

AGREEMENT BETWEEN OWNER AND CONTRACTOR

The Parties to this agreement are:

Owner:

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY,
a political subdivision of the State of Texas.
c/o The Muller Law Group, PLLC
202 Century Square Blvd.
Sugar Land, Texas 77478

Contractor:

Main Lane Industries, Ltd., a Texas limited partnership
14115 Luthe Rd. Suite 100 Houston, TX 77039

THIS AGREEMENT (“Agreement”) is made and entered into this _____ day of _____, 2021, 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:

For the Construction of Entrance and Exit Ramps, U-Turns, and Lane
Consisting of Grading, Concrete Pavement, Lime Treated Subgrade, Cement Treated Base, Storm
Sewer, and Inlets, SW3P, Traffic Control, Signing and Pavement Markings, Illumination, ETC.
(Project No. 126-1002)

Fort Bend Grand Parkway Toll Road from 0.83 Mile south of W. Airport Blvd. to 0.18 Mile East of
Mason Rd.

for Fort Bend Grand Parkway Toll Road Authority,
Fort Bend County, Texas,

according to those particular Plans and Technical Specifications (each as defined below)
prepared by LJA Engineering, Inc. and 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. Construction of Entrance and Exit Ramps, U-Turns, and Lane Widening consisting of Grading, Concrete Pavement, Base, Storm Sewer, SW3P, Traffic Control, Signing and Pavement Markings, Illumination, Etc.

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 **337 calendar days** after the date of the written Notice to Proceed. Although not anticipated, Fort Bend Grand Parkway Toll Road Authority (FBGPTRA) may hold bids for up to sixty (60) days before awarding the contract.

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 Six million, eight hundred thirty-seven thousand, one hundred and sixty dollars and twenty cents (\$6,837,160.20). 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.

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

FORT BEND GRAND PARKWAY
TOLL ROAD AUTHORITY
Owner

By: *Shoukat Dhanani*
Shoukat Dhanani (Oct 6, 2021 13:15 CDT)
Name: Shoukat Dhanani

Title: Board President

Main Lane Industries, Ltd., a Texas limited partnership
By: Main Lane Management, LLC
a Texas limited liability company, its general partner

By: *[Signature]*
Name: Anthony Colombo

Title: President

(The following to be executed if Contractor is a Corporation)

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

Signed: _____

Corporate Seal

EFFECTIVE DATE

THIS AGREEMENT IS EFFECTIVE ON THE DATE IT IS APPROVED BY THE FORT BEND COUNTY COMMISSIONERS COURT, AND IF NOT SO APPROVED SHALL BE NULL AND VOID.

DATE OF COMMISSIONERS COURT APPROVAL: _____
AGENDA ITEM NO.: _____

THIS BID MUST BE SUBMITTED IN A SEALED BID ENVELOPE

SPECIFICATIONS AND BID
FOR
FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY

FORT BEND GRAND PARKWAY TOLL ROAD (SH 99)

From 0.83 Mile South of W. Airport Blvd. to 0.18 Mile East of Mason Rd.
For the Construction of Entrance and Exit Ramps, U-Turn and Lane Widening Consisting
of Grading, Concrete Pavement, Lime Treated Subgrade, Cement Treated Base, Storm Sewer,
and Inlets, SW3P, Traffic Control, Signing and Pavement Markings, Illumination, ETC.
(Project No. 126-1002)

Notice To Bidder: ALL BIDS ARE TO BE SUBMITTED TO:

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
C/O BGE, INC.,
10777 WESTHEIMER, SUITE 400, HOUSTON, TEXAS, 77042
BY 11:00 A.M. ON THURSDAY, MAY 13, 2021.

BIDDER IS REQUIRED TO FILL IN INFORMATION BELOW:

Main Lane Industries, Ltd.

BIDDER (Company Name)

TOTAL AMOUNT OF BID \$ 4,837,140.20

FORT BEND COUNTY, TEXAS

ADDENDUM 4

BID FORM

PROJECT: 126-1002

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMPS, U-TURNS AND LANE WIDENING

<u>Item No.</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
104 6001	REMOVING CONC (PAV)	SY	8,255.00	10.00	= 82550.00
104 6009	REMOVING CONC (RIPRAP)	SY	8.00	30.00	= 240.00
104 6021	REMOVING CONC (CURB)	LF	2,746.00	1.00	= 2746.00
104 6054	REMOVING CONC (CURB AND GUTTER)	LF	94.00	7.00	= 658.00
104 6018	REMOVING STAB BASE AND ASPH PAV (7")	SY	6,141.00	4.00	= 24564.00
110 6001	EXCAVATION (ROADWAY)	CY	19,060.00	8.00	= 152480.00
132 6006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	13,528.00	5.00	= 67640.00
162 6002	BLOCK SODDING	SY	68,742.00	3.00	= 206226.00
166 6001	FERTILIZER	AC	14.21	700.00	= 9947.00
168 6001	VEGETATIVE WATERING	MG	1,717.00	16.00	= 27472.00
260 6012	LIME(HYD,COM OR QK)(SLRY)OR QK(DRY)	TON	439.00	190.00	= 83410.00
260 6079	LIME TRT (SUBGRADE)(6")	SY	32,543.00	3.00	= 97629.00
276 6224	CEM TRT(PLNT MX) (CL N)(TY E) (GR 4)(6")	SY	32,471.00	15.00	= 487065.00
292 6002	ASPHALT STAB BASE (GR 2)(PG 64)	TON	1,787.00	85.00	= 151895.00
360 6135	D-GR HMA(SQ) TY-D SAC-A PG76-22	TON	285.00	95.00	= 27075.00
360 6272	TACK COAT	GAL	409.00	4.00	= 1636.00
348 6002	TBPFC (ASPHALT)(PG 76-22)	TON	140.00	1693.00	= 237020.00 97020.00
354 6021	PLANE ASPH CONC PAV(0" TO 2")	SY	217.00	30.00	= 6510.00
360 6004	CONC PVMT (CONT REINF - CRCP) (10")	SY	16,162.00	70.00	= 1,131,340.00
360 6006	CONC PVMT (CONT REINF - CRCP) (12")	SY	13,244.00	80.00	= 1,059,520.00
360 6066	CONC PVMT (CONT REINF)(FAST TRK)(10")	SY	667.00	90.00	= 60030.00
400 6003	STRUCT EXCAV (PIPE)	CY	49.00	10.00	= 490.00

ADDENDUM 4

BID FORM

PROJECT: 126-1002

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMP, U-TURNS AND LANE WIDENING

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Price
400 6005	CEM STABIL BKFL	CY	1,531.00	40.00	= 61240.00
400 6009	CEMENT STAB BACKFILL (INLET OR MH)	CY	213.00	40.00	= 8520.00
402 6001	TRENCH EXCAVATION PROTECTION	LF	3,158.00	1.00	= 3158.00
416 6015	DRILL SHAFT (NON - REINFORCED) (12 IN)	LF	14.00	115.00	= 1610.00
416 6018	DRILL SHAFT (SIGN MTS) (24 IN)	LF	162.00	170.00	= 27540.00
416 6021	DRILL SHAFT (SIGN MTS) (42 IN)	LF	164.00	375.00	= 61500.00
416 6029	DRILL SHAFT (RDWY ILL POLE) (30 IN)	LF	178.00	200.00	= 35600.00
420 6010	CL A CONC (PLUG)	EA	1.00	500.00	= 500.00
432 6002	RIPRAP (CONC)(5 IN)	CY	7.00	700.00	= 4900.00
432 6006	RIPRAP (CONC)(CL B)	CY	6.65	1400.00	= 9310.00
432 6031	RIPRAP (STONE PROTECTION)(12 IN)	CY	44.00	150.00	= 6600.00
432 6045	RIPRAP (MOW STRIP)(4 IN)	CY	23.00	550.00	= 12650.00
450 6023	RAIL (TY SSTR)	LF	60.00	150.00	= 9000.00
462 6003	CONC BOX CULV (4 FT X 2 FT)	LF	471.00	250.00	= 117750.00
464 6005	RC PIPE (CL III)(24 IN)	LF	2,590.00	75.00	= 194250.00
465 6002	MANH (COMPL)(PRM)(48IN)	EA	6.00	4500.00	= 27000.00
465 6005	JCTBOX(COMPL)(PJB)(3FTX3FT)	EA	1.00	3000.00	= 3000.00
465 6013	INLET (COMPL)(PCO)(3FT)(NONE)	EA	4.00	4000.00	= 16000.00
465 6014	INLET (COMPL)(PCO)(3FT)(LEFT)	EA	1.00	5000.00	= 5000.00
465 6015	INLET (COMPL)(PCO)(3FT)(RIGHT)	EA	2.00	4500.00	= 9000.00
465 6067	INLET (COMPL)(PSL)(RH)(5FTX6FT)	EA	1.00	6000.00	= 6000.00
465 6158	INLET(COMPL)(PAZD)(FG)(3FTX3FT-3FTX3FT)	EA	8.00	3200.00	= 25600.00
467 6142	SET (TY I)(S= 4 FT)(HW= 3 FT) (6:1) (P)	EA	2.00	10,000.00	= 20,000.00
479 6001	ADJUSTING MANHOLES	EA	3.00	500.00	= 1500.00

ADDENDUM 4

BID FORM

PROJECT: 126-1002

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMPS, U-TURNS AND LANE WIDENING

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Price
479 6006	ADJUSTING INLET (CAP)	EA	5.00	1500.00	= 7500.00
479 6007	ADJUSTING MANHOLES(CAP)	EA	2.00	1500.00	= 3000.00
496 6002	REMOV STR (INLET)	EA	1.00	500.00	= 500.00
496 6007	REMOV STR (PIPE)	LF	51.00	20.00	= 1020.00
500 2001	MOBILIZATION	LS	1.00	610,000.00	= 610000.00
502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	13.00	5000.00	= 65000.00
506 6004	ROCK FILTER DAMS (INSTALL) (TY 4)	LF	300.00	50.00	= 15000.00
506 6011	ROCK FILTER DAMS (REMOVE)	LF	300.00	10.00	= 3000.00
506 6020	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	467.00	35.00	= 16345.00
506 6024	CONSTRUCTION EXITS (REMOVE)	SY	467.00	6.00	= 2802.00
506 6041	BIODEG EROSN CONT LOGS (INSTL) (12")	SY	2,195.00	4.50	= 9877.50
506 6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	2,195.00	0.50	= 1097.50
512 6001	PORT CTB (FUR & INST)(SGL SLOPE) (TY 1)	LF	4,050.00	73.00	= 295650.00
512 6009	PORT CTB (FUR & INST)(LOW PROF) (TY 1)	LF	2,860.00	68.00	= 194480.00
512 6010	PORT CTB (FUR & INST)(LOW PROF) (TY 2)	LF	60.00	68.00	= 4080.00
512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	7,230.00	6.00	= 43380.00
512 6033	PORT CTB (MOVE)(LOW PROF)(TY 1)	LF	900.00	6.00	= 5400.00
512 6034	PORT CTB (MOVE)(LOW PROF)(TY 2)	LF	40.00	6.00	= 240.00
512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	4,050.00	7.00	= 28350.00
512 6057	PORT CTB (REMOVE)(LOW PROF) (TY 1)	LF	2,860.00	7.00	= 20020.00
512 6058	PORT CTB (REMOVE)(LOW PROF) (TY 2)	LF	60.00	7.00	= 420.00
529 6002	CONC CURB (TY II)	LF	7,204.00	4.00	= 28816.00

ADDENDUM 4

BID FORM
 FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
 SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMP, U-TURNS AND LANE WIDENING

PROJECT: 126-1002

<u>Item No.</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
529 6010	CONC CURB (U-TURN)	LF	861.00	35.00	= 30135.00
526 6002	CONC MEDIAN	SY	2,474.00	45.00	= 111330.00
540 6001	MTL W-BEAM GD FEN (TIM POST)	LF	200.00	28.00	= 5600.00
540 6006	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	1.00	2500.00	= 2500.00
540 6016	DOWNSTREAM ANCHOR TERMINAL SECTION	EA	1.00	1500.00	= 1500.00
542 6001	REMOVE METAL BEAM GUARD FENCE	LF	211.00	4.00	= 844.00
542 6003	REMOVE DOWNSTREAM ANCHOR TERMINAL	EA	1.00	200.00	= 200.00
544 6001	GUARDRAIL END TREATMENT (INSTALL)	EA	2.00	3000.00	= 6000.00
544 6003	GUARDRAIL END TREATMENT (REMOVE)	EA	1.00	300.00	= 300.00
545 6001	CRASH CUSH ATTEN (INSTL)	EA	3.00	30,000.00	= 90,000.00
545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	3.00	4500.00	= 13500.00
545 6005	CRASH CUSH ATTEN (REMOVE)	EA	3.00	1100.00	= 3300.00
610 6004	RELOCATE RD IL ASM (TRANS-BASE)	EA	15.00	1000.00	= 15000.00
610 6005	RELOCATE RD IL ASM (U/P)	EA	2.00	225.00	= 450.00
610 6010	REPLACE LUMINAIRE W/LED (150W EQ)	EA	2.00	320.00	= 640.00
610 6102	REPLACE LUMINAIRE W/LED (250W EQ)	EA	13.00	350.00	= 4550.00
610 6214	IN RD IL (TY SA) 40T-8 (250W EQ) LED	EA	8.00	2300.00	= 18400.00
610 6288	IN RD IL (TY SA) 50T-10 (400W EQ) LED	EA	1.00	4000.00	= 4000.00
618 6023	CONDT (PVC) (SCH 40) (2")	LF	11,265.00	10.50	= 118282.50
618 6046	CONDT (PVC) (SCH 80) (2")	LF	665.00	13.00	= 8645.00
618 6047	CONDT (PVC) (SCH 80) (2") (BORE)	LF	845.00	15.00	= 12675.00

ADDENDUM 4

BID FORM

PROJECT: 126-1002

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMPS, U-TURNS AND LANE WIDENING

