

Fort Bend County, Texas
Invitation for Bid



Construction of Powerline Road from Spice Springs Lane to Sunrise Meadow Lane
for Fort Bend County Bond Project 13110
BID 18-030

SUBMIT BIDS TO:

Fort Bend County
Purchasing Department
Travis Annex
301 Jackson, Suite 201
Richmond, TX 77469

Note: All correspondence must include the term
"Purchasing Department" in address to assist in
proper delivery

SUBMIT NO LATER THAN:

Tuesday, December 12, 2017
2:00 PM (Central)

MARK ENVELOPE:

BID 18-030
Powerline Road

Grand Total: \$767,785.90

ALL BIDS MUST BE RECEIVED IN AND TIME/DATE STAMPED BY THE PURCHASING OFFICE
OF FORT BEND COUNTY ON OR BEFORE THE SPECIFIED TIME/DATE STATED ABOVE.

BIDS RECEIVED AS REQUIRED WILL THEN BE OPENED AND PUBLICLY READ.

BIDS RECEIVED AFTER THE SPECIFIED TIME, WILL BE RETURNED UNOPENED.

Results will not be given by phone.
Results will be provided to bidder in writing
after Commissioners Court award.

Requests for information must be in
writing and directed to:
Jaime Kovar
Assistant County Purchasing Agent
Jaime.kovar@fortbendcountytexas.gov

Vendor Responsibilities:

- Download and complete any addendums. (Addendums will be posted on the Fort Bend County website no
Later than 48 hours prior to bid opening)
- Submit response in accordance with requirements stated on the cover of this document.
- DO NOT submit responses via email or fax.

Prepared: 11/13/17
Issued: 11/20/17



**COUNTY PURCHASING AGENT
Fort Bend County, Texas**

Vendor Information

Debbie Kaminski, CPPB
County Purchasing Agent

Office (281) 341-8640

Legal Company Name	Durwood Greene Construction Co.		
Federal ID # or S.S. #	74-1654993		
Type of Business	<input checked="" type="checkbox"/> Corporation/LLC	<input type="checkbox"/> Sole Proprietor/Individual	
	<input type="checkbox"/> Partnership	<input type="checkbox"/> Tax Exempt Organization	
Remittance Address	P.O. Box 1338		
City/State/Zip	Stafford, Texas 77497-1338		
Physical Address	10126 Cash Road		
City/State/Zip	Stafford, Texas 77477		
Phone/Fax Number	Phone: 281-499-1551	Fax: 281-499-1525	
Contact Person	Jerry L. Berry		
E-mail	jberry@durwoodgreene.com		
Check all that apply to the company listed above and provide certification number.	<input type="checkbox"/> DBE-Disadvantaged Business Enterprise	Certification # _____	
	<input type="checkbox"/> SBE-Small Business Enterprise	Certification # _____	
	<input type="checkbox"/> HUB -Texas Historically Underutilized Business	Certification # _____	
	<input type="checkbox"/> WBE-Women's Business Enterprise	Certification # _____	
Company's gross annual receipts	<input type="checkbox"/> <\$500,000	<input type="checkbox"/> \$500,000-\$4,999,999	
	<input type="checkbox"/> \$5,000,000-\$16,999,999	<input type="checkbox"/> \$17,000,000-\$22,399,999	
	<input checked="" type="checkbox"/> >\$22,400,000		
NAICs codes (Please enter all that apply).			
Signature of Authorized Representative			
Printed Name	Jerry L. Berry		
Title	Vice President		
Date	12-12-17		

THIS FORM MUST BE SUBMITTED WITH THE SOLICITATION RESPONSE.

1.0 GENERAL REQUIREMENTS:

- 1.1 Read this entire document carefully. Follow all instructions. You are responsible for fulfilling all requirements and specifications. Be sure you understand them.
- 1.2 General Requirements apply to all advertised bids; however, these may be superseded, whole or in part, by the scope, special requirements, specifications, special specifications or other data contained herein.
- 1.3 Governing Law: Bidder is advised that these requirements shall be fully governed by the laws of the State of Texas and that Fort Bend County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.
- 1.4 Bid Form Completion: Fill out, sign, and return to the Fort Bend County Purchasing Department one (1) complete bid form. An authorized representative of the bidder must sign the Contract Sheet. The Contract will be binding only when signed by the County Judge, Fort Bend County and a purchase order authorizing the item(s) desired has been issued. The use of corrective fluid is not acceptable and may result in the disqualification of bid. If an error is made, the bidder must draw a line through error and initial each change.
- 1.5 Bid Returns: Bidders must return all completed bids to the Fort Bend County Purchasing Department at 301 Jackson, Suite 201 Richmond Texas no later than 2:00 P.M. on the date specified. Late bids will not be accepted. Bids must be submitted in a sealed envelope, addressed as follows: Fort Bend County Purchasing Agent, Travis Annex, 301 Jackson, Suite 201 Richmond, Texas 77469.
- 1.6 Addenda: No interpretation of the meaning of the drawings, specifications or other bid documents will be made to any bidder orally. All requests for such interpretations must be made in writing addressed to Jaime Kovar, Assistant Purchasing Agent, 301, Jackson, Suite 201, Richmond, Texas, 77469, E-mail: Jaime.Kovar@fortbendcountytexas.gov. Any and all interpretations and any supplemental instructions will be in the form of written addenda to the contract documents which will be posted on Fort Bend County's website. Addenda will **ONLY** be issued by the Fort Bend County Purchasing Agent. It is the sole responsibility of each bidder to insure receipt of any and all addenda. All addenda issued will become part of the contract documents. Bidders must sign and include it in the returned bid package. Deadline for submission of questions and/or clarification is no later than **Monday, December 4, 2017 at 12:00PM (CST)**. Requests received after the deadline will not be responded to due to the time constraints of this bid process.
- 1.7 References: All bidders must submit, **WITH BID**, at least three (3) references from clients for whom a project similar to that specified herein has been

successfully accomplished. References must include clients name, contact person and telephone number.

- 1.8 **Bid Bond:** All bidders must submit, **WITH BID**, a cashier's check or certified check for at least five percent (5%) of the total bid price, payable to the order of Fort Bend County, or a Bid Bond in the same amount issued by a surety, acceptable to Fort Bend County, authorized to do business in the State of Texas, as a guarantee that the Bidder will do the work described herein at the rates stated herein. Unsuccessful bidder's Cashier's Check or Certified Check will be returned only after a written request to do so have been received in the Office of the Fort Bend County Purchasing Agent.
- 1.9 **Material Safety Data Sheets:** Under the "Hazardous Communication Act", commonly known as the "Texas Right to Know Act", a bidder must provide to Fort Bend County and using departments, with each delivery, material safety data sheets, which are, applicable to hazardous substances defined in the Act. Bidders are obligated to maintain a current, updated file in the Fort Bend County Purchasing Department. Failure of the bidder to maintain such a file will be cause to reject any bid applying thereto.
- 1.10 **Pricing:** Prices for all goods and/or services shall be firm for the duration of this Contract and shall be stated on the bid sheet. Prices shall be all inclusive. No price changes, additions, or subsequent qualifications will be honored during the course of the Contract. All prices must be written in ink or typewritten. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, bidder **MUST** indicate the items required and attendant costs or forfeit the right to payment for such items.
- 1.11 **Term Contracts:** If the Contract is intended to cover a specific time period, said time will be given in the specifications under scope.
- 1.12 **Recycled Materials:** Fort Bend County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Fort Bend County will be the sole judge in determining product preference application.
- 1.13 **Evaluation:** Evaluation shall be used as a determinant as to which bid items or services are the most efficient and/or most economical for Fort Bend County. It shall be based on all factors which have a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Fort Bend County Purchasing Department and recommendation to Fort Bend County Commissioners Court. Compliance with all bid requirements, delivery and needs of the using department are considerations in evaluating bids. Pricing is **NOT** the only criteria for making a recommendation. The Fort Bend County Purchasing Department reserves the right to contact any bidder, at any time, to clarify, verify

or request information with regard to any bid.

- 1.14 **Disqualification of Bidder:** Upon signing this bid document, a bidder offering to sell supplies, materials, services, or equipment to Fort Bend County certifies that the bidder has not violated the antitrust laws of this state codified in section 15.01, et seq., Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business. Any or all bids may be rejected if Fort Bend County believes that collusion exists among the bidders. Bids in which the prices are obviously unbalanced may be rejected. If multiple bids are submitted by a bidder and after the bids are opened, one of the bids is withdrawn, the result will be that all of the bids submitted by that bidder will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple bids for different products or services.
- 1.15 **Awards:** Fort Bend 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 bidder, to reject any or all bids. In the event the lowest dollar bidder meeting specifications is not awarded a contract, the bidder may appear before the Commissioners Court and present evidence concerning its responsibility.
- 1.16 **Contract Obligation:** Fort Bend County Commissioners Court must award the Contract and the County Judge or other person authorized by the Fort Bend County Commissioners Court must sign the Contract before it becomes binding on Fort Bend County or the bidders. Department heads are not authorized to sign agreements for Fort Bend County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.

2.0 SCOPE:

It is the intent of Fort Bend County to contract with one (1) vendor for all materials, supplies, equipment, tools, services, labor and supervision necessary to complete construction of Powerline Road from Spice Springs Lane to Sunrise Meadow Lane, hereinafter referred to as the "Project," as specified herein.

3.0 PRE-BID CONFERENCE:

A pre-bid conference will be conducted on **Tuesday, November 28, 2017 at 9:30AM (CST)**. The pre-bid conference will be held at the Fort Bend County Purchasing Department located in the Travis Annex at 301 Jackson, Suite 201, Richmond, Texas 77469. All bidders are encouraged to attend.

4.0 LIQUIDATED DAMAGES:

If the Project is not substantially complete within the contract time as adjusted by extension of

time approved by Commissioner Court, Fort Bend County will deduct (from the final payment, as liquidated damages), the sum of five hundred (\$500.00) per calendar day that the Project remains not substantially complete, such sum is agreed upon as a reasonable and proper measure of damages which Fort Bend County will sustain per day by failure of Contractor to substantially complete work within the contract time. It is understood that said sum shall be considered as liquidated damages and shall in no sense be considered as a penalty against the Contractor.

5.0 COMPLETION TIME AND PAYMENT:

- 5.1 Fort Bend County shall pay the Contractor in current funds for the Contractor's performance of the Contract the contract sum, as stated herein, after receipt of notice to proceed and a purchase order issued by the Fort Bend County Purchasing Agent.
- 5.2 Based upon Applications for payment submitted to the Engineering Department, Fort Bend County shall make progress payments on account of the contract sum to the Contractor as provided below and elsewhere in the contract documents.
 - 5.2.1 The period covered by each application for payment shall be one calendar month ending on the last day of the month.
 - 5.2.2 Provided an application for payment is received by the Engineering Department not later than the 15th day of a month, Fort Bend County shall make payment to the Contractor not later than the 15th day of the next month. If an application for payment is received by the Engineering Department after the application deadline fixed above, payment shall be made by Fort Bend County not later than 30 days after the Engineering Department receives the application for payment.
 - 5.2.3 Application for payment shall indicate the percentage of completion of each portion of the Project as of the end of the period covered by the application for payment.
 - 5.2.4 Subject to the provisions of the contract documents, the amount of each progress payment shall be computed as follows:
 - 5.2.4.1 Take that portion of the contract sum properly allocable to completed Project less retainage of ten percent (10%).
 - 5.2.4.2 Add that portion of the contract sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved by Fort Bend County, suitably stored off the site at a location agreed upon in writing), less retainage of ten percent (10%).

5.2.4.3 Subtract the aggregate of previous payments made by Fort Bend County.

5.2.4.4 The progress payment amount as determined in above shall be further modified under the following circumstances:

Add, upon substantial completion of the Project, a sum sufficient to increase the total payments to one hundred percent (100%) of the contract sum, less such amounts as Fort Bend County shall determine for incomplete work and unsettled claims.

5.2.4.5 Final payment, constituting the entire unpaid balance of the contract sum, shall be made by Fort Bend County to the Contractor when the Contract has been fully performed by the Contractor.

5.3 Before the first application for payment, the Contractor shall submit to the Engineering Department a schedule of values allocated to various portions of the work, prepared in such form and supported by such data to substantiate its accuracy as the Engineering Department may require. This schedule, unless objected to by the Engineering Department shall be used as a basis for reviewing the Contractor's application for payment.

5.4 Contractor must provide with each application for payment a contractor's affidavit certifying bills against the Contractor for labor, material and expendable equipment employed in the performance of Contractor have been paid in full prior to acceptance of final payment from Fort Bend County.

5.5 The Contractor will permit Fort Bend County, or any duly authorized agent of Fort Bend County, to inspect and examine the books and records of the Contractor for the purpose of verifying the amount of work performed under the Contract. Fort Bend County's right to inspect survives the termination of the Contract for a period of five years.

6.0 LIMIT OF APPROPRIATION:

Prior to the execution of this Contract, Contractor has been advised by County, and Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence to this Contract, that County shall have available only those funds specifically allocated in this Contract to fully discharge any and all liabilities which may be incurred by County in bringing this Project to an absolute conclusion, resulting in a complete, fully furnished, fully equipped and fully usable facility, and that the total of any and all basic construction costs, costs of providing the required furnishing and equipment, all fees and compensation of any sort to the Contractor, and any and all costs for any and all things or purposes enuring under or out of this Contract, irrespective of the nature thereof, shall not exceed said specifically allocated sum, notwithstanding any word, statement or thing contained in or inferred from the preceding

provision of this Contract which might in any light by any person be interpreted to the contrary.

7.0 RIGHT TO ASSURANCE:

Whenever Fort Bend County in good faith has reason to question the Contractor's intent to perform, Fort Bend County may demand that the Contractor give written assurance of its intent to perform. In the event that a demand is made and no assurance is given within five (5) days, Fort Bend County may treat this failure as an anticipatory repudiation of the Contract.

8.0 PERFORMANCE AND PAYMENT BONDS:

Performance and Payment Bonds: In the event the total accepted bid price exceeds \$25,000 the Contractor must provide to the Office of the County Purchasing Agent, a performance bond and a payment bond, each in the amount of 100% of the total contract sum within ten (10) calendar days after receipt of notification of bid award. Such bonds shall be executed by a corporate surety duly authorized and admitted to do business in the State of Texas and licensed in the State of Texas to issue surety bonds with a Best Rating of "A" or better. Fort Bend County reserves the right to accept or reject any surety company proposed by the Contractor. In the event Fort Bend County rejects, the proposed surety company, the Contractor will be afforded five (5) additional days to submit the required bonds issued by a surety company acceptable to Fort Bend County.

9.0 POWER OF ATTORNEY:

An attorney-in-fact who signs a bid bond, performance bond or payment bond must file with each bond a certified and effectively dated copy of his or her power of attorney.

