AGREEMENT BETWEEN OWNER AND CONTRACTOR

The Parties to this agreement are:

Owner:

FORT BEND COUNTY TOLL ROAD AUTHORITY, a political subdivision of the State of Texas. c/o Greenberg Traurig, LLP 1000 Louisiana Street, Suite 6700 Houston, Texas 77002

Contractor:

Creacom, Inc. 21333 Hufsmith-Khorville Tomball, TX 77375

THIS AGREEMENT ("Agreement") is made and entered into this <u>15th</u> day of <u>May</u>, 2023, between the Parties, for and in consideration of the mutual covenants hereinafter set forth, and under the conditions expressed in the Bonds bearing event date herewith, the Contractor and Owner hereby agree as follows:

Scope of Work:

Contractor shall commence and complete the Work generally described as follows:

Sign Replacements
(Project 101-1046)
Fort Bend Westpark Tollway
for Fort Bend County Toll Road Authority,
Fort Bend County, Texas,
according to those particular Plans and Technical Specifications (each as defined below)
prepared by BGE, Inc. ("Engineer")

and all extra work in connection therewith, as agreed to by the Parties hereof ("Extra Work"), under the terms as stated in this Agreement and the Contract Documents (as defined herein), and, at Contractor's own proper cost and expense, to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said Work, in accordance with the conditions and prices stated in the Specifications and Bid attached hereto and in accordance with the contract documents, including, but not limited to, invitation to bidders, instructions to bidders, all documents referenced in the Governing Specifications and Special Provisions, General Notes, plans, and other drawings and printed or written explanatory matter thereof (collectively, "Plans"), and the Specifications and Bid and other technical specifications (collectively, "Technical Specifications"), on file with Engineer (collectively, "Contract Documents"). Contractor represents and warrants to the Owner that it has carefully examined this Agreement and all other Contract Documents, which are made a part of the Agreement, and is

thoroughly familiar therewith.

Under this Agreement and the Contract Documents, Contractor shall furnish all materials, appliances, tools, equipment, transportation, services, and all labor and superintendence necessary for the Work as described in the Technical Specifications and as shown on the Plans. The completed Work shall not lack any part that can be reasonably implied as necessary to its proper functioning or any subsidiary item that is customarily furnished, and Contractor shall deliver the Work to Owner in operating condition.

The Work, in general, under the Agreement includes:

1. For Sign Replacement

Time for Completion:

The Contractor hereby agrees to begin work within 10 calendar days after Engineer has given written Notice to Proceed. Contractor hereby also agrees to achieve Final Acceptance (as defined in Section 12 of Item 5 of the Texas Department of Transportation's Items 1-9, General Requirements and Covenants) of the Work within 90 calendar days after the date of the written Notice to Proceed.

Surety Bonds Required:

It is further agreed by the parties to this Agreement that Contractor will execute:

 a Payment Bond in the sum of 100% of the initial Contract Price (as defined herein), if the initial Contract Price is \$25,000 or more

AND

• a Performance Bond in the sum of 100% of the initial Contract Price, if the initial Contract Price is \$100,000 or more,

for the satisfactory performance of the Work, the fulfillment of any guarantees required, and the prompt payment to all persons supplying labor and materials in the prosecution of the Work, in accordance with this Agreement on the forms provided for this purpose; and it is agreed that this Agreement shall not be in effect until such Bonds are furnished and approved by Owner. Upon increase of the Contract Price authorized by Change Order, Contractor shall immediately provide revised Bonds for such increased Contract Price. Contractor's failure to provide compliant Bonds may be grounds for immediate termination regardless of whether the Contractor has started the Work.

All Bonds shall be in the form prescribed by the Contract Documents except as required otherwise by applicable laws or regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 370 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A certified copy of the agent's authority to act must accompany all Bonds signed by an agent. Surety must have a minimum Best's Key Rating of "B+". If the surety company does not have such a rating due to the length of time it has existed, the surety company must be eligible to participate in the surety bond guarantee program of the Small Business Administration and must be an approved surety listed in the current

U.S. Department of Treasury Circular 570, and must meet all of the rules and regulations of the Treasury Department with respect to performance and payment bonds for federal jobs, including specifically the rules related to the underwriting limitation.

For bonds over \$100,000, the surety must also hold a certificate of authority from the United States Secretary of Treasury to qualify as a surety on obligations permitted or required under federal law, or have obtained reinsurance for any liability in excess of \$1,000,000 from a reinsurer that is authorized and admitted as a reinsurer in the State of Texas and is the holder of a certificate of authority from the United States Secretary of Treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law. The person executing the Bonds must be a licensed Texas local recording agent and such licensing must be recorded in the files of the Texas Department of Insurance.

The person executing the Bonds must be authorized by the surety company to execute the Bonds on behalf of the company in the amount required for this Agreement and such authorization must be recorded in the files of the Texas Department of Insurance. This Agreement shall not be in effect until such Bonds have been provided by the Contractor and accepted by the Owner.

If the surety on any Bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated in any state where any part of the project is located, or it ceases to meet the requirements herein, Contractor shall promptly notify Owner and Engineer, and shall, within 10 calendar days after the event giving rise to such notification, provide another Bond and surety to fulfill the required obligations.

Contract Price:

The Contract Price for this Work is <u>Four hundred forty-eight thousand four hundred forty-seven dollars and eighty-five cents</u> (\$448,447.85). The initial Contract Price may increase or decrease due to Change Orders and the Contract Price Adjustment as provided by this Agreement and the Contract Documents.

Owner agrees to pay Contractor's invoices for work performed, in accordance with the terms of the Contract Documents, in an aggregate amount not to exceed the Contract Price, plus Change Orders and Extra Work approved by the Board of Directors of the Owner. Failure by Owner to make such payments to the Contractor shall constitute a default by Owner and shall entitle the Contractor to all rights and remedies arising under the Contract Documents for a default in payment of sums due.

Contractor and Owner agree that time is of the essence of this Agreement. Therefore, Contractor and Owner agree that for each and every calendar day the Work or any portion thereof shall remain incomplete after the expiration of the time limits set in the Agreement, or as extended under the provisions of the Contract Documents, the Contract Price will decrease by \$500.00 for Final Acceptance ("Contract Price Adjustment"). The Owner shall have the option to deduct and withhold said amount from any monies that the Owner owes the Contractor or its sureties or to recover such amount from the Contractor or the sureties on the Contractor's performance bond.

Contractor certifies and agrees that it (i) does not, nor will not, so long as the Agreement remains in effect, boycott Israel, as such term is defined in Chapter 808, Texas Government Code, (ii) does not engage in business with Iran, Sudan, or any foreign terrorist organization pursuant to Subchapter F of Chapter 2252 of the Texas Government Code; (iii) is not identified on a list prepared

and maintained under Sections 806.051, 807.051, or 2252.153, Texas Government Code; (iv) does not, nor will not, so long as the Agreement remains in effect, boycott energy companies, as such term is defined in Chapter 809, Texas Government Code; (v) does not, nor will not, so long as the Agreement remains in effect, have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, as such term is defined in 2274.001(3), Texas Government Code; and (vi) is not (a) owned or controlled by (1) individuals who are citizens of China, Iran, North Korea, Russia or any designated country (as such term is defined in 113.003, Texas Business & Commerce Code); or (2) a company or other entity, including a governmental entity, that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, of any designated country; or (b) headquartered in China, Iran, North Korea, Russia or a designated country.

Prior to execution of this Agreement by FBGPTRA, the Contractor will be required to submit a Texas Ethics Commission Form 1295. Please see this website for details related to this disclosure: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

In accordance with Section 176.0065, Texas Local Government Code, a list of local government officers of FBGPTRA may be obtained by contacting the FBGPTRA's records administrator at (713)374-3568.

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IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

	AUTHORITY Owner
	By Alle De
	Name: James D. Rice
	Title:Chairman
	CREACOM, INC.
	Signed: Momas Crea Name: Thomas Crea Title: President
	Name: Thomas Crea
	Title: President
(The following to be executed if Contractor is a Corp. I, Terry H Kennedy certify that I am the secherein; that Thomas Grew, who signed this President of said Corporation by authority of it corporate powers. Corporate Seal	retary of the Corporation named as Contractor Agreement on behalf of Contractor, was then tion: that said Agreement was duly signed for
EFFECTIVE DATE	
THIS AGREEMENT IS EFFECTIVE ON T FORT BEND COUNTY COMMISSIONERS COU BE NULL AND VOID.	THE DATE IT IS APPROVED BY THE RT, AND IF NOT SO APPROVED SHALL
DATE OF COMMISSIONERS COURT APPROVA AGENDA ITEM NO.:	AL:

THIS BID MUST BE SUBMITTED IN A SEALED BID ENVELOPE OR ELECTRONICALLY THROUGH CIVCAST

SPECIFICATIONS AND BID

FOR

FORT BEND COUNTY TOLL ROAD AUTHORITY

FORT BEND WESTPARK TOLLWAY from WEST of FM 723 to FORT BEND/HARRIS COUNTY LINE

Project 101-1046

For Sign Replacement

Notice To Bidder:

ALL BIDS ARE TO BE SUBMITTED TO FORT BEND COUNTY TOLL ROAD AUTHORITY, C/O BGE, INC., 10777 WESTHEIMER, SUITE 400, HOUSTON, TEXAS, 77042 BY 2:00 P.M. ON WEDNESDAY, MAY 10, 2023.

BIDDER IS REQUIRED TO FILL IN INFORMATION BELOW:

Creacom Inc.

BIDDER (Company Name)

FORT BEND COUNTY, TEXAS

Bid Quantities and Unit Prices Fort Bend County Toll Road Authority

Sign Replacement (WestPark Tollway - West of FM 723 to Fort Bend/Harris County Line) Bid #2

Item No. Desc. Code	Description	Unit	Quantity	Unit Bid Prices	Total
500-6001	MOBILIZATION	LS	1	\$3,984.45	\$3,984.45
502-6001	BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	4	\$16,720.47	\$66,881.88
636-6007	REPLACE EXIST ALUMINUM SIGNS (TY A)	SF	2125	\$20.26	\$43,052.50
636-6008	REPLACE EXIST ALUMINUM SIGNS (TY G)	SF	300	\$36.21	\$10,863.00
636-6009	REPLACE EXIST ALUMINUM SIGNS (TY O)	SF	2197	\$26.89	\$59,077.33
644-6004	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA	41	\$1,194.88	\$48,990.08
644-6050	IN SM RD SN SUP&AM TYS80 (2) SA (P)	EA	6	\$1,277.45	\$7,664.70
644-6066	IN SM RD SN SUP&AM (RAIL MOUNT)	EA	1	\$1,669.23	\$1,669.23
644-6076	REMOVE SM RD SN SUP&AM	EA	34	\$187.64	\$6,379.76
647-9001	REMOVE LARGE GROUND MOUNTED SIGN PANELS	SF	300	\$14.62	\$4,386.00
6001-6001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	45	\$127.59	\$5,741.55
6053-6002	REMOVE OVERHEAD SIGN PANELS	EA	14	\$991.88	\$13,886.32
6185-6002	TMA (STATIONARY)	DAY	25	\$519.25	\$12,981.25
6227-6002	SOLAR POWERED LED WARNING SIGN	EA	20	\$5,644.49	\$112,889.80
9999-9999	FORCE ACCOUNT - LAW ENFORCEMENT	LS		\$50,000.00	\$50,000.00
		1000-07		Total	\$448,447.85

Project Name: Signs Replacement

Project No.: 101-1046

Highway: For

Fort Bend Westpark Tollway

County:

Fort Bend

The enclosed Fort Bend County Toll Road Authority (FBCTRA) and Texas Department of Transportation Specifications, Special Provisions, General Notes and Specification Data in this document have been selected by me, or under my responsible supervision, as being applicable to this project(s).