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Price
618 6062	CONDT (RM) (3/4")	LF	40.00	27.00	= 1080.00
620 6003	ELEC CONDR (NO.12) BARE	LF	50.00	1.30	= 65.00
620 6004	ELEC CONDR (NO.12) INSULATED	LF	100.00	2.00	= 200.00
620 6007	ELEC CONDR (NO.8) BARE	LF	13,285.00	1.60	= 21256.00
620 6008	ELEC CONDR (NO.8) INSULATED	LF	29,150.00	1.70	= 49555.00
624 6002	GROUND BOX TY A (122311)W/APRON	EA	22.00	800.00	= 17600.00
628 6009	ELC SRV TY A 120/240 060(NS)SS(E)SP(O)	EA	1.00	5500.00	= 5500.00
628 6086	ELC SRV TY A 240/480 100(SS)SS(E)SP(O)	EA	1.00	7000.00	= 7000.00
636 6002	ALUMINUM SIGNS (TY G)	SF	1,182.00	34.00	= 40188.00
636 6003	ALUMINUM SIGNS (TY O)	SF	483.00	22.00	= 10626.00
636 6006	REFURBISH ALUMINUM SIGNS (TY O)	EA	2.00	5500.00	= 11000.00
644 6001	IN SM RD SN SUP&AM TY10 BWG(1)SA(P)	EA	5.00	500.00	= 2500.00
644 6004	IN SM RD SN SUP&AM TY10 BWG(1)SA(T)	EA	32.00	600.00	= 19200.00
644 6017	IN SM RD SN SUP&AM TY10 BWG(2)SA(P)	EA	1.00	1000.00	= 1000.00
644 6064	IN BRIDGE MNT CLEARANCE SGN ASSM(TY N)	EA	2.00	2400.00	= 4800.00
644 6076	REMOVE SM RD SN SUP&AM	EA	16.00	100.00	= 1600.00
647 6001	INSTALL LRSS (STRUCT STEEL)	LB	7,387.60	4.00	= 29550.40
650 6154	INS OH SN SUP(145 FT BRDG)	EA	1.00	140,000.00	= 140,000.00
650 6204	REMOVE OVERHD SIGN SUP	EA	2.00	1000.00	= 2000.00
662 6060	WK ZN PAV MRK REMOV (W)4"(BRK)	LF	930.00	0.70	= 651.00
662 6063	WK ZN PAV MRK REMOV (W)4"(SLD)	LF	2,406.00	0.55	= 1323.30
662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,583.00	1.60	= 2532.80
662 6095	WK ZN PAV MRK REMOV (Y)4"(SLD)	LF	3,902.00	0.50	= 1951.00

ADDENDUM 4

BID FORM
 FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
 SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMPS, U-TURNS AND LANE WIDENING

PROJECT: 126-1002

<u>Item No.</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
668 6007	PREFAB PAV MRK TY B (W)(6")(SLD)	LF	11,601.00	4.00	= 46404.00
668 6008	PREFAB PAV MRK TY B (W)(6")(DOT)	LF	430.00	5.50	= 2365.00
668 6010	PREFAB PAV MRK TY B (W)(6") (BRK)CNTST	LF	2,900.00	6.80	= 19720.00
668 6014	PREFAB PAV MRK TY B (W)(8")(SLD)	LF	4,501.00	5.50	= 24755.50
668 6016	PREFAB PAV MRK TY B (W)(12")(SLD)	LF	1,802.00	8.50	= 15317.00
668 6018	PREFAB PAV MRK TY B (W)(24")(SLD)	LF	86.00	16.00	= 1376.00
668 6019	PREFAB PAV MRK TY B (W)(ARROW)	EA	8.00	400.00	= 3200.00
668 6022	PREFAB PAV MRK TY B (W)(UTURN ARROW)	EA	4.00	600.00	= 2400.00
668 6027	PREFAB PAV MRK TY B (W)(WORD)	EA	8.00	650.00	= 5200.00
668 6034	PREFAB PAV MRK TY B (W)(36") (YLD TRI)	EA	22.00	100.00	= 2200.00
668 6047	PREFAB PAV MRK TY B (Y)(6")(SLD)	LF	3,240.00	4.00	= 12960.00
668 6117	PREFAB PAV MRK TY B (W)(12")(DOT)	LF	3,836.00	10.00	= 38360.00
672 6010	REFL PAV MRKR TY II-C-R	EA	431.00	4.50	= 1939.50
677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	280.00	0.30	= 84.00
677 6002	ELIM EXT PAV MRK & MRKS (6")	LF	10,377.00	0.30	= 3113.10
677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	420.00	0.50	= 210.00
678 6002	PAV SURF PREP FOR MRK (6")	LF	15,045.00	0.10	= 1504.50
678 6004	PAV SURF PREP FOR MRK (8")	LF	4,501.00	0.20	= 900.20
678 6006	PAV SURF PREP FOR MRK (12")	LF	3,704.00	0.35	= 1296.40
678 6008	PAV SURF PREP FOR MRK (24")	LF	86.00	1.00	= 86.00
678 6009	PAV SURF PREP FOR MRK (ARROW)	EA	8.00	20.00	= 160.00
678 6012	PAV SURF PREP FOR MRK (UTURN ARR)	EA	4.00	25.00	= 100.00

ADDENDUM 4

BID FORM

PROJECT: 126-1002

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
 SH 99 - CONSTRUCTION OF ENTERENCE AND EXIT RAMPS, U-TURNS AND LANE WIDENING

<u>Item No.</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
678 6016	PAV SURF PREP FOR MRK (WORD)	EA	8.00	20.00	= 160.00
678 6023	PAV SURF PREP FOR MRK (36")(YLD TRI)	EA	22.00	10.00	= 220.00
690 6007	REPLACE OF GROUND BOXES	EA	1.00	1000.00	= 1000.00
6001 6001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	30.00	100.00	= 3000.00
6185 6005	TMA (MOBILE OPERATION)	DAY	15.00	250.00	= 3750.00
	FORCE ACCOUNT FOR LAW ENFORCEMENT & SAFETY (FOUNDATION MTD CABINET)			\$25,000.00	= \$25,000.00
Grand Total					= 6,837,160.20

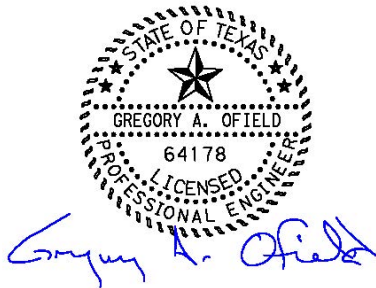
Signed: _____
 Printed Name: Anthony Colombo
 Title: President
 Date: 5/13/2021

Additional Signature for Joint Venture:
 Signed: _____
 Printed Name: _____
 Title: _____
 Date: _____

Highway: Fort Bend Grand Parkway
Toll Road (SH 99) from
0.83 Mile South of W.
Airport Blvd. to 0.18 Mile
East of Mason Rd.
Project No.: 126-1002
County: Fort Bend

The enclosed Texas Department of Transportation and Fort Bend Grand Parkway Toll Road Authority 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 Specifications and Bid and the attached form of Contract, 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 Grand Parkway Toll Road Authority as official specifications, together with and to be modified by the Special Provisions and Special Specifications as are listed herein.



Gregory A. Ofield, P.E.
Project Manager
BGE, Inc.

02/12/2021
Date:

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

General Notes:

General:

The Contractor shall be responsible for all tolls. The Authority will not reimburse the Contractor for any tolls incurred while performing the work.

If fixed features require, the governing slopes shown may vary between the limits shown and to the extent determined by the Engineer.

Superelevate the curves to match the existing surface.

Notify the Engineer immediately if discrepancies are discovered in the horizontal control or the benchmark data. references to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved, except for roadway illumination, electrical, and traffic signal items.

The lengths of the posts for ground mounted signs and the tower legs for the overhead sign supports are approximate. Verify the lengths before ordering these materials to meet the existing field conditions and to conform to the minimum sign mounting heights shown in the plans.

Furnish aluminum Type A signs instead of plywood signs for signs shown on the Summary of Small Signs sheet.

Clearly mark or highlight on the shop drawings, the items being furnished for this project. Submit required shop drawings in accordance with the shop drawing distribution list shown in the note for Item 5 for review and distribution.

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

General: Roadway Illumination and Electrical

For roadway illumination and electrical items, use materials from pre-qualified producers as shown on the Construction Division (CST) of the Department's material producers list. Check the latest link on the Department's website for this list. The category/item is "Roadway Illumination and Electrical Supplies." No substitutions will be allowed for materials found on this list.

Perform electrical work in conformance with the National Electrical Code (NEC) and the Department's standard sheets.

The Contractor may make the electrical grounding connections and permissible splices using the thermal fusion process, Cadweld, ThermOweld, or approved equal, instead of bolted connections and splices.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

The Engineer will arrange with the Contractor, an inspection of the completed electrical systems for the highway lighting systems before final acceptance for compliance with plans and specifications.

General: Site Management

Mark stations every 100 ft. and maintain the markings for the project duration. Remove the station markings at the completion of the project. This work is subsidiary to the various bid items.

Do not mix or store materials, or store or repair equipment, on top of concrete pavement or bridge decks unless authorized by the Engineer. Permission will be granted to store materials on surfaces if no damage or discoloration will result.

Personal vehicles of employees are not permitted to park within the right of way, including sections closed to public traffic. Employees may park on the right of way at the Contractor's office, equipment, and materials storage yard sites.

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.

Control the dust caused by construction operations. For sweeping the base material in preparation for laying asphalt and for sweeping the finished concrete pavement, use one of the following types of sweepers or approved equal:

Tricycle Type

Wayne Series 900
Elgin White Wing
Elgin Pelican

Truck Type - 4 Wheel

M-B Cruiser II
Wayne Model 945
Mobile TE-3
Mobile TE-4
Murphy 4042

General: Traffic Control and Construction

Schedule construction operations such that preparing individual items of work follows in close sequence to constructing storm drains in order to provide as little inconvenience as practical to the businesses and residents along the project.

Schedule work so that the base placement operations follow the subgrade work as closely as practical to reduce the hazard to the traveling public and to prevent undue delay caused by wet weather.

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

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

General: Utilities

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or causes damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

At least 72 hours before starting work, make arrangements for locating existing Department-owned above ground and underground fiber optic, communications, power, illumination, and traffic signal cabling and conduit. Do this by calling the Department's Houston District Traffic Signal Operations Office at 713-802-5662 to schedule marking of underground lines on the ground. Use caution if working in these areas to avoid damaging or interfering with existing facilities.

Notify the Engineer at least 48 hours before constructing junction boxes at storm drain and utility intersections.

Install or remove poles and luminaires located near overhead or underground electrical lines using established industry and utility safety practices. Consult the appropriate utility company before beginning such work.

If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to the Department.

If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

Perform electrical work in conformance with the National Electrical Code (NEC) and Department's standard sheets.

Item 5: Control of Work

The cross-section data provided above is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the data with the appropriate plans, specifications, and estimates for the projects.

Submit shop drawings electronically for the fabrication of items as documented in Table 2 below. Information and requirements for electronic submittals can be viewed in the "Guide to Electronic Shop Drawing Submittal" which can be accessed through the following web link, ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf. References to

11 in. x 17 in. sheets in individual specifications for structural items imply electronic CAD sheets.

Table 2

2014 Spec Item No.'s	Construction Specification Required	Product	Shop/Working Submittal Required	Drawing Approval Required (Y/N)	Contractor/ Fabricator P.E. Seal Required	Consultant Reviewing Party	Generated Plans Shop or Working Drawing (Note 1)
462		Concrete Box Culvert	Y	Y	N	D	SD
465		Pre-cast Junction Boxes, Grates, and Inlets	Y	Y	N	D	SD
466		Pre-cast Headwalls and Wingwalls	Y	Y	N	D	SD
610		Roadway Illumination Supports (Non-Standard only, calcs reqd.)	Y	Y	Y	D	SD
647		Large Roadside Sign Supports	Y	Y	Y	D	SD
650		Cantilever Sign Structure Supports - Alternate Design Calcs.	Y	Y	Y	D	SD
650		Sign Structures	Y	Y	N	D	SD

Notes:

1. Document flow for Working Drawings differs from Shop Drawings in that Working Drawings must be submitted to the Engineer rather than the Engineer of Record and they are for the information of the Engineer only; an approval stamp and distribution to all project offices is not required.

Key to Reviewing Party

D – FBGPTRA

Item 7: Legal Relations and Responsibilities

The total area disturbed for this project is 25.53 acres. The disturbed area in this project, the project locations in the Contract, and Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer (to the appropriate MS4 operator when on an off-state system route) and to the local government that operates a separate storm drain system.

This project does not require a U.S. Army Corps of Engineers (USACE) Section 404 Permit before letting, but if a permit is needed during construction, assume responsibility for preparing the permit application. Submit the permit application to the Department’s District Environmental Section for approval. Once the permit application is approved, the Department will submit it to the USACE. Assume responsibility for the requested revisions, in coordination with the Department’s District Environmental Section.

Maintain the roadway slope stability. Maintaining slope stability is subsidiary to the various bid items.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

This project is on a hurricane evacuation route. Provide at the pre-construction meeting a written plan outlining the procedures to suspend work, secure the job site, and safely handle traffic through and across the project in the event of a hurricane evacuation.

During the hurricane season (June 1 through November 30), do not close any travel lanes except when the Contractor can demonstrate that he/she can provide labor, equipment, material, a work plan, and quality of work to satisfactorily return all lanes to an open, all-weather travel surface within 3 days of receiving written or verbal notice but no later than 3 days before the predicted hurricane landfall. Construction of temporary lanes to an all-weather surface will be paid for in accordance with Article 9.7, "Payment for Extra Work and Force Account Method."

In addition to lane closures, cease work 3 days before the predicted hurricane landfall on or near the roadway that adversely impacts the flow of traffic and reduces the capacity of the highway during an evacuation. Vehicles of the Contractor, subcontractors, or material suppliers will not be allowed to enter or exit the traffic stream, including those for the purpose of material hauling and delivery, and mobilization or demobilization of equipment. When directed, this prohibition will include a reasonable time period for the evacuees to return to their point of origin.

Item 8: Prosecution and Progress

The Authority will not adjust the number of days for the project and milestones, if any, due to differences in opinion regarding any assumptions made in the preparation of the schedule or for errors, omissions, or discrepancies found in the time determination schedule.

