011	Takeuchi	TL240 Skidsteer
2012	CAT	320EL Excavator W/Fecon Grinder
2012	CAT	320EL Excavator
2012	CAT	320EL Excavator
2012	CAT	329 EL Trackhoe
2013	CAT	336E Excavator with 66' bucket
2013	CAT	336E Excavator
2013	CAT	725 Off Road Dump Truck
2013	CAT	725 Off Road Dump Truck
2013	CAT	329 EL Trackhoe
2013	CAT	329 EL Trackhoe
2013	CAT	329 EL Trackhoe
2013	Takeuchi	TL10R Skidsteer
2013	Komatsu	PC210LC-10 Excavator
2013	Komatsu	D39PX-23
2014	Barko 930	Mulcher
2014	CAT	305E Excavator
2014	Kaaser	375 Air Compressor
2014	Kaaser	210 Air Compressor
2015	CAT	305.5E2 Excavator
2015	CAT	305E2 mini Hydraulic excavator
2015	Peterbuilt	18 Wheeler Haul Truck
2015	ING. Rand	185 Air Compressor
2015	Takauchi	Skidsteer
2015	Takeuchi	TL12R Skidsteer
2015	Vermeer	Boring Machine
2015	Caterpillar	D6K2 Dozer
2016	Komatsu	PC170LC
2016	Komatsu	PC170LC

KENNETH D. STEWART
5735 Regina Lane
Beaumont, TX 77706

CONSTRUCTION EXPERIENCE:

(9/2010 – 3/2011)

WILLIAMSON CONSTRUCTION & EQUIPMENT
 2575 Hwy 69 S, Lumberton, Tx 77657

Responsible for estimating and project management of projects in heavy civil (i.e. – roads, bridges, paving, foundations, structures), commercial, drainage, and earthwork.

PROJECTS:

Client: Sabine Neches Navigation District
 Automated, elevated, control building for flood gate structures
 COST - \$2.5 Mil
 Client: ShawCorp
 Installed on-site gravity sewer, gas line bores, and air-line piping
 COST - \$178K
 Client: GT Logistics
 Construction of a Vehicular and Rail Bridge over the LNVA canal
 COST - \$1.4 Mil

(11/2008 – 9/2010)

STEWCON GROUP, LLC dba/ Stewart Homes
 5735 Regina Lane
 Beaumont, TX 77706

I started my own company in April of 2008. Residential construction was the focus of the organization in the beginning with the goal of building up large enough to gain bonding and begin moving into civil and commercial markets.

Client: Magnolia Laurel
 Managed the construction of the Plantation Oaks subdivision on Keith Road in Lumberton
 COST: \$1.4 Mil
 Client: Magnolia Laurel
 Constructed residential offices for their internet business
 COST: \$425K
 Client: Peter Morrison
 Constructed a two-story high end residence with underground vault/basement
 COST: \$2.1 Mil

KENNETH D. STEWART
5735 Regina Lane
Beaumont, TX 77706

(6/2000 – 11/2008)

ALLCO, INC.

6720 College Street

Beaumont, TX 77707

Began in commercial construction from 2000 to 2003 estimating and project managing:

PROJECTS:

Client: BISD

Project manager for construction of Pietzsch-MacArthur Elementary School

COST: \$16.8 Mil

Client: Jefferson County

Project manager for construction of 12-Field Fast-Pitch Softball Complex (Ford Park)

COST: \$5.5 Mil

Client: Beaumont Pediatrics

Estimated and managed construction of office remodel

COST: \$735K

Began estimating and managing the Highway Division from 2003 to 2008:

PROJECTS:

Client: TXDOT(Beaumont)

Estimated and managed the construction of Major Drive between I-10 and Washington Street. Approx 4mi.

COST: \$8.1 Mil

Client: TXDOT(Bryan/College Station)

Estimated and managed a grade separation for Villa Maria Road to go under the UPRR R.O.W. Double Bridge structure with deep storm sewer, drilled shaft retaining walls, and poured-in-place decorative wall panels

COST: \$13 Mil

Client: TXDOT(Beaumont)

Estimated and managed construction of approx 5 mi of 84ft wide 10" paving north of Kirbyville beginning near FM363. I was responsible for procuring our portable concrete batch plant and developing the concrete mix designs required by TXDOT for the project.

COST: \$ 24.1 Mil

KENNETH D. STEWART

*5735 Regina Lane
Beaumont, TX 77706*

(5/1997 – 5/2000)

Tribble & Stephens General Contracting
8588 Katy Frwy, Ste. 100
Houston, TX 77024

After graduating from Texas A&M I began my construction career with Tribble & Stephens in May of 1997. I started off on the jobsite and was responsible for rfi's, submittals, subcontracts, and on-site inspections.

Client: Randall Davis
Renovation of the 18-Story Rice Hotel – Downtown Houston
COST: \$18.2 Mil

Project: IL PALAZZO
New construction of a 6-Story poured-in-place concrete structure to be sold as loft condominiums.
COST: \$6 Mil

EDUCATION/TRAINING:

Stephen F. Austin H.S. – '91
Lamar University (Beaumont) – '94 A.A.S. – Computer Drafting Technology
Texas A&M University – '97 B.S. – Construction Science

Mike Brown
4340 Hwy 1131
Vidor TX, 77662

CONSTRUCTION EXPERIENCE:

(2012 to Present)

MK Constructors
16736 I H 10
Vidor, Tx. 77662
Owner

(2006-2012)

WILLIAMSON CONSTRUCTION & EQUIPMENT
2575 Hwy 69 S, Lumberton, TX 77657

Responsible for estimating and managing projects. Managing the entire business.

PROJECTS:

Client: Sabine Neches Navigation District

Automated, elevated, control building for flood gate structures

COST - \$2.5 Mil

Client: Sunoco Logistics

Ethanol Plant

COST- \$1.6 Mil

Client: GT Logistics

Construction of a Vehicular and Rail Bridge over the LNVA canal

COST - \$1.4 Mil

Client: Kinder Hawk

Construction of Ammne Plant

COST- \$1.1 Mil

Client: Eagle Rock Energy

Pipeline

COST- \$1.1 Mil

Client: ShawCorp

Installed on-site gravity sewer, gas line bores, and air-line piping

COST - \$178K

Mike Brown
4340 Hwy 1131
Vidor TX, 77662

(6/1/2001 to 6/1/2006)

Simco Enterprises
 3101 Main
 Groves, TX 77651

Responsible for estimating and project management

PROJECTS:

Client: Arceneaux and Gates
 City of Orange River Front Park
 Cost: \$1.9 Mil

Client: City of Port Neches
 Water Main Project
 Cost: \$2.1 Mil

(5/1/1996 to 6/1/2001)

F.D. Shay Contractors
 2108 Hwy 108
 Sulphur, La

(1991 to 1996)

Pipeline
 Heavy Equipment Operator
 Foreman

Experience: Estimated and managed projects from \$100,000.00 to 30,000,000.00. Road work, Dirt Work, Utilites and pipe line Projects. Lay pipe sizes from 2" through 120" diometer, from concrete to PVC and steel.

Education and Training

1989	Graduated from Vidor High School
1989-1991	USMC

JEFFERSON COUNTY

GENERAL CONDITIONS,
Including SUPPLEMENTARY CONDITIONS
For

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

GENERAL CONDITIONS, Including SUPPLEMENTARY 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 RESPONSIBILITIES

- 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 <u>Owner's Protective Liability Insurance Policy:</u> 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 <u>Builder's All Risk Insurance:</u> 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 with 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 appraising 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 of 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) **Unilateral Change Order:** 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 \$0.00 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.**

ADDENDUM #1: SEE HIGHLIGHTED AREA

ARTICLE IX. CONTRACT TIME

- 9.1 **The Contractor shall be allowed 120 working 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.

ADDENDUM # 1: SEE HIGHLIGHTED AREA

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 15th day of April, 2018 by and between Jefferson County, hereinafter called the OWNER, and BDS Constructors LLC dba MK Constructors, hereinafter called the CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and along with the terms, conditions, indemnity, and agreements contained within the Invitation for Bid documents, 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 Invitation for Bid documents prepared by LJA Engineering, Inc. which together with the CONTRACTOR's Bid Submission 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 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, defense and indemnity, and other accessories and services necessary to complete the said project in accordance with the Contract Documents is the sum of Six million, six hundred ninety-nine thousand, six hundred ninety-three dollars, and twenty cents (\$6,699,693.20)

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.

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:
d/b/a/ MK Constructors

BDS Constructors LLC
dba MK Constructors

By: *Kenneth D. Stewart
Kenneth D. Stewart President
Printed Name Title

OWNER: JEFFERSON COUNTY

[Signature]

By: Jeff R. Branick Jefferson County Judge
Printed Name Title

ATTEST [Signature]
DATE 4/15/18



House Bill 89 Verification

I, Kenneth D. Stewart the undersigned representative of (company or business name) BDS CONSTRUCTORS LLC dba MK CONSTRUCTORS (heretofore referred to as company) being an adult over the age of eighteen (18) years of age, after being duly sworn by the undersigned notary, do hereby depose and verify under oath that the company named above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

- 1. Does not boycott Israel currently; and
- 2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made ordinary business purposes; and

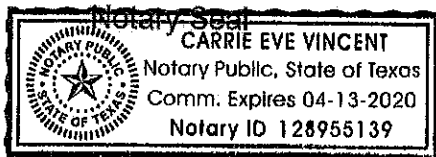
2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or an limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business association that exist to make a profit.

* Kenneth D. Stewart
Signature of Company Representative

4/9/19
Date

On this 9 day of April, 2019, personally appeared

Kenneth D. Stewart, the above named person, who after by me being duly sworn, did swear and confirm that the above is true and correct.



Carrie Vincent
Notary Signature
4/9/19
Date

Senate Bill 252 Certification

On this day, I, Deborah L. Clark, Purchasing Agent for Jefferson County, Texas, pursuant to Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153, certify that I did review the website of the Comptroller of the State of Texas concerning the listing of companies that is identified under Section 806.051, Section 807.051, or Section 2253.253 and I have ascertained that the below named company is not contained on said listing of companies which do business with Iran, Sudan, or any Foreign Terrorist Organization.

BDS CONSTRUCTORS LLC
dba MK CONSTRUCTORS
Company Name

17-043/JW
IFB/RFP/RFQ number

Certification check performed by:

James West
Purchasing Representative

April 5, 2019
Date

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 PRESENTS:

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 3/4" 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



Texas Department of Transportation

The wage rates listed are those predetermined by the Secretary of Labor and State Statute 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 01-04-2019.

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 1/4/19	ZONE TX03 1/4/19	ZONE TX04 1/4/19	ZONE TX05 1/4/19	ZONE TX06 1/4/19	ZONE TX07 1/4/19	ZONE TX08 1/4/19	ZONE TX24 1/4/19	ZONE TX25 1/4/19	ZONE TX27 1/4/19	ZONE TX28 1/4/19	ZONE TX29 1/4/19	ZONE TX30 1/4/19	ZONE TX37 1/4/19	ZONE TX38 1/4/19	ZONE TX42 1/4/19
1428	Agricultural Tractor Operator						\$12.69					\$12.35			\$11.75		
1300	Asphalt Distributor Operator	\$14.87	\$13.48	\$13.88	\$15.72	\$15.58	\$15.55	\$15.62	\$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	\$14.05	\$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	\$13.28	\$10.61	\$12.02	\$14.21	\$11.65	\$12.12	\$11.64	\$11.44	\$12.69	\$12.05	\$11.34	\$11.67	\$11.40	\$12.59	\$12.36	\$11.78
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																
1144	Communications Cable Installer	\$11.21	\$10.33	\$10.08	\$11.99		\$11.04	\$11.62		\$11.74	\$11.41	\$10.30		\$10.23	\$10.60	\$12.68	\$11.05
1124	Concrete Finisher, Paving and Structures	\$13.55	\$12.46	\$13.16	\$12.65	\$12.64	\$12.56	\$12.77	\$12.44	\$14.12	\$13.04	\$13.38	\$12.64	\$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, Curbing, Floot, Texturing Machine Operator											\$16.34				\$11.71	
1333	Concrete Saw Operator									\$14.46	\$17.33					\$13.99	
1399	Concrete/Gumite Pump Operator																
1344	Crane Operator, Hydraulic 80 tons or less				\$16.22		\$16.36			\$18.12	\$18.04	\$20.21			\$18.63	\$13.96	
1345	Crane Operator, Hydraulic Over 80 Tons																
1342	Crane Operator, Lattice Boom 80 Tons or Less	\$16.82	\$14.39	\$13.85	\$17.27		\$15.87	\$17.27		\$17.27		\$14.67			\$16.42	\$14.97	\$13.87
1343	Crane Operator, Lattice Boom Over 80 Tons				\$20.52		\$19.38	\$20.52		\$20.52		\$17.49			\$25.13	\$15.80	
1306	Crawler Tractor Operator	\$13.96	\$16.63	\$13.62	\$14.26		\$15.57			\$14.07	\$13.15	\$13.38			\$14.60	\$13.68	\$13.50
1351	Crusher or Screen Plant Operator																
1445	Directional Drilling Operator				\$20.32		\$11.67										
1139	Electrician	\$20.96		\$19.87	\$19.80	\$26.35	\$17.24		\$20.27	\$19.80		\$20.92				\$27.11	\$19.87
1347	Excavator Operator, 50,000 pounds or less	\$13.45	\$12.56	\$13.67	\$17.19	\$12.88	\$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	\$16.99	\$18.60	\$16.22				\$14.53	\$13.52
1150	Flagger	\$9.30	\$9.10	\$9.50	\$10.28	\$9.91	\$9.45	\$8.70		\$10.05	\$9.71	\$9.08	\$9.81	\$9.08	\$9.90	\$10.33	\$8.10
1151	Form Builder/Setter, Structures	\$13.52	\$12.30	\$13.38	\$12.91	\$12.71	\$12.87	\$12.98	\$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	\$13.93
1360	Foundation Drill Operator, Crawler Mounted				\$17.99					\$17.99						\$17.43	
1363	Foundation Drill Operator, Truck Mounted		\$16.86	\$22.05	\$21.51		\$16.93			\$21.07	\$20.20	\$20.76		\$17.54	\$21.39	\$15.69	\$22.05
1369	Front End Loader Operator, 3 CY or Less	\$12.28	\$13.49	\$13.40	\$13.85		\$13.04	\$13.15	\$13.29	\$13.69	\$12.64	\$12.89			\$13.51	\$13.92	\$12.17
1372	Front End Loader Operator, Over 3 CY	\$12.77	\$13.69	\$12.33	\$14.96		\$13.21	\$12.86	\$13.57	\$14.72	\$13.75	\$12.32			\$13.19	\$13.17	\$13.02
1329	Joint Sealer																
1172	Laborer, Common	\$10.30	\$9.86	\$10.08	\$10.51	\$10.71	\$10.50	\$10.24		\$10.72	\$10.45	\$10.30	\$10.25	\$10.03	\$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	\$13.68	\$12.87		\$13.21	\$14.13	\$14.29	\$12.90

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 1/4/19	ZONE TX03 1/4/19	ZONE TX04 1/4/19	ZONE TX05 1/4/19	ZONE TX06 1/4/19	ZONE TX07 1/4/19	ZONE TX08 1/4/19	ZONE TX24 1/4/19	ZONE TX25 1/4/19	ZONE TX27 1/4/19	ZONE TX28 1/4/19	ZONE TX29 1/4/19	ZONE TX30 1/4/19	ZONE TX37 1/4/19	ZONE TX38 1/4/19	ZONE TX42 1/4/19
1187	Mechanic	\$20.14	\$15.47	\$17.47	\$17.74	\$17.00	\$17.10			\$17.68	\$18.94	\$18.58	\$17.00	\$16.61	\$18.46	\$16.96	\$17.47
1380	Milling Machine Operator	\$15.54	\$14.64	\$12.22	\$14.29		\$14.18			\$14.32	\$14.35	\$12.86			\$14.75	\$13.53	\$12.80
1380	Motor Grader Operator, Fine Grade	\$17.49	\$16.52	\$16.88	\$17.12	\$18.37	\$18.51	\$16.89	\$16.13	\$17.19	\$18.35	\$17.07	\$17.74	\$17.47	\$17.08	\$15.68	\$20.01
1393	Motor Grader Operator, Rough	\$16.15	\$14.62	\$15.83	\$16.20	\$17.07	\$14.83	\$18.50		\$18.02	\$16.44	\$15.12	\$16.85	\$14.47	\$17.39	\$14.23	\$15.53
1413	Off Road Hauler			\$10.08	\$12.26	\$21.29	\$11.88			\$12.25		\$12.23	\$21.29		\$13.00	\$14.80	
1186	Painter, Structures						\$18.34									\$18.62	
1396	Pavement Marking Machine Operator	\$16.42		\$13.10	\$13.55		\$19.17	\$12.01		\$13.63	\$14.60	\$13.17		\$16.65	\$10.54	\$11.18	\$13.10
1443	Percussion or Rotary Drill Operator																
1202	Piledriver																
1205	Pipelayer																
1384	Reclaimer/Blower Operator	\$12.85	\$11.87	\$14.64	\$13.17	\$11.17	\$12.79		\$11.37	\$13.24	\$12.66	\$13.24	\$11.17	\$11.67		\$14.95	\$14.64
1500	Reinforcing Steel Worker	\$13.50	\$14.07	\$17.53	\$16.17	\$14.00	\$14.00			\$16.16	\$12.74	\$15.83		\$17.10		\$15.15	\$17.72
1402	Roller Operator, Asphalt	\$10.95		\$11.96	\$13.29		\$12.78	\$11.81		\$13.08	\$12.36	\$11.68			\$11.71	\$11.95	\$11.50
1405	Roller Operator, Other	\$10.35		\$10.44	\$11.82		\$10.50	\$11.84		\$11.51	\$10.59	\$10.30		\$12.04	\$12.85	\$11.57	\$10.86
1411	Scraper Operator	\$10.61	\$11.07	\$10.85	\$12.88		\$12.27		\$11.12	\$12.96	\$11.88	\$12.43		\$11.22	\$13.95	\$13.47	\$10.99
1417	Self-Propelled Hammer Operator																
1194	Server	\$13.98	\$12.34	\$14.11	\$14.74		\$14.51	\$15.56	\$13.44	\$14.58	\$14.31	\$13.83		\$12.43	\$13.72	\$13.97	\$14.11
1513	Sign Erector																
1708	Slurry Seal or Micro-Surfacing Machine Operator																
1341	Small Slickform Machine Operator									\$15.96							
1515	Spreader-Box Operator	\$12.50		\$13.12	\$14.71		\$14.04			\$14.73	\$13.84	\$13.68		\$13.45	\$11.83	\$13.58	\$14.05
1705	Structural Steel Welder															\$12.85	
1509	Structural Steel Worker						\$19.29									\$14.98	
1339	Subgrade Trimmer																
1143	Telecommunication Technician																
1145	Traffic Signal/Light Pole Worker						\$18.00										
1440	Trenching Machine Operator, Heavy						\$18.48										
1437	Trenching Machine Operator, Light																
1509	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	\$13.41
1612	Truck Driver Transit-Mix				\$14.14					\$14.14							
1600	Truck Driver, Single Axle	\$12.74	\$10.82	\$10.75	\$13.04	\$11.61	\$11.79	\$13.53	\$13.16	\$12.31	\$13.40	\$10.30	\$11.61		\$11.97	\$11.46	\$10.75
1606	Truck Driver, Single or Tandem Axle Dump Truck	\$11.33	\$14.53	\$11.95	\$12.95		\$11.58		\$14.06	\$12.62	\$11.45	\$12.28		\$13.08	\$11.58	\$11.48	\$11.10
1607	Truck Driver, Tandem Axle Tractor with Semi Trailer	\$12.49	\$12.12	\$12.50	\$13.42		\$12.81	\$13.16		\$12.68	\$16.22	\$12.50			\$13.80	\$12.27	\$12.50
1441	Tunneling Machine Operator, Heavy																
1442	Tunneling Machine Operator, Light																
1706	Welder		\$14.02		\$14.86		\$15.97		\$13.74	\$14.84					\$13.78		
1520	Work Zone Barricade Server	\$10.30	\$12.88	\$11.48	\$11.70	\$11.57	\$11.85	\$10.77		\$11.66	\$12.20	\$11.22	\$11.51	\$12.96	\$10.54	\$11.67	\$11.76

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: 2, 3, 4, 5, 6, 7, 8, 24, 25, 27, 28, 29, 30, 37, 38, 42**

County Name	Zone	County Name	Zone	County Name	Zone	County Name	Zone
Anderson	28	Donley	37	Karnes	27	Reagan	37
Andrews	37	Duval	30	Kaufman	25	Real	37
Angelina	28	Eastland	37	Kendall	7	Red River	28
Aransas	29	Ector	2	Kenedy	30	Reeves	8
Archer	25	Edwards	8	Kent	37	Refugio	27
Armstrong	2	El Paso	24	Kerr	27	Roberts	37
Atascosa	7	Ellis	25	Kimble	37	Robertson	7
Austin	38	Erath	28	King	37	Rockwall	25
Bailey	37	Falls	28	Kinney	8	Runnels	37
Bandera	7	Fannin	28	Kleberg	27	Rusk	4
Bastrop	7	Fayette	27	Knox	37	Sabine	28
Baylor	37	Fisher	37	Lamar	28	San Augustine	28
Bee	27	Floyd	37	Lamb	37	San Jacinto	38
Bell	7	Foard	37	Lampasas	7	San Patricio	29
Bexar	7	Fort Bend	38	LaSalle	30	San Saba	37
Blanco	27	Franklin	28	Lavaca	27	Schleicher	37
Borden	37	Freestone	28	Lee	27	Scurry	37
Bosque	28	Frio	27	Leon	28	Shackelford	37
Bowie	4	Gaines	37	Liberty	38	Shelby	28
Brazoria	38	Galveston	38	Limestone	28	Sherman	37
Brazos	7	Garza	37	Lipscomb	37	Smith	4
Brewster	8	Gillespie	27	Live Oak	27	Somervell	28
Briscoe	37	Glasscock	37	Llano	27	Starr	30
Brooks	30	Goliad	29	Loving	37	Stephens	37
Brown	37	Gonzales	27	Lubbock	2	Sterling	37
Burleson	7	Gray	37	Lynn	37	Stonewall	37
Burnet	27	Grayson	25	Madison	28	Sutton	8
Caldwell	7	Gregg	4	Marion	28	Swisher	37
Calhoun	29	Grimes	28	Martin	37	Tarrant	25
Callahan	25	Guadalupe	7	Mason	27	Taylor	2
Cameron	3	Hale	37	Matagorda	27	Terrell	8
Camp	28	Hall	37	Maverick	30	Terry	37
Carson	2	Hamilton	28	McCulloch	37	Throckmorton	37
Cass	28	Hansford	37	McLennan	7	Titus	28
Castro	37	Hardeman	37	McMullen	30	Tom Green	2
Chambers	38	Hardin	38	Medina	7	Travis	7
Cherokee	28	Harris	38	Menard	37	Trinity	28
Childress	37	Harrison	42	Midland	2	Tyler	28
Clay	25	Hartley	37	Milam	28	Upshur	4
Cochran	37	Haskell	37	Mills	37	Upton	37
Coke	37	Hays	7	Mitchell	37	Uvalde	30
Coleman	37	Hemphill	37	Montague	37	Val Verde	8
Collin	25	Henderson	28	Montgomery	38	Van Zandt	28
Collingsworth	37	Hidalgo	3	Moore	37	Victoria	6
Colorado	27	Hill	28	Morris	28	Walker	28
Comal	7	Hockley	37	Motley	37	Waller	38
Comanche	37	Hood	28	Nacogdoches	28	Ward	37
Concho	37	Hopkins	28	Navarro	28	Washington	28
Cooke	37	Houston	28	Newton	28	Webb	3
Coryell	7	Howard	37	Nolan	37	Wharton	27
Cottle	37	Hudspeth	8	Nueces	29	Wheeler	37
Crane	37	Hunt	25	Ochiltree	37	Wichita	5
Crockett	8	Hutchinson	37	Oldham	37	Wilbarger	37
Crosby	2	Irion	2	Orange	38	Willacy	30
Culberson	8	Jack	28	Palo Pinto	28	Williamson	7
Dallam	37	Jackson	27	Panola	28	Wilson	7
Dallas	25	Jasper	28	Parker	25	Winkler	37
Dawson	37	Jeff Davis	8	Parmer	37	Wise	25
Deaf Smith	37	Jefferson	38	Pecos	8	Wood	28
Delta	25	Jim Hogg	30	Polk	28	Yoakum	37
Denton	25	Jim Wells	27	Potter	2	Young	37
DeWitt	27	Johnson	25	Presidio	8	Zapata	30
Dickens	37	Jones	25	Rains	28	Zavala	30
Dimmit	30			Randall	2		

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.

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- 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);

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- 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,

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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
Burlison	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

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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

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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

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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

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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

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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,

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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.

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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 x 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 KNO₃ (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		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
1 (Paris) Feb. 1-May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	3.2	Bermudagrass	1.5
	Bermudagrass	1.8	Bahiagrass (Pensacola)	6.0
	Little Bluestem (Native)	1.7	Sand Lovegrass	0.6
	Illinois Bundleflower	1.0	Weeping Lovegrass (Ermelo)	0.8
			Partridge Pea	1.0
2 (Ft. Worth) Feb. 1-May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Slender Grama (Dilley)	1.0
	Little Bluestem (OK Select)	0.8	Sand Lovegrass (Mason)	0.2
	Purple Prairie Clover (Cuero)	0.6	Sand Dropseed (Borden County)	0.2
	Engelmann Daisy (Eldorado)	0.75	Partridge Pea (Comanche)	0.6
	Illinois Bundleflower	1.3	Little Bluestem (OK Select)	0.8
	Awnless Bushsunflower (Plateau)	0.2	Engelmann Daisy (Eldorado)	0.75
3 (Wichita Falls) Feb. 1-May 15	Green Sprangletop (Van Horn)	0.6	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Little Bluestem (OK Select)	0.8	Sand Dropseed (Borden County)	0.2
	Blue Grama (Hachita)	0.4	Partridge Pea (Comanche)	0.6
	Western Wheatgrass (Barton)	1.2	Little Bluestem (OK Select)	0.8
	Galleta Grass (Viva)	0.6	Engelmann Daisy (Eldorado)	0.75
	Engelmann Daisy (Eldorado)	0.75	Purple Prairie Clover (Cuero)	0.3
4 (Amarillo) Feb. 15-May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	3.6	Weeping Lovegrass (Ermelo)	0.8
	Blue Grama (Hachita)	1.2	Blue Grama (Hachita)	1.0
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.3
	Illinois Bundleflower	1.0	Sand Bluestem	1.8
			Purple Prairie Clover	0.5

Table 1 (continued)
Permanent Rural Seed Mix

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District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
5 (Lubbock) Feb. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Weeping Lovegrass (Ermelo)	0.8
	Blue Grama (Hachita)	1.2	Blue Grama (Hachita)	1.0
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.3
	Illinois Bundleflower	1.0	Sand Bluestem	1.8
			Purple Prairie Clover	0.5
6 (Odessa) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Blue Grama (Hachita)	0.4	Blue Grama (Hachita)	0.4
	Galleta Grass (Viva)	0.6	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Pink Pappusgrass (Maverick)	0.6	Sand Dropseed (Borden County)	0.2
	Alkali Sacaton (Saltalk)	0.2	Indian Ricegrass (Rim Rock)	1.6
	Plains Bristlegrass (Catarina Blend)	0.2	Sand Bluestem (Cottle County)	1.2
	Faise Rhodes Grass (Kinney)	0.1	Little Bluestem (Pastura)	0.8
	Whiplash Pappusgrass (Webb)	0.6	Purple Prairie Clover (Cuero)	0.3
	Arizona Cottontop (La Salle)	0.2		
7 (San Angelo) Feb. 1–May 1	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Little Bluestem (OK Select)	0.4	Sand Dropseed (Borden County)	0.2
	Blue Grama (Hachita)	0.4	Sand Bluestem (Cottle County)	1.2
	Western Wheatgrass (Barton)	1.2	Partridge Pea (Comanche)	0.6
	Galleta Grass (Viva)	0.6	Little Bluestem (OK Select)	0.8
	Engelmann Daisy (Eldorado)	0.75	Engelmann Daisy (Eldorado)	0.75
	Illinois Bundleflower (Sabine)	1.0	Purple Prairie Clover (Cuero)	0.3
8 (Abilene) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Little Bluestem (OK Select)	0.4	Sand Dropseed (Borden County)	0.2
	Blue Grama (Hachita)	0.4	Sand Bluestem (Cottle County)	1.2
	Western Wheatgrass (Barton)	1.2	Partridge Pea (Comanche)	0.6
	Galleta Grass (Viva)	0.6	Little Bluestem (OK Select)	0.8
	Engelmann Daisy (Eldorado)	0.75	Engelmann Daisy (Eldorado)	0.75
	Illinois Bundleflower (Sabine)	1.0	Purple Prairie Clover (Cuero)	0.3
9 (Waco) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Slender Grama (Dilley)	1.0
	Little Bluestem (OK Select)	0.8	Sand Lovegrass (Mason)	0.2
	Purple Prairie Clover (Cuero)	0.6	Sand Dropseed (Borden County)	0.2
	Engelmann Daisy (Eldorado)	0.75	Partridge Pea (Comanche)	0.6
	Illinois Bundleflower	1.3	Little Bluestem (OK Select)	0.8
	Awnless Bushsunflower (Plateau)	0.2	Engelmann Daisy (Eldorado)	0.75
			Purple Prairie Clover	0.3
10 (Tyler) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	1.8	Bermudagrass	1.8
	Bahiagrass (Pensacola)	9.0	Bahiagrass (Pensacola)	9.0
	Sideoats Grama (Haskell)	2.7	Weeping Lovegrass (Ermelo)	0.5
	Illinois Bundleflower	1.0	Sand Lovegrass	0.5
			Lance-Leaf Coreopsis	1.0
11 (Lufkin) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	1.8	Bermudagrass	2.1
	Bahiagrass (Pensacola)	9.0	Bahiagrass (Pensacola)	9.0
	Sideoats Grama (Haskell)	2.7	Sand Lovegrass	0.5
	Illinois Bundleflower	1.0	Lance-Leaf Coreopsis	1.0

Table 1 (continued)
Permanent Rural Seed Mix

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District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
12 (Houston) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.1	Bermudagrass	2.4
	Sideoats Grama (Haskell)	3.2	Bahiagrass (Pensacola)	10.5
	Little Bluestem (Native)	1.4	Weeping Lovegrass (Ermelo)	1.0
	Illinois Bundleflower	1.0	Lance-Leaf Coreopsis	1.0
13 (Yoakum) Jan. 15–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Hooded Windmillgrass (Mariah)	0.4
	Texas Grama (Atascosa)	1.5	Slender Grama (Dilley)	1.0
	Slender Grama (Dilley)	1.0	Hairy Grama (Chaparral)	0.8
	Shortspike Windmillgrass (Welder)	0.3	Shortspike Windmillgrass (Welder)	0.2
	Halls Panicum (Oso)	0.2	Purple Prairie Clover (Cuero)	0.6
	Plains Bristlegrass (Catarina Blend)	0.2	Partridge Pea (Comanche)	0.6
	Canada Wildrye (Lavaca)	2.0	Englemann Daisy (Eldorado)	1.0
	Illinois Bundleflower (Sabine)	1.3		
	Purple Prairie Clover (Cuero)	0.6		
14 (Austin) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Slender Grama (Dilley)	1.0
	Little Bluestem (OK Select)	0.8	Sand Lovegrass (Mason)	0.2
	Purple Prairie Clover (Cuero)	0.6	Sand Dropseed (Borden County)	0.2
	Engelmann Daisy (Eldorado)	0.75	Partridge Pea (Comanche)	0.6
	Illinois Bundleflower (Sabine)	1.3	Little Bluestem (OK Select)	0.8
	Awnless Bushsunflower (Plateau)	0.2	Englemann Daisy (Eldorado)	0.75
		Purple Prairie Clover	0.3	
15 (San Antonio) Feb. 1–May 1	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Slender Grama (Dilley)	2.0
	Texas Grama (Atascosa)	1.0	Hairy Grama (Chaparral)	0.6
	Slender Grama (Dilley)	1.0	Shortspike Windmillgrass (Welder)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Pink Pappusgrass (Maverick)	0.6
	Pink Pappusgrass (Maverick)	0.6	Plains Bristlegrass (Catarina Blend)	0.2
	Halls Panicum (Oso)	0.2	Hooded Windmillgrass (Mariah)	0.3
	Plains Bristlegrass (Catarina Blend)	0.2	Multi-flowered False Rhodes Grass	0.1
	False Rhodes Grass (Kinney)	0.1	(Hidalgo)	0.2
	Hooded Windmillgrass (Mariah)	0.2	Arizona Cottontop (La Salle)	
	Arizona Cottontop (La Salle)	0.2		
16 (Corpus Christi) Jan. 1–May 1	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Slender Grama (Dilley)	2.0
	Texas Grama (Atascosa)	1.0	Hairy Grama (Chaparral)	0.6
	Slender Grama (Dilley)	1.0	Shortspike Windmillgrass (Welder)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Pink Pappusgrass (Maverick)	0.6
	Pink Pappusgrass (Maverick)	0.6	Plains Bristlegrass (Catarina Blend)	0.2
	Halls Panicum (Oso)	0.2	Hooded Windmillgrass (Mariah)	0.3
	Plains Bristlegrass (Catarina Blend)	0.2	Multi-flowered False Rhodes Grass	0.1
	False Rhodes Grass (Kinney)	0.1	(Hidalgo)	0.2
	Hooded Windmillgrass (Mariah)	0.2	Arizona Cottontop (La Salle)	
Arizona Cottontop (La Salle)	0.2			
17 (Bryan) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	1.5	Bermudagrass	1.5
	Sideoats Grama (Haskell)	3.6	Bahiagrass (Pensacola)	7.5
	Little Bluestem (Native)	1.7	Weeping Lovegrass (Ermelo)	0.6
	Illinois Bundleflower	1.0	Sand Lovegrass	0.6
			Lance-Leaf Coreopsis	1.0

Table 1 (continued)
Permanent Rural Seed Mix

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District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
18 (Dallas) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Slender Grama (Dilley)	1.0
	Little Bluestem (OK Select)	0.8	Sand Lovegrass (Mason)	0.2
	Purple Prairie Clover (Cuero)	0.6	Sand Dropseed (Borden County)	0.2
	Engelmann Daisy (Eldorado)	0.75	Partridge Pea (Comanche)	0.6
	Illinois Bundleflower	1.3	Little Bluestem (OK Select)	0.8
	Awnless Bushsunflower (Plateau)	0.2	Engelmann Daisy (Eldorado)	0.75
			Purple Prairie Clover	0.3
19 (Atlanta) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	2.1
	Sideoats Grama (Haskell)	4.5	Bahiagrass (Pensacola)	7.5
	Illinois Bundleflower	1.0	Sand Lovegrass	0.6
		Lance-Leaf Coreopsis	1.0	
20 (Beaumont) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.7	Bermudagrass	2.1
	Sideoats Grama (Haskell)	4.1	Bahiagrass (Pensacola)	7.5
	Illinois Bundleflower	1.0	Sand Lovegrass	0.6
		Lance-Leaf Coreopsis	1.0	
21 (Pharr) Jan. 15–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Slender Grama (Dilley)	2.0
	Texas Grama (Atascosa)	1.0	Hairy Grama (Chaparral)	0.6
	Slender Grama (Dilley)	1.0	Shortspike Windmillgrass (Welder)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Pink Pappusgrass (Maverick)	0.6
	Pink Pappusgrass (Maverick)	0.6	Plains Bristlegrass (Catarina Blend)	0.2
	Halls Panicum (Oso)	0.2	Hooded Windmillgrass (Mariah)	0.3
	Plains Bristlegrass (Catarina Blend)	0.2	Multi-flowered False Rhoades Grass	0.1
	False Rhodes Grass (Kinney)	0.1	(Hidalgo)	0.2
	Hooded Windmillgrass (Mariah)	0.2	Arizona Cottontop (La Salle)	
	Arizona Cottontop (La Salle)	0.2		
22 (Laredo) Jan. 15–May 1	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Slender Grama (Dilley)	2.0
	Texas Grama (Atascosa)	1.0	Hairy Grama (Chaparral)	0.6
	Slender Grama (Dilley)	1.0	Shortspike Windmillgrass (Welder)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Pink Pappusgrass (Maverick)	0.6
	Pink Pappusgrass (Maverick)	0.6	Plains Bristlegrass (Catarina Blend)	0.2
	Halls Panicum (Oso)	0.2	Hooded Windmillgrass (Mariah)	0.3
	Plains Bristlegrass (Catarina Blend)	0.2	Multi-flowered False Rhoades Grass	0.1
	False Rhodes Grass (Kinney)	0.1	(Hidalgo)	0.2
	Hooded Windmillgrass (Mariah)	0.2	Arizona Cottontop (La Salle)	
	Arizona Cottontop (La Salle)	0.2		
23 (Brownwood) Feb. 1–May 15	Green Sprangletop (Van Horn)	0.6	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (Haskell)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Texas Grama (Atascosa)	1.0	Shortspike Windmillgrass (Welder)	0.2
	Hairy Grama (Chaparral)	0.4	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Little Bluestem (OK Select)	0.8	Sand Dropseed (Borden County)	0.2
	Blue Grama (Hachita)	0.4	Partridge Pea (Comanche)	0.6
	Western Wheatgrass (Barton)	1.2	Little Bluestem (OK Select)	0.8
	Galleta Grass (Viva)	0.6	Engelmann Daisy (Eldorado)	0.75
	Engelmann Daisy (Eldorado)	0.75	Purple Prairie Clover (Cuero)	0.3
	Awnless Bushsunflower (Plateau)	0.2		

Table 1 (continued)
Permanent Rural Seed Mix

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District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
24 (El Paso) Feb. 1–May 15	Green Sprangletop (Van Horn)	1.0	Green Sprangletop (Van Horn)	1.0
	Sideoats Grama (South Texas)	1.0	Hooded Windmillgrass (Mariah)	0.2
	Blue Grama (Hachita)	0.4	Blue Grama (Hachita)	0.4
	Galleta Grass (Viva)	0.6	Hairy Grama (Chaparral)	0.4
	Shortspike Windmillgrass (Welder)	0.2	Sand Lovegrass (Mason)	0.2
	Pink Pappusgrass (Maverick)	0.6	Sand Dropseed (Borden County)	0.2
	Alkali Sacaton (Saltalk)	0.2	Indian Ricegrass (Rim Rock)	1.6
	Plains Bristlegrass (Catarina Blend)	0.2	Sand Bluestem (Cottle County)	1.2
	False Rhodes Grass (Kinney)	0.1	Little Bluestem (Pastura)	0.8
	Whiplash Pappusgrass (Webb)	0.6	Purple Prairie Clover (Cuero)	0.3
	Arizona Cottontop (La Salle)	0.2		
25 (Childress) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	2.7	Weeping Lovegrass (Ermelo)	1.2
	Blue Grama (Hachita)	0.9	Sand Dropseed (Borden Co.)	0.5
	Western Wheatgrass	2.1	Sand Lovegrass	0.8
	Galleta	1.6	Purple Prairie Clover	0.5
	Illinois Bundleflower	1.0		

Table 2
Permanent Urban Seed Mix

District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
1 (Paris) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
2 (Ft. Worth) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Sideoats Grama (El Reno)	3.6
	Bermudagrass	2.4	Bermudagrass	2.1
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.3
3 (Wichita Falls) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	4.5	Sideoats Grama (El Reno)	3.6
	Bermudagrass	1.8	Bermudagrass	1.8
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.4
4 (Amarillo) Feb. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Sideoats Grama (El Reno)	2.7
	Blue Grama (Hachita)	1.2	Blue Grama (Hachita)	0.9
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.4
			Buffalograss (Texoka)	1.6
5 (Lubbock) Feb. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Sideoats Grama (El Reno)	2.7
	Blue Grama (Hachita)	1.2	Blue Grama (Hachita)	0.9
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.4
			Buffalograss (Texoka)	1.6
6 (Odessa) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	3.6	Sideoats Grama (Haskell)	2.7
	Blue Grama (Hachita)	1.2	Sand Dropseed (Borden Co.)	0.4
	Buffalograss (Texoka)	1.6	Blue Grama (Hachita)	0.9
			Buffalograss (Texoka)	1.6
7 (San Angelo) Feb. 1–May 1	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	7.2	Sideoats Grama (Haskell)	3.2
	Buffalograss (Texoka)	1.6	Sand Dropseed (Borden Co.)	0.3
			Blue Grama (Hachita)	0.9
			Buffalograss (Texoka)	1.6
8 (Abilene) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	3.6	Sand Dropseed (Borden Co.)	0.3
	Blue Grama (Hachita)	1.2	Sideoats Grama (Haskell)	3.6
	Buffalograss (Texoka)	1.6	Blue Grama (Hachita)	0.8
			Buffalograss (Texoka)	1.6

Table 2 (continued)
Permanent Urban Seed Mix

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District and Planting Dates	Clay Soils		Sandy Soils	
	Species and Rates (lb. PLS/acre)		Species and Rates (lb. PLS/acre)	
9 (Waco) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	1.8	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6	Bermudagrass	3.6
	Sideoats Grama (Haskell)	4.5	Sand Dropseed (Borden Co.)	0.4
10 (Tyler) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
11 (Lufkin) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
12 (Houston) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	4.5	Bermudagrass	5.4
	Bermudagrass	2.4		
13 (Yoakum) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	4.5	Bermudagrass	5.4
	Bermudagrass	2.4		
14 (Austin) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	4.8
	Sideoats Grama (South Texas)	3.6	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6		
15 (San Antonio) Feb. 1–May 1	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	3.6	Bermudagrass	4.8
	Bermudagrass	2.4	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6		
16 (Corpus Christi) Jan. 1–May 1	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	3.6	Bermudagrass	4.8
	Bermudagrass	2.4	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6		
17 (Bryan) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
18 (Dallas) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6	Bermudagrass	3.6
	Bermudagrass	2.4	Sand Dropseed (Borden Co.)	0.4
19 (Atlanta) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
20 (Beaumont) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Bermudagrass	2.4	Bermudagrass	5.4
	Sideoats Grama (Haskell)	4.5		
21 (Pharr) Jan. 15–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	3.6	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6	Bermudagrass	3.6
	Bermudagrass	2.4	Sand Dropseed (Borden Co.)	0.4
22 (Laredo) Jan. 15–May 1	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	4.5	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6	Bermudagrass	3.6
	Bermudagrass	1.8	Sand Dropseed	0.4
23 (Brownwood) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (Haskell)	3.6	Buffalograss (Texoka)	1.6
	Bermudagrass	1.2	Bermudagrass	3.6
	Blue Grama (Hachita)	0.9	Sand Dropseed (Borden Co.)	0.4
24 (El Paso) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (South Texas)	3.6	Buffalograss (Texoka)	1.6
	Blue Grama (Hachita)	1.2	Sand Dropseed (Borden Co.)	0.4
	Buffalograss (Texoka)	1.6	Blue Grama (Hachita)	1.8
25 (Childress) Feb. 1–May 15	Green Sprangletop	0.3	Green Sprangletop	0.3
	Sideoats Grama (El Reno)	3.6	Sand Dropseed (Borden Co.)	0.4
	Blue Grama (Hachita)	1.2	Buffalograss (Texoka)	1.6
	Buffalograss (Texoka)	1.6	Bermudagrass	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 4.5 Western Wheatgrass 5.6 Wheat (Red, Winter) 34
Odessa (6), San Angelo (7), El Paso (24)	September 1–November 30	Western Wheatgrass 8.4 Wheat (Red, Winter) 50
Waco (9), Tyler (10), Lufkin (11), Austin (14), San Antonio (15), Bryan (17), Atlanta (19)	September 1–November 30	Tall Fescue 4.5 Oats 24 Wheat 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 4.5 Western Wheatgrass 5.6 Cereal Rye 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

400



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.

B_c - Outside diameter or horizontal dimension
 D - Inside diameter of pipe
 d - Min. bedding material below pipe

D	d
≤ 27"	3"
30" to 60"	4"
≥ 66"	6"

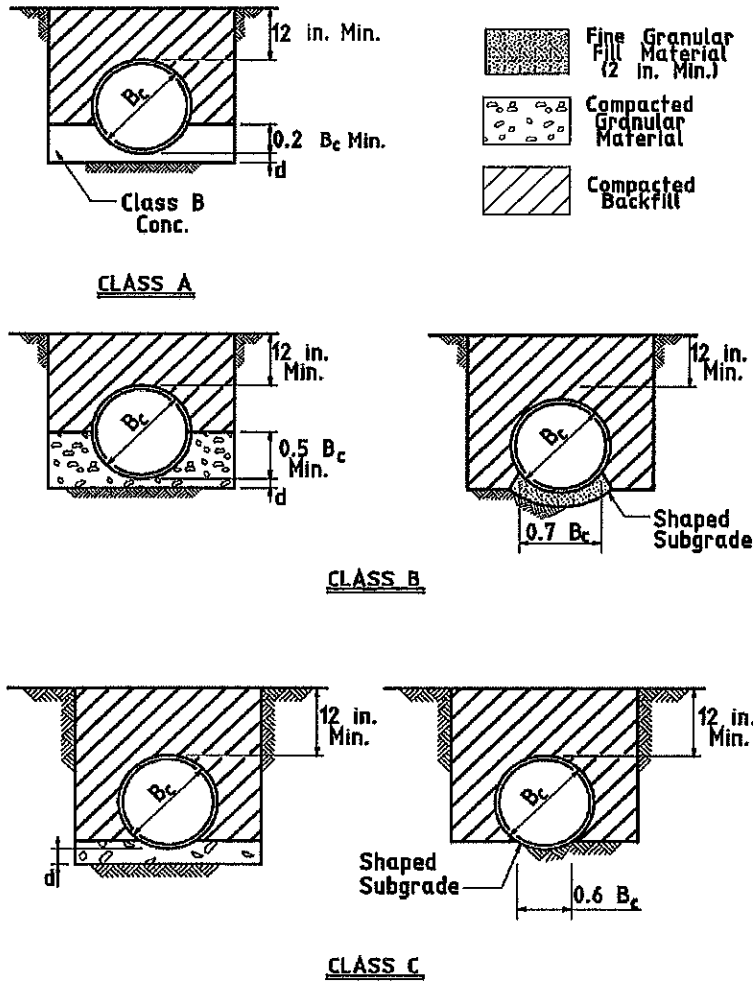


Figure 1
 Bedding Diagrams

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	
	"Structural Excavation" is a Bid Item	Variance of Revised Footing Grade from Plan Grade "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."	

500

- 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*

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 through 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 manufacturer'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.

$$SF = ((l_2 / l_1) l_1) / ((1 - l_1^2)^{0.5} \cos \theta + l_1 (l_2 / l_1) + (l_3 F_d' \cos \theta + l_4 F_f) / l_1 W_s) = 1.5$$

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. (in.)	Approx. Ave. Strength		Weight per Length	
	(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 200D² 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 ± 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. (in.)	Type	Approx. Ave. Strength		Weight per Length	
		(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 performed 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.

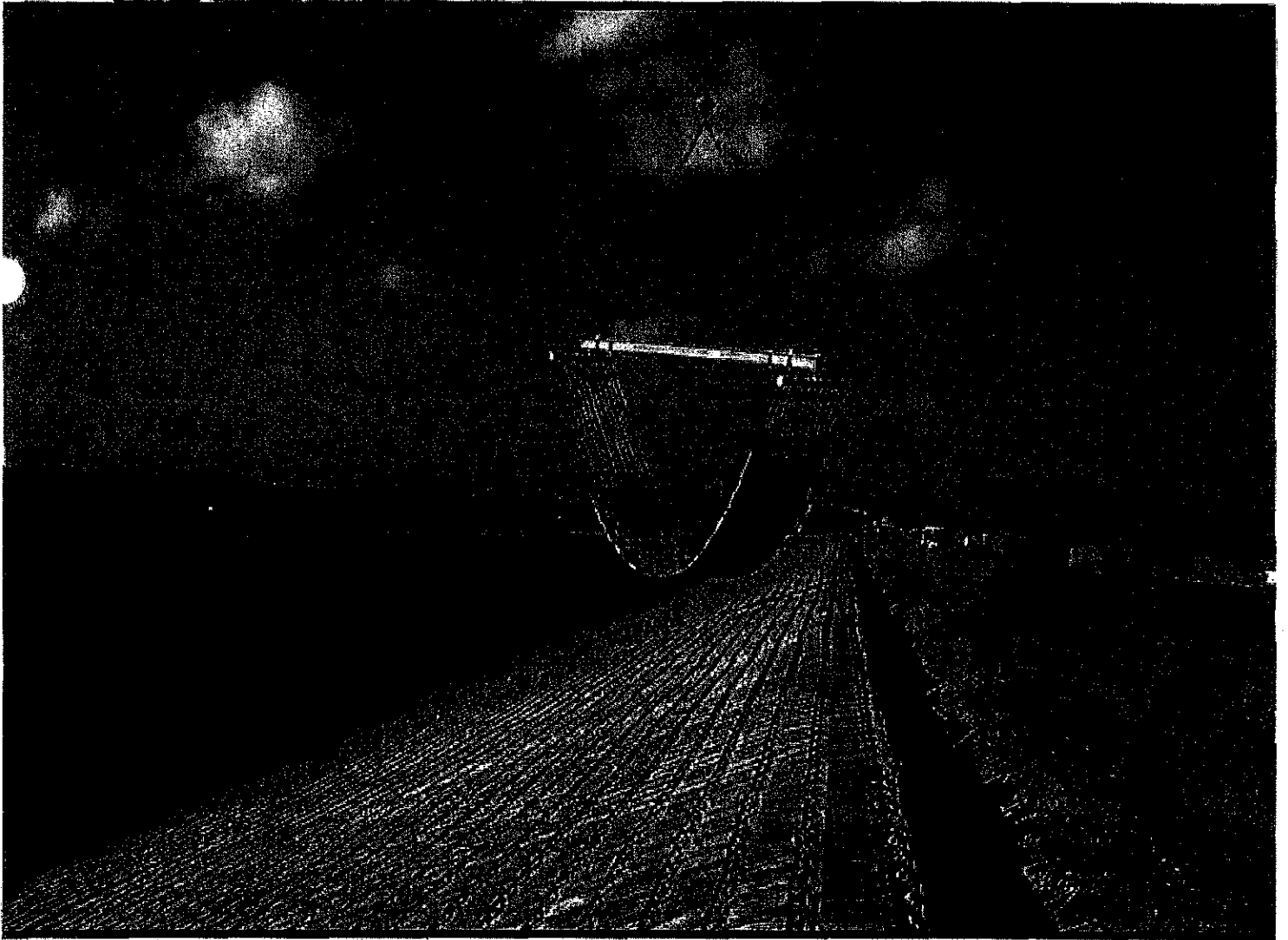
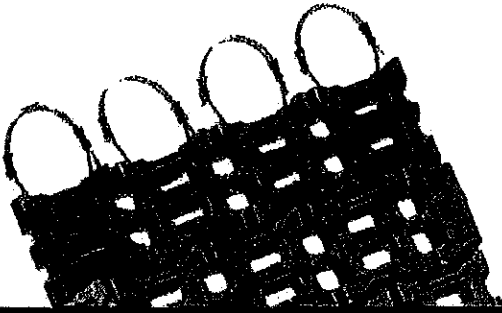
4. PAYMENT

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

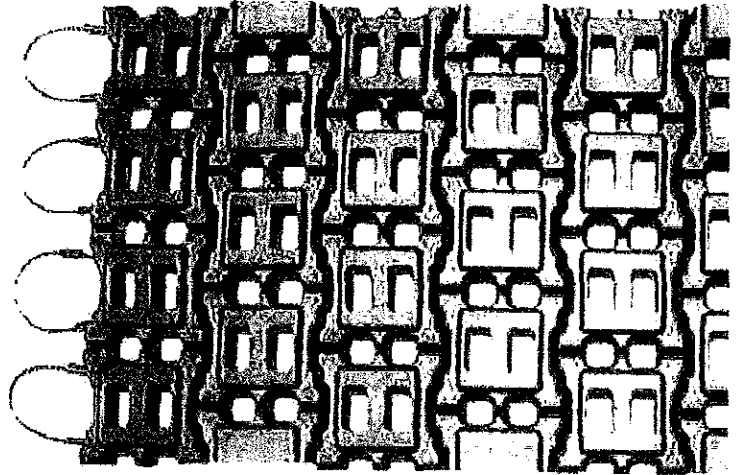



ARMORTEC[®]
Erosion Control Solutions

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

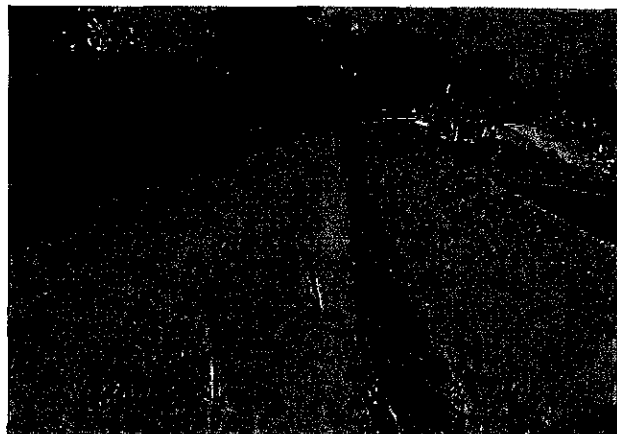
Foundation Preparation

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 fabric, 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).

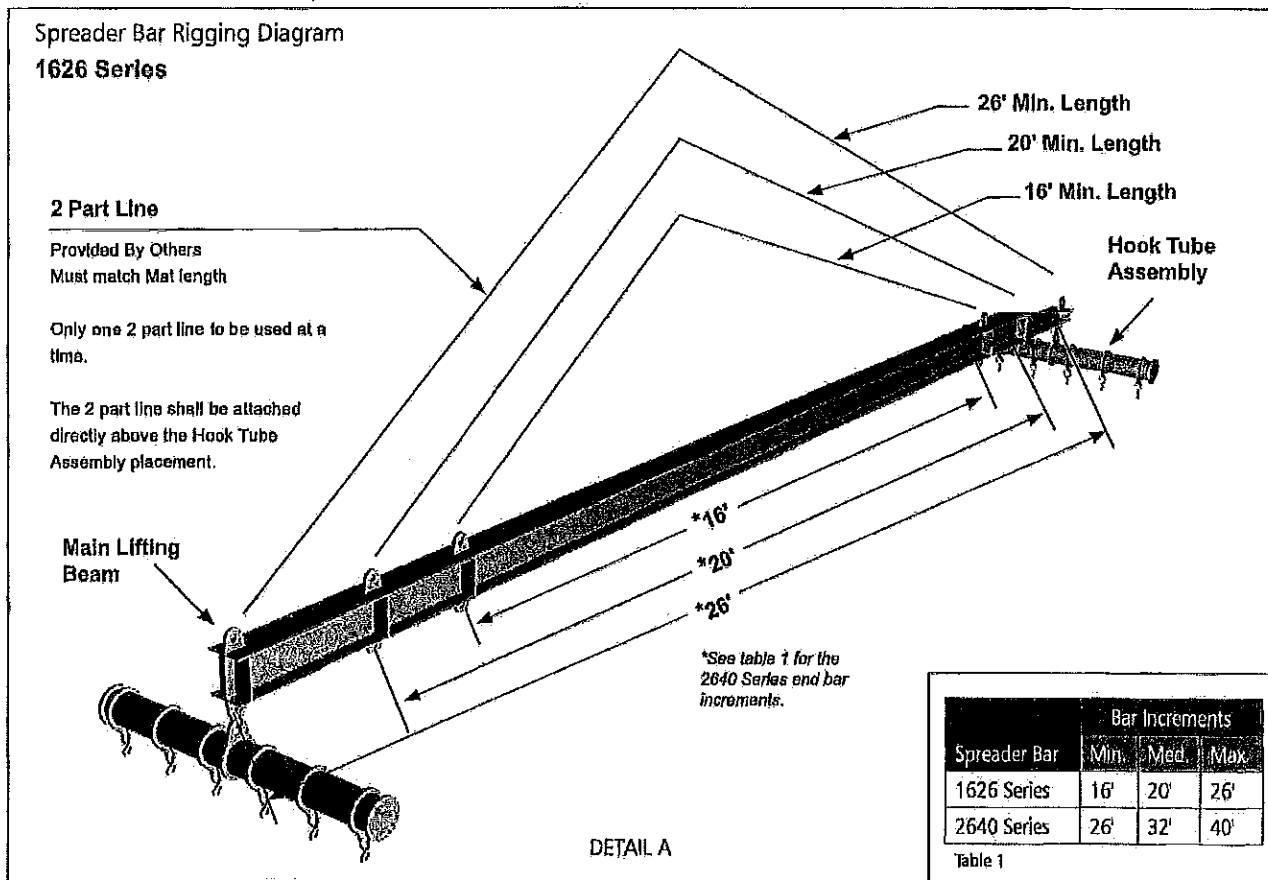
The unit shall be free of structural deformation, cracks or excessive wear of any part of the Main Lifting Beam and the Hook Tube Assemblies. The operator should check for loose or missing fasteners, including Connector Links (12), Eye Hooks with Snap Lock (12) and Screw Pin Shackles (2). Welds should also be inspected for signs of obvious cracking.

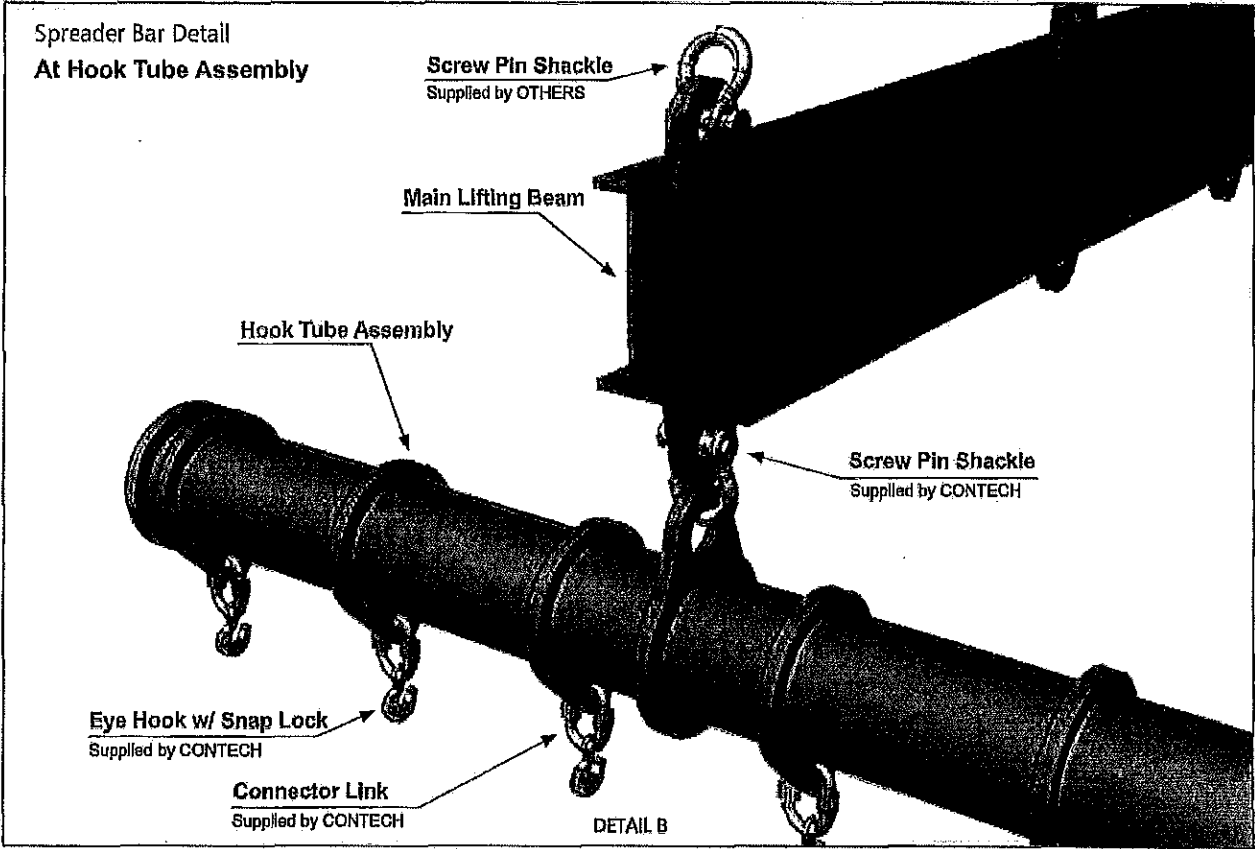
Maintenance

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 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 Shackle 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 without having read and understood the operating guide. |
| DO NOT: | Operate a damaged or malfunctioning unit or a unit with missing parts. | DO NOT: | Stand under or near suspended load. |
| DO NOT: | Lift people. | DO NOT: | Lift loads higher than necessary. |
| DO NOT: | Leave suspended loads unattended. | DO NOT: | Make alterations or modifications to a Spreader Bar. |
| DO NOT: | Remove or obscure warning labels. | | |

Installation Instructions

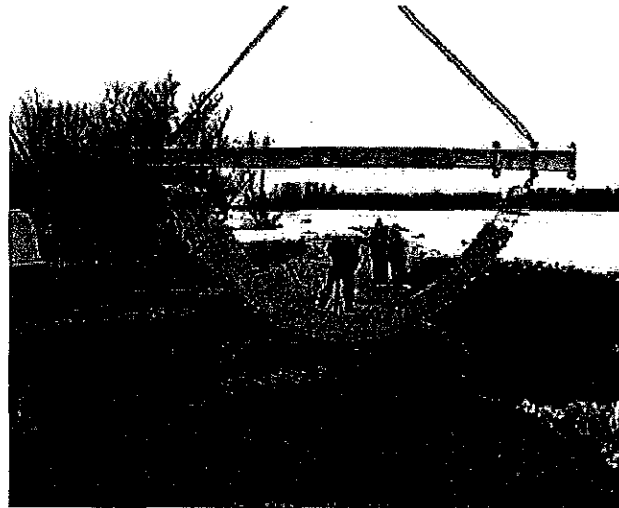
Placement of ArmorFlex Units

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 revegetation 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

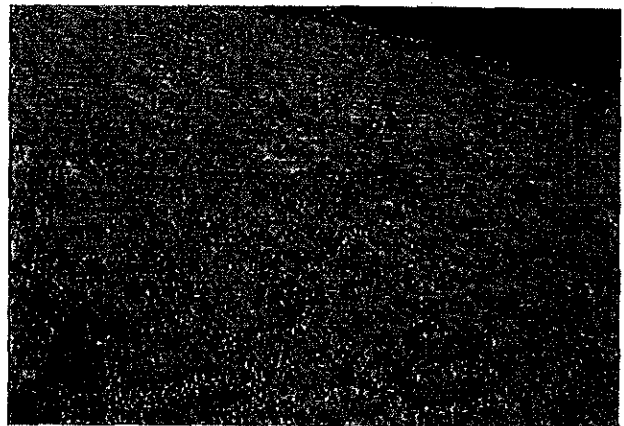
In the event that a damaged concrete unit exists prior to the placement or after the mat has been installed, the concrete unit can be repaired in one of the following acceptable manners; unit to be completely removed and then backfilled with 4,000 psi grout/concrete or, replaced with a new block unit.

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.