NOTE: For the purpose of constructing this Proposal and the attached form of Contract, FBCTRA and the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges, as adopted by the Texas Department of Transportation on November 1, 2014, hereinafter referred to are approved and incorporated herein by reference for all purposes by the Fort Bend County Toll Road Authority as official specifications, together with and to be modified by the Special Provisions and Special Specifications, as are listed herein.

GARY GEHBAUER

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Project Manager BGE, Inc.

4-20-2023

Date:

FBTRA GENERAL NOTES

Fort Bend Westpark Tollway

Project: 101-1014

Sign Replacement

General Notes:

General:

Contractor questions on this project are to be submitted through Civcast.

The project scope is replacement of signs.

The Authority will not reimburse the Contractor for any tolls incurred while performing the work.

Contactor shall not work the following days unless permitted by the Authority:

- a) New Year's Eve and New Year's Day (December 31 through January 1) (2 days)
- b) Easter Holiday Weekend (Saturday through Sunday) (2 days)
- c) Memorial Day Weekend (Saturday through Monday) (3 days)
- d) Independence Day (July 3 through July 4) (2 days)
- e) Labor Day Weekend (Saturday through Monday) (3 days)
- f) Thanksgiving Holiday (Thursday through Sunday) (4 days)
- g) Christmas Holiday (December 23 through December 26) (4 days)

Calendar day charges shall continue through these days - time charges will not be suspended. The number of calendar days shown for this contract have incorporated these non-work days.

Unless otherwise shown on the plans or otherwise directed, commence work after sunrise and ensure construction equipment is off the road by sunset.

Procure permits and licenses, which are to be issued by the City, County, or Municipal Utility District.

Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

The disturbed area is less than one acre and use of erosion control measures is not anticipated.

General: Utilities

Contractor shall note that there are existing fiber optic cables not encased in concrete between the eastbound tollway main lanes and eastbound frontage road. The system must remain operational throughout construction. If the contractor damages or causes damages to this system, notify the Authority immediately. Contractor shall be responsible for repair costs incurred by the Authority

Notify the local one-call utility center by calling 811 or making an online request 2-3 days before work begins.

Fort Bend Westpark Tollway

Project: 101-1014

Sign Replacement

Item 8: Prosecution and Progress

Within 10 days of receipt of the Notice to Proceed, Contractor may request in writing a delay of up to ninety (90) calendar days before starting time charges. This delay time is for the contractor to obtain the fabricated materials prior to time charges beginning, including shop drawing submittals.

Working days will be computed and charged based on calendar days per item 8.3.1.5. Calendar Day.

The Lane Closure Assessment Fee will be charged for all unauthorized closures of tolled lanes. The Contractor will be charged for all unauthorized closures on main lanes at a rate of one thousand (\$1,000.00) dollars per lane per hour per location of closure. This fee applies to the Contractor for closures or obstructions that overlap into restricted hour traffic for each hour or portion thereof, per lane, regardless of the length of lane closure or obstruction. For Restricted Hours subject to Lane Assessment Fee see Item 502.

Item 502: Barricades, Signs, and Traffic Handling

Restricted Lane Closure Hours Subject to Lane Assessment Fee (Monday - Friday, Peak Hours):

Fort Bend Westpark Tollway:

Eastbound 6:00 AM to 9:00 AM Westbound 3:30 PM to 7:00 PM

Complete closure of the tollway main lanes is not permitted unless approved by the Engineer, including an approved traffic control plan. If approved, full closures are permitted during the following:

Weekday Nights: Monday - Friday: 9:00pm to 5:00am

Weekends: Saturday: Midnight to noon, and 9pm to midnight

Sunday: Midnight to noon, and 9pm to midnight (until 5am

Monday)

Length of full and single lane closures may be limited in length and must be approved by the Engineer.

Use traffic control plan standards for handling traffic through the construction.

Furnish and maintain the barricades and warning signs, Place and construct these barricades and warning signs in accordance with the latest "Texas Manual on Uniform Traffic Control Devices" for typical construction layouts.

Cover work zone signs when work related to the signs is not in progress, or when any hazard related to the signs no longer exists.

Keep the delineation devices, signs, and pavement markings clean. This work is subsidiary to the Item, "Barricades, Signs, and Traffic Handling."

FBTRA GENERAL NOTES

Fort Bend Westpark Tollway

Sign Replacement

Project: 101-1014

Cover or remove the permanent signs and construction signs that are incorrect or that do not apply with the proposed installed signs.

Do not mount signs on drums or barricades, except those listed in the latest Barricades and Construction standard sheets.

A minimum of 7 days in advance of any ramp closure, place a portable changeable message (PCM) sign at the location closure which informs the traveling public of the details of the closure. Alternately, if the existing condition provides a positive barrier at the location, a non-trailer mounted static message board sign behind the positive barrier may be used in place of a PCM.

Coordinate with local law enforcement and arrange for law enforcement as directed or agreed by the Engineer. Before payment will be made, complete a "Daily Report on Law Enforcement Force Account Work" (Form 318), and submit daily invoices that agree with this form for any day during the month in which approved services were provided. The form or an Excel spreadsheet will be acceptable.

When law enforcement is used, at least one off-duty officer must be with the Fort Bend County sheriff's or constables' office, or from other local Fort Bend County jurisdictions. The Authority may waive this requirement depending on project needs or circumstances.

Payment for use of law enforcement officers during one-lane closures shall be requested by the Contractor and approved by the Authority prior to the work.

Item 504: Field Office and Laboratory

A field office is not required.

Item 636: Signs

Include aluminum route markers, exit only panels, routing signs, and other special panels attached to guide signs in the unit bid price for the parent guide sign material.

The locations of sign panels on overhead structures are approximate. Verify in the field before installing.

For design details not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Removal of existing aluminum large ground (TY G) and overhead mounted (TY O) signs will be paid under Items 647 and 6053.

Item 644: Small Roadside Sign Assemblies

The Wrong Way solar powered flashing signs will be paid under Item 644 (post assemblies) and Item 6227 (sign)

Sign locations shown on the plans are approximate. Before placing stubs, stake each sign

General Notes

Sheet D

FBTRA GENERAL NOTES

Project: 101-1014

Fort Bend Westpark Tollway

Sign Replacement

location and obtain approval of the Engineer before installation.

Use the Texas Universal Triangular Slip Base with the concrete foundation for small ground mounted signs, unless otherwise shown in the plans.

Some existing small signs mounted to rail are going to be removed and replaced with ground mounted. Contractor to verify length of all posts prior to fabrication to make sure they meet the visibility requirements from the roadway surface.

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Item 656: Foundations for Traffic Control Devices

Using ready mix concrete for sign foundations is optional.

Item 6053: Shifting or Removing Existing Overhead Signs

Assume ownership of the removed sign panels.

Item 6185: Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

TMAs/TAs must meet the requirements of the Compliant Work Zone Traffic Control Device List.

Level 3 Compliant TMAs/TAs are required for this project.

Provide shadow vehicles with TMAs/TAs as shown on the TCP Standard sheets. The Contractor is responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMAs/TAs needed on the project.

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS

ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014. STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 GENERAL REQUIREMENTS AND COVENANTS

ITEM 500 MOBILIZATION

ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING (5)(9)

ITEM 636 SIGNS (9)(643)

ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421)(440(441)(442)(445)(636)(643)(656)

ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES

SPECIAL PROVISIONS:

SPECIAL PROVISIONS WILL GOVERN AND TAKE PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED HERON WHEREVER IN CONFLICT THEREWITH. ALL SPECIAL PROVISIONS ARE INCLUDED HEREIN.

PREVAILING WAGES

SPECIAL PROVISION GENERAL (FBCTRA)

SPECIAL PROVISION TO ITEM 2 (002-001) (FBCTRA)

SPECIAL PROVISION TO ITEM 3 (003-001) (FBCTRA)

SPECIAL PROVISION TO ITEM 3 (003-013)

SPECIAL PROVISION TO ITEM 4 (004-001) (FBCTRA)

SPECIAL PROVISION TO ITEM 5 (005-002)

SPECIAL PROVISION TO ITEM 5 (005-003)

SPECIAL PROVISION TO ITEM 7 (007-001) ((FBCTRA)

SPECIAL PROVISION TO ITEM 7 (007-011)

SPECIAL PROVISION TO ITEM 8 (008-001) (FBCTRA)

SPECIAL PROVISION TO ITEM 8 (008-030)

SPECIAL PROVISION TO ITEM 8 (008-033)

SPECIAL PROVISION TO ITEM 8 (008-045)

SPECIAL PROVISION TO ITEM 9 (009-001) (FBTRA)

SPECIAL PROVISION TO ITEM 502 (502-008)

SPECIAL PROVISION TO ITEM 636 (636-001)

SPECIAL PROVISION TO ITEM 6185 (6185-002)

SPECIAL PROVISION TO ITEM 6227 (6227-001)

SPECIAL SPECIFICATIONS

ITEM 6001	PORTABLE CHANGEABLE MESSAGE SIGN
ITEM 6053	SHIFTING OR REMOVING EXISTING OVERHEAD SIGN (636)
ITEM 6185	TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)
ITEM 6227	SOLAR POWERED LIGHT EMITTING DIODE (LED) ROADSIDE SIGN
	(636)(643)(644)

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFICATIONS FOR THIS CONTRACT.

"General Decision Number: TX20210038 01/01/2021

Superseded General Decision Number: TX20200038

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 \$10.95 for calendar year 2021 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 \$10.95 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 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/01/2021

* SUTX2011-013 08/10/2011

Rates Fringes

CEMENT MASON/CONCRETE

FINISHER (Paving and	Structures)	\$ 12.98
ELECTRICIAN	\$ 27.11	

FORM BUILDER/FORM SETTER

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
Mounted
Servicer
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
- st a Wage and Hour Division letter setting forth a position on
- a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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

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

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

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

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

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

END OF GENERAL DECISION

FORT BEND COUNTY TOLL ROAD AUTHORITY

SPECIAL PROVISION – GENERAL

For this project, the following sections of the Texas Standard Specifications ("TSS") are hereby modified with respect to the clauses cited below and no other clauses or requirements of the TSS are waived or changed hereby.

Global - All references to "State" or "Department" are replaced with "Authority."

FORT BEND COUNTY TOLL ROAD AUTHORITY SPECIAL PROVISION TO ITEM 2

INSTRUCTIONS TO BIDDERS

Item 2, "Instructions to Bidders," of the Texas Department of Transportation Standard Specifications is hereby amended with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Except for Section 1, the remainder of Item 2 is voided and replaced by the following:

Section 2, Eligibility of Bidders. For this project, the Fort Bend County Toll Road Authority (FBCTRA) requires that bidders be prequalified by the Texas Department of Transportation. Submit to Texas Department of Transportation for approval a Confidential Questionnaire Form and an audited financial statement at least 10 days before the date that bids are to be opened. Once approved, the eligibility is valid for a period of one year. Comply with all technical prequalification requirements in the bid form. Obtain prequalification forms from the Construction Division.