The Lane Closure Assessment Fee is \$ 1,000 per hour mainlanes and \$500 per hour frontage roads. 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 refer to the Item, "Barricades, Signs, and Traffic Handling."

Item 104: Removing Concrete

Removing concrete curb is paid as a separate bid item if the existing pavement on which it rests is not removed at the same time.

Item 105: Removing Treated and Untreated Base and Asphalt Pavement

Removing curb on cement-treated and untreated base or on cement treatment being removed at the same time is subsidiary to this bid Item.

Item 104: Removing Concrete

Item 105: Removing Treated and Untreated Base and Asphalt Pavement

Removing the concrete pavement material is paid under the Item, "Removing Concrete."

Removing the base material and any asphalt bondbreaker material is paid under the Item, "Removing Treated and Untreated Base and Asphalt Pavement."

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Item 110: Excavation

If manipulating the excavated material requires moving the same material more than once to accomplish the desired results, the excavation is measured and paid for only once regardless of the manipulation required.

Transition the ditch grades and channel bottom widths at structure locations. Use only approved channel excavation in the embankment.

Item 132: Embankment

Furnish Type C material with a maximum Liquid Limit (LL) of 65, a minimum Plasticity Index (PI) of 5, and composed of suitable earth material such as loam, clay, or other materials that form a suitable embankment.

The embankment material used on the project which has a Liquid Limit exceeding 45 will be tested for Liquid Limits at the rate of one test per 20,000 cu. yd. or per total quantity less than 20,000 cu. yd., unless otherwise directed. Only use material that passes the above tests.

For unpaved areas, provide a finished grade with the top 4 in. capable of sustaining vegetation. Use fertile soil that is easily cultivated, free from objectionable material and highly resistant to erosion.

Item 161: Compost

Item 162: Sodding for Erosion Control

Item 164: Seeding for Erosion Control

Item 166: Fertilizer

Item 168: Vegetative Watering

Refer to the “Fertilizer, Seed, Sod, Straw, Compost, and Water” plan sheet for material specifications, application rates, and for watering requirements.

Item 260: Lime Treatment (Road-Mixed)

For slurry placing, before discharging through the distributors, sufficiently agitate or mix the lime and water to place the lime in suspension and to obtain a uniform mixture.

The Engineer will observe the lime treatment that the Contractor elects to open to construction traffic immediately after compaction. If the construction traffic damages the subgrade, route the traffic off the damaged section in accordance with the standard specification. If the construction traffic does not damage the subgrade, cure the subgrade until other courses of material cover it. Apply these courses within 14 days with a maximum curing period of 7 days.

Place the hydrated and the commercial lime as a water suspension or slurry according to the slurry placing method shown in Section 260.4.3.2, “Slurry Placement.”

Use the type of lime at particular locations as directed.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Place the quicklime dry or as a slurry.

For the dry quicklime, a spreader box is not required if the lime material is evenly distributed.

In limited areas, the Contractor may construct the lime slurry subgrade under a sequence of work in which the application, mixing, and compaction are completed in the same working day, if approved by the Engineer.

Provide documentation from certified public scales showing gross, tare, and net weights. Provide producer's delivery tickets also showing gross, tare, and net weights. Completely empty the lime trailers at the project site. The Engineer may direct the Contractor to reweigh any shipment of lime on certified scales. The cost of this operation is subsidiary to the Item, "Lime Treatment (Road-Mixed)."

The percentage of lime shown on the plans is estimated on the basis of engineering tests. If soil tests made during construction indicate properties different than those originally anticipated, the Engineer may vary the percentage of the lime to provide soil characteristics similar to those of the preliminary tests.

Mix the lime with the new base material in an approved pug mill type stationary mixer.

Item 276: Cement Treatment (Plant-Mixed)

Before placing the new base, wet and coat the vertical construction joints between the new base and the previously placed base with dry cement.

If the total thickness of the cement treatment is greater than 8 in., compact it in multiple lifts in accordance with Section 276.4.3, "Compaction." Place the courses in the same working day unless otherwise approved.

Use Class N Cement Treatment containing 4.5 percent cement based on the dry weight of the aggregate. There is no minimum compressive strength requirement for this Item.

The requirement for core drilling to determine the thickness of cement treatment is waived if using less than 500 sq. yd. at one location.

For widening the existing pavement, the Engineer may waive the requirements for preparing the subgrade by scarifying and compacting if the as-cut subgrade can be maintained to the density of the natural ground and to a uniform consistency when placing the base course. Keep the subgrade wet.

Compact in accordance with the standard specifications and complete the finishing operations within a period of 5 hours after adding the cement to the base material.

Cure the final course of cement treatment using an asphalt distributor that distributes the approved curing material and water mixture material at a rate of 0.25 gallons per square-yard evenly and smoothly or as recommended by the manufacturer at the recommended dilution rate, under a pressure necessary for proper distribution. Provide a curing material meeting the

requirements of the Item, "Asphalts, Oils, and Emulsions" for curing the cement treatment. Use the following materials for curing the courses of cement treatment:

Curing Material	Application
Water	All courses, except final course
PCE	Final course

Continue curing until placing another course or opening the finished section to traffic.

Spread the material so that the layers of base are uniform in depth and in loose density before compacting.

Type E material consists of Type A material, crushed concrete (except under flexible pavement), or Reclaimed Asphalt Pavement (RAP) meeting the requirements of the Item, "Flexible Base." If approved, the 50 percent maximum RAP limitation may be waived.

Unless otherwise directed, place the next pavement layer within 7 working days of placing the base.

If using crushed stone for the Type E material under this Item, ensure it meets the requirements for the Item, "Flexible Base," Type A, Grade 1-2. Texas Test Method TEX-117-E is not required for this Item.

If using Recycled Type E cement treatment under proposed flexible pavement, produce it using the existing base salvaged from within this project or from other approved Department projects and salvaged asphalt concrete pavement. Do not use crushed concrete under flexible pavement.

If using Recycled Type E cement treatment under proposed concrete pavement, produce it using the existing base salvaged from within this project or from other approved Department projects, salvaged asphalt concrete pavement, or crushed concrete. If using crushed concrete as an aggregate, meet the requirements of Grade 3.

If using salvaged existing base and asphalt concrete pavement as described above, size it so that all the material, except the existing individual aggregate, passes the 2-in. sieve and is of a gradation that allows satisfactory compaction. Provide salvaged material that does not contain deleterious material such as clay or organic material. Provide material passing the No. 40 sieve, defined as soil binder, with a maximum Plasticity Index of 10 and a maximum Liquid Limit of 35 when tested in accordance with test method TEX-106-E.

Meet the following additional requirements if the base and ACP are salvaged from other Department projects:

1. Obtain written approval before using the material.
2. Salvage and stockpile by approved methods.
3. Stockpile the material for exclusive use by the Department.

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Item 292: Asphalt Treatment (Plant-Mixed)

If using the iron ore topsoil as the primary aggregate, meaning 80 percent or more by weight of the total mixture, the requirements for the water susceptibility test are waived.

Mixtures containing the iron ore topsoil are exempted from test methods TEX-217-F (Part I, separation of deleterious material and Part II, decantation test for coarse aggregate) and TEX-203-F (Sand Equivalent Test).

Assume responsibility for proportioning the materials entering the asphalt mixture, regardless of the type of plant used.

Furnish the mix designs for approval.

Meet the following grading requirements:

Sieve Size	Percent Passing Grade 4 (Bondbreaker)
1-3/4 in.	-
1 in.	-
1/2 in.	100
No. 4	30 - 70
No. 40	15 - 45

Physical requirements are as follows:

- Maximum Plasticity Index (PI) = 8
- Maximum Liquid Limit (LL) = 35
- Maximum Wet Ball Mill = 50 (crushed stone)
- Maximum LA Abrasion = 50 (iron ore)

If blending the materials, perform the Wet Ball Mill test for the composite aggregate.

Form bituminous mix incorporating 3.5 to 7 percent asphaltic binder by dry weight.

For nominal aggregate size less than 0.5 in., design the mix in accordance with test method TEX-204-F. The minimum stability in accordance with TEX-208-F is 30 percent with a laboratory molded density of 96 percent plus or minus 1.5 percent.

If the layer thickness after placing is 1.25 in. or less, the bondbreaker is exempt from the in-place density control described in Section 292.4.5, "Compaction."

Item 340: Dense-Graded Hot Mix Asphalt (Small Quantity)

Taper the asphalt concrete pavement at the beginning and ending points.

Use a maximum 6H:1V slope for the asphalt concrete pavement edge.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Where the 6H:1V ACP edge taper extends over onto the unsurfaced shoulders, blade off the loose existing shoulder material to provide a solid base for the outside taper edge. After placing the ACP overlay, blade this material back against the edge taper. This work is subsidiary to the various bid items.

The stockpile will be the point of sampling of coarse aggregate for test method TEX-217-F (Part II, decantation).

Place the asphalt concrete pavement in courses as shown on the typical sections.

Do not use petroleum-based solvents in the beds of hot mix asphalt delivery vehicles.

Dilution of tack coat is not allowed.

Item 360: Concrete Pavement

Where the pavement curb is left off for a later tie, provide the dowels or the tie bars as indicated on the paving detail sheets. The dowel bars and tie bars are subsidiary to the various bid items.

Repair portions of the concrete pavement surfaces that are damaged while in a plastic state before that area receives permanent pavement markings and opens to traffic. Perform repairs that are structurally equivalent to and cosmetically uniform with the adjacent undamaged areas. Do not repair by grouting onto the surface.

On pavement widening, hand finishing in place of the longitudinal float will be permitted.

Where existing pavement is widened with new pavement, place the new pavement a minimum of 2 ft. wide.

Equip the batching plants to proportion by weight, aggregates and bulk cement, using approved proportioning devices and approved automatic scales.

For mono curb, the curb height transitions will be paid at the contract unit price of the larger curb height in the transition. The 2.5-in. laydown curbs for driveways will be paid at the unit price bid for the Item, "Conc Curb (Mono) (Ty II)."

High-early strength cement may be used for frontage road and city street intersection construction.

Do not use limestone dust of fracture as fine aggregate.

If the concrete design requires greater than 5.5 sacks of cementitious material per cubic yard, obtain written approval. If placing concrete pavement mixes from April 1 to October 31, inclusive, use Mix Design Option 1 as specified in Section 421.4.2.6.1.

Perform saw cutting as shown on the plans in accordance with Section 360.4.10, "Sawing Joints." This saw cutting is subsidiary to this bid Item.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Complete the entire Fast Track Concrete construction process, from the time the Fast Track Work Area is closed to traffic, to the time the Fast Track Work Area is opened to traffic. The Fast Track operation includes, but is not limited to, traffic control, existing pavement and subgrade removal, preparation of subgrade, placement of steel, placement of Fast Track concrete pavement, cure time, striping, etc. Perform work in the Fast Track Work Area in an expeditious manner, within the allowable time period for any area shown below:

Fast Track Work Area

Allowable Duration

1. NBFR Sta 1000+06.70 to Sta 1002+56.70

Weekend nights 7 pm to 6 am

Failure to perform any Fast Track Work Area construction within the above time frames will be cause for the Engineer to require the Contractor to shut down all other construction operations to ensure all resources are directed toward the completion of the Fast Track operation. This shutdown will remain in force until the Fast Track operation is complete. Such a shutdown will not warrant additional time, time suspension, or any additional costs to the Department.

Unless otherwise directed in writing, provide Class HES concrete with a minimum average flexural strength of 425 psi or a minimum average compressive strength of 3,000 psi in 16 hours.

When directed in writing, open the pavement to traffic before the minimum requirements have been attained.

When needed, place and remove forms in accordance with Section 360.4.5, except do not remove forms until at least 6 hours after concrete has been placed. The time for the form removal may be extended with the direction of the Engineer if weather or other conditions make it advisable.

Items 360, 420, and 421: All Concrete Items

For the concrete cylinder split samples, transport the test cylinders to the Laboratory, when applicable. Transporting the test cylinders is subsidiary to the various bid items.

Item 400: Excavation and Backfill for Structures

If Recycled Cement Treatment (Type D) is included in the plans, the following additional requirements apply:

1. Use only approved sand, crushed concrete, or salvaged base free from deleterious matter, as aggregate for cement-stabilized backfill.
2. Provide crushed concrete or salvaged base backfill material in accordance with the Item, "Cement Treatment (Plant-Mixed)(Type D)" (base or crushed concrete), except the recycled Type D material must not contain Reclaimed Asphalt Pavement (RAP).
3. For backfill material below the spring line of pipes, use cement-stabilized sand rather than Recycled Type D backfill material.

4. For the cement-stabilized sand backfill, use a minimum of 7 percent of hydraulic cement based on the dry weight of backfill material. The cement content for the crushed concrete and salvaged base is specified in the Item, "Cement Treatment (Plant-Mixed) (Type D)."
5. Place and compact the stabilized backfill material using a gradation that provides a dense mass without segregating and is impervious to passing of water.

Item 416: Drilled Shaft Foundations

Include the cost for furnishing and installing anchor bolts mounted in the drilled shafts in the unit bid price for the various diameter drilled shafts.

The Department may test using ultrasonic methods the anchor bolts for overhead sign supports, light standards, and traffic signal poles after they are installed. Replace faulty anchor bolts as directed. Do not weld the anchor bolts.

Item 420: Concrete Substructures

Unless otherwise noted, use Class C concrete with an ordinary surface finish for signal, lighting, or sign structure foundations.

Item 462: Concrete Box Culverts and Drains

Item 464: Reinforced Concrete Pipe

Concrete collars are subsidiary to the various bid items except for those specified on the plans for stage construction, which are paid for under the Item, "Concrete Substructures" as "Cl C Conc (Collar)."

Rubber gaskets are required for concrete pipe joints except for connections of safety end treatments, driveway culverts, and joints between the existing pipes and extensions.

Open, install, and backfill each section, or a portion of a section, in the same day at locations requiring pipe culverts under existing roadways.

Provide leave-outs or holes in the proposed storm drain structures and pipes for drainage during interim construction. This work is subsidiary to the various bid items.

Item 465: Junction Boxes, Manholes, and Inlets

If required on the plans, build manholes and inlets to stage 1 construction, cover with temporary pavement, and complete in a later phase of construction. This temporary covering and pavement are subsidiary to the various bid items.