10.0 INSURANCE:

- 10.1 All respondents must submit, with response, a current certificate of insurance indicating coverage in the amounts stated below. In lieu of submitting a certificate of insurance, respondents may submit, with response, a notarized statement from an Insurance company, authorized to conduct business in the State of Texas, and acceptable to Fort Bend County, guaranteeing the issuance of an insurance policy, with the coverage stated below, to the firm named therein, if successful, upon award of this Contract. Failure to provide current insurance certificate or notarized statement will result in disqualification of submittal.
- 10.2 At contract execution, contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such

insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

- 10.2.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed.
- 10.2.2 Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.
- 10.2.3 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.
- 10.2.4 Business Automobile Liability coverage with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.
- 10.3 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability (if required). All Liability policies including Workers' Compensation written on behalf of contractor, excluding Professional Liability, shall contain a waiver of subrogation in favor of County and members of Commissioners Court.
- 10.4 If required coverage is written on a claims-made basis, contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning from the time that work under the agreement is completed.
- 10.5 Contractor shall not commence any portion of the work under this Contract until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by Fort Bend County.
- 10.6 No cancellation of or changes to the certificates, or the policies, may be made without sixty (60) days prior, written notification to Fort Bend County.
- 10.7 Approval of the insurance by Fort Bend County shall not relieve or decrease the liability of the Contractor.

11.0 INDEMNIFICATION:

Respondent shall save harmless County from and against all claims, liability, and expenses, including reasonable attorney's fees, arising from activities of respondent, its agents, servants or employees, performed under this agreement that result from the negligent act, error, or omission of respondent or any of respondent's agents, servants or employees.

- 11.1 Respondent shall timely report all such matters to Fort Bend County and shall, upon the receipt of any such claim, demand, suit, action, proceeding, lien or judgment, not later than the fifteenth day of each month; provide Fort Bend County with a written report on each such matter, setting forth the status of each matter, the schedule or planned proceedings with respect to each matter and the cooperation or assistance, if any, of Fort Bend County required by Respondent in the defense of each matter.
- 11.2 Respondent's duty to defend, indemnify and hold Fort Bend County harmless shall be absolute. It shall not abate or end by reason of the expiration or termination of any contract unless otherwise agreed by Fort Bend County in writing. The provisions of this section shall survive the termination of the contract and shall remain in full force and effect with respect to all such matters no matter when they arise.
- 11.3 In the event of any dispute between the parties as to whether a claim, demand, suit, action, proceeding, lien or judgment appears to have been caused by or appears to have arisen out of or in connection with acts or omissions of Respondent, Respondent shall never-the-less fully defend such claim, demand, suit, action, proceeding, lien or judgment until and unless there is a determination by a court of competent jurisdiction that the acts and omissions of Respondent are not at issue in the matter.
- 11.4 Respondent's indemnification shall cover, and Respondent agrees to indemnify Fort Bend County, in the event Fort Bend County is found to have been negligent for having selected Respondent to perform the work described in this request.
- 11.5 The provision by Respondent of insurance shall not limit the liability of Respondent under an agreement.
- 11.6 Respondent shall cause all trade contractors and any other contractor who may have a contract to perform construction or installation work in the area where work will be performed under this request, to agree to indemnify Fort Bend County and to hold it harmless from all claims for bodily injury and property damage that may arise from said Respondent's operations. Such provisions shall be in form satisfactory to Fort Bend County.
- 11.7 Loss Deduction Clause - Fort Bend County shall be exempt from, and in no way liable for, any sums of money which may represent a deductible in any insurance

policy. The payment of deductibles shall be the sole responsibility of Respondent and/or trade contractor providing such insurance.

12.0 PREVAILING WAGES:

This project is subject to the prevailing wage rate requirements of Chapter 2258 of the Government Code. The Contractor shall pay Fort Bend County sixty dollars (\$60.00) for each worker employed by the Contractor for the provision of services described herein for each calendar day or part of the day that the worker is paid less than the below stated rates. Contractors may also visit www.wdol.gov/dba.aspx.

General Decision Number: TX170056 01/06/2017 TX56

Superseded General Decision Number: TX20160056

State: Texas

Construction Type: Highway

Counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, San Jacinto and Waller Counties in Texas.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017

* SUTX2011-013 08/10/2011

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (Paving and Structures)	\$ 12.98	
ELECTRICIAN	\$ 27.11	
FORM BUILDER/FORM SETTER		

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Paving & Curb	\$ 12.34
Structures	\$ 12.23
LABORER	
Asphalt Raker	\$ 12.36
Flagger	\$ 10.33
Laborer, Common	\$ 11.02
Laborer, Utility	\$ 11.73
Pipelayer	\$ 12.12
Work Zone Barricade Servicer	\$ 11.67
PAINTER (Structures)	\$ 18.62
POWER EQUIPMENT OPERATOR:	
Asphalt Distributor	\$ 14.06
Asphalt Paving Machine	\$ 14.32
Broom or Sweeper	\$ 12.68
Concrete Pavement Finishing Machine	\$ 13.07
Concrete Paving, Curing, Float, Texturing Machine	\$ 11.71
Concrete Saw	\$ 13.99
Crane, Hydraulic 80 Tons or less	\$ 13.86
Crane, Lattice boom 80 tons or less	\$ 14.97
Crane, Lattice boom over 80 Tons	\$ 15.80
Crawler Tractor	\$ 13.68
Excavator, 50,000 pounds or less	\$ 12.71
Excavator, Over 50,000 pounds	\$ 14.53
Foundation Drill, Crawler Mounted	\$ 17.43
Foundation Drill, Truck Mounted	\$ 15.89
Front End Loader 3 CY or Less	\$ 13.32
Front End Loader, Over 3 CY	\$ 13.17
Loader/Backhoe	\$ 14.29
Mechanic	\$ 16.96
Milling Machine	\$ 13.53
Motor Grader, Fine Grade	\$ 15.69
Motor Grader, Rough	\$ 14.23
Off Road Hauler	\$ 14.60
Pavement Marking Machine	\$ 11.18
Piledriver	\$ 14.95
Roller, Asphalt	\$ 11.95
Roller, Other	\$ 11.57
Scraper	\$ 13.47
Spreader Box	\$ 13.58
Servicer	\$ 13.97
Steel Worker	
Reinforcing Steel	\$ 15.15

Structural Steel Welder	\$ 12.85
Structural Steel	\$ 14.39

TRUCK DRIVER

Low Boy Float	\$ 16.03
Single Axle	\$ 11.46
Single or Tandem Axle Dump	\$ 11.48
Tandem Axle Tractor w/Semi Trailer	\$ 12.27

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

13.0 PERMITS:

It shall be the sole responsibility of the successful bidder to obtain all required permits in the name of Fort Bend County.

14.0 CONTRACTOR'S RESPONSIBILITY FOR WORK:

14.1 Preconstruction Work. Contractor shall do (or cause to be done) the following as preconstruction work:

14.1.1 On an as needed basis as determined by Fort Bend County, cause the Contractor's personnel to meet with Fort Bend County and the Engineer to discuss the status of the Project.

14.1.2 Review drawings and specifications with the Engineer to permit the Contractor and the Engineer to determine the compliance of the proposed facility with applicable building codes.

14.2 Construction Work. Contractor shall do (or cause to be done) the following as construction work:

14.2.1 Perform (or cause to be performed) all preparatory work at the construction site required herein, including (without limitation) soil and concrete testing and demolition of improvements existing at the construction site and all actions necessary for compliance with all laws and regulations as to actions to be taken by owners or contractors before construction begins, including without limitation those in regard to archaeological and environmental requirements.

14.2.2 Construct and install (or cause to be constructed and installed) the Project on the construction site in accordance with this Contract and the drawings and specifications approved by Fort Bend County.

14.2.3 Furnish (or cause to be furnished) all materials, supplies, equipment, tools, labor, supervision, utilities, transportation, and other materials and services necessary to complete the Project described herein.

14.2.4 Materials testing necessary for the Project and required by laws and regulations, construction industry standards as approved by Fort Bend County and this Contract; the frequency of testing shall be approved by Fort Bend County. **It is the contractor's responsibility to engage a material testing laboratory to perform testing on the structural concrete to be used for foundation work in this project. The cost of testing shall be incidental to bid item for drill shaft foundation. Testing of concrete shall comply with current TXDOT criteria. Contractor has to submit the name of the testing laboratory, intended to be used by the contractor for this project, for County's approval.**

14.3 Standards for Review and Approval.

14.3.1 Fort Bend County acknowledges that in order to meet the deadlines for the completion of the Project, and in order to accomplish the efficient completion of the Project, the Contractor may submit matters to Fort Bend County in stages for approval or consent. Upon receipt of any matter submitted by the Contractor for review and approval, Fort Bend County shall review the same and shall diligently and promptly (but in any event within 14 calendar days for any such matter, other than a proposed change order, and within 28 calendar days for a proposed change order) give the Contractor notice of Fort Bend County's approval or disapproval, setting forth in detail all reasons for any disapproval. Fort Bend County's right to disapprove any such matter submitted (other than a proposed change order) shall be limited to the elements thereof (a) which do not conform substantially to matters previously approved, (b) which are new elements not previously presented and approved and the Contractor is unable to demonstrate that such new element is reasonably necessary for completion

of the Project, or (c) which depict matters that are violations of this Contract or applicable laws and regulations.

14.3.2 If Fort Bend County disapproves of a particular matter or Proposed Change Order, the Contractor shall have the right to resubmit such matter or Proposed Change Order to Fort Bend County, altered to satisfy Fort Bend County's basis for disapproval. Any resubmission shall be subject to review and approval by Fort Bend County.

14.3.3 Fort Bend County and the Contractor shall attempt in good faith to resolve any disputes concerning the approval of any aspect of the Project expeditiously, so as not to delay the completion of the Project in accordance with this Contract.

14.3.4 Expedited Approvals. Fort Bend County recognizes the importance of expeditious action upon all matters submitted to Fort Bend County for review and approval and of expeditious response to those aspects of the Project requiring approval by governmental authorities having jurisdiction there over. Fort Bend County agrees to exercise its rights of review and approval hereunder with due diligence, reasonableness, and good faith. Fort Bend County shall use its reasonable efforts to expedite any required review of the Project or other matters by any governmental authority.

14.4 Changes.

14.4.1 General. Fort Bend County may make changes to the Project by altering, adding to, or deducting from the Project. All changes in the Project which (a) require an adjustment in the contract sum or an adjustment in the final completion date or (b) involve a material change in the overall scope or function of the Project shall be requested and authorized before commencing such changes by use of written change order notices, Proposed Change Orders and Change Orders, which change order procedure shall be the exclusive means to effect such changes in the Project.

14.4.2 Change Order Procedure. If at any time Fort Bend County desires to make any change in the Project requiring the issuance of a Change Order, Fort Bend County shall so advise the Contractor in writing by delivery to the Contractor of a written notice describing the change. Upon receipt of such notice initiated by Fort Bend County, the Contractor shall within a reasonable period of time advise Fort Bend County of the Contractor's proposal for the adjustments, if any, in the contract sum, the schedule of values, and the final completion date attributable to such change by delivering a written notice thereof (the "Proposed Change Order") to Fort Bend County. Such Proposed Change Order shall contain a description of the proposed change and shall set forth the Contractor's estimate of the increase or decrease, if any, in the contract sum and the change, if any, in

the schedule of values and the final completion date attributable to such change. If the Contractor desires to make a change in the Project requiring the issuance of a change order, the Contractor shall deliver to Fort Bend County a Proposed Change Order. Upon execution by Fort Bend County, a Proposed Change Order shall constitute (and be defined herein as) a "Change Order" for purposes of this Contract. The Contractor shall forthwith perform the work as changed in accordance with such Change Order. All work performed pursuant to a Change Order shall be performed in accordance with the terms of this Contract. All Proposed Change Orders shall be submitted for approval by Fort Bend County. No action, acquiescence or inaction by Fort Bend County or any representative of Fort Bend County shall be construed to be a waiver of requirements set forth in this Contract in regard to Change Orders or ratification of a violation of such requirements, and all acts in violation of this provision shall be considered void.

14.4.3 Change Order Authorization. Each Change Order shall be signed by Fort Bend County and an authorized representative of the Contractor.

14.4.4 Contract Sum Adjustments. The contract sum and the schedule of values shall be adjusted only as a result of a Change Order requiring such adjustment. Any extra work performed without a proper Change Order shall be considered voluntary and not subject to additional compensation. The Contractor shall not be entitled to an adjustment in the contract sum (or a Change Order permitting such adjustment) or to damages as a result of any delays in the Project caused by the acts or omissions of Fort Bend County, provided that this sentence is not applicable to delays that constitute more than 90 days in any 365-day period or cause the Project to be interrupted for a continuous period of 45 days through no fault of the Contractor.

14.4.5 When Fort Bend County and the Contractor agree upon the adjustments in the contract sum, the schedule of values, and the final completion date attributable to such adjustment, such agreement will be documented by preparation and if approved by the Fort Bend County Commissioners Court, execution of an appropriate Change Order.

14.5 Site Access. Prior to the transfer date, Fort Bend County and the Contractor shall have uninterrupted access to the construction site. Subsequent to the transfer date, Fort Bend County will permit the Contractor, the Engineer, and their representatives and subcontractors to enter upon the Project at times reasonably necessary to complete the punch list items.

14.6 Applicable Laws and Regulations. Contractor shall in its performance of the Project comply with all applicable laws and regulations. Any delays in the prosecution of the Project caused by any changes in the laws and regulations or

the application or enforcement of the laws and regulations may entitle the Contractor to an extension of time.

- 14.7 Familiarity with Project. The Contractor represents and accepts that it has: (a) visited the property(ies), (b) taken such other steps as may be necessary to ascertain the nature and location of the Project and the general and local conditions which affect the Project or the cost thereof, (c) investigated the labor situation as regards to the Project, (d) examined the property(ies), the obstacles which may be encountered and all other observable conditions having a bearing upon the performance of the Project, the superintendence of the Project, the time of completion and all other relevant matters, and (e) reported to Fort Bend County the results of all of the foregoing. The Contractor represents that it is familiar with all phases of the Project and the matters that may affect the Project or its prosecution under this Contract.
- 14.8 Standard of Performance. The Contractor shall prosecute (or cause to be prosecuted) the Project in accordance with the best efforts for the construction and development of projects similar to the Project in the State of Texas, using qualified, careful, and efficient contractors and workers and in conformity with the provisions of this Contract. The Contractor shall perform the work in a good and workmanlike manner.
- 14.9 Warranty of Contractor. The Contractor warrants to Fort Bend County that: (i) the Contractor possesses the skill and knowledge ordinarily possessed by well-informed members of its trade or profession and the Contractor will use its best efforts to ensure that the services provided under this Contract will be performed, delivered, and conducted in accordance with the best professional standards and in accordance with industry standards, and (ii) the Contractor is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly equipped, organized and financed to perform such work, and (iii) following the date of acceptance of this Contract, the services provided by the Contractor to Fort Bend County will conform to the representations contained in this Contract, including all attachments, schedules and exhibits. All warranties provided by the Contractor in this Contract shall be cumulative, shall be deemed consistent and not in conflict, are intended to be given full force and effect and to be interpreted expansively to give the broadest warranty protection to Fort Bend County.
- 14.10 Contractor's Personnel. Contractor shall employ only competent, skilled personnel for the Project. Prior to the final completion date, the Contractor shall maintain a superintendent who shall be authorized to act on behalf of the Contractor and with whom Fort Bend County may consult at all reasonable times. The superintendent shall not be transferred from the Project without Fort Bend County's consent (which shall not be unreasonably withheld or delayed); provided, however, the superintendent shall not be assigned solely to the Project and shall be entitled to spend reasonable time working on matters unrelated to the Project so long as such

work on other matters does not render the superintendent unavailable to the Project or unavailable to Fort Bend County. However, such obligation to furnish the superintendent and such staff personnel shall not be construed (a) to preclude the promotion within the Contractor's organization of any person assigned to the Project or (b) to give rise to any liability of the Contractor if any person assigned to the Project (including, without limitation, the superintendent) leaves the Contractor's employment. If the superintendent is transferred from the Project, Fort Bend County shall have the right to approve the replacement superintendent (which approval will not be unreasonably withheld or delayed). The Contractor, the Architect, and the other subcontractors shall comply with all applicable health, safety, and loss prevention rules of applicable governmental authorities. The Contractor shall, at its own expense, remove from the Project any person who fails to comply with such rules and instructions. The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Project any unfit person or anyone not skilled in the work assigned to him. Fort Bend County may, upon written notice to the Contractor, require the Contractor to remove an individual immediately from providing services for the following reasons: violation of the terms and conditions of this Contract; violation of Fort Bend County's or the Contractor's work rules and regulations; criminal activity; or violation of state, federal, or municipal statutes. Fort Bend County may, upon thirty (30) days written notice to the Contractor, require the removal of any individual from providing services without cause.