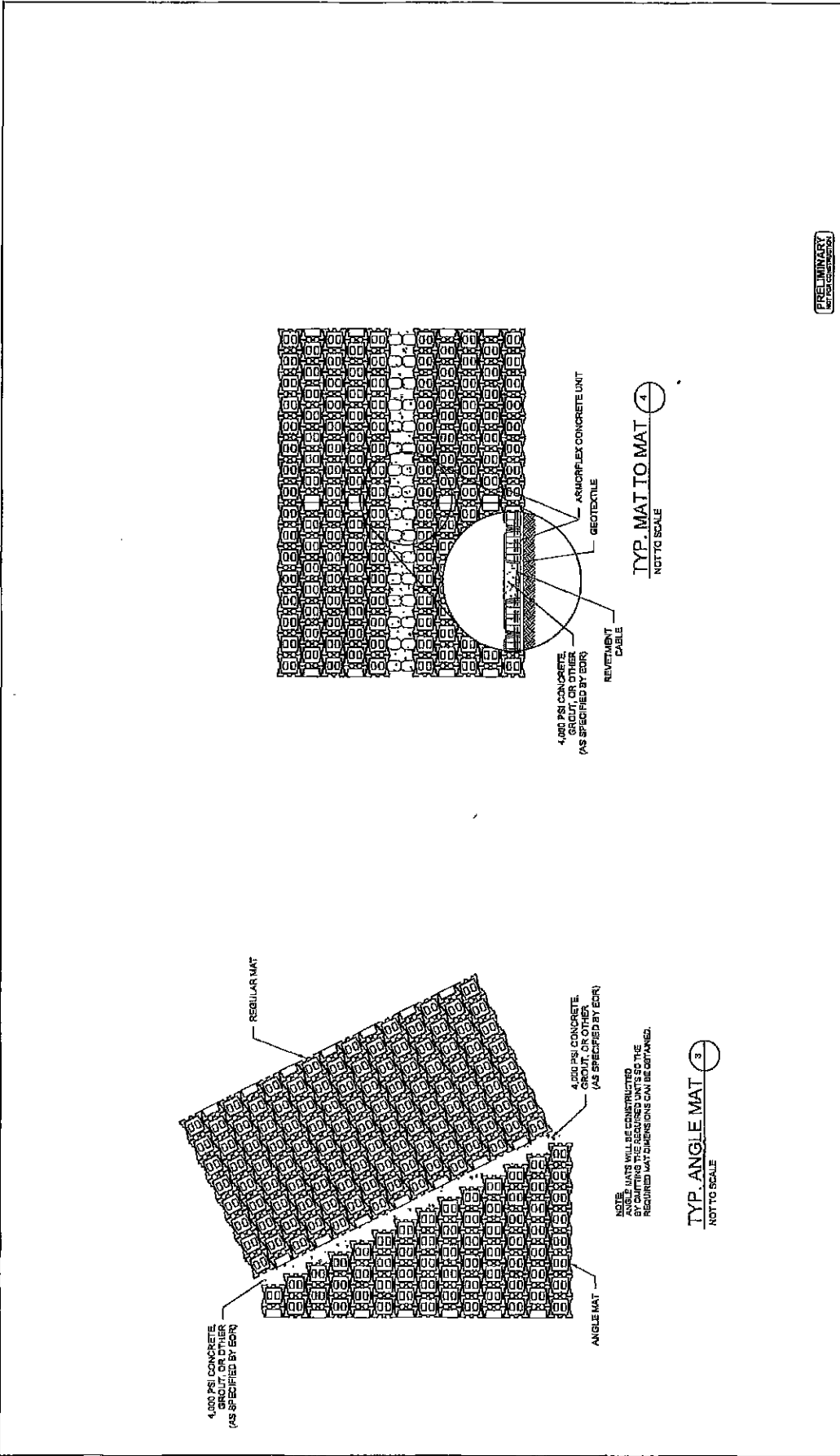


Grout to the top of the block or slightly lower — not above.



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
Armortec'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



PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT No.	ISS. No.	DATE
DESIGNED	BY	10/28/2012
CHECKED	APPROVED	
SUBMITTAL	CT2	of CT2

ARMORFLEX CLASS 50 SMALL
STANDARD TERMINATION DETAILS



CONTECH
ENGINEERED SOLUTIONS LLC
www.contechES.com
2022 Centre Pointe Dr., Suite 400, West Chatham, OH 45050
800-338-1122 513-265-7002 513-265-7951 FAX

NO.	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC, 2022 Centre Pointe Dr., Suite 400, West Chatham, OH 45050, is the sole provider of the design and engineering services shown on this drawing. The user of this drawing is responsible for obtaining all necessary permits and for verifying the accuracy of the information provided. CONTECH ENGINEERED SOLUTIONS LLC is not responsible for any errors or omissions on this drawing.

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9010

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.



INSTALLATION GUIDE

Crane Materials International
www.cmilc.com
770-933-8596
info@cmilc.com



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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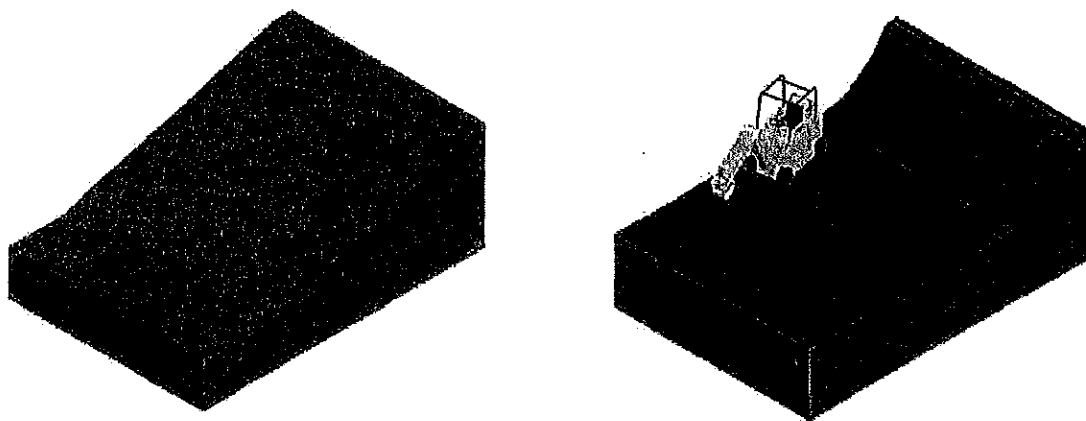
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BEFORE YOU BEGIN

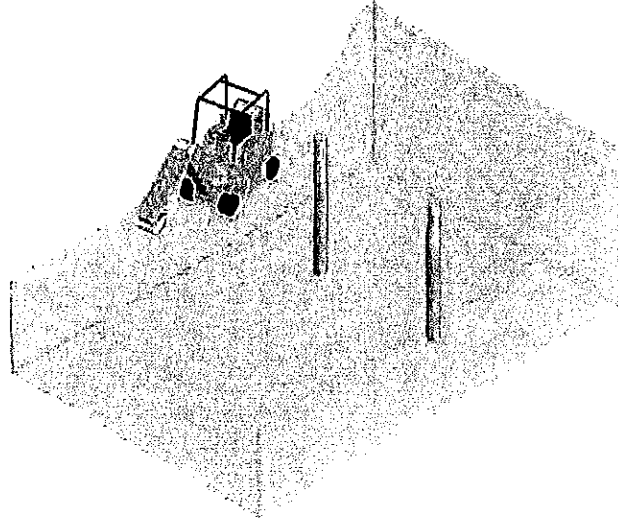
PREPPING THE SITE

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.

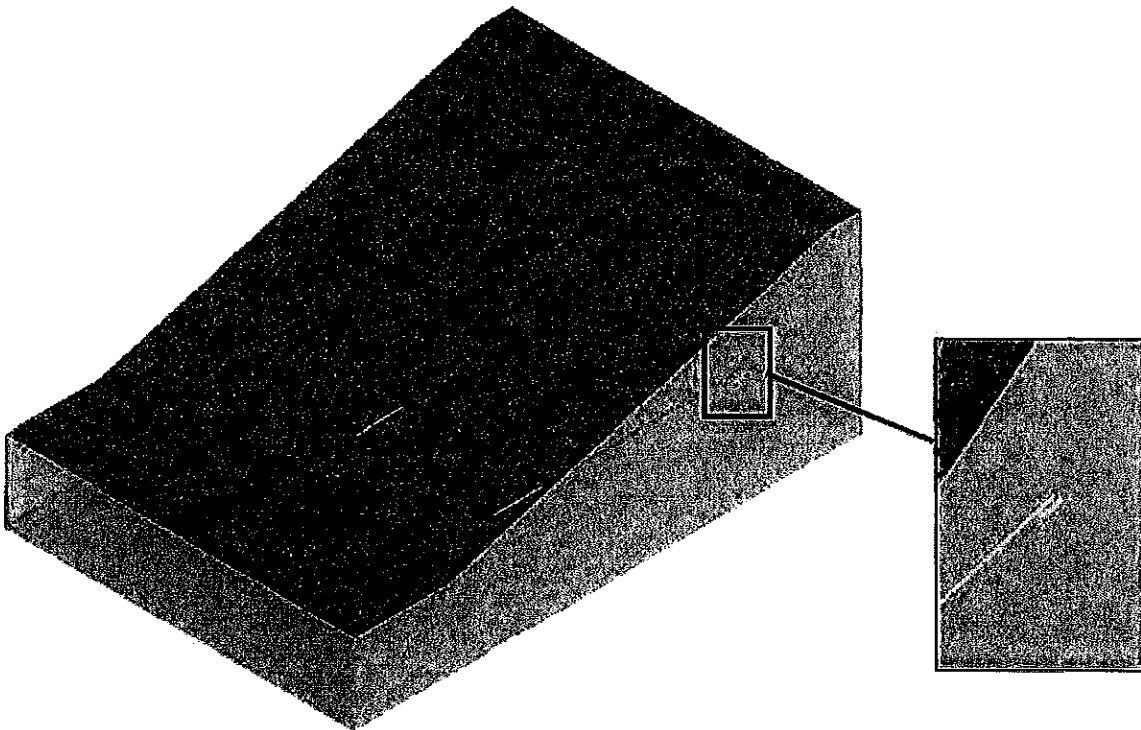


ANCHORING

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.

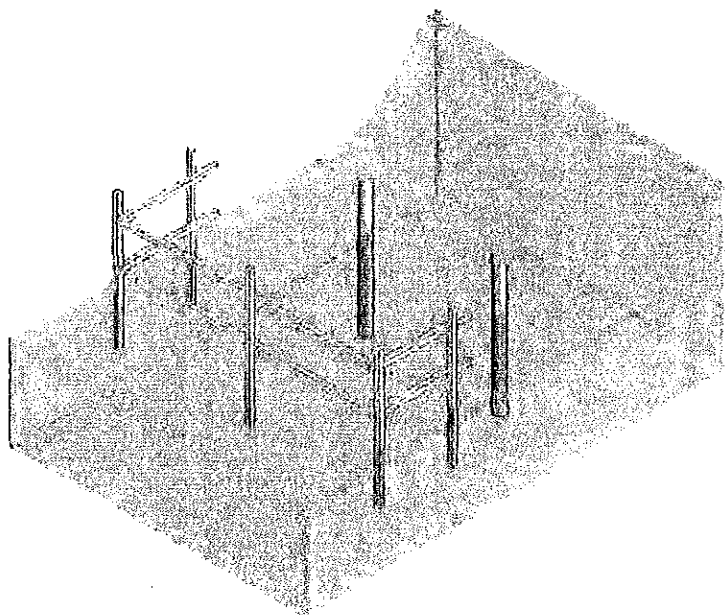


In cases where excavation is undesirable, there are other types of anchors that can be driven or screwed into the ground, leaving the exposed topside virtually undisturbed. The type pictured below has a mechanism that extends when sufficient pressure is applied to the rod, securely holding itself in 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.

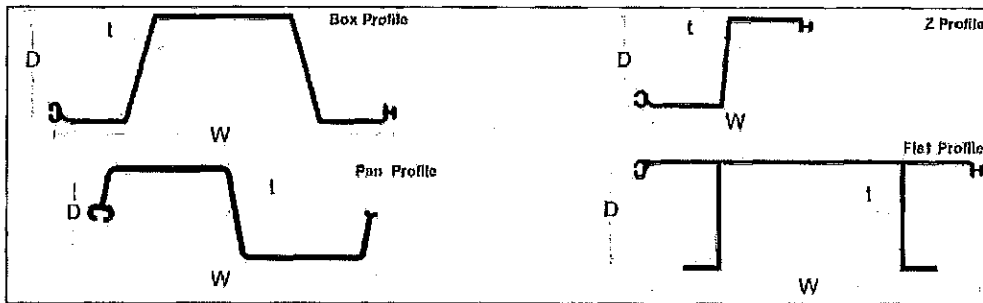


Now you are ready to begin installing your sheet piling.

SHEET PILING

MATERIALS

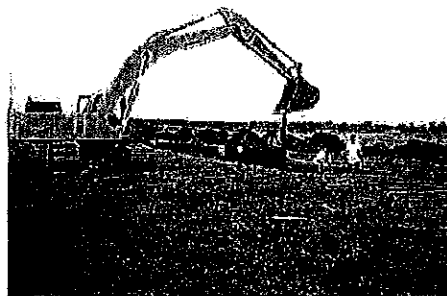
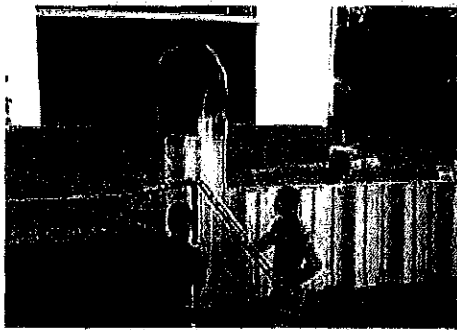
We offer many different profiles of sheet piling in three different materials; vinyl, aluminum, and FRP Composite (fiber reinforced polymer composite). The many profiles offered fall into four basic categories; "Box", "Z", "Flat", and "Pan" profiles. These four basic shapes are shown here respectively.

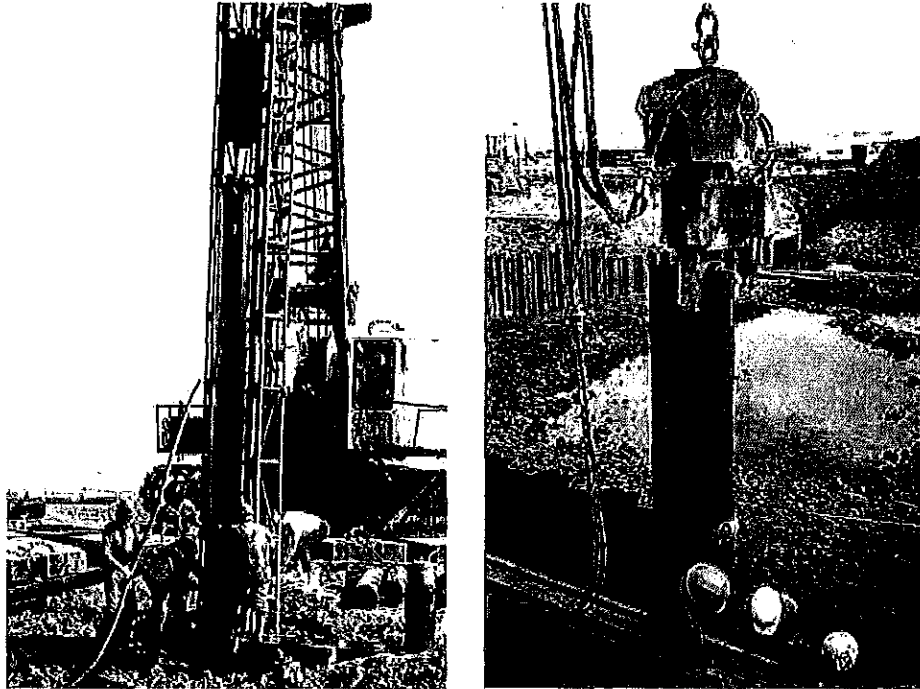


Your application may also require corners. They are available for turning 90 degree angles with all products and 45 with most.

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.





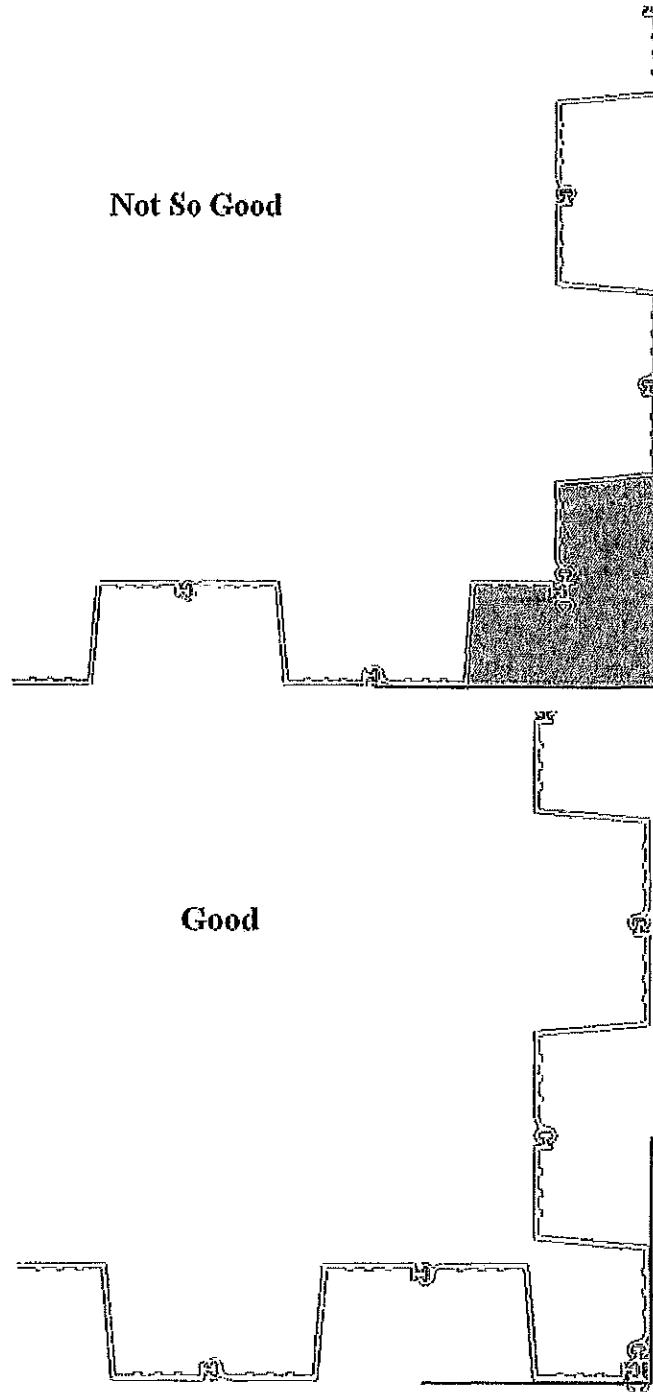
INSTALLATION

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.

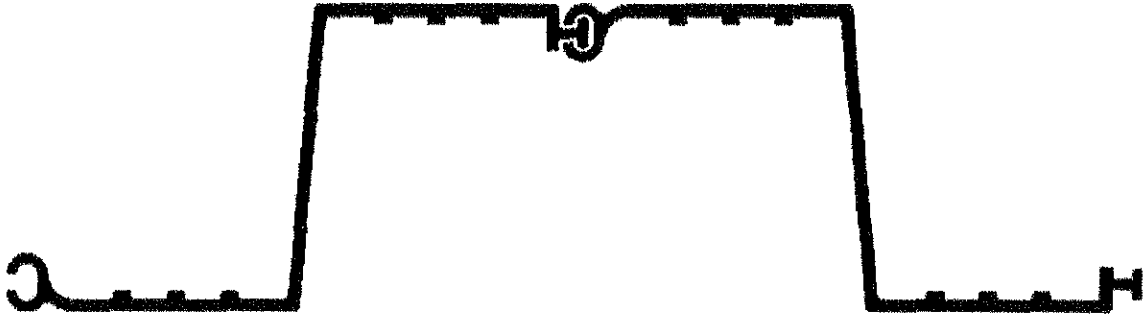
In order to achieve the full performance of your structure, your sheet piling must be driven to the depth specified by the wall designer. You may want to mark your desired driving depth on your sheet to ensure that it is sufficiently driven.

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.

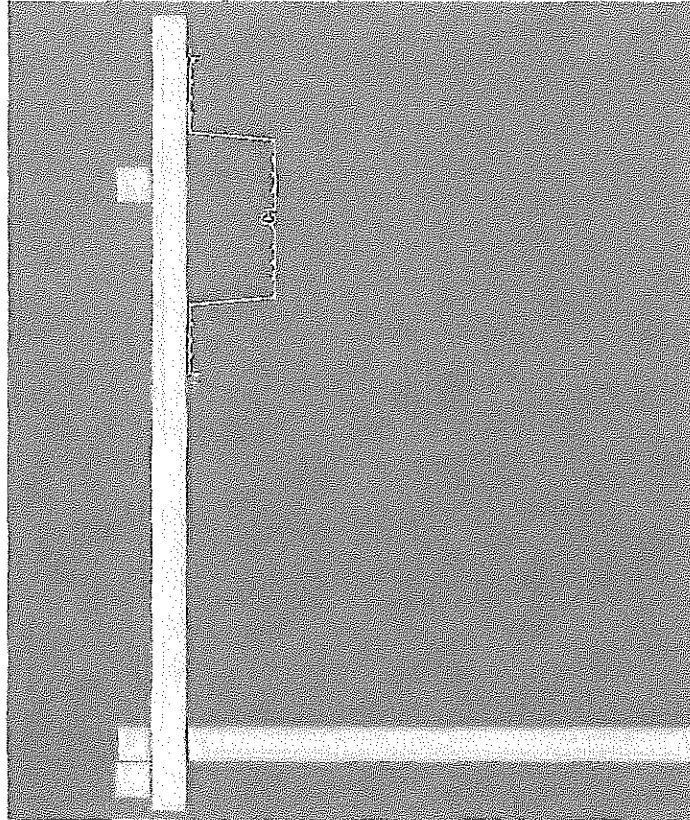
It is also a good idea to orient your sheets so that any outside corners are configured as shown in the drawing below whenever possible. Orienting your sheet piling in this way maximizes the strength of your wall in the corners, by eliminating as much of a void as possible between the sheet piling and 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.



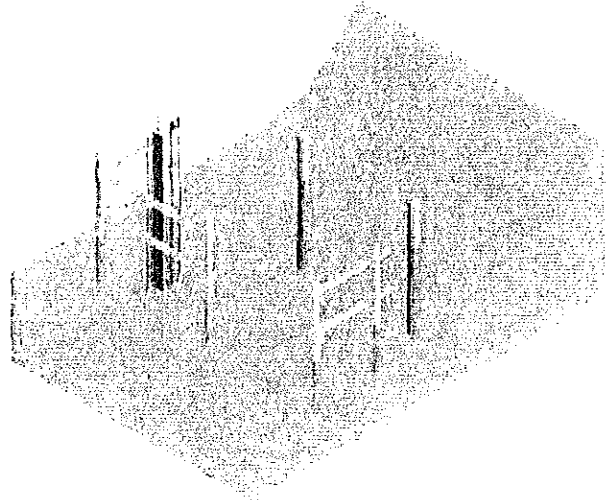
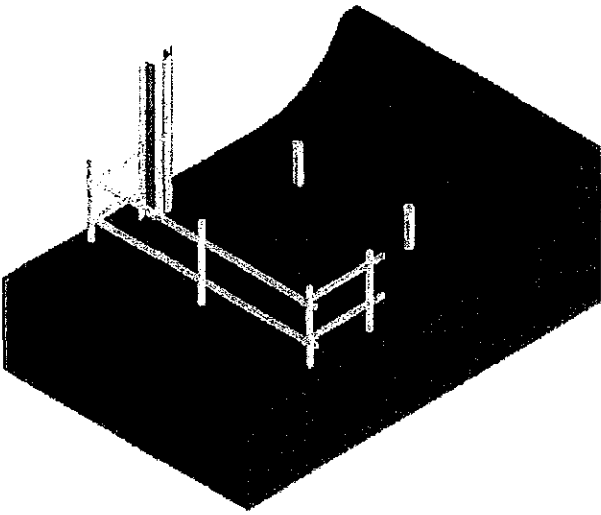
After you are satisfied that your sheet orientation is correct, you are ready to begin driving. You will want to drive your sheets as full box sections. If you have purchased a box section sheet, then you are ready to go. If you have Z section sheets, then you will want to pair them before driving.



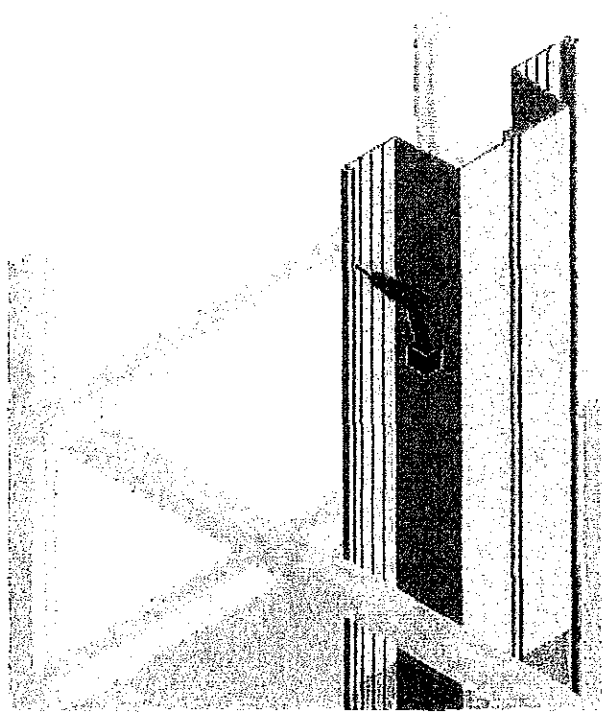
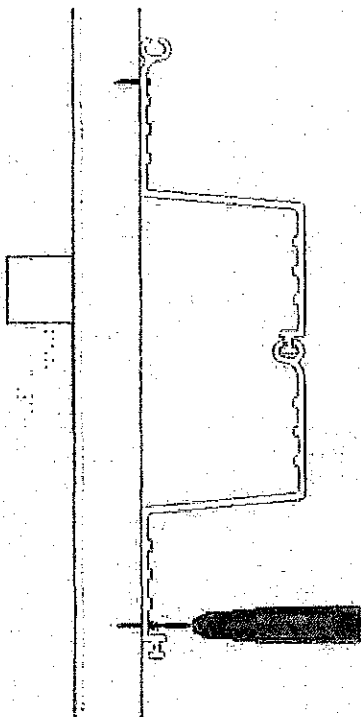
Place your first sheet or pair of sheets on your driving guide and make sure they are in the proper location and orientation for driving. Again, sheet piling installation varies from person to person. The starting location is up to you. It is important, however, to drive your first section plumb, because it will act as a vertical guide for the following sheets.



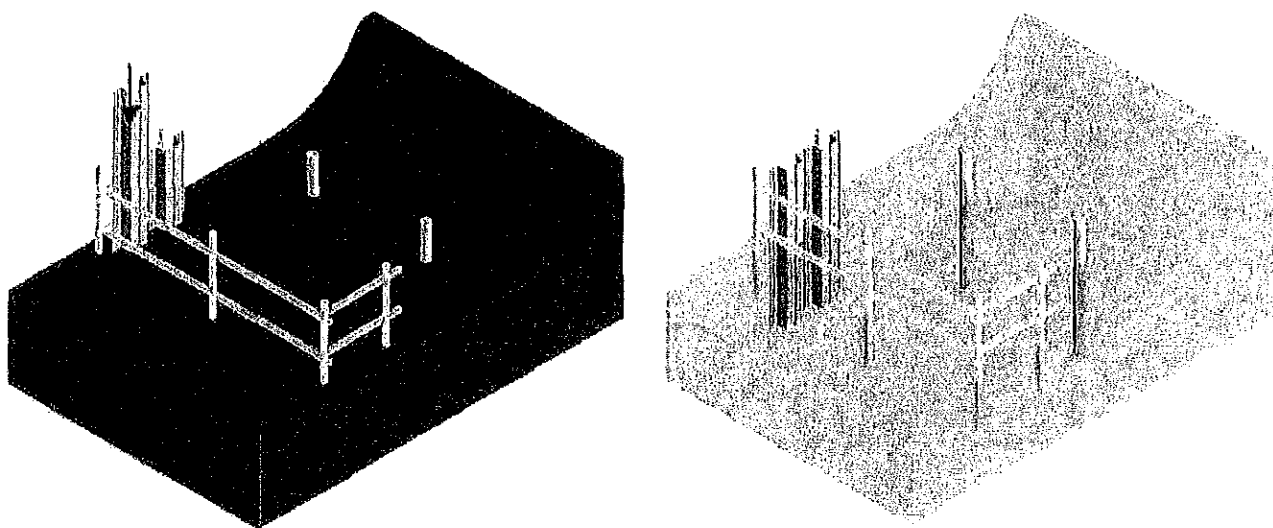
Drive your sheet to the specified depth.



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.

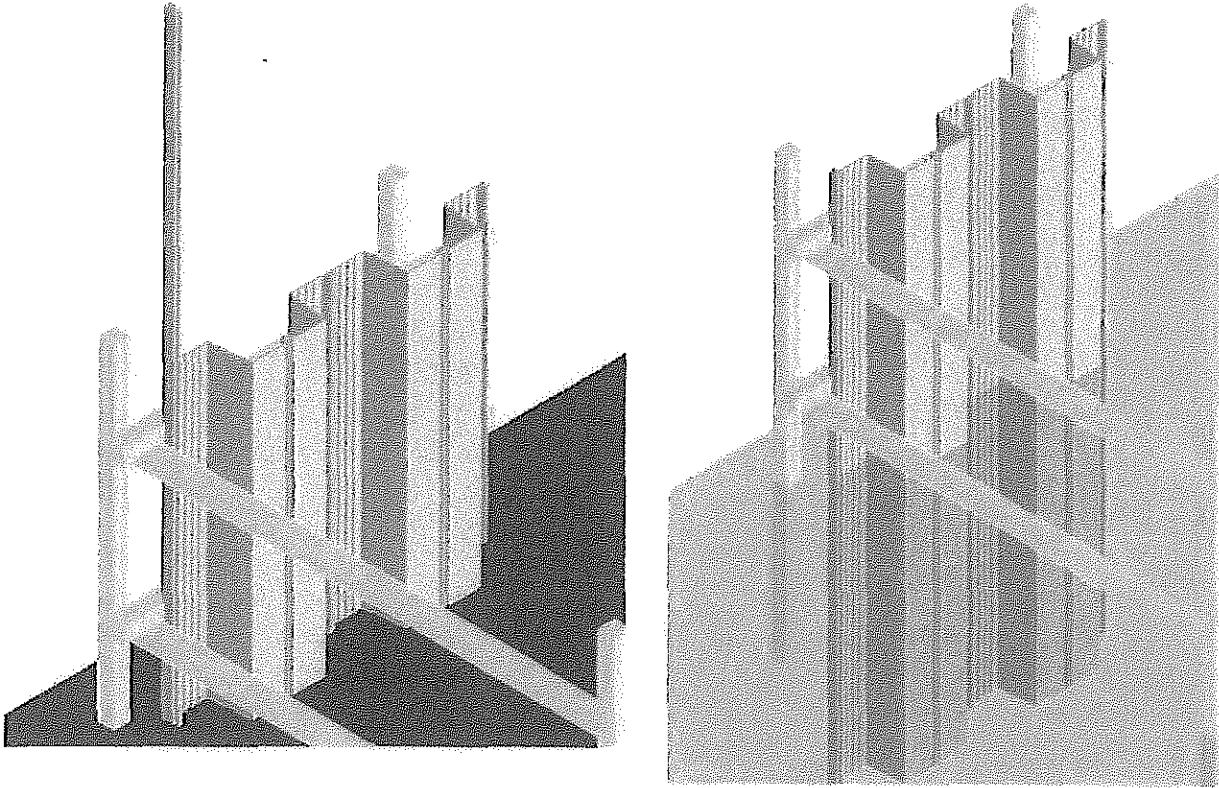


Continue this process for the first straight run of your wall. There should be enough play in the locks and flexibility in the sheets to ensure that each sheet can install in the proper position.

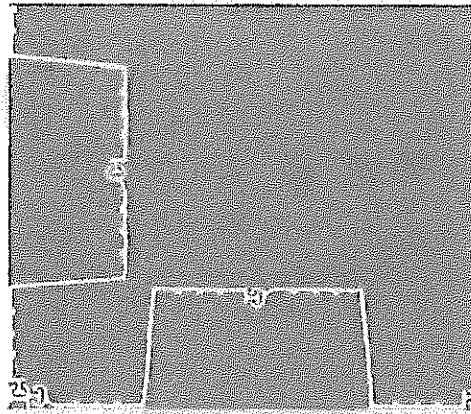


TURNING A STANDARD CORNER

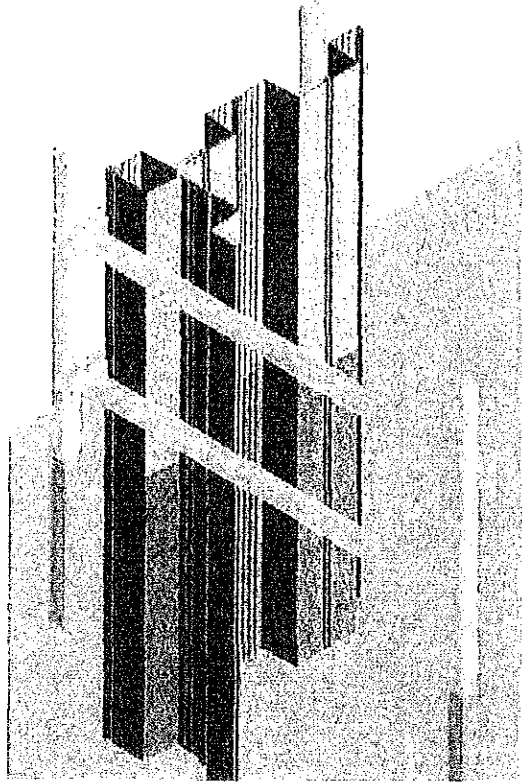
Corner pieces are available for any sheet piling that you might purchase. These pieces come in 90 degree angles, and in most cases, include 45 degree bends as well. Drive these just as you would sheet piling. Alternatively you can thread your corner piece on the leading lock of the last sheet to be driven and drive the sheet and the corner piece together.



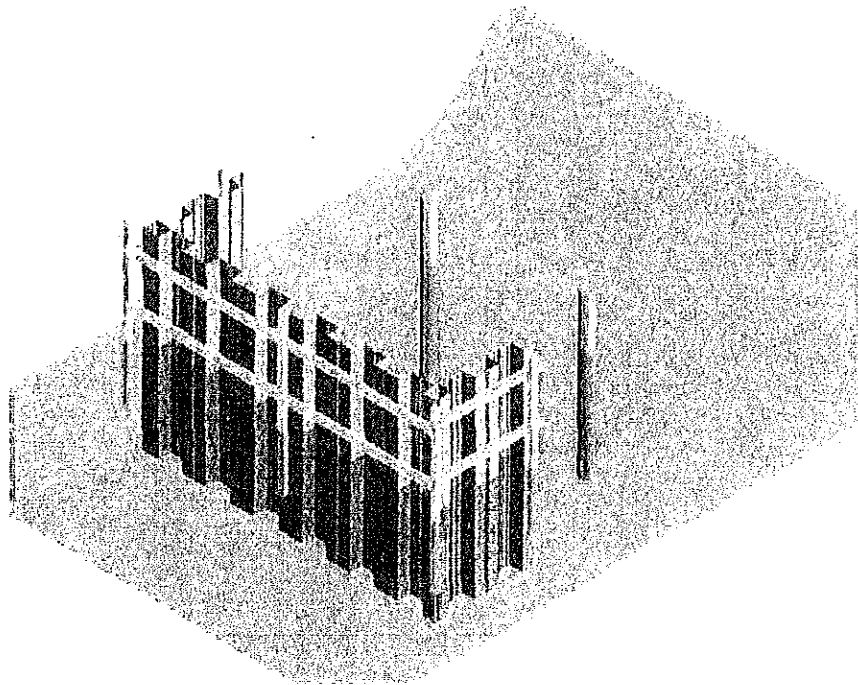
After you are satisfied that your corner is in position, drive your next box section, lining it up, using the corner's male lock and your driving guide.



After you are satisfied that this sheet is properly positioned, secure the sheet to your guide.

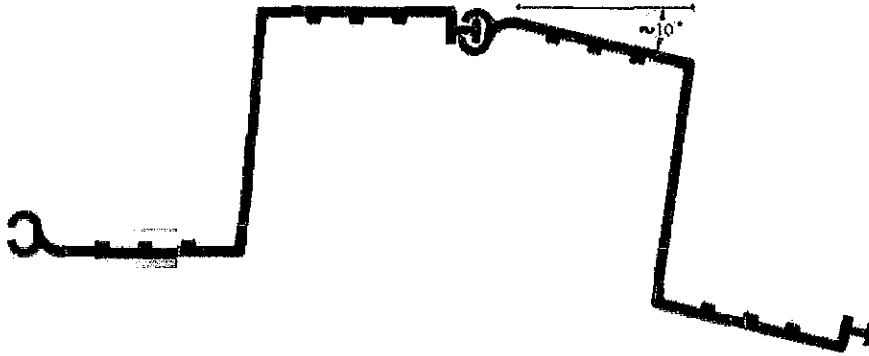


Repeat the steps learned in this section to complete your wall.

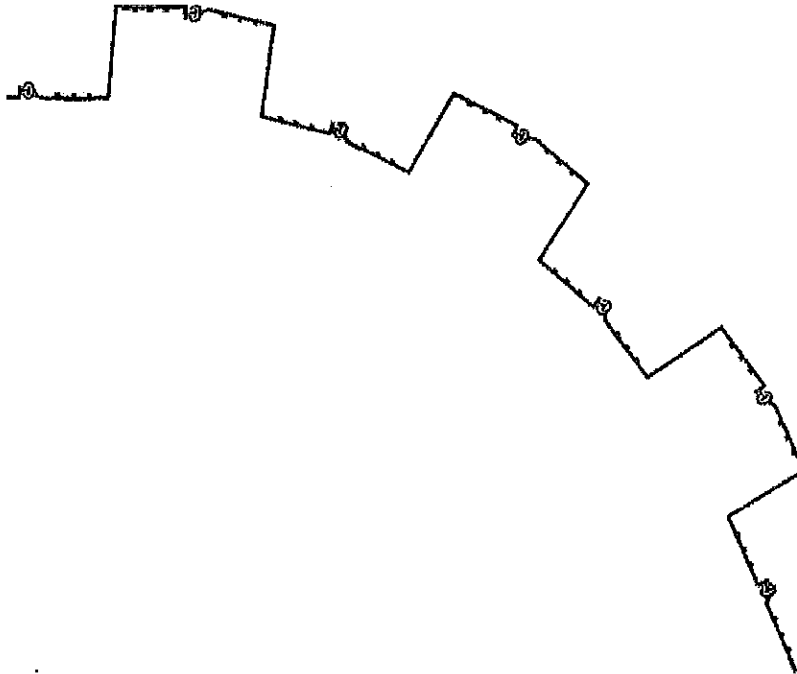


MAKING A NON-STANDARD TURN

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 10° per interlock. (This angle may be greater or smaller, depending on the particular sheet used.)

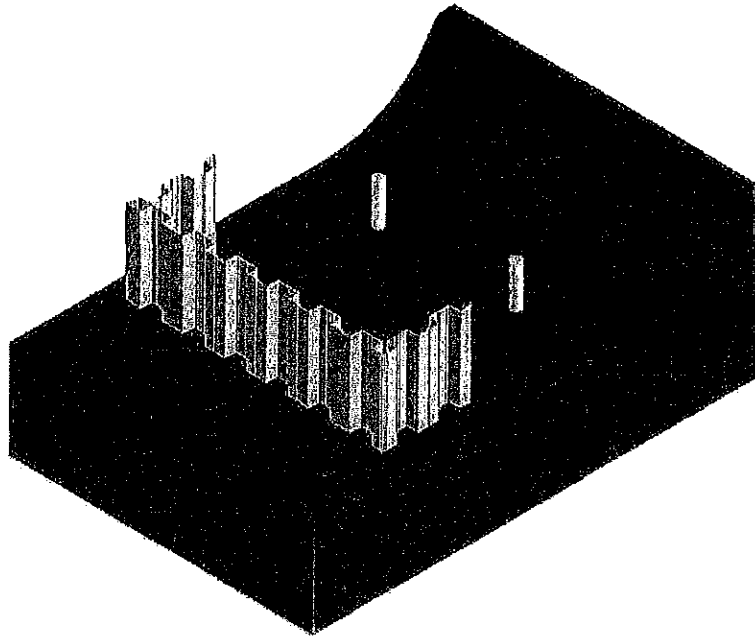


This will allow you to customize your curves and angles when constructing your wall.



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.

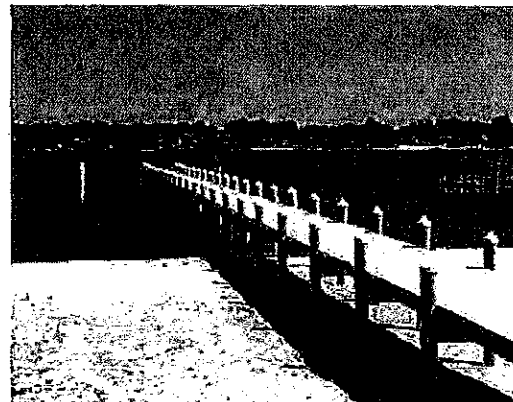
It will be up to you to decide what fasteners and peripherals you will need to secure your TimberGuard pole to your structure. It is notable that stainless steel fasteners last longer in most pressure treated wood than other, more corrosive steels.

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.

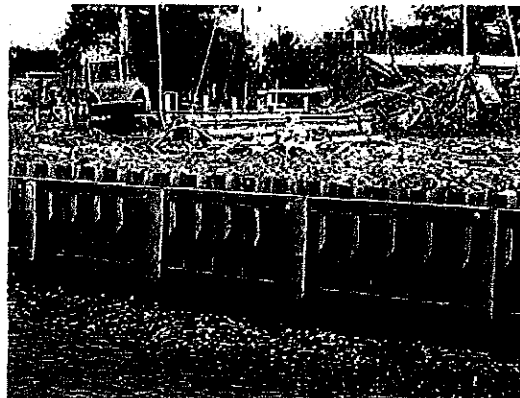
APPLICATIONS

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.

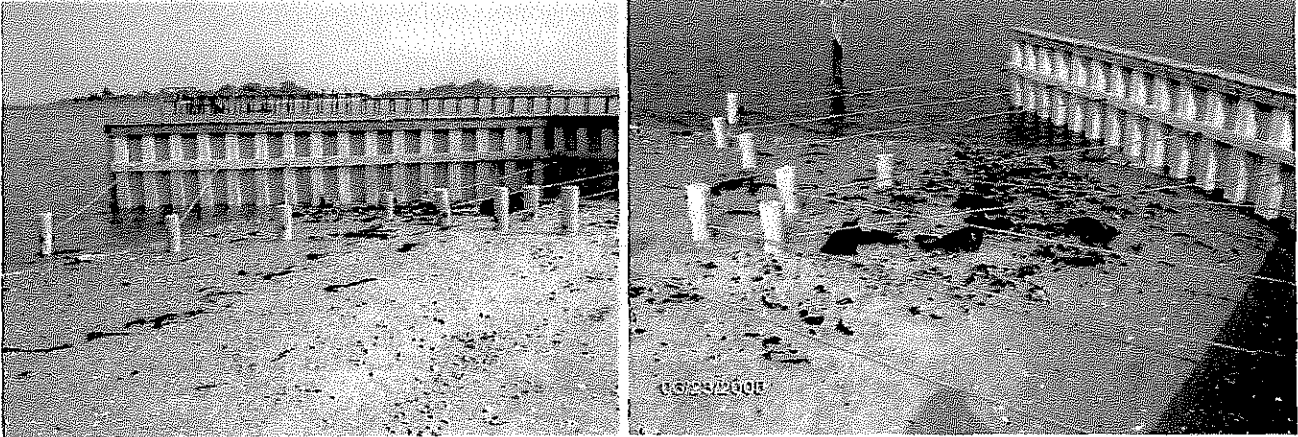
Docks:



Navy Style Seawalls & Fender Piles:

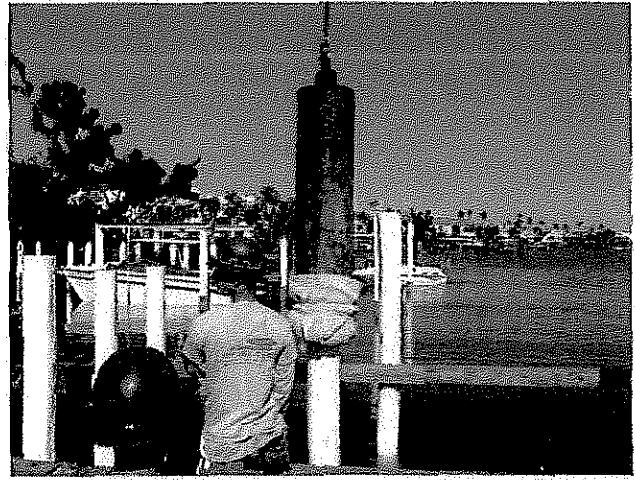
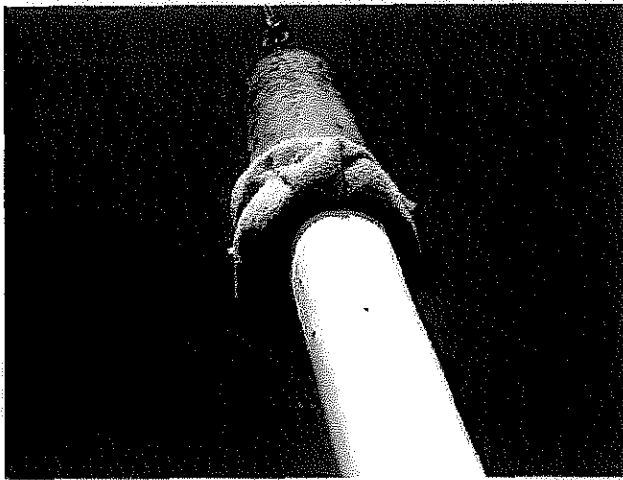


Anchors:



INSTALLATION

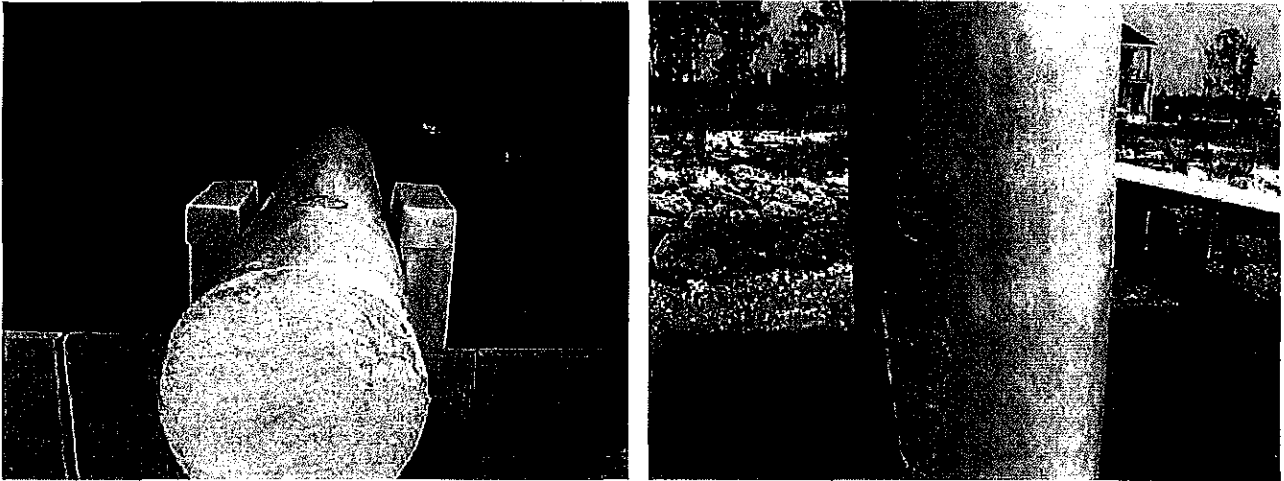
You will not have to re-equip to use TimberGuard. TimberGuard can be driven and installed using conventional construction methods and equipment. Shown here is a very typical installation, using a drop hammer. TimberGuard's polymer skin is very robust and can stand up to harsh environments and even harsher 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 breach 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:

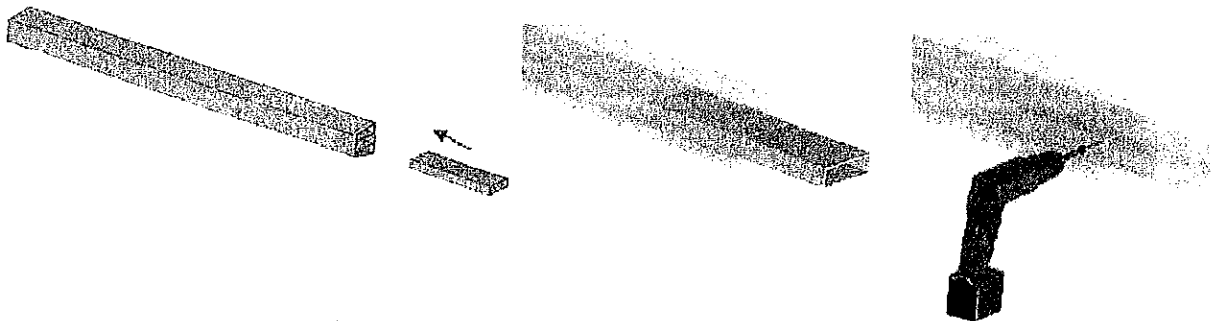
- Drill with a 3/8" hex head socket for hanging the wale with included lag screws
- Chop saw or any mitering saw that can accommodate the dimensions of the wale
- Blades appropriate for the material selected (For ShoreGuard a blade suitable for cutting the aluminum wale and inserts is required. For UltraComposite 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

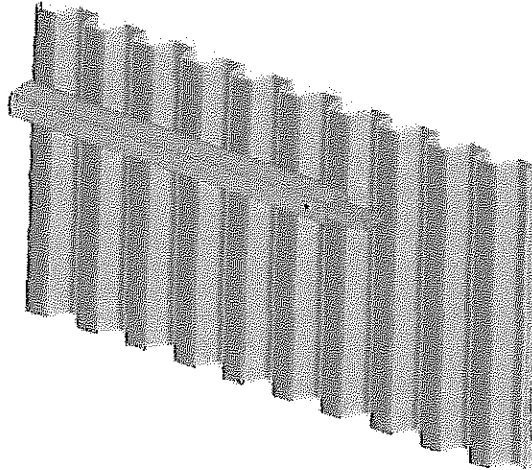
Step 1 – Prepare your wale for hanging

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.

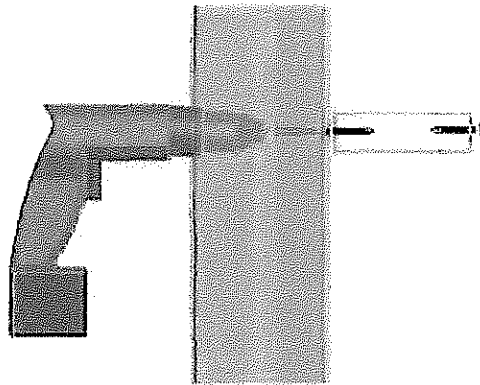


Step 2 – Hanging your first wale section

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.

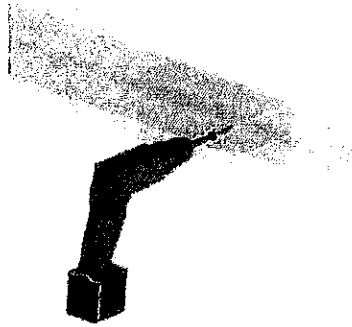


Evenly space the remaining 9 screws over the length of the wale section that does not house any insert (3 shown here). These screws will not be load bearing. They primarily act as a placeholder for your wale until the anchor system is connected.

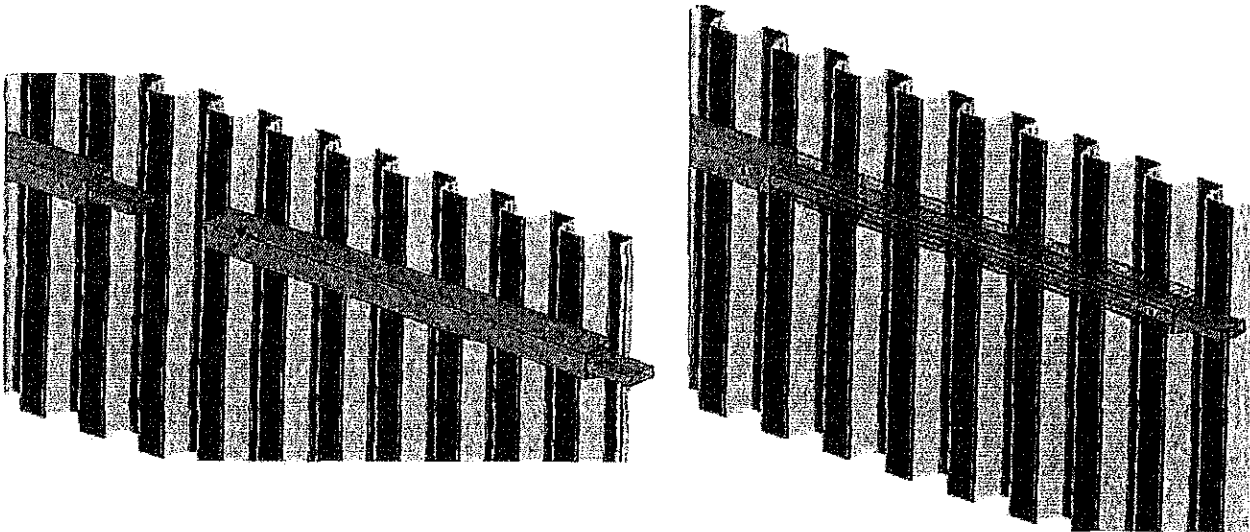


Step 3 – Hanging intermediate wale sections

Repeat Step 1 for each intermediate section, creating a wale assembly.

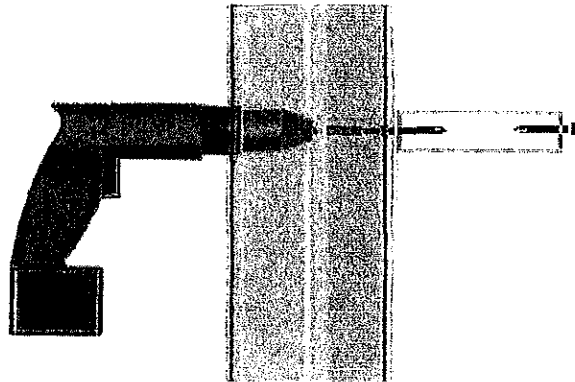


Slide your newly-created wale assembly over the exposed insert section of the previously-hung wale assembly. You will use each hung wale assembly as a guide for the following wale assembly. You will still want to ensure that each is correctly positioned and level before attaching to your wall.



As in the previous step, secure your newly-positioned wale assembly to the sheet piling from the back with the remaining
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screws.



Evenly space the screws over the length of the wale that does not house any insert.

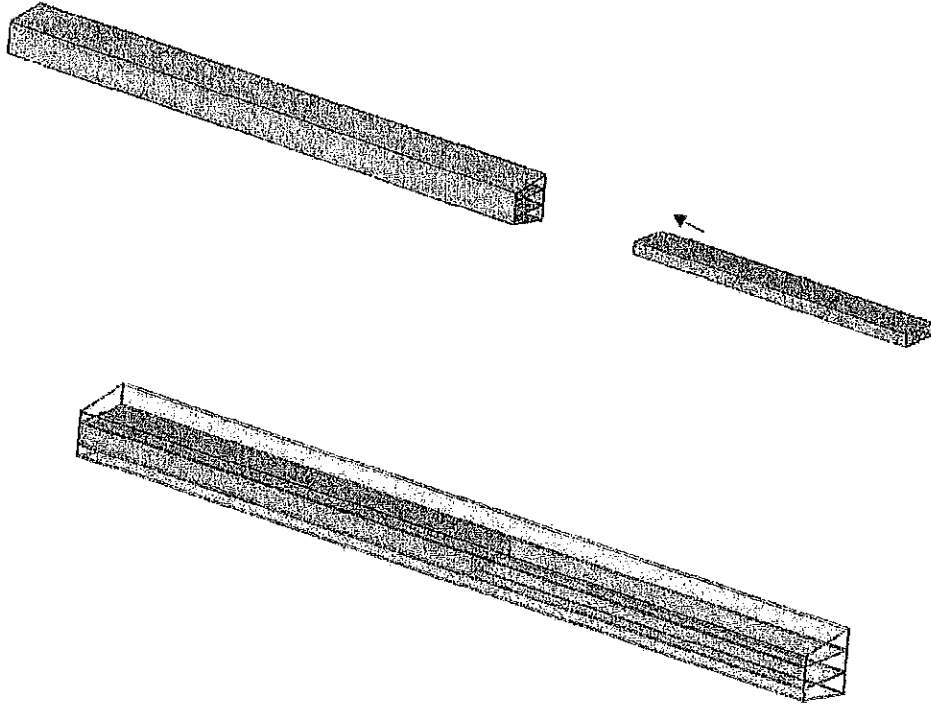


Now repeat this process for all the straight runs of your structure.

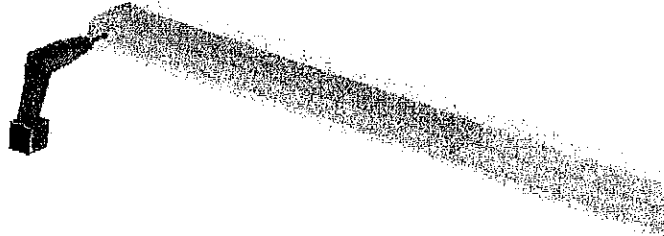
Step 4 – Modifying your installation for ShoreGuard /UltraComposite Wale STR

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 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.

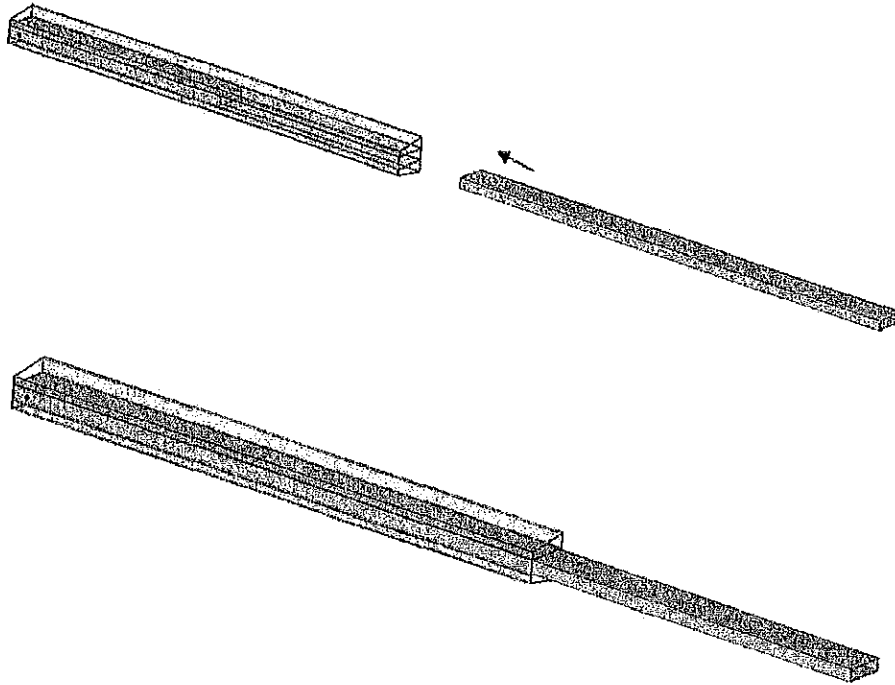
It is recommended that you cut your first 20' structural insert into two 10' lengths for easy installation. Insert one of the 10' lengths into your first wale section so that it is flush with your outside end. You will save the other piece for the final section.



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.

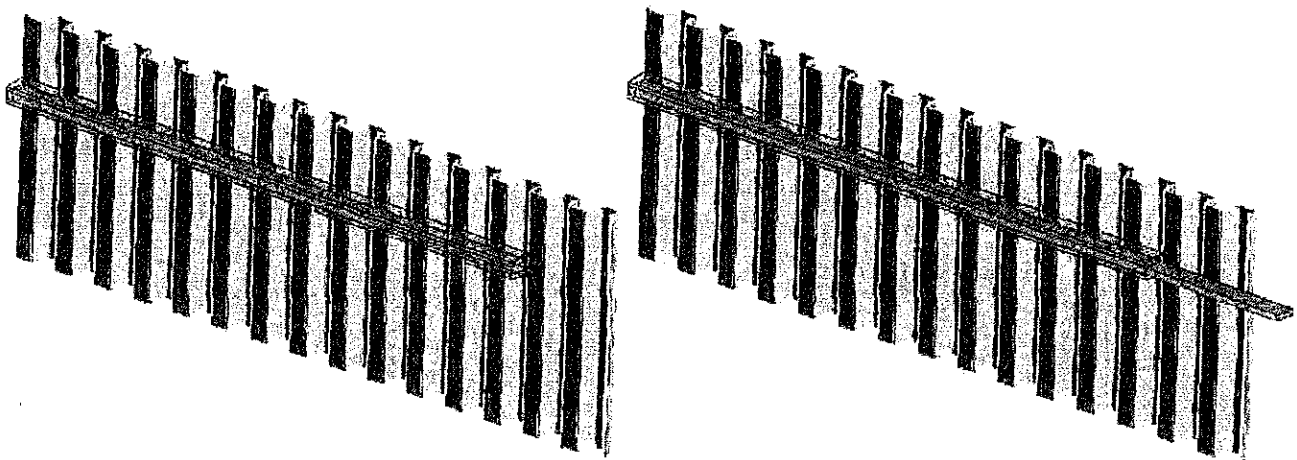


As in Step 2, place this assembly on your sheet piling in the desired position for attachment, and ensure that it is level. You will want to start at one end of your wall and work to the other end.

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.

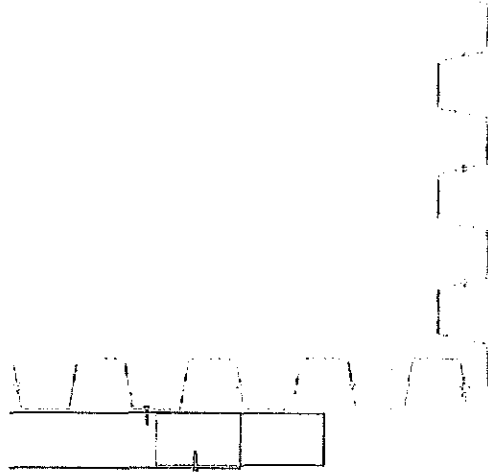


Repeat this process for all the straight runs of your structure.