Construct manholes and inlets in graded areas, first to an elevation at least 4 in. above the top of the highest entering pipe and cover with a wooden cover. Complete the construction of such manholes and inlets to the finished elevation when completing the grading work for such manholes and inlets. Adjust the final elevation, if required, since this elevation is approximate.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Construct manholes and inlets in paved areas to an elevation so their temporary wooden covers are flush with the surface of the base material.

Do not leave excavations or trenches open overnight.

Item 502: Barricades, Signs, and Traffic Handling

The Lane Closure Assessment Fee will be charged for all unauthorized closures of tolled lanes on the Authority's facilities, as well as frontage road and surface street lanes belonging to, maintained and/or operated by the Authority or Fort Bend County. The Contractor will be charged for all unauthorized closures on the main lanes at a rate of one thousand dollars (\$1,000.00) per lane per hour of closure, and five hundred dollars (\$500.00) per lane per hour of frontage roads or ramps. Unauthorized lane closures impacting toll plaza lane will be charged five thousand dollars (\$5,000) per lane per hour of closure. This fee applies to the Contractor for closures or obstructions that overlap into restricted hours 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 the table in this section.

Use a traffic control plan for handling traffic through the various phases of construction. Follow the phasing sequence unless otherwise agreed upon by the FBGPTRA Engineer and the Project Manager. Ensure this plan conforms to the latest "Texas Manual on Uniform Traffic Control Devices" and the latest Barricade and Construction (BC) Standard Sheets. The latest versions of Work Zone Standard Sheets WZ (BTS-1) and WZ (BTS-2) are the traffic control plan for the signal installations.

Submit changes to the traffic control plan to the FBGPTRA Engineer. Provide a layout showing the construction phasing, signs, striping, and signalizations for changes to the original traffic control plan.

Furnish and maintain the barricades and warning signs, including the necessary temporary and portable traffic control devices, during the various phases of construction. 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."

Erect temporary signs when exit ramps are closed or moved to new locations during construction.

If a section is not complete before the end of the workday, pull back the base material to the existing pavement edge on a 6H: 1V slope. Edge drop-offs during the hours of darkness are not permitted.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Before detouring traffic onto the mainlane shoulders, remove dirt, debris, vegetation, and other deleterious material from the surface of the shoulders. Appropriately sign the detour in an approved manner. This work is subsidiary to the various bid items.

Cover or remove the permanent signs and construction signs that are incorrect or that do not apply to the current situation for a particular phase.

Replace the overhead signs, informational signs, and exit signs to be removed, with temporary signs providing the correct information to the traveling public. Size the replacement signs and include them in the traffic control plan.

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

Use traffic cones for daytime work only. Replace the cones with plastic drums during nighttime hours.

Place positive barriers to protect drop-off conditions greater than 2 ft. within the clear zone that remain overnight.

Do not reduce the existing number of lanes open to traffic except as shown on the following time schedule:

One Lane/Shoulder Closure

Day	Daytime Closure Hours	Nighttime Closure Hours	Restricted Hours Subject to Lane Assessment Fee
Monday - Friday	9:00 AM - 3:30 PM	7:00 PM - 6:00 AM	6:00 AM - 9:00 AM 3:30 PM - 7:00 PM
Weekend	ALL DAY		N/A

Full Closure

Day	Daytime Closure Hours	Nighttime Closure Hours	Restricted Hours Subject to Lane Assessment Fee
Monday - Friday	9:00 AM - 3:30 PM	7:00 PM - 6:00 AM	6:00 AM - 9:00 AM 3:30 PM - 7:00 PM
Weekend	ALL DAY		N/A

The above times are approved for the traffic control conditions listed. The FBGPTRA Engineer may approve other closure times if traffic counts warrant. The FBGPTRA Engineer may reduce the above times for special events.

Law enforcement assistance will be required for this project and is expected to be required for major traffic control changes and lane closures. Coordinate with local law enforcement and arrange for law enforcement as directed or agreed by the Engineer. Before payment will be

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

made, complete the “Daily Report on Law Enforcement Force Account Work” (Form 318), provided by the Department and submit daily invoices that agree with this form for any day during the month in which approved services were provided.

Provide full-time, off-duty, uniformed, certified peace officers, as part of traffic control operations. The peace officers must be able to show proof of certification by the Texas Commission on Law Enforcement Officers Standards. The cost of the officers is paid for on a force account basis.

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.

A minimum of 7 days in advance of any total closure, notify the Houston District Public Information Office of which roadways, ramps, intersections, or lanes will be closed, the dates they will remain closed, and when they will be opened again to traffic.

A minimum of 7 days in advance of any total closure, place a portable changeable message (PCM) sign at the location of each total closure which informs the traveling public of the details of the closure. Alternately, if the Traffic Control Plan 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.

During construction, remove, cover, adjust, or replace overhead sign panels to correspond with each current traffic control phase. The desirable size of letters for freeways is 10 in., the minimum is 8 in. This work is subsidiary to Item 502.

Item 504: Field Office and Laboratory

Furnish one Type E structure for the field office. Ensure the windows for the structure have burglar bars.

Provide a Type E field office meeting the requirements of a Type C structure. Provide this as a single structure with a minimum of 500 sq. ft. of floor space and 3 rooms. Provide the structure with the following facilities. The cost of providing these items is subsidiary to this bid Item:

1. Three desks with 3 swivel chairs, two 5-drawer file cabinets and 3 straight back chairs.
2. Telephone service and equipment consisting of a minimum of one telephone with one extension. Include the call-waiting feature in the service.
3. Potable water with an electric water cooler, a cup dispenser, and cups.
4. Adequate heating, air conditioning, lighting, and a sufficient number of electrical outlets.
5. A commercially available toilet or equivalent facility for the field office and each laboratory.

6. A suitable printer/copier/fax machine for the field office as approved by the Engineer.

Provide a fenced enclosure approximately 100 ft. by 200 ft. Provide an appropriate parking area covered with a suitable base material and with a minimum of 2 security lights, one on each end of the lot. Cost of the work and materials to provide the enclosure are subsidiary to the various bid items.

The above requirements are subsidiary to the various bid items.

Assume ownership of temporary chain link security fences.

Equip each field office with a first aid kit and at least a 20 lb. ABC type fire extinguisher.

Item 506: Temporary Erosion, Sedimentation and Environmental Controls

A Storm Water Pollution Prevention Plan (SWP3) is required. Since the disturbed area is more than 5 acres, a "Notice of Intent" (NOI) and "Notice of Termination" (NOT) is also required. Contractor shall prepare and submit the NOI to the Texas Commission on Environmental Quality prior to commencing construction, as well as the NOT upon completion of construction. Contractor will be responsible for application fees.

Use appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. Remove and dispose of materials in compliance with State and Federal laws.

Before starting construction, review with the Engineer the SWP3 used for temporary erosion control as outlined on the plans. Before construction, place the temporary erosion and sedimentation control features as shown on the SWP3.

Schedule the seeding or sodding work as soon as possible. The project schedule provides for a vegetation management plan.

After completing earthwork operations, restore and reseed the disturbed areas in accordance with the Department's specifications for permanent or temporary erosion control.

Implement temporary and permanent erosion control measures to comply with the National Pollution Discharge Elimination System (NPDES) general permit under the Clean Water Act.

Before starting grading operations and during the project duration, place the temporary or permanent erosion control measures to prevent sediment from leaving the right of way.

Item 512: Portable Traffic Barrier

Where required by the Engineer, provide anchor pins for Type 2 Low Profile Concrete Barriers (LPCB) as shown on the current LPCB standard. Anchor pins are subsidiary to the Low Profile Concrete Barrier.

Use only the J-J Hook type connection between barriers.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

After completing the project, return Low Profile Concrete Barriers (LPCB) used for traffic handling, at the Northeast corner of Oyster Creek.

After completing the project, return Standard Height Portable Traffic Barriers (including J-J Hook and Single Slope) used for traffic handling, at the Northeast corner of Oyster Creek.

After completing the project, Standard Height Safety Shape Portable Traffic Barriers used for traffic handling and the associated connecting hardware will become the property of the Authority.

Item 529: Concrete Curb, Gutter, and Combined Curb and Gutter

An air-entraining admixture is not required.

For concrete curbs, use Grade 7 aggregate conforming to Section 421.2.6 of the Item, "Hydraulic Cement Concrete."

For driveways and turnouts, coarse aggregate Grade No. 3 through No. 8 conforming to the gradation requirements specified in the Item, "Hydraulic Cement Concrete" will be permitted.

For reinforcing steel in sidewalks and pedestrian ramps, use No. 4 bars at a maximum 18 in. spacing center-to-center in both directions.

Item 540: Metal Beam Guard Fence

Painting the timber posts is not required.

Use timber posts for galvanized steel metal beam guard fence, except for anchorage at turned down ends.

Furnish and install wood blocks between the rail elements and the timber posts as detailed on the plans. These block-outs are subsidiary to this bid Item.

The quantity of the metal beam guard fence is subject to change.

Provide a mow strip as shown on the plans, at metal beam guard fence locations, including any guardrail end treatments.

Galvanize the rail elements supplied for this project by using a Type II Zinc Coating.

At locations requiring attachment of Metal Beam Guard Fence (MBGF) to concrete railing or concrete traffic barrier, repair and fill any existing holes in the railing or barrier that are not in the correct location for attaching the new MBGF. Perform this work in accordance with the Item, "Concrete Structure Repair." Existing anchor bolt holes that cannot be utilized must be filled with an epoxy grout before drilling new holes. Then core-drill new holes in the correct locations and repair any resulting spalls at no expense to the Department. This work is considered subsidiary to the MBGF transition section (Item 540).

Item 545: Crash Cushion Attenuators

A MASH compliant crash cushion attenuator is required for every temporary and permanent installation.

Item 585: Ride Quality for Pavement Surfaces

To eliminate the need for corrective action due to excessive deviations in the final surface layers, exercise caution to ensure satisfactory profile results in the intermediate paving layers (mixture).

For Continuously Reinforced Concrete Pavement (CRCP) mainlanes, use Surface Test Type B and Pay Adjustment Schedule 2. For ramps use Surface Test Type A.

For concrete or asphalt curb and gutter sections or frontage roads, use Surface Test Type B and Pay Adjustment Schedule 2 except for the outside lane. Use Surface Test Type B and Pay Adjustment Schedule 3 for the outside lane.

For all other roads (u-turns, cross streets and intersections), use Surface Test Type A.

Item 610: Roadway Illumination Assemblies

The cost of providing the electrical conductor in the pole foundation or in the pole base to make connections is subsidiary to the roadway illumination assembly. The quantity for payment is the surface distance between locations.

Fabricate steel roadway illumination poles in accordance with the latest Department RIP (Roadway Illumination Poles) Standards. Poles manufactured according to the latest RIP Standards require no shop drawings. Alternate designs to the Department's RIP Standards or the use of aluminum to fabricate poles will require the submission of shop drawings electronically.

For poles to be installed in regions where the maximum basic wind speed exceeds 110 mph or to be mounted more than 25 ft. above the surrounding terrain, provide shop drawings (see ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf) and calculations that are sealed, signed, and dated by a professional engineer registered or licensed in Texas.

Supply anchor bolt assemblies as shown on the RIP standard sheets, unless a larger capacity bolt assembly is required for the 3-second gust wind speed and mounting elevation at the pole installation location.

Item 616: Performance Testing of Lighting Systems

The illumination plans provide for a complete illumination system installed, connected, tested, and ready for operation.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

After satisfactory completion of tests, place the new lighting fixtures in operation. Final acceptance will be made after the fixtures operate satisfactorily for a minimum period of 14 days. The 14-day test period is included in the allowed working days.

Assume responsibility for the new lighting fixtures during the test period. Make adjustments or repairs as required and repair defects or damage at no expense to the Department.

Item 618: Conduit

Item 620: Electrical Conductors

Item 628: Electrical Services

If the specifications for electrical items require UL-listed products, this means UL-listed or CSA-listed.

Item 618: Conduit

When backfilling bore pits, ensure that the conduit is not damaged during installation or due to settling backfill material. Compact select backfill in 3 equal lifts to the bottom of the conduit; or if using sand, place it 2 in. above the conduit. Ensure backfill density is equal to that of the existing soil. Prevent material from entering the conduit.

Construct bore pits a minimum of 5 ft. from the edge of the base or pavement. Close the bore pit holes overnight.

Unless otherwise shown on the plans, install underground conduit a minimum of 24 in. deep. Install the conduit in accordance with the latest National Electrical Code (NEC) and applicable Department standard sheets. Place conduit under driveways or roadways a minimum of 24 in. below the pavement surface.

If using casing to place bored conduit, the casing is subsidiary to the conduit.

If placing the conduit under existing pavement to reach the service poles, bore the conduit in place and extend it a minimum distance of 5 ft. beyond the edge of shoulder or the back of curb.

Where PVC, duct cable, and HDPE conduit 1 in. and larger is allowed and installed per Department standards, provide a PVC elbow in place of the galvanized rigid metal elbow required by the Electrical Details standards. Ensure the PVC elbow is of the same schedule rating as the conduit to which it is connected. Use only a flat, high tensile strength polyester fiber pull tape to pull conductors through the PVC conduit system.

Remove conductor and conduit to be abandoned to 1 ft. below the ground level. This work is subsidiary to the various bid items.

Use materials from pre-qualified producers as shown on the Department's Construction Division (CST) material producers list. Check the latest links on the Department's website for the list. The category is "Roadway Illumination and Electrical Supplies." The polymer concrete barrier box is subsidiary to Item 618, "Conduit."

Item 620: Electrical Conductors

Test each wire of each cable or conductor after installation. Incomplete circuits or damage to the wire or the cable are cause for immediate rejection of the entire cable being tested. Remove and replace the entire cable at no expense to the Department. Also test the replacement cable after installation.

When pulling cables or conductors through the conduit, do not exceed the manufacturer's recommended pulling tensions. Lubricate the cables or conductors with a lubricant recommended by the cable manufacturer.

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holders as shown on the Department's Construction Division (CST) material producers list. Check the latest link on the Department's website for this list. The category is "Roadway Illumination and Electrical Supplies." The fuse holder is shown on the list under Items 610 and 620. Provide 10 Amp time delay fuses.