- 14.11 Inspection. The Project and all parts thereof shall be subject to inspection from time to time by inspectors designated by Fort Bend County. No such inspections shall relieve The Contractor of any of its obligations hereunder. Neither failure to inspect nor failure to discover or reject any of the work as not in accordance with the drawings and specifications or any provision of this Contract shall be construed to imply an acceptance of such work or to relieve the Contractor of any of its obligations hereunder. Fort Bend County agrees that its right of inspection shall be used reasonably and in a timely manner so as not to delay orderly completion of the Project.
- 14.12 Protection Against Risks. The Contractor shall take all precautions which are necessary and adequate, against conditions created during the progress of the Project which involve a risk of bodily harm to persons or a risk of damage or loss to any property. The Contractor shall regularly inspect all work, materials and equipment to discover and determine any such conditions and shall be responsible for discovery, determination, and correction of any such conditions. The Contractor shall comply with all federal, state, and local occupational hazard and safety standards, codes and regulations applicable in the jurisdiction where the Project is being performed. The Contractor shall include the substance of this clause in its entirety in all subcontracts for any work to be performed at the construction site.

14.13 Equipment. Except as expressly provided herein to the contrary, the Contractor shall furnish (or cause to be furnished) all construction, transportation, installation, tools, and other equipment and facilities required for the performance of the Project within the times specified herein. Such equipment and facilities shall be serviceable and kept fit for the uses intended. Defective items shall be removed from the construction site promptly and at the Contractor's cost. The Contractor shall schedule (or cause to be scheduled) its other operations so as to not interfere with its duty to timely furnish the necessary equipment and facilities and personnel to operate the same at the times necessary for the orderly completion of the Project.

14.14 Materials. Except as may be specifically provided otherwise in the Contract or approved in advance by Fort Bend County, the Contractor shall provide Fort Bend County with copies of material testing reports and to cause all materials, equipment, and fabricated items incorporated in the Project to be new and of a suitable grade of their respective kinds for their intended use.

15.0 TERMINATION:

15.1 Fort Bend County may terminate the Contract if the Contractor:

15.1.1 Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials.

15.1.2 Fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractor.

15.1.3 Persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction.

15.1.4 Otherwise is guilty of substantial breach of a provision of the Contract Documents.

15.2 When any of the above reasons exists, Fort Bend County may, without prejudice to any other rights or remedies of Fort Bend County and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

15.2.1 Take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor.

15.2.2 Finish the Project by whatever reasonable method Fort Bend County may deem expedient.

- 15.3 Either party may terminate this Contract at any time by providing thirty (30) days written notice.
- 15.4 When Fort Bend County terminates the Contract for one of the reasons stated in this section, the Contractor shall not be entitled to receive further payment until the Project is finished. Therefore, the Contractor shall be promptly paid for all work actually and satisfactorily completed.

16.0 COMPLETION, TRANSFER, AND ACCEPTANCE:

- 16.1 Final Completion. Upon the occurrence of the final completion date, the punch list items shall be promptly commenced and thereafter completed within thirty (30) days after final completion.
- 16.2 Transfer and Acceptance. Upon the occurrence of final completion, care, custody and control of the Project shall pass to Fort Bend County. As referenced herein, the "Transfer Date" shall mean the date on which the care, custody and control of the Project passes to Fort Bend County. Subsequent to the Transfer Date all risk of loss with respect to the Project shall be by Fort Bend County and the Contractor shall be thereafter obligated to cover the Project with their Insurance.

17.0 SUSPENSION BY FORT BEND COUNTY FOR CONVENIENCE:

- 17.1 Fort Bend County may, without cause, order the Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as Fort Bend County may determine.
- 17.2 An adjustment shall be made for increase in the cost of performance, caused by suspension, delay or interruption. No adjustment shall be made to the extent:
 - 17.2.1 That performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible.
 - 17.2.2 That an equitable adjustment is made or denied under another provision of this Contract.
- 17.3 Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

18.0 INDEPENDENT CONTRACTOR:

The Contractor shall be an independent contractor and any provisions of this Contract that may appear to give Fort Bend County the right to direct the Contractor as to the details of the manner of doing the Project shall be deemed to mean that the Contractor shall follow the desires of Fort Bend County in the results of the Project only and not in the means whereby the Project is to be accomplished. The Contractor shall be responsible as to the details of completing the Project.

Neither the agents, representatives, nor employees of the Contractor, shall be deemed to be the agents, representatives, or employees of Fort Bend County. The Contractor further represents that it accepts a fiduciary role and responsibility with respect to Fort Bend County and will, to its best abilities, act in the best interests of Fort Bend County and the timely completion of the Project. The Contractor agrees and understands that neither it nor any of its agents or employees may act in the name of Fort Bend County except and unless specifically authorized in writing by Fort Bend County to do so. The Contractor shall furnish construction administration and management services and use the Contractor's best efforts to complete the Project in an expeditious and economical manner consistent with the interests of Fort Bend County.

19.0 NOTICE

19.1 All written notices, demands, and other papers or documents to be delivered to Fort Bend County under this Contract shall be delivered to the Engineering Department, 301 Jackson, Richmond, Texas 77469, or at such other place or places as Fort Bend County may from time to time designate by written notice delivered to the Contractor. For purposes of notice under this Contract, a copy of any notice or communication hereunder shall also be forwarded to the following address: Fort Bend County, 301 Jackson Street, Suite 719, Richmond, Texas 77469, Attention: County Judge.

19.2 All written notices, demands, and other papers or documents to be delivered to the Contractor under this Contract shall be delivered to the Authorized Representative identified in the Contract documents or such other place or places as the Contractor may designate by written notice delivered to Fort Bend County.

20.0 RECORDS:

20.1 Fort Bend County shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches and other documents prepared pursuant to the Contract by Contractor.

20.2 The Contractor agrees to maintain and preserve for a period of at least five years after the earlier of the expiration of the defects period or termination of this Contract, accurate and complete records relating to the performance of the Project. The Contractor agrees to, upon request, provide Fort Bend County with such records.

21.0 SUCCESSORS AND ASSIGNS:

21.1 Fort Bend County and the Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Contract and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract.

21.2 Neither Fort Bend County nor the Contractor shall assign, sublet or transfer its interest in this Contract without the prior written consent of the other.

21.3 Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public and/or governmental body that may be a party hereto.

22.0 PUBLIC CONTACT:

Contact with the news media, citizens of Fort Bend County or governmental agencies shall be the sole responsibility of Fort Bend County. Under no circumstances, whatsoever, shall Contractor release any material or information developed in the performance of its services hereunder without the express written permission of Fort Bend County, except where required to do so by law.

23.0 MODIFICATIONS:

This instrument contains the entire Contract between the parties relating to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force and effect excepting a subsequent written modification signed by both parties hereto.

24.0 SILENCE OF SPECIFICATIONS:

The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item bid.

25.0 SEVERABILITY:

In the event one or more of the provisions contained in these requirements or the specifications shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof and these requirements or the specifications shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

26.0 GOVERNING FORMS:

In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Fort Bend County's interpretation shall govern.

27.0 TAX EXEMPT:

Fort Bend County is exempt from state and local sales and use taxes under Section 151.309 of the Texas Tax Code. This Contract is deemed to be a separate contract for Texas tax purposes, and as such, Fort Bend County hereby issues its Texas Exemption for the purchase of any items qualifying for exemption under this Contract. Contractor is to issue its Texas Resale Certificate to vendors and subcontractors for such items qualifying for this exemption, and further, contractor should state these items at cost.

28.0 ENTIRE AGREEMENT:

The Parties agree that this Contract contains all of the terms and conditions of the understanding of the parties relating to the subject matter hereof. All prior negotiations, discussions, correspondence and preliminary understandings between the parties and others relating hereto are superseded by this Contract. By entering into this Contract, the parties do not intend to create any obligations, express or implied, other than those specifically set out in this Contract.

29.0 APPLICABLE LAW AND VENUE

This Contract shall be construed under and in accord with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Fort Bend County, Texas, and that venue for any litigation arising out of or related to this Contract shall lie solely in the court of appropriate jurisdiction located in Fort Bend County, Texas.

30.0 ENCLOSURE:

The following being incorporated herein by reference for all purposes as though fully set forth herein word for word.

Enclosure #1 – Specifications and Plans

31.0 PRICING: Complete unit pricing form.

32.0 PROJECT DURATION:

Bidder agrees, if awarded the contract, to complete all work required by the contract documents within 150 calendar days (maximum of 180 calendar days) after issuance of a purchase order by the County Purchasing Agent and notice to proceed by the Engineering Department.

33.0 AWARD:

This contract will be awarded to the lowest and best bid.

34.0 TEXAS ETHICS COMMISSION FORM 1295:

34.1 Effective January 1, 2016 all contracts executed by Commissioners Court,

regardless of the dollar amount, will require completion of Form 1295 "Certificate of Interested Parties", per the new Government Code Statute §2252.908. All vendors submitting a response to a formal Bid, RFP, SOQ or any contracts, contract amendments, renewals or change orders are required to complete the Form 1295 online through the State of Texas Ethics Commission website. Please visit:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm.

34.2 On-line instructions:

34.2.1 Name of governmental entity is to read Fort Bend County

34.2.2 Identification number used by the governmental entity is: B18-030

34.2.3 Description is the title of the solicitation: Construction of Powerline Road from Spice Springs Lane to Sunrise Meadow Lane

34.3 Apparent low bidder(s) will be required to provide the Form 1295 within three (3) calendar days from notification. In the event the vendor does not provide the document in the stated time period the vendor's response will be marked as disqualified and the next low bidder will be contacted

35.0 ADDITIONAL REQUIRED FORMS:

All vendors submitting are required to complete the attached and return with submission:

35.1 Vendor Form

35.2 W9 Form

35.3 Tax Form/Debt/Residence Certification

35.4 Contractor Acknowledgement of Stormwater Management Program

**Contract Sheet
Bid 18-030**

**THE STATE OF TEXAS
COUNTY OF FORT BEND**

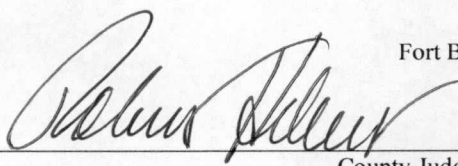
This memorandum of agreement made and entered into on the 19th day of December, 2017 by and between Fort Bend County in the State of Texas (hereinafter designated County), acting herein by County Judge Robert Hebert, by virtue of an order of Fort Bend County Commissioners Court, and Darwood Greene Construction Co. (hereinafter designated Contractor).

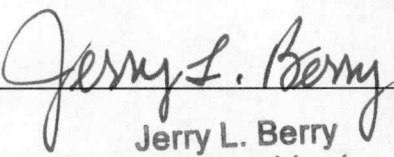
WITNESSETH:

The Contractor and the County agree that the bid and specifications for the **Construction of Powerline Road from Spice Springs Lane to Sunrise Meadow Lane** which are hereto attached and made a part hereof, together with this instrument and the bond (when required) shall constitute the full agreement and contract between parties and for furnishing the items set out and described; the County agrees to pay the prices stipulated in the accepted bid.

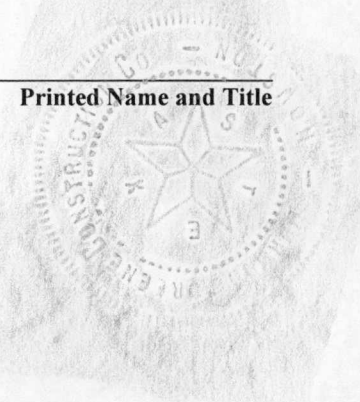
It is further agreed that this contract shall not become binding or effective until signed by the parties hereto and a purchase order authorizing the items desired has been issued.

Executed at Richmond, Texas this 19 day of December 2017.

By:  Fort Bend County, Texas
County Judge, **Robert Hebert**

By: 
Jerry L. Berry
Vice President

By: _____
Printed Name and Title



Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Durwood Greene Construction Co.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check **only one** of the following seven boxes:
 Individual/sole proprietor or single-member LLC
 C Corporation
 S Corporation
 Partnership
 Trust/estate
 Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____
Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.
 Other (see instructions) ▶ _____

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
 Exempt payee code (if any) _____
 Exemption from FATCA reporting code (if any) _____
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)
P.O. Box 1338

6 City, state, and ZIP code
Stafford Texas 77497-1338

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number					
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	-		-		
OR					
Employer identification number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; text-align: center;">74</td> <td style="width: 5%; border: 1px solid black; text-align: center;">-</td> <td style="width: 70%; border: 1px solid black; text-align: center;">1654993</td> </tr> </table>	74	-	1654993		
74	-	1654993			

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here Signature of U.S. person ▶ Jerry L. Berry **Jerry L. Berry**
 Vice President Date ▶ 12-12-17

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.

By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that the FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

Job No.: 18-030

TAX FORM/DEBT/RESIDENCE CERTIFICATION
(for Advertised Projects)

Taxpayer Identification Number (T.I.N.): 74-1654993

Company Name submitting Bid/Proposal: Durwood Greene Construction Co.

Mailing Address: P.O. Box 1338, Stafford, Texas 77497-1338

Are you registered to do business in the State of Texas? Yes No

If you are an individual, list the names and addresses of any partnership of which you are a general partner or any assumed name(s) under which you operate your business

I. **Property:** List all taxable property in Fort Bend County owned by you or above partnerships as well as any d/b/a names. Include real and personal property as well as mineral interest accounts. (Use a second sheet of paper if necessary.)

<u>Fort Bend County Tax Acct. No.*</u>	<u>Property address or location**</u>
<u>P168929</u>	<u>10126 Cash Road, Stafford, Texas 77477</u>
_____	_____
_____	_____

* This is the property account identification number assigned by the Fort Bend County Appraisal District.
** For real property, specify the property address or legal description. For business personal property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored at a warehouse or other location.

II. **Fort Bend County Debt** - Do you owe any debts to Fort Bend County (taxes on properties listed in I above, tickets, fines, tolls, court judgments, etc.)?

Yes No If yes, attach a separate page explaining the debt.

