# NOTIFICATION OF ADDENDUM ADDENDUM NO. 1 DATED 5/31/2022

Control	2121-05-046
Project	BR 2022(646)
Highway	IH 10
County	EL PASO

#### Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS PROJECT: BR 2022(646) CONTROL: 2121-05-046 COUNTY: EL PASO LETTING: 06/02/2022 REFERENCE NO: 0524 PROPOSAL ADDENDUMS X PROPOSAL COVER X BID INSERTS (SH. NO.: 1, 4, AND 6 OF 6 X GENERAL NOTES (SH. NO.: A, B, G, H, AND I THRU T X SPEC LIST (SH. NO.: ALL X SPECIAL PROVISIONS: ADDED: 300-020 DELETED: 314-001 SPECIAL SPECIFICATIONS: ADDED: DELETED: X OTHER: PLAN SHEETS AND OTHER CHANGES DESCRIPTION OF ABOVE CHANGES (INCLUDING PLANS SHEET CHANGES) \*\*\*\*\* PROPOSAL \*\*\*\*\* PROPOSAL GUARANTEE CHANGED FROM \$45,000 TO \$52,000 \*\*\*\*\* BID INSERTS \*\*\*\*\* ADDED THE FOLLOWING BID ITEMS: 310-6005, 545-6007, 3076-6066 DELETED THE FOLLOWING BID ITEMS: 314-6005, 545-6008 \*\*\*\*\* GENERAL NOTES \*\*\*\*\* SHEET A: BASIS OF ESTIMATE REPLACED ITEM 314 WITH ITEM 310. SHEET B: REPLACED INDIVIDUAL CONTACT FOR CONTRACTOR QUESTIONS. DESCRIPTION OF ABOVE CHANGES (CONTINUED)

)

(INCLUDING PLANS SHEET CHANGES)

SHEET G: ADDED LAST SENTENCE TO GENERAL NOTES 134, AND 247. ADD GENERAL NOTE 310. REMOVED GENERAL NOTE 314.

SHEETS H AND I: REMOVED GENERAL NOTES 427 AND 428.

SHEETS J THRU T: PARAGRAPHS SHIFTED DUE TO REVISIONS.

#### \*\*\*\* SPECIFICATIONS LIST \*\*\*\*

SHEET 1 OF 3: DELETE STANDARD ITEM 314 AND ADD STANDARD ITEM 310 PRIME COAT (300) (316) (3096).

ADD SPECIAL PROVISION TO ITEM 300 (300-020) AND DELETE SPECIAL PROVISION (314-001) FROM ITEM 314.

#### \*\*\*\*\* PLAN SHEETS \*\*\*\*\*

SHEET 002 (INDEX OF SHEETS): REPLACED SHEET 55 AND ADDED SHEET 55A.

SHEETS 004, 004C, 004D THRU 004I (GENERAL NOTES): REFER TO GENERAL NOTES CHANGES AS NOTED ABOVE.

SHEETS 005 AND 005A (E&Q SHEETS): REVISED ITEMS AS NOTED IN THE BID INSERTS ABOVE.

SHEET 006 (PROPOSED TYPICAL SECTIONS): REVISED DETAIL TO SHOW PRIME COAT IN LIEU OF EMULS ASPH AND ADDED TACK COAT.

SHEET 007 (QUANTITY SUMMARY): REVISED ITEMS AS NOTED IN THE BID INSERTS ABOVE.

SHEET 010A (EPIC): REVISION TO REQUIRED ACTION ON ASBESTOS NOTES.

SHEET 040 (PLAN AND PROFILE): DELETE ITEM 314-6005. ADD ITEMS 310-6005, AND 3076-6066.

SHEET 041 (BARRIER DETAILS): REPLACED ITEM 545-6008 WITH ITEM 545-6007.

SHEET 055: REPLACED STANDARD TAU-II-R(N)-16 WITH STANDARD SHEET QGELITE(M10)(N)-20.

SHEET 055A: ADDED STANDARD SHEET REACT (M) -21.

Control	2121-05-046
Project	BR 2022(646)
Highway	IH 10
County	EL PASO

# PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

# 2014 SPECIFICATIONS WORK CONSISTING OF BRIDGE REPLACEMENT EL PASO COUNTY, TEXAS

The quantities in the proposal are approximate. The quantities of work and materials may be increased or decreased as considered necessary to complete the work as planned and contemplated.