Ensure that circuits test clear of faults, grounds, and open circuits.

Split bolt connectors are allowed only for splices on the grounding conductors.

For Roadside Flashing Beacon Assemblies (Item 685) and Pedestal Pole Assemblies (Item 687) within the project, provide single-pole breakaway disconnects as shown on the Construction Division (CST) material producers list. Check the latest link on the Department's website for this list. The category is "Roadway Illumination and Electrical Supplies." The fuse holder is shown on the list under Item 685. For underground (hot) conductors, install a breakaway connector with a dummy fuse (slug). Provide dummy fuse (slug). For grounded (neutral) conductors, install a breakaway connector with a white colored marking and a permanently installed dummy fuse (slug).

For electrical licensing and electrical certification requirements for this project, see Item 7 of the Standard Specifications and any applicable special provisions to Item 7.

Item 624: Ground Boxes

The ground box locations are approximate. Alternate ground box locations may be used as directed, to avoid placing in sidewalks or driveways.

Ground metal ground box covers. Bond the ground box cover and ground conductors to a ground rod located in the ground box and to the system ground.

Ground the existing metal ground box covers as shown on the latest standard sheet ED (4)-14.

During construction and until project completion, provide personnel and equipment necessary to remove ground box lids for inspection. Provide this assistance within 24 hours of notification.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Construct concrete aprons in accordance with the latest standard sheet ED (4)-14. Make the depth of the concrete apron the same as the depth of the ground box, except for Type 1 and Type 2 ground boxes. For Type 1 or Type 2 ground boxes, construct the concrete apron in accordance with details shown on the "Ground Box Details Installations" standard.

Item 628: Electrical Services

Verify and coordinate the electrical service location with the engineering section of the appropriate utility district or company.

Identify the electrical service pole with an address number assigned by the Utility Service Provider. Provide 2-in. numerals visible from the highway. Provide numbers cut out aluminum figures nailed to wood poles or painted figures on steel poles or service cabinets.

Item 636: Signs

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.

Item 644: Small Roadside Sign Assemblies

Sign locations shown on the plans are approximate. Before placing them, obtain approval of and then stake the exact locations for these signs.

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

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

Assume ownership of the removed existing signs.

Locations of the relocated signs are approximate. Before placing them, obtain approval of and then stake the exact locations for these signs.

Replace existing signs that become damaged during relocation at no expense to the Department.

Item 647: Large Roadside Sign Supports and Assemblies

Locations of the relocated signs are approximate. Before placing them, obtain approval of and then stake the exact locations for these signs.

Replace existing signs that become damaged during relocation at no expense to the Department.

Assume ownership of the removed existing signs.

Item 650: Overhead Sign Supports

Stencil the structure numbers on the new structures for permanent identification.

If sign panels mounted on an overhead sign support face the same direction of traffic, keep the bottoms of the sign panels in the same horizontal plane, unless otherwise shown in the plans.

There is no additional reimbursement for blocking or shims for fits of alignment.

Mill test reports are not required for the walkway, grating, miscellaneous secondary structural items, or hardware.

Use the existing panel supports if removing existing guide signs and if placing new panels of different sizes at the same location. Extend the supports, if needed. If the supports extend over the top of the panel, cut off the supports at the top of the panel or the top of the truss, whichever is higher.

Before fabricating, field check the sign structure elevations, details, and dimensions shown on the plans.

Item 662: Work Zone Pavement Markings

At the end of each workday, mark roadways that remain open to traffic during construction operations with standard pavement markings, in accordance with the latest “Texas Manual on Uniform Traffic Control Devices.”

Using raised markers for removable work zone pavement markings on final concrete surfaces is optional.

For transition lane lines and detour lane lines, use raised pavement markers as shown for solid lines on the latest Barricade and Construction standard sheet for “Work Zone Pavement Marking Details.”

Item 662: Work Zone Pavement Markings

Item 666: Reflectorized Pavement Markings

Item 668: Prefabricated Pavement Markings

Item 6019: Longitudinal Prefabricated Pavement Markings (PPM) with Warranty

Item 6020: Multipolymer Pavement Markings (MPM) with Warranty

Item 6038: Multipolymer Pavement Markings (MPM)

Use Type III glass beads for thermoplastic and multipolymer pavement markings.

Use a 0.100 in. (100 mil) thickness for thermoplastic pavement markings, measured to the top of the thermoplastic, not including the exposed glass beads.

Use a 0.022 in. (22 mil) thickness for multipolymer pavement markings, measured to the top of the multipolymer, not including the exposed glass beads.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

For roadways with asphalt surfaces to be striped with work zone or permanent thermoplastic markings, the Contractor has the option to apply paint and beads markings for a maximum 30-day period until placing the thermoplastic markings, or until starting the succeeding phase of work on the striped area. Maintain the paint and beads markings, at no expense to the Department, until placing the thermoplastic markings or starting the succeeding phase of work on the striped area. The work zone markings, whether paint and beads or thermoplastic, are paid under the Item, "Work Zone Pavement Markings" and the markings are paid for only once for the given phase of construction.

If using paint and bead markings as described above, purchase the traffic paint from the open market.

If the Type II markings become dirty and require cleaning by washing, brushing, compressed air, or other approved methods before applying the Type I thermoplastic markings, this additional cleaning is subsidiary to the Item, "Reflectorized Pavement Markings."

Establish the alignment and layout for work zone striping and permanent striping.

Stripe all roadways before opening them to traffic.

Place pavement markings under these items in accordance with details shown on the plans, the latest "Texas Manual on Uniform Traffic Control Devices," or as directed.

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

Item 672: Raised Pavement Markers

If other operations are complete on the project and if the curing time period is not yet elapsed, the contract time will be suspended until the curing is done.

Before placing the raised pavement markers on concrete pavement, blast clean the surface using an abrasive-blasting medium. This work is subsidiary to the Item, "Raised Pavement Markers." Provide epoxy adhesive that is machine-mixed or nozzle-mixed and dispensed. Equip the machine or nozzle with a mechanism to ensure positive mix measurement control.

Type II C-R shall be placed at 40' spacing on main lanes, frontage roads, and ramps.

Item 677: Eliminating Existing Pavement Markings and Markers

Remove existing pavement markings on concrete or asphalt surfaces by flail milling or as directed.

Item 678: Pavement Surface Preparation for Markings

Do not blast clean asphalt concrete pavement. Clean asphalt concrete pavement as required under the applicable specifications or as directed.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

On new concrete pavement or on existing concrete pavement when placing a new stripe on a new location, remove the curing compounds and contamination from the pavement surface by flail milling or as directed. In addition, air-blast the surface with compressed air just before placing the new stripe.

On existing concrete pavement when placing a new stripe on an existing location, after removing the existing stripe under the Item, "Eliminating Existing Pavement Markings and Markers," air-blast the surface with compressed air just before placing the new stripe.

Do not clean concrete pavement by grinding.

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)

A shadow vehicle with Truck Mounted Attenuators (TMAs) is required as shown on the appropriate Traffic Control Plan (TCP) sheets. TMAs must meet the requirements of the Compliant Work Zone Traffic Control Device List.

Level 3 Compliant TMAs are required for this project.

A total of one (1) shadow vehicle with a TMA/TA is required for the work with the exception of Pavement Marking Operations. 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.

A total of three (3) shadow vehicles with a TMA are required for Pavement Marking Operations. 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 needed on the project.

In addition to the shadow vehicles with TMAs that are specified as being required on the TCP layout sheets for this project, provide additional shadow vehicles with TMAs 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 needed on the project.

County: Fort Bend County

Project No. 126-1002

Highway: SH 99: From 0.83 Miles South of W. Airport Blvd.
to 0.18 Miles East of Mason Rd.

Basis of Estimate

Item	Description	Limit and Rate	Unit
260	Lime Treatment (Road-Mixed) For materials used as subgrade * <ul style="list-style-type: none">• Lime(HYD, COM, or QK)(SLRY) or QK(DRY)	6 % by weight based on 100 Lb. / Cu. Ft. subgrade	SY TON
292	Asphalt Treatment (Plant-Mixed) <ul style="list-style-type: none">• Asphalt• Aggregate	110 Lb. / Sq. Yd.-In. 5 % by weight 95 % by weight	TON
340	Dense-Graded Hot Mix Asphalt (Small Quantity) <ul style="list-style-type: none">• Asphalt• Aggregate Tack Coat <ul style="list-style-type: none">• Applied on new HMA• Applied on Existing HMA• Applied on Milled HMA	110 Lb. / Sq. Yd.-In. 6 % by weight 94 % by weight 0.06 Gal. / Sq. Yd. 0.09 Gal. / Sq. Yd. 0.11 Gal. / Sq. Yd.	TON

* If used in existing roadway base, rate will be determined on a case by case basis.

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 AND A COPY MAY BE PURCHASED FROM TXDOT.

- ITEMS 1 TO 9 GENERAL REQUIREMENTS AND COVENANTS
- ITEM 104 REMOVING CONCRETE
- ITEM 105 REMOVING TREATED AND UNTREATED BASE AND ASPHALT PAVEMENT
- ITEM 110 EXCAVATION (132)
- ITEM 132 EMBANKMENT (100) (160) (204) (210) (216) (260) (400)
- ITEM 162 SODDING FOR EROSION CONTROL (166) (168)
- ITEM 166 FERTILIZER (520)
- ITEM 168 VEGETATIVE WATERING
- ITEM 260 LIME TREATMENT (ROAD-MIXED) (105) (132) (204) (210) (216) (247) (300) (310) (520)
- ITEM 276 CEMENT TREATMENT (PLANT-MIXED) (204) (210) (216) (247) (300)(520)
- ITEM 292 ASPHALT TREATMENT (PLANT-MIXED) (300) (301) (320) (520) (585)
- ITEM 340 DENSE-GRADED HOT-MIX ASPHALT (SMALL QUANTITY) (300) (301) (320) (520) (585)
- ITEM 348 THIN BONDED FRICTION COURSES (210)(300)(301)(320)(342)(520)(585)
- ITEM 354 PLANING AND TEXTURING PAVEMENT
- ITEM 360 CONCRETE PAVEMENT (421) (422) (438) (440) (529) (585)
- ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (110) (132) (401) (402) (403) (416) (420) (421) (423)
- ITEM 402 TRENCH EXCAVATION PROTECTION
- ITEM 416 DRILLED SHAFT FOUNDATIONS (405) (420) (421) (423) (440) (448)
- ITEM 420 CONCRETE SUBSTRUCTURES (400) (404) (421) (422) (426) (427) (440) (441) (448)
- ITEM 432 RIPRAP (247) (420) (421) (431) (440)
- ITEM 450 RAILING (420) (421) (422) (424) (440) (441) (442) (445) (446) (448) (540)
- ITEM 462 CONCRETE BOX CULVERTS AND DRAINS (400) (402) (403) (420) (421) (422) (424) (440) (464) (476)
- ITEM 464 REINFORCED CONCRETE PIPE (400) (402) (403) (467) (476)
- ITEM 465 JUNCTION BOXES, MANHOLES, AND INLETS (400) (420) (421) (424) (440) (471)
- ITEM 467 SAFETY END TREATMENT (400) (420) (421) (432) (440) (442)(445)(460)(464)
- ITEM 479 ADJUSTING MANHOLES AND INLETS (400) (421) (465) (471)
- ITEM 496 REMOVING STRUCTURES
- ITEM 500 MOBILIZATION
- ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
- ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS (161) (432) (556)
- ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420) (421) (424) (440) (442)

- ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360) (420) (421) (440)
- ITEM 536 CONCRETE MEDIANS AND DIRECTIONAL ISLANDS (420) (421) (427) (440) (529)
- ITEM 540 METAL BEAM GUARD FENCE (421) (441) (445) (529)
- ITEM 542 REMOVING METAL BEAM GUARD FENCE
- ITEM 544 GUARDRAIL END TREATMENTS
- ITEM 545 CRASH CUSHION ATTENUATORS (421)
- ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (416) (421) (432) (441) (442) (445) (449) (614) (616) (618) (620) (622) (624) (628)
- ITEM 618 CONDUIT (400) (476)
- ITEM 620 ELECTRICAL CONDUCTORS (610) (628)
- ITEM 624 GROUND BOXES (420) (421) (432) (440) (618) (620)
- ITEM 628 ELECTRICAL SERVICES (441) (445) (449) (618) (620) (627) (656)
- ITEM 636 SIGNS (643)
- ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421) (440) (441) (442) (445) (636) (643) (656)
- ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (416) (421) (440) (441) (442) (445) (636)
- ITEM 650 OVERHEAD SIGN SUPPORTS (416)(420)(421)(441)(442)(445)(449)(618)(636)(654)
- ITEM 662 WORK ZONE PAVEMENT MARKINGS (666) (668) (672) (677)
- ITEM 668 PREFABRICATED PAVEMENT MARKINGS (678)
- ITEM 672 RAISED PAVEMENT MARKERS (677) (678)
- ITEM 677 ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS (300) (302) (316)
- ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)
- ITEM 690 MAINTENANCE OF TRAFFIC SIGNALS (416) (421) (476) (610) (618) (620) (622) (624) (625) (627) (628) (636) (656) (680) (682) (684) (685) (686) (687) (688)

SPECIAL PROVISIONS:

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

PREVAILING WAGES

- SPECIAL PROVISION TO ITEM 000 "GENERAL" (FBGPTRA)
- SPECIAL PROVISION TO ITEM 000 "SCHEDULE OF LIQUIDATED DAMAGES" (000---658)
- SPECIAL PROVISION TO ITEM 000 "INSTRUCTIONS TO BIDDERS" (FBGPTRA) (002-001)
- SPECIAL PROVISION TO ITEM 000 "AWARD AND EXECUTION OF CONTRACT" (FBGPTRA) (003-001)
- SPECIAL PROVISION TO ITEM 000 "SCOPE OF WORK" (FBGPTRA) (004-001)
- SPECIAL PROVISION TO ITEM 000 "CONTROL OF THE WORK" (005-002)
- SPECIAL PROVISION TO ITEM 000 "LEGAL RELATIONS AND RESPONSIBILITIES" (FBGPTRA) (007-001)
- SPECIAL PROVISION TO ITEM 000 "PROSECUTION AND PROGRESS" (008-017) (008-033)
- SPECIAL PROVISION TO ITEM 000 "MEASUREMENT AND PAYMENT" (FBGPTRA) (009-001)
- SPECIAL PROVISION "EMBANKMENT" (132---002)

SPECIAL PROVISION "DENSE-GRADED HOT-MIX ASPHALT (SMALL QUANTITY)" (340---003)
SPECIAL PROVISION "THIN BONDED FRICTION COURSES" (348-003)
SPECIAL PROVISION "CONCRETE BOX CULVERTS AND DRAINS" (462-002)
SPECIAL PROVISION "REINFORCED CONCRETE PIPE" (464-001)
SPECIAL PROVISION "JUNCTION BOXES, MANHOLES, AND INLETS" (465-001)
SPECIAL PROVISION "BARRICADES, SIGNS, AND TRAFFIC HANDLING" (502---008)
SPECIAL PROVISION "TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL
CONTROLS" (506---005)
SPECIAL PROVISION "METAL BEAM GUARD FENCE" (540-001)
SPECIAL PROVISION "SIGNS" (636-001)
SPECIAL PROVISION "RAISED PAVEMENT MARKERS" (672---001)
SPECIAL PROVISION "TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR
(TA)" (6185---002)

SPECIAL SPECIFICATIONS:

ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
ITEM 6185 TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)

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 PROJECT.