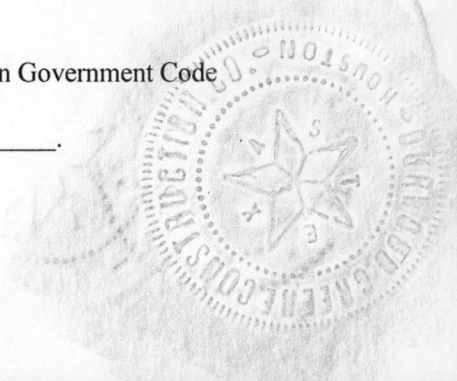
III. **Residence Certification** - Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Fort Bend County requests Residence Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are 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 Durwood Greene Construction Co. is a Resident Bidder of Texas as defined in Government Code §2252.001.
[Company Name]

I certify that _____ is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____.
[Company Name] [City and State]

Jerry L. Berry
Jerry L. Berry
Vice President
12-12-17



Mandatory Form



Contractor Acknowledgement of Stormwater Management Program

I hereby acknowledge that I am aware of the stormwater management program and standard operating procedures developed by Fort Bend County in compliance with the TPDES General Permit No. TXR040000. I agree to comply with all applicable best management practices and standard operating procedures while conducting my services for Fort Bend County. I agree to conduct all services in a manner that does not introduce illicit discharges of pollutants to streets, stormwater inlets, drainage ditches or any portion of the drainage system. The following materials and/or pollutant sources must not be discharged to the drainage system as a result of any services provided:

1. Grass clippings, leaves, mulch, rocks, sand, dirt or other waste materials resulting from landscaping activities, (except those materials resulting from ditch mowing or maintenance activities)
2. Herbicides, pesticides and/or fertilizers, (except those intended for aquatic use)
3. Detergents, fuels, solvents, oils and/or lubricants, other equipment and/or vehicle fluids,
4. Other hazardous materials including paints, thinners, chemicals or related waste materials,
5. Uncontrolled dewatering discharges, equipment and/or vehicle wash waters,
6. Sanitary waste, trash, debris, or other waste products
7. Wastewater from wet saw machinery,
8. Other pollutants that degrade water quality or pose a threat to human health or the environment.

Furthermore, I agree to notify Fort Bend County immediately of any issue caused by or identified by:

Durwood Greene Construction Co.

(Company/Contractor)

that is believed to be an immediate threat to human health or the environment.

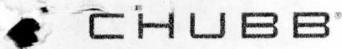
Jerry L. Berry
Contractor Signature

12-12-17
Date

Jerry L. Berry
Printed Name **Vice President**

Title

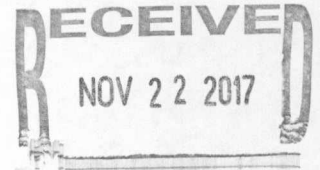




Surety
202B Halls Mill Road, PO Box 1650
Whitehouse Station, NJ 08889-1650

O + 908.903.3485
F + 908.903.3656

Federal Insurance Company



Bid Bond

Bond No. Not Applicable

Amount \$ 5% GAB

Know All Men By These Presents,

That we, Durwood Greene Construction Co.

P.O. Box 1338 Stafford, Texas 77497

(hereinafter called the Principal),

as Principal, and FEDERAL INSURANCE COMPANY, a corporation duly organized under the laws of the State of Indiana, (hereinafter called the Surety), as Surety, are held and firmly bound unto

Fort Bend County

Fort Bend County Purchasing Department,
Travis Annex, 301 Jackson, Suite 201, Richmond, Texas 77469

(hereinafter called the Obligee),

in the sum of Five Percent of the Greatest Amount Bid

Dollars

(\$ 5% GAB), for the payment of which we, the said Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this

12th

day of

December, 2017

WHEREAS, the Principal has submitted a bid, dated December 12, 2017

for Construction of Powerline Road from Spice Springs Lane to Sunrise Meadow Lane for Fort Bend County,

Project 13310, Bid: #18-030

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with such bid and give bond with good and sufficient surety for the faithful performance of such contract, or in the event of the failure of the Principal to enter into such contract and give such bond, if the Principal shall pay to the Obligee the difference, not to exceed the penalty hereof, between the amount specified in said bid and the amount for which the Obligee may legally contract with another party to perform the work covered by said bid, if the latter amount be in excess of the former, then this obligation shall be null and void, otherwise to remain in full force and effect.

Durwood Greene Construction Co.

Principal

By:

Jerry L. Berry
Vice President

Federal Insurance Company

By:

Richard Covington, Attorney-in-Fact

Chubb. Insured. SM

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

Know All by These Presents. That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Joseph R. Aulbert, Marc W. Boots, Richard Covington, Ashley Koletar, Vickie Lacy and Maria D. Zuniga of Houston, Texas; Susan Golla of San Antonio, Texas

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

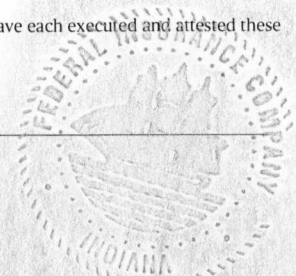
In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 15th day of February, 2017.

Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney

Stephen M. Haney, Vice President



STATE OF NEW JERSEY

County of Hunterdon

ss.

On this 15th day of February, 2017 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with Stephen M. Haney, and knows him to be Vice President of said Companies; and that the signature of Stephen M. Haney, subscribed to said Power of Attorney is in the genuine handwriting of Stephen M. Haney, and was thereto subscribed by authority of said Companies and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2318885
Commission Expires July 16, 2019

Katherine J. Adelaar

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
(4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
(ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
(iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this 12th Day of December, 2017



Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT: Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

REFERENCES

Reference #1

Organization Name: Harris County Engineering
Contact Name/Telephone No.: Mr Gary Howard 713-755-8770
Address: 1310 Prairie Street Houston, Texas 77002

Services provided: General Construction to include street and road repair, replacement and overlay

Reference #2

Organization Name: Texas Department of Transportation
Contact Name/Telephone No.: Ms. Eliza Paul, P.E. 979-864-8500
Address: 1033 E. Orange Street, Angleton, Texas 77515

Services provided: General Construction to include street and road repair, replacement and overlay

Reference #3

Organization Name: Texas Department of Transportation
Contact Name/Telephone No.: Mr. Jesse Garcia, P.E. 713-934-5900
Address: 14838 Northwest Freeway, Houston, Texas 77040

Services provided: General Construction to include street and road repair, replacement and overlay

REFERENCES (Continued)

Reference #4

Organization Name: LJA Engineering, Inc

Contact Name/Telephone No.: Mr James Ross 713-953-5200

Address: 2929 Briarpark, Suite 600 Houston, Texas 77042

Services provided: Concrete and asphalt paving of streets and roads.

Reference #5

Organization Name: City of Houston

Contact Name/Telephone No.: Rowaidah Ayoub 832-395-2206

Address: 611 Walker Street - 14th Floor Houston, Texas 77002

Services provided: Concrete and asphalt paving of streets and roads.

Reference #6

Organization Name: City of Missouri City, Texas

Contact Name/Telephone No.: Sharon Valiente 281-814-9134

Address: 1522 Texas Parkway, Missouri City, Texas 77459

Services provided: Concrete and asphalt paving of streets and roads.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

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

OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Durwood Greene Construction Co.
Sugar Land, TX United States

Certificate Number:
2017-293418

Date Filed:
12/13/2017

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

Date Acknowledged:

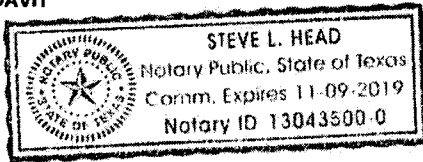
3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
Bid No: 18-030, Project 13110
Construction of Powerline Road From Spice Springs Lane to Sunrise Meadow Lane for Fort Bend County Bond Project 13110

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Loughrie-Moore, Brandy	Stafford, TX United States		X
	Maynard, Stephen	Stafford, TX United States		X
	Berry, Jerry	Sugar Land, TX United States		X
	Greene, Jonathan	Stafford, TX United States	X	
	Greene, Daniel	Stafford, TX United States	X	
	Greene, Bradley	Stafford, TX United States	X	
	Greene, Jeffrey	Stafford, TX United States	X	
	Greene, Richard	Stafford, TX United States	X	

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



Jerry L. Berry
Signature of authorized agent of contracting business entity

Jerry L. Berry
Vice President

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Jerry L. Berry, this the 13th day of December, 2017, to certify which, witness my hand and seal of office.

Steve L. Head
Signature of officer administering oath

STEVE L. HEAD
Printed name of officer administering oath

NOTARY PUBLIC
Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

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

OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Durwood Greene Construction Co.
Sugar Land, TX United States

Certificate Number:
2017-293418

Date Filed:
12/13/2017

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

Date Acknowledged:
12/19/2017

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
Bid No: 18-030, Project 13110
Construction of Powerline Road From Spice Springs Lane to Sunrise Meadow Lane for Fort Bend County Bond Project 13110

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Loughrie-Moore, Brandy	Stafford, TX United States		X
	Maynard, Stephen	Stafford, TX United States		X
	Berry, Jerry	Sugar Land, TX United States		X
	Greene, Jonathan	Stafford, TX United States	X	
	Greene, Daniel	Stafford, TX United States	X	
	Greene, Bradley	Stafford, TX United States	X	
	Greene, Jeffrey	Stafford, TX United States	X	
	Greene, Richard	Stafford, TX United States	X	

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

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

Signature of officer administering oath

Printed name of officer administering oath

Title of officer administering oath

SUMMARY OF WORK

PART 1 GENERAL

Summary of the Work includes work covered by contract documents, county-furnished products, work sequence, contractor use of premises, warranty and additional conditions for substantial completion.

1.01 PROJECT LOCATION AND DESCRIPTION

- A. Powerline Road is a heavily-traveled connection between two major thoroughfares (FM 2977 and FM 2218) in south central Fort Bend County, Precinct 1 that provides access for several subdivisions currently in development. (Key Map© 645-K). The primary focus of this project is to realign a segment of the road to eliminate two 90-degree curves near the Sunrise Meadow Subdivision and improve safety.

The project consist of design and prepare plans, specifications, and quantity estimates for the construction of approximately 1,900-foot long asphalt pavement section with shoulders and roadside ditches. Incorporated in the plans will be properly-sized culverts and/or storm sewer systems.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Scope

Work of the Contract as shown in the Contract Documents (Contract Drawings and Project Manual) is for demolition and removal of existing concrete pavement and storm sewers; protection of existing pavements and trees; and construction of new concrete pavements, sidewalks, curb ramps, signs, traffic control, traffic signal modifications, and storm sewer systems.

1. Demolition work consists of the removal of existing asphalt pavement, existing asphalt pavement milling, existing reinforced concrete pavement with median island curb, sidewalks, driveways; fences; storm manholes, inlets, and culverts within limits of the existing streets' rights-of-way.
2. Storm drainage work consists of constructing open ditches, inlets, manholes, reinforced concrete pipe leads, and RCP culverts with SET's. Storm box culverts with two openings may be cast in place if precast structure is not available. Cost for either method to be as shown on bid sheet.
3. Work includes placement of block sod on all disturbed, non-paved areas between the back of proposed curb and the right-of-way; and maintenance of same until grass is fully established.

4. Site improvements including irrigation systems, planters, fences, landscaping, etc., are potentially present in the streets' rights-of-way. Contractor shall restore the project site disturbed by construction operations at no cost to the County. Include cost in the surface improvements associated with the roadway construction.
 5. Pavement work within the rights-of-way consists of milling existing asphalt pavement and overlaying proposed asphalt wearing surface to match proposed grade and saw-cutting and widening to proposed two way 12-foot wide lanes with 6-foot shoulder. Pavement work also consists of full depth constructing of 2-inch thick asphalt wearing surface, 8-inch black base, and 8-inch limestone treated subgrade (6% lime) for the two way 12-foot wide lanes with 6-foot shoulder. Also includes 6-inch reinforced concrete curbs for island median.
 6. Additional work includes the removal and replacement of permanent signs and pavement markings.
 7. The notes "CAUTION EX. GAS FACILITIES IN AREA and "CAUTION EX. CPE U/G FACILITIES IN AREA" are included as a precaution to the contractor where the proposed improvements cross or are in close proximity to an existing Center Point Energy (CPE) gas line smaller than 4-inch, or to an existing CPE underground facility. Contractor shall exercise caution during construction of improvements in the vicinity of these facilities.
- B. The Contractor shall pay special attention to the Special Specifications contained within this document as they will affect the bid items for this project.
- C. Conduct all construction operation under this contract in conformance with the erosion control practices described in Specifications 713 thru 751 and in the construction drawings. Work identified in this project falls under Small Construction Activity with area disturbed to be one or more acres but less than five acres. TPDES requirements applicable to Small Construction Activity will apply.
- D. Any pavement (including wheel chair ramps, pavement curbs, sidewalks, driveways, etc.), fences, gates, lawns, irrigation utilities, landscapes, ditches, culverts, inlets, manholes, signs or mail boxes and other improvements that have been disturbed due to construction shall be replaced with same quality material or better, according to the County Standard Specifications and Details located at

<http://www.eng.hctx.net/Consultants/Standards-Specifications/Standard-Engineering-Design-Specifications>

<http://www.eng.hctx.net/Consultants/Standards-Specifications/Standard-Civil-Drawings>

The cost to repair / replace shall not be paid for directly, but shall be considered subsidiary to all bid items in the project.

- E. Coordination

Lane closure and construction of the Powerline Road realignment shall be performed during the hours of 9 a.m. to 4:00 p.m., unless otherwise instructed by the County Engineer. Unless otherwise approved by the County Engineer, use Uniformed Peace Officer for work along major thoroughfares and work at signalized intersections.

Coordinate with Fort Bend County Engineering by contacting Stacy Slawinski at 281-633-7508 for the construction within Fort Bend County's rights of way.

Coordinate with the Municipal Utility District #162 (MUD #162) by contacting an engineering firm representative at Baker & Lawson, Inc at 979-849-6681 for the construction in the area of MUD #162's underground utilities.

Coordinate with Center Point Energy (CPE) and AT&T along with Texas811 48 hours in advance of any underground excavations in the area of their utilities.

F. Geotechnical Investigation for Soil Conditions

The Geotechnical Investigation Report is provided with the bid documents.

G. Field Office

Field Office is not required in this project.

H. General Notes

1. The flow lines and locations of all underground utilities must be located by whatever means may be required (metal detection equipment, probes, excavation, survey, coordination with utility companies) by the contractor prior to construction. All field verification work and utility adjustments shall be completed prior to excavation for proposed utilities. No separate payment will be made for this work, include cost in appropriate utility sections and bid accordingly.
2. The notes "CAUTION EX. GAS FACILITIES IN AREA" and "CAUTION EX. CABLE FACILITIES IN AREA" are included as a precaution to the contractor, where the proposed pavement, drainage structures, and ditches cross an existing Center Point Energy (CPE) Gas line smaller than 4-inch or when crossing an existing CPE underground facility. Contractor is required to exercise caution during construction of storm sewers in the vicinity of these facilities.
3. The contractor to provide cut sheets (ground elevations and proposed storm sewer inverts with amount of cut at every 100 feet in tabular format) on each street to the County for approval prior to construction. No separate payment will be made for this work, include cost in appropriate sections and bid accordingly.
4. Contractor must refer to the Harris County Standard Details located at

<http://www.eng.hctx.net/Consultants/Standards-Specifications/Standard-Civil-Drawings>

for any details not included in the construction drawings.