To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within five (5) days of FBCTRA's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:

- Evidence of Bidder's authority to do business in the state of Texas.
- Bidder's state or other contractor license number, if applicable.
- Subcontractor and Supplier qualification information.
- Evidence that Bidder has successfully completed 4 similar projects under the
 direction of the same firm. Successfully completed projects shall be located in the
 Houston area, completed within the last 3 years and shall be similar to this Work in
 scope and in magnitude of cost.

A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

Section 3, Issuing Bid Forms. Request bid forms orally, in writing, or electronically.

In the case of a joint venture, all joint venture participants must be prequalified. An equally divided portion of the Engineer's estimate must be within each participant's available bidding capacity.

The FBCTRA will not issue a bid form for a proposed Contract if one or more of the following apply:

The Bidder is disqualified by an agency of the federal government.

- The Bidder is suspended or debarred by the TxDOT Commission, or is prohibited from rebidding a specific proposal because of bid error or failure to enter into a Contract of the first awarded bid.
- The Bidder has not fulfilled the requirements for prequalification.
- The Bidder or a subsidiary or affiliate of the Bidder has received compensation from the FBCTRA to participate in the preparation of the plans or specifications on which the bid or Contract is based.
- The Bidder did not attend an advertised mandatory pre-bid conference.

Section 4, Interpreting Estimated Quantities. The quantities listed in the bid form are approximate and will be used for the comparison of bids. Payments will be made for the work performed in accordance with the Contract.

Section 5, Examining Documents and Work Locations. Examine the bid form, plans, specifications, and specified work locations before submitting a bid for the work contemplated. Submitting a bid will be considered evidence that the Bidder has performed this examination. Borings, soil profiles, water elevations, and underground utilities shown on the plans were obtained for use of the FBCTRA in the preparation of plans. This information is provided for the Bidder's information only and the FBCTRA makes no representation as to the accuracy of the data. Be aware of the difficulty of accurately classifying all material encountered in making foundation investigations, the possible erosion of stream channels and banks after survey data have been obtained, and the unreliability of water elevations other than for the date recorded.

Oral explanations, instructions, or consideration for contractor-proposed changes in the Items of work, specifications, plans or bid forms given during the bidding process are not binding. Only requirements included in the bid form, associated specifications, plans and FBCTRA issued addenda are binding. Request explanations of documents in adequate time to allow the FBCTRA to reply before the bid opening date.

Immediately notify the FBCTRA of any error, omission, or ambiguity discovered in any part of the bid form, specifications or plans. The FBCTRA will issue an addendum when appropriate.

Section 6, Preparing the Bid. Prepare the bid on the form furnished by the FBCTRA. Bid forms may be printed or electronic (if permitted). Informational forms will not be accepted.

Specify a unit price in dollars and cents for each Item for which an estimated quantity is given. When "Working Days" is an Item, submit the number of working days to be used to complete the Contract, or phases of the Contract shown on the plans.

An Item left blank will constitute an incomplete bid and will be handled as prescribed in Section 11, "Tabulating Bids." Include unit bid prices for each Item in the Item group or alternate Item group, except for instances when alternate Items pertain to foreign steel or iron materials.

If a bid form contains both regular bid Items for domestic and alternate bid Items pertaining to foreign steel or iron materials the bidder must either:

- Submit unit bid prices for domestic bid items only, or
- Submit unit bid prices for both the alternate foreign bid items and domestic bid items.

Verify whether addenda have been issued on a proposed Contract. Acknowledge all addenda.

Section 7, Nonresponsive Bids. A bid that has one or more of the deficiencies listed below is nonresponsive and will not be considered.

- The person or, in the case of a manually submitted joint venture bid, persons did not sign the bid form.
- The proposal guaranty did not comply with the requirements contained in Article 2.8, "Bid Guaranty."
- The bid was in a form other than the official bid form issued to the Bidder or Bidders.
- The bid was not in the hands of the letting official at the time and location specified in the advertisement. For electronic bids, "in the hands of the letting official" means CivCast vault acknowledgement.
- The bid form submitted had the incorrect number of Items.
- A computer printout, when used, was not signed in the name of the Bidder (or joint Bidders, in the case of a joint venture), or omitted required Items or included an Item or Items not shown in the bid form.
- The Bidder was not authorized to receive a bid form under Article 2.3, "Issuing Bid Forms."
- The Bidder failed to acknowledge receipt of all addenda issued.
- The Bidder bid more than the maximum or less than the minimum number of allowable working days shown on the plans when working days was an Item.
- The Bidder modified the bid in a manner that altered the conditions or requirements for work as stated in the bid form.
- The Bidder did not attend a specified mandatory pre-bid conference.
- The FBCTRA will not accept or read any of the bids submitted on the same project by:
 - A joint venture and one or more of its partners, or
 - Affiliated bidders.

Section 8, Electronic Bid (if permitted).

Section 8.1. Electronic Bid Form (if permitted). Use the electronic bid form in CivCast. Acknowledge an addendum by initialing each addendum listed under the addenda tab in CivCast.

- **Article 8.2. Bid Guaranty.** For electronic bids, upload a copy of the guaranty check or bid bond on CivCast. Submit the original guaranty check or bid bond within 24 hours to FBCTRA.
- Article 8.3. Electronically Submitted Bids (if permitted). Submit the electronic bid to the electronic vault using CIVCAST. It is the bidder's responsibility to ensure that the bid is received by the electronic vault on or before the time and date set for the opening.
- Article 8.4. Revising Bid Forms. Make desired changes up until the time and date set for the opening of bids using CIVCAST. The electronically submitted bid with the latest time stamp by the electronic vault will be used for tabulation purposes.
- **Article 8.4.1. After Bid Opening.** Revisions to bids are not allowed after the time and date set for the opening.
- Article 8.5. Withdrawing Bids. Submit a written request to withdraw the bid. For a written request, submit a signed request to the Letting Official. A request to withdraw an electronic bid must be made by a person authorized to bind the Bidder and must be made prior to the time and date set for the opening. For written request for withdrawals of electronic bids and in the case of joint venture, the FBCTRA will accept a request from any person authorized to bind a party to the joint venture to withdraw a bid.
- **Article 8.6.** The FBCTRA will not be responsible for Internet unavailability. The FBCTRA will not provide a computer for preparing, submitting, revising or withdrawing an electronic bid.

Section 9, Printed Bid.

Article 9.1. Printed Bid Form. Make all entries and execute the bid form in ink. Acknowledge all addenda by checking the appropriate box on the addendum acknowledgement page. Provide the complete and correct name of the Bidder submitting the bid. A person authorized to bind the Bidder must sign the bid form. In the case of a joint venture, provide the complete and correct name of all Bidders submitting the bid. The bid form must be signed by person(s) authorized to bind the Bidder(s).

As an alternative to hand writing the unit prices in the bid form, submit a computer printout signed by the person authorized to bind the Bidder or for a joint venture the persons authorized to bind the Bidders. As a minimum, computer printouts must contain the information in the format shown on the "Example of Bid Prices Submitted by Computer Printout" form in the bid form.

- **Article 9.2. Bid Guaranty.** The bid guaranty amount is fixed at the amount indicated on the bid form on the date the bid form is released to the public. Provide a bid guaranty in the amount indicated on the bid form as follows:
 - For printed bids, use either a guaranty check or a bid bond.
- Article 9.2.1. Guaranty Check. The guaranty check must be payable to the Fort Bend County Toll Road Authority and must be a cashier's check, money order, or teller's check drawn by or on a state or national bank, a savings and loan association, or a state or federally chartered credit union (collectively referred to as "bank"). The check must be dated on or before the date of the

bid opening. Post dated checks will not be accepted. The type of check or money order must be indicated on the face of the instrument and the instrument must be no more than 90 days old. A check must be made payable at or through the institution issuing the instrument; be drawn by a bank and on a bank; or be payable at or through a bank. The FBCTRA will not accept personal checks, certified checks, or other types of money orders as a bid guaranty.

Article 9.2.2. Bid Bond. The bid bond shall be on the American Institute of Architects, AIA Document 310, with powers of attorney attached, and in the amount specified on the bid bond form. The bond form must be dated on or before the date of the bid opening, bear the impressed seal of the Surety and be signed by the Bidder or Bidders, in the case of a joint venture, and an authorized individual of the Surety. As an alternative for joint venture Bidders, each of the Bidders may submit a separate bid bond, completed as outlined in this Subarticle. Bid bonds will only be accepted from Sureties authorized to execute a bond under and in accordance with state law.

Article 9.3. Submittal of Bid. Place the completed bid form and the bid guaranty in a sealed envelope marked to indicate the contents.

When submitting by mail or delivery service, place the envelope in another sealed envelope and address as indicated in the official advertisement. It is the bidder's responsibility to ensure that the sealed bid arrives at the location described in the official advertisement of the project on or before the time and date set for the opening. The bid must be in the hands of the Letting Official by that time, regardless of the method chosen for delivery, in order to be accepted.

In addition to the requirements above, all pages of a bid form printed from CIVCAST must be submitted.

Article 9.4. Revising Bid Forms. Revisions to bids will be handled as follows:

Article 9.4.1. Before Submission. Make desired changes to the printed bid form in ink and initial the changes.

Article 9.4.2. After Submission. Withdraw the bid in accordance with Article 2.11, "Withdrawing Bids." Make desired changes to the printed bid form in ink and initial the changes. Resubmit to the Letting Official in accordance with Article 2.9, "Delivery of Bid." The FBCTRA will not make revisions to a bid on behalf of a Bidder.

Article 9.4.3. After Bid Opening. Revisions to bids are not allowed after the time and date set for the opening.

Article 9.5. Withdrawing Bids. Submit a signed written request to the Letting Official. The FBCTRA will not accept telephone or electronic requests, but will accept a properly signed telefacsimile request. The request must be made by a person authorized to bind the Bidder, and must be in the hands of the Letting Official before the time and date set for the opening. In the case of joint venture, the FBCTRA will accept a request from any person authorized to bind a party to the joint venture to withdrawal a bid.

Section 10, Opening and Reading of Bids. At the time, date and location specified in the official advertisement, the Letting Official will publicly:

- Open and read manually submitted bids; and
- Read electronically submitted bids.

Section 11, Tabulating Bids.

Article 11.1. Official Total Bid Amount. The FBCTRA will sum the products of the quantities and the unit prices bid in the bid form to determine the official total bid amount. Except as provided in Section 11.5.3., "Special Item Considerations," the official total bid amount is the basis for determining the apparent low Bidder. The total bid amounts will be compared and the results made public.

Article 11.2. Consideration of Bid Format. When a Bidder submits both an electronic bid and a properly completed manual bid, the unit bid prices in the manual bid will be used to determine the total bid amount. If a bidder submits an electronic bid and an incomplete manual bid, the electronic bid will be used in the tabulation of the total bid amount.

If a bidder submits two or more manual bids, all responsive bids will be tabulated. The bid with the lowest tabulation will be used to determine the total bid amount.

Article 11.3. Rounding of Unit Prices. The FBCTRA will round off all unit bids involving fractional parts of a cent to the nearest one-tenth cent (\$0.001) in determining the amount of the bid as well as computing the amount due for payment of each Item under the Contract. For rounding purposes, entries of five-hundredths of a cent (\$0.0005) or more will be rounded up to the next highest tenth of a cent, while entries less than five-hundredths of a cent will be rounded down to the next lowest tenth of a cent.