"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.....	\$ 12.71
Excavator, Over 50,000 pounds.....	\$ 14.53
Foundation Drill, Crawler Mounted.....	\$ 17.43
Foundation Drill, Truck Mounted.....	\$ 15.89
Front End Loader 3 CY or Less.....	\$ 13.32
Front End Loader, Over 3 CY.	\$ 13.17
Loader/Backhoe.....	\$ 14.29
Mechanic.....	\$ 16.96
Milling Machine.....	\$ 13.53
Motor Grader, Fine Grade....	\$ 15.69
Motor Grader, Rough.....	\$ 14.23
Off Road Hauler.....	\$ 14.60
Pavement Marking Machine....	\$ 11.18
Piledriver.....	\$ 14.95
Roller, Asphalt.....	\$ 11.95
Roller, Other.....	\$ 11.57
Scraper.....	\$ 13.47
Spreader Box.....	\$ 13.58
 Servicer.....	 \$ 13.97
Steel Worker	
Reinforcing Steel.....	\$ 15.15
Structural Steel Welder.....	\$ 12.85
Structural Steel.....	\$ 14.39

TRUCK DRIVER

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

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

=====

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

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

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate). Union Rate Identifiers A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example:

PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average

rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted. Union Average Rate Identifiers Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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

=====

END OF GENERAL DECISION

FORT BEND GRAND PARKWAY 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.”

Special Provision to Item 000

Schedule of Liquidated Damages



Table 1
Schedule of Liquidated Damages

For Dollar Amount of Original Contract		Dollar Amount of Daily Contract Administration Liquidated Damages per Working Day
From More Than	To and Including	
0	100,000	570
100,000	500,000	590
500,000	1,000,000	610
1,000,000	1,500,000	685
1,500,000	3,000,000	785
3,000,000	5,000,000	970
5,000,000	10,000,000	1,125
10,000,000	20,000,000	1,285
20,000,000	Over 20,000,000	2,590

In addition to the amount shown in Table 1, the Liquidated Damages will be increased by the amount shown in Item 8 of the General Notes for Road User Cost (RUC), when applicable.

FORT BEND GRAND PARKWAY 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 GRAND PARKWAY TOLL ROAD Authority (FBGPTRA) 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 FBGPTRA'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 FBGPTRA 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 FBGPTRA 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 FBGPTRA in the preparation of plans. This information is provided for the Bidder's information only and the FBGPTRA 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 FBGPTRA issued addenda are binding. Request explanations of documents in adequate time to allow the FBGPTRA to reply before the bid opening date.

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

Section 6, Preparing the Bid. Prepare the bid on the form furnished by the FBGPTRA. 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 FBGPTRA 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 FBGPTRA.

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 FBGPTRA will accept a request from any person authorized to bind a party to the joint venture to withdraw a bid.

Article 8.6. The FBGPTRA will not be responsible for Internet unavailability. The FBGPTRA 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 GRAND PARKWAY 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 FBGPTRA 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 FBGPTRA 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 FBGPTRA 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 FBGPTRA 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 FBGPTRA 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 FBGPTRA 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 FBGPTRA will make a documented determination of the unit bid price for tabulation purposes if a unit bid price is illegible. The FBGPTRA'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 FBGPTRA 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 FBGPTRA 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 FBGPTRA will select the regular Item or Items or the alternate Item or Items at the FBGPTRA's discretion if both the regular and alternate bid results in the same cost to the State.

The FBGPTRA 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 FBGPTRA will select the option (regular or alternate) that results in the lowest cost to the State. The FBGPTRA will select the regular Item or Items or the alternate Item or Items at the FBGPTRA'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 FBGPTRA 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 FBGPTRA within 5 business days after the date the bid is opened.
- Identify the Items of work involved and include bidding documentation. The FBGPTRA may request clarification of submitted documentation.

The FBGPTRA 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 FBGPTRA 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 FBGPTRA.

Section 13, Gratuities. Do not offer FBGPTRA 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 GRAND PARKWAY 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 60 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.

FORT BEND GRAND PARKWAY 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 either party.)

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 project-specific 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.

FORT BEND GRAND PARKWAY 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 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 hour 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:

8.6.1.1.1 Hour. Any continuous 60 min. period or portion of a continuous 60 min. period beginning at that point when a lane(s) is closed or obstructed by the Contractor's operations.

8.6.1.1.2 Assessment Fee. The amount shown in the proposal, representing the average hourly cost of interference and inconvenience to the road user for each lane closed or obstructed during peak hour traffic.

8.6.1.1.3 Closure or Obstruction. When the Contractor's operations result in a useable lane width of the travelway or shoulder less than that specified in 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 the Contractor on the monthly construction estimate, and thus retained by the Department. The Engineer will determine the time of overlap of lane closure(s) or obstruction(s) 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.

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."

FORT BEND GRAND PARKWAY 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 6, "Payment for Material on Hand (MOH)," is supplemented by the following:

The Contractor shall furnish an affidavit that the material is stored in a bonded facility approved by the Fort Bend County Toll Road Authority (FBGPTRA). The estimate shall be made and included for 75 percent of the invoice material cost and invoice freight cost of materials involved after the Contractor has furnished the engineer with a copy of the paid invoices. Only materials requiring approved shop drawings, or where shop drawings are permitted due to quantities of units or because of stage construction, which are completely constructed and/or fabricated on the Contractor's order for a specific project, and on which an approved Test Report has been issued are eligible.

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.

Special Provision to Item 132

Embankment



Item 132, "Embankment" 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 132.2., "Materials", is supplemented with the following:

- **Type E.** Cement stabilized material consisting of Type CS select backfill meeting the requirements of Section 423.2.4.2. Table 2. Select Backfill Gradation Limits and hydraulic cement meeting the requirements of DMS-4600, "Hydraulic Cement," and the Department's Hydraulic Cement Quality Monitoring Program (HCQMP). Sources not on the HCQMP will require testing and approval before use.

Article 132.2., "Materials", the last paragraph is voided and not replaced.

Section 132.3.3, "Embankments Adjacent to Culverts and Bridges", is voided and replaced by the following:

132.3.3. Embankments Adjacent to Culverts and Bridges. Except as noted below, in Section 132.3.4, compact embankments adjacent to culverts, under bridge approach slabs, and adjacent to abutments where using Wide Flange Terminal Anchorage systems but not cement stabilized embankment, in accordance with Item 400, "Excavation and Backfill for Structures."

Section 132.3.4., "Compaction Methods", the first paragraph is supplemented by the following:

When cement stabilized backfill embankment, reinforced volume embankment, retaining wall foundation improvements, or embankment foundation improvements are shown on the plans, compact each layer to the required density, in accordance with Section 276.4.3, "Compaction."

Article 132.3., "Construction", is supplemented with the following:

Section 132.3.7 Cement Stabilized Backfill Embankment (CSBE). Provide Type E material for cement stabilized backfill embankment. Place CSBE for embankments, retaining wall foundation improvements, embankment foundation improvements and backfill material placed between the reinforced volume of retaining walls in accordance with the requirements of Section 423.2.4.4, "Cement Stabilized Backfill" at the locations shown on the plans or as directed.

Article 132.5., "Payment", the first paragraph is voided and replaced by the following:

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Embankment (Final)," "Embankment (Original)," or "Embankment (Vehicle)," of the compaction method and type specified. Where Cement Stabilized Backfill Embankment (CSBE) is shown on the plans, it will be paid for at the unit price bid for "Embankment (Final) (CSBE)," "Embankment (Final)(CSBE)(Retaining Wall Foundation Improvement)," "Embankment (Final)(CSBE)(Embankment Foundation Improvement)," or "Embankment (Final)(CSBE) (Reinforced Volume of Retaining Walls) of the compaction method and type shown on the plans. When the embankment adjacent to the cement stabilized reinforced volume is not cement stabilized, the cement stabilized reinforced volume will be paid as "Embankment (Final)" of the compaction method and type shown on the plans. This price is full compensation for all cement, cement treatment and stabilization, furnishing embankment, hauling, placing, compacting, curing, finishing, and reworking; disposal of waste material; and equipment, labor, tools, and incidentals.

Special Provision to Item 132

Embankment



Item 132, "Embankment" 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 132.3.4., "Compaction Methods." The last sentence is replaced by the following.

Compact embankments in accordance with Section 132.3.4.1., "Ordinary Compaction," or Section 132.3.4.2., "Density Control," as shown on the plans. The Contractor may use Section 132.3.4.3., "Density Control by Computer-Generated (CG) Curve," as an option for density control.

Article 132.3.4., "Compaction Methods," is supplemented by the following.

3.4.3. Density Control by Computer-Generated (CG) Curve. At the Contractor's discretion, CG curves may be used for density control.

Compact each layer to the required density using equipment complying with Item 210, "Rolling." Determine the maximum lift thickness based on the ability of the compacting operation and equipment to meet the required density. Do not exceed layer thickness of 12 in. loose or 10 in. compacted material, unless otherwise approved. Maintain a level layer with consistent thickness to ensure uniform compaction.

When using this method for each source and type of material, or when directed, sample and conduct testing according to the input parameters specified in Table 3 and provide CG field moisture-density curves based on each soil-compactors-lift thickness combination and CG Tex-114-E moisture-density curves based on each lift of soil. The CG field dry density (D_{fcg}) must be greater than or equal to the CG Tex-114-E maximum dry density (D_{acg}). The Engineer may obtain independent soil samples for supplemental Tex-114-E lab tests to check a supplemental maximum dry density (D_a) and optimum moisture content (W_{opt}) for reference when new CG curves are submitted. Provide access to the computer program used to generate the curve, when directed.

Table 3
Computer-Generated Lab and Field Compaction Curve Input Criteria

Input Variables	Test Method
Liquid Limit, %	Tex-104-E
Plasticity Index (PI), %	Tex-106-E
Soil gradation	Tex-110-E Tex-111-E
Soil classification	Tex-112-E
Compaction roller brand, type, and model	N/A
Loose lift thickness, in.	N/A
Soil specific gravity	Use 2.65 for soil type SC. Use 2.68 for soil type CL. Use 2.69 for soil type CH.

Provide a compaction control report showing all input and output parameters and CG compaction curves, including:

- CG Tex-114-E laboratory maximum dry density (D_{acg}),
- CG Tex-114-E laboratory optimum moisture content (W_{optcg}),
- CG field maximum dry density (D_{fcg}),

- CG field optimum moisture content ($W_{f_{optcg}}$),
- graph of CG laboratory and field compaction curves and the “Zero Air Voids Line,” and
- minimum number of roller passes to achieve the required density and moisture content.

Meet the requirements for field maximum dry density (D_{fcg}) and field optimum moisture content ($W_{f_{optcg}}$) specified in Table 4, unless otherwise shown on the plans. Use only the specific roller and soil properties utilized in lift construction as input parameters to generate the CG field curve used to meet moisture-density requirements in construction.

Table 4
Computer-Generated Lab and Field Compaction Curve Input Criteria

Description	Density	Moisture Content
	Tex-115-E	
$PI \leq 15$	$\geq 98\% D_{fcg}$	$\geq W_{f_{optcg}}$
$15 < PI \leq 35$	$\geq 98\% D_{fcg}$ and $\leq 102\% D_{fcg}$	$\geq W_{f_{optcg}}$
$PI > 35$	$\geq 95\% D_{acg}$ and $\leq 100\% D_{acg}$	$\geq W_{f_{optcg}}$

Each layer is subject to testing by the Engineer for density and moisture content. During compaction, the moisture content of the soil should be above CG optimum moisture content but should not exceed the value shown on the moisture-density curve, above optimum, required to achieve 98% dry density.

When the CG field maximum dry density (D_{fcg}) is not achieved, perform the following steps in order.

- Verify that construction controls including lift soil properties, minimum number and uniformity of compactor passes, lift thickness, and moisture content are correct.
- If needed, rework the lift with the corrected controls using the original CG curve.
- Generate a new CG field compaction curve based on actual in-place soil properties and rework the lift.
- Generate a non-CG Tex-114-E moisture-density reference standard and rework the material using this reference standard.

When required, remove small areas of the layer to allow for density tests. Replace the removed material and recompact at no additional expense to the Department. Proof-roll in accordance with Item 216, “Proof Rolling,” when shown on the plans or as directed. Correct soft spots as directed.

Article 132.3.5., “Maintenance of Moisture and Reworking.” The first sentence is replaced by the following.

Maintain the density and moisture content once all requirements in Table 2 or 4 are met.

Special Provision to Item 340

Dense-Graded Hot-Mix Asphalt (Small Quantity)



For this project, Item 340, "Dense-Graded Hot-Mix Asphalt (Small Quantity)," 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 340.2.5., "Tack Coat." The first paragraph is voided and replaced by the following.

Furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with Item 300, "Asphalts, Oils, and Emulsions." Specialized tack coat materials listed on the Department's MPL are allowed or required when shown on the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

Section 340.4.1., "Certification." The paragraph is voided and replaced by the following.