5. Contractor shall coordinate ahead of time with business owners and residents for construction in encroached areas of the public right-of-way. No separate payment will be made for this work, and include the cost in appropriate sections and bid accordingly.

1.03 ALTERNATES

Not Applicable.

1.04 COUNTY-FURNISHED PRODUCTS

A. Items Furnished by the County for Installation and final connection by Contractor:
None.

B. Contractor's Responsibilities:

1. Supply all new construction materials as outlined in the Bid Form.
2. Arrange and pay for Product delivery to the site.
3. Receive and unload Products at the site; jointly with the County, inspect for completeness or damage.
4. Handle, store, Install, and finish Products.
5. Repair or replace damaged items.

No separate payment will be made for the work listed above unless included as a bid item in the Bid Form. Include cost in appropriate utility sections and bid accordingly.

1.05 WORK SEQUENCE

A. Construct the work according to the work sequence phases feasible to this project. Coordinate construction schedule and operations with the Project Manager.

1. See Plan Sheet 21 for Work Sequence
2. Place advance signing on cross streets and work area street's approaches. Place detour signing appropriate for the work zones. Place traffic control measures including barricades, vertical panels, drums, concrete barriers, signing,

striping, flaggers, etc. appropriate for the phase of the work, in accordance with the contract documents, and in compliance with the requirements of the Texas Manual on Uniform Traffic Control Devices, latest edition. Install and maintain SW3P items.

3. Install roadway signs and pavement markings. Remove barricades and open the the roadway segments to traffic.
 4. Complete final clean up and project closeout.
- B. Contractor shall submit sequence of construction work for review and approval by Project Manager before commencing construction.
- C. Coordination of the Work: Project coordination meetings with the Contractor and the County Engineer will be held monthly as a minimum.

1.06 CONTRACTOR USE OF PREMISES

- A. Comply with procedures for access to the site and Contractor's use of rights-of-way as directed by the County Engineer.
- B. Maintain continuous access to all roads and driveways. Coordinate with business owners and residents. No separate payment will be made for this work unless included as a bid item in the Bid Form. Include cost in appropriate items and bid accordingly.
- C. Construction Operations: Limited to the County's and TxDOT's rights-of-way provided by the County and areas shown or described in the Contract documents. Contractor must accommodate construction within these areas and bid accordingly.
- D. Utility Outages and Shutdown: Provide a minimum of 48 hours' notice to MUD 162 and the private utility companies (when applicable), excluding weekends and holidays, in advance of required utility shutdown. Coordinate all work as required. Contractor shall contact MUD 162 and the utilities a minimum of 48 hours prior to construction to field locate utilities.

1.07 WARRANTY

- A. Comply with warranty requirements in accordance with the contract documents.

1.08 ADDITIONAL CONDITIONS FOR SUBSTANTIAL COMPLETION

- A. In addition to requirements outlined in the contract documents, for Contractor to be substantially complete with the Work and call for inspection by Project Manager to confirm, the following conditions must be met or completed:
1. All testing shall be completed and accepted by Project Manager.

2. All safety-related systems and equipment shall be installed, accepted by manufacturer's representative and approved for use.

3. All pay items complete report.

B. No additional condition described in Paragraph 1.08 may be included in Contractor's punch list.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

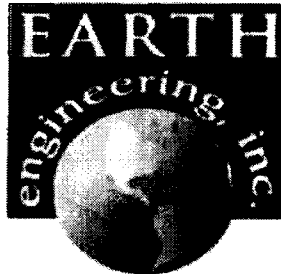
END OF SECTION

**GEOTECHNICAL EXPLORATION
FOR THE PROPOSED POWERLINE ROAD REALIGNMENT
LOCATED IN
FORT BEND COUNTY, TEXAS**

Reported to

**MR. MICHAEL MARTIN
VAN DEWIELE & VOGLER INC.
HOUSTON, TX**

Prepared By



*down to earth solutions
for your complex projects*

**EARTH ENGINEERING, INC.
HOUSTON, TEXAS**



Project No: EE-1526511-G

December 24, 2015



down to earth solutions
for your complex projects

EARTH ENGINEERING, INC.

Geotechnical, Materials Testing & Environmental Consultants
4877 Langfield Road • Houston, TX 77040 • T: (713) 681-5311 • F: (713) 681-5411 • www.eartheng.com

December 24, 2015

Mr. Michael Martin
Senior Project Manager
Van DeWiele & Vogler Inc.
2925 Briarpark, Suite 275
Houston, TX 77042

Report No.: EE-1526511-G

**Subject: GEOTECHNICAL EVALUATION FOR THE PROPOSED POWERLINE ROAD
REALIGNMENT IN FORT BEND COUNTY, TX**

Dear Mr. Martin:

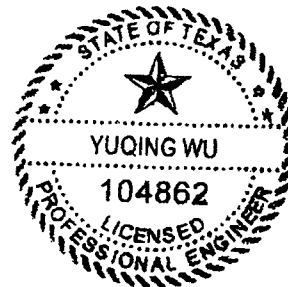
Earth Engineering, Inc. is pleased to submit the results of the geotechnical exploration study for the above-referenced project. This report briefly presents the findings of the study along with our conclusions and recommendations for the design of the foundation for the above project.

We appreciate the opportunity to serve you and look forward to working with you in other future projects. We also look forward to providing the materials testing inspection phase on this project.

Should you have any questions regarding this report or any questions pertaining to soils engineering or materials testing, please do not hesitate to call me at (713) 681-5311 or e-mail me at wu@eartheng.com at any time.

Yours very truly,
EARTH ENGINEERING, INC.

Yuqing (Jack) Wu, MSCE, P.E. (104862)
Senior Project Manager



12.24/2015

MAS/cy

Date: 12/24/2015
Yuqing Wu, P.E. - # 104862
Earth Engineering, Inc # F-5045

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1.0 INTRODUCTION

Planning is underway for construction of Powerline Road Realignment in Fort Bend County, Texas.

It should be noted that three (3) cores were conducted at the existing asphalt road.

2.0 SCOPE OF WORK

The scope of our services is presented below:

- Coring existing pavement at three different locations.
- Drilling, sampling a total of three (3) borings each to a depth of 10-feet at the proposed road realignment area.
- Obtaining continuous soil samples to a depth of 10 feet.
- Earth Engineering will perform granular soil sampling utilizing the Standard Penetration Test (split spoon sampler) by driving. Blow counts will be recorded as produced by a 140-pound weight falling 30 inches (ASTM D-1558). Cohesive soils will be sampled using a thin walled sampler (Shelby Tube) hydraulically pushed into the soil (ASTM D-1587).
- Performing laboratory tests on selected representative soil samples to develop the engineering properties of the soil. These tests may include: pocket penetrometers, unconfined compression, present moisture content, percent passing 200 sieves, dry densities, Atterberg Limits, and swell tests, as deemed appropriate.
- Utilizing the results of observations both in the field and in limited laboratory tests, Earth Engineering will author a report that will include the following subjects:
 - soil stratigraphy: soil encountered up to 10 feet
 - groundwater conditions and groundwater control during construction
 - boring log information will include all laboratory test results and field observations
 - specify sub-grade compaction requirements for slab on-grade and pavement structure



- provide pavement section design recommendations for both rigid and flexible pavements
 - Compare the existing pavement section with the design pavement section.
 - recommend construction considerations, as deemed necessary
 - recommend back-fill material specifications
- Incorporating all of the above into a geotechnical engineering report which is performed under the direction of, and signed by, a professional engineer registered in the State of Texas.

3.0 SUBSURFACE EXPLORATION

3.1 Sampling Techniques

The subsurface conditions were explored by a total of five (5) borings. All borings were drilled by a truck-mounted drilling rig. The boring locations are shown on Plate 2.

Samples in cohesive and semi-cohesive soils (clays, sandy clays, and silty clays) were obtained using a three-inch diameter Shelby Tube sampler advanced hydraulically by one stroke in accordance with the procedures outlined in ASTM D-1587. Samples were extruded in the field, visually classified, and a strength estimate was obtained with a pocket penetrometer. Penetrometer readings are tabulated on the logs of borings. Representative portions of the samples were wrapped with aluminum foil and sealed for transport to the laboratory for further testing.

Cohesionless and semi-cohesionless soils (sands and silts), if encountered, were sampled using the Standard Penetration Test (SPT) split spoon barrel driven 18 inches by a 140-pound hammer falling 30 inches in accordance with procedures outlined in ASTM D-1586. The number of blows (N) required to advance the split-spoon barrel the last 12 inches is recorded for each corresponding sample on the individual log of borings. Samples obtained from the split-spoon barrel were visually classified in the field, wrapped in aluminum foil, and sealed for transportation to the laboratory for further testing.

3.2 Sample Disposal

In general, soil samples (both tested and untested) will be discarded 30 days after the submittal of the final report, unless otherwise notified by the client.



4.0 LABORATORY TESTING

The laboratory testing program was designed and directed towards evaluating the physical and engineering properties of the subsoils. Physical properties include Atterberg limits (liquid limits and plastic limits), moisture content for clays and percent passing #200 sieve for sands. Engineering properties include shear strength of the soil, compressibility of the soils, and the swell characteristics of the soils. It should be noted that the testing program varies for each project and depends solely on the project budget and emphasis. Typically, Earth Engineering, Inc. specifies the anticipated testing program in each proposal. The tests undertaken in this program included the following:

Laboratory Tests	Applicable Test Standards	Number of Tests
Liquid Limit, Plastic Limit, and Plasticity Index of Soil	ASTM D-4318	6
Moisture Content	ASTM D-2216	15
Proctor Compaction	ASTM D-698-07 Method A Standard	1

Laboratory test results are presented on the Logs of Borings, Plates 3 through 5. A Key to Log Terms and Symbols is presented in Plate 6. It should be noted that the soils were classified in accordance with the Unified Soil Classification System (ASTM D-2487).

5.0 SUBSURFACE STRATIGRAPHY

5.1 Site Conditions

The site is located at Powerline Road Realignment in Fort Bend County, Texas. At the time of drilling, the proposed site was farm land. It should be noted that three (3) cores were conducted at the existing asphalt road.

Based on our visual observation during drilling operations, it appears that the site and the surrounding area exhibit topographic variations of less than five (5) feet. Surveying map with existing and proposed elevations including the finished floor elevations was not available at this time.



5.2 Existing Pavement Section

Three (3) cores were conducted at the existing asphalt road. Summaries of Asphalt concrete cores are as follows:

Summary of Asphalt Concrete Cores at the Existing Powerline Road

Coring No.	Average Asphalt Thickness (Inches)	Base (sand & gravel) (Inches)
C-1	7	5
C-2	6	5 1/2
C-3	6 1/2	4

5.3 Subsurface Conditions

The subsurface conditions at the project site were evaluated based on three (3) borings. Soil stratigraphy details are presented on the Logs of Borings, Plates 3 through 5. A Key to Log Terms and Symbols is presented on Plate 6. Based on field logs and laboratory test results, the subsoil stratigraphy is approximately as follows:

Summary of Soil Stratigraphy

Stratum No.	Range ⁽¹⁾ of Depth, ft.	Soil Description and Classification (Based on Unified Soil Classification System)
I	0-2 at B-1 0-4 at B-2 0-6 at B-3	Firm to stiff dark brown SANDY LEAN CLAY (CL) with roots fibers
II	2-10 at B-1 4-10 at B-2 6-10 at B-3	Firm to very stiff dark gray to gray brown FAT CLAY (CH) with ferrous STAINS & calcareous nodules,

These stratum depths are based on measurements referenced from ground surface at the time of our drilling activities on November 24, 2015. Please note that the depths of the stratum changes vary; please refer to the boring logs presented on Plates 3 through 5 for stratum changes at specific locations.

Stratum I consists of firm to very stiff sandy lean clays. These soils are medium in plasticity with plasticity indices ranging from 16 to 24.



Stratum II consists of firm to very stiff fat clays.

5.3 Groundwater Conditions

The borings were drilled using flight auger (dry method) to better assess the groundwater conditions. Groundwater was not encountered during drilling operations.

Groundwater generally fluctuates due to seasonal rainfall quantity, the presence of wells in the vicinity of the site, location (upstream or downstream) and the close proximity of the site to a bayou, or a stream, if any.

Accurate groundwater measurements can be measured only using piezometers or monitor wells. Piezometer installation was beyond the scope of this project.

The groundwater level should be verified before the commencement of road construction.



6.0 PAVEMENT RECOMMENDATIONS

6.1 General

Selecting the proper pavement system for the soil conditions at the site is also essential. In general, a flexible (asphalt) pavement system is more tolerable to differential settlements as compared to a rigid (concrete) system. Pavement design recommendations will be presented for both asphalt and concrete pavements.

6.2 Anticipated Traffic

Traffic counts were not available during this study. However, it is anticipated that the road will be exposed to light traffic that consists mainly of passenger cars, delivery vehicles, and garbage trucks.

Recommendations are presented in the following sections.

6.3 Asphalt Pavement

6.3.1 Pavement Thickness

Asphalt pavement thickness is dependent on several factors. The factors include reliability, traffic loads, and the effective subgrade resilient modulus. For the present study, the following parameters may be assumed in AASHTO pavement design methodology.

Resilient Modulus, CBR = 3, M_r	4,118 psi
Initial Serviceability, S_o	4.5
Terminal Serviceability, S_t	2.5
Reliability, R	80%

Pavement design recommendations are presented below:



ASPHALT PAVEMENT			
Pavement Component	Pavement Thickness (in inches)		
	Low Traffic	Medium Traffic	Medium Heavy
Life Expectancy ESALs	36,700	113,800	302,200
Asphalt Surface	2.0	2.5	3.0
Crushed Limestone Base	8.0	10.0	12.0
Stabilized Subgrade	8.0	8.0	8.0

6.3.2 Subgrade Stabilization

The pavement area should be prepared in accordance with the site preparation recommendations presented in this report.

Since cohesive soils were encountered in surface, we recommend that the subgrade be stabilized with lime after the site and subgrade are prepared in accordance to our Site Preparation guidelines, the upper six inches (6") of the subgrade in the light traffic area and eight inches (8") in the medium and heavy traffic area should be stabilized with **six (6) percent (6%) lime** by dry weight in accordance with TxDOT Specification Item 260. This translates to about 30 pounds of dry lime per square yard for six (6) inches of stabilization depth. The amount of lime required for the eight (8)-inch stabilization depth is about 40 pounds per square yard.

The amount of lime should be determined in the field after the site is stripped of top loose soil and the subgrade soils are exposed. The lime used should be (Type A) hydrated lime or (Type B) commercial slurry conforming to TxDOT Item 264. The subgrade should be compacted to 95% of the Standard Moisture Density Relationship (ASTM D-698) as specified in the Site Preparation Section of this report.

It is recommended to extend the pavement stabilization five feet beyond the perimeter of the pavement in order to preclude edge failure. It is also highly recommended to maintain positive drainage away from the pavement throughout the life of the pavement.

6.3.3 Hot Mix Asphaltic Concrete Course

The asphalt surface should be mixed in a batch plant and laid hot (Fine Graded Surface Course) in accordance with TxDOT Item 340 Type D (Hot Mix Asphaltic Concrete Pavement) and specific criteria for the job mix design formula. The mix should be designed for a stability of at least 40 and should be compacted to 95 percent, of the maximum theoretical density as measured by ASTM D 2041.