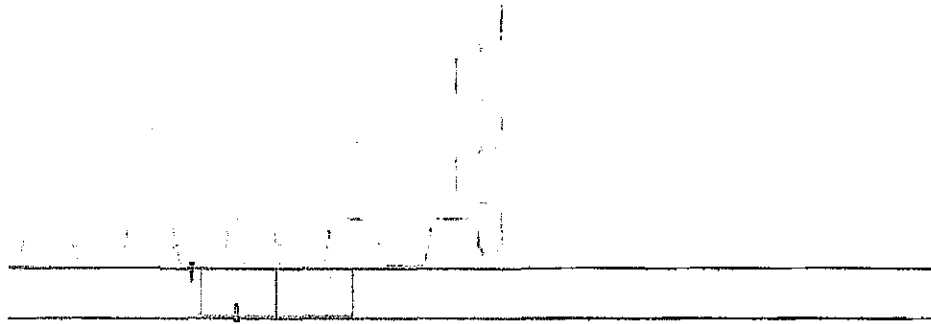
TURNING A CORNER WITH YOUR SHOREGUARD/ULTRACOMPOSITEWALE

Step 1 – Preparing to turn a corner

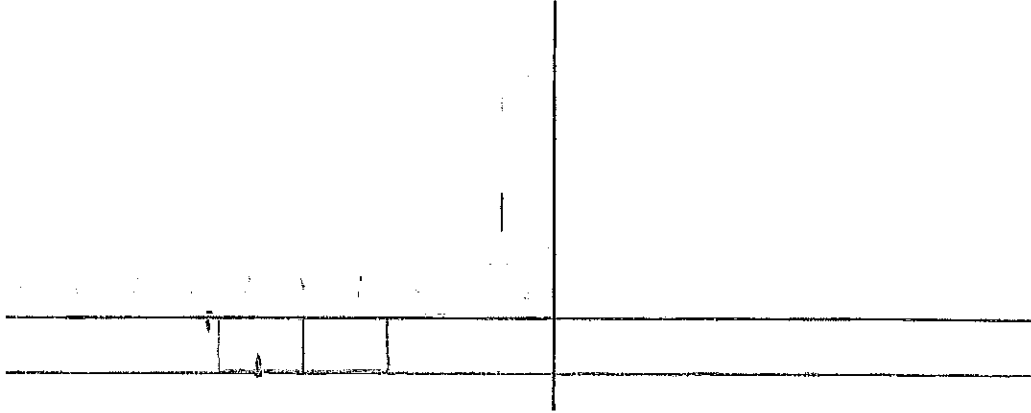
For this example we will show the standard ShoreGuard/UltraComposite Wale package turning a 90 degree corner. This process will use a 90 degree corner insert. CMI also offers 45 degree corner inserts, but the process for turning a 45 or a 90 degree corner is fundamentally the same. When you reach a corner, 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.

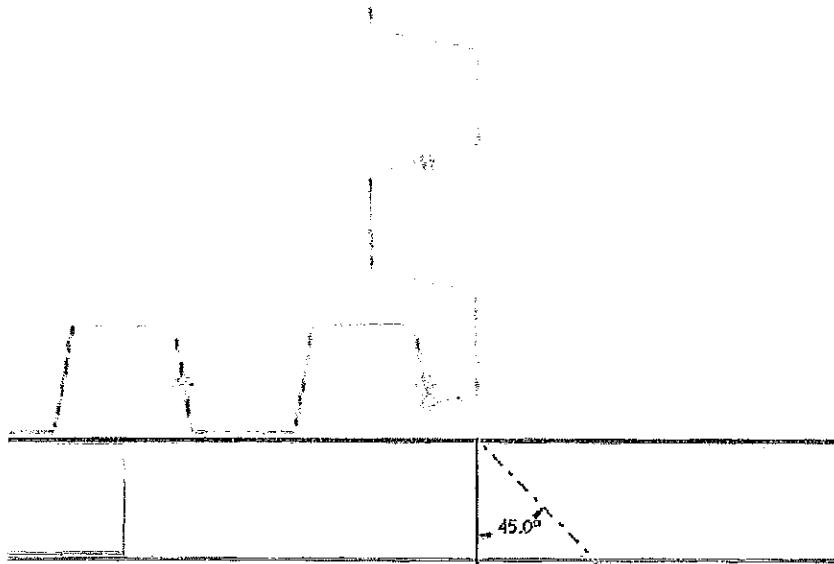


Extend a line from the angled face and transfer a construction line to the wale section using a marking device.

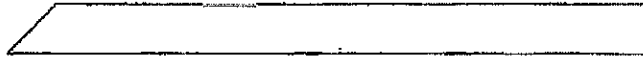


Step 2 – Making your cuts

Since this will be a mitered cut, your cut angle will be $\frac{1}{2}$ 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.



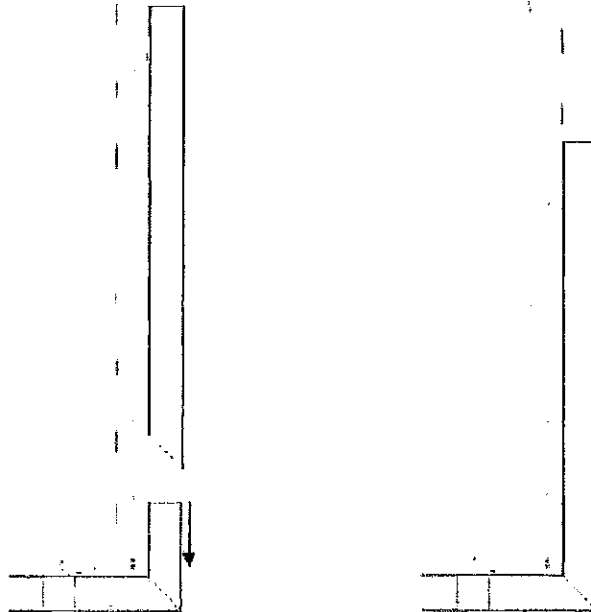
Insert the appropriate corner insert, in this case a 90 degree corner insert, into the wale section.



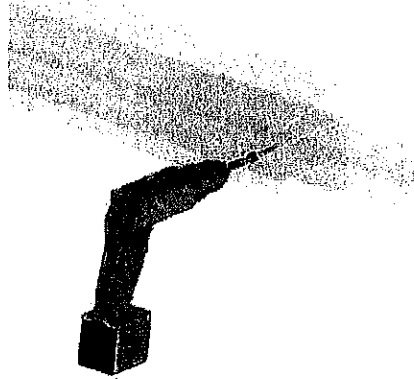
You will use the same attachment principals learned in the Hanging your ShoreGuard/UltraComposite Wale section. You will secure the insert to the previous wale and use it as a guide for the next. It is a good idea to temporarily slide your second cut wale section on to mock up your corner before you 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.



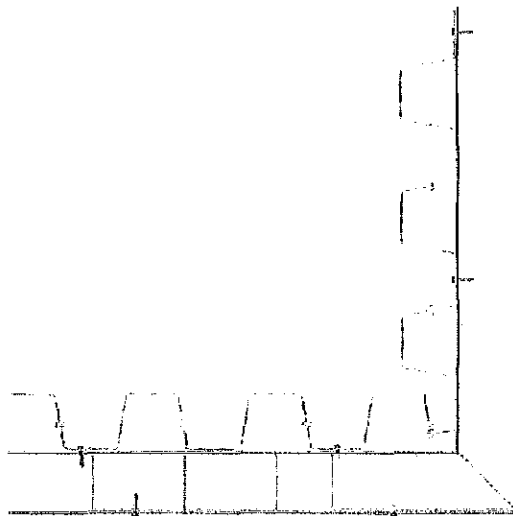
Slide your second cut wale section onto the exposed corner insert.



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.



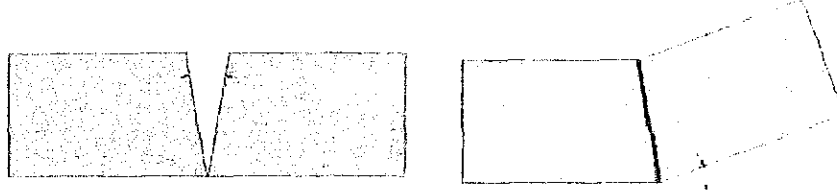
Attach this wale section or wale assembly to the wall as you would have in the Hanging your ShoreGuard/UltraComposite Wale section.



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

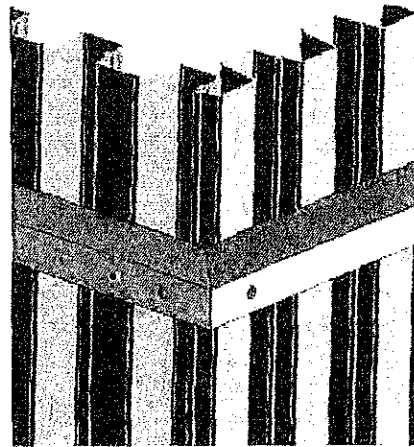
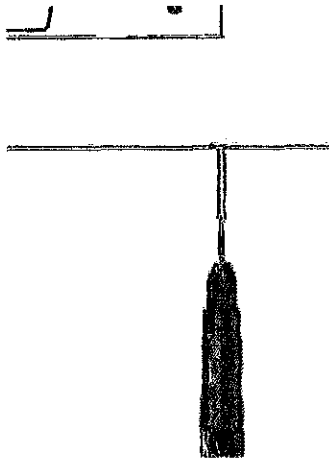
If you will be making a turn other than 45 or 90 degrees, the process is identical, only you will need to fabricate your own corner inserts. You can use a provided splicing insert for this. Miter cut the insert using the same process and at the same angle as you would cut your wale sections. Weld the 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.



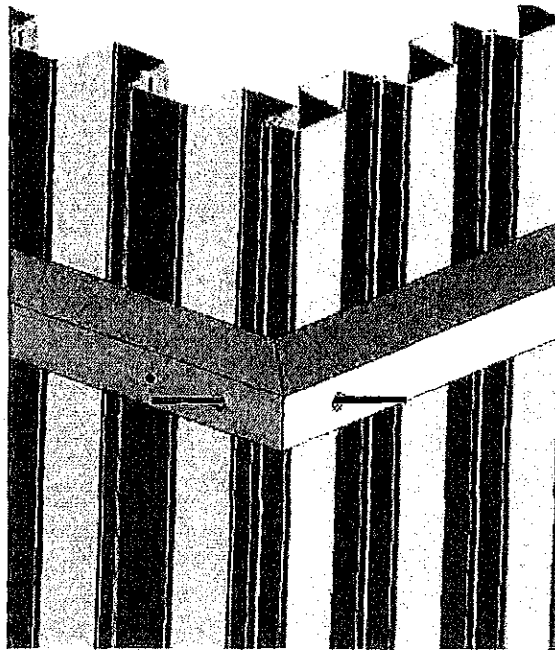
Step 5 – Modifying your installation for a Braced Corner

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 $1\frac{1}{2}$ " 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

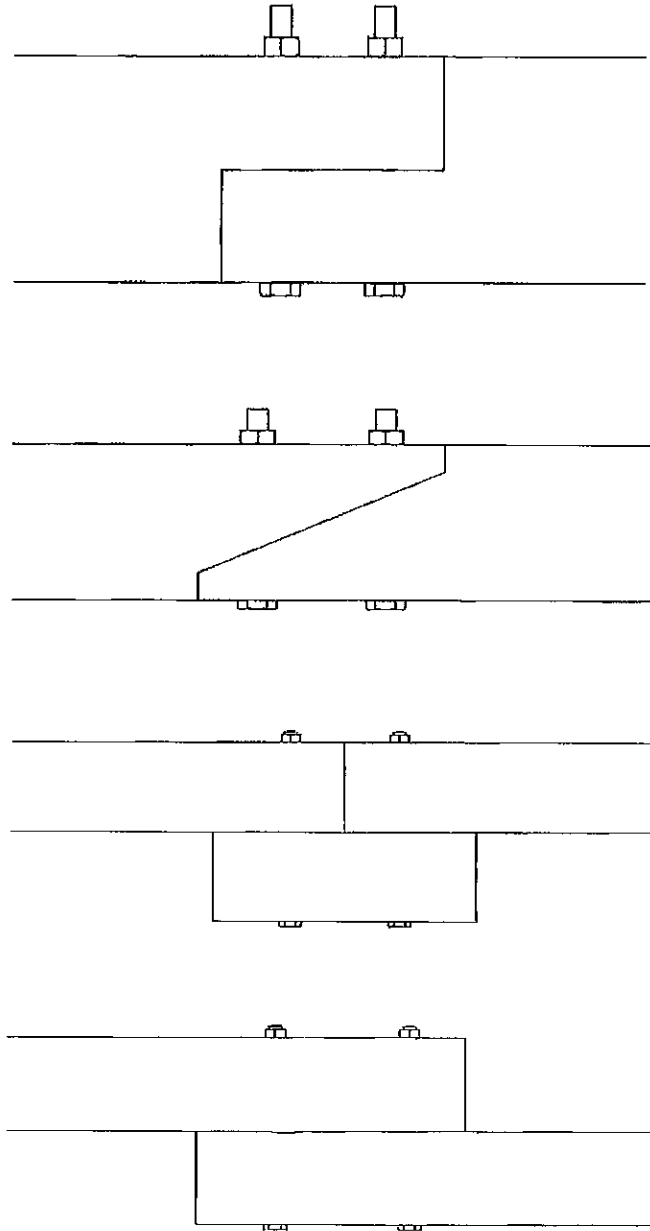
HANGING YOUR TIMBERGUARD WALE

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

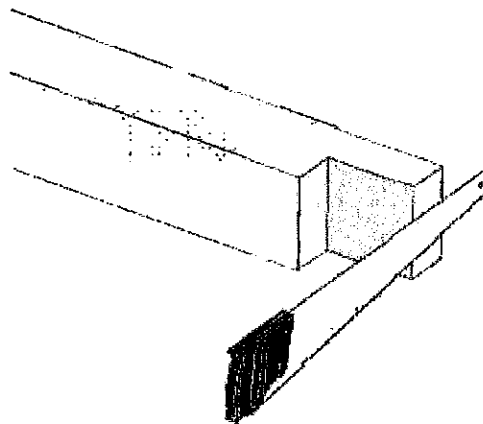
There are also many types of joints in woodworking. Several are shown here. Finding a balance between aesthetics, structural requirements, and ease of installation for your application will dictate what type of joint you will use.



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.



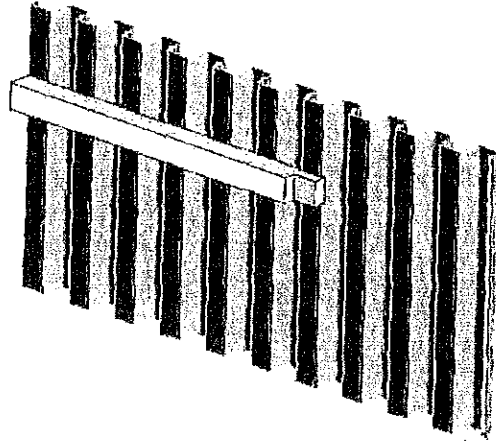
Now cut your joint, and the plastic will be flush with the newly cut wooden face. You can plan ahead and precut all your TimberGuard or cut each joint as you go.



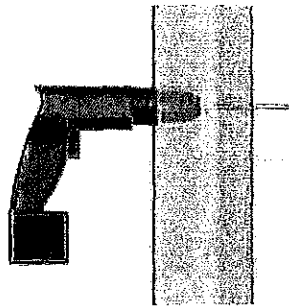
Step 3 – Hanging your first wale section

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.



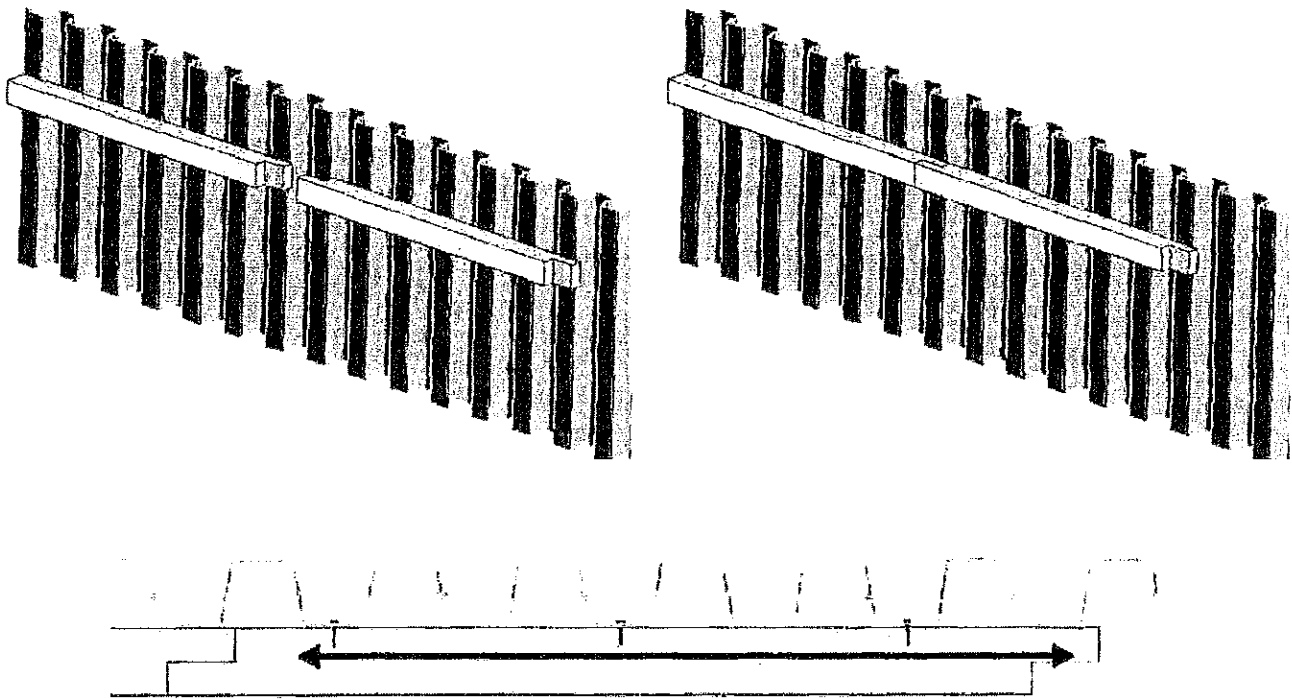
These screws will not be load bearing. They primarily act as a placeholder for your wale until the anchor system is connected.



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

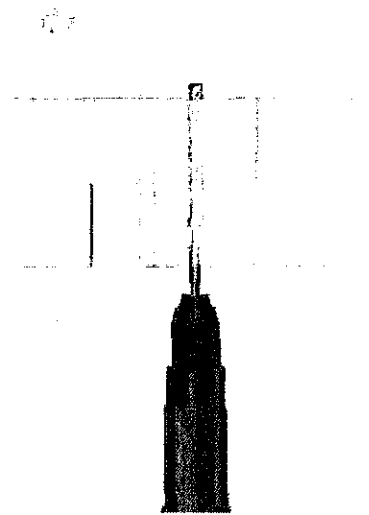
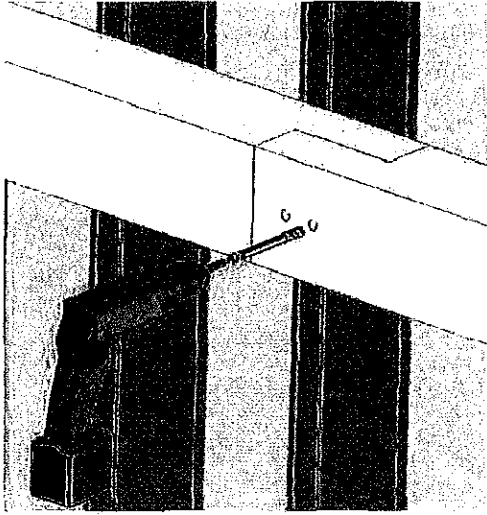
as you did in Step 3. Again, it is a better idea not to lag through joint sections.



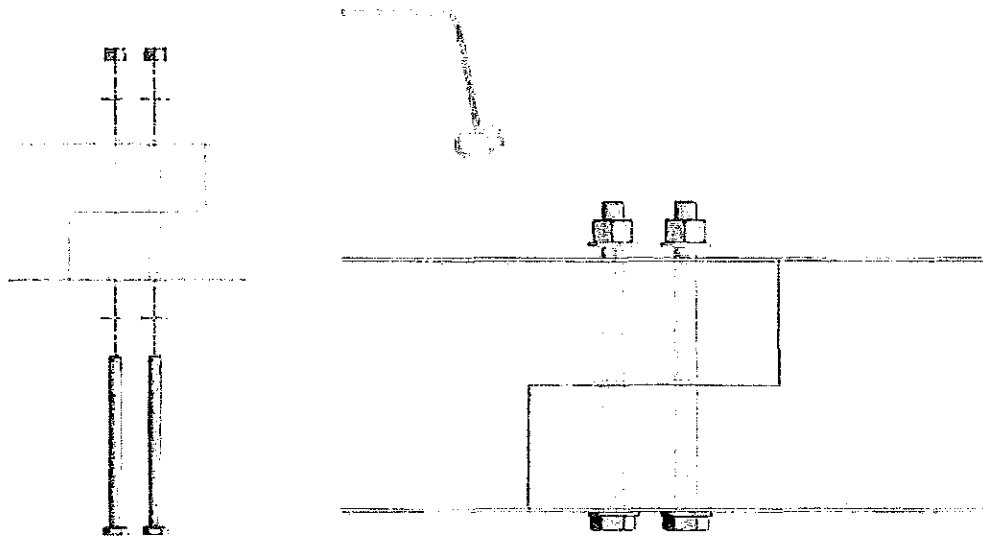
Step 5 – Securing your joint

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.

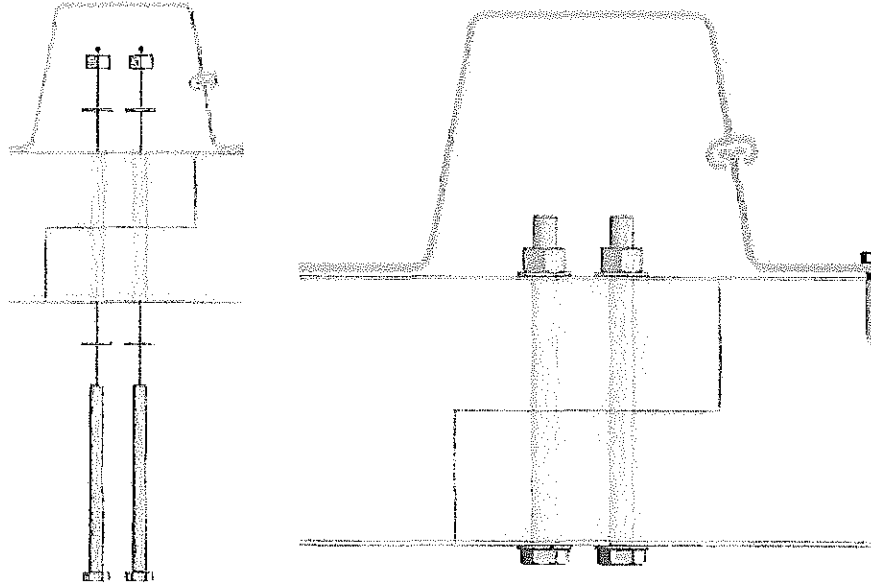
When the joint falls on a flat face, you will want to drill the bolt holes all the way through the TimberGuard and your sheet piling.



Assemble your fasteners and tighten the nuts.



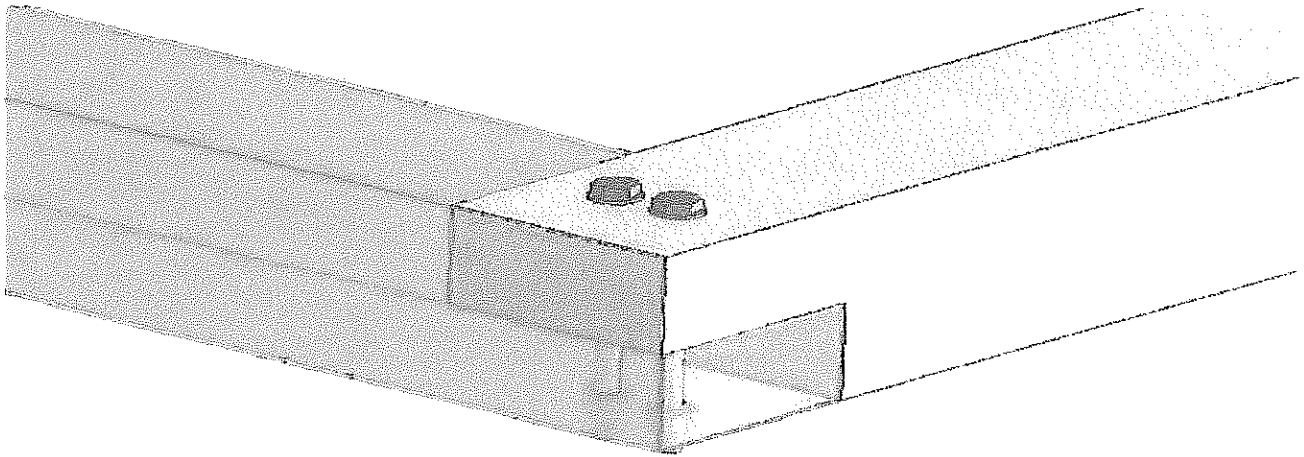
The process is the same if your joint lands on a gap. However, you will only bolt through the TimberGuard, not the sheet piling.



TURNING A CORNER WITH YOUR TIMBERGUARD WALE

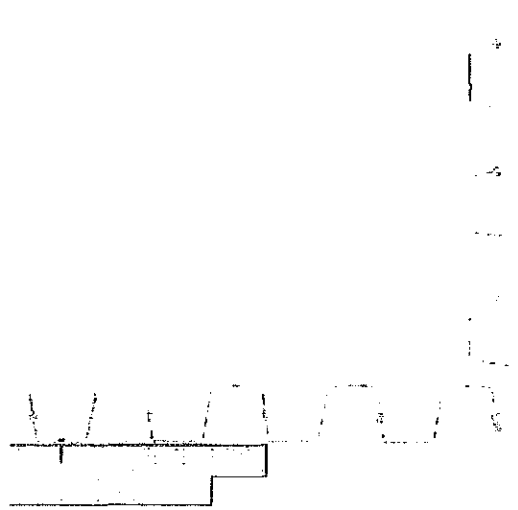
Step 1 – Preparing to turn a corner

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.

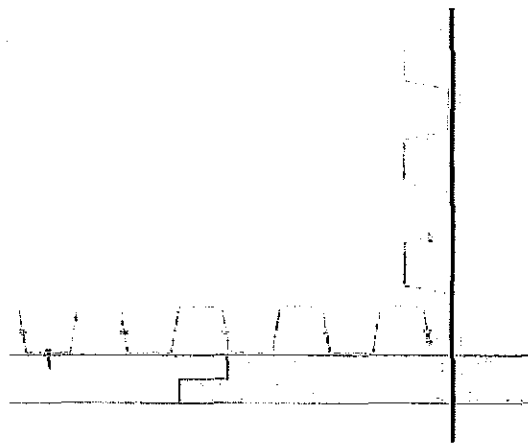


Another aesthetically-pleasing option is a mitered corner. For this example, we will show the steps to create a mitered corner for a 90 degree turn, although you can use this method to create any angled turn by adjusting your cut angle. When you reach a corner, you will want to stop so that your last wale section fits within the straight section of the wall. Make

your face joints as far from the corner as possible.

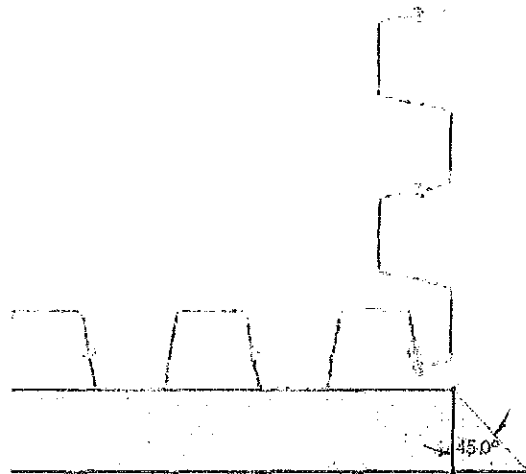


If you haven't already done so, you will want to take your measurements for cutting your first corner wale piece. An easy way to do this is to use a section on which the joint cut has already been made. Place it on the wall as if you were going to connect it to the previously hung wale section. Extend the line from the angled face, and transfer a construction line to the wale section using a marking device.



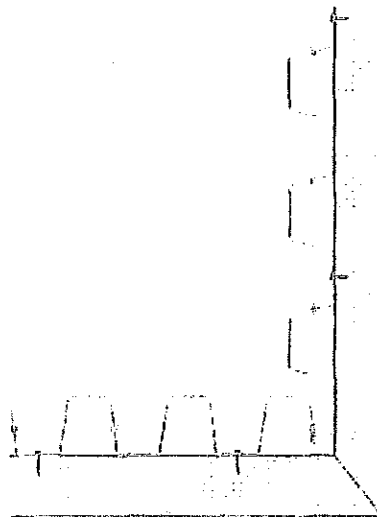
Step 2 – Making your cuts

Since this will be a mitered cut, your cut angle will be $\frac{1}{2}$ 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.

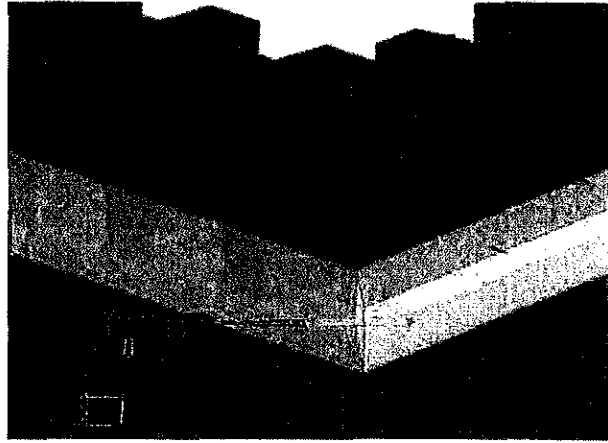
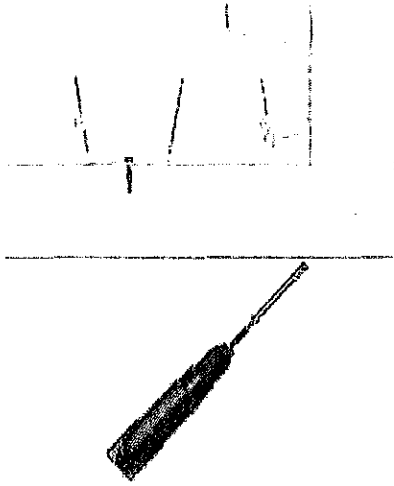


You will need to join your corner to keep it from separating after backfill. There are many ways to achieve this. One example is as follows:

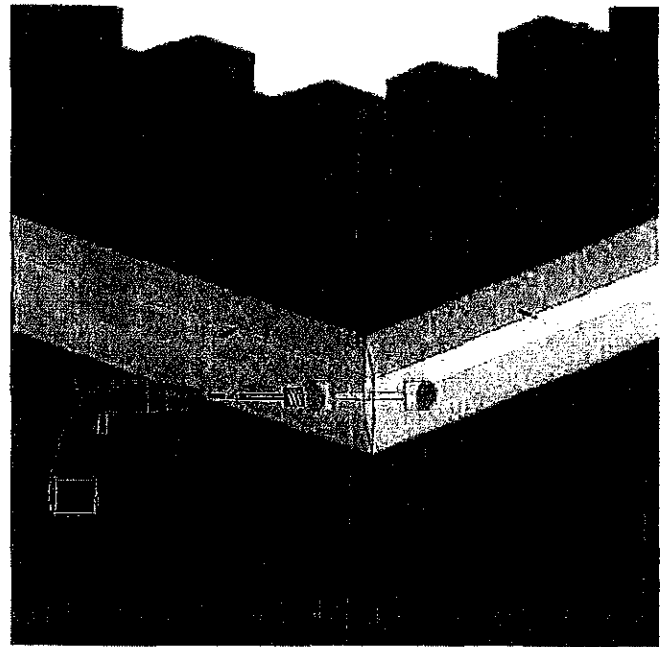
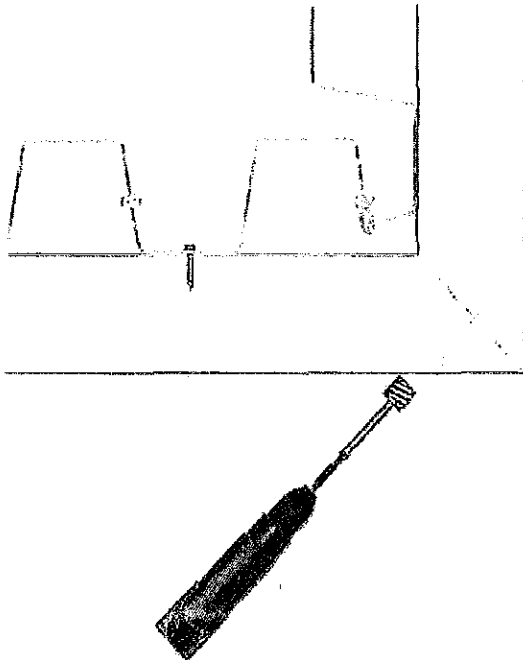
Step 3 – Securing your corner

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.



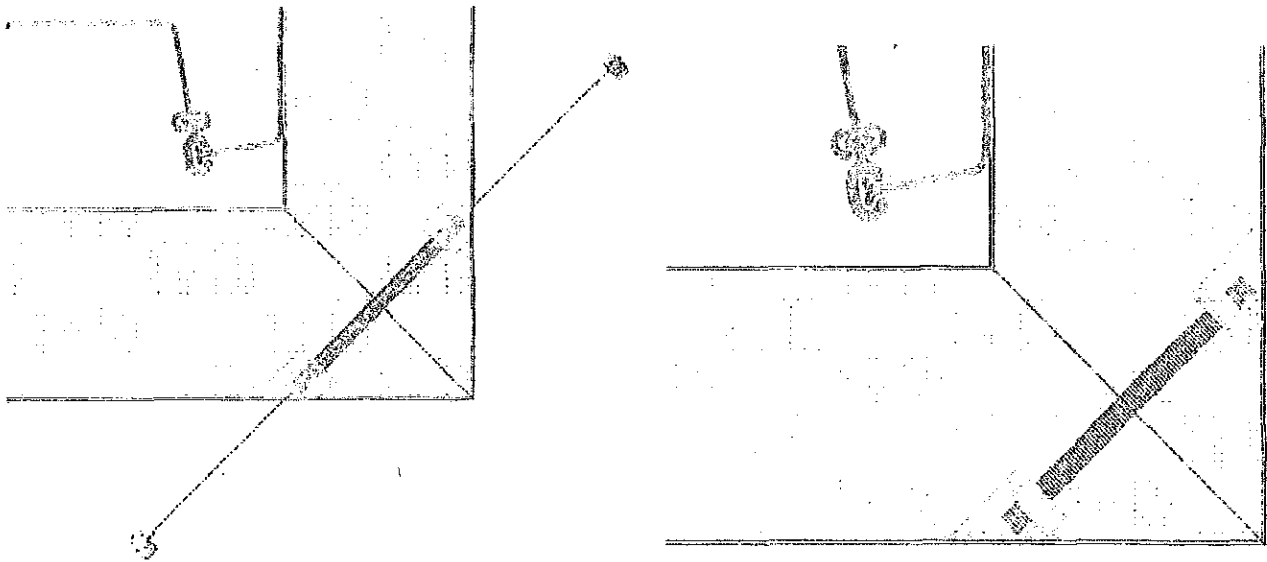
Make a countersunk hole concentric with the hole that you just drilled, and deep enough to house the nuts and washers. It should be wide enough to accommodate the washers you have chosen.



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.



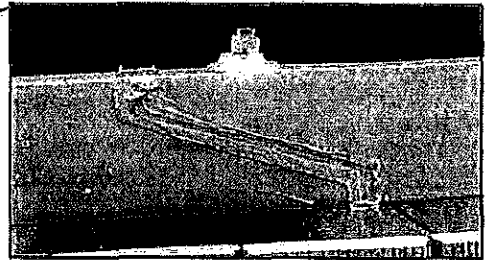
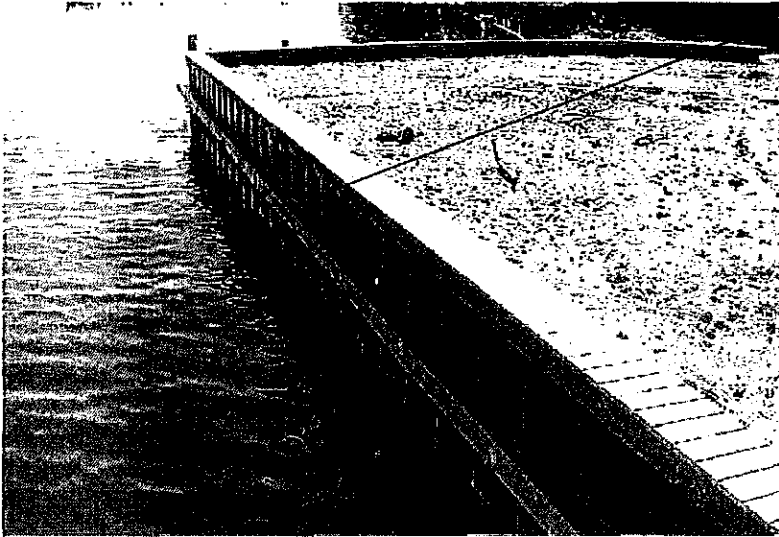
Attach washers and nuts, oriented as shown.



Oxygen and light are two of the primary factors that contribute to marine borer survival and rot. Therefore, when accidental or intentional breach 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.

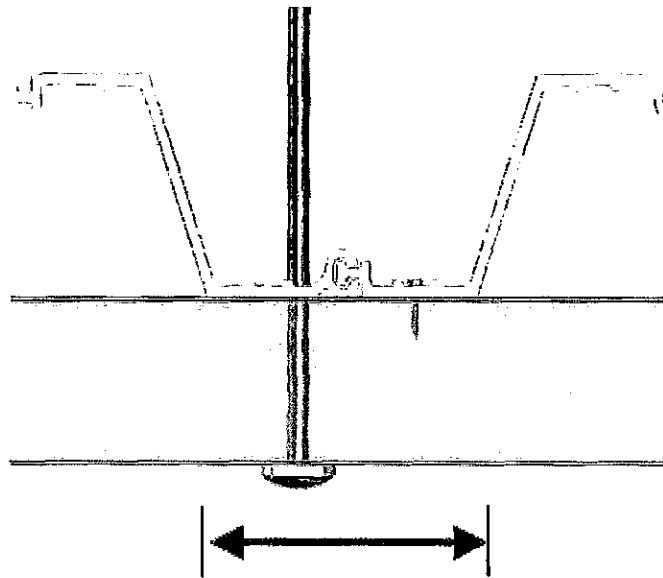
All of the most common hardware for tying back your wall comes with the ShoreGuard Tie Rod package. Use the table below to select the package that is right for you. There are several available accessories that should be considered. If you are going to angle your rods, which is normally the case, we carry 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:

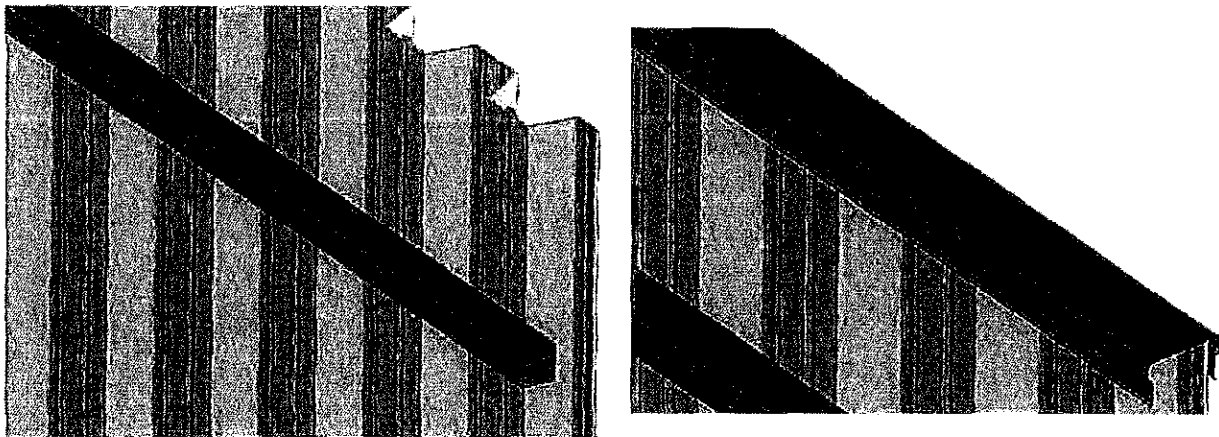
- Appropriate drill for drilling holes through your wale, wall & anchor depending on anchor type
- Drill bits appropriate for the material and tie rod diameter selected. Bits will need to be slightly oversized in order for the holes to be large enough to accommodate the plastic coating.
- Measuring and 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.

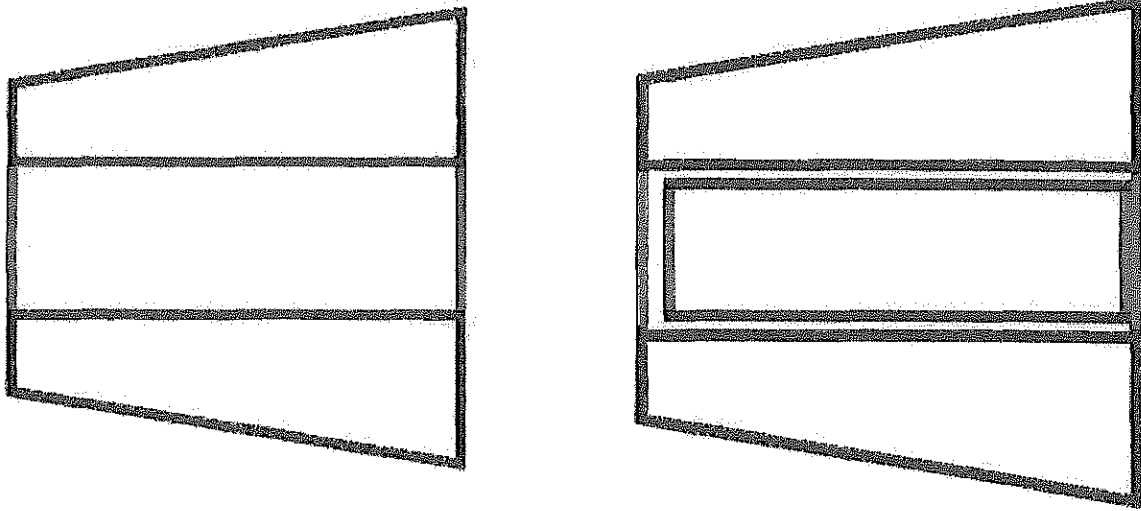


Temporarily mark your hole locations so that the rods can be positioned in the most effective manner before you begin drilling. After you are satisfied with your rod layout, you are ready to drill your holes. If tying back through wales, your holes should be centered on the outer vertical face as shown. 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.

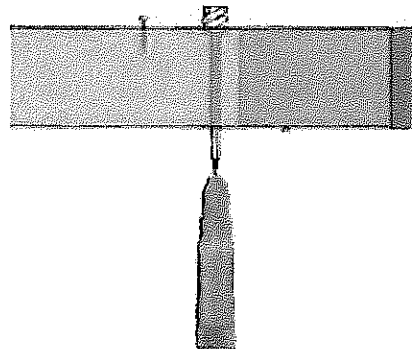
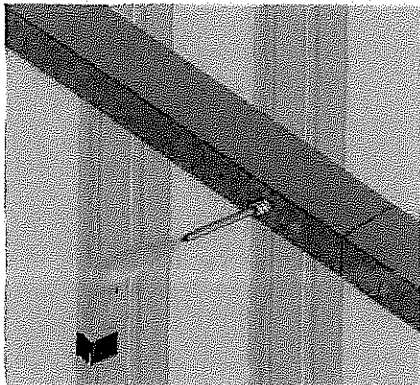


You will have to drill through different materials in this process with as many as three material transitions. This can be very harsh on the drill operator if done in the field. For instance, when drilling through rigid aluminum wales, as soon as the relatively soft plastic is penetrated, it tends to 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.

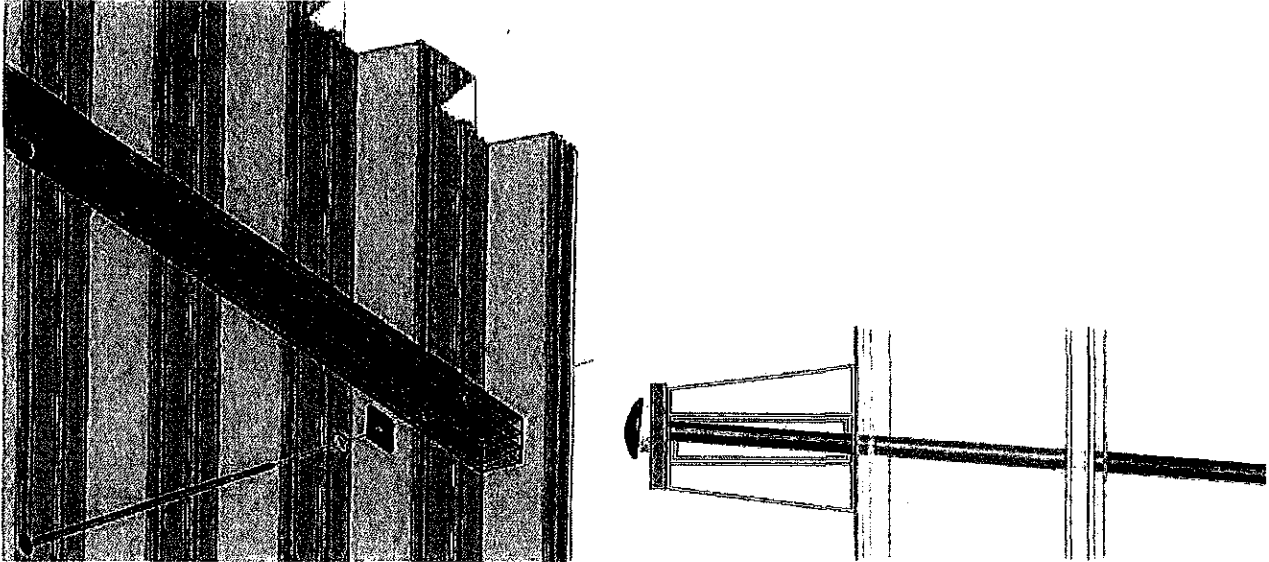
It is important that you not drill through the inner web sections of an ShoreGuard or UltraComposite wale or their Inserts. Limit all drilling to vertical faces only. If you drill through any horizontal sections, the strength of the beam is weakened. It is a good idea to penetrate green areas only, and 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.



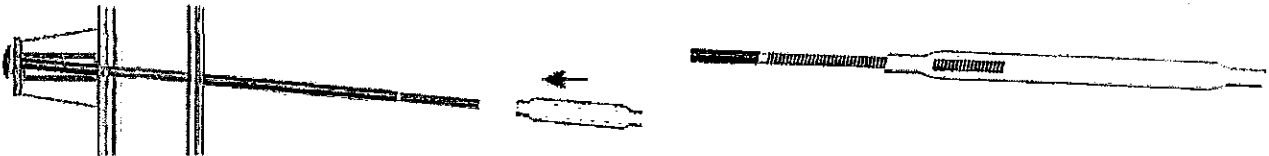
Most designs will call for you to angle your tie rod with a slight downward slope through the wale or cap, which will allow for a deep anchor. Because TimberGuard, like wood, is relatively soft and has a pretty homogeneous cross section, there is little worry about point loading and structural damage 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 $\frac{3}{4}$ " diameter ShoreGuard Rod, tied back through the wale, with one ShoreGuard beveled washer and one ShoreGuard plate washer.



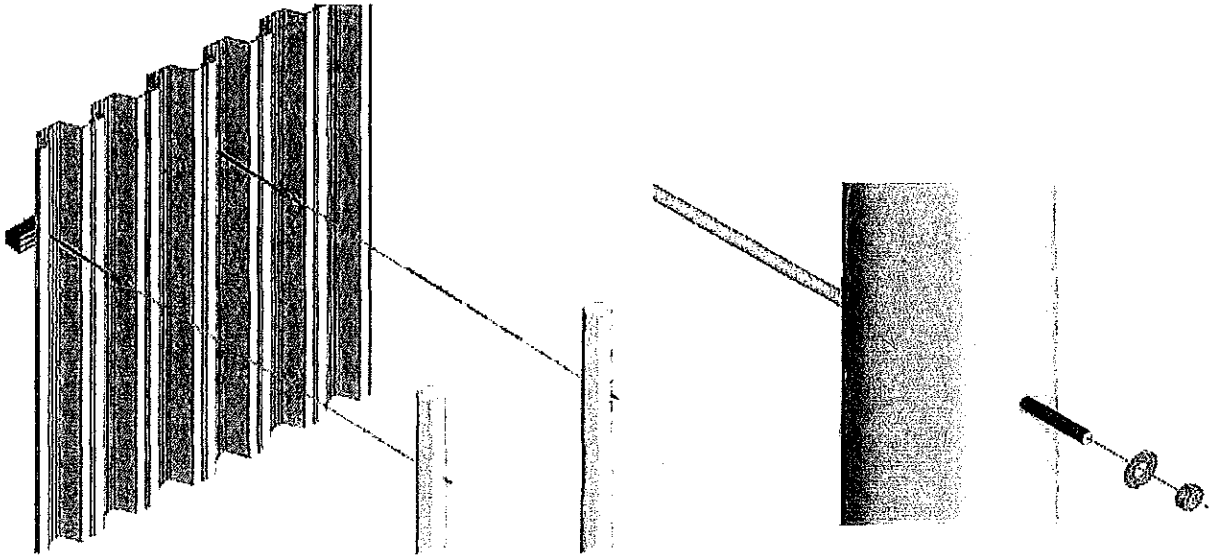
Screw the appropriately threaded end of the included turnbuckle onto the threads of the coated ShoreGuard rod. The coated rod section is reverse-threaded to allow your tie rod system to be tightened with the turnbuckle after assembly.



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:

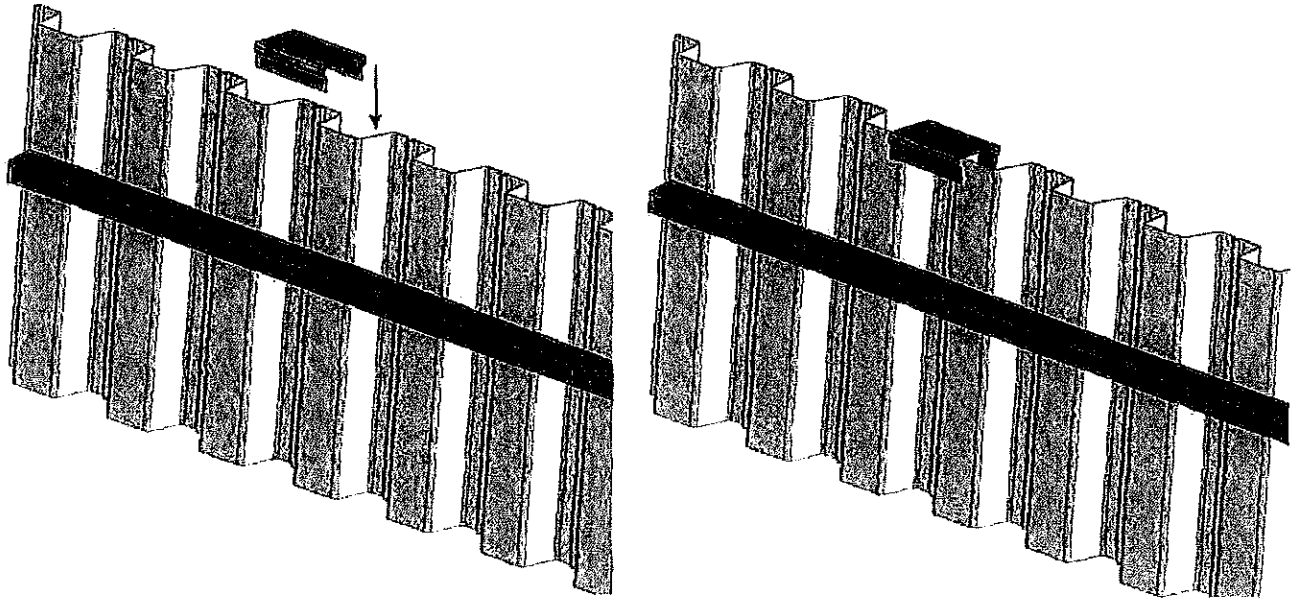
- Drill with a 3/8" bit for drilling bolt holes through aluminum and wall material
- 9/16" socket and/or wrench for tightening nuts and bolts
- Chop saw or any mitering saw that can accommodate the dimensions of the cap
- Blades appropriate for cutting the aluminum cap and inserts are required
- Measuring and leveling devices for proper cap positioning
- Aluminum Welder, if you will be making non-standard turns

INSTALLATION

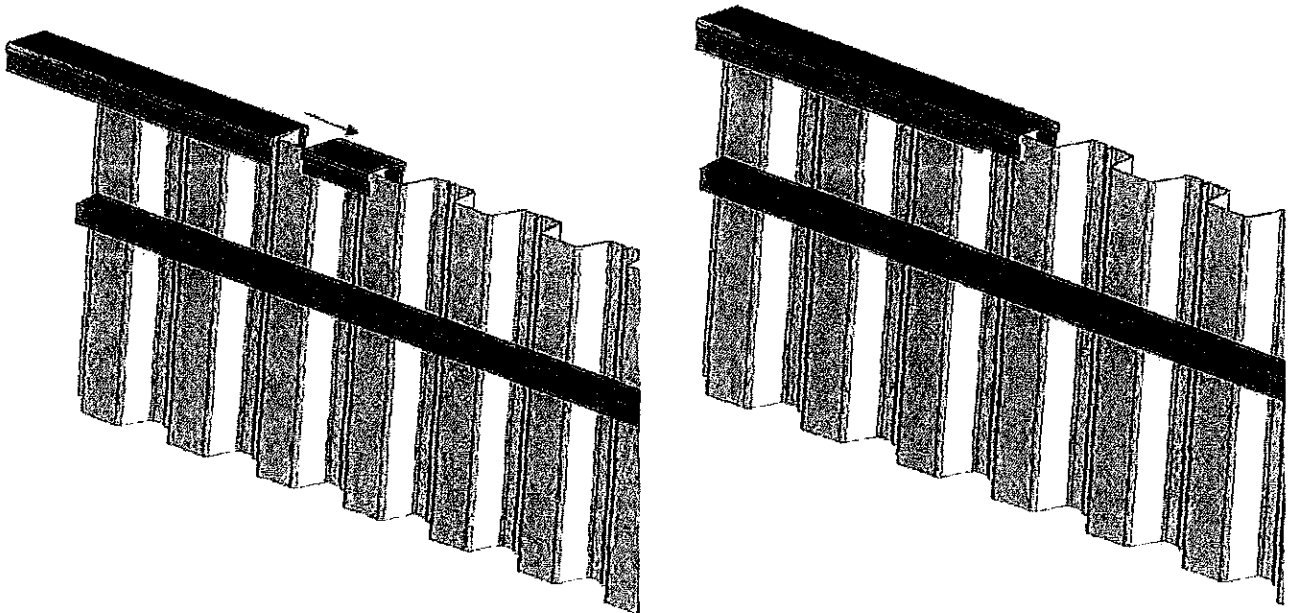
ATTACHING YOUR SHOREGUARD CAP

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.

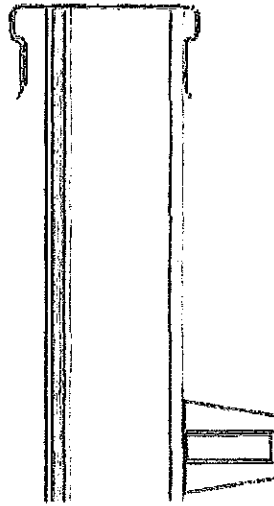


Next, slide a ShoreGuard Cap section onto the insert. The cap acts like a roof on your wall, so you want to make sure that no wall is left exposed underneath the outside end of your cap.

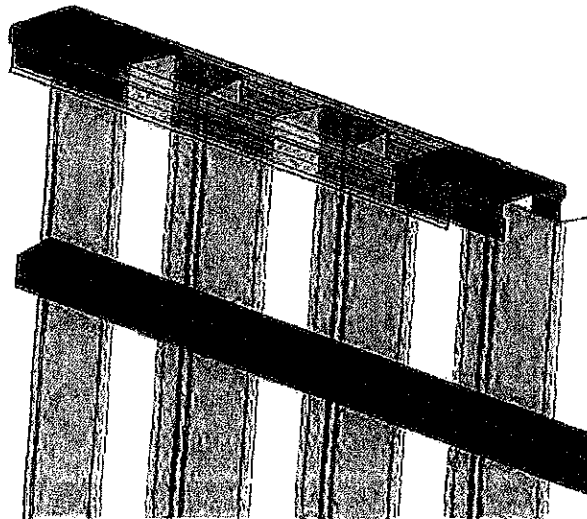


The cap is designed to be wider than the sheet piling wall that it houses. This allows for easy installation and overhanging material for increased protection. Throughout this entire capping process, you will probably want your cap's contact with the sheet piling to be on the front face (exposed side). 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 where 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.



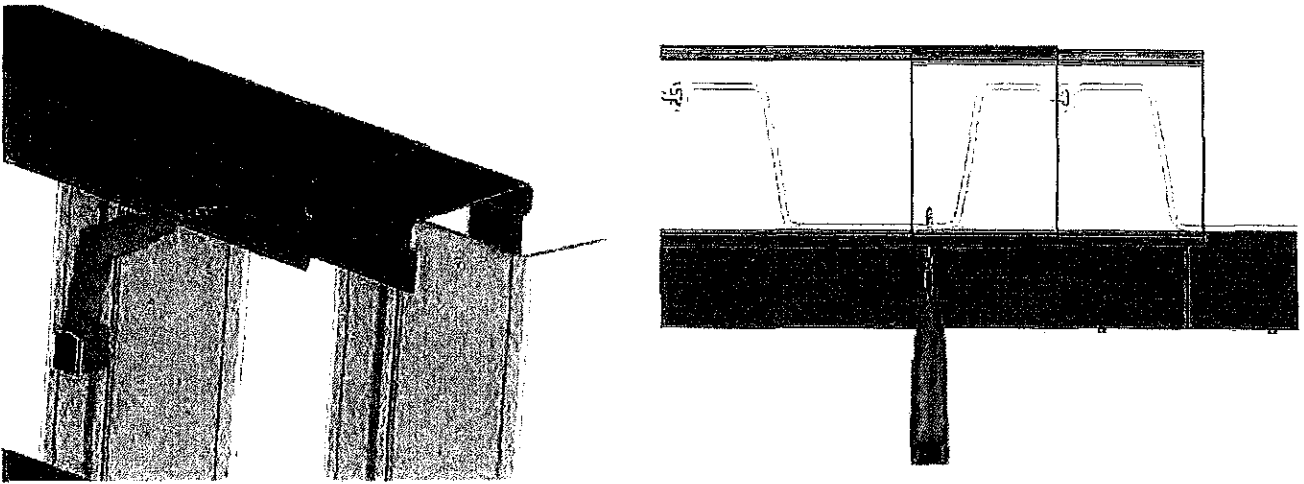
After you have made sure that your cap section is flush with the outermost end of your wall, you want to position your insert for attachment. Like the wale inserts, you want the cap insert to be half in, half out of the cap section. This will leave 9" of cap insert exposed. Before taking steps to secure 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.



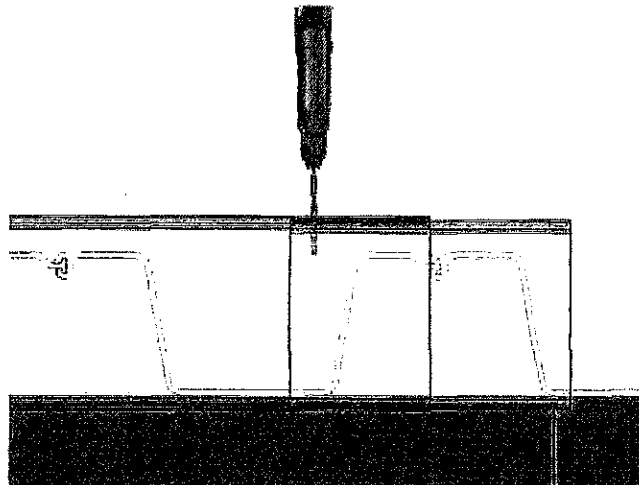
After you have secured the cap to the wall in a level position, you will need to remove the temporary leveling insert as you will be installing it at a later time.

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.

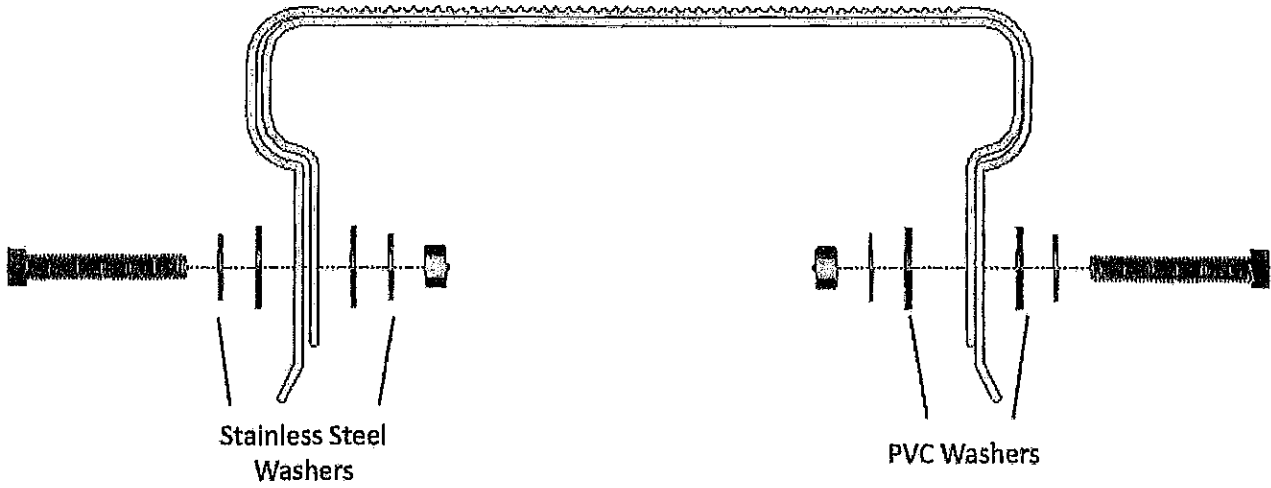


Repeat this process for the rear of the wall. In this case, however, you want to make sure that you do not drill through the wall, only the cap and insert so that they can be securely fastened, and the cap will remain flush with the front wall face.