This project is to be completed in 123 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

Provide a proposal guaranty in the form of a Cashier's Check, Teller's Check (including an Official Check) or Bank Money Order on a State or National Bank or Savings and Loan Association, or State or Federally chartered Credit Union made payable to the Texas Transportation Commission in the following amount:

#### FIFTY-TWO THOUSAND (Dollars) (\$52,000)

A bid bond may be used as the required proposal guaranty. The bond form may be detached from the proposal for completion. The proposal may not be disassembled to remove the bond form. The bond must be in accordance with Item 2 of the specifications.

Any addenda issued amending this proposal and/or the plans that have been acknowledged by the bidder, become part of this proposal.

By signing the proposal the bidder certifies:

- 1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
- 2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
- 3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
- 4. that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

• Signed: **			
(1)	(2)	(3)	
Print Name:			
(1)	(2)	(3)	
Title:	(2)		
Company: (1)	(2)	(3)	
· · ·			

• Signatures to comply with Item 2 of the specifications.

<sup>\*\*</sup>Note: Complete (1) for single venture, through (2) for joint venture and through (3) for triple venture.

<sup>\*</sup> When the working days field contains an asterisk (\*) refer to the Special Provisions and General Notes.

# NOTICE TO CONTRACTORS

ANY CONTRACTORS INTENDING TO BID ON ANY WORK TO BE AWARDED BY THIS DEPARTMENT MUST SUBMIT A SATISFACTORY "AUDITED FINANCIAL STATEMENT" AND "EXPERIENCE QUESTIONNAIRE" AT LEAST TEN DAYS PRIOR TO THE LETTING DATE.

UNIT PRICES MUST BE SUBMITTED IN ACCORDANCE WITH ITEM 2 OF THE STANDARD SPECIFICATIONS OR SPECIAL PROVISION TO ITEM 2 FOR EACH ITEM LISTED IN THIS PROPOSAL.

Printed Name of Authorized Signer: _	
Signature of Authorized Signer:	Date:

PROJECT BR 2022(646) COUNTY EL PASO Proposal Sheet TxDOT FORM 234-B I-61-5M

ALT	ITEM-CODE							DEPT
	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR		UNIT	APPROX QUANTITIES	USE ONLY
	100	6002		PREPARING ROW		STA	6.000	1
					DOLLARS			
				and	CENTS			
	104	6021		REMOVING CONC (CURB)		LF	620.000	2
					DOLLARS			
				and	CENTS			
	104	6023		REMOVING CONC (CTB)		LF	380.000	3
					DOLLARS			
				and	CENTS			
	105	6013		REMOVING STAB BASE & ASP	` /	SY	990.000	4
					DOLLARS			
				and	CENTS			
	110	6001		EXCAVATION (ROADWAY)		CY	32.000	5
					DOLLARS			
				and	CENTS			
	132	6005		EMBANKMENT (FINAL)(ORD (	, , , ,	CY	5,289.000	6
					DOLLARS			
				and	CENTS			
	247	6203	003	FL BS (CMP IN PLC)(RAP) (6")		SY	3,631.000	7
					DOLLARS			
				and	CENTS			
	247	6366	003	FL BS (CMP IN PLC)(TY A GR 5	· ` ·	CY	233.000	8
					DOLLARS			
				and	CENTS			
	310	6005		PRIME COAT (AE-P)		GAL	171.000	9
					DOLLARS			
				and	CENTS			
	400	6005		CEM STABIL BKFL		CY	157.000	10
					DOLLARS			
				and	CENTS			

	ITEM-CODE							DEPT
ALT	ITEM DESC S NO CODE N			UNIT BID PRICE ONLY. WRITTEN IN WORDS		UNIT	APPROX QUANTITIES	USE ONLY
	400	6006		CUT & RESTORING PAV		SY	8.000	11
					DOLLARS			
				and	CENTS			
	416	6004		DRILL SHAFT (36 IN)		LF	838.000	12
					DOLLARS			
				and	CENTS			
	420	6014		CL C CONC (ABUT)(HPC)		CY	47.200	13
					DOLLARS			
				and	CENTS			
	420	6030		CL C CONC (CAP)(HPC)		CY	59.700	14
					DOLLARS			
				and	CENTS			
	420	6038		CL C CONC (COLUMN)(HPC)		CY	54.300	15
					DOLLARS			
				and CENTS				
	420	6066		CL C CONC (RAIL FOUNDATION	*	CY	76.000	16
					DOLLARS			
				and	CENTS			
	422	6002		REINF CONC SLAB (HPC)		SF	11,040.000	17
					DOLLARS			
				and	CENTS			
	422	6016		APPROACH SLAB (HPC)	5077.50	CY	71.000	18
					DOLLARS			
	40.5	5005		and	CENTS	* 5	1 420 420	10
	425	6035		PRESTR CONC GIRDER (TX28)	DOLL ADG	LF	1,428.420	19
				4	DOLLARS CENTS			
	422	6000		and			261,000	20
	432	6008		RIPRAP (CONC)(CL B)(RR8&RR9)		CY	261.000	20
				4	DOLLARS CENTS			
	450	6015	001	and PAH (TX T551)(HPG)	CENTS	TE	512.000	21
	450	6015	001	RAIL (TY T551)(HPC)	DOLLADO	LF	512.000	21
				and	DOLLARS CENTS			
	450	6027	001		CENTS	1 17	460,000	22
	450	6027	001	RAIL (TY T80SS)	DOLLADO	LF	468.000	22
				and	DOLLARS CENTS			
				and	CENTS			