The compacted asphaltic surface should contain air voids between 5% and 9%. The asphalt cement content of total mixture weight should be within ± 0.3 percent asphalt cement from the specific mix.

6.3.4 Crushed Limestone Base

The base material should consist of crushed limestone in accordance with TxDOT item 247 Type A, Grade 1 requirements. The base should be compacted to 95% of the maximum dry density as determined by the modified moisture/density relationship (ASTM D 1557) within -2 to $+3$ percent of the optimum moisture content.

6.4 Rigid Pavement

6.4.1 Pavement Thickness

Pavement design thickness is dependent on several factors. The factors include traffic loading, design reliability, concrete modulus of rupture, load transfer coefficients, effective modulus of subgrade reaction, and drainage provisions. For the present study, the following parameters may be assumed in AASHTO pavement design methodology:

Initial Serviceability, S_o	4.5
Terminal Serviceability, S_t	2.5
Reliability, R	80%
Overall Deviation	0.35
Modulus of Rupture or Third Point Flexural Strength, S'_c	550 psi
Elastic Modulus of Concrete, E_c	3.712×10^6 psi
Load Transfer, J	3.2
Effective Modulus of Subgrade Reaction, k_e	71 pci
Minimum CBR of Subgrade	3.0
Loss of Support, L.S.	1.0

At the present time, the anticipated traffic is unknown. Therefore, we have computed the life expectancy in ESALs (equivalent to 18-kip single axle loads) of the pavements that are typical to subdivisions/parks. The number of mixed vehicular traffic (cars, busses, dump trucks, etc.) can be converted to standard number of ESALs based on the conversion factors provided in this report.

Pavement section recommendations are presented below:



CONCRETE PAVEMENT			
Pavement Component	Pavement Thickness (in inches)		
	Low Traffic	Medium Traffic	Medium Heavy
Life Expectancy ESALS	306,200	722,100	1,595,700
Reinforced Concrete	6.0	7.0	8.0
Stabilized Subgrade	6.0	8.0	8.0

6.4.2 Subgrade Stabilization

Please refer to section 6.3.2 for details.

6.4.3 Temperature Steel Reinforcement and Joint Spacing

For concrete pavements that are placed on clay or sandy soils, it is typical to use #4 bars at 18 inches center to center both ways. A ¾ inch dowel, 18 inches in length spaced at 12 inches on centers at each joint can also be utilized.

Maximum control joint spacing of 12 feet is desirable throughout the pavement. If sawcut, control joints should be cut within 12 to 24 hours of concrete placements.

However, proper reinforcement, joint spacing, and other pertinent design parameters should conform to ACI or AASHTO methods or standard local practices.

6.4.4 Concrete Curing

Unlike flexible pavement, concrete pavement should be cured at least 7-days after placing of concrete to preserve much needed moisture for hydration of cement. Curing plays a great part for the strength and durability of the concrete pavement. Unless otherwise specified, the concrete should be cured in accordance with Harris county specification for bridge and roads or equivalent specifications as following.

- The concrete should be protected against pitting and washing from rain and should keep above 50° F



- Concrete should be protected from direct sunlight and kept moist at least 7-days from placement day.
- Proper covering should be maintained throughout the curing period and pavement should be protected from the traffic until the desired strength is achieved.
- If the pavement is cured by sealing materials or by liquid membrane, it should be in accordance with item no 421 in Harris County specification for pavement or equivalent specification.

6.4.5 Concrete Strength

The materials and characteristics of reinforced concrete pavement should meet the requirements presented in ACI manual for concrete practice. Typically, the concrete mix should have minimum 28-days compressive strength of 3,500 psi.

6.5 Guidelines to Convert Mixed Traffic to ESALs

Converting the expected mixed traffic (cars, trucks, etc.) with different axle loads and configurations into an equivalent total number of standard 18-kip single axle loads or ESALs determines the design traffic. The procedure of converting the traffic is based on the equivalent damaging effect that an individual vehicle type has on the pavement. For your convenience, the following table provides the ESAL conversion factors for various vehicle types commonly operated on roads. The ESAL conversion factors shown for both flexible and rigid pavements correspond to the number of passes for each type of vehicle.

Based on the anticipated traffic, the design engineer should compute the number of ESALs that will be subjected to the pavement during its lifetime. Based on the computed ESALs the pavements should be designed accordingly. If the computed ESALs are less than the life expectancies (ESALs) shown in the tables, the thinnest design section should be considered as the minimum pavement thickness to be provided.



Vehicle Type	Axle Load, kips			Number of Passes	ESAL Factor	
	Front ^a	Middle	Rear		Rigid	Flexible
Cars, Light Pickup Trucks	2	-	2 ^b	2500	1.00	0.88
Heavy Pickup Trucks or Flat Beds	2	-	5 ^{a or b}	200	1.00	1.00
Light Delivery Vans or School Busses	12	-	18 ^b	1	1.17	1.18
Heavy Single Axle Trucks	12	-	24 ^b	1	3.68	3.51
Tandem Axle Trucks, Concrete Trucks	12	-	34 ^c	1	2.13	1.26
16-Wheeler Trucks	12	16 ^b	34 ^c	1	2.73	1.87
18-Wheeler Trucks	12	34 ^c	34 ^c	1	4.09	2.34

Note: AASHTO ESAL conversion assumptions: D=10 in., SN = 4.0, and S_t = 2.0

a. Single Wheel Single Axle Load
b. Dual Wheel Single Axle Load
c. Dual Wheel Tandem Axle Load

For example: If a pavement is subjected to 300 car passes per day and 6 heavy single axle trucks passes per week, the approximate total number of ESALs (flexible) over a design life of 20 years would be:

$$\{(300 \times 365 \times 20 \times 0.88) / 2500\} + \{6 \times 52 \times 20 \times 3.51\} = 22,673 \text{ ESALs.}$$

Or, for ESAL conversion, Table D.19, Appendix-D of the AASHTO Design Guide can also be utilized.

7.0 CONSTRUCTION CONSIDERATIONS

7.1 Site Preparation

- Soft soils should be removed until firm soil is reached. The soft soils can be aerated and placed back in eight-inch loose lifts and compacted to 95% as specified by ASTM D-698.
- Tree stumps, tree roots, old slabs, old foundations and existing pavements should be removed from the structure area. If the tree stumps and roots are left in place, settlement and termite infestation may occur. Once a root system is removed, a void is created in the subsoil. It is recommended to fill these voids with structural fill or cement-stabilized sand and compact to 95% as specified by ASTM D-698.



- Any low-lying areas including ravines, ditches, swamps, etc. should be filled with structural fill and placed in eight-inch lifts. Each lift should be compacted to 95% of the maximum dry density as specified by ASTM D-698.
- The exposed subgrade should be scarified to a minimum depth of six (6) inches in the driveway and slab areas. The subgrade should then be compacted to 95% of the maximum density as determined by the Standard Moisture Density Relationship (ASTM D-698). In the event that the upper six (6) inches cannot be compacted due to excessive moisture, we recommend that these soils be excavated and removed or chemically stabilized to provide a firm base for fill placement.
- Proof rolling should be performed using a heavy tired loaded truck or pneumatic rubber-tired weighting about 20 to 25 tons equipment.
- The fill soils placed below the structures should consist of low plasticity sandy clays with plasticity indices ranging between 12 and 20.
- Sands or silts are not considered fill and therefore, should not be used in lieu of sandy clays.
- The fill soils should be placed in loose eight-inch lifts and compacted to 95% of the maximum density as determined by ASTM D-698.
- A qualified soil technician should monitor all earthwork operations. Field density tests should be conducted on each lift using a nuclear density gauge. The gauge should be calibrated every day.
- Prior to field density tests, a 50-pound sample from the subgrade soils should be obtained. A similar sample should be obtained from the fill soils. A Standard Moisture Density Relationship (ASTM D-698) should be performed on each sample in order to obtain an optimum moisture content and a maximum dry density. The field density tests should be compared to these results every time the soils are tested in the field.

The above recommendations are applicable to slabs, driveways, pavements and any structures that are supported directly on-grade.

7.2 Site Drainage

Site drainage should be established during the first phase of construction. Water should not be allowed to collect or pond on the construction site. The site should be graded in such a manner to shed all rainwater away from the construction site. Positive site drainage should be maintained throughout the life of the pavement.



8.0 DESIGN REVIEW

EARTH ENGINEERING, INC. should be given the opportunity to review the construction design documents including the slab design prior to release for bid to assure that our recommendations are interpreted as intended in our report. If we are not given the opportunity to review the slab design and other related documents, EARTH ENGINEERING, INC. will not be responsible for misinterpretations of our recommendations by other parties. The design review is not part of our scope of work and would be an additional charge.

9.0 LIMITATIONS

Our site exploration was based on three (3) borings at pre-designated locations. Soil stratigraphy may change within the site. In the event that different soil conditions are encountered in the field, EARTH ENGINEERING, INC. should be immediately notified.

This study was performed in accordance with generally accepted geotechnical engineering practices for design purposes only under the supervision of a licensed professional engineer in the State of Texas. Fault study was not included in our current scope of work.

Recommendations provided herein the report is valid for one year from the date of submission of the report. After one year, Earth Engineering, Inc. should be contacted to review the validity of the recommendations.

In the event that any changes in the nature, design or location of the driveway are made, the conclusions or recommendations presented in this report are not valid until the changes are reviewed by EARTH ENGINEERING, INC. and the conclusions and recommendations are modified in writing.

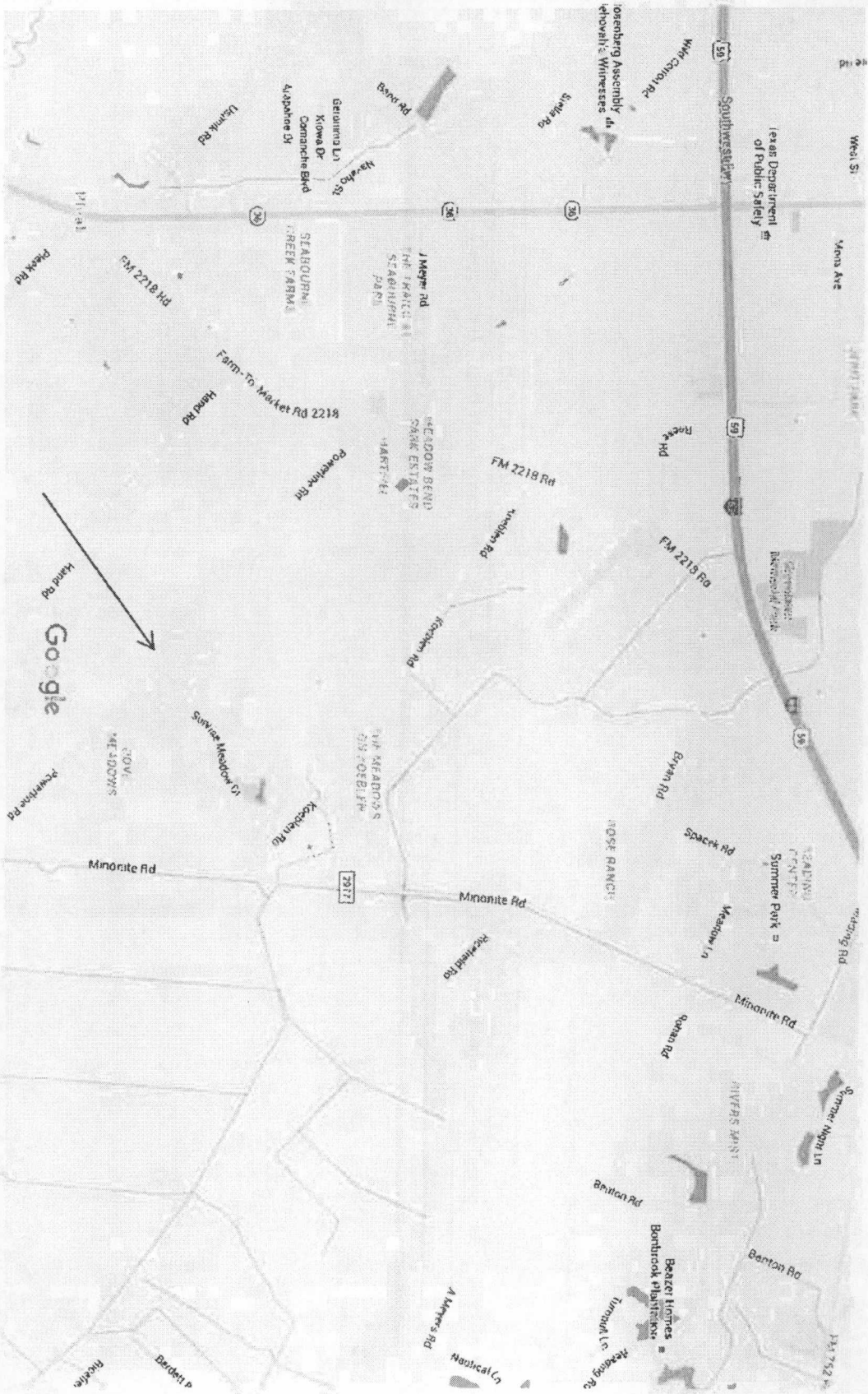


10.0 CONSTRUCTION MATERIALS TESTING

Quality control (QC) is extremely important in the construction industry. A quality control program should be initiated at the beginning of the project. The program should be designed by an accredited laboratory to cover all stages of construction. EARTH ENGINEERING, INC. will be pleased to provide you with these services.

- Soil Compaction (fill under-slab, utility backfill, etc.)
- Soil Stabilization (lime or lime/fly-ash)
- Foundation Inspection and Monitoring (drilled piers, drilled shafts, auger cast piles, spread footings, driven piles and spread footings)
- Concrete Inspection & Monitoring
- Rebar Inspection
- Structural Steel Welding Visual Inspection and Non-Destructive Testing
- Fire-Proofing Inspection
- Floor Flatness
- Maturity Probes and Thermocouples to Measure Concrete Temperature and Strength





Site Location Map:

**Proposed Road Realignment
Powerline Road
Ford Bend County, TX**

EARTH ENGINEERING INC

Geotechnical, Environmental and Material Testing

Scale: N.T.S.