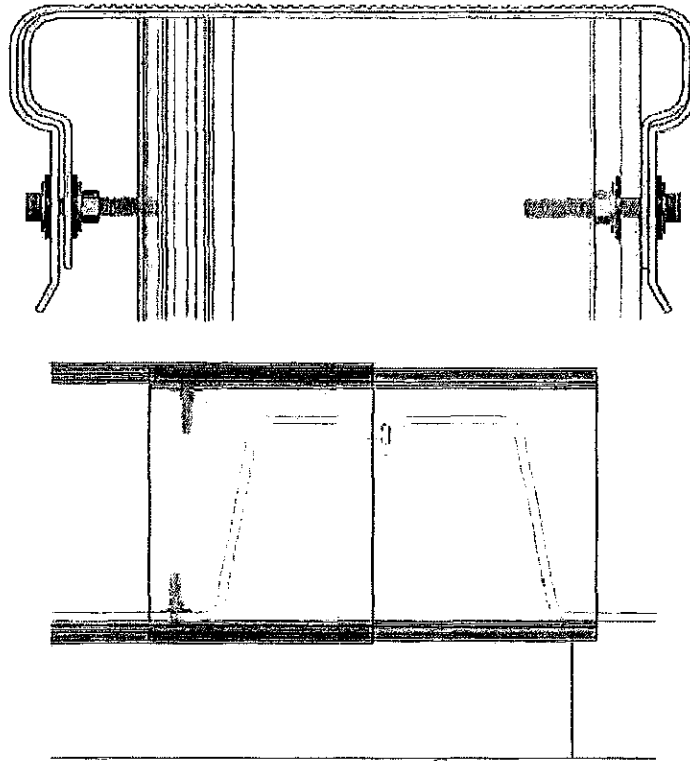


After both holes have been drilled, secure them with the cap bolts and washers, in the order shown. The PVC washers are

Included to provide a galvanic corrosion barrier between the stainless steel washers and the aluminum cap.



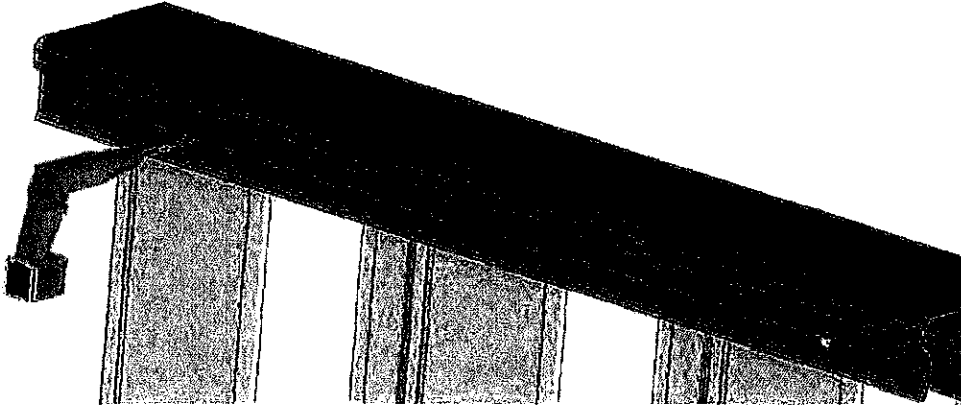
Hand-tighten the front side first to ensure good solid contact, followed by hand tightening the rear side, and then fully tightening both. In this scenario, we have chosen to sandwich the front face of the wall in as well.



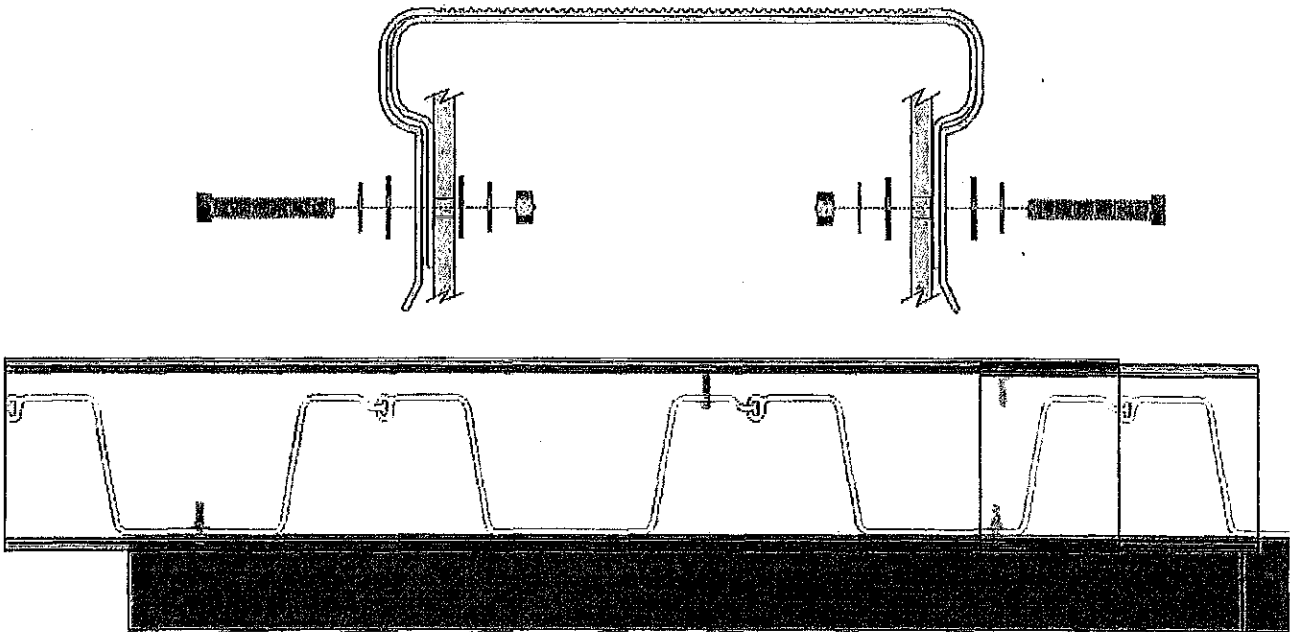
Step 3 – Attaching your first ShoreGuard Cap section to the wall

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.

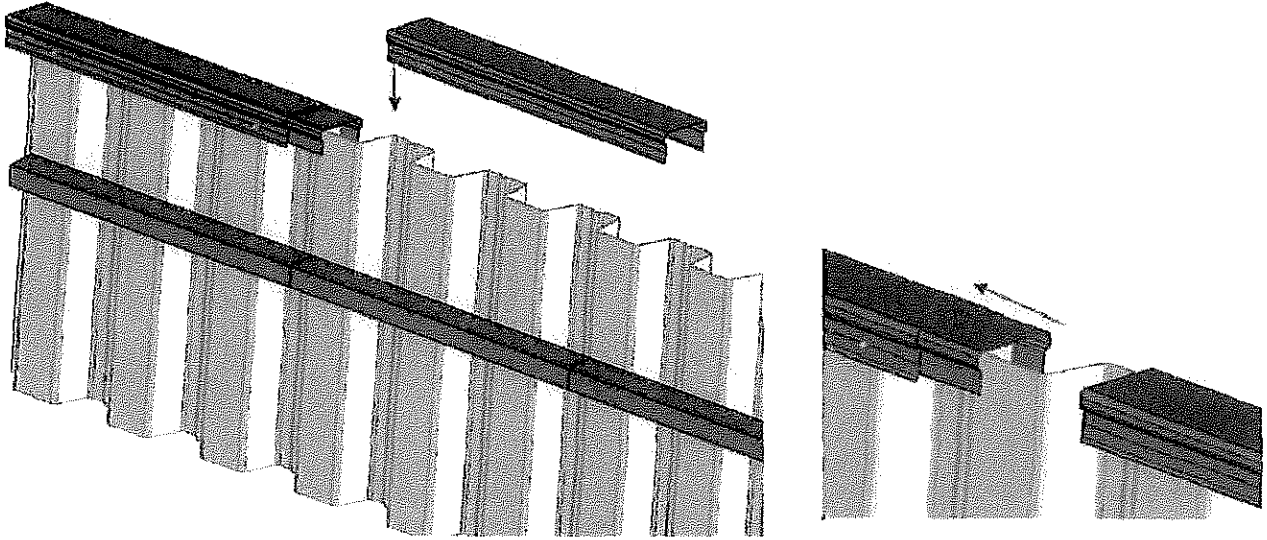


Evenly space your bolts and washers along the length of the cap, half on each side of the wall. Attach them as you did before, with the cap and wall between the washers on both sides. Hand-tighten the complete front side first to make sure that the cap is in direct contact with the front face, and then fully tighten all nuts. In cases where 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.

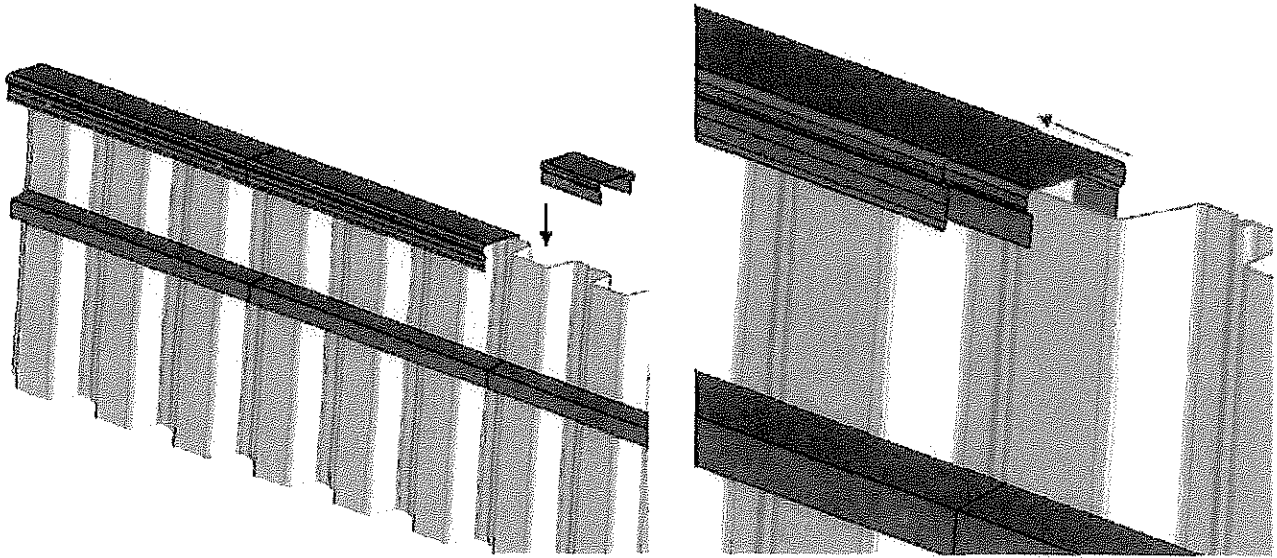


Step 4 – Installing intermediate cap sections

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.

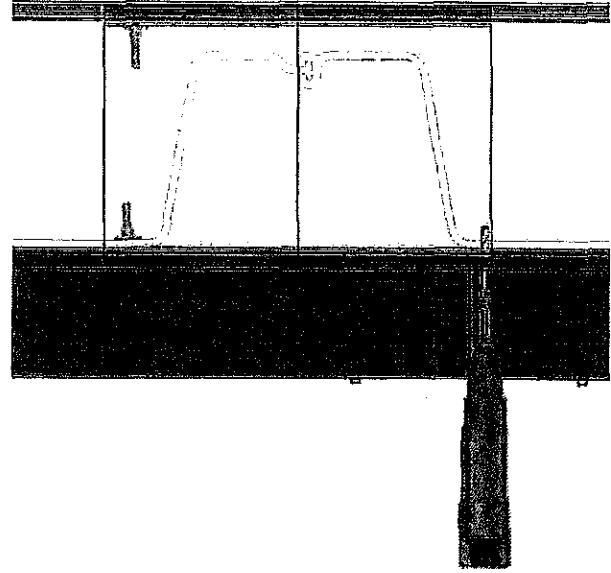
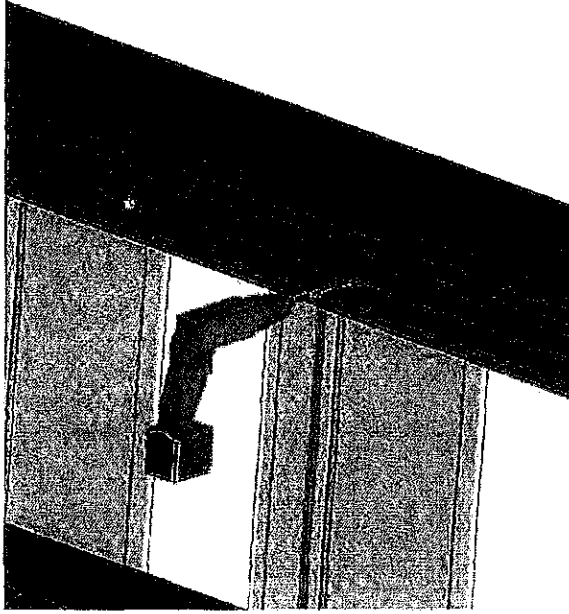


Slide your next cap insert into this cap section, half-in, half-out. This will level the cap section and leave you in a position similar to that in Step 2.

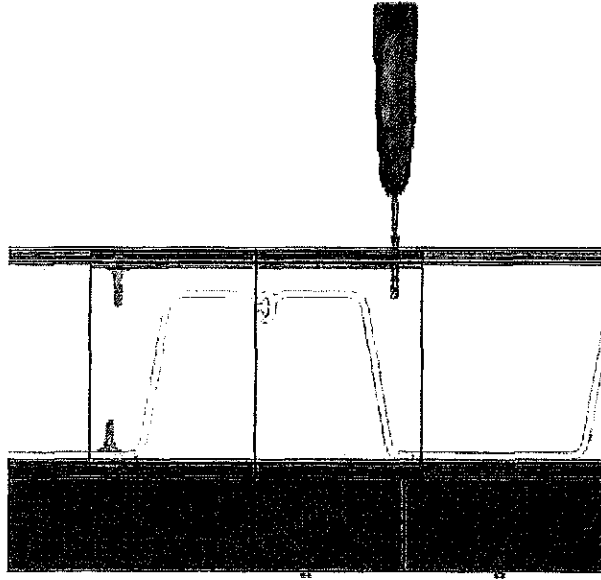


You will need to secure the insert on both sides of the cap section rather than just the leading end. You will begin attachment by securing the trailing end of the unattached cap section to its corresponding (partially installed) insert. You will use the same installation principals and methods as you 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

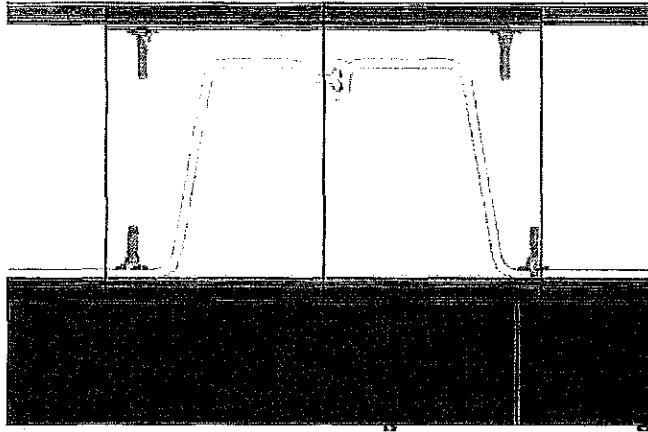
more sturdiness to your assembly, you can also drill through the wall (as shown). Remember from before, this can only be done if part of the insert falls on an outside flat face as it does in this scenario. This will be the case more often than not, depending on the type of sheet that you use. The main 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.



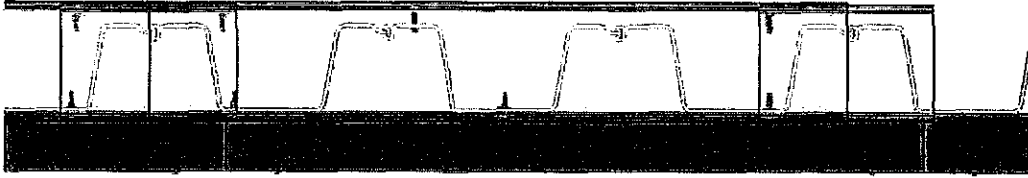
Repeat this process for the rear of the wall. Again, in this case, you want to make sure that you do not drill through the wall, only the cap and insert, so that they can be securely fastened, and the cap will remain in direct contact with the front wall face.



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.

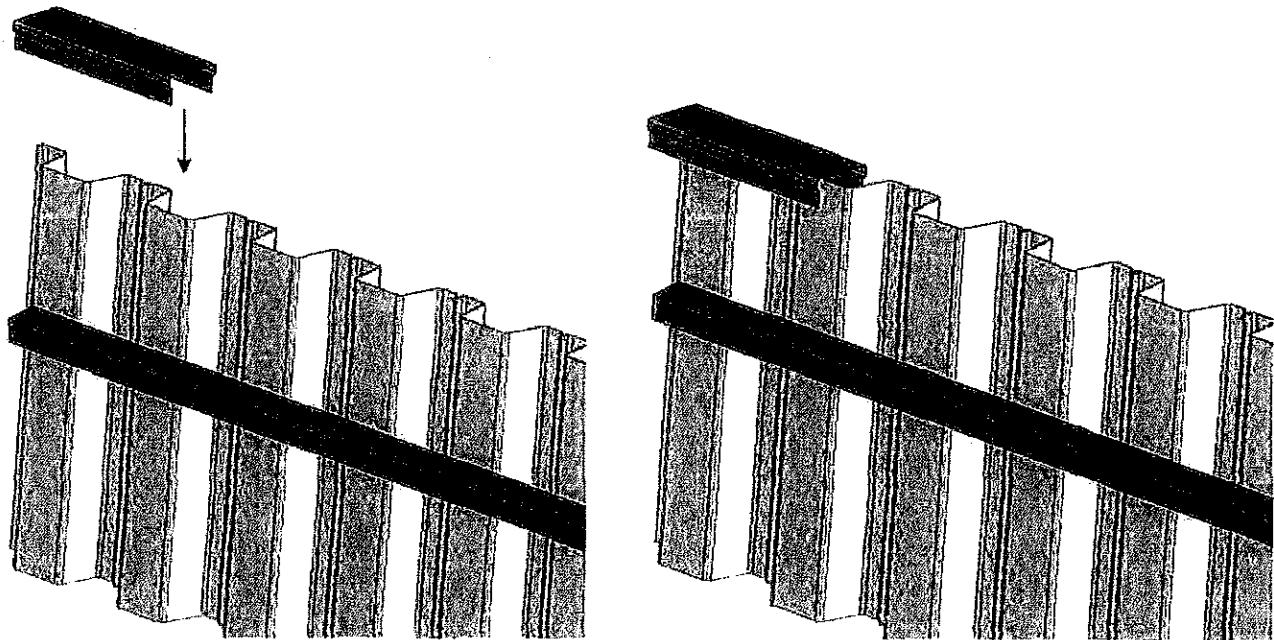


Repeat this process for all the straight runs of your wall.

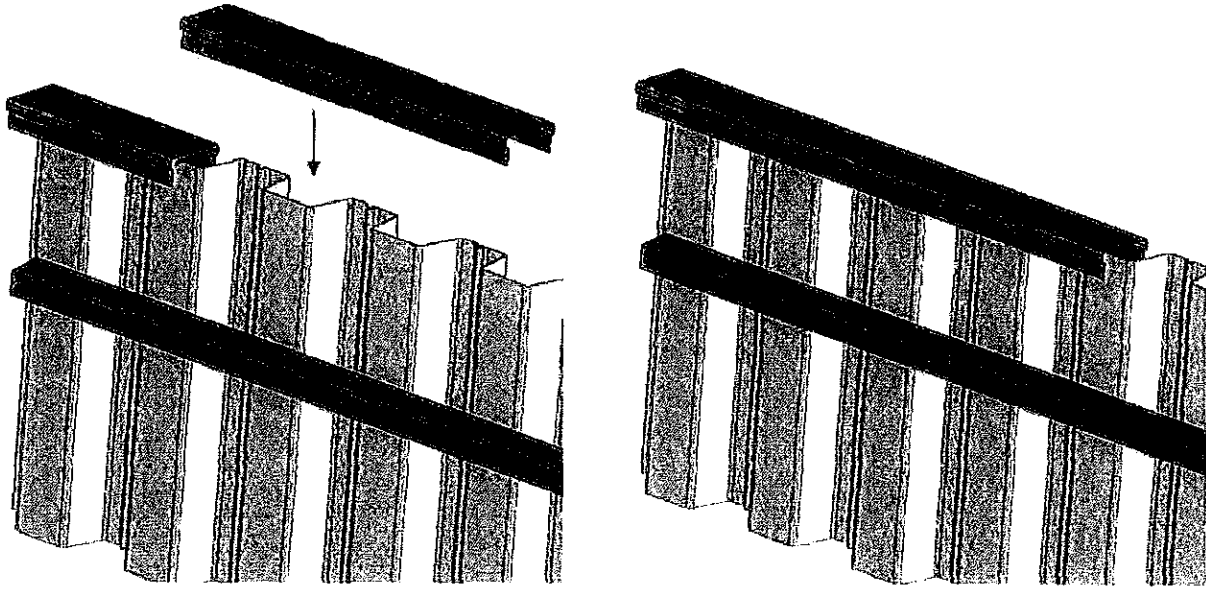
Step 5 – Modifying your installation for ShoreGuard Cap STR

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.

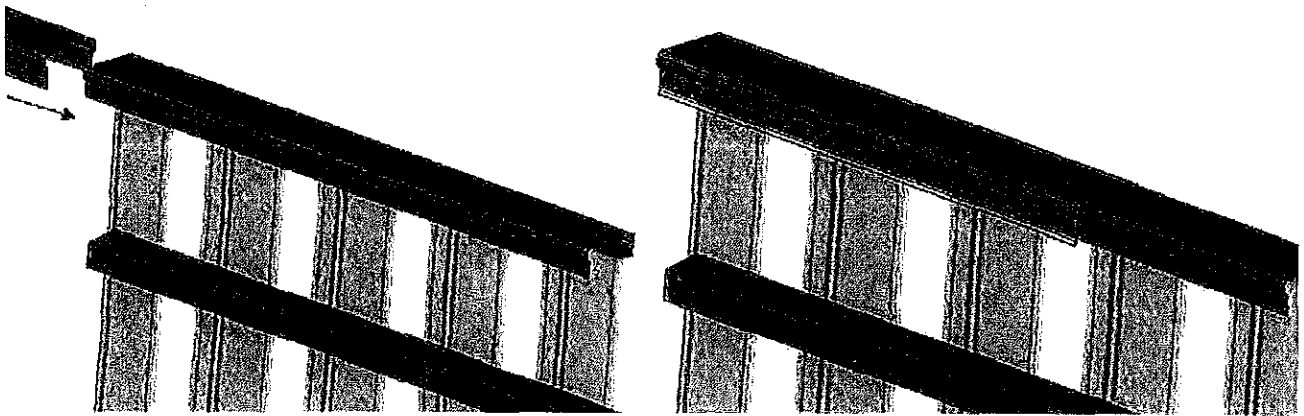
It is recommended that you cut one of your 20' structural inserts into two 10' lengths for easy installation. Place one of the 10' lengths onto your wall so that no wall is left exposed underneath the outside end of your insert. You will save the other piece for the final step of your installation.



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.

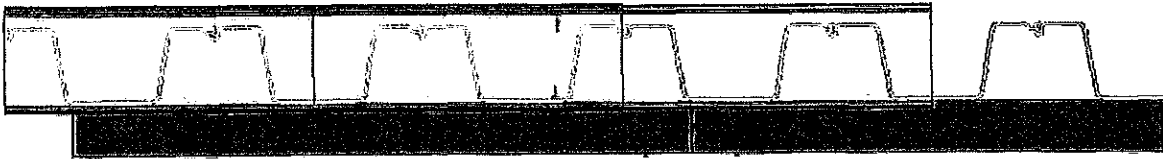


After this helpful setup, the rest of the install process is the same as with the standard package. Follow Steps 2-4 from above to complete the installation for the faces of your wall.

To summarize:



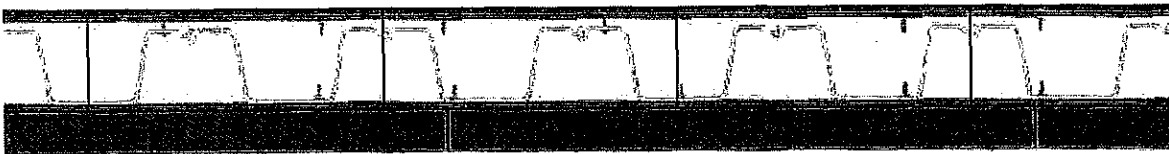
Secure the 1st cap section to the insert.



Secure the cap and insert to the wall.



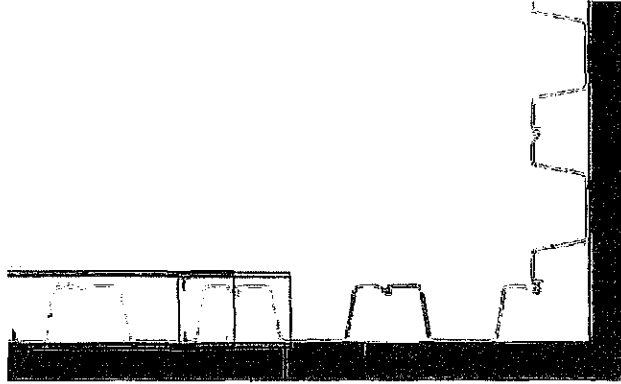
Secure the next cap section to Inserts at both ends, followed by securing the cap and insert to the wall.



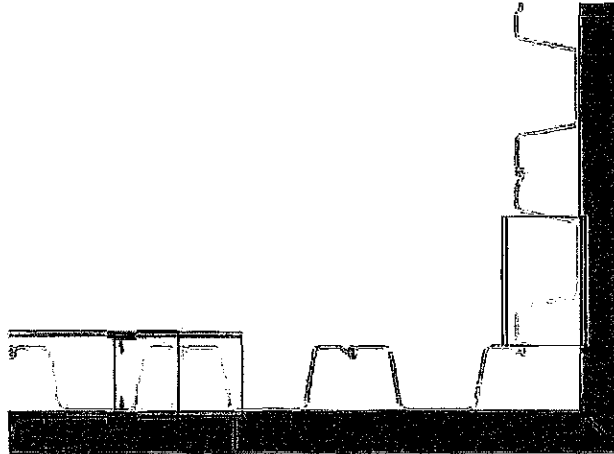
TURNING A CORNER WITH YOUR SHOREGUARD CAP

Step 1 – Preparing to turn a corner

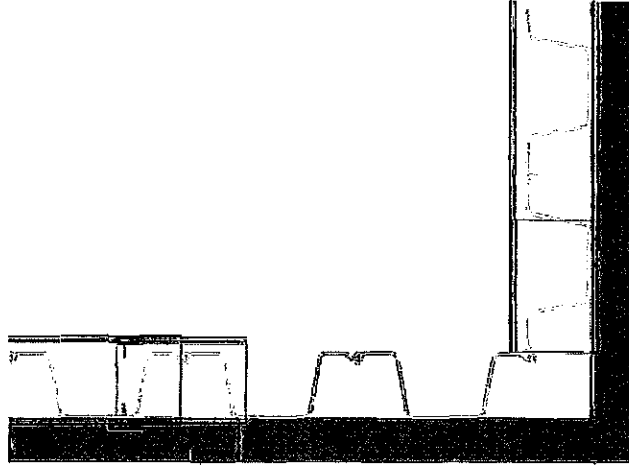
For this example we will show the standard ShoreGuard Cap package turning a 90 degree corner. This process will use a 90 degree corner insert. We also offer 45 degree corner Inserts, but the process for turning a 45 or 90 degree corner is fundamentally the same. When you reach a corner, you will want 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.



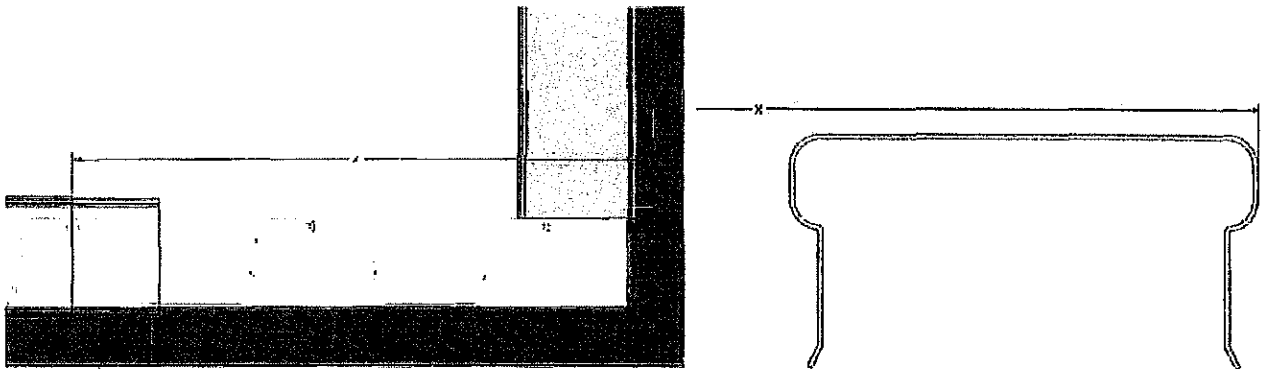
Identifying the proper location for your miter cut is very important for a quick, simple, and attractive wall. There are many ways to accomplish this, but one of the simpler ways is as follows: Place a cap insert onto the turned wall section and slide it as far into the corner as possible.



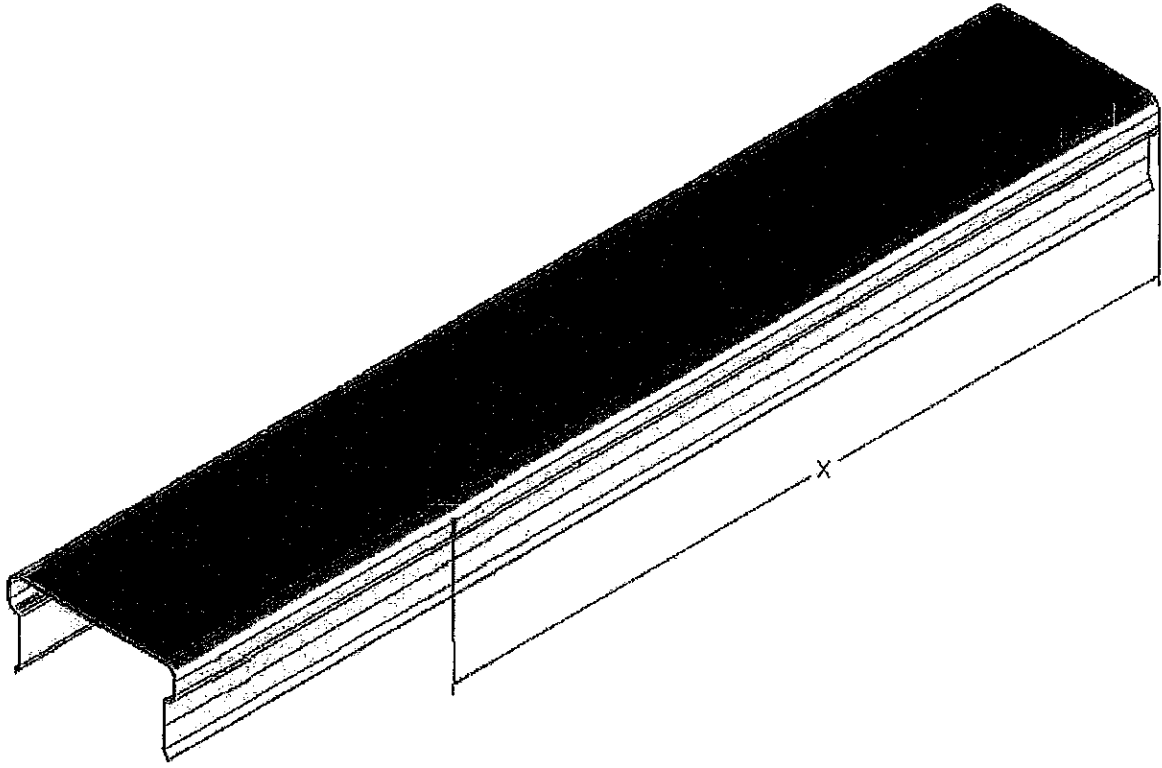
Slide a cap section onto the insert and up to the corner as well. Position these just as you would for final installation. This ensures, in this particular situation, that the cap and wall tightly sandwich the insert on the front side and are hanging over the back just as before.



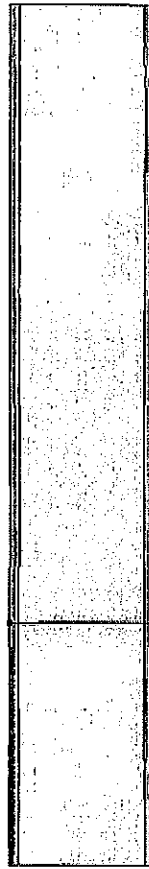
Measure the distance from the farthest point on the cap that you just positioned (this will be the upper flat section) to the last cap section on the flat of your wall.



Mark this distance out on a new cap section (shown in blue).

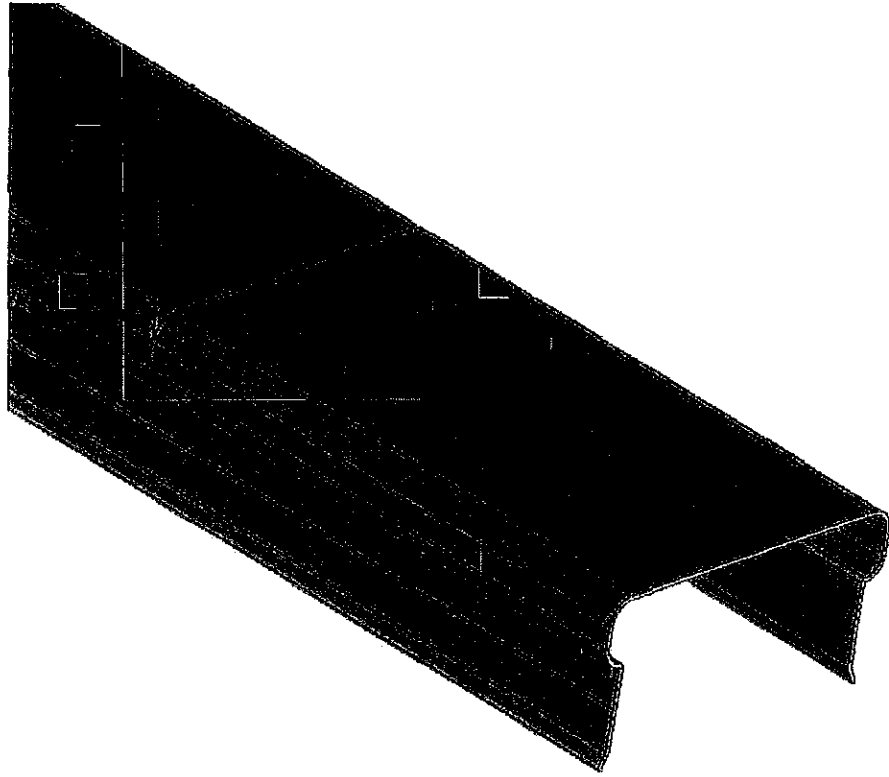


Extend this point across and around to the opposite side of your cap to get a baseline for your cut (shown in blue).

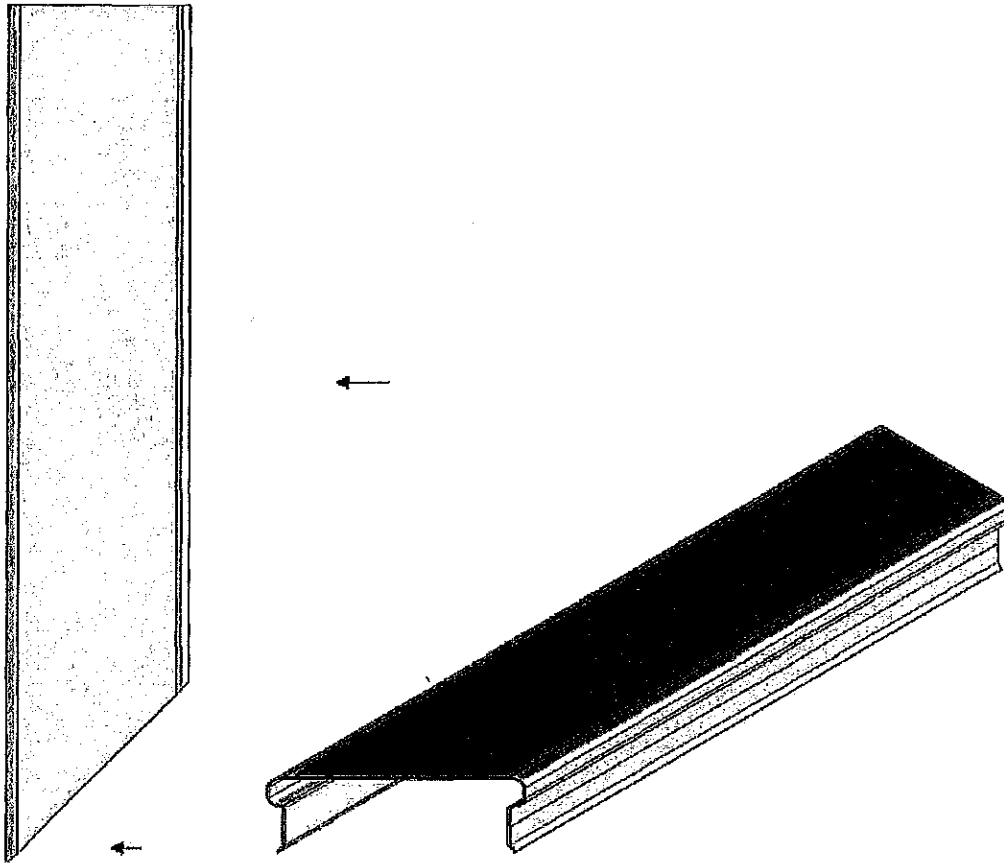


Step 2 – Making your cuts

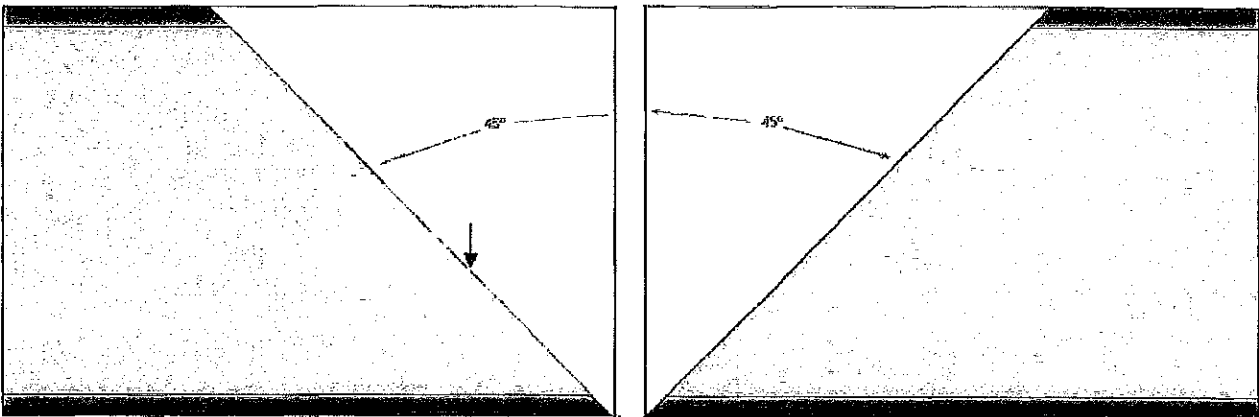
Since this will be a mitered cut, your cut angle will be $\frac{1}{2}$ of your actual turned angle. For this example of a 90 degree turn, we will cut at a 45 degree angle from base line. For a 45 degree turn, the cut would be made at 22.5 degrees and so on. For accurate cutting, you should use a chop 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.

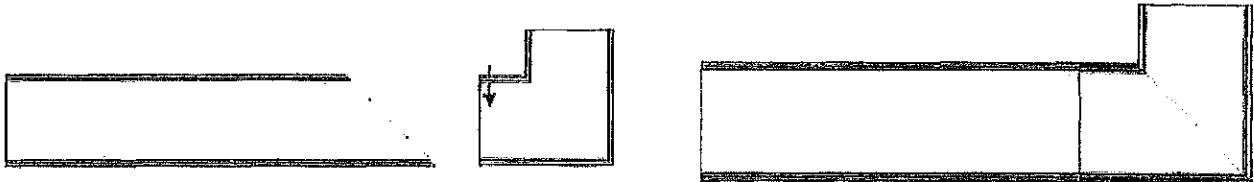


You might want to go ahead and cut your other miter corner piece as well, while you are already cutting. You should make your second corner piece from a new 20' section so that the next splice occurs as far from the corner as possible. For this cut, you will make the matching miter cut 22.5 or 45 degrees from perpendicular, respectively, for a 45 or 90 degree turn. This cut can be made from the end so that no measurement is necessary.

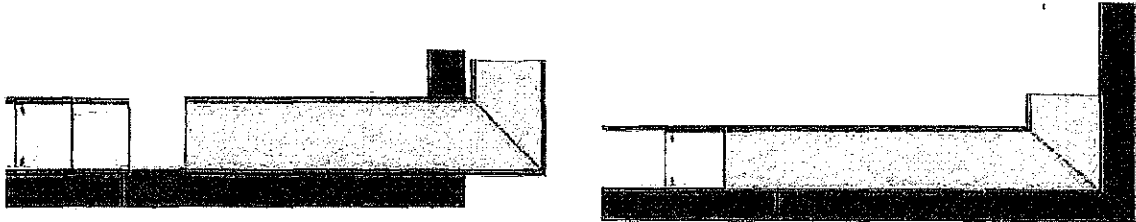


Step 3 – Installing your corner

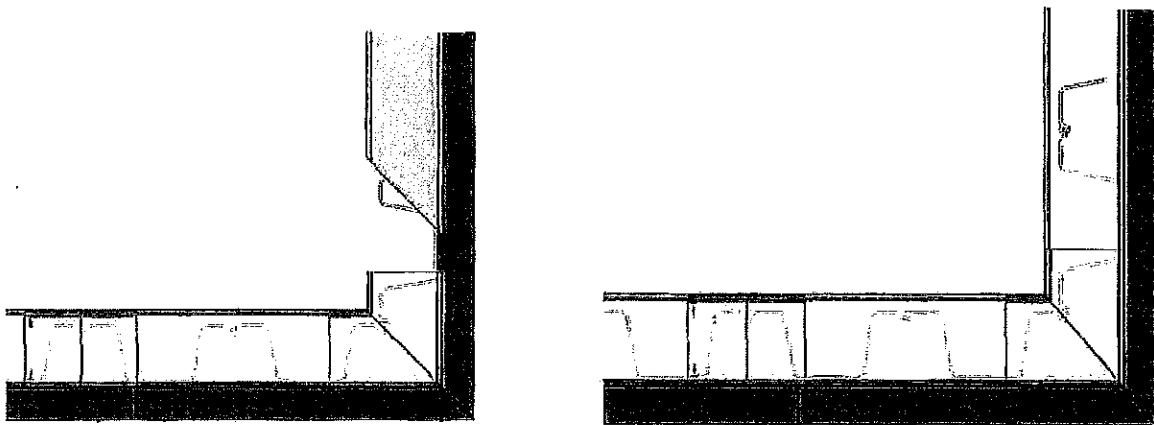
After you have made your cuts, you are ready to assemble your corner. Since there are some precision cuts used here, it might be a good idea to “mock up” your corner to ensure that everything fits together to your satisfaction before fastening. Slide your appropriate corner insert, in this case a 90 degree corner insert, into the first cap section (the one with the measured cut).



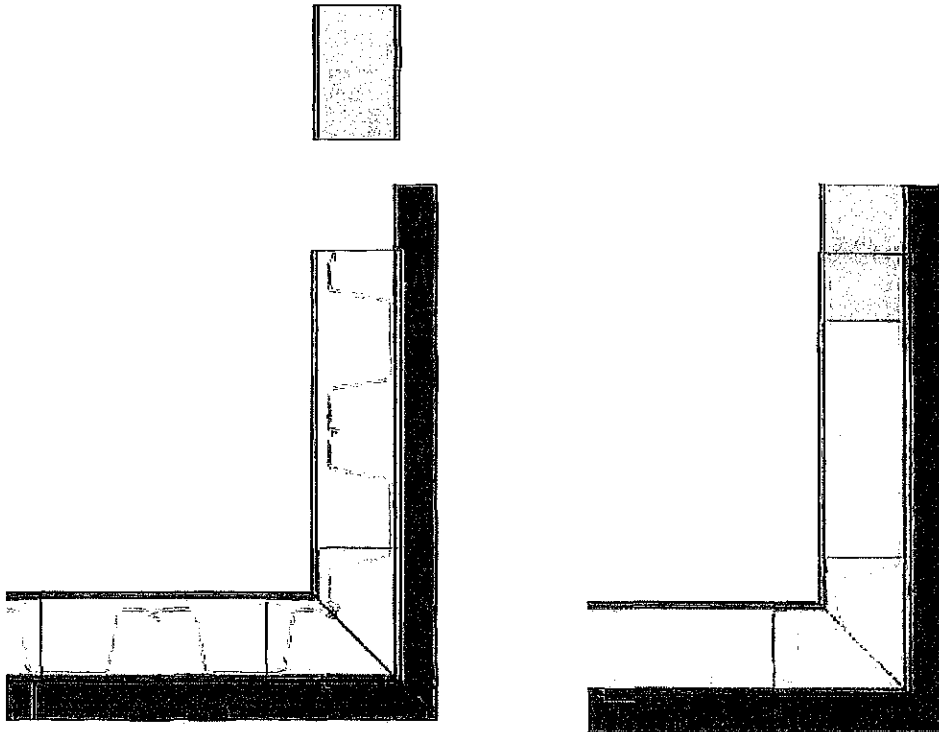
You will now need to slide this onto your last insert on the wall face while at the same time positioning the corner insert piece on the corner of the wall. You will be doing two things at once here, so depending on your situation, some force may be required.



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.



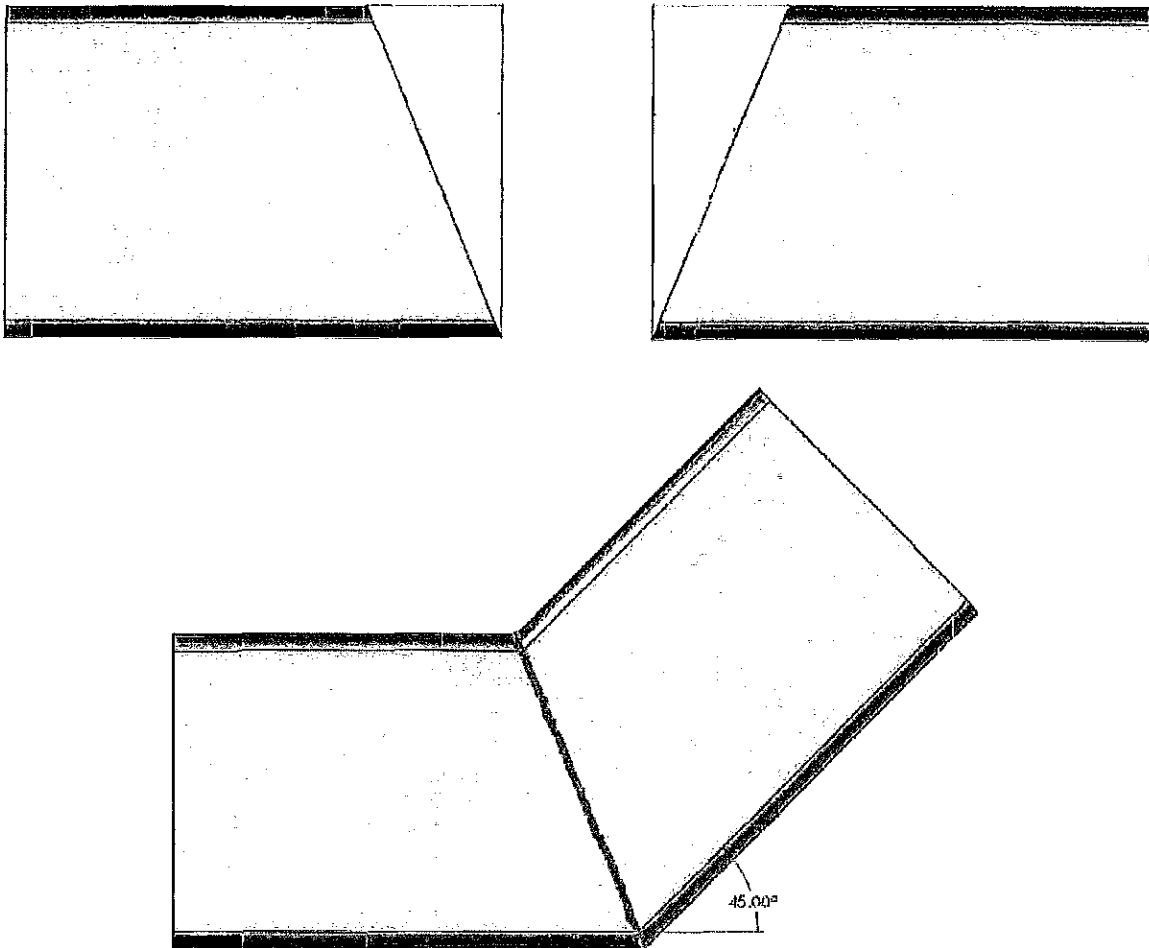
Slide in an 16" insert half-in, half-out of the last cap section. If you will be continuing your wall, this will be used to connect your next cap section. If your wall stops here, then this insert will aid in leveling your cap.



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.

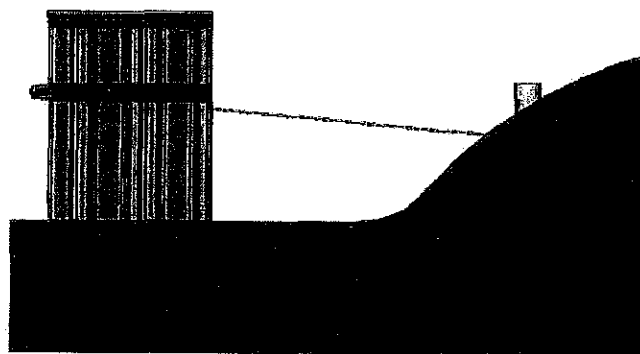
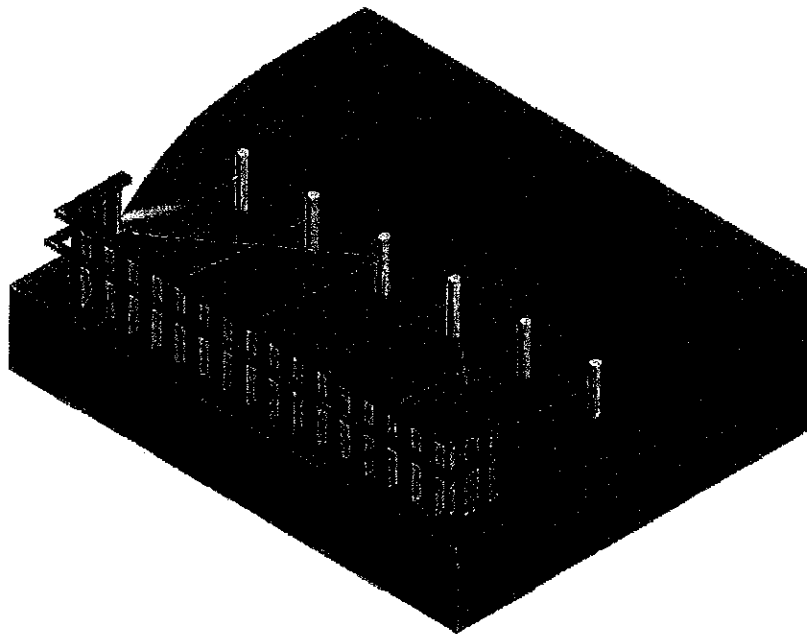
Wherever the painted or anodized coating on the cap has been damaged it is necessary to buff the area and apply a fresh layer of touch-up paint. It is also important to grind down and buff any jagged edges and apply a fresh coat of touch-up paint.

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.

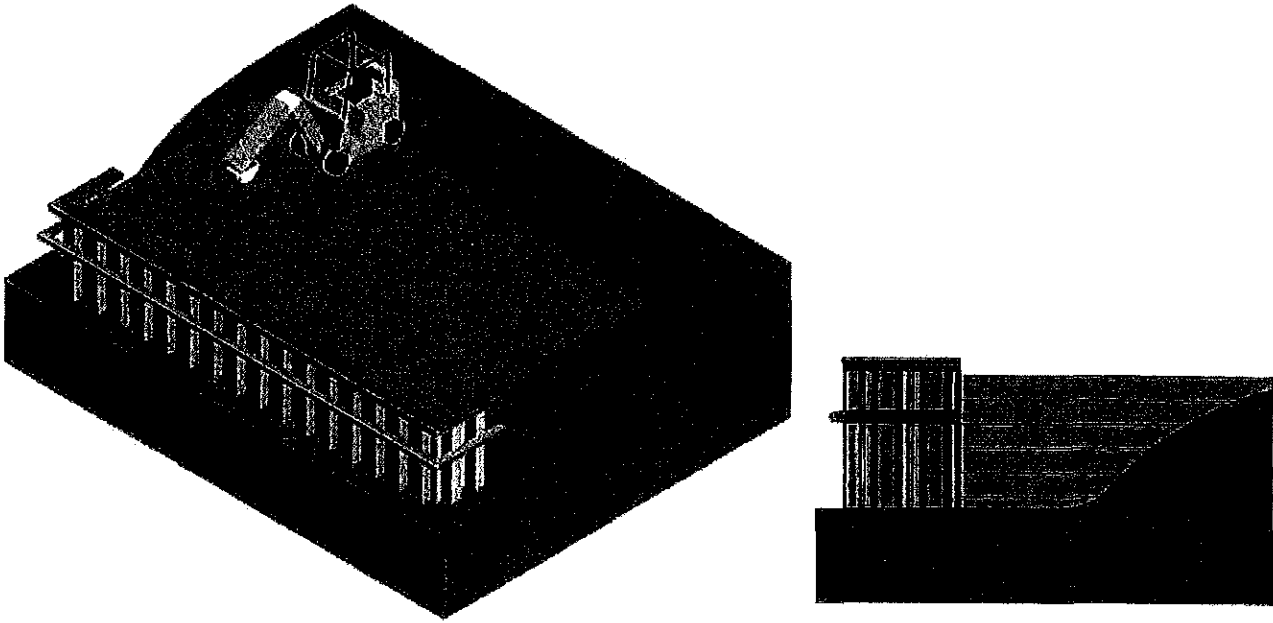
FINISHING UP

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.

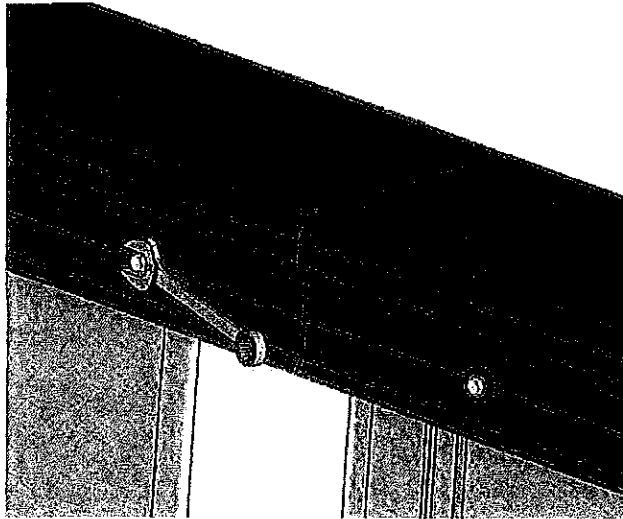


It is a good idea to backfill in lifts or layers of 1-2 ft., compacting the soil at each layer. It is very important to make sure that there are no voids in the backfill and that it has good contact with the entire surface of your wall. This is particularly important in the corners, where it may take some extra effort to ensure good backfilling and compaction.

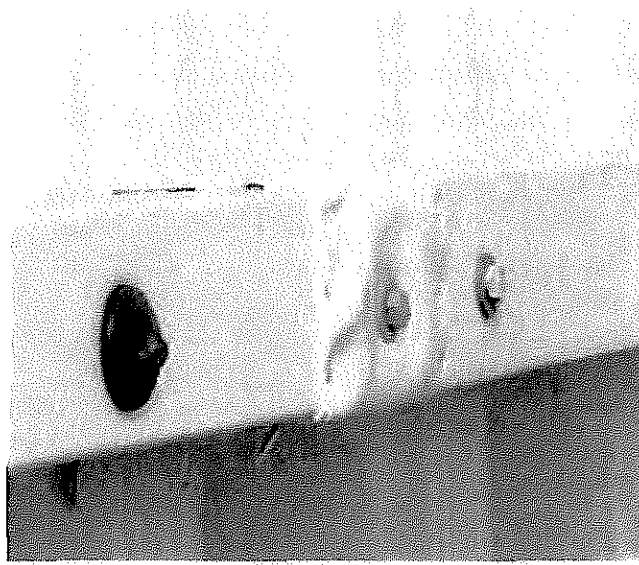


FINAL WALL TUNING

After all of your components are installed and you have backfilled, you will now want to tighten all nuts and bolts on your structure.

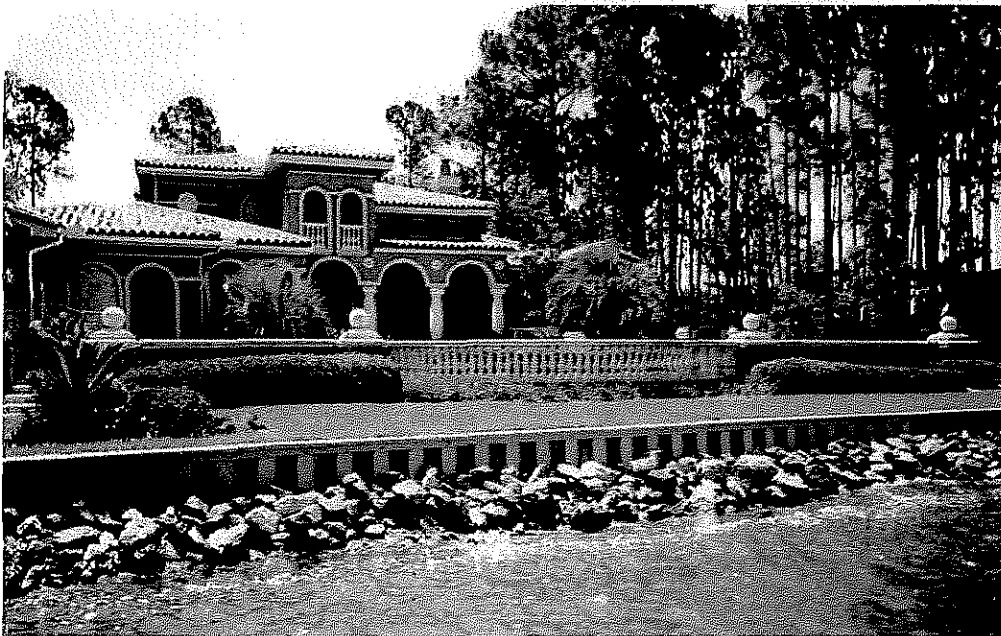


If you have used TimberGuard components and would like to wrap or seal any openings to give it a finished look, you can do this now. We have suggested that you save this step for last because it is primarily a polishing step to touch up the aesthetics of your wall. You may, however, do this at any point 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.



9020

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.

9030

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.

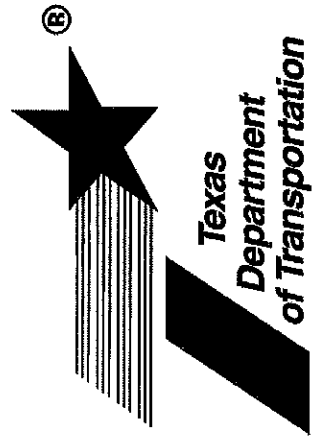
4. PAYMENT

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



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

MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	
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	
	Moisture/Density	Tex-114-E		As directed by the Engineer	
RETAINING WALL (NON-SELECT BACKFILL)	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 for each different material or notable change in material. Sample in accordance with Tex-100-E.
	As shown above for Embankment (Cuts and Fills)	Tex-110-E		Cut: each 6,000 LF	
				As shown above for Embankment (Cuts and Fills)	
RETAINING WALL (SELECT BACKFILL)	Gradation	Tex-110-E	During stockpiling operations, from completed stockpile, or project site (B)	As shown above for Embankment (Cuts and Fills)	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.
	Resistivity (A)	Tex-129-E		Each 5,000 CY	
	pH (A)	Tex-128-E		Each 5,000 CY	

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 II - EMBANKMENTS, SUBGRADES, BACKFILL AND BASE COURSES

MATERIAL OR PRODUCT	PROJECT TESTS			REMARKS	
	TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)		
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. 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 (E)	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.
	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.
TREATED SUBGRADE AND BASE COURSES	Sulfate Content	Tex-145-E	As designated by the Engineer	1 per 500 linear feet or 5,000 CY	Sample in accordance with Tex-100-E.
	Liquid Limit (A)	Tex-104-E	During stockpiling operations, from completed stockpile, or windrow (B)	Each 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.
	Plasticity Index (A)	Tex-106-E	During stockpiling operations, from completed stockpile, or windrow (B)	Each 5,000 CY	Sample in accordance with Tex-100-E.
	Gradation (A)	Tex-110-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.
	Wet Ball Mill (A)	Tex-116-E	From completed stockpile at the source (E)	Each 20,000 CY	Sample in accordance with Tex-400-A.

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 1 - EMBANKMENTS, SUBGRADES, BACKFILL AND BASE COURSES					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	
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	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.
TREATED SUBGRADE AND BASE COURSES	CEMENT		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		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. Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE 1 - EMBANKMENTS, SUBGRADES, BACKFILL AND BASE COURSES

MATERIAL OR PRODUCT		TEST FOR	TEST NUMBER	LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (F)	REMARKS
PROJECT TESTS						
TREATED SUBGRADE AND BASE COURSES	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 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.
RECLAIMED ASPHALT PAVEMENT (RAP), CRUSHED CONCRETE, and RECYCLED MATERIALS	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
	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. Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE 1 - 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	<p>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:</p> <ul style="list-style-type: none"> • 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 A - ASPHALT STABILIZED BASE (PART MIX)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	
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 BRSCQ, 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.