Article 11.4. Interpretation of Unit Prices. The FBCTRA will make a documented determination of the unit bid price for tabulation purposes if a unit bid price is illegible. The FBCTRA's determination will be final.

Article 11.5. Consideration of Unit Prices. Unit bid price entries such as no dollars and no cents, zero dollars and zero cents, or numerical entries of \$0.00, will be tabulated as one-tenth of a cent (\$0.001).

The FBCTRA will consider proposals where unit bid prices have been left blank incomplete and nonresponsive. If a proposal has a regular and a corresponding alternate Item or group of Items, the bid will be considered complete if:

- The regular Item or group of regular Items has unit prices entered, or
- The alternate Item or group of alternate Items has unit prices entered.

The bid will be considered incomplete and nonresponsive if:

- A regular Item or group of regular Items is left blank, and
- A corresponding alternate Item or group of alternate Items is left blank.

Article 11.5.1. Consideration of Alternate Items. The FBCTRA will make two calculations using one-tenth of a cent (\$0.001) for each Item if:

- A regular Item or a group of Items have an entry such as no dollars and no cents, zero dollars and zero cents, or numerical entries of \$0.00, and
- A corresponding alternate Item or group of Items, have an entry such as no dollars and no cents, zero dollars and zero cents, or numerical entries of \$0.00.

The FBCTRA will select the regular Item or Items or the alternate Item or Items at the FBCTRA's discretion if both the regular and alternate bid results in the same cost to the State.

The FBCTRA will use the unit price that is greater than zero for bid tabulation if:

- A unit price greater than zero has been entered for either a regular bid or a corresponding alternate Item or group of Items, and
- An entry of no dollars and no cents, zero dollars and zero cents, or a numerical entry of \$0.00 has been entered for the other corresponding Item or group of Items.

If a unit price has been entered for both the regular Item and a corresponding alternate Item, the FBCTRA will select the option (regular or alternate) that results in the lowest cost to the State. The FBCTRA will select the regular Item or Items or the alternate Item or Items at the FBCTRA's discretion if both the regular and alternate bid results in the same cost to the State.

Article 11.5.2. Special Item Considerations.

Article 11.5.2.1. Rubber Additives. For proposed Contracts without federal funds, if an alternate Item for "Hot Asphalt-Rubber Surface Treatments" or "Hot Mix Asphalt Concrete Pavement" which contains ground tire rubber is shown in the bid form and the Bidder bids that alternate Item, the amounts bid for "Hot Asphalt-Rubber" and "Aggregate" or "Hot Mix Asphalt Concrete" will be reduced to 85% of the amounts actually bid. This reduction will only be used for the purposes of determining the lowest Bidder. To qualify, the ground tire rubber used must be produced from scrap tire ground in a facility in Texas. Payment for "Hot Asphalt-Rubber" and "Aggregate" or "Hot Mix Asphalt Concrete" will be at the actual unit prices bid.

Article 11.5.2.2. "Buy America." For proposed Contracts where unit bid prices are submitted for both domestic and foreign steel or iron materials, the total bid amount will be calculated using both the domestic and foreign steel unit bid prices. If the total bid amount using the foreign steel or iron materials is the low bid, and the lowest bid using domestic steel or iron materials exceeds the low bid using foreign steel or iron materials by 25% or more, the apparent low Bidder will be the bid using foreign steel or iron materials. If the difference between the low bid using foreign steel or iron materials and the lowest bid using domestic steel or iron materials is less than 25%, the apparent low Bidder will be the bid using domestic steel or iron materials.

Article 11.5.2.3. Home State Bidding Preference. For the purpose of determining the apparent low Bidder on proposed Contracts without federal funds, the total bid amount will be based upon the reverse application of the non-resident Bidder's home state bidding preference, if any.

Section 12, Consideration of Bid Errors. The FBCTRA will consider a claim of a bid error by the apparent low Bidder if the following requirements have been met:

- Submit written notification to the FBCTRA within 5 business days after the date the bid is opened.
- Identify the Items of work involved and include bidding documentation. The FBCTRA may request clarification of submitted documentation.

The FBCTRA will evaluate the claim of an error by the apparent low Bidder by considering the following:

- The bid error relates to a material Item of work.
- The bid error amount is a significant portion of the total bid.
- The bid error occurred despite the exercise of ordinary care.
- The delay of the proposed work will not impact cost and safety to the public.

Acceptance of the bid error claim by the FBCTRA will result in the rejection of all bids. The erring Contractor will not be allowed to bid the project when it is relet. Rejection of bids due to the Contractor's bid error may result in the application of sanctions by the FBCTRA.

Section 13, Gratuities. Do not offer FBCTRA employees benefits, gifts, or favors. The only exceptions allowed are ordinary business lunches. Failure to honor this policy may result in the termination of the Contract and sanctions under the Texas Administrative Code. Termination of the Contract will be in accordance with Article 8.7, "Termination of Contract."

END OF SPECIAL PROVISION

FORT BEND COUNTY TOLL ROAD AUTHORITY SPECIAL PROVISION TO ITEM 3

AWARD AND EXECUTION OF CONTRACT

Item 3, "Award and Execution of Contract," of the Texas Department of Transportation Standard Specifications is hereby amended with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Section 1, "Award of the Contract," is voided and replaced in its entirety as follows:

The Authority will award, reject, or defer the Contract within 90 days after the opening of the proposal. The Authority reserves the right to reject any or all proposals and to waive technicalities in the best interest of the County.

Article 4.2., "Bonds," is supplemented by the following:

Performance Bond and Payment Bond forms provided by the Authority must be completed.

Special Provision to Item 3 Award and Execution of Contract



Item 3, "Award and Execution of Contract" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 4.3 "Insurance" is being amended by the following:

Table 2
Insurance Requirements

Type of Insurance	Amount of Coverage
Commercial General Liability Insurance	Not Less Than: \$600,000 each occurrence
Business Automobile Policy	Not Less Than: \$600,000 combined single limit
Workers' Compensation	Not Less Than: Statutory
All Risk Builder's Risk Insurance (For building-facilities contracts only)	100% of Contract Price

FORT BEND COUNTY TOLL ROAD AUTHORITY

SPECIAL PROVISION TO ITEM 4

SCOPE OF WORK

Item 4, "Scope of Work," of the Texas Department of Transportation Standard Specifications is hereby amended with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Section 4, "Changes in the Work," is supplemented by the following:

For purposes of extra work, the following individuals have the authority shown to approve extra work. The Authority has no obligation to pay for extra work unless the Contractor secures written authorization executed by the appropriate person prior to commencement of the work. Extra work may not be split or severed to avoid the requirements of this section.

Mike Stone (Chief Operating Officer):

\$ 50,000 or less

Board of Directors:

greater than \$50,000

Article 4.1., "Change Orders," is added as follows:

The unit prices Bid shall govern for additions to, or deductions from the Contract. If materials or labor are required for which no unit price is bid, the price shall be that reached by agreement by the Authority and the Contractor after definite evidence is furnished by the Contractor to the Authority that the price is the current prevailing price in the area. If the Authority and the Contractor cannot agree, the Engineer shall determine the price for changes.

No compensation shall be allowed under a Change Order for any person not actively engaged in the performance of the specified work.

No extra work shall be paid for without an approved Change Order prior to the start of the extra work.

If additional time is required by reason of the Change, the number of days for completion provided for in this Contract shall be adjusted at the time the Change Order is entered into, and if no adjustment is made on the Change Order form, any additional time is to be considered waived by the Contractor.

Any extension of time given shall not release the Contractor or the Surety from their Performance and Payment Bonds or from all obligations hereunder, which shall remain in full force until the discharge of the Contract.

All time limits stated in the Contract Documents are the essence of the agreement. The provisions of this Article shall not exclude recovery of damage (including but not limited to fees

and charges of engineers, architects, attorneys and other professionals and court and arbitration costs for delay by Contractor.)

Section 6, "Requests for Additional Compensation and Damages," is revised by removing the first two paragraphs and replacing as follows:

In the event the Contractor requests additional compensation for work not clearly covered in the contract, the contractor shall notify the Authority in writing of his intention to make a claim for additional compensation before beginning such work, within 21 days of the day Contractor knows or should have known of such claim. The Contractor must provide a written estimate of the amount of the claim or assessment of damages within 30 days of timely notice of the claim. If such notice is not given, then the Contractor waives his right to file a claim for such work. Notice of such claim by the Contractor and the documentation of the cost of the claim work by Contractor shall not be construed as proof or substantiation of the validity of such claim. All such claims must be approved in writing by the Board of Directors of the Authority.

No claims for delay damages may be made nor will the Authority ever be obligated to pay delay damages. Contractor's sole remedy for damages caused by delay is an extension of the contract time. This limitation applies to delay caused by the Authority and delay caused by third parties only. Contractor will not be entitled to extension of time for delays resulting in whole or part from the Contractor's actions or omissions.

Special Provision to Item 5 Control of the Work



Item 5, "Control of the Work," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 5.1, "Authority of Engineer," is voided and replaced by the following.

The Engineer has the authority to observe, test, inspect, approve, and accept the work. The Engineer decides all questions about the quality and acceptability of materials, work performed, work progress, Contract interpretations, and acceptable Contract fulfillment. The Engineer has the authority to enforce and make effective these decisions.

The Engineer acts as a referee in all questions arising under the terms of the Contract. The Engineer's decisions will be final and binding.

The Engineer will pursue and document actions against the Contractor as warranted to address Contract performance issues. Contract remedies include, but are not limited to, the following:

- conducting interim performance evaluations requiring a Project Recovery Plan, in accordance with Title 43,
 Texas Administrative Code (TAC) §9.23,
- requiring the Contractor to remove and replace defective work, or reducing payment for defective work,
- removing an individual from the project,
- suspending the work without suspending working day charges,
- assessing standard liquidated damages to recover the Department's administrative costs, including additional projectspecific liquidated damages when specified in the Contract in accordance with 43 TAC §9.22,
- withholding estimates,
- declaring the Contractor to be in default of the Contract, and
- in case of a Contractor's failure to meet a Project Recovery Plan, referring the issue directly to the Performance Review Committee for consideration of further action against the Contractor in accordance with 43 TAC §9.24.

The Engineer will consider and document any events outside the Contractor's control that contributed to the failure to meet performance standards, including consideration of sufficient time.

Follow the issue escalation ladder if there is disagreement regarding the application of Contract remedies.

Special Provision to Item 5 Control of the Work



Item 5, "Control of the Work" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 5.4, "Coordination of Plans, Specifications, and Special Provisions," the last sentence of the last paragraph is replaced by the following:

Failure to promptly notify the Engineer will constitute a waiver of all contract claims against the Department for misunderstandings or ambiguities that result from the errors, omissions, or discrepancies.

FORT BEND COUNTY TOLL ROAD AUTHORITY SPECIAL PROVISION TO ITEM 7 LEGAL RELATIONS AND RESPONSIBILITIES

Item 7, "Legal Relations and Responsibilities," of the Texas Department of Transportation Standard Specifications is hereby modified with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Section 3, "Laws to be Observed," is supplemented by the addition of the following:

It is the intent of the Authority that all construction work shall be accomplished with minimum disturbance and inconvenience to the public.