Date: 11/24/2015

Project: EF-1526511-G Plate 1



Boring Location Map:
Proposed Road Realignment
Powerline Road
Ford Bend County, TX

EARTH ENGINEERING INC
Geotechnical, Environmental and Material Testing

Scale: N.T.S.	Date: 11/24/2015
Project: FF-1526511-G	Plate 2

LOG OF BORING: B-1

Project: Proposed Powerline Road Realignment in Fort Bend County, TX
Client: Van DeWiele & Vogler Inc.
Location: See plate 2
Driller: Geo Drilling

Project No.: EE-1526511-G
Drilling Depth (ft): 10
Elevation (ft): Existing
Logged By: Ricardo

DEPTH Elevation	Description Surface Elevation: Existing	USCS	Graphic Log	SAMPLERS	Test Result Curves		PPR (tsf)	SPT, Blows/ft	W %	Liquid Limit LL %	PL %	PI %	Cohesion (ksf)	Failure Strain %	Dry Density (pcf)	% <#200	
					Plastic Limit ▲	Liquid Limit ○											
0	Firm dark brown SANDY LEAN CLAY with root fibers	CL															
2.5	Firm dark gray FAT CALY with root fibers to 8 feet	CH															
5	--dark gray from 4-6 feet																
7.5	--very stiff, gray brown, calcareous nodules from 6-8 feet																
10	--gray brown from 8-10 feet																

This information pertains only to this boring location and should not be interpreted as being indicative of the whole site

WATER LEVEL MEASUREMENTS

DATE DRILLED: 11-24-2015

▽ Initial: Dry

▽ Final: Dry

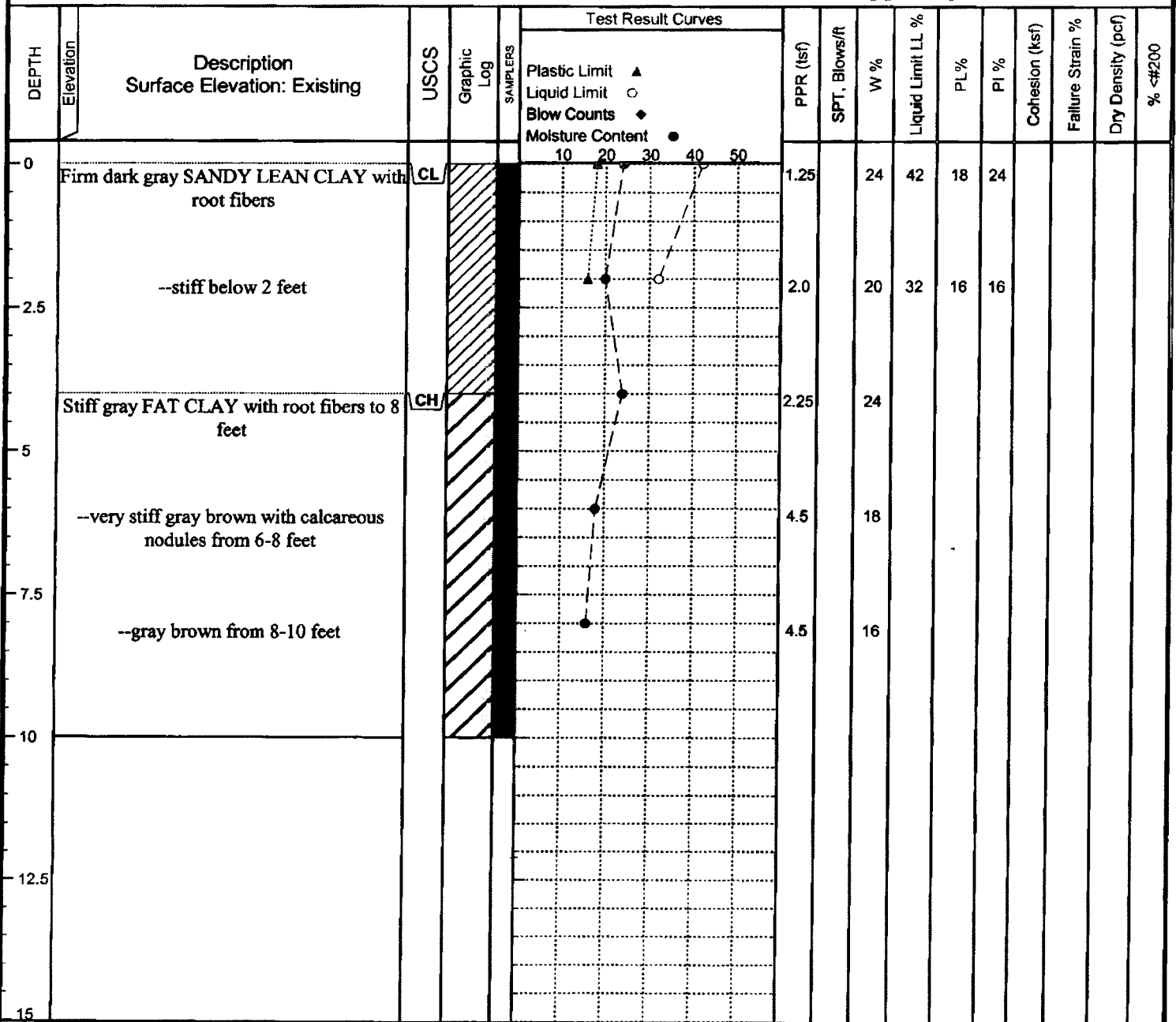
Plate: 3



LOG OF BORING: B-2

Project: Proposed Powerline Road Realignment in Fort Bend County, TX
Client: Van DeWiele & Vogler Inc.
Location: See plate 2
Driller: Geo Drilling

Project No.: EE-1526511-G
Drilling Depth (ft): 10
Elevation (ft): Existing
Logged By: Ricardo



This information pertains only to this boring location and should not be interpreted as being indicative of the whole site

WATER LEVEL MEASUREMENTS

DATE DRILLED: 11-24-2015

▽ Initial: Dry

▽ Final: Dry

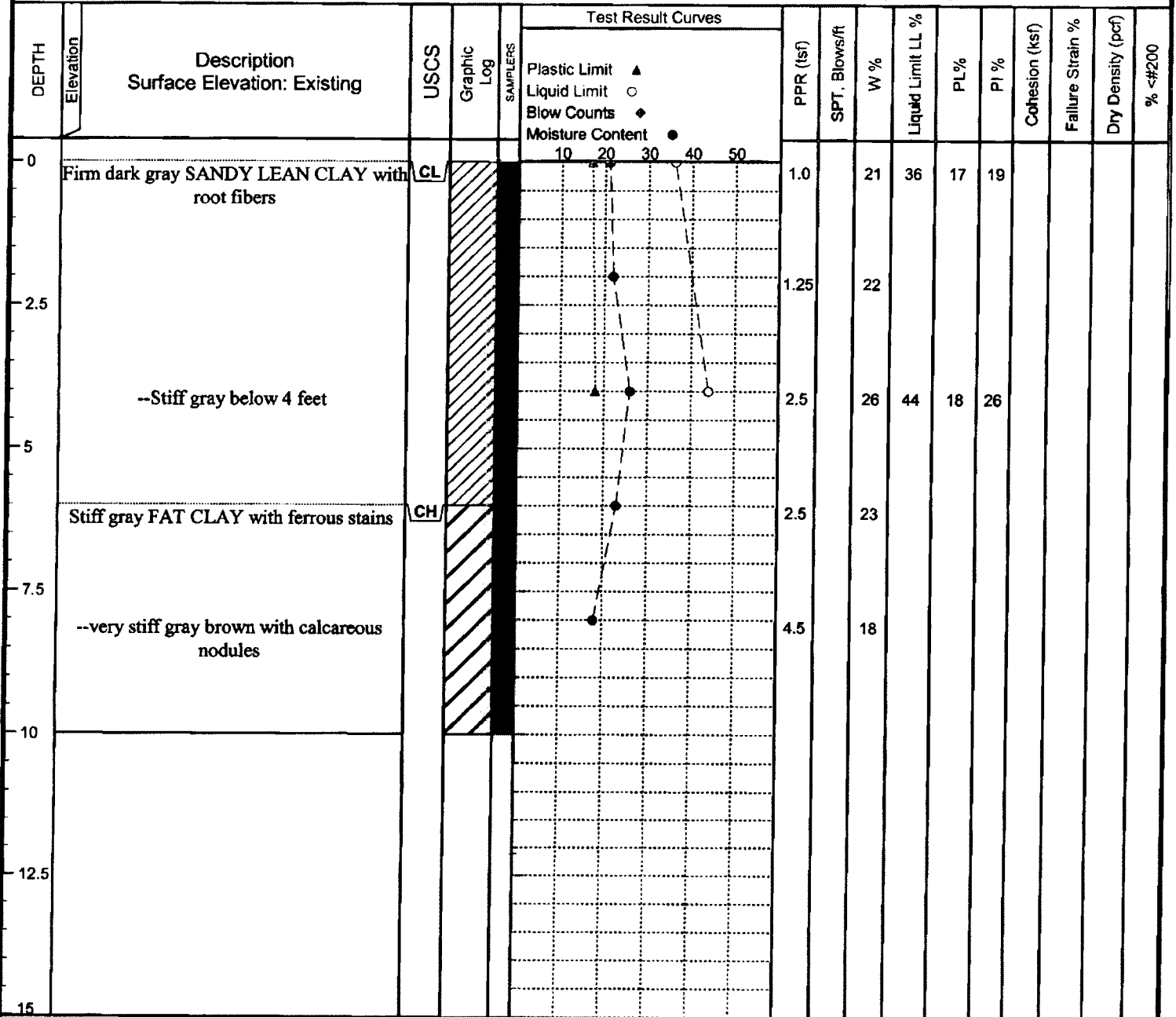
Plate: 4



LOG OF BORING: B-3

Project: Proposed Powerline Road Realignment in Fort Bend County, TX
Client: Van DeWiele & Vogler Inc.
Location: See plate 2
Driller: Geo Drilling

Project No.: EE-1526511-G
Drilling Depth (ft): 10
Elevation (ft): Existing
Logged By: Ricardo



This information pertains only to this boring location and should not be interpreted as being indicative of the whole site

WATER LEVEL MEASUREMENTS

DATE DRILLED: 11-24-2015

▽ Initial: Dry

▼ Final: Dry

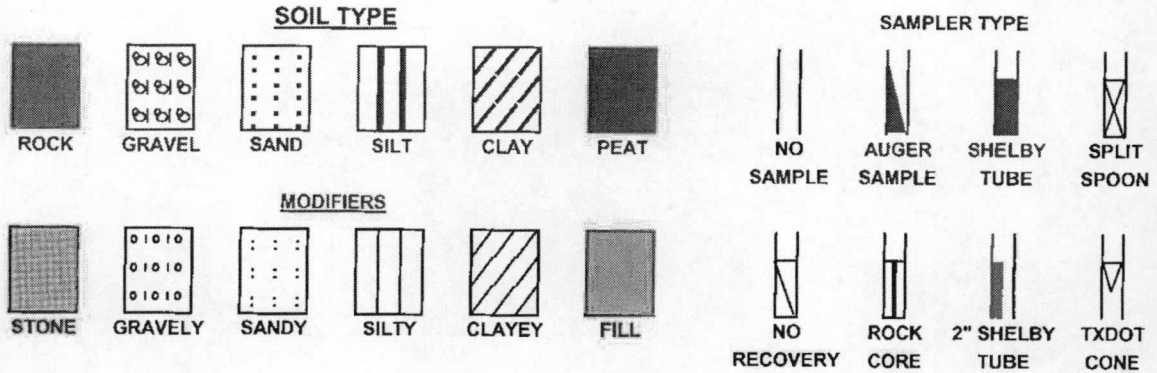
Plate: 5



EARTH ENGINEERING, INC.
 4877 Langfield Rd. Houston, TX 77040

Geotechnical, Materials Testing & Environmental Consultants.
 Phone: 713-681-5311 Fax: 713-681-5411 www.eartheng.com

KEY TO LOG TERMS AND SYMBOLS



UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D 2487

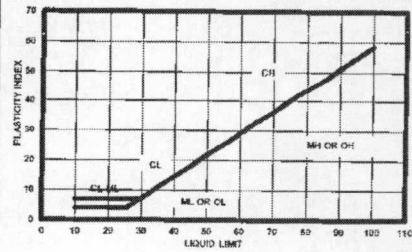
MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS LESS THAN 50% PASSING NO. 4 SIEVE	GRAVEL & CLEAN GRAVELS	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	SOILS (LITTLE OR NO FINES)	GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	50% PASSING NO. 4 SIEVE	W APPRECIABLE FINE FINE	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
		CLEAN SANDS	GC	WELL GRADED SAND, GRAVELY SAND (LITTLE FINES)
	MORE THAN 50% PASSING NO. 4 SIEVE	LITTLE FINES	SW	POORLY GRADED SANDS, GRAVELY SAND (LITTLE FINES)
	60% PASSING NO. 4 SIEVE	SANDS WITH APPRECIABLE FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
FINE GRAINED SOILS LESS THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	ML	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR	
		CL	SILTY OR CLAYEY FINE SANDS OR CLAYEY SILT WITH INORGANIC CLAY OF LOW TO MEDIUM PLASTICITY	
		OL	GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS	
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50	MH	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY	
		CH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS	
		OH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
HIGHLY ORGANIC SOIL		PT	ORGANIC CLAYS OF MED TO HIGH PL, ORGANIC SILT, PEAT AND OTHER HIGHLY ORGANIC SOILS	
UNCLASSIFIED FILL MATERIALS		FILL MATERIALS		

CONSISTENCY OF COHESIVE SOILS

CONSISTENCY	UNCONFINED COMP. STRENGTH IN TSF
VERY SOFT	0 TO 0.25
SOFT	0.25 TO 1.0
FIRM	1.0 TO 1.75
STIFF	1.75 TO 3.0
VERY STIFF	3.0 TO 4.5
HARD	4.5+

RELATIVE DENSITY - GRANULAR SOILS

CONSISTENCY	N-VALUE (BLOWS PER FT)
VERY LOOSE	0-4
LOOSE	4-9
MEDIUM DENSE	10-29
DENSE	30-49
VERY DENSE	> 50 OR 50+

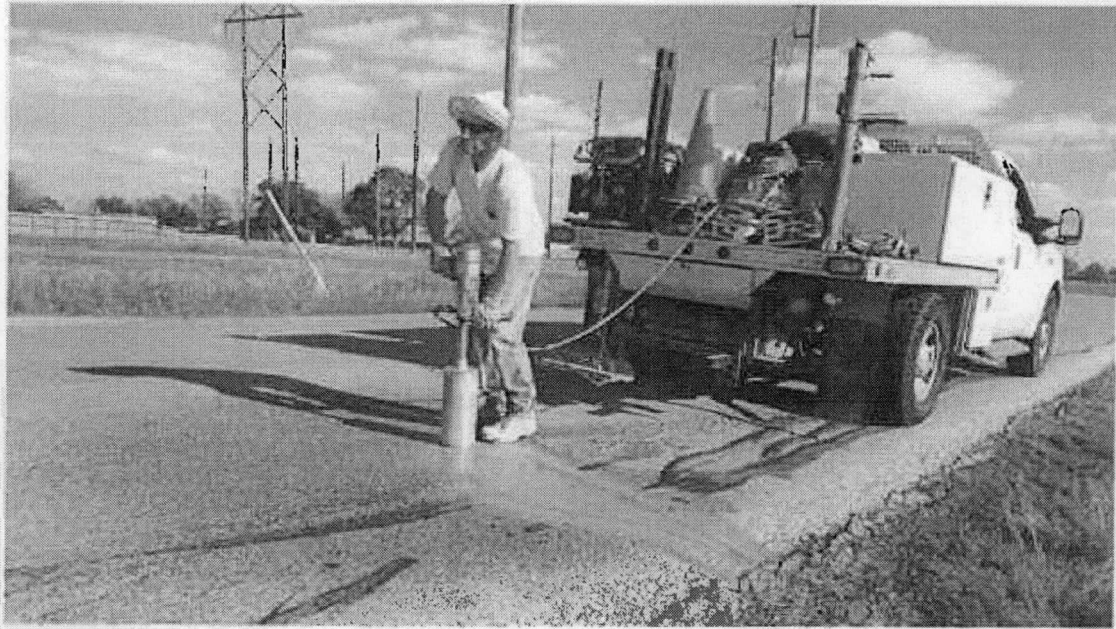


CLASSIFICATION OF GRANULAR SOILS

U.S. STANDARD SIEVE SIZE(S)											
9"		3/4"		4		10		40		200	
BOUL- -DERS	GRAVEL				SAND				SILT OR CLAY		CLAY
	COBBLES		COARSE		COARSE		FINE				
	152	76.2	19.1	4.76	2.0	0.42	0.074			0.002	
	GRAIN SIZE IN MM										



Project Site Pictures
EE-1526511-G



REALIGNMENT AT POWERLINE ROAD IN FOTR BEND COUNTY, TX

Project Site Pictures
EE-1526511-G



REALIGNMENT AT POWERLINE ROAD IN FOTR BEND COUNTY, TX

Project Site Pictures
EE-1526511-G



REALIGNMENT AT POWERLINE ROAD IN FOTR BEND COUNTY, TX

Attachment

Proctor Compaction Test

Fort Bend County
BID 18-030 Construction of Powerline Road from Spice Springs Lane to Sunrise Meadow
Lane for Fort Bend County Bond Project 13110
Q&A 1

Question 1: Bid Item numbers 35 and 36 call for junction boxes that are 2x4 and 2x5. Please clarify if these are the correct sizes, as 2, 18" RCP will not fit in the 2x4 box, and 2, 24" RCP will not fit in the 2x5 box.