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 A - ASPHALT STABILIZED BASE (PLANT MIX)

MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	
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.
	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 A - 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 Site Manager 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: <ul style="list-style-type: none"> • 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. Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE 11 - SEAL COAT

MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	
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 BRSSQC, 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 BRSSQC, 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 BRSSQC, 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.
	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.
	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. Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE I - SEAL COAT

MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (C)	FREQUENCY OF SAMPLING (D)	
	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 BRQC. 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 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	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: <ul style="list-style-type: none"> 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. 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, S, CO, K, LMC (OR SS)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	
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)
	Sand Equivalent (B)	Tex-203-F		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.
FINE AGGREGATE	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)	
	Compliance with DMS-4630 (A)		1 per project, per class of concrete (For each type and brand)	Sample in accordance with Tex-320-D.	
SILICA FUME			Railroad car, truck, bags or silos		

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 11 - HYDRAULIC CEMENT CONCRETE - STRUCTURAL (CLASSES C, F, H, S, CO, K, L, MC, OF, SS)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	
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 I - HYDRAULIC CEMENT CONCRETE - STRUCTURAL (CLASSES C, F, H, S, CO, K, LMC, or SS)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (D)	FREQUENCY OF SAMPLING (E)	
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.
	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. <ul style="list-style-type: none"> • 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			
CONCRETE	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 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	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: <ul style="list-style-type: none"> • 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 (ASSES A, B, or E)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING (B)	FREQUENCY OF SAMPLING (C)	
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 Site Manager 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: <ul style="list-style-type: none"> 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 X - HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes P, or HES)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	
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 ASTM&P for testing prior to use in accordance with Tex-499-A.
	5-Cycle Magnesium Sulfate Soundness (A)	Tex-411-A		Sample in accordance with Tex-400-A. (C)	
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		Each 20,000 CY of concrete (each source)	Sample in accordance with Tex-400-A.
	Deleterious Material (B)	Tex-413-A		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 ASTM&P for testing prior to use in accordance with Tex-499-A.
MIX DESIGN	Acid Insoluble (A)	Tex-612-J	At source, if not approved	Min. 1 design, per class, per source	Sample in accordance with Tex-400-A. (C)
	Compliance with the Standard Specifications Item 421.4.A				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 ASTM&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)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	
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)

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, OTHES)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OR TIME OF SAMPLING	FREQUENCY OF SAMPLING (D)	
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		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. <ul style="list-style-type: none"> • 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	At time and location strength specimens are made	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.

Testing frequency may need to be increased for high material variability or when test results approach specification limits.

TABLE 1 - 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, 343, 344, 345, 347 and 348)
 (All testing noted in table may be waived for exempt production as defined by Specification.)

MATERIAL OR PRODUCT	PROJECT TESTS			REMARKS
	TEST FOR	TEST NUMBER	LOCATION (Per Design)	
COARSE AGGREGATE	L. A. Abrasion (A)	Tex-410-A	Stockpile (B)	Verify the published value of the source, as listed in the current Material Producer list for BRSCQ, 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		
	Micro Deval	Tex-461-A		
COMBINED AGGREGATE	Sand Equivalent	Tex-203-F	Stockpiles, hot bins or feeder belts	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	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)	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.

		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.	
	Void 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				Sample in accordance with Tex-222-F. Unless waived by the Engineer.	
	Indirect Tensile Strength - Dry	Tex-226-F		1 per project			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	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 V - ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347 and 348) All testing as noted in Table V may be waived for exempt production as defined by Specification					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION	FREQUENCY (Per Design)	
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.
	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.
ROADWAY	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)**

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 BRSCQ, 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			
COMBINED AGGREGATE	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 BRSCQ, 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. Site Manager Quality Monitoring test documentation is accomplished by attaching an approved mix design.
	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 VI - ASPHALT CONCRETE PAVEMENT (Items 354) (Refer to DMS-9210, Limestone Rock Asphalt (LRA) for testing requirements for Item 330)					
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION	FREQUENCY (Per Design) (F)	
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 (Type 340)

MATERIAL OR PRODUCT	PROJECT TESTS			REMARKS	
	TEST FOR	TEST NUMBER	LOCATION		
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 BRSCQ, 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	1 per project, per source		
	Surface Aggregate Classification (A)	Tex-499-A	1 per project, per source		
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)

MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION	FREQUENCY	
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.
	Air Voids (A)	Tex-207-F	Selected by the Engineer (D)	1 per day (2 Cores)	Sample in accordance with Tex-222-F.
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.
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)

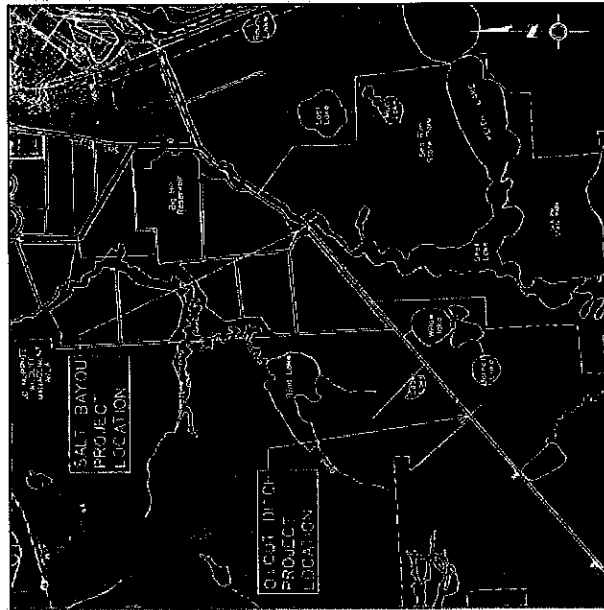
MATERIAL OR PRODUCT	TEST FOR	TEST NUMBER	PROJECT TESTS		REMARKS
			LOCATION OF SAMPLING	FREQUENCY (Per Design)	
AGGREGATE	5-Cycle Magnesium Sulfate Soundness (A)	Tex-411-A		1 per project, per source	Verify the published value of the source, as listed in the current Material Producer list for BRSQC meets 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	Stockpile (B)	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)
COMBINED BLEND	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)
	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.
	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 X - 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

WALLACE R. WALSON, P.E. #44857 WALLACE R. WALSON P.E.			TITLE SHEET
DATE: 08/17/76	CLIENT: JEFFERSON COUNTY		PROJECT LOCATION: GULF INTRACOASTAL WATERWAY
LIA Engineering, Inc. 505 Cochran Street P.O. Box 11115 Fort Worth, Texas 76101 Phone: 817-338-1115	CITY: JEFFERSON COUNTY: JEFFERSON STATE: TEXAS	BEAMONT: INTRACOASTAL WATERWAY CH: 079 DRAWING: 1012 SHEET: 01	TEXAS REGISTERED ENGINEERING FIRM F-1396 APPROV.

NO. DATE	REVISION	APPROV.
		
W.A. R. WILSON, P.E. #48857 W.A. R. Wilson, P.E. DATE: 09/17/16 CLIENT: JEFFERSON COUNTY PROJECT LOCATION: GHW SIPHON CITY: BEAUMONT COUNTY: JEFFERSON STATE: TEXAS FROM: 40913181 FAX: 40913181 LJA Engineering, Inc. 300 Ocean Blvd Beaumont, Texas 77701		
TEXAS REGISTERED ENGINEERING FIRM F-1366		

SUMMARY SHEET

SALT BAYOU

ITEM NO.	DESC CODE	DESCRIPTION	UNT	QUANTITY
100	001	PREPARING ROW (DITCH)	AC	0.10
110	001	EXCAVATION (DITCH)	CY	475.00
132	001	EMBANKMENT (TY DI)	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 POLYETHYLENE PIPE (36" HDPE)	LF	32.00
618	002	HIGH DENSITY POLYETHYLENE 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	1,578.00
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=9.07' W/ STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.07' W/ STUB-OUT & FLAP GATE	EA	4.00
9020	003	SIPHON STRUCTURE (HEIGHT=6.07' W/ STUB-OUT & FLAP GATE	EA	2.00
9030	001	BREAKWATER (INSTALL)	CY	408.00
9030	002	BREAKWATER (REMOVE)	CY	110.00

OILCUT DITCH

ITEM NO.	DESC CODE	DESCRIPTION	UNT	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	1,217.00
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 POLYETHYLENE 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=9.07' W/ STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.07' W/ STUB-OUT & FLAP GATE	EA	4.00

PROJECT LOCATION: GHW SIPHON

CITY: BEAUMONT

COUNTY: JEFFERSON

STATE: TEXAS

FROM: 40913181

FAX: 40913181

LJA Engineering, Inc.

300 Ocean Blvd

Beaumont, Texas 77701

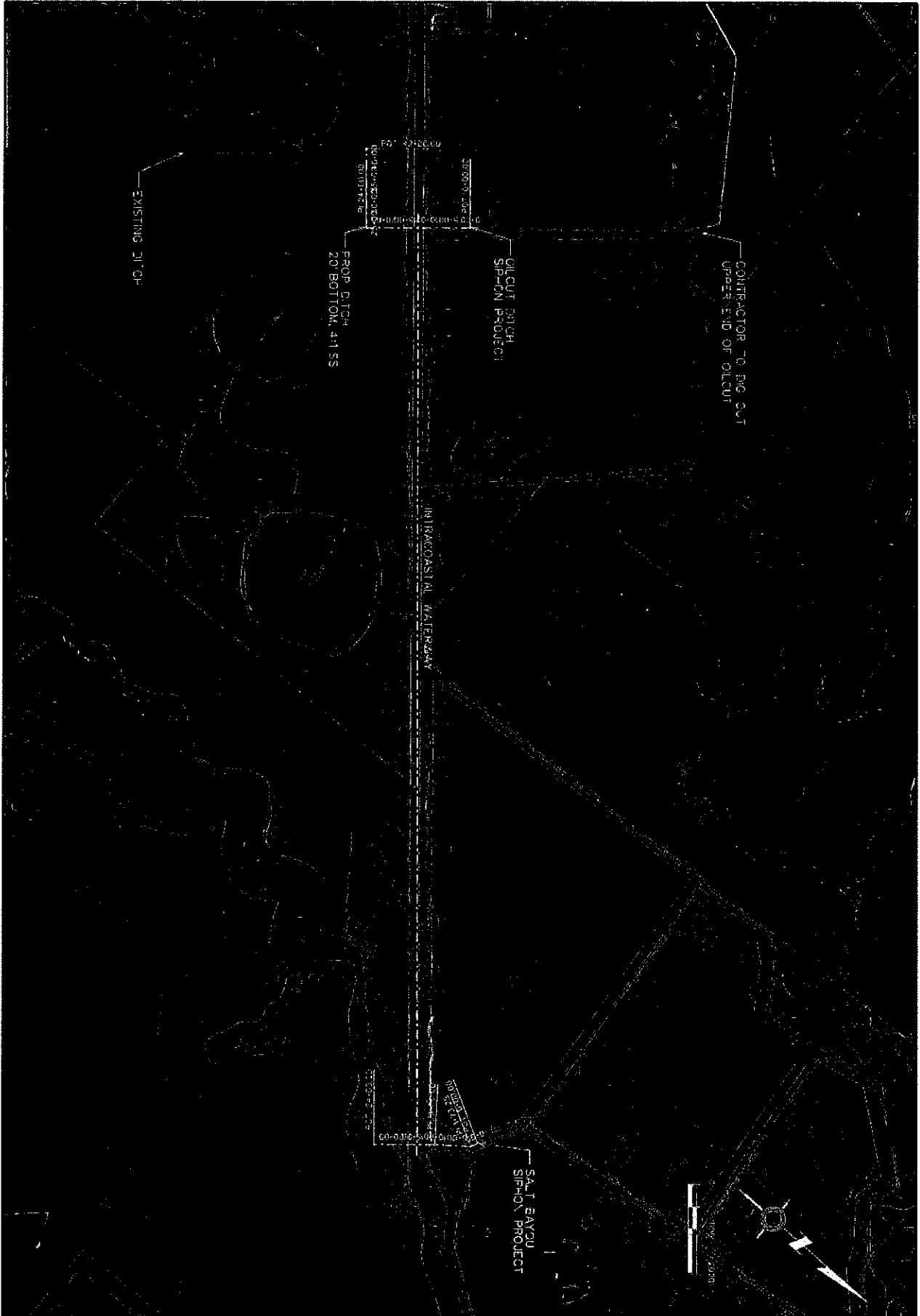
CLIENT: JEFFERSON COUNTY

SITE ADDRESS: INTRACASTAL WATERWAY

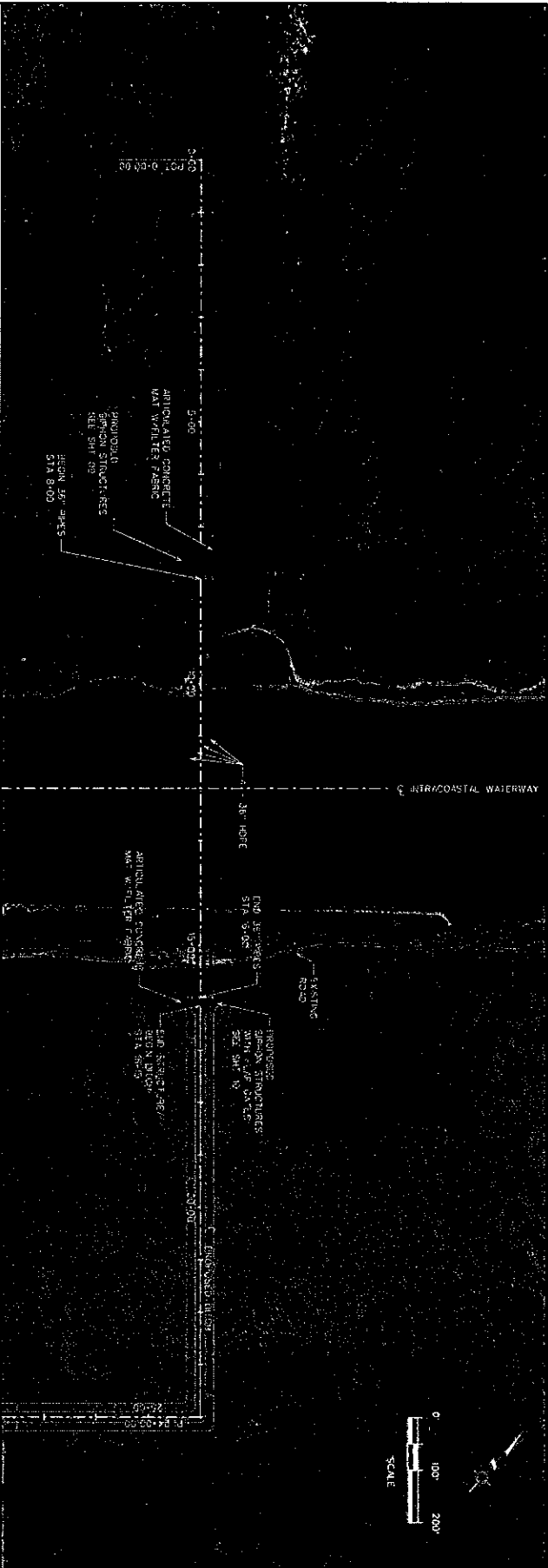
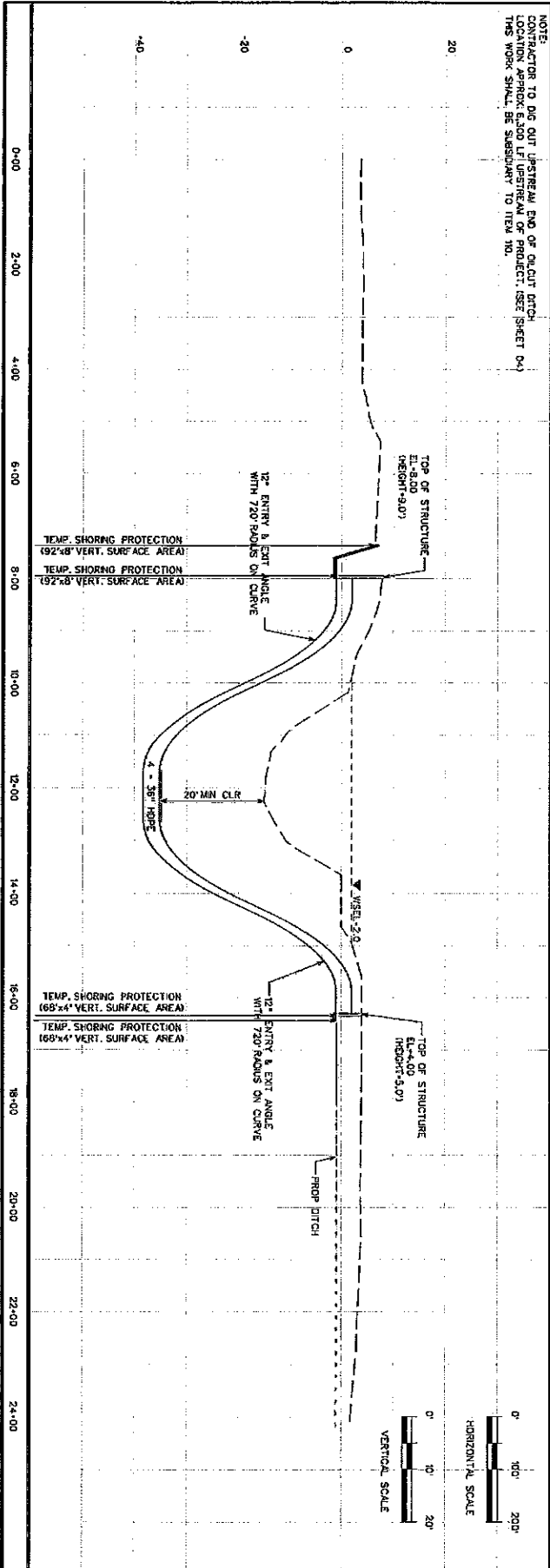
ON: 07/27/16

DR: 07/27/16

SHEET: 02



			<p>PROJECT LAYOUT</p> <p><i>Wallace R. Wilson P.E.</i></p> <p>WALLACE R. WILSON, P.E. #84857</p>		<p>LJA Engineering, Inc.</p> <p>Public Infrastructure 906 Oxford Street Beaumont, Texas 77705 Phone 409.813.1302 Fax 409.813.1918 HRH-F-1395</p>		<p>PROJECT LOCATION</p> <table border="1"> <tr> <td>CITY</td> <td>COUNTY</td> <td>STATE</td> </tr> <tr> <td>BEAUMONT</td> <td>JEFFERSON</td> <td>TEXAS</td> </tr> </table>			CITY	COUNTY	STATE	BEAUMONT	JEFFERSON	TEXAS
CITY	COUNTY	STATE													
BEAUMONT	JEFFERSON	TEXAS													
<p>NO. DATE REVISION APPROV.</p> <p>TEXAS REGISTERED ENGINEERING FIRM F-1386</p>			<p>CLIENT</p> <p>JEFFERSON COUNTY</p> <p>DATE 08/17/06</p>		<p>SITE ADDRESS: INTRACOASTAL WATERWAY</p> <table border="1"> <tr> <td>CH</td> <td>PN</td> <td>DRAWING</td> <td>SHEET</td> </tr> <tr> <td>079</td> <td>1012</td> <td></td> <td>04</td> </tr> </table>			CH	PN	DRAWING	SHEET	079	1012		04
CH	PN	DRAWING	SHEET												
079	1012		04												



NOTES:
 CONTRACTOR TO DIG OUT UPSTREAM END OF OILCUT DITCH
 LOCATION APPROX 5,300 FT UPSTREAM OF PROJECT (SEE SHEET 0-4)
 THIS WORK SHALL BE SUBSIDIARY TO ITEM 110.

NO.	DATE	REVISION	APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386			

**OILCUT DITCH
 PLAN & PROFILE**

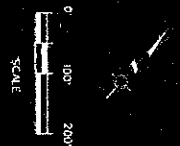
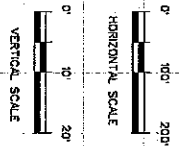
Wallace R. Wilson, P.E.
 WALLACE R. WILSON, P.E. #84857

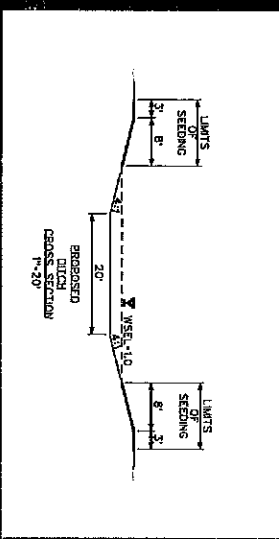
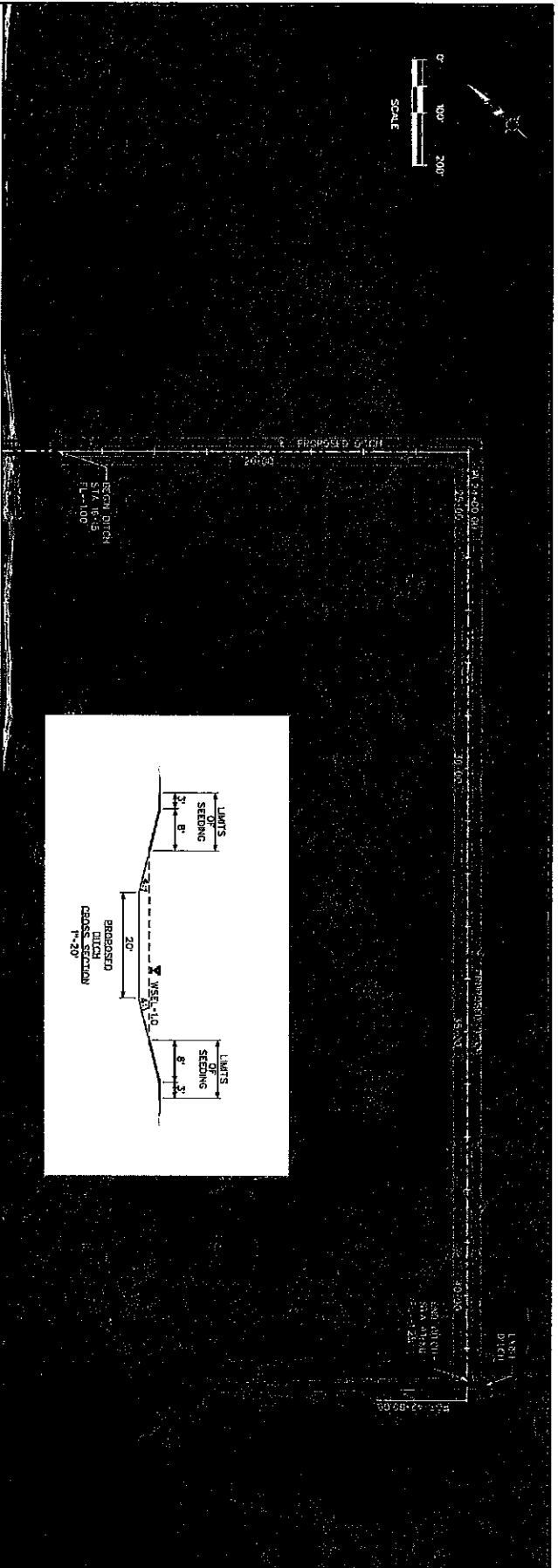
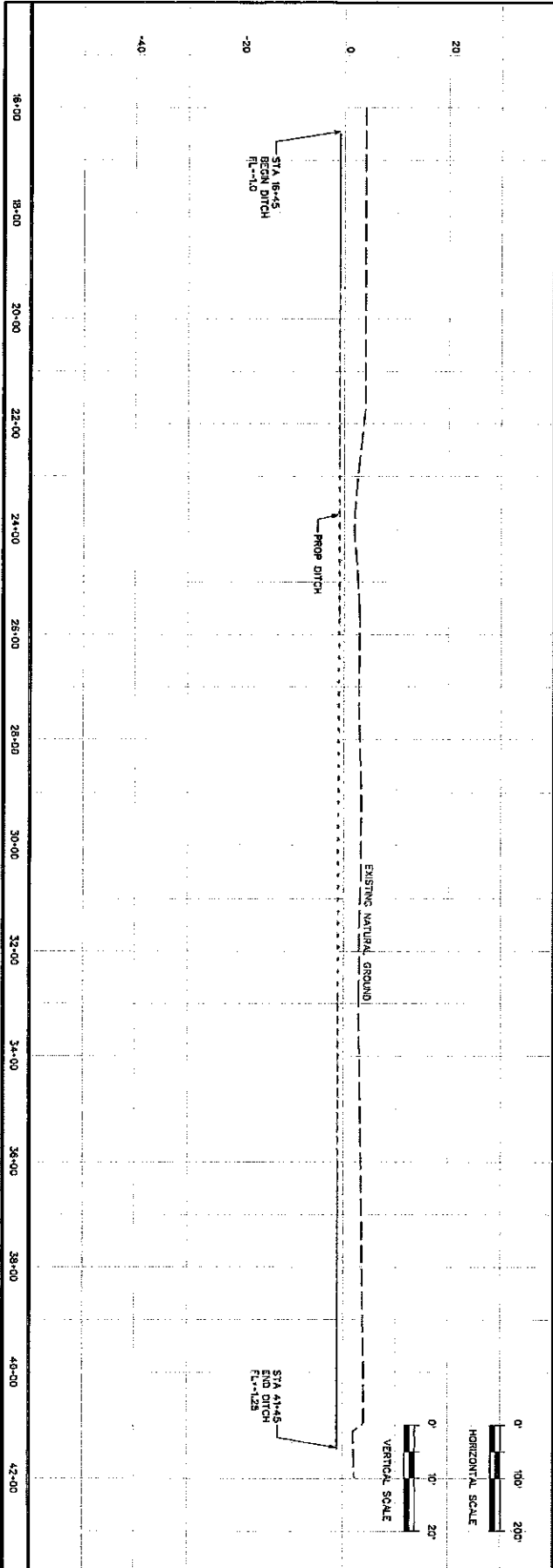
LJA Engineering, Inc.
 9504 Bay Street
 Houston, Texas 77061

Phone 409-811-1897
 Fax 409-811-1518
 FBN-F-1386

CLIENT
JEFFERSON COUNTY

PROJECT LOCATION			
CITY	COUNTY	STATE	
BEALMONT	JEFFERSON	TEXAS	
SITE ADDRESS: INTRACOASTAL WATERWAY			
CH	PN	DRAWING	SHEET
079	1012		05





NO.	DATE	REVISION	APPROV.
TEXAS REGISTERED ENGINEERING FIRM F-1386			



**OILCUT DITCH
PLAN & PROFILE**

Wallace R. Wilson, P.E.

WALLACE R. WILSON, P.E. #84887

08/17/16 DATE

LJA Engineering, Inc.
 855 Oakdale Street
 Beaumont, Texas 77701
 Phone 409.815.1887
 Fax 409.815.1919
 PEOB-F-1383

CLIENT
JEFFERSON COUNTY

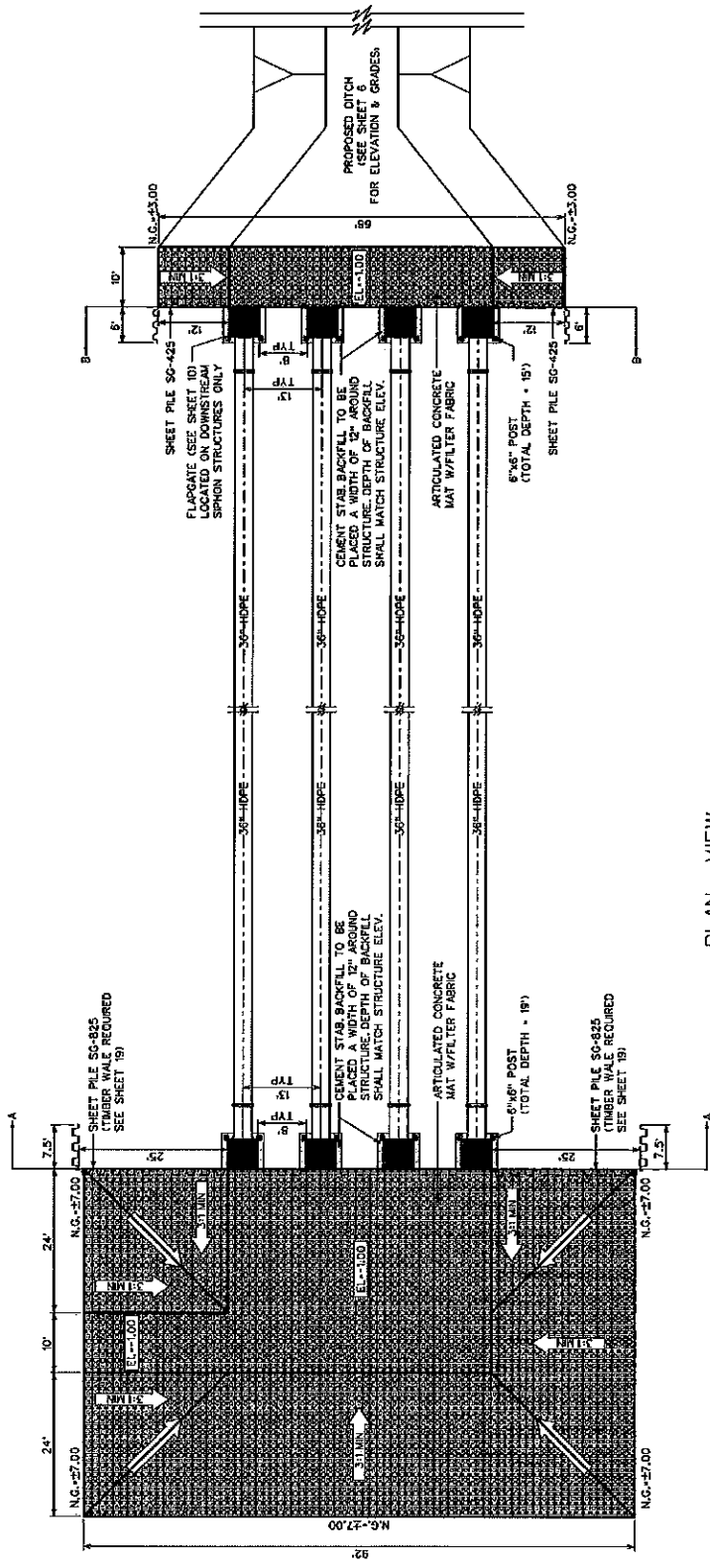
PROJECT LOCATION		
CITY	COUNTY	STATE
BEAUMONT	JEFFERSON	TEXAS
SITE ADDRESS: INTRACOSTAL WATERWAY		
CN	PN	DRAWING
079	1012	06

NO. DATE	REVISION	APPROV.	DATE

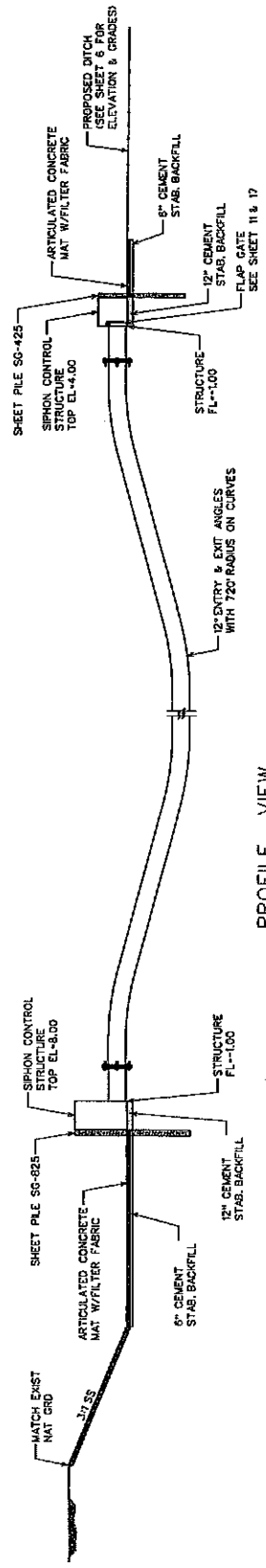


**OILCUT DITCH
SIPHON DETAIL 1**

CLIENT: *Wallace R. Watson P.E.*
 DATE: 08/17/16
 PROJECT LOCATION: GHW SYPHON
 CITY: JEFFERSON COUNTY
 COUNTY: JEFFERSON COUNTY
 STATE: TEXAS
 DRAWING SHEET: 07



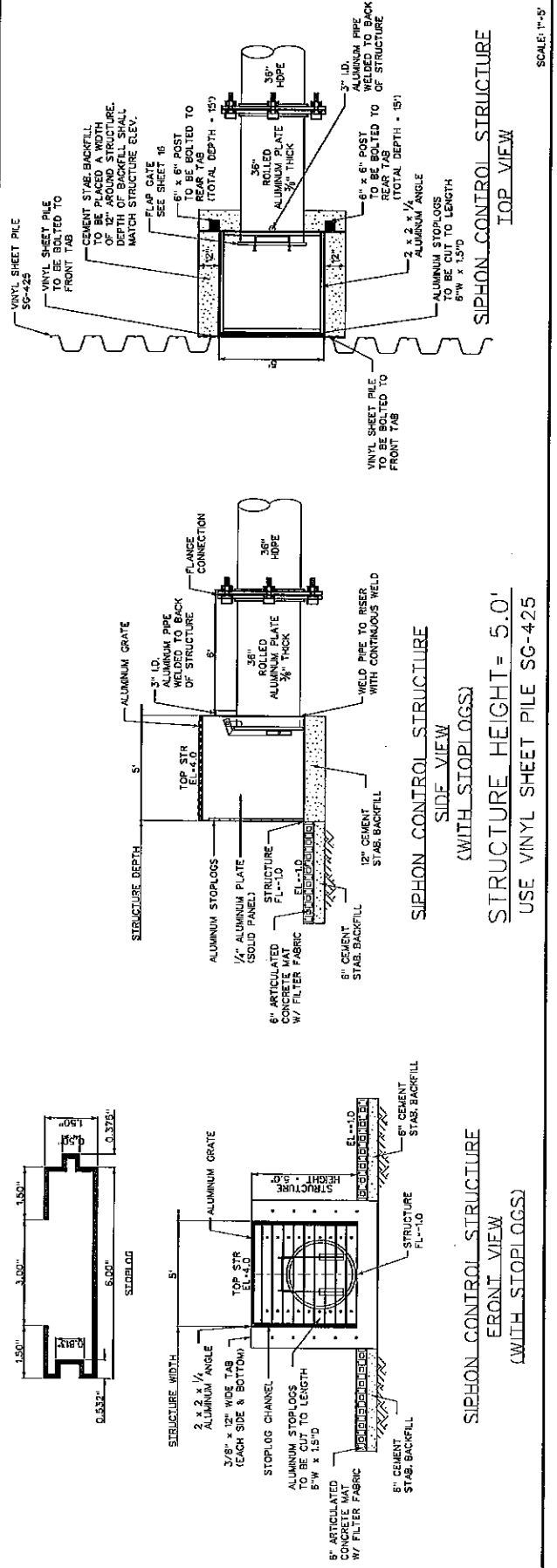
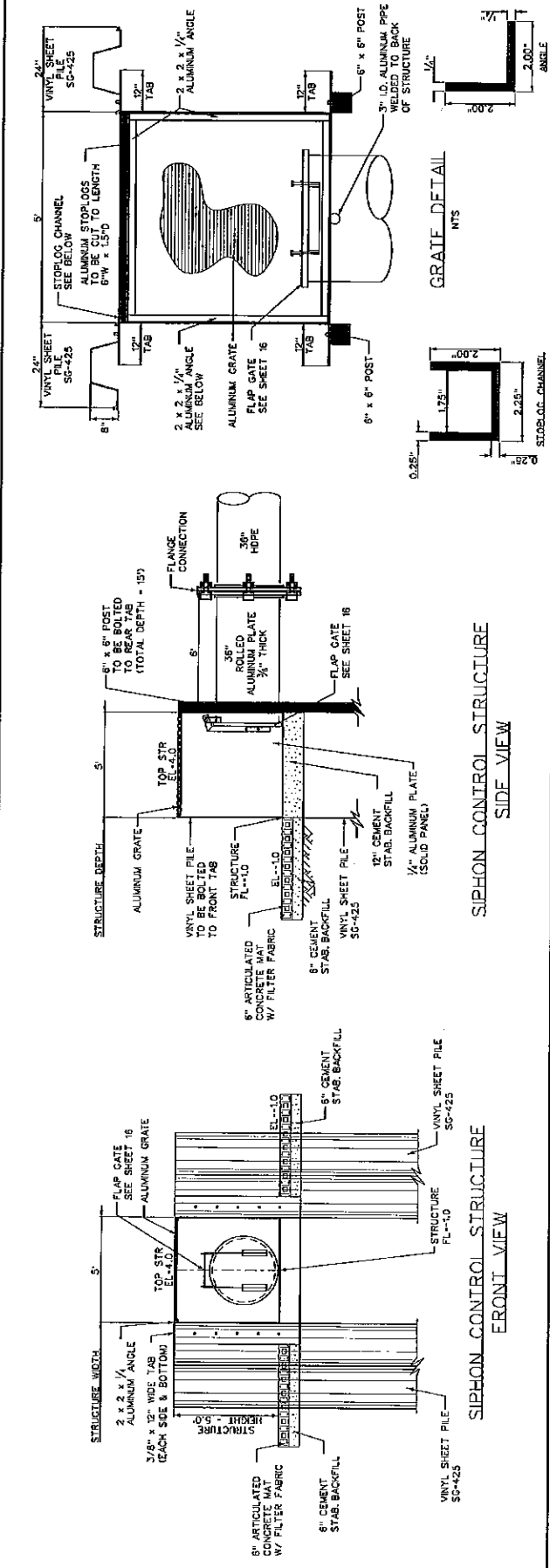
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NOTE: PROFILE SCALE ON PIPE ANGLES AND BENDS
 SEE SHEET 5 FOR DETAILS ON PIPE ANGLES AND BENDS

NO. DATE	REVISION	APPROV.		WALACE R. WILSON, P.E. #94897 DATE 08/17/18 CLIENT JEFFERSON COUNTY PROJECT LOCATION NEWARK, TEXAS CITY JEFFERSON COUNTY STATE TEXAS SHEET 10
NO. DATE	REVISION	APPROV.		



SCALE: 1" = 5'

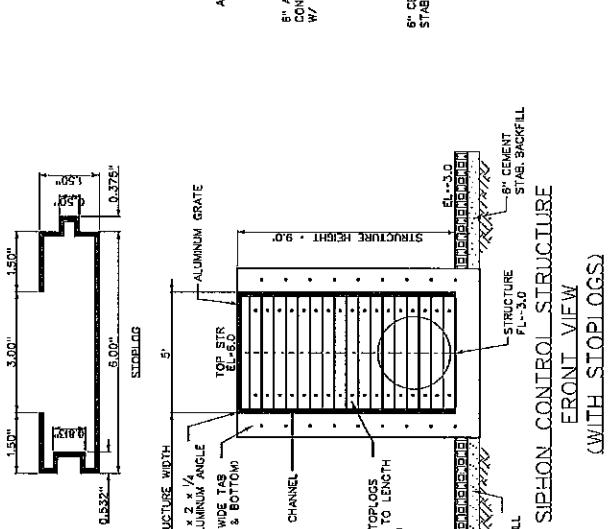
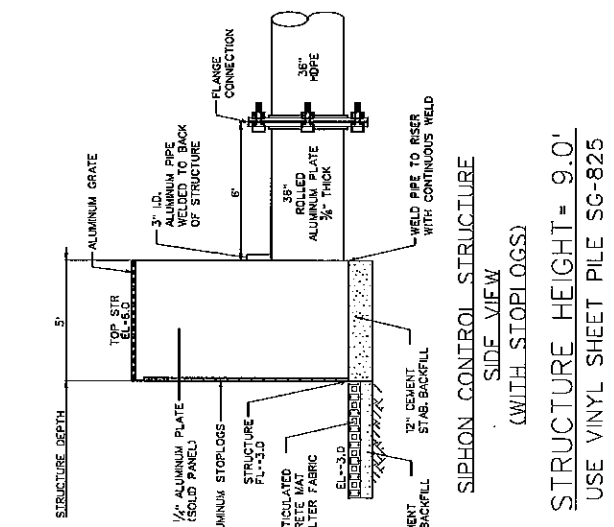
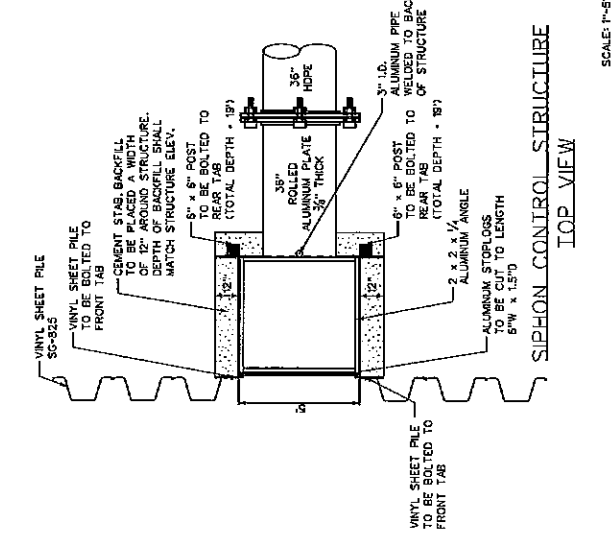
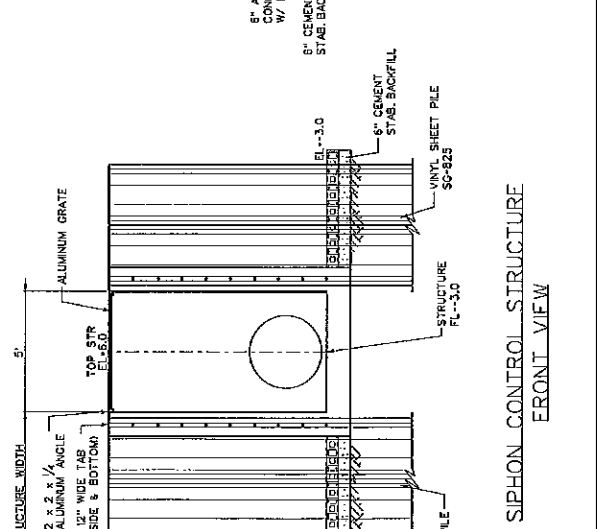
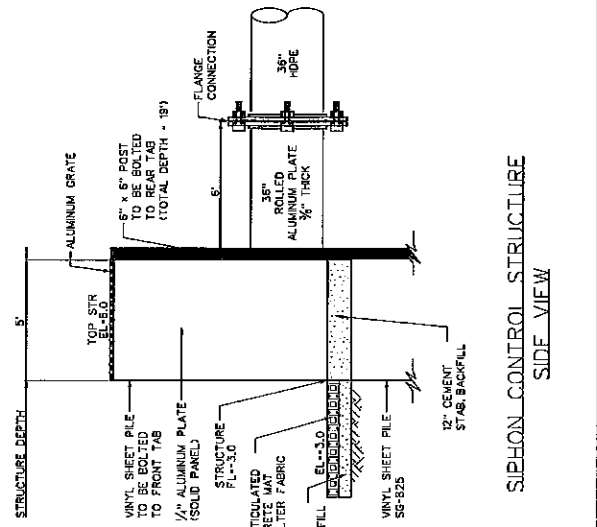
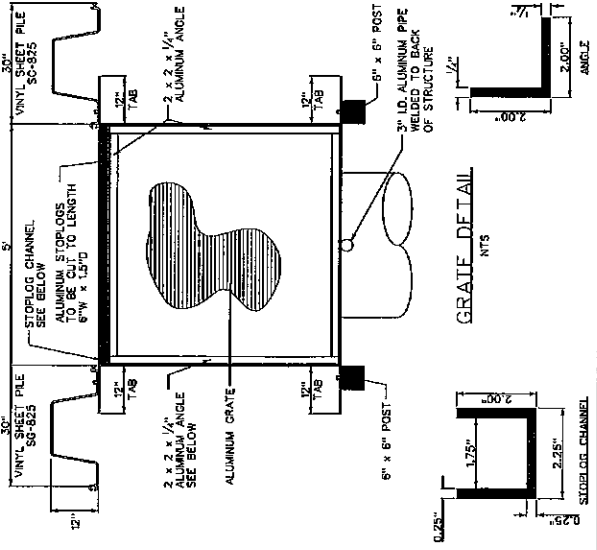
NO. DATE	REVISION	APPROV.	DATE

REGISTERED PROFESSIONAL ENGINEER
 STATE OF TEXAS
 No. 14857
 WALLACE R. WILSON, P.E. #14857

CLIENT: JEFFERSON COUNTY
 PROJECT LOCATION: SALT BAYOU
 SIPHON DETAIL 3
 WALLACE R. WILSON, P.E. #14857
 DATE: 08/17/16

L&A Engineering, Inc.
 8000 Rockwood
 Houston, Texas 77061
 Phone: 281.881.8888
 Fax: 281.881.8888
 FIRM # 19335

CITY: GIMW COUNTY: STATE: TEXAS
 BEAUMONT: MIRCACOSTAL WATERWAY
 CN: DRAWING SHEET: 14
 079

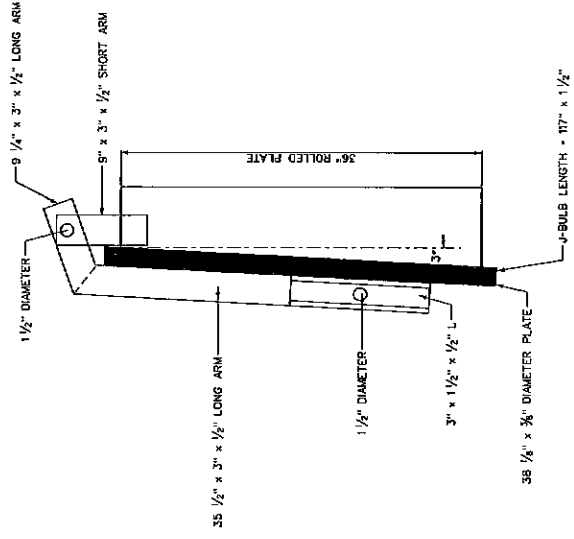


STRUCTURE HEIGHT = 9.0'
 USE VINYL SHEET PILE SC-825

SCALE: 1"=5'

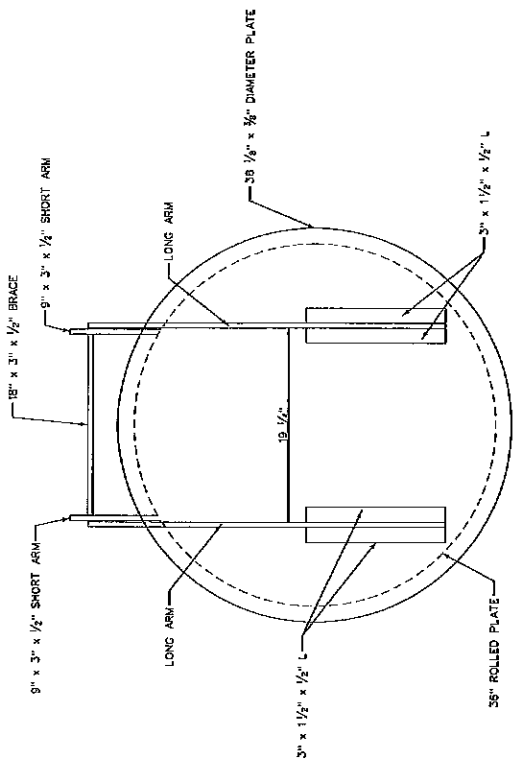
TEXAS REGISTERED ENGINEERING FIRM F-1386 APPROV. _____ REVISION _____ NO. DATE _____		WALACE B. WILSON, P.E. #84957 DATE 09/17/16	
PROJECT LOCATION GIMW SIPHON COUNTY JEFFERSON BEAUMONT TEXAS		CLIENT JEFFERSON COUNTY BEAUMONT TEXAS 77701	
STATE TX CITY BEAUMONT COUNTY JEFFERSON BEAUMONT TEXAS		LJA Engineering, Inc. P.O. Box 403813 Houston, Texas 77240 Phone 713-418-1118	
DRAWING SHEET 17 CN PN SITE ADDRESS: INTRACASTAL WATERWAY 079 1012		WALACE B. WILSON, P.E. #84957 DATE 09/17/16	

**FLAP GATE DETAIL FOR
STRUCTURE HEIGHT = 5.0'**

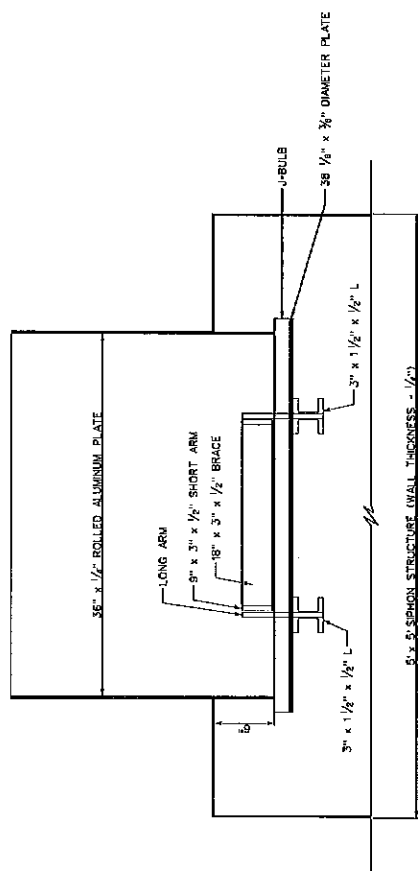


SIDE VIEW

- NOTES:
1. FLAP GATE SHALL BE CONSTRUCTED OF ALUMINUM.
 2. ALUMINUM THICKNESS SHALL BE 1/2".
 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.




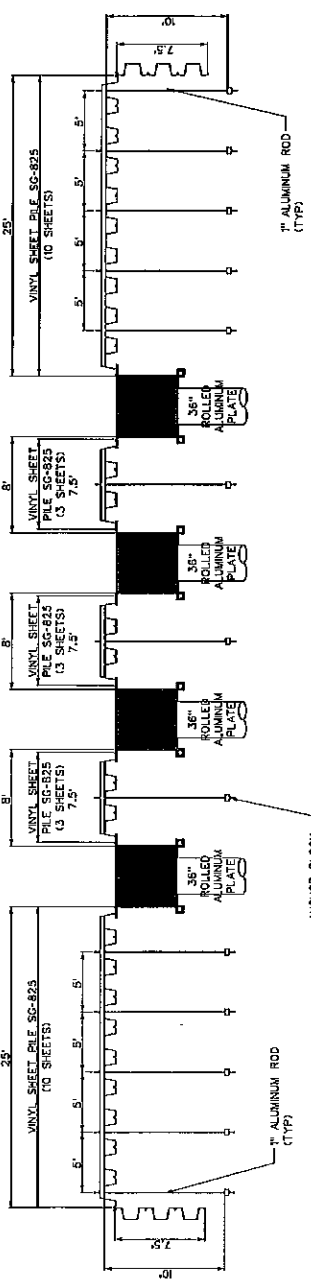
FRONT VIEW



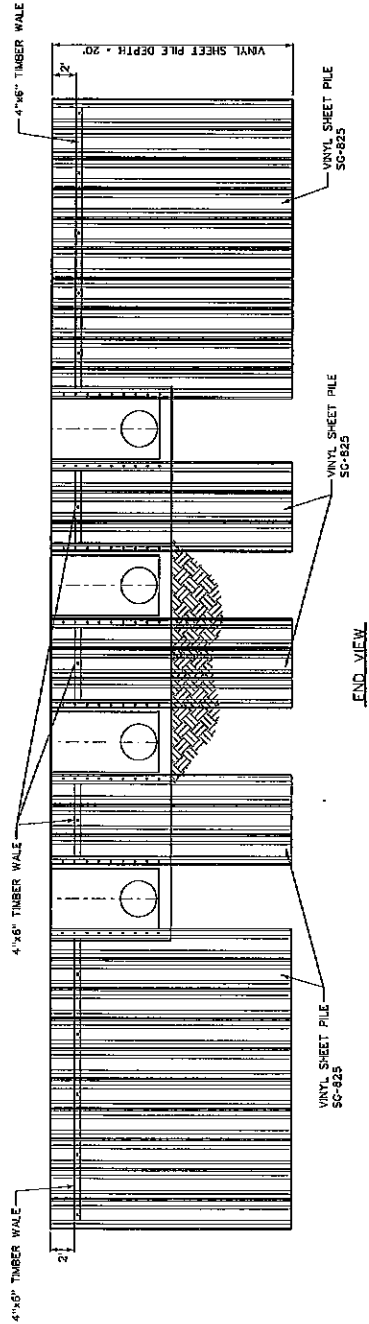
TOP VIEW

SCALE: 1"-1'

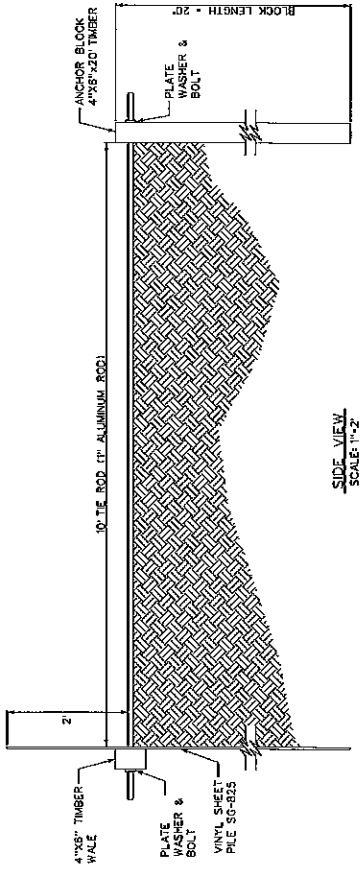
NO. DATE	REVISION	APPROV.	WALLACE R. WILSON, P.E. 184857
18			
TEXAS REGISTERED ENGINEERING FIRM F-1386			
			
WALE DETAIL <i>Wallace R. Wilson, P.E.</i> WALLACE R. WILSON, P.E. 184857 DATE 08/17/16 CLIENT JEFFERSON COUNTY 503 Oak Street Newark, Texas 77057 P.O. BOX 1000 22815-1000 Phone 409-331-1857 Fax 409-331-1857 LJA Engineering, Inc. 22815-1000 Phone 409-331-1857 Fax 409-331-1857 PROJECT LOCATION GHW Siphon COUNTY JEFFERSON STATE TEXAS BEAUMONT SITE ADDRESS: METRACASTAL WATERWAY CN PN 078 DRAWING SHEET			



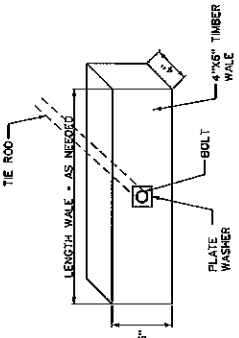
PLAN VIEW



END VIEW



SIDE VIEW
SCALE: 1"=2'



CONNECTION DETAIL
SCALE: 1"=1'

WALE DETAIL FOR
VINYL SHEET PILE SC-825

SCALE: 1"=10'

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
132	001	SEEDING FOR EROSION CONTROL (DITCH)	SY	6,221.00
164	001	SEEDING FOR EROSION CONTROL (DITCH)	CY	81.00
400	001	EXCAVATION FOR SIPHON STRUCTURE	CY	1,211.00
400	002	EXCAVATION FOR ARTICULATED CONCRETE MAT	CY	77.00
400	003	CEMENT STABILIZED BACKFILL	SF	2,016.00
403	001	TEMPORARY SPECIAL SHORING	LS	1.00
500	001	MOBILIZATION	LF	3,200.00
618	002	HIGH DENSITY POLYETHYLENE PIPE (36" HDPE)(HDD METHOD)	SF	6,016.00
2000	001	FILTER FABRIC	LS	1.00
8000	001	DEWATERING	SY	688.00
9000	001	ARTICULATED CONCRETE MATS (6")	SF	900.00
9010	001	VINYL SHEET PILE (SG-425)	SF	1,750.00
9010	002	VINYL SHEET PILE (SG-825) WITH WALE SYSTEM	EA	4.00
9020	001	SIPHON STRUCTURE (HEIGHT=5.07'W STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.07'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 POLYETHYLENE PIPE (36" HDPE)	LF	32.00
618	002	HIGH DENSITY POLYETHYLENE 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
9000	001	VINYL SHEET PILE (SG-425)	SF	1,320.00
9010	001	VINYL SHEET PILE (SG-825) WITH WALE SYSTEM	SF	1,750.00
9020	001	SIPHON STRUCTURE (HEIGHT=5.07' W STUB-OUT	EA	4.00
9020	002	SIPHON STRUCTURE (HEIGHT=5.07' W STUB-OUT & FLAP GATE	EA	4.00
9020	003	SIPHON STRUCTURE (HEIGHT=5.07'W STUB-OUT & FLAP GATE	EA	2.00
9050	001	BREAKWATER (INSTALL)	CY	408.00
9050	002	BREAKWATER (REMOVE & RELOCATE)	CY	110.00

		WALLACE R. WILSON, P.E. #94857 DATE: 09/14/16
SUMMARY SHEET		
PROJECT LOCATION: GUNN SPRING COUNTY: JEFFERSON STATE: TEXAS	CLIENT: JEFFERSON COUNTY	LIA Engineering, Inc. 9500 West Loop West, Suite 1100 Houston, Texas 77036 Phone: 281.412.1102 Fax: 281.412.1100
SHEET: 02 DRAWING: WATERWAY	SITE ADDRESS: INTRACOSTAL WATERWAY	TEXAS REGISTERED ENGINEERING FIRM # 1396 APPROV: _____ REVISION: _____ NO. DATE: _____

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310 Bid Bond

KNOW ALL MEN BY THESE PRESENTS, THAT WE BDS Constructors, LLC dba MK Constructors
P O Box 1208, Vidor, TX 77670

as Principal, hereinafter called the Principal, and Hartford Fire Insurance Company
One Hartford Plaza, Hartford, CT 06155-0001

a corporation duly organized under the laws of the State of CT

as Surety, hereinafter called the Surety, are held and firmly bound unto Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor, Beaumont, TX 77701

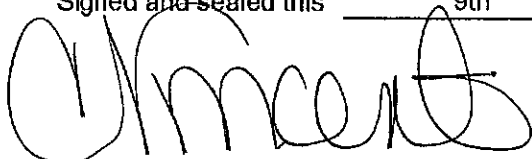
as Obligee, hereinafter called the Obligee, in the sum of Five Percent of Amount Bid

Dollars (\$ 5%),
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for Siphon Control Structures at Oilcut Ditch and Salt Bayou at the Gulf Intracoastal Waterway for Jefferson County, Bid No. IFB 17-043/JW

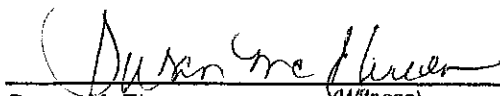
NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and materials furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 9th day of January, 2018


(Witness)

BDS Constructors, LLC dba MK Constructors
(Principal) (Seal)

By: Kenneth Stewart President
(Title)


Susan McElveen (Witness)

Hartford Fire Insurance Company
(Surety) (Seal)

By: 
Attorney-in-Fact Douglas N. McElveen (Title)

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:

- Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- 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.



CERTIFICATE

Nora M. Stranko
Notary Public

My Commission Expires March 31, 2018

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 January 9, 2018
Signed and sealed at the City of Hartford.



Kevin Heckman, Assistant Vice President



**JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT**

1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number: (IFB 17-043/JW)
IFB Title: Siphon Control Structures at Oilcut Ditch and Salt Bayou
at the Gulf Intracoastal Waterway for Jefferson County
IFB Due: 11:00 am CDT, Tuesday, January 9, 2018
Addendum No.: 1
Issued (Date): December 7, 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: Revisions to Specifications

Revision: The Contractor shall be allowed 120 working days to complete the project.
(See Revised Bid Specifications Page 42 & Page 74 – attached to this Addendum)
Revision: This project WILL NOT have liquidated damages applied for working days that go over the allotted number of 120 working days.
(See Revised Bid Specifications Page 42 & Page 73 – attached to this Addendum)

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:

Kenneth D. Stewart
Authorized Signature (Bidder)

Witness

President
Title of Person Signing Above

Witness

Kenneth D. Stewart
Typed Name of Business or Individual

Approved by _____ Date: _____

16736 IH 10
Address *Vidor TX 77662*

BID (REVISED FORM - Addendum No. 1)

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 120 working days.

BIDDER acknowledges receipt of the following ADDENDUM:

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

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 \$0.00 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.**

ADDENDUM #1: SEE HIGHLIGHTED AREA

ARTICLE IX. CONTRACT TIME

- 9.1 **The Contractor shall be allowed 120 working 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.

ADDENDUM # 1: SEE HIGHLIGHTED AREA

REVISED CONTRACTOR'S BID

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:

Item No.	Spec No.	Alt.	Description	Quantity	Unit	Unit Price	Unit Price (Method)	Notes	Total
SIPHON CONTROL STRUCTURES AT OILCUT DITCH AND SALT BAYOU AT THE GULF INTRACOASTAL WATERWAY									
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)	788.00	CY			and /100 Dollars	
164	001		SEEDING FOR EROSION CONTROL (DITCH)	6,304.00	SY			and /100 Dollars	
400	001		EXCAVATION FOR SIPHON STRUCTURE	137.00	CY			and /100 Dollars	
400	002		EXCAVATION FOR ARTICULATED CONCRETE MAT	2,508.00	CY			and /100 Dollars	
400	003		CEMENT STABILIZED BACKFILL	313.00	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 POLYETHYLENE PIPE (66" HDPE)	322.00	LF			and /100 Dollars	
618	002		HIGH DENSITY POLYETHYLENE PIPE (36" HDPE)(R/D 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 & RELOCATE)	110.00	CY			and /100 Dollars	
SUBTOTAL									
GRAND TOTAL ALL ITEMS									

OILCUT DITCH

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY
100	001	PREPARING ROW (DITCH)	AC	3.00
110	001	EXCAVATION (DITCH)	CY	13,373.00
144	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
409	001	TEMPORARY SPECIAL SHORING	SF	2,016.00
500	001	MOBILIZATION	LS	1.00
618	002	HIGH DENSITY POLYETHYLENE 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-425) WITH WALE SYSTEM	SF	1,750.00
9020	001	SIPHON STRUCTURE (HEIGHT=9.0)W STUB-OUT	EA	4.00
9030	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	473.00
132	001	EMBANKMENT (TYP)	CY	789.00
144	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
409	001	TEMPORARY SPECIAL SHORING	SF	2,120.00
500	001	MOBILIZATION	LS	1.00
618	001	HIGH DENSITY POLYETHYLENE PIPE (36" HDPE)	LF	32.00
618	002	HIGH DENSITY POLYETHYLENE PIPE (36" HDPE/HDD METHOD)	LF	3,200.00
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-425) 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=6.0)W STUB-OUT & FLAP GATE	EA	4.00
9030	001	BREAKWATER (INSTALL)	CY	408.00
9030	002	BREAKWATER (REMOVE & RELOCATE)	CY	110.00

SUMMARY SHEET

Wallace R. Wilson, P.E.
WALLACE R. WILSON, P.E. #84857

09/13/16
DATE

LJA Engineering, Inc.
Public Notarities
2000 Green Street
Beaumont, Texas 77701
Phone 409.831.1822
Fax 409.831.1822
FBN-F-1386

CLIENT
JEFFERSON COUNTY

PROJECT LOCATION

CITY	COUNTY	STATE
BEAUMONT	JEFFERSON	TEXAS
SITE ADDRESS: INTRACASTAL WATERWAY		
CR	PH	DRAWING SHEET
079	012	02



NO.	DATE	REVISION	APPROV.

TEXAS REGISTERED ENGINEERING FROM F-1386



**JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT**

1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number: (IFB 17-043/JW)
IFB Title: Siphon Control Structures at Oilcut Ditch and Salt Bayou
at the Gulf Intracoastal Waterway for Jefferson County
IFB Due: 11:00 am CDT, Tuesday, January 9, 2018
Addendum No.: 3
Issued (Date): December 15, 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: Bid Specification Clarifications, Clarification of Incorrect Plan Sheet Page Numbers, Revisions to Bid Specifications (Pages 37 & 44), and Cut-Off Date for Responses to Question Submissions.