The operation of heavy construction equipment over adjacent streets shall be avoided to the greatest extent practicable. If such operation is unavoidable, care shall be taken to prevent the creation of any nuisance, including, but not limited to, the tracking of dirt or the blowing of dust from uncovered loads.

If sites, buildings, and locations of historical, archaeological, educational, or scientific interests are discovered after construction operations are begun, operation in that particular area shall cease immediately and the sites, buildings, or location shall be investigated or evaluated by the Fort Bend County Toll Road Authority (FBCTRA). An extension of time will be granted, if necessary, for delays caused by these investigations and evaluations. It is specifically understood, however, that if the Contractor is delayed by virtue of an investigation and evaluation that this delay will not be considered as basis for claim for damages or additional compensation of any kind by the Contractor and that an extension of time will be sole remedy of Contractor for such delay.

Section 6, "Personal Liability of Public Officials," is revised to read in its entirety as follows:

In carrying out provisions of the Contract Documents or in exercising any power or authority granted there under, there shall be no liability for the Project Engineer, the Section Engineer(s), Construction Phase Engineer, their respective officers, employees, subcontractors, or authorized assistants, either personally or otherwise, as they are agents and representatives of the Authority, and there shall be no liability, either personal or otherwise for any member of the Commissioners' Court, the FBCTRA, or any of the FBCTRA's officers, employees, or consultants. Neither the Contract Document nor FBCTRA's or Contractor's course of conduct shall be deemed to create the relationship of principal and agent by and between the FBCTRA and the Contractor.

Article 7.7.2, "Texas Pollutant Discharge Elimination System (TPDES) Permits and Storm Water Pollution Prevention Plans (SWP3)," is voided and replaced by the following:

The Contractor will file the Notice of Intent (NOI) and the Notice of Termination (NOT) for work shown on the plans in the right of way. Adhere to all requirements of the SWP3.

Section 15, "Responsibility of Damage Claims," is voided and replaced by the following:

TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS FORT BEND COUNTY TOLL ROAD AUTHORITY, THE PROJECT ENGINEER, THE SECTION ENGINEER(S), THE CONSTRUCTION PHASE ENGINEER, AND THEIR RESPECTIVE OFFICERS AND EMPLOYEES (COLLECTIVELY, THE "INDEMNIFIED PARTIES") FROM AND AGAINST EVERY LOSS, ITEM OF DAMAGE, INJURY, EXPENSE, DEMAND, CLAIM, CAUSE OF ACTION, JUDGMENT OR LIABILITY, OF WHATSOEVER KIND OR CHARACTER, WHETHER ARISING IN CONTRACT OR TORT OR UNDER ANY STATUTE, FOR EVERY ELEMENT OF RECOVERY, WHETHER DIRECT OR INDIRECT, INCLUDING SPECIAL AND CONSEQUENTIAL DAMAGES, AND INCLUDING ALL RELATED FINES, FEES AND COSTS, TO INCLUDE ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS, FOR:

- (I) BODILY INJURY OR DEATH OF AN EMPLOYEE OF ANY CONTRACTOR PARTIES, EVEN IF SUCH BODILY INJURY OR DEATH IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE, BREACH OF CONTRACT, BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR OTHER FAULT OF AN INDEMNIFIED PARTY; AND
- (II) BODILY INJURY TO OR DEATH OF ANY PERSON NOT ENCOMPASSED IN (I), ABOVE, PROPERTY DAMAGE OR ECONOMIC LOSS (INCLUDING LOSS OF USE) CAUSED BY OR ARISING OUT OF ANY BREACH OF THIS CONTRACT, OR THE BREACH OF ANY COMMON LAW DUTY, OR THE VIOLATION OF ANY STATUTE OR REGULATION BY THE CONTRACTOR PARTIES IN CONNECTION WITH THE PERFORMANCE (OR NON-PERFORMANCE) OF THE WORK, IN EACH INSTANCE, EVEN IF DUE IN PART TO THE NEGLIGENCE, BREACH OF CONTRACT, BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR OTHER FAULT OF AN INDEMNIFIED PARTY, PROVIDED, HOWEVER, THAT CONTRACTOR'S OBLIGATION OF INDEMNIFICATION SHALL NOT EXTEND TO THE PERCENTAGE OF DAMAGES, INJURIES, EXPENSES, DEMANDS, CLAIMS, CAUSES OF ACTION, JUDGMENTS, LIABILITIES, COSTS AND FEES CAUSED BY THE INDEMNIFIED PARTIES.

THIS INDEMNITY AGREEMENT IS INTENDED TO MEET THE TEXAS "EXPRESS NEGLIGENCE RULE" BECAUSE CONTRACTOR AGREES THAT IT APPLIES AND IS ENFORCEABLE EVEN AS TO LOSSES, DAMAGES, INJURIES, EXPENSES, CLAIMS, CAUSES OF ACTION, JUDGMENTS OR LIABILITIES JOINTLY OR CONCURRENTLY CAUSED BY THE NEGLIGENCE OR OTHER FAULT OF THE INDEMNIFIED PARTIES. THE TERM "FAULT" IN THE PREVIOUS SENTENCE INCLUDES THE VIOLATION OR BREACH BY THE INDEMNIFIED PARTIES OF ANY COMMON LAW DUTY, ANY TERM OF THIS CONTRACT, OR ANY STATUTE OR REGULATION.

NOTWITHSTANDING THE FOREGOING, THE CONTRACTOR ASSUMES NO RESPONSIBILITY FOR THE TIMELY DELIVERY AND ADEQUACY, ACCURACY AND/OR SUFFICIENCY OF THE PLANS, SPECIFICATIONS, OR DRAWINGS PRODUCED BY FBCTRA'S ENGINEERS, AND IT SHALL NOT BE LIABLE TO THE FBCTRA FOR DAMAGES RESULTING FROM ERRORS, INCONSISTENCIES OR OMISSIONS IN SUCH PLANS, SPECIFICATIONS, OR DRAWINGS.

THIS INDEMNIFICATION OBLIGATION SHALL NOT BE LIMITED IN ANY WAY BY ANY OTHER PROVISION OF THIS CONTRACT OR BY ANY LIMITATIONS ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR THE CONTRACTOR PARTIES UNDER WORKERS' COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFITS ACTS.

THIS INDEMNIFICATION OBLIGATION IS IN ADDITION TO ALL OTHER LEGAL, EQUITABLE, OR INDEMNIFICATION REMEDIES AVAILABLE TO THE

INDEMNIFIED PARTIES. THIS INDEMNIFICATION OBLIGATION SURVIVES THE TERMINATION OR EXPIRATION OF THIS CONTRACT.

CONTRACTOR DOES HEREBY WAIVE, RELEASE AND FOREVER RELINQUISH AND DISCHARGE AUTHORITY FROM ALL OF CONTRACTOR'S CAUSES OF ACTION ARISING FROM BODILY INJURY OR DEATH OR DAMAGE TO ANY PROPERTY ARISING OUT OF THE WORK, REGARDLESS OF WHETHER THE INJURY OR DAMAGE IS CAUSED IN FULL OR IN PART BY THE NEGLIGENCE OR OTHER FAULT OF THE INDEMNIFIED PARTIES.

In the event that any statute, rule of law or equitable principle should be held applicable to any indemnity clause contained in this Contract in favor of one or more of the Indemnified Parties which would render void, voidable, or unenforceable any such indemnity clause as to any party by reason of any provisions contained therein, then and in only such event, such indemnity clause shall be deemed modified and read, construed and enforced as to such party with respect to the provisions held to violate the statute, rule of law or equitable principle to require indemnity by Contractor of the Indemnified Parties to the fullest extent required by such indemnity provision modified and limited only to the degree or extent necessary to bring such indemnity into compliance with such statute, rule of law or equitable principle, but otherwise, the indemnity shall remain in full force and effect and binding upon the parties hereto.

Each party hereto agrees and covenants that it will not contest the validity or enforceability of any indemnity or exculpatory provision of this Contract on the basis that the party has no notice or knowledge of such provision or that the provision is not "conspicuous."

If other provisions contain any indemnities or limitations, such indemnities shall be deemed to be cumulative of and to operate independently of the indemnities provided herein to the end that all indemnities provided in the Contract shall be construed to grant indemnity to the Indemnified Parties to the fullest extent of each such indemnity.

Contractor shall include in each of its subcontracts with its subcontractors of every tier provisions the same as in all material respects those contained herein. Such provisions shall be for the benefit of and in favor of the Indemnified Parties and such other parties on whom Contractor and such subcontractors may agree.

Special Provision to Item 007 Legal Relations and Responsibilities



Item 7, "Legal Relations and Responsibilities," of the Standard Specifications is amended with respect to the clauses cited below.

Section 2.6., "Barricades, Signs, and Traffic Handling," the first paragraph is voided and replaced by the following:

2.6. **Barricades, Signs, and Traffic Handling.** Comply with the requirements of Item 502 "Barricades, Signs, and Traffic Handling," and as directed. Provide traffic control devices that conform to the details shown on the plans, the TMUTCD, and the Department's Compliant Work Zone Traffic Control Device List maintained by the Traffic Safety Division. When authorized or directed, provide additional signs or traffic control devices not required by the plans.

Section 2.6.1., "Contractor Responsible Person and Alternative," is voided and replaced by the following:

2.6.1. Contractor Responsible Person and Alternative. Designate in writing, a Contractor's Responsible Person (CRP) and an alternate to be the representative of the Contractor who is responsible for taking or directing corrective measures regarding the traffic control. The CRP or alternate must be accessible by phone 24 hr. per day and able to respond when notified. The CRP and alternate must comply with the requirements of Section 2.6.5., "Training."

Section 2.6.2, "Flaggers," the first paragraph is voided and replaced by the following:

2.6.2. Flaggers. Designate in writing, a flagger instructor who will serve as a flagging supervisor and is responsible for training and assuring that all flaggers are qualified to perform flagging duties. Certify to the Engineer that all flaggers will be trained and make available upon request a list of flaggers trained to perform flagging duties.

Section 2.6.5, "Training," is voided and replaced by the following:

2.6.5. **Training.** Train workers involved with the traffic control using Department-approved training as shown on the "Traffic Control Training" Material Producer List.

Coordinate enrollment, pay associated fees, and successfully complete Department-approved training or Contractor-developed training. Training is valid for the period prescribed by the provider. Except for law enforcement personnel training, refresher training is required every 4 yr. from the date of completion unless otherwise specified by the course provider. The Engineer may require training at a frequency instead of the period prescribed based on the Department's needs. Training and associated fees will not be measured or paid for directly but are considered subsidiary to pertinent Items.

Certify to the Engineer that workers involved in traffic control and other work zone personnel have been trained and make available upon request a copy of the certification of completion to the Engineer. Ensure the following is included in the certification of completion:

- name of provider and course title,
- name of participant,
- date of completion, and
- date of expiration.