Answer: The plans and summary of work give the contractor the option to use precast junction boxes or construct the junction boxes cast-in-place. Whichever method the contractor selects, the junction boxes must accommodate the dual pipes at the specific location. The descriptions are simply the description the engineer has selected to describe each junction box.

Due to the limited headroom above the pipes, it is doubtful the contractor will be able to use a precast junction box. The contractor must base his bid on the system he plans to employ to accommodate the pipes as shown.

**Powerline Road
New Alignment with 2-Lane Road, Shoulders and Roadside Ditches
Mobility Project No 13110
Fort Bend County
Specification Index**

Item No.	Specification Section	Revision No.	Revision Date
102	Clearing and Grubbing	8	1 May 2016
104	Removing Old Concrete	5	1 June 2015
110	Roadway Excavation	9	1 May 2016
130	Borrow	7	1 May 2016
162	Sodding for Erosion Control and Stabilization	8	1 May 2016
165	Hydro-Mulch Seeding (for Erosion Control and Stabilization)	6	1 June 2015
220	Lime Stabilized Subgrade	1	1 May 2016
221	Hydrated Lime and Lime Slurry	5	1 May 2016
250	Hot Mix Asphaltic Concrete Base Course (Black Base)	10	1 May 2016
309	Milling Existing Pavement	2	1 May 2016
340	Hot Mix-Hot Laid Asphaltic Concrete	13	1 May 2016
429	Trench Safety System	1	1 Nov. 2008
460	Reinforced Concrete Pipe	9	1 March 2012
463	Safety End Treatment	6	1 May 2014
465	Remove and Dispose of Existing Concrete or Metal Pipe	2	1 May 2014
471	Precast Concrete Manholes and Junction Boxes	10	1 Sept. 2017
473	Adjusting Manholes and Inlets	2	1 Nov. 2008
495	Removing Old Structures	2	1 Nov. 2008
500	Remove and Relocate or Dispose of Traffic Signs, Mail Boxes and Roadway Signs	3	1 May 2014
530	Concrete Curb	7	1 May 2016
540	Removing and Disposing of Existing Asphaltic Surface and Base Material	2	1 May 2014
561	Video Recording Construction	2	A No. 2008
624	Aluminum Signs	6	1 May 2014
660	Reflectorized Pavement Markings	6	1 May 2016
663	Traffic Buttons and Pavement Markers	4	1 March 2012
671	Traffic Control	8	1 May 2014
672	Flagmen	7	1 Feb. 2011
700	Notice of Intent	4	1 May 2016
713	Reinforced Filter Fabric Barrier	3	1 May 2016
719	Inlet Protection Barriers	3	1 May 2016
751	SWPPP Inspection and Maintenance	2	1 May 2016

FORT BEND COUNTY MOBILITY PROJECT NO. 13110
POWERLINE ROAD
NEW ALIGNMENT WITH 2-LANE ROAD, SHOULDERS AND ROADSIDE DITCHES
COST ESTIMATE

ITEM NO.	DESCRIPTION	SPEC. NO.	UNIT OF MEASURE	APPROX. QTY.	UNIT PRICE	TOTAL AMOUNT
A SITE PREPARATION & EARTHWORK						
1	Clearing and Grubbing	102	LS	1	\$ 45,000. ⁰⁰	\$ 45,000. ⁰⁰
2	Roadway Excavation and Disposal	110	CY	3,111	\$ 12. ⁰⁰	\$ 37,332. ⁰⁰
3	Project sign (Fort Bend County)	DWGS	EA	2	\$ 1,000. ⁰⁰	\$ 2,000. ⁰⁰
4	Removing Old Concrete Pavement	104	SY	250	\$ 10. ⁰⁰	\$ 2,500. ⁰⁰
5	Removing Old Concrete Curb	104	SY	19	\$ 7. ⁰⁰	\$ 133. ⁰⁰
6	Removing Old Concrete Sidewalk	104	LF	192	\$ 3. ⁰⁰	\$ 576. ⁰⁰
7	Borrow	130	CY	3435	\$ 15. ⁰⁰	\$ 51,525. ⁰⁰
8	Milling Existing Pavement (All Depths, includes removal, to become property of contractor)	309	SY	2477	\$ 6. ⁰⁰	\$ 14,862. ⁰⁰
9	Remove and Dispose of Existing Concrete or Metal Pipe (All Sizes)	465	LF	258	\$ 17. ⁰⁰	\$ 4,386. ⁰⁰
10	Removing Old Structures (Inlet)	495	EA	1	\$ 550. ⁰⁰	\$ 550. ⁰⁰
11	Removing Old Structures (SET)	495	EA	4	\$ 550. ⁰⁰	\$ 2,200. ⁰⁰
12	Removing and Disposing of Existing Asphalt Pavement and Base Material	540	SY	2,936	\$ 10. ⁰⁰	\$ 29,360. ⁰⁰
					SUBTOTAL OF A	\$ 190,424.⁰⁰
B PAVING & SUBGRADE						
13	Lime Stabilized Subgrade (8" Depth) (under HMAC)	220	SY	8,523	\$ 3. ⁰⁰	\$ 25,569. ⁰⁰
14	Hydrated Lime (Ty A) (Dry) (6%)	221	TON	162	\$ 170. ⁰⁰	\$ 27,540. ⁰⁰
15	Hot Mix Asphalt Concrete Base Course (Black Base), (8" Depth) (Roadway)	250	TON	3,269	\$ 73. ⁰⁰	\$ 238,637. ⁰⁰
16	Hot Mix Asphalt Concrete Base Course (Black Base), (8" Depth) (Driveway)	250	TON	47	\$ 84. ⁰⁰	\$ 3,948. ⁰⁰
17	Hot Mix - Hot Laid Asphaltic Concrete, (Type "D" Surface Course, 2" Depth) (Roadway)	340	TON	1,070	\$ 85. ⁰⁰	\$ 90,950. ⁰⁰
18	Hot Mix - Hot Laid Asphaltic Concrete, (Type "D" Surface Course, 2" Depth) (Driveway)	340	TON	12	\$ 140. ⁰⁰	\$ 1,680. ⁰⁰
19	Concrete Curb (6")	530	LF	336	\$ 7. ⁰⁰	\$ 2,352. ⁰⁰
					SUBTOTAL OF B	\$ 390,676.⁰⁰
C PERMANENT TRAFFIC SIGNS & PAVEMENT MARKINGS						
20	Remove and Relocate Roadway Signs	500	EA	2	\$ 800. ⁰⁰	\$ 1,600. ⁰⁰
21	Alluminum Signs (Ground Mounted)-Furnish & Install	624	EA	8	\$ 800. ⁰⁰	\$ 6,400. ⁰⁰
22	Reflectorized Pavement Markings Type I (Thermoplastic) 24" White/Solid - Furnish & Applied	660	LF	73	\$ 10. ⁰⁰	\$ 730. ⁰⁰
23	Reflectorized Pavement Markings Type I (Thermoplastic) 4" White/solid - Furnish & Applied	660	LF	4264	\$ 0. ⁷⁰	\$ 2,984. ⁸⁰
24	Reflectorized Pavement Markings Type I (Thermoplastic) 4" Yellow/solid - Furnish & Applied	660	LF	3663	\$ 0. ⁷⁰	\$ 2,564. ¹⁰
25	Reflectorized Pavement Markings Type II 12" Yellow/Solid - Furnish & Applied (median nose)	660	LF	74	\$ 7. ⁰⁰	\$ 518. ⁰⁰
26	Reflectorized Pavement Markers Type II-A-A - Furnish & Install	663	EA	98	\$ 7. ⁰⁰	\$ 686. ⁰⁰
					SUBTOTAL OF C	\$ 15,482.⁹⁰

FORT BEND COUNTY MOBILITY PROJECT NO. 13110
POWERLINE ROAD
NEW ALIGNMENT WITH 2-LANE ROAD, SHOULDERS AND ROADSIDE DITCHES
COST ESTIMATE

ITEM NO.	DESCRIPTION	SPEC. NO.	UNIT OF MEASURE	APPROX. QTY.	UNIT PRICE	TOTAL AMOUNT
D TRAFFIC CONTROL PLAN						
27	Traffic Control-Furnish Install and Remove	671	MO	5	\$ <u>3,200.⁰⁰</u>	\$ <u>16,000.⁰⁰</u>
SUBTOTAL OF D						\$ <u>16,000.⁰⁰</u>
E DRAINAGE						
28	Trench Safety System, 0' to 5' Depth	429	LF	398	\$ <u>1.²⁵</u>	\$ <u>497.⁵⁰</u>
29	Trench Safety System, 5' to 10' Depth	429	LF	306	\$ <u>1.³⁵</u>	\$ <u>382.⁹⁰</u>
30	18" RCP (ASTM C76, Class III) (Rubber Gasket)	460	LF	198	\$ <u>95.⁰⁰</u>	\$ <u>18,810.⁰⁰</u>
31	24" RCP (ASTM C76, Class III) (Rubber Gasket)	460	LF	506	\$ <u>110.⁰⁰</u>	\$ <u>55,660.⁰⁰</u>
32	Connect to Existing Storm Sewer with Concrete Collar	460	EA	1	\$ <u>1,700.⁰⁰</u>	\$ <u>1,700.⁰⁰</u>
33	Safety End Treatment (Type II) (18") (RCP) (6:1) (P)	463	EA	4	\$ <u>900.⁰⁰</u>	\$ <u>3,600.⁰⁰</u>
34	Safety End Treatment (Type II) (24") (RCP) (6:1) (P)	463	EA	12	\$ <u>1,250.⁰⁰</u>	\$ <u>15,000.⁰⁰</u>
35	Junction Box (2'x5')	471	EA	1	\$ <u>3,500.⁰⁰</u>	\$ <u>3,500.⁰⁰</u>
36	Junction Box (2'x4')	471	EA	1	\$ <u>3,200.⁰⁰</u>	\$ <u>3,200.⁰⁰</u>
37	Adjust Inlet to Proposed Grade	473	EA	1	\$ <u>300.⁰⁰</u>	\$ <u>300.⁰⁰</u>
SUBTOTAL OF E						\$ <u>102,650.⁰⁰</u>
F POLLUTION PREVENTION FOR CONSTRUCTION ACTIVITIES						
38	Sodding for Erosion Control and Stabilization	162	SY	1,131	\$ <u>4.⁰⁰</u>	\$ <u>4,524.⁰⁰</u>
39	Hydro-Mulch Seeding	165	AC	4.60	\$ <u>1,750.⁰⁰</u>	\$ <u>8,050.⁰⁰</u>
40	TPDES General Permit No. TXR 150000, Notice of Intent (NOI) Application Fees (Contractor's NOI Fee & Fort Bend County's NOI Fee, Each Fee shall be set price of \$325.00)	700	EA	2	\$ <u>325.⁰⁰</u>	\$ <u>650.⁰⁰</u>
41	Filter Fabric Fence (60% of unit cost for furnish and installation and 40% of unit cost for removal)	713	LF	2,046	\$ <u>3.⁰⁰</u>	\$ <u>6,138.⁰⁰</u>
42	Reinforced Filter Fabric Barrier	713	LF	266	\$ <u>3.⁵⁰</u>	\$ <u>931.⁰⁰</u>
43	Inlet Protection Barrier (Stage 1, With Reinforced Filter Fabric Fence; 60% of unit cost for furnish and installation, and 40% of unit cost for removal)	719	EA	1	\$ <u>100.⁰⁰</u>	\$ <u>100.⁰⁰</u>
44	SWPPP Inspection and Maintenance (Min. Bid - \$6,000)	751	MO	5	\$ <u>6,000.⁰⁰</u>	\$ <u>30,000.⁰⁰</u>
SUBTOTAL OF F						\$ <u>50,393.⁰⁰</u>
G ** Extra Work Items						
45	Video Recording Construction	561	LS	1	\$ <u>1,200.⁰⁰</u>	\$ <u>1,200.⁰⁰</u>
46	Uniform Peace Officer (Minimum: \$25 / HR)	672	HOUR	24	\$ <u>40.⁰⁰</u>	\$ <u>960.⁰⁰</u>
SUBTOTAL OF G						\$ <u>2,160.⁰⁰</u>
SUMMARY						
A	SITE PREPARATION & EARTHWORK					\$ <u>190,424.⁰⁰</u>
B	PAVING & SUBGRADE					\$ <u>390,676.⁸⁰</u>
C	PERMANENT TRAFFIC SIGNS & PAVEMENT MARKINGS					\$ <u>15,482.⁹⁰</u>
D	TRAFFIC CONTROL PLAN					\$ <u>16,000.⁰⁰</u>
E	DRAINAGE					\$ <u>102,650.⁰⁰</u>
F	POLLUTION PREVENTION FOR CONSTRUCTION ACTIVITIES					\$ <u>50,393.⁰⁰</u>
G	*** EXTRA WORK ITEMS					\$ <u>2,160.⁰⁰</u>
GRAND TOTAL (ITEMS A-G)						\$ <u>767,785.⁹⁰</u>

**FORT BEND COUNTY MOBILITY PROJECT NO. 13110
 POWERLINE ROAD
 NEW ALIGNMENT WITH 2-LANE ROAD, SHOULDERS AND ROADSIDE DITCHES
 COST ESTIMATE**

ITEM NO.	DESCRIPTION	SPEC. NO.	UNIT OF MEASURE	APPROX. QTY.	UNIT PRICE	TOTAL AMOUNT
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*Awarded vendor to submit a sample of specified items for inspection/approval by PID prior to order placement.

**The extra work items are to be used only on the instructions of the field engineer on the job. No compensation will be received for any part of these items unless they are actually used on the job under the direction of the field engineer. Any additional items required over and above those listed above will have to be secured on a change-in-contract and are not to be used until they have been approved by the County Auditor and/or Commissioner Court. The amount subtotal for extra work items is to be included in the grand total of this bid.

***This figure should appear on the front cover of the Fort Bend County Bid Cover Sheet.