Bid Specification Clarification:

The TxDOT Item 618 was questioned as to whether we were referring to electrical conduit. We were referring to the HDPE 36" pipe to be directional drilled underneath the Intracoastal Waterway. TxDOT Item 618 includes HDPE pipe of the size and type specified in the plans.

Incorrect Plan Sheet Reference

On plan sheets # 7 and 12 there is a reference to the timber wale sheet. The plans refer you to sheet # 19, however there is no sheet # 19. The correct sheet # for the timber wale is plan sheet # 18.

Projected Start Date for this Project:

A projected start date for this project is unavailable at this time, as anticipated grant funding to proceed with this project is currently pending. A contract will not be executed for this project until grant funds are secured or authorized by the County Auditor.

The successful bidder may not commence work under this Contract until authorized to do so by receiving a "Notice to Proceed" document issued by the Purchasing Agent. The "Notice to Proceed" document shall be issued within ten (10) days of the execution of the Contract by the "Owner".

Should there be any reasons why "Notice to Proceed" cannot be issued within such period, the time may be extended by mutual agreement between "Owner" and "Contractor."

Revisions to Bid Specification Pages 37 & 44 (Attached):

Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

Cut-off Date for Responses to Question Submissions:

Bidders may submit technical questions via email to Allen D. Sims with LJA Engineering, Inc. at asims@ljaengineering.com by 5:00 pm, on Thursday, January 4, 2018.

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:

** Kenneth D. Stewart*
Authorized Signature (Bidder)

Witness

President
Title of Person Signing Above

Witness

Kenneth D. Stewart
Typed Name of Business or Individual

Approved by _____ Date: _____

110736 IH 10
Address *Vidor TX 77662*

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 ninety (90)** 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

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 be awarded 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 90 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 90 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 90 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 BDS CONSTRUCTORS LLC
dba MK CONSTRUCTORS
Name of Contracting Firm
16736 I H 10
Address
Vidor TX 75602
City State Zip
409-7109-0089
(Area Code) Phone Number
CarrieV@mkconstructors.com
Email Address

* Kenneth D. Stewart 1/4/18
Authorized Signature Date
Kenneth D. Stewart
Printed Name
President
Title
409-7109-1288
(Area Code) Fax Number
409-658-5870
(Area Code) Cell Phone Number

THIS FORM MUST BE COMPLETED AND SUBMITTED WITH BID



**JEFFERSON COUNTY, TEXAS
PURCHASING DEPARTMENT**

1149 Pearl Street – First Floor
Beaumont, Texas 77701
409-835-8593 phone

ADDENDUM TO IFB

IFB Number: (IFB 17-043/JW)
IFB Title: Siphon Control Structures at Oilcut Ditch and Salt Bayou
at the Gulf Intracoastal Waterway for Jefferson County
IFB Due: **11:00 am CDT, Tuesday, January 9, 2018**
Addendum No.: 4
Issued (Date): January 4, 2018

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: Questions asked by Contractor /Answers to Questions.

Question

Can Limestone # 57 be substituted for the Cement Stabilized Backfill placed around the Siphon Structures and under the Articulated Mats ?

Answer

Limestone # 57 cannot be substituted for the Proposed Cement Stabilized Backfill.

Question

What happens to the material that is excavated from the Proposed ditch areas ?

Answer

The material from the Proposed ditch excavation areas (Minus the Organic Material) are to be used any place around the Siphon Structures where fill is needed. The remainder of the excavated material shall be spread out around the ditch excavation areas and must be leveled with no standing piles and must not obstruct any natural water flow.

Question

The Contractor asked if there are any soil boring reports for the Siphon areas ?

Answer

To our knowledge, there are no soil boring reports for those areas.

▪ Question

Are there any limitations on the working hours for this Project ?

Answer

There are no limitations on the working hours, however anytime, especially at night the Navigational Safety Rules for the Intercoastal Waterway shall be followed.

▪ Question

Will stationary drilling and support equipment require secondary containment ?

Answer

Yes, secondary containment will be required for this equipment.

▪ Question

What are the requirements for disposal of drilling mud ?

Answer

Drilling mud shall be disposed of off the Project at an approved disposal facility.

▪ Question

Will we be allowed to source water for drilling operations from the Intercoastal Waterway ?

Answer

You will need to check with the Texas Parks and Wildlife Office in that area for the answer to that question.

▪ Question

Are there any HDPE pipe substitutions that will be allowed on this Project ?

Answer

As stated in the Pre-Bid Meeting, the type of pipe preferred was 36" HDPE (DIPS) SDR-11. However, as long as the pipe meets this criteria: 36" HDPE SDR-11 it will be considered as an approved substitute. The color should be "Black".

▪ Cut-off Date for Responses to Question Submissions:

Bidders may submit technical questions via email to Allen D. Sims with LJA Engineering, Inc. at asims@ljaengineering.com by 5:00 pm, on Thursday, January 4, 2018.

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:

** Kenneth D. Stewart*

Authorized Signature (Bidder)

Witness

President

Title of Person Signing Above

Witness

Kenneth D. Stewart

Typed Name of Business or Individual

Approved by _____ Date: _____

P.O. Box 1208

Address *Vidor TX 77670*



JOC 19-0216/DC

Building Services

SpawGlass Building Services

350 Pine Street, Ste. 310 - Beaumont, Texas 77701 - Phone (409) 681-4547
Answering Service - 877-206-0944

Proposal

March 29, 2019

BuyBoard:520-ez1QC

Deborah Clark
Jefferson County
1149 Pearl St.
Beaumont Texas 77701

Re:

Remove (2) flapoles and install (2) new flagpoles at courthouse.

SpawGlass Job No.:

Address of Service: **1149 Pearl St.
Beaumont, Texas 77701**

Dear Mrs. Clark,

SpawGlass Construction Corp. is pleased to offer our proposal to perform the scope as described in the following inclusions:

I. INCLUSIONS

We have estimated:

- 1) Remove (2) existing flagpoles and store for Owner use
- 2) Install (2) new (aluminum - 44' each) flagpoles to match same height and type of existing.
- 3) Existing flagpoles sleeves are to be re used
- 4) All lifting equipement to remove and re-install flagpoles
- 5) All labor, material, equipment and supervision for scope of work

Cost of Service	\$ 15,066.00
Sales Tax (8.25%)	TAX EXEMPT
Total Cost of Service	\$ 15,066.00

II. EXCLUSIONS

- 1) Any additional areas needing repair
- 2) State tax
- 3) Bonding
- 4) Sleeve and base replacement
- 5) Anything not specifically included above is specificall included

III. OWNER-SUPPLIED

Street Closure / entrance closure, unencumbered access to site, final storage and removal of existing flagpoles

Any work performed outside of this scope of work is to be considered a change order and paid in addition to the stated contract amount. This offer is subject to arrangements being made, which are satisfactory to Contractor, for payment of the contract sum and security thereof.

Note: This proposal is valid for thirty (30) days only. SpawGlass is carrying a \$750 contingency in this project for unforeseen conditions.

Michael Green
SpawGlass Construction Corp.

3/29/2019
Date

Deborah Clark
Jefferson County
Date

ATTEST?

Carolyn L. Guidry
Carolyn L. Guidry, County Clerk



Jeff Branick
JEFFERSON COUNTY, TEXAS
Jeff Branick, County Judge



300 19-027/DC
Building Services

SpawGlass Building Services

350 Pine Street, Ste. 310 - Beaumont, Texas 77701 - Phone (409) 681-4547
Answering Service - 877-206-0944

Proposal

BuyBoard:520-ez1QC

April 5, 2019

Deborah Clark
Jefferson County
1149 Pearl St.
Beaumont Texas 77701

Re: **Wall and floor tile in bathroom in (4) bathrooms.**

SpawGlass Job No.:

Address of Service: **Jefferson County Courthouse
Beaumont, Texas 77708**

Dear Mrs. Clark,

SpawGlass Construction Corp. is pleased to offer our proposal to perform the scope as described in the following inclusions:

I. INCLUSIONS

We have estimated:

- 1) Demo existing tile (Mapei Wall Adhesive and Grout) and deteriorated substrates
- 2) Install new framing and backer board to furr out these areas
- 3) Install new wall tile to match size and color as close as possible, only loose wall tile will be
- 4) Remove floor tile in one bathroom and replace complete (same type unless directed otherwise)
- 5) Re set window sills existing wall mounted items upon completion (grab bars, dispensers, etc...)
- 6) Replace loose wall tiles in (3) bathrooms and floor tile in (1) bathroom
- 7) Clean site of all scope related trash and place in owner furnished dumpster
- 8) All labor, material, equipment and supervision for scope of work

Cost of Service	\$ 11,905.00
Sales Tax (8.25%)	TAX EXEMPT
Total Cost of Service	\$ 11,905.00

II. EXCLUSIONS

- 1) Any additional areas needing repair
- 2) State tax
- 3) Bonding
- 4) Exterior / Window Caulking
- 5) Tile base replacement
- 6) Window Sill material replacement

III. OWNER-SUPPLIED

Dumpster, Unencumbered access to work areas

Any work performed outside of this scope of work is to be considered a change order and paid in addition to the stated contract amount. This offer is subject to arrangements being made, which are satisfactory to Contractor, for payment of the contract sum and security thereof.

Note: This proposal is valid for thirty (30) days only. *****Deduct \$450 for floor tile in one bathroom, If that is what is desired in that one bathroom.*****

Michael Green
SpawGlass Construction Corp.
Date 4/5/2019

ATTEST:
Carolyn L. Guidry
Carolyn L. Guidry, County Clerk



Deborah Clark
Jefferson County
Date

JEFFERSON COUNTY, TEXAS
Jeff Branick
Jeff Branick, County Judge

**AGENDA ITEM****April 15, 2019**

Consider, possibly approve, authorize the County Judge to execute, receive and file Utility Easement from Jefferson County to Entergy Texas, Inc. (Entergy) to allow Entergy to construct and maintain electrical power lines upon Jefferson County Airport property as part of its Port Arthur Reliability Project.



Entergy Services, LLC
350 Pine St., 13th Floor
Beaumont, TX 77701

BOARD CERTIFIED
PERSONAL INJURY TRIAL LAW
TEXAS BOARD OF LEGAL SPECIALIZATION

Paul A. Scheurich
Assistant General Counsel
Tel: 409.981.4498
Fax: 409.981.3016
pscheur@entergy.com

April 9, 2019

Honorable Jeff Branick
County Judge
Jefferson County Courthouse
1149 Pearl Street
Beaumont, Texas 77701

via: hand delivery

Re: Port Arthur Reliability Project
Subject properties: Tracts TX-JE-043, TX-JE-047, and TX-JE-049
Property owner: County of Jefferson

Dear Judge Branick:

Attached please find three easements for property owned by the County over which Entergy Texas is seeking to construct and maintain the new transmission line associated with its Port Arthur Reliability Project. As agreed, Entergy Texas will pay the county the following amounts:

Tract TX-JE-043	\$87,190
Tract TX-JE-047	\$8,000
Tract TX-JE-049.001	\$7,000

Entergy Texas sincerely appreciates the County's efforts in assisting it in this important reliability project to allow Jefferson County to continue its economic growth.

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul A. Scheurich", with a large, sweeping flourish extending to the left.

Paul A. Scheurich

PAS/ddw
Enclosures

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORDING IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Utility EASEMENT

State of Texas

KNOW ALL MEN BY THESE PRESENTS:

County of Jefferson

THAT, Jefferson County, a political subdivision of the State of Texas, hereinafter called Grantor, whether one or more, for and in consideration of Ten and 00/100 (\$10.00) Dollars in hand paid by ENTERGY TEXAS, INC, the receipt of which is hereby acknowledged, has granted, sold and conveyed, and by these presents does grant, sell and convey unto the said ENTERGY TEXAS, INC. at P.O. Box 2951, Right of Way Department, Beaumont, Texas 77704, hereinafter called Grantee, a corporation duly incorporated and existing under the laws of the State of Texas, the RIGHT, PRIVILEGE AND EASEMENT to enter upon and to construct, maintain, operate, inspect, patrol, repair and remove one or more circuits, one or more lines of structures (if used, such structures being composed of wood, metal, concrete or other types of materials) with lines of wires, crossarms, guy wires, stubs, foundations, anchors, underground conduits and other usual fixtures for the transmission/distribution of electricity and communications, said facilities to be erected simultaneously or at different future times, with the right to replace structures or fixtures composed of one type of material or materials with structures or fixtures of any other type of material or materials at any time and from time to time without further payment, upon, over, under and across that parcel of land owned by Grantor, said facilities to be located within a 125 foot easement strip except that at angle points, if any, Grantee may place guy wires, stubs and anchors outside said easement strip in sufficient number so as to adequately brace its structures at any place where said easement strip makes an angle, which easement strip and continuations or projections thereof as described by the metes and bounds on the attached Exhibit A and as shown on the attached plat marked Exhibit B, insofar as same may be embraced within said tract.

GRANTOR grants unto Grantee the right at any time and from time to time (a) to trim, cut or remove and keep clear all trees, vegetation, underbrush and other obstructions located upon said easement strip by use of variety of methods commonly used in the utility vegetation management industry, without further payment, and (b) trim, cut or remove from

the land outside of said easement strip any and all trees, limbs and other vegetation which in falling could come within ten feet of the electric lines of Grantee without further payment.

GRANTOR RETAINS the right to use the land covered by said easement for any purpose, except for those purposes herein granted to Grantee, as long as such use by Grantor does not interfere with the right of way easement and rights herein granted. However, Grantor shall not erect, locate or permit the erection or placement of any building, structure, trees, or shrubs, well head/facilities or object of any type whatever within the easement strip described above. Grantor further agrees that it shall not erect, locate or permit the erection or placement of any building, structures, trees or shrubs or object of any type outside of said easement strip that will interfere with Grantee's operations or the rights granted to Grantee hereunder or that violate any clearance of safety requirements as set forth in the National Electrical Safety Code, the Texas Health and Safety Code and all other applicable laws, regulations, or ordinances or requirements. Grantor shall not change the elevation of the land within said easement strip where such elevation change causes a violation in the clearance requirements set forth in the National Electrical Safety Code Requirements/Specification or limit Grantee's ingress/egress to, from and along the land covered by this easement strip. Grantee shall have ingress and egress at any time to, from and along the land covered by this easement.

If required by FAA regulations, Grantee shall place aerial marker balls or lights on the lines or other elevated structures in conformity with FAA regulations.

TO HAVE AND TO HOLD the above granted rights and easements, together with all and singular, the privileges and appurtenances thereto in anywise belonging unto said ENTERGY TEXAS INC., its successors and assigns, and Grantor does hereby bind himself, his heirs, executors, administrators, successors and assigns, to warrant and defend all and singular the above granted rights, easements, privileges and appurtenances unto ENTERGY TEXAS INC., its successors and assigns, against any person whomsoever lawfully claiming or to claim the same or any part thereof.

Grantor hereby covenants with and represents and warrants to said ENTERGY TEXAS, INC., that Grantor has good and marketable title to said land, and has the unqualified right to grant the privileges herein contained.

ALL THE AGREEMENTS and stipulations herein contained, and all of the obligations herein assumed, shall inure to the benefit of and be binding upon the heirs, successors and assigns of the respective parties hereto. Whenever the word "Grantor" is used herein it shall be construed to include "Grantors".

WITNESS the signature of Grantor this 15th day of APRIL, 2019

Grantor:

Jefferson County, a political subdivision of the State of Texas

By: [Signature]

Printed Name: JEFF R. BRANICK

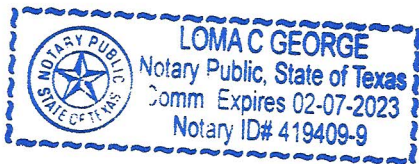
Its: COUNTY JUDGE

ACKNOWLEDGEMENT

State of Texas X

County of Jefferson X

This instrument was acknowledged before me on 15th APRIL, 2019 by Judge Jeff R. Branick



[Signature]
Notary Public's Signature

Fittz & Shipman

INC.

Ronald D. Fittz, P.E., R.P.L.S. (1948-1987)
 Terry G. Shipman, P.E., Senior Consultant
 Billy J. Smith, Jr., President
 Daniel A. Dotson, P.E., Vice President

Consulting Engineers and Land Surveyors

Donald R. King, P.E.
 Bernardino D. Tristan, P.E.
 Jason R. Davis, P.E.
 Mitchell L. Brackin, R.P.L.S.

EXHIBIT A, PAGE 1 OF 2
CENTERLINE DESCRIPTION
OF A 3.769 ACRE TRACT
FOR A
125' WIDE ENTERGY EASEMENT
OUT OF THE
T. & N.O.R.R. SURVEY, SECTION 7, ABSTRACT 239
JEFFERSON COUNTY, TEXAS
AUGUST 29, 2018

That certain centerline description of a 3.769 acre tract for a 125' wide Entergy easement across a called 138.568 acre tract (Parcel 5A) conveyed to Jefferson County as recorded in Clerks File No. 2001008588 of the Official Public Records of Jefferson County, Texas out of the T. & N.O.R.R. Survey, Section 7, Abstract 239, Jefferson County, Texas, said centerline being more particularly described by the courses and distances as follows:

Note: Bearings are referenced to the NAD83 Texas State Plane Coordinate System, South Central Zone #4204.

COMMENCING at a capped iron rod (N=13,920,572.67, E= 3,545,142.45) found in the westerly line of the said 138.568 acre tract for the southeast corner of the remainder of a called 188 acre tract (Tract No. Four) conveyed to C. Doornbos A & B LP as recorded in Clerks File No. 2006001324 of the Official Public Records of Jefferson County, Texas and the northeast corner of a called 90.000 acre tract (Tract B) conveyed to Kirk C. Thomas as recorded in Clerks File No. 2007020217 of the Official Public Records of Jefferson County, Texas ;

THENCE South 16°28'57" East along the easterly line of the said 90.00 acre tract and the remainder of a called 10.000 acre tract conveyed to Kirk C. Thomas as recorded in Clerks File No. 2007015030 of the Official Public Records of Jefferson County, Texas and the said westerly line of the 138.568 acre tract a distance of 2582.06 feet (called South 16°28'44" East) to a point for the **POINT OF BEGINNING** (N=13,918,096.72, E=3,545,875.04) of the said centerline of the 125' wide Entergy easement from which a 5/8" iron rod found for the northerly corner of a called 3.272 acre tract conveyed to Joseph Sylvester and Carolyn Sylvester as recorded in Clerks File No. 2007015558 of the Official Public Records of Jefferson County, Texas bears South 16°28'57" East 133.01 feet (called South 16°28'44" East);

THENCE along the said centerline of the 125' wide Entergy easement with the following courses and distances:

North 36°17'35" East a distance of 1083.74 feet to an angle point;
 South 53°34'07" East a distance of 229.56 feet to a point in the northerly line of a called 1.002 acre tract conveyed to Pennzoil Pipeline Co. as recorded in Volume 1624, Page 10 of the Deed Records of Jefferson County, Texas and the southerly line of the said 138.568 acre tract

EXHIBIT A, PAGE 1 OF 2

for the **POINT OF TERMINATION** (N=13,918,833.50, E=3,546,701.75) of the said centerline of the 125' wide Entergy easement from which a 5/8" iron rod marked "Arceneaux" found for the most southerly east corner of the said 138.568 acre tract bears North 36°39'26" East 62.50 feet (called North 36°44'24" East), traversing a total distance of 1313.30 feet and containing in area 3.769 acres, more or less.

This Field Note Description is based on a survey performed by Fitz & Shipman, Inc. during 2018 and accompanies a plat of the same date.

F&S Project No. 18032.0000
TX-JE-043

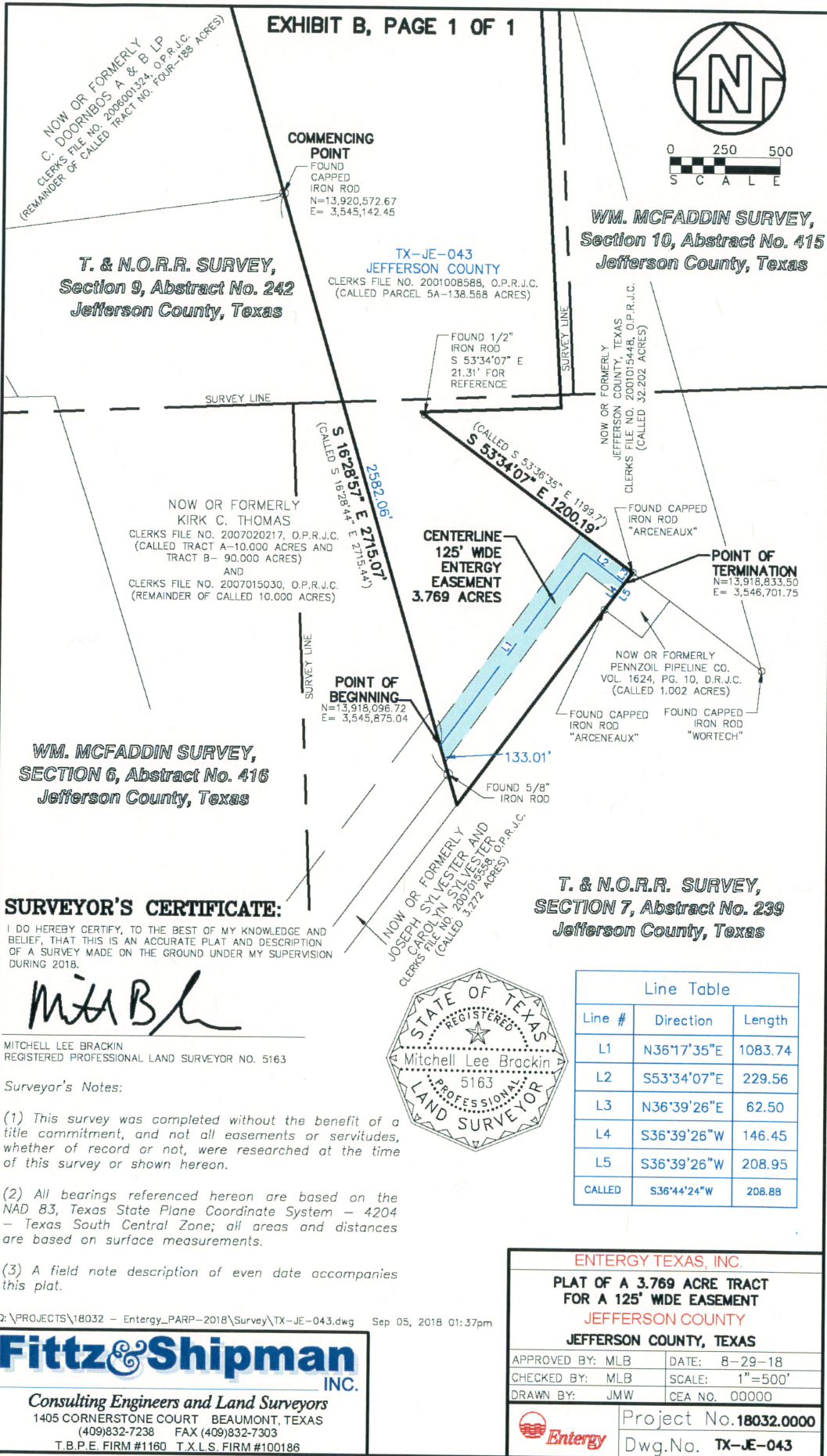
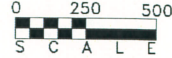


EXHIBIT B, PAGE 1 OF 1



NOW OR FORMERLY
C. DOORNBOS A & B LP
CLERKS FILE NO. 2006001324, O.P.R.J.C.
(REMAINDER OF CALLED TRACT NO. FOUR-188 ACRES)

T. & N.O.R.R. SURVEY,
Section 9, Abstract No. 242
Jefferson County, Texas

COMMENCING
POINT
FOUND
CAPPED
IRON ROD
N=13,920,572.67
E= 3,545,142.46

TX-JE-043
JEFFERSON COUNTY
CLERKS FILE NO. 2001008588, O.P.R.J.C.
(CALLED PARCEL 5A-138.568 ACRES)

WM. MCFADDIN SURVEY,
Section 10, Abstract No. 415
Jefferson County, Texas

NOW OR FORMERLY
KIRK C. THOMAS
CLERKS FILE NO. 2007020217, O.P.R.J.C.
(CALLED TRACT A-10,000 ACRES AND
TRACT B- 90,000 ACRES)
AND
CLERKS FILE NO. 2007015030, O.P.R.J.C.
(REMAINDER OF CALLED 10,000 ACRES)

CENTERLINE
125' WIDE
ENTERGY EASEMENT
3.769 ACRES

NOW OR FORMERLY
JEFFERSON COUNTY, TEXAS
CLERKS FILE NO. 2001015446, O.P.R.J.C.
(CALLED 32.292 ACRES)

FOUND CAPPED
IRON ROD
"ARCENEAX"

POINT OF
TERMINATION
N=13,918,833.50
E= 3,546,701.75

WM. MCFADDIN SURVEY,
SECTION 6, Abstract No. 416
Jefferson County, Texas

POINT OF
BEGINNING
N=13,918,096.72
E= 3,545,875.04

NOW OR FORMERLY
PENNZOIL PIPELINE CO.
VOL. 1624, PG. 10, D.R.J.C.
(CALLED 1.002 ACRES)

FOUND CAPPED
IRON ROD
"ARCENEAX"

FOUND CAPPED
IRON ROD
"WORTECH"

FOUND 5/8"
IRON ROD

SURVEYOR'S CERTIFICATE:

I DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THIS IS AN ACCURATE PLAT AND DESCRIPTION OF A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION DURING 2018.

MitL Brackin

MITCHELL LEE BRACKIN
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5163

Surveyor's Notes:

- (1) This survey was completed without the benefit of a title commitment, and not all easements or servitudes, whether of record or not, were researched at the time of this survey or shown hereon.
- (2) All bearings referenced hereon are based on the NAD 83, Texas State Plane Coordinate System - 4204 - Texas South Central Zone; all areas and distances are based on surface measurements.
- (3) A field note description of even date accompanies this plat.



Line Table		
Line #	Direction	Length
L1	N36°17'35"E	1083.74
L2	S53°34'07"E	229.56
L3	N36°39'26"E	62.50
L4	S36°39'26"W	146.45
L5	S36°39'26"W	208.95
CALLED	S36°44'24"W	208.88

Q:\PROJECTS\18032 - Entergy_PARP-2018\Survey\TX-JE-043.dwg Sep 05, 2018 01:37pm

Fittz & Shipman
INC.
Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
T.B.P.E. FIRM #1180 T.X.L.S. FIRM #100186

ENTERGY TEXAS, INC.
PLAT OF A 3.769 ACRE TRACT
FOR A 125' WIDE EASEMENT
JEFFERSON COUNTY
JEFFERSON COUNTY, TEXAS

APPROVED BY: MLB	DATE: 8-29-18
CHECKED BY: MLB	SCALE: 1"=500'
DRAWN BY: JMW	CEA NO. 00000

Project No. 18032.0000
Dwg.No. TX-JE-043

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORDING IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Utility EASEMENT

State of Texas

KNOW ALL MEN BY THESE PRESENTS:

County of Jefferson

THAT, Jefferson County, a political subdivision of the State of Texas, hereinafter called Grantor, whether one or more, for and in consideration of Ten and 00/100 (\$10.00) Dollars in hand paid by ENTERGY TEXAS, INC, the receipt of which is hereby acknowledged, has granted, sold and conveyed, and by these presents does grant, sell and convey unto the said ENTERGY TEXAS, INC. at P.O. Box 2951, Right of Way Department, Beaumont, Texas 77704, hereinafter called Grantee, a corporation duly incorporated and existing under the laws of the State of Texas, the RIGHT, PRIVILEGE AND EASEMENT to enter upon and to construct, maintain, operate, inspect, patrol, repair and remove one or more circuits, one or more lines of structures (if used, such structures being composed of wood, metal, concrete or other types of materials) with lines of wires, crossarms, guy wires, stubs, foundations, anchors, underground conduits and other usual fixtures for the transmission/distribution of electricity and communications, said facilities to be erected simultaneously or at different future times, with the right to replace structures or fixtures composed of one type of material or materials with structures or fixtures of any other type of material or materials at any time and from time to time without further payment, upon, over, under and across that parcel of land owned by Grantor, said facilities to be located within a 125 foot easement strip except that at angle points, if any, Grantee may place guy wires, stubs and anchors outside said easement strip in sufficient number so as to adequately brace its structures at any place where said easement strip makes an angle, which easement strip and continuations or projections thereof as described by the metes and bounds on the attached Exhibit A and as shown on the attached plat marked Exhibit B, insofar as same may be embraced within said tract.

GRANTOR grants unto Grantee the right at any time and from time to time (a) to trim, cut or remove and keep clear all trees, vegetation, underbrush and other obstructions located upon said easement strip by use of variety of methods commonly used in the utility vegetation management industry, without further payment, and (b) trim, cut or remove from

the land outside of said easement strip any and all trees, limbs and other vegetation which in falling could come within ten feet of the electric lines of Grantee without further payment.

GRANTOR RETAINS the right to use the land covered by said easement for any purpose, except for those purposes herein granted to Grantee, as long as such use by Grantor does not interfere with the right of way easement and rights herein granted. However, Grantor shall not erect, locate or permit the erection or placement of any building, structure, trees, or shrubs, well head/facilities or object of any type whatever within the easement strip described above. Grantor further agrees that it shall not erect, locate or permit the erection or placement of any building, structures, trees or shrubs or object of any type outside of said easement strip that will interfere with Grantee's operations or the rights granted to Grantee hereunder or that violate any clearance of safety requirements as set forth in the National Electrical Safety Code, the Texas Health and Safety Code and all other applicable laws, regulations, or ordinances or requirements. Grantor shall not change the elevation of the land within said easement strip where such elevation change causes a violation in the clearance requirements set forth in the National Electrical Safety Code Requirements/Specification or limit Grantee's ingress/egress to, from and along the land covered by this easement strip. Grantee shall have ingress and egress at any time to, from and along the land covered by this easement.

If required by FAA regulations, Grantee shall place aerial marker balls or lights on the lines or other elevated structures in conformity with FAA regulations.

TO HAVE AND TO HOLD the above granted rights and easements, together with all and singular, the privileges and appurtenances thereto in anywise belonging unto said ENTERGY TEXAS INC., its successors and assigns, and Grantor does hereby bind himself, his heirs, executors, administrators, successors and assigns, to warrant and defend all and singular the above granted rights, easements, privileges and appurtenances unto ENTERGY TEXAS INC., its successors and assigns, against any person whomsoever lawfully claiming or to claim the same or any part thereof.

Grantor hereby covenants with and represents and warrants to said ENTERGY TEXAS, INC., that Grantor has good and marketable title to said land, and has the unqualified right to grant the privileges herein contained.

Fittz & Shipman

INC.

Ronald D. Fittz, P.E., R.P.L.S. (1948-1987)
 Terry G. Shipman, P.E., Senior Consultant
 Billy J. Smith, Jr., President
 Daniel A. Dotson, P.E., Vice President

Consulting Engineers and Land Surveyors

Donald R. King, P.E.
 Bernardino D. Tristan, P.E.
 Jason R. Davis, P.E.
 Mitchell L. Brackin, R.P.L.S.

EXHIBIT A, PAGE 1 OF 2
FIELD NOTE DESCRIPTION
OF A 0.5269 ACRE TRACT
FOR A PARTIAL
125' WIDE ENTERGY EASEMENT
OUT OF THE
T. & N.O.R.R. SURVEY, SECTION 7, ABSTRACT 239
JEFFERSON COUNTY, TEXAS
SEPTEMBER 15, 2018

That certain 0.5269 acre tract for a partial 125' wide Entergy easement across the remainder of a called 33.816 acre tract (Tract 1) conveyed to the County of Jefferson as recorded in Clerks File No. 2001006798 of the Official Public Records of Jefferson County, Texas, out of the T. & N.O.R.R. Survey, Section 7, Abstract 239, Jefferson County, Texas, said 0.5269 acre tract being more particularly described by metes and bounds as follows:

Note: Bearings are referenced to the NAD83 Texas State Plane Coordinate System, South Central Zone #4204.

BEGINNING at a capped iron rod "Wortech" (N=13,918,700.98, E=3,546,900.38) found for an interior corner of the remainder of a called 1.874 acre tract conveyed to the City of Port Arthur, Texas as recorded in Volume 2248, Page 158 of the Deed Records of Jefferson County, Texas and the north corner of the said 33.816 acre tract and the northwest corner of the said 0.5269 acre tracts;

THENCE South 53°16'27" East along a southerly line of the said 1.874 acre tract and the northerly line of the said 33.816 and 0.5269 acre tract a distance of 344.96 feet to a capped iron rod "Arceneaux" (N=13,918,494.70, E=3,547,176.86) found for the north corner of the remainder of a called 6.612 acre tract conveyed to Service Zone, Inc. as recorded in Clerks File No. 2010000302 of the Official Public Records of Jefferson County, Texas and the northeast corner of the said 0.5269 acre tract;

THENCE South 36°38'58" West along the westerly line of the said 6.612 acre tract and the easterly line of the said 0.5269 acre tract a distance of 62.94 feet to a point for the southeast corner of the said 0.5269 acre tract;

THENCE North 54°27'51" West along the southerly line of the said 0.5269 acre tract a distance of 345.12 feet to a point in a common line of the said 1.874 and 33.816 acre tracts for the southwest corner of the said 0.5269 acre tract from which a capped iron rod "Wortech" (N13,918,549.51, E=3,546,787.33) found for a common corner of the said 1.874 and 33.816 acre tracts bears South 36°44'05" West 118.90 feet (called South 36°44'24" West);

THENCE North 36°44'05" East along the said common line of the 1.874 and 33.816 acre tracts being the westerly line of the said 0.5269 acre tract a distance of 70.11 feet

1405 Cornerstone Court • Beaumont, Texas 77706 • (409) 832-7238 • Fax (409) 832-7303

Texas Board of Professional Engineers Firm No. 1160 • Texas Board of Professional Land Surveyors Firm No. 100186

EXHIBIT A, PAGE 2 OF 2

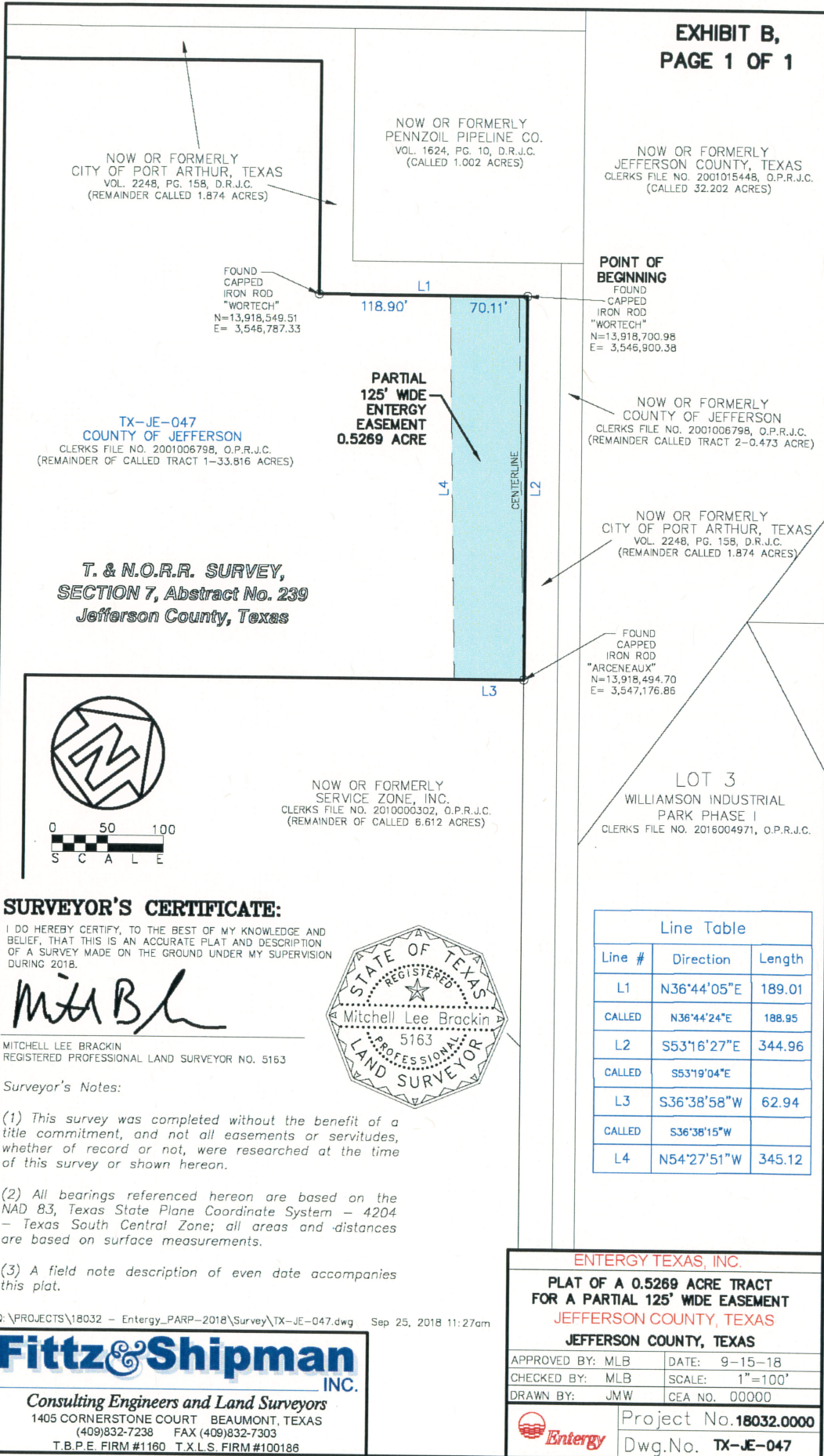
(called North 36°44'24" East) to the **POINT OF BEGINNING** and containing in area 0.5269 acre, more or less.

This Field Note Description is based on a survey performed by Fitz & Shipman, Inc. during 2018 and accompanies a plat of the same date.

F&S Project No. 18032.0000

TX-JE-047

**EXHIBIT B,
PAGE 1 OF 1**



NOW OR FORMERLY
CITY OF PORT ARTHUR, TEXAS
VOL. 2248, PG. 158, D.R.J.C.
(REMAINDER CALLED 1.874 ACRES)

NOW OR FORMERLY
PENNZOIL PIPELINE CO.
VOL. 1624, PG. 10, D.R.J.C.
(CALLED 1.002 ACRES)

NOW OR FORMERLY
JEFFERSON COUNTY, TEXAS
CLERKS FILE NO. 2001015448, O.P.R.J.C.
(CALLED 32.202 ACRES)

FOUND
CAPPED
IRON ROD
"WORTECH"
N=13,918,549.51
E= 3,546,787.33

POINT OF BEGINNING
FOUND
CAPPED
IRON ROD
"WORTECH"
N=13,918,700.98
E= 3,546,900.38

TX-JE-047
COUNTY OF JEFFERSON
CLERKS FILE NO. 2001006798, O.P.R.J.C.
(REMAINDER OF CALLED TRACT 1-33.816 ACRES)

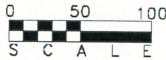
**PARTIAL
125' WIDE
ENTERGY
EASEMENT
0.5269 ACRE**

NOW OR FORMERLY
COUNTY OF JEFFERSON
CLERKS FILE NO. 2001006798, O.P.R.J.C.
(REMAINDER CALLED TRACT 2-0.473 ACRE)

**T. & N.O.R.R. SURVEY,
SECTION 7, Abstract No. 239
Jefferson County, Texas**

NOW OR FORMERLY
CITY OF PORT ARTHUR, TEXAS
VOL. 2248, PG. 158, D.R.J.C.
(REMAINDER CALLED 1.874 ACRES)

FOUND
CAPPED
IRON ROD
"ARCENEUX"
N=13,918,494.70
E= 3,547,176.86



NOW OR FORMERLY
SERVICE ZONE, INC.
CLERKS FILE NO. 2010000302, O.P.R.J.C.
(REMAINDER OF CALLED 6.612 ACRES)

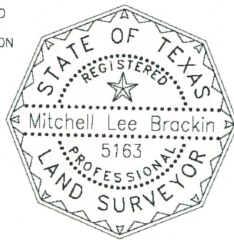
LOT 3
WILLIAMSON INDUSTRIAL
PARK PHASE I
CLERKS FILE NO. 2016004971, O.P.R.J.C.

SURVEYOR'S CERTIFICATE:

I DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THIS IS AN ACCURATE PLAT AND DESCRIPTION OF A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION DURING 2018.

Mitl Brl

MITCHELL LEE BRACKIN
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5163



Surveyor's Notes:

- (1) This survey was completed without the benefit of a title commitment, and not all easements or servitudes, whether of record or not, were researched at the time of this survey or shown hereon.
- (2) All bearings referenced hereon are based on the NAD 83, Texas State Plane Coordinate System - 4204 - Texas South Central Zone; all areas and distances are based on surface measurements.
- (3) A field note description of even date accompanies this plat.

Line Table		
Line #	Direction	Length
L1	N36°44'05"E	189.01
CALLED	N36°44'24"E	188.95
L2	S53°16'27"E	344.96
CALLED	S53°19'04"E	
L3	S36°38'58"W	62.94
CALLED	S36°38'15"W	
L4	N54°27'51"W	345.12

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Fittz & Shipman
INC.
Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
T.B.P.E. FIRM #1160 T.X.L.S. FIRM #100186

ENTERGY TEXAS, INC.
**PLAT OF A 0.5269 ACRE TRACT
FOR A PARTIAL 125' WIDE EASEMENT
JEFFERSON COUNTY, TEXAS**
JEFFERSON COUNTY, TEXAS

APPROVED BY: MLB	DATE: 9-15-18
CHECKED BY: MLB	SCALE: 1"=100'
DRAWN BY: JMW	CEA NO. 00000

Project No. **18032.0000**
Dwg.No. **TX-JE-047**

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORDING IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Utility EASEMENT

State of Texas

KNOW ALL MEN BY THESE PRESENTS:

County of Jefferson

THAT, Jefferson County, a political subdivision of the State of Texas, hereinafter called Grantor, whether one or more, for and in consideration of Ten and 00/100 (\$10.00) Dollars in hand paid by ENTERGY TEXAS, INC, the receipt of which is hereby acknowledged, has granted, sold and conveyed, and by these presents does grant, sell and convey unto the said ENTERGY TEXAS, INC. at P.O. Box 2951, Right of Way Department, Beaumont, Texas 77704, hereinafter called Grantee, a corporation duly incorporated and existing under the laws of the State of Texas, the RIGHT, PRIVILEGE AND EASEMENT to enter upon and to construct, maintain, operate, inspect, patrol, repair and remove one or more circuits, one or more lines of structures (if used, such structures being composed of wood, metal, concrete or other types of materials) with lines of wires, crossarms, guy wires, stubs, foundations, anchors, underground conduits and other usual fixtures for the transmission/distribution of electricity and communications, said facilities to be erected simultaneously or at different future times, with the right to replace structures or fixtures composed of one type of material or materials with structures or fixtures of any other type of material or materials at any time and from time to time without further payment, upon, over, under and across that parcel of land owned by Grantor, said facilities to be located within a 125 foot easement strip except that at angle points, if any, Grantee may place guy wires, stubs and anchors outside said easement strip in sufficient number so as to adequately brace its structures at any place where said easement strip makes an angle, which easement strip and continuations or projections thereof as described by the metes and bounds on the attached Exhibit A and as shown on the attached plat marked Exhibit B, insofar as same may be embraced within said tract.

GRANTOR grants unto Grantee the right at any time and from time to time (a) to trim, cut or remove and keep clear all trees, vegetation, underbrush and other obstructions located upon said easement strip by use of variety of methods commonly used in the utility vegetation management industry, without further payment, and (b) trim, cut or remove from

the land outside of said easement strip any and all trees, limbs and other vegetation which in falling could come within ten feet of the electric lines of Grantee without further payment.

GRANTOR RETAINS the right to use the land covered by said easement for any purpose, except for those purposes herein granted to Grantee, as long as such use by Grantor does not interfere with the right of way easement and rights herein granted. However, Grantor shall not erect, locate or permit the erection or placement of any building, structure, trees, or shrubs, well head/facilities or object of any type whatever within the easement strip described above. Grantor further agrees that it shall not erect, locate or permit the erection or placement of any building, structures, trees or shrubs or object of any type outside of said easement strip that will interfere with Grantee's operations or the rights granted to Grantee hereunder or that violate any clearance of safety requirements as set forth in the National Electrical Safety Code, the Texas Health and Safety Code and all other applicable laws, regulations, or ordinances or requirements. Grantor shall not change the elevation of the land within said easement strip where such elevation change causes a violation in the clearance requirements set forth in the National Electrical Safety Code Requirements/Specification or limit Grantee's ingress/egress to, from and along the land covered by this easement strip. Grantee shall have ingress and egress at any time to, from and along the land covered by this easement.

If required by FAA regulations, Grantee shall place aerial marker balls or lights on the lines or other elevated structures in conformity with FAA regulations.

TO HAVE AND TO HOLD the above granted rights and easements, together with all and singular, the privileges and appurtenances thereto in anywise belonging unto said ENTERGY TEXAS INC., its successors and assigns, and Grantor does hereby bind himself, his heirs, executors, administrators, successors and assigns, to warrant and defend all and singular the above granted rights, easements, privileges and appurtenances unto ENTERGY TEXAS INC., its successors and assigns, against any person whomsoever lawfully claiming or to claim the same or any part thereof.

Grantor hereby covenants with and represents and warrants to said ENTERGY TEXAS, INC., that Grantor has good and marketable title to said land, and has the unqualified right to grant the privileges herein contained.

ALL THE AGREEMENTS and stipulations herein contained, and all of the obligations herein assumed, shall inure to the benefit of and be binding upon the heirs, successors and assigns of the respective parties hereto. Whenever the word "Grantor" is used herein it shall be construed to include "Grantors".

WITNESS the signature of Grantor this _____ day of _____, 2019

Grantor:

Jefferson County, a political subdivision of the State of Texas

By: _____

Printed Name: JEFF R. BRANCK

Its: COUNTY JUDGE

ACKNOWLEDGEMENT

State of Texas X

County of _____ X

This instrument was acknowledged before me on _____ by _____.

Notary Public's Signature

Fittz & Shipman

INC.

Ronald D. Fittz, P.E., R.P.L.S. (1948-1987)
 Terry G. Shipman, P.E., Senior Consultant
 Billy J. Smith, Jr., President
 Daniel A. Dotson, P.E., Vice President

Consulting Engineers and Land Surveyors

Donald R. King, P.E.
 Bernardino D. Tristan, P.E.
 Jason R. Davis, P.E.
 Mitchell L. Brackin, R.P.L.S.

EXHIBIT A, PAGE 1 OF 2
FIELD NOTE DESCRIPTION
OF A 0.4628 ACRE TRACT
FOR A PARTIAL
125' WIDE ENTERGY EASEMENT
OUT OF THE
T. & N.O.R.R. SURVEY, SECTION 7, ABSTRACT 239
JEFFERSON COUNTY, TEXAS
SEPTEMBER 24, 2018

That certain 0.4628 acre tract for a partial 125' wide Entergy easement across the remainder of a called 0.473 acre tract (Tract 2) conveyed to the County of Jefferson as recorded in Clerks File No. 2001006798 of the Official Public Records of Jefferson County, Texas, out of the T. & N.O.R.R. Survey, Section 7, Abstract 239, Jefferson County, Texas, said 0.4628 acre tract being more particularly described by metes and bounds as follows:

Note: Bearings are referenced to the NAD83 Texas State Plane Coordinate System, South Central Zone #4204.

COMMENCING at a capped iron rod "Arceneaux" (N=13,918,884.03, E=3,546,738.54) found in the southwesterly line of a called 32.202 acre tract conveyed to Jefferson County, Texas as recorded in Clerks File No. 2001015448 of the Official Public Records of Jefferson County, Texas for the east corner of a called 138.568 acre tract (Parcel 5A) conveyed to Jefferson County as recorded in Clerks File No. 2001008588 of the Official Public Records of Jefferson County, Texas and the north corner of a called 1.002 acre tract conveyed to Pennzoil Pipeline Company as recorded in Volume 1624, Page 10 of the Deed Records of Jefferson County, Texas;

THENCE South 53°19'41" East along the said southwesterly line of the 32.202 acre tract and the northeasterly line of the said 1.002 acre tract a distance of 209.00 feet (called 209') to a point for the east corner (N=13,918,759.20, E=3,546,906.17) of the said 1.002 acre tract, the northwest corner of the said 0.473 and 0.4628 acre tracts and the **POINT OF BEGINNING**;

THENCE South 53°18'38" East along the said southwesterly line of the 32.202 acre tract and the northerly line of the said 0.473 and 0.4628 acre tracts a distance of 522.72 feet (called South 53°19'04" East) to a capped iron rod "Wortech" found for the south corner of the said 32.202 acre tract and the southwest corner of Lot 3 of Williamson Industrial Park, Phase I, a plat recorded in Clerks File No. 2016004971 of the Official Public Records of Jefferson County, Texas and an angle point of the said 0.4628 acre tract;

THENCE South 53°16'58" East along the southerly line of said Lot 3 and continuing along the said northerly line of the 0.473 and 0.4628 acre tracts a distance of 96.76 feet (called South 53°10'29" East 96.75 feet) to a capped iron rod "Soutex" found for the west corner of a called 0.6135 acre tract (Tract I) conveyed to HSC Pipeline Partnership, LLC as recorded in Clerks File No. 2010019488 of the Official Public Records of Jefferson County, Texas, the southeast corner of the said Lot 3 and an angle point of the said 0.4628 acre tract;

1405 Cornerstone Court • Beaumont, Texas 77706 • (409) 832-7238 • Fax (409) 832-7303

Texas Board of Professional Engineers Firm No. 1160 • Texas Board of Professional Land Surveyors Firm No. 100186

EXHIBIT A, PAGE 2 OF 2

THENCE South 53°21'45" East along the southwesterly line of the said 0.6135 acre tract and Lot 2 and Lot 1 of the said Williamson Industrial Park, Phase I and the said northerly line of the 0.473 and 0.4628 acre tracts a distance of 393.84 feet (Called South 53°10'04" East) to a TxDot monument (N=13,918,154.02, E=3,546,718.92) found in the northwesterly right-of-way line of F.M. Highway 365 for the south corner of said Lot 1 and the northeast corner of the said 0.4628 acre tract;

THENCE South 36°26'32" West along the said northwesterly right-of-way line of F.M. Highway 365 and the easterly line of the said 0.4628 acre tract a distance of 20.00 feet to a point in the southerly line of the said 0.473 acre tract and the northerly line of the remainder of a called 1.874 acre tract conveyed to the City of Port Arthur as recorded in Volume 2248, Page 158 of the Deed Records of Jefferson County, Texas for the southeast corner of the said 0.4628 acre tract from which a ½" iron rod found for the east corner of the a called 4.985 acre tract conveyed to Total Safety US, Inc. as recorded in Clerks File No. 2014005622 of the Official Public Records of Jefferson County, Texas bears South 36°26'32" West 30.49 feet;

THENCE North 53°19'41" West along the said northerly line of the 1.874 acre tract and the said southerly line of the 0.473 and 0.4628 acre tracts a distance of 1013.40 feet (called North 53°19'04" West) to a point in the southeasterly line of the said 1.002 acre tract for a northerly corner of the said 1.874 acre tract and the southwest corner of the said 0.473 and 0.4628 acre tracts;

THENCE North 36°39'26" East along the said southeasterly line of the 1.002 acre tract and the westerly line of the said 0.473 and 0.4628 acre tracts a distance of 20.00 feet (called North 36°44'24" East 20.00 feet) to the **POINT OF BEGINNING** and containing in area 0.4628 acre, more or less.

This Field Note Description is based on a survey performed by Fittz & Shipman, Inc. during 2018 and accompanies a plat of the same date.

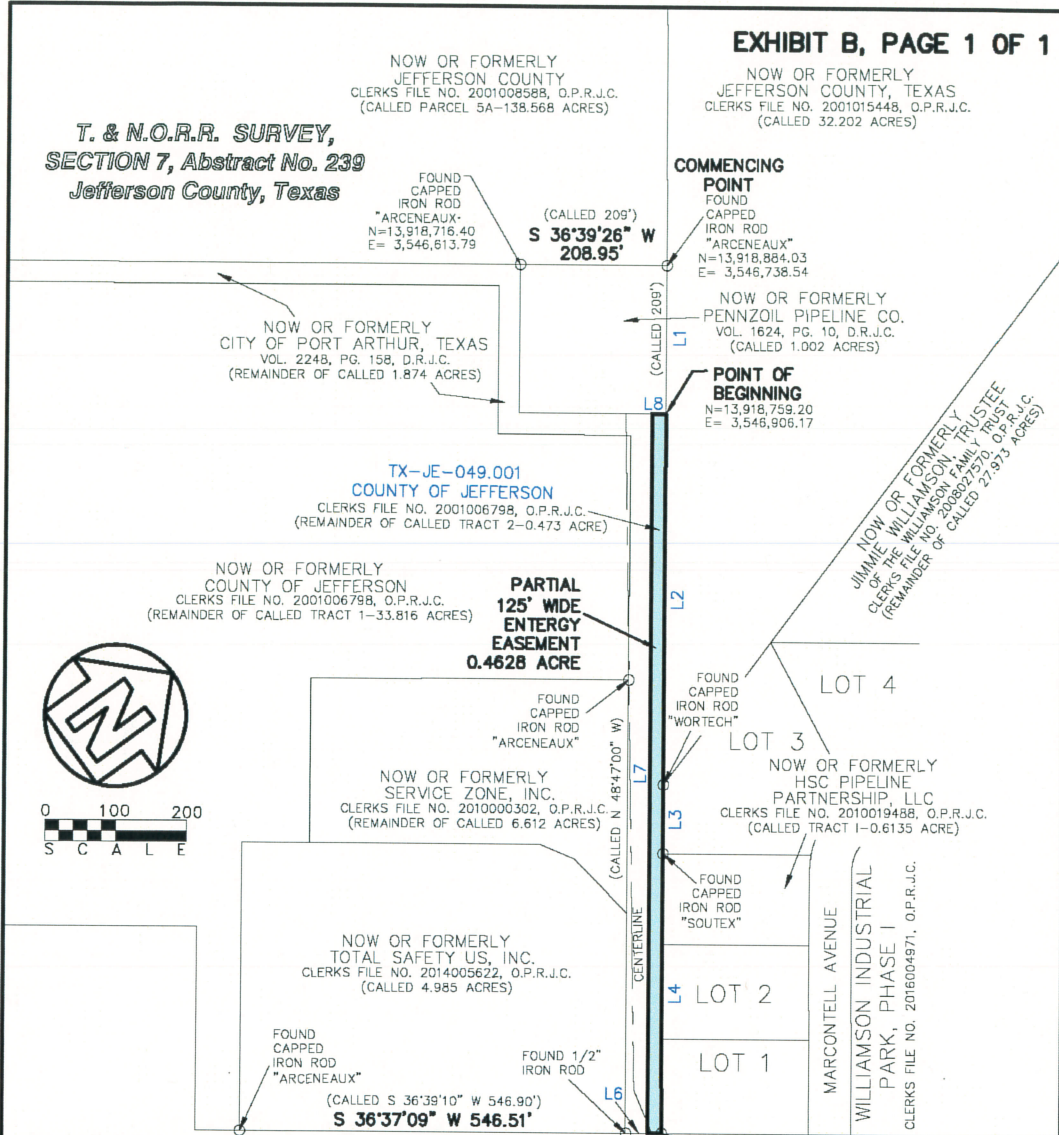
F&S Project No. 18032.0000
TX-JE-049.001

EXHIBIT B, PAGE 1 OF 1

**T. & N.O.R.R. SURVEY,
SECTION 7, Abstract No. 239
Jefferson County, Texas**

NOW OR FORMERLY
JEFFERSON COUNTY
CLERKS FILE NO. 2001008588, O.P.R.J.C.
(CALLED PARCEL 5A-138.568 ACRES)

NOW OR FORMERLY
JEFFERSON COUNTY, TEXAS
CLERKS FILE NO. 2001015448, O.P.R.J.C.
(CALLED 32.202 ACRES)



SURVEYOR'S CERTIFICATE: F.M. HIGHWAY 365

I DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THIS IS AN ACCURATE PLAT AND DESCRIPTION OF A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION DURING 2018.

MLB

MITCHELL LEE BRACKIN
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5163

Surveyor's Notes:

- (1) This survey was completed without the benefit of a title commitment, and not all easements or servitudes, whether of record or not, were researched at the time of this survey or shown hereon.
- (2) All bearings referenced hereon are based on the NAD 83, Texas State Plane Coordinate System - 4204 - Texas South Central Zone; all areas and distances are based on surface measurements.
- (3) A field note description of even date accompanies this plat.
- (4) The subject tract is a drainage ditch.



Line #	Direction	Length
L1	S53°19'41"E	209.00
L2	S53°18'38"E	522.72
CALLED	S53°19'04"E	
L3	S53°16'58"E	96.76
CALLED	S53°10'29"E	96.75
L4	S53°21'45"E	393.84
CALLED	S53°19'04"E	
L5	S36°26'32"W	20.00
L6	S36°26'32"W	30.49
L7	N53°19'41"W	1013.40
CALLED	N53°19'04"W	
L8	N36°39'26"E	20.00
CALLED	N36°44'24"E	20.00

Q:\PROJECTS\18032 - Entergy_PARP-2018\Survey\TX-JE-049.001.dwg Sep 26, 2018 11:01am

Fittz & Shipman
INC.

Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
T.B.P.E. FIRM #1160 T.X.L.S. FIRM #100186

ENTERGY TEXAS, INC.

**PLAT OF A 0.4628 ACRE TRACT
FOR A PARTIAL 125' WIDE EASEMENT
COUNTY OF JEFFERSON
JEFFERSON COUNTY, TEXAS**

APPROVED BY: MLB	DATE: 9-24-18
CHECKED BY: MLB	SCALE: 1" = 200'
DRAWN BY: JMW	CEA NO. 00000

Project No. 18032.0000
Dwg. No. TX-JE-049.001

To: Fran Lee / Auditing Department
From: Greg Keller / Maintenance Department
Date: April 9, 2019
Subject: Budget Transfer

We are requesting that you transfer \$20,000.00 from account #120-6083-416-10-72 (Maintenance Crew Account) and put into account #120-6083-416-60-03 (Building Courthouse). For replacing two flag poles in front of the Historical Courthouse and for additional cost to repair restroom wall tiles and floor tiles in the Courthouse. This will help us thru remainder of budget year '18-'19. If you have any questions please call ext. 8511.

Thank you,

GK/pa

(409) 835-8450 Phone
(409) 839-2350 Fax



1085 Pearl St, Room 103
Beaumont, TX 77701

Jevonne Smith Pollard
Constable, Precinct One

DATE: April 8, 2019
TO: Fran / Auditing
FROM: Constable Jevonne Pollard
RE: Transfer of funds

Please transfer the funds to the account numbers listed below:

\$300.00 from account #120-3065-425.40-11 to account #120-3065-425.30-17

\$400.00 from account #120-3065-425.50-21 to account #120-3065-425.30-17

to order uniforms for the Deputies. Please give me a call if you have any questions regarding this matter.

Thank you,

A handwritten signature in black ink, appearing to read "Jevonne Pollard", is written over a horizontal line.