Where Contractor-developed training or a Department-approved training course does not produce a certification, maintain a log of attendees. Make the log available upon request. Ensure the log is legible and includes the following:

- printed name and signature of participant,
- mame and title of trainer, and
- date of training.
- 2.6.5.1. Contractor-developed Training. Develop and deliver Contractor-developed training meeting the minimum requirements established by the Department. The outline for this training must be submitted to the Engineer for approval at the preconstruction meeting. The CRP or designated alternate may deliver the training instead of the Department-approved training. The work performed and materials furnished to develop and deliver the training will not be measured or paid for directly but will be considered subsidiary to pertinent ltems.
- 2.6.5.1.1. Flagger Training Minimum Requirements. A Contractor's certified flagging instructor is permitted to train other flaggers.
- 2.6.5.1.2. Optional Contractor-developed Training for Other Work Zone Personnel. For other work zone personnel, the Contractor may provide training meeting the curriculum shown below instead of Department-approved training.

Minimum curriculum for Contractor-provided training is as follows:

Contractor-developed training must provide information on the use of personnel protection equipment, occupational hazards and health risks, and other pertinent topics related to traffic management. The type and amount of training will depend on the job duties and responsibilities. Develop training applicable to the work being performed. Develop training to include the following topics.

- The Life You Save May Be Your Own (or other similar company safety motto).
- Purpose of the training.
 - It's the Law.
 - To make work zones safer for workers and motorist.
 - To understand what is needed for traffic control.
 - To save lives including your own.
- Personal and Co-Worker Safety.
 - High Visibility Safety Apparel. Discuss compliant requirements; inspect regularly for fading and
 reduced reflective properties; if night operations are required, discuss the additional and
 appropriate required apparel in addition to special night work risks; if moving operations are
 underway, discuss appropriate safety measures specific to the situation and traffic control plan.
 - Blind Areas. A blind area is the area around a vehicle or piece of construction equipment not
 visible to the operators, either by line of sight or indirectly by mirrors. Discuss the "Circle of Safety"
 around equipment and vehicles; use of spotters; maintain eye contact with equipment operators;
 and use of hand signals.
 - Runovers and Backovers. Remain alert at all times; keep a safe distance from traffic; avoid turning your back to traffic and if you must then use a spotter; and stay behind protective barriers, whenever possible. Note: It is not safe to sit on or lean against a concrete barrier, these barriers can deflect four plus feet when struck by a vehicle.
 - Look out for each other, warn co-workers.
 - Be courteous to motorists.
 - Do not run across active roadways.
 - Workers must obey traffic laws and drive courteously while operating vehicles in the work zones.
 - Workers must be made aware of company distracted driving policies.
- Night Time Operations. Focus should be placed on projects with a nighttime element.

- Traffic Control Training. Basics of Traffic Control.
 - Identify work zone traffic control supervisor and other appropriate persons to report issues to when they arise.
 - Emphasize that work zone traffic control devices must be in clean and in undamaged condition. If devices have been hit but not damaged, put back in their correct place and report to traffic control supervisor. If devices have been damaged, replace with new one and report to traffic control supervisor. If devices are dirty, faded or have missing or damaged reflective tape clean or replace and report to traffic control supervisor. Show examples of non-acceptable device conditions. Discuss various types of traffic control devices to be used and where spacing requirements can be found.
 - Channelizing Devices and Barricades with Slanted Stripes. Stripes are to slant in the direction
 you want traffic to stay or move to; demonstrate this with a device.
 - Traffic Queuing. Workers must be made aware of traffic queuing and the dangers created by it. Workers must be instructed to immediately notify the traffic control supervisor and other supervisory personnel if traffic is queuing beyond advance warning sign and devices or construction limits.
 - Signs. Signs must be straight and not leaning. Report problems to the traffic control supervisor or other as designated for immediate repair. Covered signs must be fully covered. If covers are damaged or out of place, report to traffic control supervisor or other as designated.

3 - 3 11-20 Statewide

FORT BEND COUNTY TOLL ROAD AUTHORITY SPECIAL PROVISION TO ITEM 8 PROSECUTION AND PROGRESS

Item 8, "Prosecution and Progress," of the Texas Department of Transportation Standard Specifications is hereby amended with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Section 1, "Prosecution of Work," is revised by removing the first sentence and replacing as follows:

Prior to beginning construction operations, a preconstruction conference between the Contractor and the Engineer will be conducted. Prior to the preconstruction conference, The Contractor shall submit to the Engineer a preliminary CPM progress schedule which details the first 100 days of the contract in accordance with the requirements of Article 5.2., Progress Schedule. Within 30 calendar days following the preconstruction conference, the contractor shall submit the final version of the Contract Schedule. If the contractor fails to submit the initial schedule within the 30 days, the Engineer may withhold \$1,000 per day until an initial (baseline) schedule that complies with the specifications is submitted. The engineer will review the schedule within 7 days, and determine if the schedule is acceptable. If the schedule is not acceptable, the contractor will have 7 days to make the necessary changes. If the contractor fails to submit the revised and corrected initial schedule within the 30 days, the Engineer may withhold \$1,000 per day until an initial schedule that complies with the specifications is submitted.

Section 3, "Computation of Contract Time for Completion," is revised to read in its entirety as follows:

Time is of the essence of this Contract. All references to days are references to calendar days unless expressly stated otherwise. Calculation of Contract Time will commence on the Notice to Proceed date and run continuously for the duration of the contract.

The Contractor must achieve Substantial Completion within the contract duration specified.

The Contractor must achieve Final Completion no more than the number of days specified by the Engineer from the date of Substantial Completion.

Work shall begin on the date fixed in the Contract requisition. It shall be prosecuted regularly and without interruption until completion. The entire work shall be finished and fully completed to the satisfaction of the Engineer by **FINAL COMPLETION.**

Article 5.2., "Progress Schedule," is voided and replaced in its entirety as follows:

The Contractor must furnish a Critical Path Method schedule. Each schedule submittal must be accompanied by an electronic backup copy of the schedule. Schedules must be submitted at least monthly and must accompany each pay application. The schedule shall include all planned work activities and sequences. The initial schedule must utilize all of the contract time allowed in the contract. The schedule should incorporate major material procurements including preparation of shop drawings, submittals, fabrication and delivery of long lead items, known utility relocations, and other activities that may affect the completion of the Contract in the progress schedule. Each activity will be assigned a dollar value, the sum of which shall be equal to the adjusted contract value. The schedule activities must generally have durations shorter than one month and the work divided into discrete increments to allow easy identification of the specific task and simplify the updating process.

The Contractor may use Phoenix CPM Scheduling Software or Primavera P6. Schedules prepared and submitted in any other format will not be accepted.

The Engineer may require the Contractor to develop more detailed schedules for certain phases of the project such as major traffic changes, work requiring lane closures, or recovery schedules if the project falls behind schedule etc.

The contractor must provide a person proficient in CPM analysis to create and maintain the project schedule and be available when requested to meet with the Owner's Representative.

The CPM schedule must generally comply with construction industry standards as presented in "CPM in Construction" by James J. O'Brien or the AGC Guide to "Construction Planning and Scheduling". The schedule must have a clearly identifiable Critical Path. The Critical Path is defined as the longest path. It is the Fort Bend County Toll Road Authority's (the Authority) intention to conduct regular schedule update and review meetings with the Contractor to identify potential conflicts and opportunities on the project. The schedules submitted throughout the project will be essential elements in any delay claim.

Article 5.3., "Schedule Format," is replaced to read in its entirety as follows:

The project schedule shall include but is not limited to the following:

- Begin the project schedule on the start date of contract time or start of compensable work on the project, whichever occurs first;
- Show the sequence and interdependence of activities required for complete performance of the work;
- Ensure all work sequences are logical and show a coordinated plan of the work;
- Show a predecessor and successor for each activity
- Clearly and accurately identify the critical path as the longest continuous path

- Provide a legend for all abbreviations and include the schedule filename, run date, data date, project start date, and project completion date in the title block of each schedule submittal;
- Through the use of calendars, incorporate seasonal weather conditions into the schedule for work (e.g., earthwork, concrete paving, structures, asphalt, drainage, etc.) that may be influenced by temperature or precipitation. Also, incorporate non work periods such as holidays, weekends, or other non-work days as identified in the Contract;
- No constraints or negative lags will be allowed.
- Show submittal and procurement periods.

Article 5.4., "Activity Format," is replaced to read in its entirety as follows:

For each activity on the project schedule provide:

- A logical activity number utilizing an alphanumeric designation system tied to the sequence of work and traffic control plans;
- A concise description of the work represented by the activity;
- An activity duration in days;
- The estimated quantity of work;
- Plan and incorporate resources, such as crews and heavy equipment, for each activity. Accurately represent the planned labor and equipment hours necessary to achieve the estimated productivity rates;
- Code the activities so that organized plots of the schedule may be produced:

Article 5.5.1., "Bar Chart," is voided in its entirety.

Article 5.5.1.1., "Progress Schedule Reviews," is voided in its entirety.

Article 5.5.2.1., "Preliminary Schedule," is voided in its entirety.

Article 5.5.2.2., "Baseline Schedule," is voided in its entirety.

Article 5.5.2.2.1., "Review," is voided in its entirety.

Article 5.5.2.3., "Progress Schedule," is revised by removing the last two paragraphs and replacing as follows:

The cut-off day for recording monthly progress will be established by the Project Engineer. Submit the updated schedule no later than the 1st work day of the following month.

A monthly update narrative will be included in the monthly schedule update. This narrative should include but is not limited to the following:

- The status of the project completion date, listing reasons why any change may have occurred;
- List all activities that have been added, deleted, or otherwise changed in the schedule with explanations for the modifications and description of the impacts each has on the project schedule;
- Any revisions that may have been performed to the schedule, providing the purpose
 of the revision and description of the impact to the project critical path and
 completion dates; and
- The status of the critical path, explaining reasons for any changes in critical path, impacts to the critical path that occurred during the period represented, or identifying any potential impacts that may occur in the next 3 months, including but not limited to material deliveries, utility and right way clearances, or other potential impacts.

No direct compensation will be made for fulfilling these requirements, as this work is considered subsidiary to the Item 500-2001, Mobilization. If the contractor does not submit the monthly schedule update by the 1st workday of the following month, the Engineer may withhold \$1,000 per day until an updated schedule that complies with the specifications is submitted.

Any amounts withheld by the Engineer for failure to comply with any part of Section 5, Project Schedules, may be deducted from the Contract Amount by the Engineer at his discretion.

Article 5.5.3., "Notice of Potential Time Impact," is revised to read in its entirety as follows:

Control of the contract duration, completion date, and contract amount are essential elements of this contract and shall only be adjusted in writing by Change Order. A Change Order amending the contract duration and the contract completion date or the contract amount shall only be considered after the Contractor has made such a request in a timely manner accompanied by proper documentation supporting such a request. The contract duration, completion date, and amount may not be adjusted by any other means.

Reasons for adjustment. The Engineer will consider adjustment of the contract duration, completion date, and contract amount for any changed condition or event which in the sole opinion of the Engineer is beyond the control of the Contractor; could not have been reasonably foreseen; and impacts the longest path on the properly prepared and submitted CPM schedule for the project.

Longest Path. Extensions of time will be granted only to the extent the changed conditions impact the longest path of the properly prepared CPM schedule. No extension of time will be granted for any change that does not impact the longest path, nor will any extension of time be granted for that portion of any delay event that is absorbed by float within the schedule.

Delays affecting activities not on the longest path by definition can not affect the completion date of the project and will not be considered as a reason to adjust the contract duration or the contract completion date but may be considered for cost impacts. In cases of non-critical delays the Contractor must provide timely documentation of the condition giving rise to the non-critical delay and documentation on the how the delay is causing the cost impact. All notice requirements contained in this provision pertain equally to critical as well as non-critical impacts without exception.