Certification. Personnel certified by the Department-approved hot-mix asphalt certification program must conduct all mixture designs, sampling, and testing in accordance with Table 6. Supply the Engineer with a list of certified personnel and copies of their current certificates before beginning production and when personnel changes are made. Provide a mixture design developed and signed by a Level 2 certified specialist. Provide Level 1A certified specialists at the plant during production operations. Provide Level 1B certified specialists to conduct placement tests. Provide Level AGG101 certified specialists for aggregate testing.

Table 6, "Test Methods, Test Responsibility, and Minimum Certification Levels" is voided and replaced by the following.

Table 6
Test Methods, Test Responsibility, and Minimum Certification Levels

Test Description	Test Method	Contractor	Engineer	Level ¹
1. Aggregate and Recycled Material Testing				
Sampling	Tex-221-F	✓	✓	1A/AGG101
Dry sieve	Tex-200-F, Part I	✓	✓	1A/AGG101
Washed sieve	Tex-200-F, Part II	✓	✓	1A/AGG101
Deleterious material	Tex-217-F, Parts I & III	✓	✓	AGG101
Decantation	Tex-217-F, Part II	✓	✓	AGG101
Los Angeles abrasion	Tex-410-A		✓	TxDOT
Magnesium sulfate soundness	Tex-411-A		✓	TxDOT
Micro-Deval abrasion	Tex-461-A		✓	AGG101
Crushed face count	Tex-460-A	✓	✓	AGG101
Flat and elongated particles	Tex-280-F	✓	✓	AGG101
Linear shrinkage	Tex-107-E	✓	✓	AGG101
Sand equivalent	Tex-203-F	✓	✓	AGG101
Organic impurities	Tex-408-A	✓	✓	AGG101
2. Asphalt Binder & Tack Coat Sampling				
Asphalt binder sampling	Tex-500-C, Part II	✓	✓	1A/1B
Tack coat sampling	Tex-500-C, Part III	✓	✓	1A/1B
3. Mix Design & Verification				
Design and JMF changes	Tex-204-F	✓	✓	2
Mixing	Tex-205-F	✓	✓	2
Molding (TGC)	Tex-206-F	✓	✓	1A
Molding (SGC)	Tex-241-F	✓	✓	1A
Laboratory-molded density	Tex-207-F, Parts I & VI	✓	✓	1A
Rice gravity	Tex-227-F, Part II	✓	✓	1A
Ignition oven correction factors ²	Tex-236-F, Part II	✓	✓	2
Indirect tensile strength	Tex-226-F	✓	✓	1A
Hamburg Wheel test	Tex-242-F	✓	✓	1A
Boil test	Tex-530-C	✓	✓	1A
4. Production Testing				
Mixture sampling	Tex-222-F	✓	✓	1A/1B
Molding (TGC)	Tex-206-F		✓	1A
Molding (SGC)	Tex-241-F		✓	1A
Laboratory-molded density	Tex-207-F, Parts I & VI		✓	1A
Rice gravity	Tex-227-F, Part II		✓	1A
Gradation & asphalt binder content ²	Tex-236-F, Part I		✓	1A
Moisture content	Tex-212-F, Part II		✓	1A/AGG101
Hamburg Wheel test	Tex-242-F		✓	1A
Boil test	Tex-530-C		✓	1A
5. Placement Testing				
In-place air voids	Tex-207-F, Parts I & VI		✓	1A
In-place density (nuclear method)	Tex-207-F, Part III	✓		1B
Establish rolling pattern	Tex-207-F, Part IV	✓		1B
Ride quality measurement	Tex-1001-S	✓	✓	Note 3

- Level 1A, 1B, AGG101, and 2 are certification levels provided by the Hot Mix Asphalt Center certification program.
- Refer to Section 340.4.8.3., "Production Testing," for exceptions to using an ignition oven.
- Profiler and operator are required to be certified at the Texas A&M Transportation Institute facility when Surface Test Type B is specified.

Section 340.4.4.2., Mixing and Discharge of Materials.” The first paragraph is voided and replaced by the following.

Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F (or 275°F for WMA). The Department will not pay for or allow placement of any mixture produced above 350°F.

Section 340.4.6.2., “Tack Coat.” The paragraph is voided and replaced by the following.

4.6.2.1 **Application.** Clean the surface before placing the tack coat. The Engineer will set the rate between 0.04 and 0.10 gal. of residual asphalt per square yard of surface area. Apply a uniform tack coat at the specified rate unless otherwise directed. Apply the tack coat in a uniform manner to avoid streaks and other irregular patterns. Apply the tack coat to all surfaces the will come in contact with the subsequent HMA placement, unless otherwise directed. Allow adequate time for emulsion to break completely before placing any material. Prevent splattering of tack coat when placed adjacent to curb, gutter, and structures. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

4.6.2.2 **Sampling.** The Engineer will obtain at least one sample of the tack coat binder per project in accordance with Tex-500-C, Part III, and test it to verify compliance with Item 300, “Asphalts, Oils, and Emulsions.” The Engineer will obtain the sample from the asphalt distributor immediately before use.

For emulsions, the Engineer may test as often as necessary to ensure the residual of the emulsion is greater than or equal to the specification requirement in Item 300, “Asphalts, Oils, and Emulsions.”

Section 340.5., “Measurement,” is voided and replaced by the following.

5.1 **Dense Graded Hot-Mix Asphalt (SQ).** Hot mix will be measured by the ton of composite hot-mix, which includes asphalt, aggregate, and additives. Measure the weight on scales in accordance with Item 520, “Weighing and Measuring Equipment.”

5.2 **Tack Coat.** Tack coat will be measured at the applied temperature by strapping the tank before and after road application and determining the net volume in gallons from the calibrated distributor. The Engineer will witness all strapping operations for volume determination. All tack, including emulsions, will be measured by the gallon applied.

The Engineer may allow the use of a metering device to determine asphalt volume used and application rate if the device is accurate within 1.5% of the strapped volume.

Section 340.6., “Payment,” the first paragraph is voided and replaced with the following.

The work performed and materials furnished in accordance with this Item and measured as provided under Article 340.5.1, “Measurement,” will be paid for at the unit bid price for “Dense Graded Hot-Mix Asphalt (SQ)” of the mixture type, SAC, and binder specified. These prices are full compensation for surface preparation, materials, placement, equipment, labor, tools, and incidentals.

Section 340.6., “Payment,” is supplemented by the following.

The work performed and materials furnished in accordance with this Item and measured as provided under Section 340.5.2, “Measurement,” will be paid for at the unit bid price for “Tack Coat” of the tack coat provided. These prices are full compensation for materials, placement, equipment, labor, tools, and incidentals.

Special Provision to Item 348

Thin Bonded Friction Courses



For this project, Item 348, "Thin Bonded Friction Courses," 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 348.4.1., "Certification." The paragraph is voided and replaced by the following.

Certification. Personnel certified by the Department-approved hot-mix asphalt certification program must conduct all mixture designs, sampling, and testing in accordance with Table 6. Supply the Engineer with a list of certified personnel and copies of their current certificates before beginning production and when personnel changes are made. Provide a mixture design developed and signed by a Level 2 certified specialist. Provide Level 1A certified specialists at the plant during production operations. Provide Level 1B certified specialists to conduct placement tests. Provide Level AGG101 certified specialists for aggregate testing.

Table 6, "Test Methods, Test Responsibility, and Minimum Certification Levels" is voided and replaced by the following.

Table 6
Test Methods, Test Responsibility, and Minimum Certification Levels

Test Description	Test Method	Contractor	Engineer	Level ¹
1. Aggregate and Recycled Material Testing				
Sampling	Tex-221-F	✓	✓	1A/AGG101
Dry sieve	Tex-200-F , Part I	✓	✓	1A/AGG101
Washed sieve	Tex-200-F , Part II	✓	✓	1A/AGG101
Deleterious material	Tex-217-F , Parts I & III	✓	✓	AGG101
Decantation	Tex-217-F , Part II	✓	✓	AGG101
Los Angeles abrasion	Tex-410-A		✓	TxDOT
Magnesium sulfate soundness	Tex-411-A		✓	TxDOT
Micro-Deval abrasion	Tex-461-A		✓	AGG101
Crushed face count	Tex-460-A	✓	✓	AGG101
Flat and elongated particles	Tex-280-F	✓	✓	AGG101
2. Asphalt Binder & Tack Coat Sampling				
Asphalt binder sampling	Tex-500-C , Part II	✓	✓	1A/1B
Membrane sampling	Tex-500-C , Part III	✓	✓	1A/1B
3. Mix Design & Verification				
Design and JMF changes	Tex-204-F	✓	✓	2
Mixing	Tex-205-F	✓	✓	2
Molding (SGC)	Tex-241-F	✓	✓	1A
Laboratory-molded density	Tex-207-F , Parts I, VI, & VIII	✓	✓	1A
Rice gravity	Tex-227-F , Part II	✓	✓	1A
Ignition oven correction factors ²	Tex-236-F , Part II	✓	✓	2
Drain-down	Tex-235-F	✓	✓	1A
Hamburg Wheel test	Tex-242-F	✓	✓	1A
Overlay test	Tex-248-F		✓	TxDOT
Boil test	Tex-530-C	✓	✓	1A
Cantabro loss	Tex-245-F	✓	✓	1A
4. Production Testing				
Control charts	Tex-233-F	✓	✓	1A
Mixture sampling	Tex-222-F	✓	✓	1A/1B
Gradation & asphalt binder content ²	Tex-236-F , Part I	✓	✓	1A
Moisture content	Tex-212-F , Part II	✓	✓	1A/AGG101
Micro-Deval abrasion	Tex-461-A		✓	AGG101
Drain-down	Tex-235-F	✓	✓	1A
Boil test	Tex-530-C	✓	✓	1A
Abson recovery	Tex-211-F		✓	TxDOT
5. Placement Testing				
Control charts	Tex-233-F	✓	✓	1A
Ride quality measurement	Tex-1001-S	✓	✓	Note 3
Thermal profile	Tex-244-F	✓	✓	1B
Permeability	Tex-246-F	✓	✓	1B

- Level 1A, 1B, AGG101, and 2 are certification levels provided by the Hot Mix Asphalt Center certification program.
- Refer to Section 348.4.5., "Production Operations," for exceptions to using an ignition oven.
- Profiler and operator are required to be certified at the Texas A&M Transportation Institute facility when Surface Test Type B is specified.

Table 8, “Laboratory Mixture Properties for Permeable Friction Course,” is voided and replaced by the following.

Table 8
Laboratory Mixture Design Properties

Mixture Property	Test Method	PG 76 Mixtures		A-R Mixtures	Thin Bonded Wearing Course		
		Fine (PFC-F)	Coarse (PFC-C)	Coarse (PFCR-C)	Type A	Type B	Type C
Asphalt binder content, %	–	6.0–7.0	6.0–7.0	7.0–9.0	5.0–5.8	4.8–5.6	4.8–5.6
Film thickness, microns	–	–	–	–	9.0 Min	9.0 Min	9.0 Min
Design gyrations (Ndesign)	Tex-241-F	50	50	50	50	50	50
Laboratory-molded density, %	Tex-207-F	78.0 Max	82.0 Max	82.0 Max	92.0 Max	92.0 Max	92.0 Max
Hamburg Wheel test, ¹ passes at 12.5 mm rut depth	Tex-242-F	10,000 Min	–	–	–	–	–
Overlay test, ¹ number of cycles	Tex-248-F	200 Min	–	–	–	–	–
Drain-down, %	Tex-235-F	0.10 Max	0.10 Max	0.10 Max	0.10 Max	0.10 Max	0.10 Max
Fiber content, % by wt. of total PG 76 mixture	Calculated	0.20 ² –0.50	0.20 ² –0.50	–	–	–	–
Lime content, % by wt. of total aggregate	Calculated	1.0 ³	1.0 ³	–	–	–	–
CRM content, % by wt. of A-R binder	Calculated	–	–	15.0 Min	–	–	–
Boil test ⁴	Tex-530-C	–	–	–	–	–	–
Cantabro loss, %	Tex-245-F	20.0 Max	20.0 Max	20.0 Max	20.0 Max	20.0 Max	20.0 Max

1. Mold test specimens to Ndesign at the optimum asphalt binder content (JMF1).
2. When at least 3% RAS is used in the mixture, the Contractor may reduce the amount of fibers to at least 0.10% provided the mixture meets the drain-down requirement.
3. Unless otherwise shown on the plans or waived by the Engineer based on Hamburg Wheel results.
4. Used to establish baseline for comparison to production results. May be waived when approved.

Table 9, “Testing Frequency and Mixture Production Tolerances,” is voided and replaced by the following.

Table 9
Testing Frequency and Mixture Production Tolerance

Test Description	Test Method	Minimum Contractor Testing Frequency	Minimum Engineer Testing Frequency	Operational Tolerance from Current JMF
Individual % retained for sieve sized larger than #200	Tex-200-F	1 per subplot	1 per 12 sublots	±5.0 ¹
% passing the #200 sieve				±2.0 ¹
Laboratory-molded density, %	Tex-207-F , Part VIII	1 per subplot	1 per lot	Table 8
Asphalt binder content, %	Tex-236-F ²	1 per subplot	1 per lot ³	±0.3 ⁴
Drain-down, %	Tex-235-F	1 per subplot	1 per 12 sublots	Table 8
Boil test ⁵	Tex-530-C	1 per project	1 per project	N/A
Membrane application rate	Tex-247-F	1 per lot	1 per 4 lots	±0.02
Cantabro loss, %	Tex-245-F	1 per project (sample only)	1 per project	Table 8
Asphalt binder sampling	Tex-500-C , Part II	1 per lot (sample only)	1 per project	N/A
Emulsion membrane sampling and testing	Tex-500-C , Part III	1 per lot (sample only)	1 per project	N/A
Thermal profile	Tex-244-F	1 per subplot	1 per project ⁶	N/A

1. Only applies to mixture produced for Lot 1 and higher. Aggregate gradation is not allowed to be outside the limits shown in Table 7.
2. Ensure the binder content determination excludes fibers. Add the recycled binder content to the flow meter readout when the asphalt mass flow meter is used to determine binder content.
3. May be obtained from asphalt mass flow meter readouts.
4. Asphalt binder content is not allowed to be outside the limits shown in Table 8.
5. The Engineer may reduce or waive the sampling and testing requirements based on a satisfactory test history.
6. Not required when a thermal imaging system is used.