Jevonne Pollard
Constable PCT 1

NAME	AMOUNT	CHECK NO.	TOTAL
JURY FUND			
TRI-CITY COFFEE SERVICE	96.40	458004	
DAWN DONUTS	45.50	458144	
			141.90**
ROAD & BRIDGE PCT.#1			
M&D SUPPLY	60.01	457969	
SMART'S TRUCK & TRAILER, INC.	39.60	457993	
SOUTHEAST TEXAS WATER	14.00	457996	
JEFFERSON COUNTY CREDIT CARDS	39.44	458105	
ADVANCE AUTO PARTS	67.37	458120	
ASCO	321.04	458123	
REPUBLIC SERVICES	125.66	458143	
			667.12**
ROAD & BRIDGE PCT.#2			
CITY OF NEDERLAND	49.79	457936	
ENTERGY	443.85	457956	
MID-COUNTY ALTERNATOR	125.00	457972	
MUNRO'S	40.00	457974	
OFFICE DEPOT	266.63	457978	
AT&T	97.08	457997	
VULCAN MATERIALS CO.	7,750.33	458007	
BUMPER TO BUMPER	121.20	458066	
ACT PIPE AND SUPPLY	2,308.12	458094	
JEFFERSON COUNTY CREDIT CARDS	257.96	458105	
REPUBLIC SERVICES	122.69	458143	
GULF COAST	703.80	458153	
WAUKESHA-PEARCE INDUSTRIES LLC	370.53	458160	
			12,656.98**
ROAD & BRIDGE PCT. # 3			
SPIDLE & SPIDLE	2,060.55	457924	
CITY OF PORT ARTHUR - WATER DEPT.	47.35	457935	
FARM & HOME SUPPLY	19.57	457952	
ENTERGY	273.14	457956	
M&D SUPPLY	48.08	457969	
MUNRO'S	90.85	457974	
OFFICE DEPOT	173.53	457978	
PHILPOTT MOTORS, INC.	117.04	457980	
MATHESON TRI-GAS	47.42	458005	
VULCAN MATERIALS CO.	80,351.67	458007	
SOUTHERN TIRE MART, LLC	1,048.24	458013	
CDW COMPUTER CENTERS, INC.	98.54	458016	
LOWE'S HOME CENTERS, INC.	193.10	458049	
TEXAS GAS SERVICE	181.84	458053	
FIVE STAR FEED	114.95	458060	
BILL WILLIAMS	200.00	458082	
ACTION OVERHEAD DOOR	604.00	458119	
FELIX AAA AUTO & TRUCK PARTS LLC	5.21	458142	
REPUBLIC SERVICES	45.00	458143	
SMITTY'S HAMSHIRE GULF	20.00	458152	
			85,643.92**
ROAD & BRIDGE PCT.#4			
ABLE FASTENER, INC.	161.14	457922	
CHUCK'S WRECKER SERVICE	370.00	457933	
COASTAL WELDING SUPPLY	65.10	457938	
DYNAMIC POWER SYSTEM, INC.	842.60	457945	
RB EVERETT & COMPANY, INC.	1,989.31	457951	
ENTERGY	20.61	457956	
M&D SUPPLY	69.56	457969	
MUNRO'S	142.46	457974	
OFFICE DEPOT	630.87	457978	
UNITED STATES POSTAL SERVICE	3.01	458036	
BEAUMONT FREIGHTLINER STERLING	2,456.21	458072	
ON TIME TIRE	166.99	458112	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	128.38	458131	
GCR TIRES & SERVICE	65.00	458134	
REPUBLIC SERVICES	214.79	458143	
RUSH TRUCK CENTERS	382.90	458188	
			7,708.93**
ENGINEERING FUND			

NAME	AMOUNT	CHECK NO.	TOTAL
VERIZON WIRELESS	244.45	458031	
CANON SOLUTIONS AMERICA INC	120.00	458121	364.45**
PARKS & RECREATION			
ENTERGY	47.14	457956	47.14**
GENERAL FUND			
TAX OFFICE			
ELECTRONIC OFFICE MACHINES	110.00	457949	
OFFICE DEPOT	662.50	457978	
ACE IMAGEWEAR	23.55	457992	
UNITED STATES POSTAL SERVICE	695.54	458036	1,491.59*
COUNTY HUMAN RESOURCES			
UNITED STATES POSTAL SERVICE	1.65	458036	1.65*
AUDITOR'S OFFICE			
FED EX	13.13	457953	
OFFICE DEPOT	228.79	457978	
UNITED STATES POSTAL SERVICE	12.56	458036	254.48*
COUNTY CLERK			
SOUTHERN COMPUTER WAREHOUSE	1,197.39	457928	
OFFICE DEPOT	119.66	457978	
UNITED STATES POSTAL SERVICE	300.73	458036	
RICOH USA INC	444.94	458118	2,062.72*
COUNTY JUDGE			
OFFICE DEPOT	315.07	457978	
ANITA F. PROVO	500.00	457983	
TEXAS COLLEGE OF PROBATE JUDGE	1,125.00	458001	
UNITED STATES POSTAL SERVICE	1.30	458036	
KIMBERLY PHELAN, P.C.	500.00	458074	
HARVEY L WARREN III	500.00	458102	
JEFFERSON COUNTY CREDIT CARDS	125.00	458105	
JAN GIROUARD & ASSOCIATES LLC	600.00	458147	
TEXAS ASSOCIATION OF COUNTIES	150.00	458176	3,816.37*
RISK MANAGEMENT			
OFFICE DEPOT	73.49	457978	
UNITED STATES POSTAL SERVICE	9.79	458036	83.28*
COUNTY TREASURER			
UNITED STATES POSTAL SERVICE	182.36	458036	182.36*
PRINTING DEPARTMENT			
OLMSTED-KIRK PAPER	179.62	457979	
JEFFERSON COUNTY CREDIT CARDS	95.64	458105	275.26*
PURCHASING DEPARTMENT			
BEAUMONT ENTERPRISE	1,628.70	457950	
OFFICE DEPOT	50.83	457978	
PORT ARTHUR NEWS, INC.	1,115.50	457981	
UNITED PARCEL SERVICE	15.38	458006	
UNITED STATES POSTAL SERVICE	63.72	458036	
JEFFERSON COUNTY CREDIT CARDS	522.00	458105	3,396.13*
GENERAL SERVICES			
B&L MAIL PRESORT SERVICE	1,721.20	457931	
CASH ADVANCE ACCOUNT	55.00	457967	
OLMSTED-KIRK PAPER	2,520.00	457979	

NAME	AMOUNT	CHECK NO.	TOTAL
TEXAS WILDLIFE DAMAGE MGMT FUND	2,700.00	458002	
INTERFACE EAP	1,347.30	458012	
ADVANCED STAFFING	97.50	458014	
TOWER COMMUNICATIONS, INC.	2,435.00	458033	
			10,876.00*
DATA PROCESSING			
OFFICE DEPOT	193.57	457978	
CDW COMPUTER CENTERS, INC.	115.86	458016	
MICHAEL BAIN	325.96	458083	
			635.39*
VOTERS REGISTRATION DEPT			
UNITED STATES POSTAL SERVICE	167.92	458036	
			167.92*
ELECTIONS DEPARTMENT			
OFFICE DEPOT	420.80	457978	
UNITED STATES POSTAL SERVICE	161.00	458036	
SIERRA SPRING WATER CO. - BT	38.94	458038	
JEFFERSON COUNTY CREDIT CARDS	1.87	458105	
			622.61*
DISTRICT ATTORNEY			
CASH ADVANCE ACCOUNT	305.00	457967	
NATIONAL DISTRICT ATTORNEY'S ASSN.	380.00	457975	
OFFICE DEPOT	771.63	457978	
UNITED STATES POSTAL SERVICE	176.61	458036	
CHILD ABUSE & FORENSIC SERVICES	125.00	458045	
JEFFERSON COUNTY CREDIT CARDS	5,821.00	458105	
THOMSON REUTERS-WEST	2,856.43	458126	
HIGGINBOTHAM INSURANCE AGENCY INC	71.00	458138	
CIOX HEALTH	83.74	458157	
LAURA RAMOS	562.95	458185	
			11,153.36*
DISTRICT CLERK			
UNITED STATES POSTAL SERVICE	384.83	458036	
JEFFERSON COUNTY CREDIT CARDS	399.96	458105	
			784.79*
CRIMINAL DISTRICT COURT			
DAVID GROVE	8,750.00	457925	
DONALD W. DUESLER & ASSOC.	8,750.00	457944	
EDWARD B. GRIPON, M.D., P.A.	595.00	457955	
OFFICE DEPOT	190.39	457978	
UNITED STATES POSTAL SERVICE	11.26	458036	
JOHN STEVENS JR	90.00	458079	
STEVEN GREENE	840.69	458129	
			19,227.34*
58TH DISTRICT COURT			
OFFICE DEPOT	84.99	457978	
SOUTHEAST TEXAS WATER	29.95	457996	
UNITED STATES POSTAL SERVICE	.82	458036	
MELISSA NAIL	582.09	458151	
			527.87*
60TH DISTRICT COURT			
SIERRA SPRING WATER CO. - BT	74.88	458041	
			74.88*
136TH DISTRICT COURT			
UNITED STATES POSTAL SERVICE	2.06	458036	
LEXIS-NEXIS	69.00	458037	
			71.06*
252ND DISTRICT COURT			
STATE BAR OF TEXAS	470.00	457998	
UNITED STATES POSTAL SERVICE	39.65	458036	
SUMMER TANNER	28.80	458077	
BRITTANIE HOLMES	8,750.00	458116	
			9,288.45*
279TH DISTRICT COURT			

NAME	AMOUNT	CHECK NO.	TOTAL
DAVID GROVE	100.00	457925	
PHILLIP DOWDEN	50.00	457927	
LAIRON DOWDEN, JR.	350.00	457943	
CATHERINE BRUNEY	1,050.00	457963	
ANITA F. PROVO	200.00	457983	
NATHAN REYNOLDS, JR.	200.00	457986	
RANDY SHELTON	125.00	457991	
KEVIN S. LAINE	500.00	458015	
UNITED STATES POSTAL SERVICE	2.50	458036	
LEXIS-NEXIS	76.00	458037	
JOEL WEBB VAZQUEZ	200.00	458064	
KIMBERLY PHELAN, P.C.	300.00	458074	
TONYA CONNELL TOUPS	200.00	458085	
JONATHAN L. STOVALL	200.00	458106	
ALICIA K HALL	350.00	458111	
TARA SHELANDER	100.00	458132	
MELANIE AIREY	150.00	458139	
317TH DISTRICT COURT			4,153.50*
LAIRON DOWDEN, JR.	325.00	457943	
OFFICE DEPOT	98.32	457978	
ANITA F. PROVO	925.00	457983	
WENDELL RADFORD	185.00	457985	
KEVIN S. LAINE	325.00	458015	
CHARLES ROJAS	150.00	458019	
JOEL WEBB VAZQUEZ	500.00	458064	
JUDY PAASCH	2,465.42	458067	
TARA SHELANDER	450.00	458132	
MELANIE AIREY	450.00	458139	
LAW OFFICE OF J SCOTT FREDERICK	150.00	458140	
JUSTICE COURT-PCT 1 PL 1			6,023.74*
UNITED STATES POSTAL SERVICE	45.27	458036	
LEXISNEXIS- ACCURINT	93.73	458100	
JUSTICE COURT-PCT 1 PL 2			139.00*
LEXISNEXIS- ACCURINT	93.73	458100	
JUSTICE COURT-PCT 2			93.73*
CDW COMPUTER CENTERS, INC.	458.62	458016	
JUSTICE COURT-PCT 6			458.62*
UNITED STATES POSTAL SERVICE	38.83	458036	
LEXISNEXIS- ACCURINT	93.73	458100	
JUSTICE COURT-PCT 7			132.56*
LEXISNEXIS- ACCURINT	93.73	458100	
JUSTICE OF PEACE PCT. 8			93.73*
LEXISNEXIS- ACCURINT	93.73	458100	
COUNTY COURT AT LAW NO.1			93.73*
UNITED STATES POSTAL SERVICE	.82	458036	
LEXIS-NEXIS	78.00	458037	
SIERRA SPRING WATER CO. - BT	78.43	458039	
COUNTY COURT AT LAW NO. 2			157.25*
DAVID GROVE	250.00	457925	
BRUCE N. SMITH	250.00	457994	
UNITED STATES POSTAL SERVICE	7.00	458036	
COUNTY COURT AT LAW NO. 3			507.00*
DONALD BOUDREAUX	250.00	457932	

NAME	AMOUNT	CHECK NO.	TOTAL
OFFICE DEPOT	142.49	457978	
MARVA PROVO	250.00	457982	
UNITED STATES POSTAL SERVICE	4.53	458036	
LANGSTON ADAMS	300.00	458050	
JOEL WEBB VAZQUEZ	250.00	458064	
ANTOINE FREEMAN	300.00	458087	
LAURIE PEROZZO	250.00	458099	
JARED GILTHORPE	250.00	458133	
THE MAYO LAW FIRM PLLC	300.00	458158	
			2,012.04*
COURT MASTER			
RICHARD D. HUGHES	4,200.00	457964	
UNITED STATES POSTAL SERVICE	.41	458036	
LEXIS-NEXIS	68.00	458037	
			4,268.41*
MEDIATION CENTER			
UNITED STATES POSTAL SERVICE	6.18	458036	
			6.18*
SHERIFF'S DEPARTMENT			
GT DISTRIBUTORS, INC.	164.15	457954	
ENTERGY	764.92	457956	
AT&T	129.44	457997	
UNITED STATES POSTAL SERVICE	1,546.20	458036	
JEFFERSON COUNTY CREDIT CARDS	320.83	458105	
GALLS LLC	86.52	458141	
REPUBLIC SERVICES	45.00	458143	
SOUTHEAST TEXAS OCCUPATIONAL MEDICI	200.00	458150	
TND WORKWEAR CO LLC	292.00	458156	
			3,549.06*
JAIL - NO. 2			
AAA LOCK & SAFE	1,002.00	457919	
CITY OF BEAUMONT - WATER DEPT.	16.00	457934	
COBURN'S, BEAUMONT BOWIE (1)	43.64	457939	
ECOLAB	569.90	457948	
ENTERGY	31,080.15	457956	
HERTZ CORPORATION	121.03	457962	
JACK BROOKS REGIONAL AIRPORT	408.00	457966	
CASH ADVANCE ACCOUNT	414.42	457967	
KIRKSEY'S SPRINT PRINTING	99.80	457968	
MCNEILL INSURANCE AGENCY	426.00	457971	
OFFICE DEPOT	2,045.27	457978	
OLMSTED-KIRK PAPER	325.00	457979	
SANITARY SUPPLY, INC.	1,168.00	457989	
AT&T	29.31	457997	
UNITED COMMUNICATIONS, INC.	125.50	458020	
CHANNING L. BETE CO, INC.	64.95	458022	
WALMART COMMUNITY BRC	38.36	458034	
LOWE'S HOME CENTERS, INC.	679.08	458049	
DOGUET RICE MILLING COMPANY	288.00	458081	
FIRETROL PROTECTION SYSTEMS, INC.	1,360.00	458095	
TITAN TESTING	587.00	458107	
INDUSTRIAL & COMMERCIAL MECHANICAL	2,675.00	458113	
MATERA PAPER COMPANY INC	3,518.14	458124	
KROPP HOLDINGS INC	2,377.99	458128	
GALLS LLC	8.95	458141	
REPUBLIC SERVICES	3,777.06	458143	
THE MONOGRAM SHOP	1,943.00	458159	
FOOD MARKETING CONCEPTS INC	17,598.20	458171	
HARDIE'S FRESH FOODS	6,698.59	458172	
CORRHEALTH LLC	78,900.85	458180	
PV BUSINESS SOLUTION INC	298.50	458192	
			158,687.69*
JUVENILE PROBATION DEPT.			
HERNANDEZ OFFICE SUPPLY, INC.	54.36	457961	
OFFICE DEPOT	66.97	457978	
UNITED STATES POSTAL SERVICE	5.53	458036	
LATONYA DOUCET	110.20	458092	
KAYLAN BURTON	281.88	458174	
			518.94*
JUVENILE DETENTION HOME			

NAME	AMOUNT	CHECK NO.	TOTAL
EPS	200.00	457946	
ENTERGY	4,955.13	457956	
FLOWERS FOODS	163.64	458061	
BEN E KEITH FOODS	2,285.21	458062	
KAREN ROBERTS	600.00	458097	
REPUBLIC SERVICES	704.70	458143	
BIG THICKET PLUMBING INC	789.00	458181	
STERICYCLE, INC	35.00	458183	
CONSTABLE PCT 1			9,732.68*
UNITED STATES POSTAL SERVICE	53.20	458036	
LEXISNEXIS- ACCURINT	93.73	458100	
BAYTOWN POLICE ACADEMY	20.00	458191	
CONSTABLE-PCT 2			166.93*
LEXISNEXIS- ACCURINT	93.73	458100	
CONSTABLE-PCT 4			93.73*
BRIAN WERNER	151.53	458071	
DISH NETWORK	62.57	458080	
JEFFERSON COUNTY CREDIT CARDS	134.80	458105	
TRANSUNION RISK AND ALTERNATIVE	70.00	458137	
CONSTABLE-PCT 6			418.90*
UNITED STATES POSTAL SERVICE	7.00	458036	
COLE INFORMATION SERVICES	469.00	458065	
LEXISNEXIS- ACCURINT	93.72	458100	
CONSTABLE PCT. 8			569.72*
TND WORKWEAR CO LLC	206.35	458156	
AGRICULTURE EXTENSION SVC			206.35*
UNITED STATES POSTAL SERVICE	.82	458036	
TRACTOR SUPPLY CO	18.58	458076	
DAVID OATES	41.76	458149	
PAULA TACKER	149.64	458179	
TYLER FITZGERALD	87.00	458190	
HEALTH AND WELFARE NO. 1			297.80*
NSO - NURSES SERVICE ORGANIZATION	111.00	457921	
AUSTIN CECIL WALKES MD PA	2,932.58	458008	
UNITED STATES POSTAL SERVICE	47.75	458036	
LEXISNEXIS- ACCURINT	140.60	458100	
HEALTH AND WELFARE NO. 2			3,231.93*
CLAYBAR FUNERAL HOME, INC.	1,040.00	457937	
HANNAH FUNERAL HOME, INC.	1,500.00	457960	
OFFICE DEPOT	511.34	457978	
AUSTIN CECIL WALKES MD PA	2,932.58	458008	
LEXISNEXIS- ACCURINT	140.60	458100	
STERICYCLE, INC	35.00	458183	
NURSE PRACTITIONER			6,159.52*
MCKESSON MEDICAL-SURGICAL INC	152.61	458017	
SIERRA SPRING WATER CO. - BT	5.97	458040	
CHILD WELFARE UNIT			158.58*
J.C. PENNEY'S	6,788.79	458046	
SEARS COMMERCIAL CREDIT	1,141.35	458047	
INDIGENT MEDICAL SERVICES			7,930.14*
LOCAL GOVERNMENT SOLUTIONS LP	3,773.00	458088	

NAME	AMOUNT	CHECK NO.	TOTAL	
CARDINAL HEALTH 110 INC	6,185.23	458127	9,958.23*	
EMERGENCY MANAGEMENT				
VERIZON WIRELESS	150.00	458031	150.00*	
MAINTENANCE-BEAUMONT				
LOUIS AND COMPANY	932.76	457923	33,755.83*	
CITY OF BEAUMONT - LANDFILL	66.00	457929		
M&D SUPPLY	183.46	457969		
SANITARY SUPPLY, INC.	1,684.74	457989		
ACE IMAGEWEAR	384.20	457992		
S.E. TEXAS BUILDING SERVICE	25,381.80	457995		
WARREN EQUIPMENT CO.	2,125.00	458009		
WORTH HYDROCHEM	265.00	458011		
TEXAS FIRE & COMMUNICATIONS	105.00	458021		
CENTERPOINT ENERGY RESOURCES CORP	36.23	458068		
ATTABOY TERMITE & PEST CONTROL	477.54	458098		
REPUBLIC SERVICES	2,114.10	458143		
MAINTENANCE-PORT ARTHUR				
ALL-PHASE ELECTRIC SUPPLY	128.32	457941		11,401.39*
M&D SUPPLY	55.65	457969		
SANITARY SUPPLY, INC.	267.64	457989		
S.E. TEXAS BUILDING SERVICE	8,774.98	457995		
LOWE'S HOME CENTERS, INC.	467.44	458049		
TEXAS GAS SERVICE	360.66	458053		
ALLIED ELECTRICAL SYSTEMS&SOLUTIONS	195.00	458096		
PARKER LUMBER	135.26	458103		
NORTHERN TOOL AND EQUIPMENT	919.99	458109		
ALL TERRAIN EQUIPMENT CO	96.45	458175		
MAINTENANCE-MID COUNTY				
CITY OF NEDERLAND	20.65	457936	2,169.57*	
COBURN'S GROVES (5)	83.26	457940		
ENTERGY	1,789.21	457956		
RITTER @ HOME	3.89	457987		
ACE IMAGEWEAR	79.32	457992		
W. JEFFERSON COUNTY M.W.D.	27.14	458010		
WALMART COMMUNITY BRC	74.00	458034		
REPUBLIC SERVICES	92.10	458143		
SERVICE CENTER				
SPIDLE & SPIDLE	12,678.22	457924	32,038.51*	
J.K. CHEVROLET CO.	573.87	457965		
THE MUFFLER SHOP	105.00	457973		
PHILPOTT MOTORS, INC.	320.82	457980		
AT&T	64.72	457997		
JEFFERSON CTY. TAX OFFICE	7.50	458023		
JEFFERSON CTY. TAX OFFICE	7.50	458024		
JEFFERSON CTY. TAX OFFICE	15.00	458025		
JEFFERSON CTY. TAX OFFICE	16.75	458026		
JEFFERSON CTY. TAX OFFICE	7.50	458027		
JEFFERSON CTY. TAX OFFICE	7.50	458028		
JEFFERSON CTY. TAX OFFICE	7.50	458029		
JEFFERSON CTY. TAX OFFICE	7.50	458030		
VOYAGER FLEET SYSTEM, INC.	16,863.82	458059		
BUMPER TO BUMPER	792.45	458066		
ROBERT'S TEXACO XPRESS LUBE	56.00	458093		
SOUTHEAST TEXAS PARTS AND EQUIPMENT	190.35	458131		
1800RADIATOR & AC	179.00	458135		
REPUBLIC SERVICES	122.69	458143		
IMAGE 360 BEAUMONT	14.82	458184		
VETERANS SERVICE				
UNITED STATES POSTAL SERVICE	1.45	458036	108.05*	
HILARY GUEST	106.60	458051		
MOSQUITO CONTROL FUND			364,436.55**	

NAME	AMOUNT	CHECK NO.	TOTAL
SUPERIOR TIRE & SERVICE	47.27	457926	
ENTERGY	466.03	457956	
MUNRO'S	49.98	457974	
TIME WARNER COMMUNICATIONS	96.02	458000	
PRO CHEM INC	206.68	458114	
REPUBLIC SERVICES	122.69	458143	
TEXAS DEPARTMENT OF AGRICULTURE	75.00	458145	
O'REILLY AUTO PARTS	51.34	458186	
FEMA EMERGENCY			1,115.01**
GULF COAST	4,698.37	458154	
MOBILE MODULAR MANAGEMENT CORP	412.70	458187	
J.C. FAMILY TREATMENT			5,111.07**
BEAUMONT OCCUPATIONAL SERVICE, INC.	84.95	458044	
SECURITY FEE FUND			84.95**
SMITHS DETECTION	1,051.25	458117	
LAW LIBRARY FUND			1,051.25**
THOMSON REUTERS-WEST	1,907.53	458125	
EMPG GRANT			1,907.53**
VERIZON WIRELESS	90.26	458031	
JEFFERSON COUNTY CREDIT CARDS	1,637.30	458105	
JUVENILE PROB & DET. FUND			1,547.04**
VERIZON WIRELESS	26.22	458031	
IV-E FOSTER CARE			26.22**
SHI GOVERNMENT SOLUTIONS, INC.	527.16	458042	
GRANT A STATE AID			527.16**
VICTORIA COUNTY JUVENILE SERVICES	11,350.99	458091	
GRAYSON COUNTY DEPT OF JUVENILE	14,458.68	458136	
COMMUNITY SUPERVISION FND			25,809.67**
CASH ADVANCE ACCOUNT	1,316.65	457967	
OFFICE DEPOT	142.66	457978	
FRED PRYOR SEMINARS & CAREER TRACK	198.00	457984	
TEXAS DEPT OF LICENSING &	100.00	458003	
UNITED STATES POSTAL SERVICE	95.65	458036	
ABSHIRE INTERPRETING SERVICES	390.00	458086	
LOCAL GOVERNMENT SOLUTIONS LP	6,965.00	458088	
STERICYCLE, INC	210.00	458183	
JEFF. CO. WOMEN'S CENTER			9,417.96**
A&A ELECTRIC CO OF BEAUMONT INC	325.84	457920	
MARKET BASKET	346.43	457970	
SYSCO FOOD SERVICES, INC.	1,178.97	457999	
TOWER COMMUNICATIONS, INC.	60.00	458033	
BEN E KEITH FOODS	1,249.50	458062	
SAM'S CLUB DIRECT	249.25	458115	
MATERA PAPER COMPANY INC	258.28	458124	
REPUBLIC SERVICES	150.26	458143	
STERICYCLE, INC	70.00	458183	
MENTALLY IMPAIRED OFFEND.			3,888.53**
CASH ADVANCE ACCOUNT	200.00	457967	
COMMUNITY CORRECTIONS PRG			200.00**

NAME	AMOUNT	CHECK NO.	TOTAL
CASH ADVANCE ACCOUNT	200.00	457967	200.00**
JAG GRANTS			
CDW COMPUTER CENTERS, INC.	976.00	458016	976.00**
CRIME VICTIMS CLEARING.			
KIMBERLY PHELAN, P.C.	750.00	458074	750.00**
LAW OFFICER TRAINING GRT			
HERNANDEZ OFFICE SUPPLY, INC.	2,069.18	457961	
JEFFERSON COUNTY CREDIT CARDS	40.83	458105	
GALLS LLC	84.00	458141	2,194.01**
DEPUTY SHERIFF EDUCATION			
JEFFERSON COUNTY CREDIT CARDS	949.00	458105	949.00**
UNCLAIMED FUNDS MGMT FUND			
RICKY RENAUD ZENO	73.64	458193	73.64**
HOTEL OCCUPANCY TAX FUND			
THE LABICHE ARCHITECTURAL GROUP	6,628.00	457930	
EAST TEXAS PEACE OFFICERS ASSN.	1,610.00	457947	
M&D SUPPLY	22.89	457969	
AT&T	185.73	457997	
TRI-CITY COFFEE SERVICE	65.80	458004	
ART MUSEUM OF SOUTHEAST TEXAS	3,509.00	458043	
SOUTHEAST TEXAS BASEBALL/ACADEMY	9,375.00	458048	
SOUTHEAST TEXAS ARTS COUNCIL	5,000.00	458052	
MARDI GRAS OF SOUTHEAST TEXAS	9,000.00	458055	
FIRE MUSEUM OF TEXAS	1,600.00	458056	
BEAUMONT HERITAGE SOCIETY	2,700.00	458057	
BEAUMONT CONVENTION & VISITOR BUREA	10,200.00	458058	
SPINDLETOP-GLADYS CITY BOOMTOWN	2,600.00	458063	
PORT ARTHUR HISTORICAL SOCIETY	5,000.00	458078	
TEXAS STYLE COOL AUTUMN NITES	2,880.00	458101	
PORT ARTHUR CONVENTION & TOURIST	14,875.00	458108	
DIOCESE OF BEAUMONT	1,430.00	458122	
REPUBLIC SERVICES	606.69	458143	
BEAUMONT COUNCIL OF GARDEN CLUBS	3,879.00	458146	
MAGNOLIA GARDEN CLUB	5,000.00	458161	
STARS OVER TX SOFTBALL	500.00	458162	
STARS OVER TX SOFTBALL	500.00	458163	
STARS OVER TX SOFTBALL	500.00	458164	
STARS OVER TX SOFTBALL	500.00	458165	
STARS OVER TX SOFTBALL	500.00	458166	
STARS OVER TX SOFTBALL	500.00	458167	
STARS OVER TX SOFTBALL	500.00	458168	
STARS OVER TX SOFTBALL	500.00	458169	
DIAMOND DYNASTY LLC	500.00	458182	90,667.11**
COASTAL RESTORATION PRJCT			
TIM RICHARDSON	10,500.00	458130	10,500.00**
AIRPORT FUND			
CURETON & SON	34.00	457942	
ENTERGY	11,470.64	457958	
ENTERGY	248.97	457959	
RALPH'S INDUSTRIAL ELECTRONICS	16.16	457988	
AT&T	618.62	457997	
UNITED STATES POSTAL SERVICE	5.81	458036	
LOWE'S HOME CENTERS, INC.	474.36	458049	
HERRERA'S EMERGENCY LIGHTING	130.00	458054	
JEFFERSON COUNTY CREDIT CARDS	2,058.00	458105	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	5.40	458131	
REPUBLIC SERVICES	415.81	458143	

NAME	AMOUNT	CHECK NO.	TOTAL
MAVERICK INTERNATIONAL	200.00	458148	
ADVANTAGE CONSULTING LLC	750.00	458155	
TITAN AVIATION FUELS	44,971.97	458189	61,399.74**
SE TX EMP. BENEFIT POOL			
STANDARD INSURANCE COMPANY	14,983.95	458073	
RELIANCE STANDARD LIFE INSURANCE	5,825.56	458075	
EXPRESS SCRIPTS INC	73,034.83	458177	
UNITEDHEALTHCARE INSURANCE COMPANY	1,047.84	458178	94,892.18**
SETEC FUND			
INDUSTRIAL & COMMERCIAL MECHANICAL REPUBLIC SERVICES	1,652.00 1,570.21	458113 458143	3,222.21**
LIABILITY CLAIMS ACCOUNT			
STEVENS BALDO & LIGHTY PLLC	1,132.50	458173	1,132.50**
WORKER'S COMPENSATION FD			
TRISTAR RISK MANAGEMENT	4,506.39	458069	
TRISTAR RISK MANAGEMENT	12,733.07	458070	17,239.46**
SHERIFF'S FORFEITURE FUND			
THIRD COAST TINT	200.00	458090	200.00**
GUARDIANSHIP FEE			
GREGORY LAW FIRM	200.00	458110	200.00**
APPELLATE JUDICIAL SYSTEM			
9TH COURT OF APPEALS	2,320.00	458089	2,320.00**
MARINE DIVISION			
ENTERGY	129.73	457956	
RITTER @ HOME	1,531.59	457987	
SETZER HARDWARE, INC.	254.19	457990	
AT&T	84.24	457997	
ADVANCED SYSTEMS & ALARM SERVICES,	60.00	458018	
VERIZON WIRELESS	531.86	458032	
BUMPER TO BUMPER	318.66	458066	
THE DINGO GROUP-PETE JORGENSON MARI	3,903.14	458084	
VECTOR SECURITY	39.95	458170	6,853.36**
SHERIFF - COMMISSARY			
WALMART COMMUNITY BRC	758.72	458034	758.72**
			813,787.23***

**AGENDA ITEM****April 15, 2019**

Receive and file executed Professional Services Agreement between Jefferson County and Lone Star PACE.

**AGENDA ITEM****November 13, 2018**

Consider, possibly approve and authorize the County Judge to execute a Professional Services Agreement between Jefferson County and Lone Star PACE related to the administration of the PACE program to Jefferson County.

**REPORT REQUIRED BY TEXAS LOCAL GOVERNMENT CODE SECTION 399.009
FOR PROPOSED JEFFERSON COUNTY
PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAM**

This Report is adopted by Jefferson County Commissioners Court for the Jefferson County Property Assessed Clean Energy (PACE) Program (**the "PACE Program" or "program"**) in accordance with the requirements of the Property Assessed Clean Energy Act (**the "PACE Act"**) as set forth in Texas Local Government Code Chapter 399.

Jefferson County and its constituents benefit when older existing buildings are modified with new technology and equipment that increases energy efficiency and reduces water consumption. As described in this Report, Jefferson County is establishing the commercial PACE Program to encourage private sector investment in energy efficiency and water conservation. The PACE program will be offered to property owners on a strictly voluntary basis and will not require the use of any public funds or resources.

Authorized under the PACE Act enacted in 2013, the PACE program is an innovative financing program that enables private sector owners of privately owned commercial, industrial, and multi-family residential properties with five or more dwelling units to obtain low-cost, long-term loans to pay for water conservation, energy-efficiency improvements, and renewable energy retrofits. PACE loans provide up to 100% financing of all project costs, with little or no up-front out-of-pocket cost to the owner. The 2015 legislative session streamlined the process.

Loans made under the PACE Program will be secured by assessments on the property that are voluntarily imposed by the owner. Assessments may be amortized over the projected life of the improvements. The annual utility cost savings derived from improvements financed with PACE loans are expected to exceed the amount of the annual assessment payments. In turn, these improvements are able to generate positive cash flow upon installation because the debt service will be less than the savings.

PACE assessments are tied to the property and follow title from one owner to the next. Each owner is responsible only for payment of the assessments accruing during its period of ownership. When the property is sold, the payment obligation for the remaining balance of the assessment is transferred automatically to the next owner. As a result, the program will help property owners overcome market barriers which often discourage investment in energy efficiency and water conservation improvements.

1. Eligible Properties

The Jefferson County PACE program is a strictly voluntary program. All private sector owners of Eligible Properties located within the County PACE region may participate in PACE financing. **"Eligible Properties"** include commercial, industrial, and multi-family residential

properties with five or more dwelling units. Government, residential¹, and undeveloped property and property undergoing development at the time of the assessment are not Eligible Properties.

2. Qualified Improvements

PACE financing may be used to pay for Qualified Improvements to Eligible Properties. "*Qualified Improvements*" are permanent improvements intended to decrease water or energy consumption or demand, including a product, device, or interacting group of products or devices on the customer's side of the meter that use energy technology to generate electricity, provide thermal energy, or regulate temperature. Under the PACE Act, products or devices that are not permanently fixed to real property are not considered to be Qualified Improvements.

The following items may constitute Qualified Improvements:

- High efficiency heating, ventilating and air conditioning ("HVAC") systems
- High efficiency chillers, boilers, and furnaces
- High efficiency water heating systems
- Energy management systems and controls
- Distributed generation systems
- High efficiency lighting system upgrades
- Building enclosure and envelope improvements
- Water conservation and wastewater recovery and reuse systems
- Combustion and burner upgrades
- Heat recovery and steam traps
- Water management systems and controls (indoor and outdoor)
- High efficiency irrigation equipment

3. Benefits of PACE to Property Owners

The PACE program will enable owners of Eligible Properties to overcome traditional barriers to capital investments in energy efficiency and water conservation improvements, such as unattractive returns on investment, split incentives between landlords and tenants, and uncertainty of recouping the investment upon sale of the property.

By financing Qualified Improvements through the program, property owners may achieve utility cost savings that exceed the amount of the assessment and reduce their exposure to utility price volatility. As a result, the value of the property will be enhanced, and the owner will only be obligated to pay the assessment installments that accrue during its period of ownership of the property. Additionally, by investing in energy efficiency and water conservation with PACE financing, property owners may also qualify for various rebate, tax credit, and incentive programs offered by utility providers and state or federal governmental authorities to encourage these types of investments.

¹ This encompasses single-family residential and multi-family properties less than five units.

4. Benefits of PACE to the County

Several commercial, agricultural and industrial buildings, plants and multifamily buildings require alterations to make them more energy efficient, water efficient and environmentally friendly to reduce the growing drain on our energy and water supplies and to improve air and water quality. They and many residential occupants may benefit from the financing options available through PACE to enable them to proceed with long range plans now rather than have to wait for other financing availability.

Among other things, projects financed through PACE will:

- Enable property owners and occupants to save substantial amounts in utility costs
- Reduce demand on the electricity grid
- Mitigate greenhouse gas emissions associated with energy generation
- Enhance the value and efficiency of existing buildings
- Boost the local economy by creating new job opportunities for laborers and new business opportunities for contractors, engineers, commercial lenders, professionals, and equipment vendors and manufactures
- Increase business retention and expansion in the PACE region by enabling cost effective energy and water saving updates to existing property
- Improve productivity through optimized energy usage
- Support the State's water conservation plan
- Better enable the County to meet its water conservation goals

Finally, there are multiple regulatory schemes being promulgated by the EPA that will have significant impacts on air quality in Texas. For example, the recent adjustment in the National Ambient Air Quality Standards (“NAAQS”) to a lower standard increased the difficulty for the County to maintain its attainment status. Being non-attainment for priority pollutants in the Clean Air Act endangers federal transportation funding. Through the reduction in energy consumption, as a result of the PACE program, there will be a decreased demand for power resulting in lower emissions from power plants.

The PACE program requires minimal support from the County. It is designed to be self-sustaining. Furthermore, because the PACE program is tax neutral, it achieves all of the benefits listed in this Report without imposing a burden on the County's general fund.

The 84th Texas Legislature added a provision that explicitly shields the County and its employees from liability resulting from administering a PACE program.²

5. The Benefits of PACE to Lenders

PACE loans are attractive to lenders because they are very secure investments. Like a property tax lien, the assessment lien securing the PACE loan has priority over other liens

² TX. Local Gov't §399.019.

on the property. Therefore, the risk of loss from non-payment of a PACE loan is low compared to most other types of loans. PACE assessments provide lenders with an attractive new product to assist existing and new customers in addressing an almost universal pent-up demand for needed commercial and industrial property equipment modernization. In order to protect the interests of holders of existing mortgage loans on the property, the PACE Act requires their written consent to the PACE assessment as a condition to obtaining a PACE loan.

6. The Benefits of PACE to Contractors, Engineers, and Manufacturers

PACE loans provide attractive sources of financing for water and energy saving retrofits and upgrades, thereby encouraging property owners to make substantial investments in existing commercial and industrial buildings. As a result, PACE will unlock business opportunities for contractors, engineers, and manufacturers throughout the commercial and industrial sectors.

7. Administration of the PACE Program

Under the PACE Act, the establishment and operation of the program are considered to be governmental functions. The PACE Act further authorizes the County to enter into a contract with third parties to provide administrative services for the PACE program (the "*Authorized Representatives*"). Jefferson County may delegate administration of the PACE program to one or more qualified, non-profit organizations or registered municipal advisor ("RMA") firms that can administer the program at no cost to the County. The Authorized Representatives will be funded by transaction fees paid by the parties, charitable grants or other sources of revenue. The Authorized Representatives will not receive compensation or reimbursement from the County. Periodic updates to the standard form documents (described in Section 9) will be necessary as the program evolves, incorporating best practices and standardizing the PACE contracts across various PACE programs. The Authorized Representatives will be tasked with maintaining the form contracts and making technical and conforming updates as necessary so long as the changes are consistent with the resolution to establish the PACE program and the statute.

8. Eligible Lenders

The PACE Act does not set criteria for financial institutions or investors to be PACE lenders. The County will follow best practices of other PACE programs by recommending that lenders be:

- Any federally insured depository institution such as a bank, savings bank, savings and loan association and federal or state credit union;
- Any insurance company authorized to conduct business in one or more states;
- Any registered investment company, registered business development company, or a Small Business
- Small business investment company;
- Any publicly traded entity; or
- Any private entity that:
 - Has a minimum net worth of \$5 million; and

- Has at least three years' experience in business or industrial lending or commercial real estate lending (including multifamily lending), or has a lending officer that has at least three years' experience in business or industrial lending or commercial real estate lending; and
- Can provide independent certification as to availability of funds; and
- All lenders must have the ability to carry out, either directly or through a servicer, the bookkeeping and customer service work necessary to manage the assessment accounts.

Any lender can participate in the PACE program as long as it is a financially stable entity with the ability to carry out, either directly or through a servicer, the bookkeeping and customer service work necessary to manage the assessment accounts. The property owner, not the County or the Authorized Representative, selects the lender.

The PACE administrator will not guarantee or imply that funding will automatically be provided from a third-party lender, imply or create any approval, endorsement or certification of, or responsibility for, any lender; or create any type of express or implied favoritism for any eligible lender.

9. Components of the PACE Program

As required under Section 399.009 of the PACE Act, the following describes all aspects of the PACE Program:

- a. Map of Region. A map of the boundaries of the region included in the program is attached to this Report as Exhibit 1. The region encompasses the Jefferson County limits.
- b. Form Contract with Owner. A form contract between Jefferson County and the record owner of the Eligible Property is attached as Exhibit 2. It specifies the terms of the assessment under the PACE program and the financing to be provided by an Eligible Lender of the property owner's choosing.
- c. Form Contract with Lender. A form contract between Jefferson County and the Eligible Lender chosen by a property owner is attached to this Report as Exhibit 3. It specifies the financing and servicing of the debt through assessments.
- d. Form Notice of Contractual Assessment Lien. A form Notice of Assessment Lien to be filed by the County with the Hays County Clerk is attached to this Report as Exhibit 4.
- e. Qualified Improvement. The following types of projects are qualified improvements that may be subject to contractual assessments under the PACE program:

Projects that (a) involve the installation or modification of a

permanent improvement fixed to privately owned commercial, industrial or residential real property with five (5) or more dwelling units³; and (b) are intended to decrease energy or water consumption or demand by installing a product, device, or interacting group of products or devices on the customer's side of the meter that uses energy technology to generate electricity, provide thermal energy, or regulate temperature.⁴

A sample list of potential Qualified Improvements appears in Section 2 above.

The PACE program may not be used to finance improvements to undeveloped lots or lots undergoing development at the time of the assessment, or for the purchase or installation of products or devices not permanently fixed to real property.⁵

- f. Authorized Representatives. HB 3187 was signed into law on June 16, 2015. It authorizes Jefferson County to delegate administration of the PACE program to one or more third-party "representatives." Jefferson County may delegate all official administrative responsibilities, like the execution of individual contracts with property owners and lenders, to Authorized Representatives. This relationship will be monitored and maintained by the County Judge or his designee.
- g. Plans for Ensuring Sufficient Capital. Lenders will extend loans to finance Qualified Improvements. Financing documents executed between owners and lenders will impose a contractual assessment on Eligible Property to repay the owner's financing of the Qualified Improvements. The lenders will ensure that property owners demonstrate the financial ability to fulfill the financial obligations to be repaid through contractual assessments.
- h. No Use of Bonds or Public Funds. Jefferson County does not intend to issue bonds or use any other public monies to fund PACE projects. Property owners will obtain all financing from the Eligible Lenders they choose.
- i. Limit on Length of Loan. One of the statutory criteria of a PACE loan is that the assessment payment period cannot exceed the useful life of the Qualified Improvement that is the basis for the loan and assessment. As part of the application process, the property owners will submit a third-party review showing the water or energy baseline conditions and the projected water or energy savings. This review will aid the Authorized Representatives in making a determination that the period of the requested assessment does not exceed the useful life of the Qualified Improvement.
- j. Application Process. The Authorized Representatives will accept applications from property owners seeking to finance Qualified Improvements under the program.

³ TX. Local Gov't Code §399.002(5).

⁴ TX. Local Gov't Code §399.002(3).

⁵ TX. Local Gov't Code §399.004.

Each application must be accompanied by the required application fee and must include

- (1) A description of the specific Qualified Improvements to be installed or modified on the property,
- (2) A description of the specific real property to which the qualified improvements will be permanently fixed, and
- (3) The total amount of financing, including any transaction costs, to be repaid through assessments.

Based on this information, the Authorized Representative may issue a preliminary letter indicating that, subject to verification of all requirements at closing, the proposed project appears to meet program requirements. Based on this preliminary letter, the property Owner may initiate an independent third-party review of the project and submit the project to Eligible Lenders for approval of financing.

Once the above processes are completed, the property owner will submit the application to the Authorized Representative to obtain preliminary approval. The property owner is expected to produce the following documentation prior to closing on the PACE loan:

- (1) A Report conducted by a qualified, independent third party, showing water or energy baseline conditions and the projected water or energy savings, or the amount of renewable energy generated attributable to the project;
- (2) Such financial information about the owner and the property as the lender chosen by the owner deems necessary to determine that the owner has demonstrated the financial ability to fulfill the financial obligations to be paid through assessments; and
- (3) All other information required by the Authorized Representative.

k. Financial Eligibility Requirements. The Authorized Representative will determine whether the owner, the property and the improvements are eligible for financing under the program. The Eligible Lender chosen by the owner will determine whether the owner has demonstrated the financial ability to repay the financial obligations to be collected through contractual assessments. The statutory method⁶ for ensuring such a demonstration of financial ability must be based on appropriate underwriting factors, including the following:

- (1) verification that the person requesting to participate in the program is the legal record owner of the benefitted property,
- (2) the applicant is current on mortgage and property tax payments,
- (3) the applicant is not insolvent or in bankruptcy proceedings,
- (4) the title of the benefitted property is not in dispute, and
- (5) there is an appropriate ratio of the amount of the assessment to the assessed

⁶ TX. Local Gov't Code §399.009(b).

value of the property.

- l. Mortgage Holder Notice and Consent. As a condition to the execution of a written contract between the Authorized Representative and the property owner imposing an assessment under the program, the holder of any mortgage lien on the property must be given notice of the owner's intention to participate in the program on or before the 30th day before the date the contract is executed, and the owner must obtain the written consent of all mortgage holders.⁷

- m. Imposition of Assessment. The Authorized Representative will enter into a written contract with the property owner, only after:
 - (1) The property owner delivers to the Authorized Representative written consent of all mortgage lien holders;
 - (2) The Authorized Representative's determination that the owner and the property are eligible to participate in the program, that the proposed improvements are reasonably likely to decrease energy or water consumption or demand, and that the period of the requested assessment does not exceed the useful life of the Qualified Improvements; and
 - (3) The Eligible Lender notifies the Authorized Representative that the owner has demonstrated the financial ability to fulfill the financial obligations to be repaid through contractual assessments.

The contract will impose a contractual assessment on the owner's Eligible Property to repay the lender's financing of the Qualified Improvements. The Eligible Lender will file "A Notice of Contractual Assessment Lien," in substantially the form in Exhibit 4 in the Official Public Records of Jefferson County, depending on where the Eligible Property is located, as notice to the public of the assessment, from the date of filing. The contract and the notice must contain the amount of the assessment, the legal description of the property, the name of the property owner, and a reference to the statutory assessment lien provided under the PACE Act.

- n. Collection of Assessments. The execution of the written contract between the Authorized Representative and the property owner and recording of the Notice of Contractual Assessment Lien incorporate the terms of the financing documents executed between the property owner and with the lender to repay the financing secured by the assessment. The third-party lender will advance financing to the owner, and the terms for repayment will be such terms as are agreed between the lender and the owner. Under the form lender contract attached as Exhibit 3, the lender or a designated servicer will agree to service the debt secured by the assessment.⁸

With funds from the lender, the property owner can purchase directly the

⁷ TX. Local Gov't Code §399.010.

⁸ The servicer will be responsible for maintaining payment records, account balances, and reporting to the PACE Administrator as required.

equipment and materials for the Qualified Improvement and contract directly, including through lease, power purchase agreement, or other service contract, for the installation or modification of the Qualified Improvements. Alternatively, the lender may make progress payments to the property owner as the Qualified Improvement is installed.

The lender will receive the owner's assessment payments to repay the debt and remit to the Authorized Representative any administrative fees. The lender will have the right to assign or transfer the right to receive the installments of the debt secured by the assessment, provided all of the following conditions are met:

- (1) The assignment or transfer is made to an Eligible Lender, as defined above; and
 - (2) The property owner and the Authorized Representative are notified in writing of the assignment or transfer and the address to which payment of the future installments should be mailed at least 30 days before the next installment is due according to the schedule for repayment of the debt; and
 - (3) The assignee or transferee of the right to receive the payments executes an explicit written assumption of all of lender's obligations under the lender contract.
- o. Verification Review. After a Qualified Improvement is completed, the Authorized Representative will require the property owner to provide verification by a qualified independent third-party reviewer that the Qualified Improvement was properly completed and is operating as intended.⁹ The verification report conclusively establishes that the improvement is a Qualified Improvement and the project is qualified under the PACE program.
- p. Marketing and Education Services. Jefferson County may subsequently enter into agreements with one or more other local governments or non-profit organizations that promote energy and water conservation and/or economic development to provide marketing and education services for the PACE program.
- q. Quality Assurance and Antifraud Measures. The Authorized Representative will institute quality assurance and antifraud measures for the Program. The Authorized Representative will review each PACE application for completeness and supporting documents through independent review and verification procedures. The application and required attachments will identify and supply the information necessary to ensure that the property owner, the property itself, and the proposed project all satisfy PACE program underwriting and technical standard requirements. Measures will be put in place to provide safeguards, including a review of the energy and water savings baseline and certification of compliance with the technical standards manual from an independent third-party reviewer (ITPR), who must be a registered professional engineer, before the project can proceed. This review will include a site visit, report, and a letter from the ITPR certifying that he or she has no financial interest in the

⁹ TX. Local Gov't Code §399.011.

project and is an independent reviewer. After the construction of the project is complete, an ITPR will conduct a final site inspection and determine whether the project was completed and is operating properly. The reviewer's certification will also include a statement that the reviewer is qualified and has no financial interest in the project.

- r. Delinquency. Under the terms of the form lender contract attached as Exhibit 3, if a property owner fails to pay an agreed installment when due on the PACE assessment, the lender will agree to take at least the following steps to collect the delinquent installment:

- (1) Mail to the owner a written notice of delinquency and demand for payment by both certified mail (return receipt requested) and first-class mail, and
- (2) Mail to the owner a written notice of delinquency and demand for payment by both certified mail (return receipt requested) and first-class mail, and
- (3) Mail to the owner a second notice of delinquency and demand for payment by both certified mail (return receipt requested) and first-class mail, at least 30 days after the date of the first notice if the delinquency is continuing.

If the owner fails to cure the delinquency within 30 days after mailing the second notice of delinquency, the lender may notify the Authorized Representative of the owner's default. Pursuant to Texas Local Government Code Section 399.014(c), the Authorized Representative will initiate steps for the County to enforce the assessment lien in the same manner as a property tax lien against real property may be enforced, to the extent the enforcement is consistent with Section 50, Article XVI, of the Texas Constitution. Delinquent installments will incur penalties and interest in the same manner and at the same rate as delinquent property taxes, according to Texas Local Government Code Section 399.014(d), and such statutory penalties and interest will be due to the County to offset the cost of collection.

If the County files suit to enforce collection, the County may also recover costs and expenses, including attorney's fees, in a suit to collect a delinquent installment of an assessment in the same manner and at the same rate as in suit to collect a delinquent property tax. If a delinquent installment of an assessment is collected after the filing of a suit, the County will remit to the lender the net amount of the delinquent installments and contractual interest collected and remit to the Authorized Representative the amount of any administrative fees collected but will retain any statutory penalties, interest, and attorney's fees collected.

EXHIBIT 1

MAP OF COUNTY PACE REGION

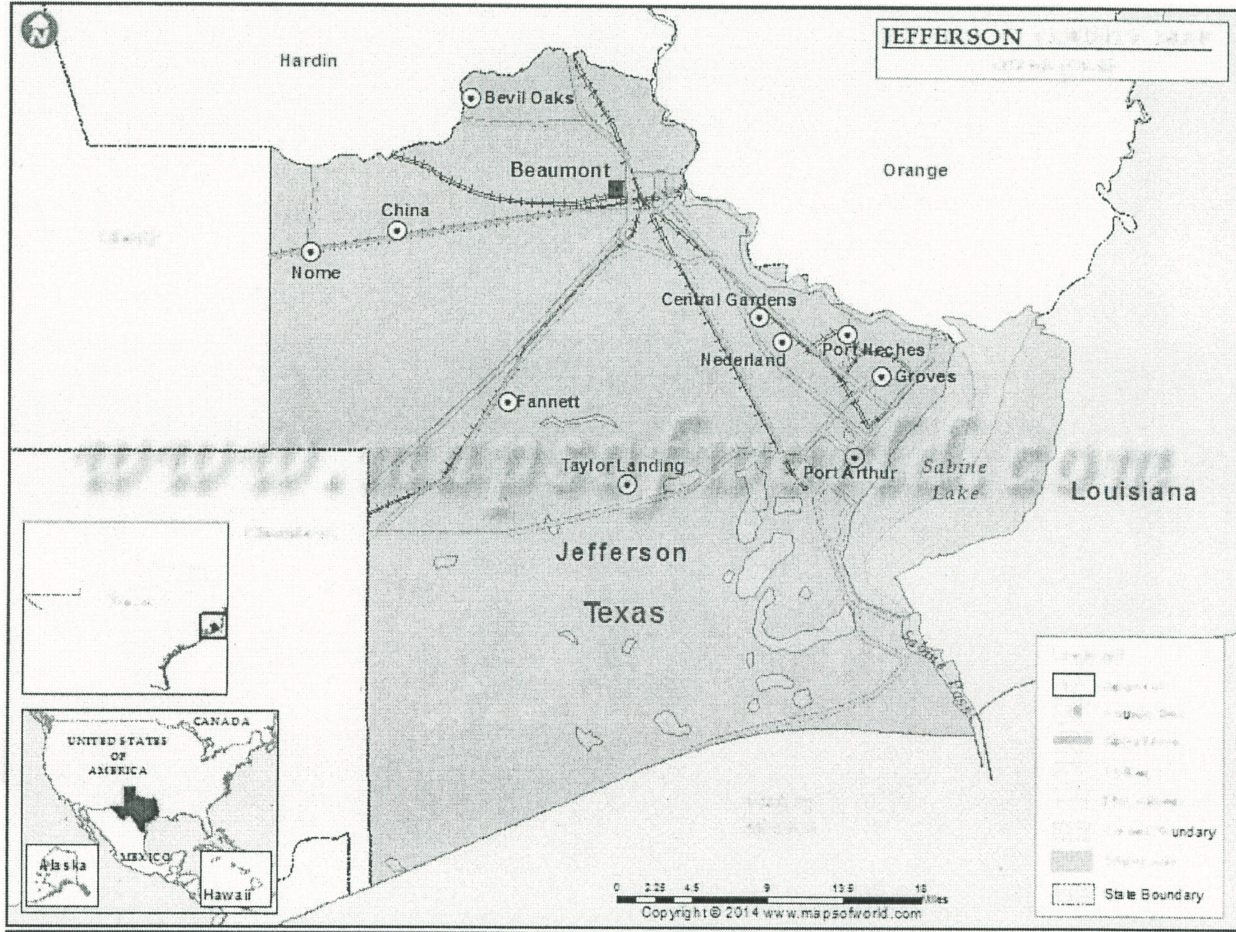


EXHIBIT 2PACE OWNER CONTRACT

THIS PROPERTY ASSESSED CLEAN ENERGY ("PACE") OWNER CONTRACT ("OWNER CONTRACT") is made as of _____ day of _____, _____, by and between Jefferson County, Texas ("Local Government"), and _____ ("Property Owner").

RECITALS

The Property Assessed Clean Energy Act ("PACE Act"), Texas Local Government Code Chapter 399, authorizes the governing body of a local government to establish a program and designate a region within the local government's jurisdiction within which one or more authorized representatives of the local government may enter into written contracts with the record owners of commercial, industrial, agricultural, and large multifamily residential (5 or more dwelling units) real property to impose assessments on the property to finance the cost of permanent improvements fixed to the property intended to decrease water or energy consumption or demand.

Local Government has established a program under the PACE Act pursuant to a resolution dated _____, adopted by the Jefferson County Commissioners Court (the "PACE Program"), and has designated _____ ("**Authorized Representative**") as a representatives authorized to enter into the Owner Contract and Lender Contract described herein, and has designated the entire territory within the Jefferson County's jurisdiction as a region ("Region") within which the Authorized Representative and the record owners of such real property may enter into written contracts to impose assessments to repay the financing by owners of qualified improvements on the owner's property pursuant to the PACE Program.

Property Owner is the legal and record Owner of the qualified "real property," as defined in Section 399.002 of the PACE Act, within the Region located at _____, _____, Texas, _____ (the "Property").

Pursuant to Application number _____ Property Owner has applied to Local Government to participate in the PACE Program by installing or modifying on the Property certain permanent improvements which are intended to decrease water or energy consumption or demand, and which are or will be fixed to the Property as "qualified improvements", as defined in Section 399.002 of the PACE Act (the "**Qualified Improvements**"). The installation or modification of such Qualified Improvements on the Property will be a "qualified project" as defined in Section 399.002 of the PACE Act (the "**Project**"). Property Owner has requested that Local Government enter into this Owner Contract pursuant to the PACE Act and the PACE Program and has requested Local Government to impose an assessment (the "**Assessment**") on the Property as set forth in the Notice Of Contractual Assessment Lien Pursuant To Property Assessed Clean Energy Act to be filed in the in the Official Public Records of Jefferson County, Texas (the "**Notice of Contractual Assessment Lien**"), a copy of which is attached hereto as Exhibit A and made a part hereof, to repay the financing of such Qualified Improvements.

The Property, Qualified Improvements and Assessment are more fully described in the Notice of Contractual Assessment Lien.

The financing of such Qualified Improvements will be provided to Property Owner by _____ ("**Lender**"), a qualified lender selected by Property Owner, pursuant to a contract executed by Lender and Local Government as required by Section 399.006(c) of the PACE Act and by the PACE Program (the "Lender Contract"). The financing will include only those costs and fees for which an assessment may be imposed under the PACE Act. Local Government has agreed to maintain and continue the Assessment for the benefit of Lender until such financing is repaid in full and to release the Assessment upon notice from Lender of such payment, or foreclose the lien securing the Assessment for the benefit of Lender upon notice from Lender of a default by Property Owner.

As required by Section 399.010 of the PACE Act, Property Owner notified the holder(s) of any mortgage liens on the Property at least thirty (30) days prior to the date of this Owner Contract of Property Owner's intention to participate in the PACE Program. The written consent of each mortgage holder to the Assessment was obtained prior to the date of this Owner Contract and is attached hereto as Exhibit B and made a part hereof.

AGREEMENT

The parties agree as follows:

Imposition of Assessment. In consideration for the financing advanced or to be advanced to Property Owner by Lender for the Project under the PACE Program pursuant to the Lender Contract, Property Owner hereby requests and agrees to the imposition by Local Government of the Assessment in the amount of \$ _____ as set forth in the Notice of Contractual Assessment Lien, including all interest, fees, costs, and other sums due under and/or authorized by the PACE Act, PACE Program and the financing documents between Property Owner and Lender (the "Financing Documents") which are described or listed on Exhibit C attached hereto and made a part hereof by reference. Property Owner promises and agrees to pay such amount and interest to Local Government, in care of or as directed by Lender, in satisfaction of the Assessment imposed pursuant to the Owner Contract and the PACE Act. Accordingly, Local Government hereby imposes the Assessment on the Property to secure the payment of such amount, in accordance with the requirements of the PACE Program and the provisions of the PACE Act.

Maintenance and Enforcement of Assessment. In consideration for Lender's agreement to advance financing to Property Owner for the Project pursuant to the Financing Documents, Local Government agrees to maintain and continue the Assessment on the Property for the benefit of Lender until the Assessment, including all interest, fees, penalties, costs, and other sums due under and/or authorized by the PACE Act, PACE Program and the Financing Documents are paid in full, and to release the Assessment upon notice from Lender of such payment. Local Government agrees to undertake reasonable efforts to enforce the Assessment against the Property for the benefit of Lender in the event of a default by Property Owner. Local Government agrees to send an annual notice of assessment

to the property owner with the annual property tax notice each year there is a PACE lien balance. This notification can be listed on page one of said tax notice or as a separate page two (2) notification.

Installments. The Assessment, including the amount financed and contractual interest, is due and payable in installments as set forth in the Notice of Contractual Assessment Lien and the Financing Documents. The Assessment shall include: (1) a fee paid by Property Owner to Authorized Representative at loan closing, and (2) a recurring administration fee paid by Property Owner to the Authorized Representative. The recurring administration fee amount shall be collected by Lender and paid to the Authorized Representative within thirty (30) days of receipt by Lender. The amounts due to the Authorized Representative are identified in Exhibit C hereto. As required by Section 399.009(a) (8) of the PACE Act, the period during which such installments are payable does not exceed the useful life of the Project. When the Assessment together with any prepayment premium, and/or default penalties and interest, if any, has been paid in full, Local Government's rights under this Owner Contract will cease and terminate. Upon notice from Lender that all amounts owing have been paid in full, Local Government will execute a release of the Assessment and this Owner Contract. Thereafter, the Authorized Representative will record the release.

Assignment of Right to Receive Installments. Lender will have the right to assign or transfer the right to receive the installments of the financing secured by the Assessment, provided all of the following conditions are met:

The assignment or transfer is made to a qualified lender as defined in the Lender Contract;

Property Owner and Authorized Representative are notified in writing of the assignment or transfer and the address to which payment of the future installments should be mailed at least 30 days before the next installment is due according to the payment schedule included in the Notice of Contractual Assessment Lien and the Financing Documents; and

The assignee or transferee of the right to receive the payments executes an explicit written assumption of all of Lender's obligations under Lender Contract.

Upon written notice to Property Owner and Authorized Representative of an assignment or transfer of the right to receive the installments that meets all of these conditions, the assignor shall be released of all of the obligations of the Lender under such Lender Contract accruing after the date of the assignment assumed by and transferred to such assignee or transferee and all of such obligations shall be assumed by and transferred to the assignee. Any attempt to assign or transfer the right to receive the installments that does not meet all of these conditions is void.

Lien Priority and Enforcement. Pursuant to Section 399.014 of the PACE Act,

Delinquent installments of the Assessment will incur interest and penalties in the same manner and in the same amount as delinquent property taxes, viz., a delinquent installment incurs a penalty of 6% of the amount of the installment for the first calendar month it is delinquent plus 1% for each additional month or portion of a month the installment remains unpaid prior to July 1 of the year in which it becomes delinquent.

However, an installment delinquent on July 1 incurs a total penalty of 12% of the amount of the delinquent installment without regard to the number of months it has been delinquent. A delinquent installment will also accrue interest at the rate of 1% for each month or portion of a month that the installment remains unpaid. Statutory penalties and statutory interest payable under this paragraph will be retained by Local Government to compensate it for the cost of enforcing the Assessment. Additional interest at any default rate imposed by Lender pursuant to the Financing Documents, along with any other fees and charges that become due pursuant to the Financing Documents may be assessed by Lender and retained by Lender.

The Assessment, together with any penalties and interest thereon,

is a first and prior lien against the Property from the date on which the Notice of Contractual Assessment Lien is filed in the Official Public Records of Jefferson County as provided by Section 399.014 of the PACE Act, until the financing secured by the Assessment and any penalties and interest are paid; and

such lien has the same priority status as a lien for any other ad valorem tax, pursuant to Section 399.014(a)(2) of the PACE Act.

The lien created by the Assessment runs with the land, and according to Section 399.014(b) of the PACE Act, any portion of the Assessment that has not yet become due is not eliminated by foreclosure of: (i) a property tax lien, or (ii) the lien for any past due portion of the Assessment. In the event of a sale or transfer of the Property by Property Owner, the obligation for the Assessment and the Property Owner's obligations under the Financing Documents will be transferred to the succeeding owner without recourse on Local Government or Authorized Representative.

In the event of a default by Property Owner in payment of the installments called for by the Financing Documents, the lien created by the Assessment will be enforced by Local Government in the same manner according to Texas Tax Code Sees. 33.41 to 34.23 that a property tax lien against real property may be enforced by a local government, to the extent the enforcement is consistent with Section 50, Article XVI, Texas Constitution.

In a suit to collect a delinquent installment of the Assessment, Local Government will be entitled to recover costs and expenses, including attorney's fees in the amount of 15% of the total amount of the delinquent installment, penalties, and interest due, in the same manner according to Texas Tax Code Sec. 33.48 as in a suit to collect a delinquent property tax. Lender shall be entitled to any additional sums due to it under the Financing Documents in connection with a suit to collect a delinquent installment of the Assessment.

After written notice of the Assessment is recorded in the real property records of the county in which the Property is located as provided under Section 399.013 of the PACE Act, the lien created by the Assessment may not be contested on the basis that the improvement is not a "qualified improvement" or the project is not a "qualified project", as such terms are defined in Section 399.002 of the PACE Act.

Written Contract Required by PACE Act. This Owner Contract constitutes a written contract for the Assessment between the Property Owner and Local Government as required by Section 399.005 of the PACE Act. The Notice of Contractual Assessment Lien will be recorded in the Official Public Records of Jefferson County as notice of the contractual Assessment, in accordance with the requirements of Section 399.013 of the PACE Act.

Qualified Improvements. Property Owner agrees that all improvements purchased, constructed and/or installed through financing obtained pursuant to this Owner Contract shall be permanently affixed to the Property and will transfer with the Property to the transferee in the event of and sale or assignment of the Property.

Water or Energy Savings. For so long as the Assessment encumbers the Property, Property Owner agrees on or before January 31st of each year, to report to Authorized Representative the water or energy savings realized through the Project in accordance with the reporting requirements established by the Local Government.

Construction and Definitions. This Owner Contract is to be construed in accordance with and with reference to the PACE Program and PACE Act. Terms used herein, and not otherwise defined herein, shall have the meanings ascribed to them in: (1) the PACE Program, and/or (2) the PACE Act.

Binding Effect. This Owner Contract inures to the benefit of Local Government and is binding upon Property Owner, its heirs, successors, and assigns.

Notices. All notices and other communications required or permitted by this Owner Contract shall be in writing and mailed by certified mail, return receipt requested, addressed to the other party at its address shown below the signature of such party or at such other address as such party may from time to time designate in writing to the other party, and shall be effective from the date of receipt.

Governing Law. This Owner Contract shall in all respects be governed by and construed in accordance with the laws of the State of Texas.

Entire Agreement. This Owner Contract constitutes the entire agreement between Local Government and Property Owner with respect to the subject matter hereof and may not be amended or altered in any manner except by a document in writing executed by both parties.

Further Assurances. Property Owner further covenants and agrees to do, execute and deliver, or cause to be done, executed, and delivered all such further acts for

implementing the intention of this Owner Contract as may be reasonably necessary or required.

Captions. Paragraph and section titles are for convenience of reference only and shall not be of any legal effect.

Interest. Interest and penalties in the event of default, as provided above, are explicitly authorized by Section 399.014(d) of the PACE Act. However, in no event will the total amount of interest on the Assessment, including statutory interest payable to Local Government and contractual interest payable to Lender under the Financing Documents, exceed the maximum amount or rate of nonusurious interest that may be contracted for, charged, or collected under Texas law (the "Usury limit"). If the total amount of interest payable to Local Government and Lender exceeds the usury limit, the interest payable to Local Government will be reduced and any interest in excess of the usury limit will be credited to the amount payable to Local Government or refunded. This provision overrides any conflicting provisions in this Owner Contract.

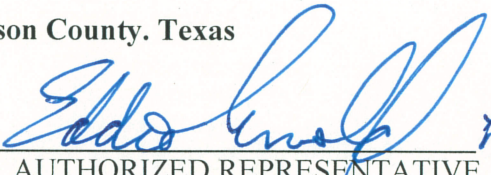
Counterparts. This Owner Contract may be executed in any number of counterparts, each counterpart may be delivered originally or by electronic transmission, all of which when taken together shall constitute one agreement binding on the parties, notwithstanding that all parties are not signatories to the same counterpart

Costs. No provisions of this Owner Contract will require Local Government to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder.

Construction Terms. If the Lender Contract includes requirements related to construction of the Project and disbursement of Financing, such requirements are set forth in Exhibit D attached hereto and incorporated herein by reference. Such requirements may include, among other things, (1) the disbursement schedule and (2) any holdback amount to be funded following verification of final project completion.