Timely notice of any impact is an essential element of this contract. The Contractor must provide the Engineer with notice of any delay which may impact the project completion date or impact cost within 7 calendar days from the commencement of the delay, or 7 calendar days from the date the Contractor should have reasonably been aware of the delay. Initial notice of the delay must be in writing and must generally describe the event or condition causing the delay and must specifically identify the schedule activities by activity ID and description which are being impacted, and generally the types and amounts of cost per day being incurred. The Contractor's initial notice shall also provide a brief explanation of why an alternative construction sequence eliminating or minimizing the delay is not possible or practical. This initial notice may be a letter containing all of the elements described above. The Engineer may request an immediate schedule review meeting with the Contractor upon notice of any delay to review the current CPM schedule and consider all possible alternatives.

FAILURE TO PROVIDE WRITTEN NOTICE WITHIN 7 CALENDAR DAYS OF THE COMMENCEMENT OF ANY DELAY MAY RESULT IN THE DENIAL OF ANY REQUEST FOR AN ADJUSTMENT TO THE CONTRACT DURATION, COMPLETION DATE, OR CONTRACT AMOUNT RESULTING FROM THAT DELAY.

Article 5.5.4., "Time Impact Analysis," is revised to read in its entirety as follows:

The Impact of the Delay will be evaluated using the Time Impact Analysis method. A Time Impact Analysis consists of the following steps:

Step 1. Establish the status of the project immediately prior to the delay event or impact, or as near as practical prior to the commencement of the delay.

Step 2. Using the schedule produced in Step 1, add an activity to the schedule for the delay event with an estimated duration, or the actual duration of the delay event in the case of delay which has ended. Logically connect the added activity representing the delay event to the appropriate predecessor and successor activities to determine the impact to the completion date.

Step 3. Track the effects of the impact on the schedule during the occurrence by progressing the schedule monthly including the delay activity included in Step 2.

Step 4. Immediately after the conclusion of the delay event, or as near as practical after the delay event has ended, establish the status of the project and provide details identifying any mitigating actions or circumstances used to keep the project ongoing during the impact period.

Submit Step 1 and 2 with the Notice of Potential Time Impact. Incorporate Step 3 into schedule updates until impact is complete. Submit Step 4 with the Final Documentation, no later than 10 days after the completion of the impact.

Determine the time impact by comparing the status of the work prior to the impact (Step 1) to the prediction of the effect of the impact (Step 2), and to the actual effects of the impact once it is complete (step 4). All four steps of the Time Impact Analysis shall be completed before consideration of a Contract time extension or adjustment of milestone date will be provided.

Final Documentation. After the delay event or condition has ended the Contractor has 10 days to prepare and submit the final documentation of the impact of the delay including all cost impacts. An additional 30 days to prepare the final statement of impacts may be granted by the Engineer if requested by the Contractor in writing prior to the conclusion of the initial 10 day period. This documentation shall include a concise Time Impact Analysis Statement prepared using the submitted CPM schedules and a statement of all additional costs incurred as a result of the delay event or condition with backup documentation to support the claimed cost.

FAILURE TO PROVIDE WRITTEN DOCUMENTATION OF THE TIME AND COST IMPACT OF ANY DELAY WITHIN 10 DAYS OF THE CONCLUSION OF ANY DELAY MAY RESULT IN THE SUBSEQUENT DENIAL OF ANY REQUEST FOR AN ADJUSTMENT TO THE CONTRACT COMPLETION DATE OR COST IMPACTS.

Section 6, "Failure to Complete Work on Time," is revised to read in its entirety as follows:

Failing to achieve Final Completion within the days specified by the Engineer the Contractor will be assessed liquidated damages of \$ 620 per day which will be withheld from any amount owed the Contractor. If the amount owed the Contractor is insufficient to withhold the amount, the Contractor shall pay the difference to the Authority.

The Engineer may waive the collection of liquidated damages if the Work in its entirety, or any portion of the Work for which a date of completion is stipulated, has been substantially completed within the prescribed time of completion therefore.

If the Contractor fails to complete the Work within the time fixed by the Contract, or extensions thereof, and if the Engineer shall, nevertheless, permit the Contractor to continue and complete same, such permission shall neither modify nor waive any liability of the Contractor for damages arising from non-completion of the Work within the said time, but all such liabilities shall continue in full force against the Contractor

END OF SPECIAL PROVISION

Special Provision to Item 8 Prosecution and Progress



Item 8, "Prosecution and Progress" of the Standard Specification is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 8.2., "Subcontracting," is supplemented by the following paragraph, which is added as paragraph six to this article:

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is not registered in the Department of Homeland Security's (DHS) E-Verify system. Require that all subcontractors working on the project register and require that all subcontractors remain active in the DHS E-Verify system until their work is complete on the project.

Special Provision to Item 8 Prosecution and Progress



Item 8, "Prosecution and Progress" of the Standard Specifications is amended with respect to the clause cited below. No other clauses or requirements of this Item are waived or changed.

Article 8.7.2., "Wrongful Default," is revised and replaced by the following:

If it is determined after the Contractor is declared in default, that the Contractor was not in default, the rights and obligations of all parties will be the same as if termination had been issued for the convenience of the public as provided in Article 8.8 "Termination of Contract."

Special Provision to Item 8 Prosecution and Progress



Item 8, "Prosecution and Progress," of the Standard Specifications, is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 8.6., "Failure to Complete Work on Time," is supplemented by the following:

8.6.1. Lane Closure Assessment Fees.

Monetary assessment, as shown on the plans, will be made against the Contractor for any lane closure or obstruction that overlaps into the peak hour traffic for each time increment defined on the plans or portion thereof, per lane, regardless of the length of lane closure or obstruction.

- **8.6.1.1. Definition of Terms.** For this Contract, the following definitions apply:
- **Time increment.** Any continuous defined increment of time period or portion thereof for a period beginning at that point when lanes are closed or obstructed by the Contractor's operations.
- **8.6.1.1.2. Assessment Fee.** The amount shown on the proposal for each defined time increment, representing the average cost of interference and inconvenience to the road user for each lane closed or obstructed during peak hour traffic. The Engineer may allow a proportional fee assessment for closures that do not involve an entire defined time increment.
- **8.6.1.1.3. Closure or Obstruction.** When the Contractor's operations result in a reduced lane width of the travel way or shoulder less than that specified on the plan documents.
- **8.6.1.1.4. Peak Hour Traffic Times.** Schedule of days and times described in the General Notes, when lane closures or obstructions are not allowed.
- **8.6.1.2.**Fee Calculation and Collection. The assessment fee will be deducted from the amount due to the Contractor on the monthly construction estimate, and thus retained by the Department. The Engineer will determine the time of overlap of lane closures or obstructions for calculating the assessment fee. The assessment fee is based on road user costs and is assessed not as a penalty, but for added expense incurred by the traveling public.

FORT BEND COUNTY TOLL ROAD AUTHORITY SPECIAL PROVISION TO ITEM 9

MEASUREMENT AND PAYMENT

Item 9, "Measurement and Payment," of the Texas Department of Transportation Standard Specifications is hereby amended with respect to the clauses cited below. No other clauses or requirements are waived or changed.

Section 8, "Retainage," is voided and replaced in its entirety as follows:

The Authority will withhold 5.0 percent retainage from the total amount approved for payment until the completion and final acceptance. The Contractor may withhold retainage on subcontractors in accordance with state and federal regulations.

The retainage will be released after all submittals are received and final quantities have been determined.

Article 9.7.1.1., "Labor," is voided and replaced in its entirety as follows:

The Contractor will receive an additional 15% as compensation based on the total wages paid said laborers and foremen. For cost of premiums on public-liability and workers compensation insurance, social security and unemployment insurance taxes, an amount equal to 55 percent of the sum of the labor cost, excluding the 15 percent compensation provided above, will be paid to the Contractor.

Article 9.7.1.3., "Materials," is voided and replaced in its entirety as follows:

The Contractor will receive the actual cost, including freight charges, of the materials used on such work to which cost will be added a sum equal to 15 percent thereof as compensation.

Section 10, "Final Payment," is supplemented by the following:

The Contractor shall after completion of his contract submit his final estimate for quantities installed during the construction period and the value thereof at the Contract unit prices.

The Engineer shall approve and submit the final estimate to the Commissioners' Court and the County shall at such time or within thirty (30) days from and after the date of said estimate as the County may elect, pay the entire sum so found to be due after audit and approval by the County Auditor, after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the Contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment. It is mutually agreed between the parties to the Contract that no estimate or payment made under the Contract, except the final payment, shall exclude any claim of the County or shall constitute conclusive evidence of acceptable performance of the Contract either wholly or in part by the County; and no payments shall be construed to be an acceptance of any defective work or improper materials, or

a release from any claims for damages. The Contractor hereby further agrees that the payment of the final amount due under the Contract and adjustment and payment of the bill rendered for any work done in accordance with any alterations to the Contract on a Change In Contract form shall release the County and the Engineer from any and all claims or liability on account of work performed under the Contract or alterations thereof. The Contractor agrees to examine the final estimate and, if he finds it correct, to execute thereon his release in full of all claims due by Fort Bend County, and to certify under oath to the payment by him of all claims against him for labor, materials, and supplies furnished by the Contractor by all persons and firms in the performance of the Contract.

Section 11, "Electronic Wire Transfers," is added as follows:

If the Contractor requests in writing to the Engineer, the Authority will make payments via electronic wire transfer.

Special Provision to Item 502 Barricades, Signs and Traffic Handling



Item 502, "Barricades, Signs and Traffic Handling" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 502.1., "Description," is supplemented by the following:

Temporary work-zone (TWZ) traffic control devices manufactured after December 31, 2019, must have been successfully tested to the crashworthiness requirements of the 2016 edition of the Manual for Assessing Safety Hardware (MASH). Such devices manufactured on or before this date and successfully tested to NCHRP Report 350 or the 2009 edition of MASH may continue to be used throughout their normal service lives. An exception to the manufacture date applies when, based on the project's date of letting, a category of MASH-2016 compliant TWZ traffic control devices are not approved, or are not self-certified after the December 31, 2019, date. In such case, devices that meet NCHRP-350 or MASH-2009 may be used regardless of the manufacture date.

Such TWZ traffic control devices include: portable sign supports, barricades, portable traffic barriers designated exclusively for use in temporary work zones, crash cushions designated exclusively for use in temporary work zones, longitudinal channelizers, truck and trailer mounted attenuators. Category I Devices (i.e., lightweight devices) such as cones, tubular markers and drums without lights or signs attached however, may be self-certified by the vendor or provider, with documentation provided to Department or as are shown on Department's Compliant Work Zone Traffic Control Device List.

Article 502.4., "Payment," is supplemented by the following:

Truck mounted attenuators and trailer attenuators will be paid for under Special Specification, "Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)." Portable Changeable Message Signs will be paid for under Special Specification, "Portable Changeable Message Sign." Portable Traffic Signals will be paid for under Special Specification, "Portable Traffic Signals."

Special Provision to Item 636 Signs



Item 636, "Signs" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Section 636.3.1, "Fabrication." is deleted.

Section 636.3.1.2, "Sheeting Application." The last sentence of the fourth paragraph is voided and replaced by the following.