Section 348.4.5.2., “Mixing and Discharge of Materials.” The first paragraph is voided and replaced by the following.

Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F (or 275°F for WMA). The Department will not pay for or allow placement of any mixture produced above 350°F.

Section 348.4.7., “Placement Operations.” The second paragraph is voided and replaced by the following.

Prepare the surface by removing raised pavement markers and objectionable material such as moisture, dirt, sand, leaves and other loose impediments from the surface before placing mixture. Remove vegetation from pavement edges. Do not allow any loose mixture onto the prepared surface before application of the membrane. Place the mixture to meet the typical section requirements and produce a smooth, finished surface with a uniform appearance and texture. Offset longitudinal joints of successive courses of hot-mix by at least 6 in. Place mixture so that longitudinal joints on the surface course coincide with lane lines, or as directed. Ensure that all finished surfaces will drain properly.

Section 348.4.7.3.1.3., “Thermal Camera,” is voided and replaced by the following.

Take immediate corrective action to eliminate recurring moderate thermal segregation when a hand-held thermal camera is used. Provide the Engineer with the thermal profile of every subplot within one working day of the completion of each lot. When requested by the Engineer, provide the electronic files generated using the thermal camera. Report the results of each thermal profile in accordance with Section 348.4.2., “Reporting and Responsibilities.” The Engineer will use a hand-held thermal camera to obtain a thermal profile at least once per project. Suspend operations and take immediate corrective action to eliminate severe thermal segregation unless otherwise directed. Resume operations when the Engineer determines that subsequent production will meet the requirements of this Section.

Special Provision to Item 462

Concrete Box Culverts and Drains



Item 462, "Concrete Box Culverts and Drains," 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 2.1., "General." The last paragraph is voided and replaced with the following:

Furnish material for precast formed and machine-made box culverts in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Sections 2.2.2., "Formed Precast," and 2.2.3., "Machine-Made Precast," are voided and replaced by the following.

2.2.2 **Precast.** Precast formed and machine –made box culvert fabrication plants must be approved in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures." The Construction Division maintains a list of approved precast box culvert fabrication plants on the Department's MPL. Fabricate precast boxes in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Sections 2.3.2., "Formed Precast," and 2.3.3., "Machine-Made Precast," are voided and replaced by the following.

2.3.2 **Precast.** Make, cure, and test compressive test specimens for precast formed and machine –made box culverts in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Section 2.5., "Marking," the first paragraph is voided and replaced with the following.

Marking. Clearly mark each precast unit with the following:

- Name or trademark of fabricator and plant location;
- ASTM designation and product designation (when applicable);
- Date of manufacture,
- Box size,
- Minimum and maximum fill heights,
- Designation "TX" for precast units fabricated per DMS-7305,
- Fabricator's designated approval stamp for each approved unit,
- Designation "SR" for boxes meeting sulfate-resistant concrete plan requirements (when applicable), and
- Precast drainage structures used for jacking and boring (when applicable).

Section 2.6., "Tolerances." The section is voided and replaced with the following.

Ensure precast sections meet the permissible variations listed in ASTM C1577.

Ensure that the sides of a section at each end do not vary from being perpendicular to the top and bottom by more than 1/2 in. when measured diagonally between opposite interior corners. Deviations from this tolerance will be acceptable if the sections can be fitted at the plant and the joint opening at any point does not exceed 1 in. Use match-marks for proper installation on sections that have been accepted in this manner.

Ensure wall and slab thicknesses are not less than shown on the plans except for occasional deficiencies not greater than 3/16 in. or 5%, whichever is greater. If proper jointing is not affected, thicknesses in excess of plan requirements are acceptable.

Section 2.7., “Defects and Repair.” The section is voided and replaced with the following:

Fine cracks on the surface of members that do not extend to the plane of the nearest reinforcement are acceptable unless the cracks are numerous and extensive. Repair cracks that extend into the plane of the reinforcing steel in accordance with the Department’s Concrete Repair Manual. The Engineer may accept boxes with repairs that are sound, properly finished, and cured in conformance with pertinent specifications. Discontinue further production of precast sections until corrections are made and proper curing is provided when fine cracks on the surface indicate poor curing practices.

Repair precast boxes in accordance with DMS-7305, “Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures.”

Section 2.8., “Storage and Shipment.” This section is voided and replaced with the following:

- 2.8 **Storage and Shipment.** Store precast sections on a level surface. Do not place any load on the sections until design strength is reached and curing is complete. Store and ship precast boxes in accordance with DMS-7305, “Fabrication and Qualification Production for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures.

Special Provision to Item 464

Reinforced Concrete Pipe



Item 464, "Reinforced Concrete Pipe," 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 2.1., "Fabrication." The section is voided and replaced with the following.

Fabrication plants must be approved by the Materials and Tests Division in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures," before furnishing precast reinforced concrete pipe for Departmental projects. The Department's MPL has a list of approved reinforced concrete pipe plants.

Furnish material and fabricate reinforced concrete pipe in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Section 2.3., "Marking." The first paragraph is voided and replaced with the following.

Furnish each section of reinforced concrete pipe marked with the following information specified in DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

- Class or D-Load of pipe,
- ASTM designation,
- Date of manufacture,
- Pipe size,
- Name or trademark of fabricator and plant location,
- Designation "TX" for precast units fabricated per DMS-7305;
- Designated fabricator's approval stamp for each approved unit,
- Pipe to be used for jacking and boring (when applicable), and
- Designation "SR" for pipe meeting sulfate-resistant concrete plan requirements (when applicable).

Section 2.5., "Causes for Rejection." The section is voided and replaced with the following.

Individual sections of pipe may be rejected for any of the conditions stated in the Annex of DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Section 2.6., "Repairs." The section is voided and replaced with the following:

Make repairs, if necessary, as stated in the Annex of DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Special Provision to Item 465

Junction Boxes, Manholes, and Inlets



Item 465, "Junction Boxes, Manholes, and Inlets," 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 2.1., "Concrete," The section is voided and replaced with the following.

Furnish concrete per DMS-7305 for formed and machine-made precast junction boxes, manholes, and inlets. Furnish Class C concrete for cast-in-place junction boxes, manholes, and inlets unless otherwise shown on the plans.

Section 3.1., "Precast Junction Boxes, Manholes, and Inlets," The section is voided and replaced with the following.

Construct formed and machine-made precast junction boxes, manholes, and inlets in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures" and the Contract Plans, except as otherwise noted in this Item.

Multi-project fabrication plants as defined in Item 424 "Precast Concrete Structural Members (Fabrication)," that produce junction boxes, manholes, and inlets will be approved by the Materials and Tests Division in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures." The Department's MPL has a list of approved multi-project fabrication plants.

Section 3.1.1., "Lifting Holes," The section is voided and not replaced.

Section 3.1.2., "Marking," The section is voided and replaced with the following.

Marking. Clearly mark each precast junction box, manhole, and inlet unit with the following information:

- name or trademark of fabricator and plant location;
- product designation;
- ASTM designation (if applicable);
- date of manufacture;
- designation "TX" for precast units fabricated per DMS-7305;
- designated fabricator's approval stamp for each approved unit; and
- designation "SR" for product meeting sulfate-resistant concrete plan requirements (when applicable).

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 506

Temporary Erosion, Sedimentation, and Environmental Controls



Item 506, "Temporary Erosion, Sedimentation, and Environmental Controls," 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 506.1., "Description." The second paragraph is voided and replaced by the following.

Contractor is considered primary operator to have day-to-day operational control as defined in TPDES GP TXR150000.

- 1.1. For projects with soil disturbance of less than 1 acre, no submittal to TCEQ will be required but Contractor will follow SWP3. For projects with soil disturbance of 1 acre to less than 5 acres a small site notice will be posted at the site. For projects with soil disturbance of 5 acres or more a Notice of Intent (NOI) is required and a large site notice posted at site. Postings will be in accordance with TPDES GP TXR150000. Postings not associated with project specific locations will be in same location as Department's postings.
- 1.2. **Notice of Intent (NOI).** Submit a NOI, if applicable, with the TCEQ under the TPDES GP TXR150000 at least 7 days prior to commencement of construction activities at the project site. Provide a signed copy to the Engineer and any other MS4 operators at the time of submittal. The Department will submit their NOI prior to contractor submission and will provide a copy for Contractor's use in completing the Contractor's NOI form.
- 1.3. **Notice of Change (NOC).** Upon concurrence of the Engineer, submit a NOC, if applicable, to the TCEQ within 14 days of discovery of a change or revision to the NOI as required by the TPDES GP TXR150000. Provide a signed copy of the NOC to the Engineer and any other MS4 operators at the time of submittal.
- 1.4. **Notice of Termination (NOT).** Upon concurrence of the Engineer, submit a NOT, if applicable, to the TCEQ within 30 days of the Engineer's approval that 70% native background vegetative cover is met or equivalent permanent stabilization have been employed in accordance with the TPDES GP TXR 150000. Provide a signed copy of the NOT to the Engineer and any other MS4 operators at the time of submittal.

Section 506.3.1, "Contractor Responsible Person Environmental (CRPE) Qualifications and Responsibilities," is supplemented by the following:

- 3.1. **Contractor Responsible Person Environmental (CRPE) Qualifications and Responsibilities.** Provide and designate in writing at the preconstruction conference a CRPE and alternate CRPE who have overall responsibility for the storm water management program. The CRPE will implement stormwater and erosion control practices; will oversee and observe stormwater control measure monitoring and management; will monitor the project site daily and produce daily monitoring reports as long as there are BMPs in place or soil disturbing activities are evident to ensure compliance with the SWP3 and TPDES General Permit TXR150000. Daily monitor reports shall be maintained and made available upon request. During time suspensions when work is not occurring or on contract non-work days, daily inspections are not required unless a rain event has occurred. The CRPE will provide recommendations on how to improve the effectiveness of control measures. Attend the Department's preconstruction conference for the project. Ensure training is completed as identified in Section 506.3.3., "Training," by all applicable personnel before employees work on the project. Document and maintain and make available upon request, a list, signed by the CRPE, of all applicable Contractor and subcontractor employees who have completed the training. Include the employee's name, the training course name, and date the employee completed the training.

Section 506.3.3., "Training," is supplemented by the following:

Training is provided by the Department at no cost to the Contractor and is valid for 3 yr. from the date of completion. The Engineer may require the following training at a frequency less than 3 yr. based on environmental needs:

- “Environmental Management System: Awareness Training for the Contractor” (English and Spanish) (Approximate running time 20 min.), and
- “Storm Water: Environmental Requirements During Construction” (English and Spanish) (Approximate running time 20 min.).

The Contractor responsible person environmental (CRPE), alternate CRPE designated for emergencies, Contractor's superintendent, Contractor, and subcontractor lead personnel involved in soil disturbing or SWP3 activities must enroll in and complete the training listed below and maintain and make available upon request the certificate of completion. Training is provided by a third party and is valid for 3 yr. from the date shown on the Certificate of Completion. Coordinate enrollment as prescribed by the Department and pay associated fees for the following training:

- “Revegetation During Construction,”
- “Construction General Permit Compliance,” and
- “Construction Stage Gate Checklist (CSGC).”

Training and associated fee will not be measured or paid for directly but are subsidiary to this Item.

Special Provision to Item 540 Metal Beam Guard Fence



Item 540, "Metal Beam Guard Fence" 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 540.4.7, "Measurement," is voided and replaced with the following:

Long Span System. Measurement will be by each long span system, complete in place. Each long span system will be from the first CRT to the last CRT in the system.

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 Item 672

Raised Pavement Markings



For this project, Item 672, "Raised Pavement Markings," 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 672.3., "Construction," the twelfth paragraph is voided and replaced by the following:

Provide a 30-day performance period that begins the day following written acceptance for each separate location or patch. The date of written acceptance will be the last calendar day of each month for the RPMs installed that month for the completed separate project locations. This written acceptance does not constitute final acceptance.

Article 672.3., "Construction," is supplemented by the following:

672.3.1. Raised Pavement Markers Patch. Raised Pavement Markers will be in accordance with Item 672, "Raised Pavement Markers." Unless otherwise directed in the General Notes and Specification Data, a patch will be defined as 1,000 LF or less along the center line of the roadway. The Engineer will determine whether to remove and place markers on the entire roadway segment or just the patch areas. Unless otherwise directed on the plans, the Contractor will remove temporary pavement markings (tabs or temporary tape) prior to placement of permanent markers.

Article 672.5., "Payment," the first paragraph is voided and replaced by the following:

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid at the unit price bid for "Reflectorized Pavement Marker," "Traffic Button," "Plowable Reflectorized Pavement Marker," or "Reflectorized Pavement Marker (Patch)" of the types specified.

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 measurable. 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 Specification 6001

Portable Changeable Message Sign



1. DESCRIPTION

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

2. 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.

3. 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.

4. 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 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.

3. 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.

4. 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.

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 "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.






00_Main Lane Ind Contract 126-1002 W Airport Ramps Uturns AuxLanes - Partially Signed (003)

Final Audit Report

2021-10-06

Created:	2021-10-06
By:	Keely Campbell (keely@mullerlawgroup.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAuW0KGbBZ6cX69uNonllgLqzyE-stelSO

"00_Main Lane Ind Contract 126-1002 W Airport Ramps Uturns AuxLanes - Partially Signed (003)" History

-  Document created by Keely Campbell (keely@mullerlawgroup.com)
2021-10-06 - 6:12:12 PM GMT- IP address: 184.80.241.146
-  Document emailed to Shoukat Dhanani (sdhanani@gulshaninc.com) for signature
2021-10-06 - 6:13:08 PM GMT
-  Email viewed by Shoukat Dhanani (sdhanani@gulshaninc.com)
2021-10-06 - 6:14:36 PM GMT- IP address: 173.11.246.122
-  Document e-signed by Shoukat Dhanani (sdhanani@gulshaninc.com)
Signature Date: 2021-10-06 - 6:15:05 PM GMT - Time Source: server- IP address: 173.11.246.122
-  Agreement completed.
2021-10-06 - 6:15:05 PM GMT