LOCAL GOVERNMENT:

Jefferson County, Texas

By:  PRO TEM
AUTHORIZED REPRESENTATIVE
Pursuant to Tex. Local Gov 't Code §399.006(b)

Name: Eddie Arnold - Pro Tem

Title: Commissioner Eddie Arnold

Address: _____

Signed on the date indicated below.

LONE STAR PACE LLC

Lee A. McCormick
Signature

Printed Name: Lee A. McCormick
Title: President
Date: 11/13/18

STATE OF TEXAS §
COUNTY OF Collin §

This instrument was acknowledged before me on the 13th day of NOVEMBER, 2018, by Lee A. McCormick (Authorized Representative), President (Title), of LONE STAR PACE LLC, on behalf of said entity.

[SEAL]

Jean Marie Gard
Signature
NOTARY PUBLIC, STATE OF TEXAS

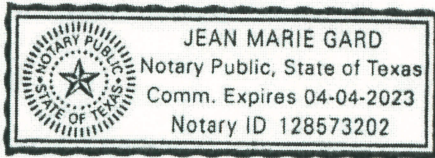


EXHIBIT A**NOTICE OF CONTRACTUAL ASSESSMENT LIEN
PURSUANT TO
PROPERTY ASSESSED CLEAN ENERGY ACT**

STATE OF TEXAS §
 §
COUNTY OF JEFFERSON §

RECITALS

The Property Assessed Clean Energy Act ("**PACE Act**"), Texas Local Government Code Chapter 399, authorizes the governing body of a local government to establish a program and designate a region within the local government's jurisdiction within which one or more authorized representatives of the local government may enter into written contracts with the record owners of commercial, industrial, agricultural, and large multifamily residential (5 or more dwelling units) real property to impose assessments on the property to finance the cost of permanent improvements fixed to the property intended to decrease water or energy consumption or demand. Unless otherwise expressly provided herein, all terms used herein have the same meanings ascribed to them in the PACE Act.

Jefferson County ("**Local Government**") has established a program under the PACE Act pursuant to a resolution dated March 20, 2017 and _____ adopted by the Jefferson County Commissioners Court (the "**PACE Program**"), and has designated _____ ("**Authorized Representative**") as the representative authorized to enter into and enforce the Assessment, Owner Contract and Lender Contract described herein, and has designated the entire territory within the County of Jefferson jurisdiction as a region ("**Region**") within which an Authorized Representative and the record owners of such real property may enter into written contracts to impose assessments to repay the financing by owners of qualified improvements on the owner's property pursuant to the PACE Program.

_____ ("**Property Owner**") is the legal and record owner of the qualified "real property," as defined in Section 399.002 of the PACE Act, within the Region Located at _____, _____, Texas, and more fully described in Exhibit A attached hereto and made a part hereof (the "**Property**").

Property Owner has applied to Local Government to participate in the PACE Program by installing or modifying on the Property certain permanent improvements described in Exhibit B attached hereto and made a part hereof, which are intended to decrease water or energy consumption or demand, and which are or will be fixed to the Property as "qualified improvements", as defined in Section 399.002 of the PACE Act (the "Qualified Improvements"). The installation or modification of such Qualified Improvements on the Property will be a "qualified project" as defined in Section 399.002 of the PACE Act. Property Owner has entered into a written contract (the "**Owner Contract**") with Local Government pursuant to the PACE Act and the PACE Program and has requested Local

Government to impose an assessment on the Property to repay the financing of such Qualified Improvements.

The financing of such Qualified Improvements will be provided to Property Owner by _____ ("**Lender**"), a qualified lender selected by Property Owner, pursuant to a written contract executed by Lender and Local Government as required by Section 399.006(c) of the PACE Act and by the PACE Program (the "Lender Contract"). Lender will be responsible for all servicing duties other than those specifically undertaken by Local Government in the Lender Contract.

THEREFORE, Local Government hereby gives notice to the public pursuant to Section of the PACE Act that it has imposed an assessment on the Property in the amount of \$_____, as set forth on Exhibit C attached hereto, which together with all interest, fees, penalties, costs and other sums due under and/or authorized by the PACE Act, PACE Program and the financing documents between Property Owner and Lender (the "**Financing Documents**") is herein referred to as the "Assessment".

Pursuant to Section 399.014 of the PACE Act,

The Assessment, including interest and any penalties, costs, or fees accrued thereon,

is a first and prior lien on the Property from the date that this Notice of Contractual Assessment Lien is recorded in the Official Public Records of Jefferson County Texas, until such Assessment, interest, penalties, costs, and fees are paid in full; and

such lien has the same priority status as a lien for any other ad valorem tax, pursuant to Section 399.014(a)(2) of the PACE Act.

The lien created by the Assessment runs with the land, and according to Section 399.014(b) of the PACE Act, any portion of the Assessment that has not yet become due is not eliminated by foreclosure of: (i) a property tax lien, or (ii) the lien for any past due portion of the Assessment. Additionally, in the event of a sale or transfer of the Property by Property Owner (excluding a transfer as part of a foreclosure sale for a past due portion of the Assessment), the obligations under the Financing Documents, including, without limitation, any unpaid installments of the Assessment then due and owing and the portion of the Assessment that has not yet become due, will be transferred to the succeeding owner without recourse on Local Government or Authorized Representatives.

After this Notice of Contractual Assessment Lien is recorded in the real property records of the county in which the Property is located as provided under Section 399.013 of the PACE Act, the lien created by the Assessment may not be contested on the basis that the improvement is not a "qualified improvement" or the project is not a "qualified project", as such terms are defined in Section 399.002 of the PACE Act.

EXECUTED ON _____, 20____.

LOCAL GOVERNMENT:
Jefferson County, Texas

By: _____

Name: _____

Title: _____

AUTHORIZED REPRESENTATIVE
Pursuant to Tex. Local Gov't Code §399.006(b)

ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF JEFFERSON §

This Notice of Contractual Assessment Lien pursuant to Property Assessed Clean Energy Act was acknowledged before me on _____, 20____, by _____, _____ on behalf of _____, Texas.

_____(print name)
NOTARY PUBLIC, STATE OF TEXAS

LOCAL GOVERNMENT:

Jefferson County, Texas

By: _____
AUTHORIZED REPRESENTATIVE
Pursuant to Tex. Local Gov't Code §399.006(b)

Name: _____

Title: _____

Address: _____

PROPERTY OWNER:

By: _____

Name: _____

Title: _____

Address: _____

EXHIBIT A
OWNER CONTRACT

EXHIBIT B

FINANCING DOCUMENTS

Assessment Payment Schedule

Assessment Total:

Payment Frequency:

Interest Rate:

Payment Date	Total Payment	Principal Paid	Interest Paid	Administration Fee	Remaining Balance

Document	Parties	Date Executed

EXHIBIT C**CONSTRUCTION TERMS**

[if applicable]

Date	Draw down Amount	Purpose

EXHIBIT 4

**NOTICE OF CONTRACTUAL ASSESSMENT LIEN
PURSUANT TO
PROPERTY ASSESSED CLEAN ENERGY ACT**

STATE OF TEXAS §
 §
COUNTY OF JEFFERSON §

RECITALS

The Property Assessed Clean Energy Act ("**PACE Act**"), Texas Local Government Code Chapter 399, authorizes the governing body of a local government to establish a program and designate a region within the local government's jurisdiction within which one or more authorized representatives of the local government may enter into written contracts with the record owners of commercial, industrial, agricultural, and large multifamily residential (5 or more dwelling units) real property to impose assessments on the property to finance the cost of permanent improvements fixed to the property intended to decrease water or energy consumption or demand. Unless otherwise expressly provided herein, all terms used herein have the same meanings ascribed to them in the PACE Act.

Jefferson County ("Local Government") has established a program under the PACE Act pursuant to resolutions dated March 20, 2017 and _____, adopted by the Jefferson County Commissioners Court (the "PACE Program"), and has designated _____ ("Authorized Representative") as a representative authorized to enter into and enforce the Assessment, Owner Contract and Lender Contract described herein, and has designated the entire territory within the County of Jefferson jurisdiction as a region ("**Region**") within which the Authorized Representative and the record owners of such real property may enter into written contracts to impose assessments to repay the financing by owners of qualified improvements on the owner's property pursuant to the PACE Program.

_____ ("**Property Owner**") is the legal and record owner of the qualified "real property" as defined in Section 399.002 of the PACE Act, within the Region located at _____, _____ Texas, and more fully described in Exhibit A attached hereto and made a part hereof (the "**Property**").

Property Owner has applied to Local Government to participate in the PACE Program by installing or modifying on the Property certain permanent improvements described in Exhibit B attached hereto and made a part hereof, which are intended to decrease water or energy consumption or demand, and which are or will be fixed to the Property as "qualified improvements", as defined in Section 399.002 of the PACE Act (the "**Qualified Improvements**"). The installation or modification of such Qualified Improvements on the

Property will be a "qualified project" as defined in Section 399.002 of the PACE Act. Property Owner has entered into a written contract (the "**Owner Contract**") with Local Government pursuant to the PACE Act and the PACE Program and has requested Local Government to impose an assessment on the Property to repay the financing of such Qualified Improvements.

The financing of such Qualified Improvements will be provided to Property Owner by _____ ("Lender"), a qualified lender selected by Property Owner, pursuant to a written contract executed by Lender and Local Government as required by Section 399.006(c) of the PACE Act and by the PACE Program (the "Lender Contract"). Lender will be responsible for all servicing duties other than those specifically undertaken by Local Government in the Lender Contract.

THEREFORE, Local Government hereby gives notice to the public pursuant to Section of the PACE Act that it has imposed an assessment on the Property in the amount of \$ _____ as set forth on Exhibit C attached hereto, which together 'With all interest, fees, penalties, costs and other sums due under and/or authorized by the PACE Act, PACE Program and the financing documents between Property Owner and Lender (the "**Financing Documents**") is herein referred to as the "**Assessment**".

Pursuant to Section 399.014 of the PACE Act,

The Assessment, including interest and any penalties, costs, or fees accrued thereon,

- (i) is a first and prior lien on the Property from the date that this Notice of Contractual Assessment Lien is recorded in the Official Public Records of Jefferson County Texas, until such Assessment, interest, penalties, costs, and fees are paid in full; and
- (ii) such lien has the same priority status as a lien for any other ad valorem tax, pursuant to Section 399.014(a)(2) of the PACE Act.

The lien created by the Assessment runs with the land, and according to Section 399.014(b) of the PACE Act, any portion of the Assessment that has not yet become due is not eliminated by foreclosure of: (i) a property tax lien, or (ii) the lien for any past due portion of the Assessment. Additionally, in the event of a sale or transfer of the Property by Property Owner (excluding a transfer as part of a foreclosure sale for a past due portion of the Assessment), the obligations under the Financing Documents, including, without limitation, any unpaid installments of the Assessment then due and owing and the portion of the Assessment that has not yet become due, will be transferred to the succeeding owner without recourse on Local Government or Authorized Representatives.

After this Notice of Contractual Assessment Lien is recorded in the real property records of the county in which the Property is located as provided under Section 399.013 of the PACE Act, the lien created by the Assessment may not be contested on the basis that the improvement is not a "qualified improvement" or the project is not a "qualified project", as such terms are defined in Section 399.002 of the PACE Act.

EXECUTED ON _____, _____.

LOCAL GOVERNMENT:
Jefferson County, Texas

By: _____
AUTHORIZED REPRESENTATIVE
Pursuant to Tex. Local Gov 't Code §399.006(b)

Name: _____

Title: _____

Address: _____

ACKNOWLEDGMENT

STATE OF TEXAS §

COUNTY OF JEFFERSON §

This Notice of Contractual Assessment Lien pursuant to Property Assessed Clean Energy Act was acknowledged before me on _____, by _____, _____ on behalf of _____, Texas.

(print name)

NOTARY PUBLIC, STATE OF TEXAS

EXHIBIT A

PROPERTY DESCRIPTION

EXHIBIT B

QUALIFIED IMPROVEMENTS

EXHIBIT C
ASSESSMENT

ASSESSMENT PAYMENT SCHEDULE

Assessment Total:
Payment Frequency:
Interest Rate:

Payment Date	Total Payment	Principal Paid	Interest Paid	Administration Fee	Remaining Balance

EXHIBIT A

PROPERTY DESCRIPTION

EXHIBIT B

QUALIFIED IMPROVEMENTS

EXHIBIT B

MORTGAGE HOLDER(S) CONSENT

EXHIBIT D**CONSTRUCTION TERMS**

[if applicable]

Date	Draw down Amount	Purpose

EXHIBIT 3PACE LENDER CONTRACT

THIS PROPERTY ASSESSED CLEAN ENERGY ("PACE") LENDER CONTRACT (the "**Lender Contract**") is made as of the _____ day of _____, _____, by and between Jefferson County ("**Local Government**") and _____ ("**Lender**")

RECITALS

The Property Assessed Clean Energy Act ("**PACE Act**"), Texas Local Government Code Chapter 399, authorizes the governing body of a local government to establish a program and designate a region within the local government's jurisdiction within which one or more authorized representatives of the local government may enter into written contracts with the record owners of commercial, industrial, agricultural, and large multifamily residential (5 or more dwelling units) real property to impose assessments on the property to finance the cost of permanent improvements fixed to the property intended to decrease water or energy consumption or demand.

Local Government has established a program under the PACE Act pursuant to a resolution dated _____, adopted by the Jefferson County Commissioners Court (the "**PACE Program**"), and has designated _____ ("**Authorized Representative**") as representative authorized to enter into and enforce the Owner Contract and Lender Contract described herein, and has designated the entire territory within the Jefferson County's jurisdiction as a region ("**Region**") within which the Authorized Representatives and the record owners of such real property may enter into written contracts to impose assessments to repay the financing by owners of qualified improvements on the owner's property pursuant to the PACE Program.

Pursuant to Application number _____, _____, ("**Property Owner**") has applied to Local Government to participate in the PACE Program with respect to certain real property located at _____, _____ Texas, _____ (the "**Property**") by installing or modifying on the Property certain permanent improvements which are intended to decrease water or energy consumption or demand, and which are or will be fixed to the Property as "qualified improvements", as defined in Section 399.002 of the PACE Act (the "Qualified Improvements"). The installation or modification of such Qualified Improvements on the Property will be a "qualified project" as defined in Section 399.002 of the PACE Act (the "Project").

Property Owner and Local Government have entered into a written contract as required by Section 399.005 of the PACE Act, a copy of which is attached hereto as Exhibit A and made a part hereof (the "**Owner Contract**"), in which Property Owner has requested that Local Government impose an assessment (the "**Assessment**") on the Property as set forth in the Notice Of Contractual Assessment Lien Pursuant To Property Assessed Clean Energy Act to be filed in the in the Official Public Records of Jefferson County, Texas (the "**Notice of**

Contractual Assessment Lien"), a copy of which is attached to the Owner Contract as Exhibit A, to repay the financing of such Qualified Improvements. The Property, Qualified Improvements and Assessment are more fully described in the Notice of Contractual Assessment Lien.

Financing for the Project (the "**Financing**") will be provided to Property Owner by Lender in accordance with financing documents which are described or listed on Exhibit B attached hereto and made a part hereof (the "**Financing Documents**"). Such Financing includes only those costs and fees for which an assessment may be imposed under the PACE Act. This Lender Contract is entered into between Local Government and Lender as required by Section 399.006(c) of the PACE Act to provide for repayment of the Financing secured by the Assessment.

As required by Section 399.010 of the PACE Act, Property Owner notified the holder(s) of any mortgage liens on the Property at least thirty (30) days prior to the date of the Owner Contract of Property Owner's intention to participate in the PACE Program. The written consent of each mortgage lien holder to the Assessment was obtained prior to the date of the Owner Contract, as shown by the copy of such consent(s) attached as Exhibit B to the Owner Contract.

AGREEMENT

The parties agree as follows:

Maintenance and Enforcement of Assessment. Lender agrees to provide the Financing for the Project in the total amount of \$ _____ according to the terms set out in the Financing Documents attached hereto as Exhibit B. In consideration for the Financing provided or to be provided by Lender for the Project, and subject to the terms and conditions of this Lender Contract, Local Government agrees to maintain and continue the Assessment for the benefit of Lender until the Financing, all contractual interest, any prepayment premium, additional penalties and interest imposed by the Lender under the Financing Documents according to the Financing Documents, and any statutory penalties, interest, attorney's fees, or costs accrued in the event of default are paid in full Local Government will not release the Assessment until which time Lender notifies Local Government that all amounts owing have been paid in full Local Government shall not sell, assign or transfer the Assessment or the assessment lien against the Property to any third party without the prior written consent of the Lender. Local Government agrees to enforce the assessment lien against the Property for the benefit of Lender in the event of a default by Property Owner in accordance with the provisions set forth in paragraph 6. Local Government shall have no obligation to repurchase the assessment and no liability to Lender should there be a default or an event of default in the payment thereof or should there be any other loss or expense suffered by Lender or under any other circumstances.

Installments. The Assessment, including the amount financed and contractual interest, is due and payable to Lender in installments as set forth in the Notice of Contractual Assessment Lien and Financing Documents. The Assessment shall include: (1) an application fee paid by Property Owner to Authorized Representative at loan closing, and (2) a recurring administration fee paid by Property Owner to the Authorized Representative. The recurring administration fee amount shall be collected by Lender and paid to the Authorized Representative within thirty (30) days of receipt by Lender. The amounts due to the Authorized Representative are identified in Exhibit B hereto. As required by Section 399.009(a)(8) of the PACE Act, the period during which such installments are payable does not exceed the useful life of the Project. When the Assessment together with any prepayment premium, and/or default penalties and interest, if any, has been paid in full, Local Government's rights under this Lender Contract will cease and terminate. Upon notice from Lender that all amounts owing have been paid in full, Local Government will execute a release of the Assessment and this Lender Contract. Thereafter, the Authorized Representative will record the release.

Assignment of Right to Receive Installments. Lender will have the right to assign or transfer the right to receive the installments of the Assessment, provided all of the following conditions are met:

The assignment or transfer is made to a qualified lender, which may be one of the following:

Any federally insured depository institution such as a bank, savings bank, savings and loan association and federal or state credit union;

Any insurance company authorized to conduct business in one or more states;

Any registered investment company, registered business development company, or a Small Business Administration small business investment company;

Any publicly traded entity; or

Any private entity that:

- (i) Has a minimum net worth of \$5 million;
- (ii) Has at least three years' experience in business or industrial lending or commercial real estate lending (including multifamily lending), or has a lending officer that has at least three years' experience in business or industrial lending or commercial real estate lending;
- (iii) Can provide independent certification as to availability of funds; and

- (iv) Has the ability to carry out, either directly or through a servicer, the bookkeeping and customer service work necessary to manage the assessment accounts

Property Owner and Authorized Representative are notified in writing of the assignment or transfer and the address to which payment of the future installments should be mailed at least 30 days before the next installment is due according to the payment schedule included in the Financing Documents; and

The assignee or transferee of the right to receive the installments executes an explicit written assumption of all of Lender's obligations under this Lender Contract.

Upon written notice to Property Owner and Authorized Representative of an assignment or transfer of the right to receive the installments that meets all of these conditions, the assignor shall be released of all of the obligations of the Lender under this Lender Contract accruing after the date of the assignment and all of such obligations shall be assumed by and transferred to the assignee. Any attempt to assign or transfer the right to receive the installments of the Assessment that does not meet all of these conditions is void.

Financing Responsibility. Lender assumes full responsibility for determining the financial ability of the Property Owner to repay the Financing and for advancing the funds as set forth in the Financing Documents and performing Lender's obligations and responsibilities thereunder.

Lien Priority and Enforcement. As provided in the Owner Contract and Section 399.014 of the PACE Act:

Delinquent installments of the Assessment incur interest and penalties in the same manner and in the same amount as delinquent property taxes, viz., a delinquent installment incurs a penalty of 6% of the amount of the installment for the first calendar month it is delinquent plus 1% for each additional month or portion of a month the installment remains unpaid prior to July 1 of the year in which it becomes delinquent. However, an installment delinquent on July 1 incurs a total penalty of 12% of the amount of the delinquent installment without regard to the number of months it has been delinquent. A delinquent installment also accrues interest at the rate of 1% for each month or portion of a month the installment remains unpaid. Statutory penalties and statutory interest payable under this paragraph will be retained by Local Government to compensate it for the cost of enforcing the Assessment. Additional interest at any default rate imposed by Lender pursuant to the Financing Documents, along with any other fees and charges that become due pursuant to the Financing Documents may be assessed by Lender and retained by Lender.

The Assessment, together with any penalties and interest thereon,

is a first and prior lien against the Property from the date on which

the Notice of Contractual Assessment Lien is filed in the Official Public Records of Jefferson County, as provided by Section 399.014 of the PACE Act, until the Assessment and any penalties and interest are paid; and

such lien has the same priority status as a lien for any other ad valorem tax, pursuant to Section 399.014(a)(2) of the PACE Act.

The lien created by the Assessment runs with the land, and any portion of the Assessment that has not yet become due is not eliminated by foreclosure of a property tax lien, according to Section 399.014(b) of the PACE Act. In the event of a sale or transfer of the Property by Property Owner, the obligation for the Assessment and the Property Owner's obligations under the Financing Documents will be transferred to the succeeding owner without recourse on local Government or the Authorized Representative.

In the event of a default by Property Owner in payment of the installments called for by the Financing Documents, the lien created by the Assessment will be enforced by Local Government in the same manner according to Texas Tax Code Sees. 33.41 to 34.23 that a property tax lien against real property may be enforced by a local government, to the extent the enforcement is consistent with Section 50, Article XVI, Texas Constitution.

In a suit to collect a delinquent installment of the Assessment, Local Government will be entitled to recover costs and expenses, including attorney's fees in the amount of 15% of the total amount of the delinquent installment, penalties, and interest due, in the same manner according to Texas Tax Code Sec. 33.48 as in a suit to collect a delinquent property tax. Lender shall be entitled to any additional sums due to it under the Financing Documents in connection with a suit to collect a delinquent installment of the Assessment.

After written notice of the Assessment is recorded in the real property records of the county in which the Property is located as provided under Section 399.013 of the PACE Act, the lien created by the Assessment may not be contested on the basis that the improvement is not a "qualified improvement" or the project is not a "qualified project", as such terms are defined in Section 399.002 of the PACE Act.

Lender agrees that, in the event of non-payment (or insufficient payment) of any non-PACE ad valorem taxes for a tax year, if any PACE assessment payments are received by Lender with respect to that same tax year, the PACE assessments will be subordinated to the payment of the non-PACE ad valorem taxes; accordingly, in such event, Lender must agree to remit to the County any PACE assessments received with respect to such tax year in an amount up to the amount of any such non-payment.

Servicing and Enforcement of Assessment.

Servicing. The Assessment payments will be billed, collected, received, and disbursed in accordance with the procedures set out in the Financing Documents. Lender will be responsible for all servicing duties other than those specifically undertaken by Local Government in this Lender Contract. Local Government agrees to send an annual notice of

assessment to the property owner with the annual property tax notice each year there is a PACE lien balance. This notification can be listed on page one of said tax notice or as a separate page two (2) notification.

Remittances. Each of the parties covenants and agrees to promptly remit to the other party any payments incorrectly received by such party with respect to the Assessment after the execution of this Lender Contract.

Default and Enforcement. In the event of a default in payment of any installment of the Assessment as specified in the Financing Documents, Lender agrees to take at least the following steps to collect the delinquent installment:

Mail a written notice of delinquency and demand for payment to the Property Owner by both certified mail, return receipt requested, and first-class mail; and

Mail a second notice of delinquency to the Property Owner by both certified mail, return receipt requested, and first-class mail at least 30 days after the date of the first notice if the delinquency is continuing.

If the Property Owner fails to cure the delinquency within 30 days after the mailing of the second notice of delinquency, the Lender or its designated servicer may notify the Authorized Representative who will certify to the Local Government in writing of a default by the Property Owner, and upon receipt of such certification and after doing its own due diligence, Local Government will enforce the assessment lien for the benefit of Lender pursuant to Tex. Local Gov't Code Sec. 399.014(c), in the same manner as a property tax lien against real property may be enforced, to the extent the enforcement is consistent with Section 50, Article XVI, Texas Constitution.

Final Payment and Release. When the Assessment has been satisfied and paid in full, together with all interest and prepayment premiums, if any, provided under the Financing Documents and all costs, fees, penalties, and interest applicable under the PACE Act and payable to Lender or Local Government, Local Government's rights under the Owner Contract will cease and terminate. Upon notice from Lender that all amounts owing have been paid in full, Local Government will execute a release of the Assessment and the Owner Contract. Thereafter, the Authorized Representative will record the Release.

Limitations on Local Government's Actions. Without the prior written consent of Lender, Local Government will not enter into any amendment or modification of or deviation from the Owner Contract. Local Government will not institute any legal action with respect to the Owner Contract, the Assessment, or the assessment lien without the prior written request of Lender.

Limitations of Local Government's Obligations. Local Government undertakes to perform only such duties as are specifically set forth in this Lender Contract, and no implied duties on the part of Local Government are to be read into this Lender Contract. Local Government will not be deemed to have a fiduciary or other similar relationship with Lender. Local Government may request written instructions for action from Lender and refrain from taking

action until it receives satisfactory written instructions. Local Government will have no liability to any person for following such instructions, regardless of whether they are to act or refrain from acting.

Costs. No provisions of this Lender Contract will require Local Government to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder.

Lender's Warranties and Representations. With respect to this Lender Contract, Lender hereby warrants and represents that on the date on which Lender executes this Lender Contract:

Lender is a qualified lender under the PACE Program, as defined in paragraph 3(a) above, and is fully qualified under the PACE Program to enter into this Lender Contract and the Financing Documents;

Lender has independently and without reliance upon Local Government conducted its own credit evaluation, reviewed such information as it has deemed adequate and appropriate, and made its own analysis of the Owner Contract, the Project, and Property Owner's financial ability to perform the financial obligations set out in the Financing Documents; and

Lender has not relied upon any investigation or analysis conducted by, advice or communication from, or any warranty or representation by Local Government or any agent or employee of Local Government, express or implied, concerning the financial condition of the Property Owner or the tax or economic benefits of an investment in the Assessment.

Written Contract Required by the PACE Act. This Lender Contract constitutes a written contract between Local Government and Lender, as required under Section 399.006 (c) of the PACE Act.

Construction and Definitions. This Lender Contract is to be construed in accordance with and with reference to the PACE Program and PACE Act. Terms used herein, and not otherwise defined herein, shall have the meanings ascribed to them in: (1) the Notice of Contractual Assessment Lien, (2) the Owner Contract, (3) the PACE Program, and/or (4) the PACE Act.

Binding Effect. This Lender Contract is binding upon and shall inure to the benefit of the parties hereto and their respective heirs, representatives, successors, and assigns.

Notices. All notices and other communications required or permitted hereunder shall be in writing and mailed by certified mail, return receipt requested, addressed to the other party at the address stated below the signature of such party or at such other address as such party may from time to time designate in writing to the other party, and shall be effective from the

date of receipt.

Governing Law. This Lender Contract shall in all respects be governed by and construed in accordance with the laws of the State of Texas.

Entire Agreement. This Lender Contract constitutes the entire agreement between the parties with respect to the subject matter hereof and shall not be amended or altered in any manner except by a document in writing executed by both parties.

Captions. Paragraph and section titles are for convenience of reference only and shall not be of any legal effect.

Counterparts. This Lender Contract may be executed in any number of counterparts, each counterpart may be delivered originally or by electronic transmission, all of which when taken together shall constitute one agreement binding on the parties, notwithstanding that all parties are not signatories to the same counterpart.

Interest. Interest and penalties in the event of default, as provided above, are explicitly authorized by Section 399.014(d) of the PACE Act. However, in no event will the total amount of interest on the Assessment, including statutory interest payable to Local Government and contractual interest payable to Lender under the Financing Documents, exceed the maximum amount or rate of nonusurious interest that may be contracted for, charged, or collected under Texas law (the "usury limit"). If the total amount of interest payable to Local Government and Lender exceeds the usury limit, interest payable to Local Government will be reduced and any interest in excess of the usury limit will be credited to the amount payable to Local Government or refunded. This provision overrides any conflicting provisions in this Lender Contract.

Certification. Local Government certifies that the PACE Program has been duly adopted and is in full force and effect on the date of this Lender Contract. Property Owner has represented to Lender and Local Government that the Project is a "qualified project" as defined in the PACE Program and Section 399.002 of the PACE Act. The Assessment has been imposed on the Property as a lien in accordance with the PACE Owner Contract and the PACE Act. Local Government has not assigned or transferred any interest in the Assessment or the PACE Owner Contract.

Construction Terms. If this Lender Contract includes requirements related to construction of the Project and disbursement of Financing, such requirements are set forth in Exhibit C attached hereto and incorporated herein by reference. Such requirements may include, among other things, (1) the disbursement schedule and (2) any holdback amount to be funded following verification of final project completion.

LENDER:

By: _____

Name: _____

Title: _____

Address: _____

**AGENDA ITEM****April 15, 2019**

Consider, possibly approve and authorize the County Judge to execute a Consent Form for Demolition of an Unsafe Structure located at 7710 Tram Road, 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.

PER THE STATE CONSTITUTION THE COUNTY CANNOT INDEMNIFY

***** Any personal property should be removed immediately because the spoils from the demolition will be discarded according to city policies and procedures.

PROPERTY DESCRIPTION:

7710 TRAM RD
PL RS5 TR A OUT OF TR 23 ABST 20 D EASLEY ABSTRACT 300020

409-835-8466

Telephone Number

[Handwritten Signature]

Signature

JEFF R. BRAWICK, COUNTY JUDGE

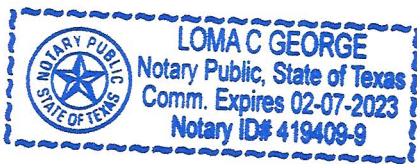
Signature

Date: 04-15-2019

STATE OF TEXAS
COUNTY OF JEFFERSON

BEFORE ME, the undersigned authority, on this day appeared Jefferson County Judge Jeff Brawick known to me to be the person(s) whose name(s) is (are) subscribed to the foregoing instrument and acknowledged to me that he (they) executed the same for the purpose and consideration therein expressed.

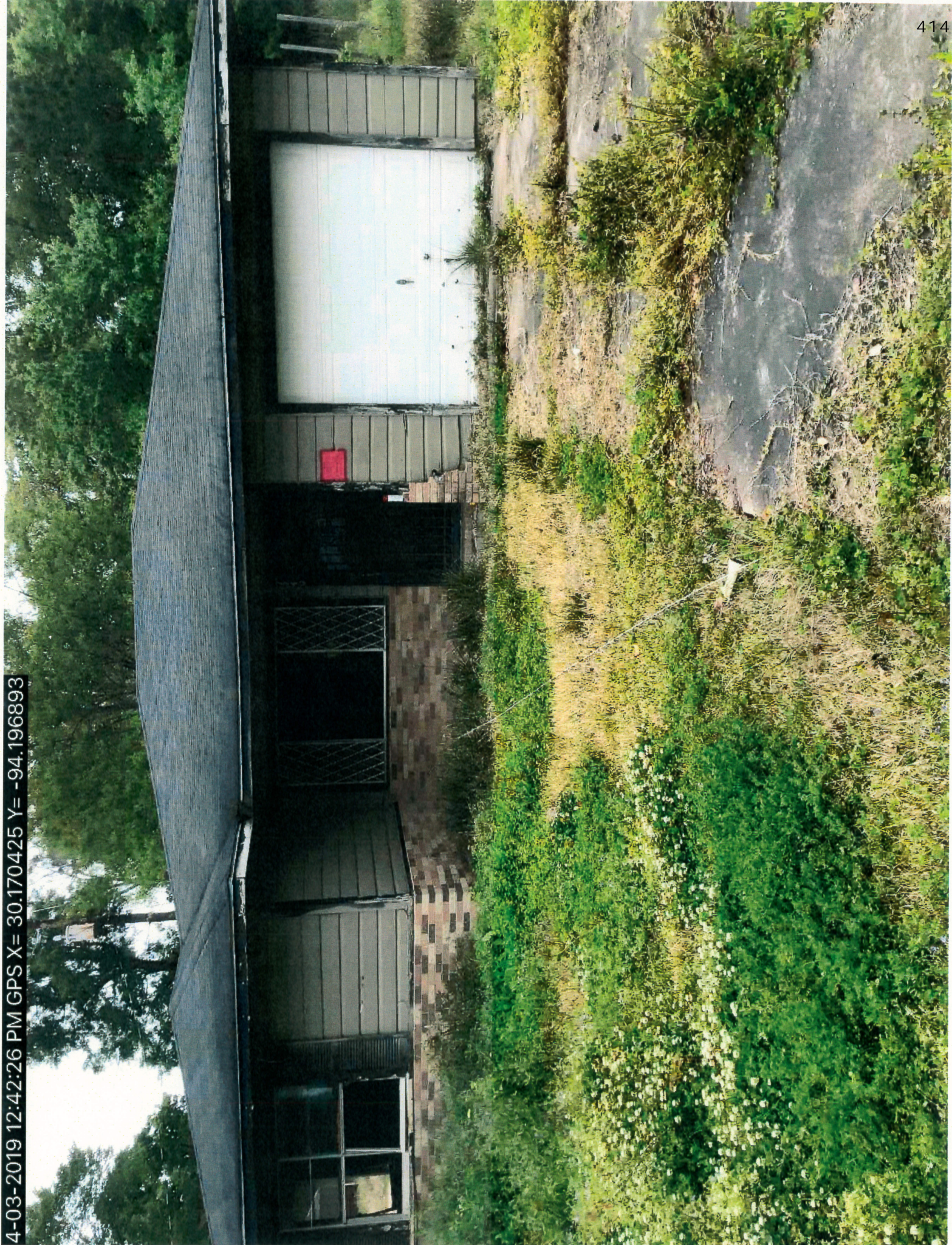
GIVEN UNDER MY HAND AND SEAL OF OFFICE this 15th day of APRIL, 2019.



[Handwritten Signature: Loma C George]

Notary Public in and for
02-07-2023, Texas
My Commission Expires:

4-03-2019 12:42:26 PM GPS X= 30.170425 Y= -94.196893



4-03-2019 12:42:42 PM GPS X= 30.170547 Y= -94.196882

UNSAFE
DO NOT ENTER OR OCCUPY

This has been determined by a registered inspector that the structure in which this notice is attached is in violation of the provisions of the City of Memphis - Article 14 of Chapter 1-100, which establish minimum health/safety standards.

UNTIL THE STRUCTURE MEETS CODE COMPLIANCE, ALL UTILITIES WILL BE DISCONNECTED.

7700 Tran Rd.

This structure was inspected by:
 The City of Memphis
 Building Code Division
 801 Main Street
 901.938.4741

Paul A. Smith
 Date: *4-3-2019* Time: *12:40*

IT IS UNLAWFUL FOR ANY PERSON TO OCCUPY A STRUCTURE THAT HAS BEEN TAGGED BY AN INSPECTOR OR STANDARD SUBJECT TO ENFORCEMENT WITH ARTICLE 1504 OF THE CITY OF MEMPHIS CODE OR THEREAFTER.

ANY PERSON WHO SHALL DELAY, DESTROY OR REMOVE THIS PLACARD IS SUBJECT TO A FINE NOT TO EXCEED \$200.00 PER DAY OR IMPRISONMENT.

Account Status

[Prev. Acc...](#)
[Next Acco...](#)
[Prev. Owner](#)
[Next Owner](#)
[Acct History](#)
[Acct Summary](#)
[Notes](#)
[Documents](#)
Go To:

CELLIS ACCOUNT NO(30002000000390000000); YEAR = 2018, LEGAL STATUS = STRUCK OFF, 04/09/2019 09:21:45
 ACT8006 v1.284 CAUSE NUMBER = D195657 ACTJC

STATUS DETAIL [Expand Fees](#) [Summary](#)

Account Information

Account No. Roll Code

Certified Owner

Parcel Address

Amount Due as of Owner No.

Tax Units

Tax Unit Description

List of Tax Units

Countywide

Tax Unit, Yr, Rec. Type
 Tax Unit
 Year
 Rec. Type

Amount Due/Paid Information

Year	Appr. Value	H	O	V	D	Base Levy	Paid Levy	Write-Off	Remaining Levy	Fees	Refund	Amount Due
2018	\$12,410			0		\$347.02	\$0.00	\$0.00	\$347.02	\$38.17	\$0.00	\$385.19
2017	\$40,710			0		\$1,118.63	\$0.00	\$0.00	\$1,118.63	\$586.17	\$0.00	\$1,704.80
2016	\$40,710			0		\$1,119.33	\$0.00	\$0.00	\$1,119.33	\$747.69	\$0.00	\$1,867.02
2015	\$40,710			0		\$1,119.33	\$0.00	\$0.00	\$1,119.33	\$908.89	\$0.00	\$2,028.22
2014	\$40,710			0		\$1,117.34	\$0.00	\$0.00	\$1,117.34	\$1,068.16	\$0.00	\$2,185.50
2013	\$40,710			0		\$1,094.96	\$0.00	\$0.00	\$1,094.96	\$1,204.48	\$0.00	\$2,299.44
2012	\$40,720			0		\$1,068.61	\$0.00	\$0.00	\$1,068.61	\$1,329.35	\$0.00	\$2,397.96
2011	\$40,720			0		\$1,072.65	\$0.00	\$0.00	\$1,072.65	\$1,488.82	\$0.00	\$2,561.47
2010	\$51,100			0		\$1,339.85	\$229.35	\$0.00	\$1,110.50	\$1,701.30	\$0.00	\$2,811.80
Totals						\$26,643.30	\$9,474.01	\$0.00	\$17,169.29	\$42,072.65	\$0.00	\$53,804.92

Last Payment Date

Account Master - Read Only

Prev Account Next Account Prev Owner Next Owner Notes Go To: []

CELLIS ACCOUNT NO (30002000000390000000); YEAR = 2018, LEGAL STATUS = STRUCK OFF, 04/09/2019 09:22:36
 ACT8002 v1.469 CAUSE NUMBER = D195657 ACTJC

SUMMARY Account Detail Owner Detail Prop Value Detail Jurisdictions Special Exemptions Frozen Amounts

Account Master

Account No. 30002000000390000000 Appraisal District No. 300020003900 Year 2018
 Legal PL RS5 TR A OUT OF TR 23 ABST 20 D Scan Line No. 30002000000390000000 SIT Account []
 Desc. EASLEY Alias Key [] Roll Code R
 Parcel Address 7710 TRAM RD Legal Acres .3512 Account Status NA
 Tax Units 1 4 21 41 49 55 Apport. N Exempt Entire Account []

Owner Master

Certified MANSFIELD FRED & GLORIA EST Owner % 1.000000 Exempt % 0.000000
 Owner [] Homestead [] Over 65 [] Disabled []
 Address 7710 TRAM RD Start Date [] [] []
 BEAUMONT TX 77713-8783 Veteran Exemptions []
 Addr Status [] Owner ID 319656 UDI Group [] **Veteran Exemption Details**

Exemptions

Tax Unit	Exemption Code	Exemption Amount	Code Type

Save and Calculate Levy
 Prior Year(s)

Property Value

Year	Category	Land	Improvement	New Improvement	Total
2018	Homesite	\$0	\$0	\$0	\$0
	Agricultural	\$0	\$0		\$0
	Non-Qualifying A1	\$2,980	\$9,430		\$12,410

Last Frozen Year 1992

BEAUMONT

Planning & Community Development

April 04, 2019

DEM2019-00089

JEFFERSON COUNTY
ATTN: JUDGE BRANICK
1149 PEARL ST
BEAUMONT, TX 77701-3638

Certified Mail# 70140040000036046894

District Acct: 3000200000039000000003

U.S. St. 101
RE: 7710 TRAM RD
7710 TRAM RD

Dear JEFFERSON COUNTY,

The City Tax Rolls of the City of Beaumont reveals that you are the owner of the above described property. If you are no longer the owner of said property, please accept my apology and notify us immediately by calling 880-3762 so that the City of Beaumont does not send you other notices at taxpayer expense.

An inspection of the structure at 7710 TRAM RD reveals that it is unsafe, unfit for human occupancy and is in a state of deterioration and likely to endanger the health, safety or general welfare of the citizens of the City. The structure in its present state is in violation of the Unsafe Substandard Structures Ordinance Chapter 24, Division 1, Section 24.04.001 of the Code of Ordinances and is a public nuisance in violation of 24.04.002 of the City's Code of Ordinances. Determination of unsafe substandard structures shall be governed by the 2015 International Property Maintenance Code.

Listed on the attached inspection sheet are the violations.

You are hereby officially notified to contact Building Codes at (409) 880-3762 within fifteen (15) days of the date of this letter, which is no later than April 19, 2019 to discuss enrolling in a work repair program. A building permit must be secured from the Building Codes Division before repair work is commenced. Until this structure meets code compliance, all utilities will be disconnected. Thereafter, if the described structure has not been enrolled in a work program to be repaired, the structure should be demolished and removed in compliance with City standards within (30) days, which is no later than May 04, 2019, in accordance with Section 24.04.003 of the Code of Ordinances.

Should compliance not be met, the structure will be brought before City Council for an Unsafe Substandard Structure Public Hearing. If declared an unsafe substandard structure and/or public nuisance, the City of Beaumont will order the structure to be demolished and removed. If not removed within the allotted time frame, the structure will be removed by the City. Should this property be of a commercial use, such expense of demolition and removal shall be assessed as a lien against the property upon which the structure was situated.

Your cooperation in this matter is greatly appreciated.

Sincerely,
Paul Buxie
Substandard Housing Inspector

MB:ds
Attachement

PLANNING & COMMUNITY DEVELOPMENT
T 409.880.3762
F 409.880.3110
PO Box 3827 | Beaumont, TX 77704
beaumonttexas.gov



An inspection for the property at 7710 TRAM RD found the property to be in violation on April 3, 2019.

The violations of this property are:

108.1.1 Exterior: Unsafe Structure

108.1.1 An unsafe structure is one that is found to be dangerous to life, health, property or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, delapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partially or complete collapse is possible.

108.1.3 STRUCTURE UNFIT FOR HUMAN OCCUPANCY

A structure is unfit for human occupancy whenever the code official finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is insanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

24.04.001 Unsafe Structure

24.04.001 All unsafe substandard structures within the terms of section 24.04.001 are hereby declared to be public nuisances and shall be repaired, removed or demolished as hereinafter provided

302.1 Exterior Property Areas: Sanitation

302.1 Sanitation. All exterior property and premises shall be maintained in a clean, safe and sanitary condition. The occupant shall keep that part of the exterior property which such occupant occupies or controls in a clean and sanitary condition.

302.4 Exterior Property Areas: Weeds

302.4 Weeds. All premises and exterior property shall be maintained free from weeds or plant growth in excess of (jurisdiction to insert height in inches). All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens. Upon failure of the owner or agent having charge of a property to cut and destroy weeds after service of a notice of violation, they shall be subject to prosecution in accordance with Section 106.3 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the owner or agent responsible for the property.

302.6 Exterior Property Areas: Exhaust vents

302.6 Exhaust vents. Pipes, ducts, conductors, fans or blowers shall not discharge gases, steam, vapor, hot air, grease, smoke, odors or other gaseous or particulate wastes directly upon abutting or adjacent public or private property or that of another tenant.

304.1 Exterior: General

304.1 General. The exterior of a structure shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare.

304.13 Exterior: Window, skylight and door frames

304.13 Window, skylight and door frames. Every window, skylight, door and frame shall be kept in sound condition, good repair and weather tight.

304.13.1 Exterior: Glazing

304.13.1 Glazing. All glazing materials shall be maintained free from cracks and holes.



BEAUMONT

Planning & Community Development

304.13.2 Exterior: Openable windows

304.13.2 Openable windows. Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware.

304.14 Exterior: Insect Screens

304.14 Insect screens. Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

304.15 Exterior: Doors

Exterior doors, door assemblies, operator systems if provided, and hardware shall be maintained in good condition. Locks at all entrances to dwelling units and sleeping units shall tightly secure the door. Locks on means of egress doors shall be in accordance with Section 702.3.

304.18 Exterior: Building Security

304.18 Building security. Doors, windows or hatchways for dwelling units, room units or housekeeping units shall be provided with devices designed to provide security for the occupants and property within.

304.18.2 Exterior: Windows

304.18.2 Windows. Operable windows located in whole or in part within 6 feet (1828 mm) above ground level or a walking surface below that provide access to a dwelling unit, rooming unit or housekeeping unit that is rented, leased or let shall be equipped with a window sash locking device.

304.3 Exterior: Premises Identification

304.3 Premises identification. Buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

304.4 Exterior: Structural members

304.4 Structural members. All structural members shall be maintained free from deterioration, and shall be capable of safely supporting the imposed dead and live loads.

304.6 Exterior walls

304.6 Exterior walls. All exterior walls shall be free from holes, breaks, and loose or rotting materials; and maintained weatherproof and properly surface coated where required to prevent deterioration.

305.1.1 Interior: Unsafe Conditions

305.1.1 Unsafe conditions. The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the International Building Code or the International Existing Building Code as required for existing buildings:

305.2 Interior: Structural Members

305.2 Structural members. All structural members shall be maintained structurally sound, and be capable of supporting the imposed loads.

305.3 Interior: Interior surfaces

305.3 Interior surfaces. All interior surfaces, including windows and doors, shall be maintained in good, clean and sanitary condition. Peeling, chipping, flaking or abraded paint shall be repaired, removed or covered. Cracked or loose plaster, decayed wood and other defective surface conditions shall be corrected.

305.4 Interior: Stairs and walking surfaces

305.4 Stairs and walking surfaces. Every stair, ramp, landing, balcony, porch, deck or other walking surface shall be maintained in sound condition and good repair.

PLANNING & COMMUNITY DEVELOPMENT

T 409.880.3762

F 409.880.3110

PO Box 3827 | Beaumont, TX 77704

beaumonttexas.gov



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305.5 Interior: Handrails and guards

305.5 Handrails and guards. Every handrail and guard shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

305.6 Interior: Interior doors

305.6 Interior doors. Every interior door shall fit reasonably well within its frame and shall be capable of being opened and closed by being properly and securely attached to jambs, headers or tracks as intended by the manufacturer of the attachment hardware.

308.1 Rubbish and Garbage: Accumulation of rubbish or garbage

308.1 Accumulation of rubbish or garbage. All exterior property and premises, and the interior of every structure, shall be free from any accumulation of rubbish or garbage.

402.1 Light: Habitable spaces

402.1 Habitable spaces. Every habitable space shall have at least one window of approved size facing directly to the outdoors or to a court. The minimum total glazed area for every habitable space shall be 8 percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than 3 feet (914 mm) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room. Exception: Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m²). The exterior glazing area shall be based on the total floor area being served.

402.2 Light: Common halls and stairways

402.2 Common halls and stairways. Every common hall and stairway in residential occupancies, other than in one- and two family dwellings, shall be lighted at all times with at least a 60-watt standard incandescent light bulb for each 200 square feet (19 m²) of floor area or equivalent illumination, provided that the spacing between lights shall not be greater than 30 feet (9144 mm). In other than residential occupancies, means of egress, including exterior means of egress, stairways shall be illuminated at all times the building space served by the means of egress is occupied with a minimum of 1 footcandle (11 lux) at floors, landings and treads.

402.3 Light: Other spaces

402.3 Other spaces. All other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe occupancy of the space and utilization of the appliances, equipment and fixtures.

403.1 Light: Habitable spaces

403.1 Habitable spaces. Every habitable space shall have at least one openable window. The total openable area of the window in every room shall be equal to at least 45 percent of the minimum glazed area required in Section 402.1. Exception: Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m²). The ventilation openings to the outdoors shall be based on a total floor area being ventilated.

403.2 Light: Bathrooms and toilet rooms

403.2 Bathrooms and toilet rooms. Every bathroom and toilet room shall comply with the ventilation requirements for habitable spaces as required by Section 403.1, except that a window shall not be required in such spaces equipped with a mechanical ventilation system. Air exhausted by a mechanical ventilation system from a bathroom or toilet room shall discharge to the outdoors and shall not be recirculated.

403.3 Light: Cooking facilities

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403.3 Cooking facilities. Unless approved through the certificate of occupancy, cooking shall not be permitted in any rooming unit or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the rooming unit or dormitory unit. Exceptions: 1. Where specifically approved in writing by the code official. 2. Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

403.4 Light: Process ventilation

403.4 Process ventilation. Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust ventilation system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

403.5 Light: Clothes dryer exhaust

403.5 Clothes dryer exhaust. Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted outside the structure in accordance with the manufacturer's instructions.

Exception: Listed and labeled condensing (ductless) clothes dryers.

404.4.3 Occupancy Limitations: Water closet accessibility

404.4.3 Water closet accessibility. Every bedroom shall have access to at least one water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to at least one water closet and lavatory located in the same story as the bedroom or an adjacent story.

501.2 Plumbing Facilities and Fixture Requirements: Responsibility

501.2 Responsibility. The owner of the structure shall provide and maintain such plumbing facilities and plumbing fixtures in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any structure or premises which does not comply with the requirements of this chapter.

503.1 Toilet Rooms: Privacy

503.1 Privacy. Toilet rooms and bathrooms shall provide privacy and shall not constitute the only passageway to a hall or other space, or to the exterior. A door and interior locking device shall be provided for all common or shared bathrooms and toilet rooms in a multiple dwelling.

504.3 Plumbing Systems and Fixtures: Plumbing system hazards

504.3 Plumbing system hazards. Where it is found that a plumbing system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, inadequate venting, cross connection, backsiphonage, improper installation, deterioration or damage or for similar reasons, the code official shall require the defects to be corrected to eliminate the hazard.

601.2 MECHANICAL AND ELECTRICAL REQUIREMENTS: RESPONSIBILITY

601.2 Responsibility. The owner of the structure shall provide and maintain mechanical and electrical facilities and equipment in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any premises that does not comply with the requirements of this chapter.

602.1 Heating Facilities: Facilities required

602.1 Facilities required. Heating facilities shall be provided in structures as required by this section.

602.2 Heating Facilities: Residential occupancies

602.2 Residential occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature for the locality indicated in Appendix D of the International Plumbing Code. Cooking appliances shall not be used to provide space heating to meet the requirements of this section. Exception: In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

604.1 Electrical Facilities: Facilities Required

604.1 Facilities required. Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 605.

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604.2 Electrical Facilities: Service

604.2 Service. The size and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with NFPA 70. Dwelling units shall be served by a three-wire, 120/240 volt, single-phase electrical service having a rating of not less than 100 amperes.

604.3 Electrical Facilities: Electrical System Hazards

604.3 Electrical system hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, improper fusing, insufficient receptacle and lighting outlets, improper wiring or installation, deterioration or damage, or for similar reasons, the code official shall require the defects to be corrected to eliminate the hazard.

605.1 Electrical Equipment: Installations

605.1 Installation. All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and approved manner.

605.2 Electrical Equipment: Receptacles

605.2 Receptacles. Every habitable space in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter. Every bathroom shall contain at least one receptacle. Any new bathroom receptacle outlet shall have ground fault circuit interrupter protection.

605.3 Electrical Equipment: Luminaires

605.3 Luminaires. Every public hall, interior stairway, toilet room, kitchen, bathroom, laundry room, boiler room and furnace room shall contain at least one electric luminaire.

702.1 MEANS OF EGRESS: GENERAL

702.1 General. A safe, continuous and unobstructed path of travel shall be provided from any point in a building or structure to the public way. Means of egress shall comply with the International Fire Code.

704.2 Fire Protection Systems: Smoke alarms

704.2 Smoke alarms. Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and in dwellings not regulated in Group R occupancies, regardless of occupant load at all of the following locations: 1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms. 2. In each room used for sleeping purposes. 3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level. Single- or multiple-station smoke alarms shall be installed in other groups in accordance with the International Fire Code.



**AGENDA ITEM****April 15, 2019**

Consider, possibly approve, authorize the County Judge to execute, receive and file Inter-local Agreement between Jefferson County and Orange County for the Jefferson County Crime Laboratory to provide crime laboratory testing and services suitable for investigations.

STATE OF TEXAS

§
§
§

INTERLOCAL AGREEMENT

COUNTY OF JEFFERSON

FOR CRIME LAB SERVICES

WHEREAS, Jefferson County, Texas, by and through its Commissioners' Court as authorized by Chapter 791 of the Government Code and Orange County, political subdivision of the State of Texas, by and through its Commissioners' Court, for the mutual benefit of the citizens they serve, desire to enter into a contract to provide certain services to each other; and,

WHEREAS, Jefferson County, through its Crime Laboratory, has provided crime laboratory testing and services suitable for criminal investigations; and,

WHEREAS, Orange County, its cities and entities, have, from time to time, the need to employ the services of a certified crime laboratory and investigators; and,

WHEREAS, Orange County and its cities and entities do not have the resources, labor, or equipment suited for crime lab services;

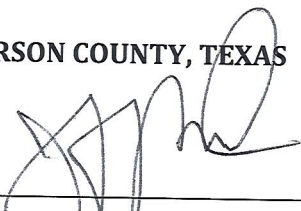
Now, therefore, know all men by these presents:

Orange County, Texas (for itself and for the benefit of the law enforcement agencies and entities within Orange County, including those listed on the attached Exhibit "A") and Jefferson County, hereby agree as follows:

1. Jefferson County shall furnish labor, equipment and material to provide crime lab services for Orange County and the agencies identified in Exhibit "A", when and as determined at the discretion of the Jefferson County Crime Lab, subject to the requirements of Section 791.014 of the Government Code.
2. This agreement shall be effective on the date of its execution and may be terminated at the will of either party.
3. This agreement shall be construed according to the laws of the State of Texas.
4. Nothing in this agreement shall be construed to create the existence of an agency relationship between the parties.
5. Any employee of a party performing services pursuant to this agreement shall not be deemed to be the agent of the party receiving services under this agreement.
6. Orange County will remit payment within 60 days of invoice from Jefferson County, for services provided by the Jefferson County Crime Laboratory, on the pro rata share of the actual cost of the Jefferson County Crime Laboratory department. The pro rata share will be determined by calculating the percentage of Orange County (including entities within Orange County) cases submitted to the Crime Laboratory for the fiscal year. Jefferson County will submit such billings, in accordance with our current practice, on or about the 15th day of January each year.


IN WITNESS WHEREOF, the Parties have executed and attested this Agreement by their respective duly authorized authorized officers or elected officials.

JEFFERSON COUNTY, TEXAS




Hon. Jeff R. Branick, Date
Jefferson County Judge


ATTEST:



Jefferson County Clerk or duly
Appointed Deputy County Clerk

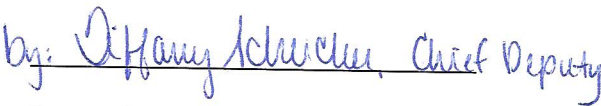


ORANGE COUNTY, TEXAS



Hon. Carl K. Thibodeaux Date
Orange County Judge

ATTEST:

by: 

Orange County Clerk or her duly
Appointed Deputy County Clerk

Exhibit "A"

Including any Local, State or Federal Law Enforcement agency which submits evidence items relevant to a potential or ongoing criminal investigation originating in whole or in part in Orange County:

Orange Police Department
Orange County Sheriff's Office
Vidor Police Department
Bridge City Police Department
West Orange Police Department
Pine Forest Police Department
Pinehurst Police Department
Orange County District Attorney's Office
Orange County Constable's Office Pct. 1
Orange County Constable's Office Pct. 2
Orange County Constable's Office Pct. 3
Orange County Constable's Office Pct. 4
Bridge City Independent School District Police Department
Vidor Independent School District Police Department
Rose City Marshall's Office
Department of Public Safety
Texas Parks and Wildlife Department
Texas Alcohol Beverage Commission
Drug Enforcement Administration
Alcohol, Tobacco and Firearms
Federal Bureau of Investigation
National Parks Service
U. S. Postal Inspection Service



JEFFERSON COUNTY SHERIFF'S DEPARTMENT
REGIONAL CRIME LABORATORY
 5030 Highway 69 South, Suite 500
 Beaumont, Texas 77705-9630
 (409) 726-2577 FAX (409) 726-2576

January 3, 2019

Pennee Schmitt
 Orange County Auditor
 123 S. 6th Street
 Orange, Texas 77630

Dear Ms. Schmitt,

The Regional Crime Laboratory spent \$1,252,669.51 of its annual operational budget for the 2017-2018 fiscal year. Orange County law enforcement agencies submitted 670 requests for analysis, or approximately 18.92 percent of the total caseload. Therefore, Orange County's share of the budget is \$236,886.42.

For planning purposes, the approved Regional Crime Laboratory budget for fiscal year 2018-2019 is \$1,426,809.00. To date, Orange County law enforcement agencies have submitted approximately 14.66 percent of the total caseload.

If you have any questions, please feel free to contact me.

Sincerely,

Emily Esquivel
 Laboratory Director

RCUD 13:04
 7 JAN 19
 AUDITING

cc: John Shaubeger, Chief, Jefferson County Sheriff's Department
 Jeff Branick, County Judge, Jefferson County
 Fran Lee, Budget Manager, Jefferson County

**AGENDA ITEM****April 15, 2019**

Consider, possibly approve and authorize the County Judge to execute receive and file an agreement between Jefferson County Management Information Systems and GMO GlobalSign, Inc. for EV SSL Certificate.

GlobalSign Subscriber Agreement Acceptance Form



GlobalSign Subscriber Agreement – Digital Certificates and Services - Version 3.8

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE DIGITAL CERTIFICATE ISSUED TO YOU OR YOUR ORGANIZATION. BY APPLYING FOR A DIGITAL CERTIFICATE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY CANCEL THE ORDER WITHIN 7 DAYS OF THE APPLICATION FOR A FULL REFUND. IF YOU HAVE PROBLEMS UNDERSTANDING THIS AGREEMENT, E-MAIL US AT legal@globalsign.com

PLEASE RETURN THE SIGNED DOCUMENTS TO VETTING-US@GLOBALSIGN.COM

This GlobalSign Subscriber Agreement ("Agreement") is effective as of the date of the application for the Extended SSL Digital Certificate, EV Codesigning Certificate and MSSL EV profile (EV products) (the "Effective Date") between GMO GlobalSign, Inc. ("GlobalSign"), and the applicant receiving the Digital Certificate ("Subscriber").

<p>("Subscriber")</p> <p>Jefferson County PAR130220</p>	<p>("GlobalSign")</p> <p>GMO GlobalSign, Inc.</p>
<p>1149 Pearl Street Ste 301 Beaumont TX 77701</p>	<p>2 International Dr. Suite 150 Portsmouth, NH 03801</p>
<p>Jeff Branick</p>	

The **GlobalSign Subscriber Agreement - Digital Certificates and Services** - found on the GlobalSign repository at <https://www.globalsign.com/repository> is incorporated by reference in its entirety. The following is an outline of the Subscriber Agreement sections provided for your reference.

- 1.0 Definitions and Incorporation by Reference
- 2.1 Authority to Use Certificates
- 2.1 Grant of Authority
- 2.2 Limitations on Authority
- 3.0 Services Provided by GlobalSign
- 3.1 Provision of Certificate Revocation Lists (CRL), Online Certificate Status Protocol (OCSP) Services and Certificate Issuing Authority Details
- 3.2 Revocation Services for Certificates
- 3.3 Key Generation
- 3.4 Site Seal Services for SSL/TLS Certificates and OCSP/CRL Responses
- 3.5 Timestamping Services for Code Signing Certificate
- 3.6 Timestamping Services for PDF Signing for Adobe CDS Certificate
- 3.7 Time stamping Services for Adobe Authorized Trust List (AATL) Certificate
- 4.0 Subscriber's Obligations and Warranties
- 4.1 Accuracy of Information
- 4.2 Protection of Private Key
- 4.3 Private Key Reuse
- 4.4 Prevention of Misuse
- 4.5 Acceptance of Certificate
- 4.6 Use; Restrictions
- 4.7 Reporting and Revocation
- 4.8 Termination of Use of Certificate
- 4.9 Responsiveness
- 4.10 Acknowledgement and Acceptance
- 4.11 Sharing of Information
- 4.12 Compliance with Industry Standards
- 4.13 Domain Control for SSL/TLS Digital Certificate
- 4.14 E-mail Control for PersonalSign Digital Certificate
- 4.15 Key Generation and Usage
- 4.16 NAESB Certificates
- 5.0 Consent to Publish Information
- 6.0 GlobalSign Limited Warranty
- 7.0 Term and Termination
- 8.0 Effect of Termination
- 9.0 Miscellaneous Provisions
- 9.1 Governing
- 9.2 Binding Effect
- 9.3 Entire Agreement
- 9.4 Severability
- 9.5 Notices
- 9.6 Privacy; Use of third party databases
- 9.7 Trade Names, Logos
- 10. Customer Support

Contract Signer's Warranty

By signing this Subscriber Agreement Acceptance Form, the Contract Signer acknowledges that s/he has the authority to obtain the digital equivalent of a company stamp, seal, or (where applicable) officer's signature to establish the authenticity of the company's software or the company's website, and that the Applicant is responsible for all uses of its EV Certificates.

By signing this Subscriber Agreement Acceptance Form on behalf of Subscriber, the Contract Signer represents that the Contract Signer:

- (I) is acting as an authorized representative of the Subscriber; and
- (II) is expressly authorized by the Subscriber to sign Subscriber Agreements and approve EV Certificate requests on the Subscriber's behalf; and
- (III) has confirmed the Subscriber's right to use the domain(s) to be included in EV Certificates.

Pre-authorization of the Certificate Approver

Name of the Certificate Approver: **Jeff Branick**

By signing this Subscriber Agreement Acceptance Form, the Contract Signer confirms that the Certificate Approver is expressly authorized by the Subscriber to do the following, as of the date of this Subscriber Agreement Acceptance Form (this will be referred to as the "EV Authority"):

- (I) Submit, and, if applicable, authorize a Certificate Requester to submit, the EV Certificate Request on behalf of the Applicant; and
- (II) Provide, and, if applicable, authorize a Certificate Requester to provide, the information requested from the Applicant by the CA for issuance of the EV Certificate; and
- (III) Approve EV Certificate Requests submitted by a Certificate Requester.

When approving orders for certificates the Certificate Approver will be authenticated by use of a suitable challenge response such as, logging into an account with the username and password or contacting the Certificate Approver by phone or mail at a verified phone number or address for the Applicant and obtaining oral or written confirmation that the Certificate Approver has reviewed and approved the EV Certificate Request.

The Contract Signer confirms that the Certificate Approver has EV Authority until this authority is revoked by the Subscriber.


If the EV Authority is revoked, the Subscriber must notify GlobalSign in writing through any of our International offices immediately. Our International offices are listed on <http://www.globalsign.com/company/contact.htm>.

The Contract Signer represents that

- (I) upon execution of this Subscriber Agreement Acceptance Form, the Applicant will be bound by all of its terms and conditions;
- (II) by signing the Subscriber Agreement Acceptance Form, GlobalSign and the Applicant are entering into a legally valid and enforceable Subscriber Agreement that creates extensive obligations on Applicant,
- (III) an EV Certificate serves as a form of digital identity for Applicant,
- (IV) there are serious consequences attached to the misuse of an EV Certificate, and
- (V) the loss or misuse of this identity can result in great harm to the Applicant.

The Contract Signer confirms that the Applicant is obligated for all EV Certificates issued at the request of, or approved by the Certificate Approver.

Signing on behalf of the Subscriber: **Jefferson County**

Name	Jeff Branick	Title	County Judge
Signature		Date	04-15-2019

Special, April 15, 2019

There being no further business to come before the Court at this time,
same is now here adjourned on this date, April 15, 2019