Do not splice sheeting or overlay films for signs fabricated with ink or with colored transparent films.

Special Provision to Special Specification 6185 Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)



Item 6185, "Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 4. "Measurement", is voided and replaced by the following:

- 4.1. **Truck Mounted Attenuator/Trailer Attenuator (Stationary).** This Item will be measured by the day. TMA/TAs must be set up in a work area and operational before a calendar day can be considered measureable. A day will be measured for each TMA/TA set up and operational on the worksite.
- 4.2. Truck Mounted Attenuator/Trailer Attenuator (Mobile Operation). This Item will be measured by the hour or by the day. The time begins once the TMA/TA is ready for operation at the predetermined site and stops when notified by the Engineer. When measurement by the hour is specified, a minimum of 4 hr. will be paid each day for each operating TMA/TA used in a mobile operation. When measurement by the day is specified, a day will be measured for each TMA/TA set up and operational on the worksite.

Special Provision to Special Specification 6227 Solar Powered Light Emitting Diode (LED) Roadside Sign



Item 6227, "Solar Powered Light Emitting Diode (LED) Roadside Sign" of the Special Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 2. "Materials". The lastparagraphis voided and replaced by the following:

Provide LEDs thathave dimming capabilities and automatically adjust flash brightness to varying light conditions. LEDs will be rated to operate at least 100,000 hr. Providesolar panels and batteries sized to allow the system to work 24 hours a day, 7 days a week. Batteries must have a 3 yr. lifespan while operating 24 hr. per day. Provide solar panel and batteries system integrated in the same enclosure. Batteries must be field replaceable. Dimension must not exceed 17 x 15 x 4 in. Must include aluminum mounting bracket. Solar panel, battery and mounting hardware must with stand wind load rating up to 110 mph. Solar Panel, battery system must be configurable to operate 24/7 or from dusk to dawn. Solar panel and batteries must be installed on existing or proposed standard sign pole as shown on the plans and as per manufacturer's recommendations.

Special Specification 6001 Portable Changeable Message Sign



DESCRIPTION

Furnish, operate, and maintain portable trailer mounted changeable message sign (PCMS) units.

MATERIALS

Furnish new or used material in accordance with the requirements of this Item and the details shown on the plans. Provide a self-contained PCMS unit with the following:

- Sign controller
- Changeable Message Sign
- Trailer
- Power source

Paint the exterior surfaces of the power supply housing, supports, trailer, and sign with Federal Orange No. 22246 or Federal Yellow No. 13538 of Federal Standard 595C, except paint the sign face assembly flat black.

- 2.1. Sign Controller. Provide a controller with permanent storage of a minimum of 75 pre-programmed messages. Provide an external input device for random programming and storage of a minimum of 75 additional messages. Provide a controller capable of displaying up to 3 messages sequentially. Provide a controller with adjustable display rates. Enclose sign controller equipment in a lockable enclosure.
- 2.2. Changeable Message Sign. Provide a sign capable of being elevated to at least 7 ft. above the roadway surface from the bottom of the sign. Provide a sign capable of being rotated 360° and secured against movement in any position.

Provide a sign with 3 separate lines of text and 8 characters per line minimum. Provide a minimum 18 in. character height. Provide a 5×7 character pixel matrix. Provide a message legibility distance of 600 ft. for nighttime conditions and 800 ft. for normal daylight conditions. Provide for manual and automatic dimming light sources.

The following are descriptions for 3 screen types of PCMS:

- Character Modular Matrix. This screen type comprises of character blocks.
- **Continuous Line Matrix.** This screen type uses proportionally spaced fonts for each line of text.
- Full Matrix. This screen type uses proportionally spaced fonts, varies the height of characters, and displays simple graphics on the entire sign.
- 2.3. **Trailer**. Provide a 2 wheel trailer with square top fenders, 4 leveling jacks, and trailer lights. Do not exceed an overall trailer width of 96 in. Shock mount the electronics and sign assembly.
- 2.4. Power Source. Provide a diesel generator, solar powered power source, or both. Provide a backup power source as necessary.
- 2.5. Cellular Telephone. When shown on the plans, provide a cellular telephone connection to communicate with the PCMS unit remotely.

CONSTRUCTION

Place or relocate PCMS units as shown on the plans or as directed. The plans will show the number of PCMS units needed, for how many days, and for which construction phases.

Maintain the PCMS units in good working condition. Repair damaged or malfunctioning PCMS units as soon as possible. PCMS units will remain the property of the Contractor.

MEASUREMENT

This Item will be measured by each PCMS or by the day used. All PCMS units must be set up on a work area and operational before a calendar day can be considered measurable. When measurement by the day is specified, a day will be measured for each PCMS set up and operational on the worksite.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Portable Changeable Message Sign." This price is full compensation for PCMS units; set up; relocating; removing; replacement parts; batteries (when required); fuel, oil, and oil filters (when required); cellular telephone charges (when required); software; and equipment, materials, tools, labor, and incidentals.

Special Specification 6053 Shifting or Removing Existing Overhead Signs



DESCRIPTION

Shift or remove existing overhead sign panels

MATERIALS

Reuse existing sign panel materials as shown on the plans. When required, provide new materials that comply with the details shown on the plans, the requirements of this Item, and the pertinent requirements of the following:

- Item 636, "Signs"
- Item 654, "Sign Walkways"

CONSTRUCTION

Shift or remove signs on structures as shown on the plans or as directed. Remove and store shifted signs as necessary. Prevent damage to sign components. Reuse existing attachment hardware as directed. Cut sign support brackets, if necessary; however, do not extend or lengthen existing brackets. Furnish additional sign attachment hardware, support brackets, etc., as directed. Adjust or add support brackets and appurtenances such as sign lights, walkways, conduit, etc., as shown on the plans.

Handle and store signs to prevent damage to sign corners, edges, and faces. Store signs off the ground and in a vertical position. Store signs 60 in. × 60 in. or smaller in a weatherproof building. Larger signs may be stored outside. Damage to the sign face that is not visible when viewed at a distance of 50 ft., night or day, will be acceptable. Replace unacceptable signs and components.

Stockpile removed sign components for reuse or that become property of the Department at a designated locations. Accept ownership of unsalvageable materials and dispose of in accordance with federal, state, and local regulations.

After installation, wash signs with a biodegradable cleaning solution acceptable to the manufacturers of the sheeting, colored transparent film, and screen ink to remove grease, oil, dirt, smears, streaks, finger marks, and other foreign material.

MEASUREMENT

This Item will be measured by each sign panel shifted or removed.

PAYMENT

The work performed and materials furnished as accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Shift Overhead Sign Panels" or "Remove Overhead Sign Panels." This price is full compensation for shifting, reinstalling, or removing the existing sign panels; furnishing and installing new mounting hardware; furnishing and installing new sign panels, when required; cleaning sign panels; storing of components to be reused or salvaged; disposal of unsalvageable material; and equipment, labor, tools, and incidentals.

Special Specification 6185



Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

1. DESCRIPTION

Furnish, operate, maintain and remove upon completion of work, Truck Mounted Attenuator (TMA) or Trailer Attenuator (TA).

2. MATERIALS

Furnish, operate and maintain new or used TMAs or TAs. Assure used attenuators are in good working condition and are approved for use. A list of approved TMA/TA units can be found in the Department's Compliant Work Zone Traffic Control Devices List. The host vehicle for the TMA and TA must weigh a minimum of 19,000 lbs. Host vehicles may be ballasted to achieve the required weight. Any weight added to the host vehicle must be properly attached or contained within it so that it does not present a hazard and that proper energy dissipation occurs if the attenuator is impacted from behind by a large truck. The weight of a TA will not be considered in the weight of the host vehicle but the weight of a TMA may be included in the weight of the host vehicle. Upon request, provide either a manufacturer's curb weight or a certified scales weight ticket to the Engineer.

CONSTRUCTION

Place or relocate TMA/TAs as shown on the plans or as directed. The plans will show the number of TMA/TAs needed, for how many days or hours, and for which construction phases.

Maintain the TMA/TAs in good working condition. Replace damaged TMA/TAs as soon as possible.

MEASUREMENT

- 4.1. Truck Mounted Attenuator/Trailer Attenuator (Stationary). This Item will be measured by the each or by the day. TMA/TAs must be set up in a work area and operational before a calendar day can be considered measurable. When measurement by the day is specified, a day will be measured for each TMA/TA set up and operational on the worksite.
- 4.2. **Truck Mounted Attenuator/Trailer Attenuator (Mobile Operation).** This Item will be measured by the hour. The time begins once the TMA/TA is ready for operation at the predetermined site and stops when notified by the Engineer. A minimum of 4 hr. will be paid each day for each operating TMA/TA used in a mobile operation.

PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Truck Mounted Attenuators/Trailer Attenuators (Stationary)," or "Truck Mounted Attenuators/Trailer Attenuators (Mobile Operation)." This price is full compensation for furnishing TMA/TA: set up; relocating; removing; operating; fuel; and equipment, materials, tools, labor, and incidentals.

Special Specification 6227 Solar Powered LED Roadside Sign



1. DESCRIPTION

Fabricate, furnish and install solar powered light emitting diode (LED), embedded signs consisting of embedded LED lights placed along the border of the sign, and solar panels and batteries for each sign. This solar LED embedded lights function is to flash in order to enhance the sign to draw the motorist's attention to the message of the roadway sign.

MATERIALS

Furnish and construct materials in accordance with the following:

- Item 636, "Signs,"
- Item 643, "Sign Identification Decals," and
- Item 644, "Small Roadside Sign Supports and Assemblies."

Provide signs that meet TMUTCD. Provide sign substrate that meets Department Material Specification DMS-7110. Provide sign reflective sheeting as shown on the plans and in accordance with Traffic Operations Division's Typical Sign Requirements (TSR) standard sheets. Provide sign with LED lights embedded along the border of the sign. Provide high powered 1 W LEDs wired in a manner that all LEDs continue to flash in the event of failure of an individual LED. Sign must output 550 candelas at daytime peak ensuring sign is daylight visible.

Provide LEDs that have dimming capabilities and automatically adjust flash brightness to varying light conditions. LEDs will be rated to operate at least 100,000 hr. Provide solar panels and batteries sized to allow the system to work 24 hours a day, 7 days a week. Batteries must have a 5 yr. lifespan while operating 24 hr. per day. Batteries must be installed in a box mounted on a pole underneath the solar panel as per manufacturer's recommendations.

CONSTRUCTION

Install signs in accordance to Item 644, "Small Roadside Sign Assemblies."

WARRANTY

The LED lighting system as a whole will have a minimum 2 yr. warranty from the time of installation and acceptance of the system. Manufacturer will ship replacement parts at no cost as required during 2 yr. warranty period, except when installation has been damaged by outside forces.

MEASUREMENT

This Item will be measured by each solar powered LED roadside sign.

PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Solar Powered LED Roadside Sign."

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This price is full compensation for furnishing and installing complete solar powered LED signs including sign connections and all hardware; attaching signs to the supports; washing and cleaning the signs; testing of the LED sign and making adjustments as needed; installing solar panels to ensure optimal recharging of batteries and solar powered batteries to the satisfaction of the Engineer; and all equipment, materials, labor, tools, and incidentals.

The roadside sign assembly (excluding the solar powered LED sign) and foundation will be paid for under Item 644, "Small Roadside Sign Assemblies."

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