	ITEM-CODE						DEPT
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	USE ONLY
	454	6018		SEALED EXPANSION JOINT (4 IN) (SEJ - M)  DOLLARS  and  CENTS	LF	137.000	23
	496	6010		REMOV STR (BRIDGE 100 - 499 FT LENGTH)  DOLLARS  and  CENTS	EA	1.000	24
	496	6025		REMOV STR (APPROACH SLAB)  DOLLARS and CENTS	EA	2.000	25
	500	6001		MOBILIZATION  DOLLARS and CENTS	LS	1.000	26
	502	6001	008	BARRICADES, SIGNS AND TRAFFIC HANDLING  DOLLARS and  CENTS	МО	7.000	27
	506	6002	005	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	160.000	28
	506	6011	005	ROCK FILTER DAMS (REMOVE)  DOLLARS and CENTS	LF	160.000	29
	506	6020	005	CONSTRUCTION EXITS (INSTALL) (TY 1)  DOLLARS and  CENTS	SY	623.000	30
	506	6024	005	CONSTRUCTION EXITS (REMOVE)  DOLLARS  and  CENTS	SY	623.000	31
	506	6040	005	BIODEG EROSN CONT LOGS (INSTL) (8")  DOLLARS and  CENTS	LF	75.000	32
	506	6043	005	BIODEG EROSN CONT LOGS (REMOVE)  DOLLARS and  CENTS	LF	75.000	33
	512	6005		PORT CTB (FUR & INST)(F-SHAPE)(TY 1)  DOLLARS  and  CENTS	LF	1,290.000	34

ALT	ITEM-CODE							DEPT
	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONL WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	USE ONLY	
	512	6053		PORT CTB (REMOVE)(F-SHAPE)(	TY 1)	LF	1,290.000	35
					DOLLARS			
					CENTS			
	529	6002		CONC CURB (TY II)		LF	572.000	36
					DOLLARS			
	5.40	6001	001		CENTS	LE	575,000	27
	540	6001	001	MTL W-BEAM GD FEN (TIM POST	r) DOLLARS	LF	575.000	37
					CENTS			
	540	6002	001	MTL W-BEAM GD FEN (STEEL PO		LF	1,250.000	38
	340	0002	001	`	DOLLARS	LI	1,230.000	36
					CENTS			
	540	6006	001	MTL BEAM GD FEN TRANS (THR		EA	4.000	39
				· ·	DOLLARS			
				and	CENTS			
	540	6016	001	DOWNSTREAM ANCHOR TERMI	NAL SEC-	EA	2.000	40
				TION				
					DOLLARS			
				and	CENTS			
	542	6001		REMOVE METAL BEAM GUARD	FENCE	LF 2,110.000		41
					DOLLARS			
					CENTS			
	542	6003		REMOVE DOWNSTREAM ANCHO	OR TERMI-	EA	2.000	42
				NAL	DOLLADO			
					DOLLARS CENTS			
	544	6001		GUARDRAIL END TREATMENT (		EA	6.000	43
	344	0001			DOLLARS	LA	0.000	43
					CENTS			
	544	6003		GUARDRAIL END TREATMENT (		EA	2.000	44
				,	DOLLARS	´		
				and	CENTS			
	545	6005		CRASH CUSH ATTEN (REMOVE)		EA	6.000	45
					DOLLARS			
				and	CENTS			
	545	6007		CRASH CUSH ATTEN (INSTL)(L)(		EA	2.000	46
					DOLLARS			
				and	CENTS			

	ITEM-CODE							DEPT
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE OF WRITTEN IN WOR	UNIT	APPROX QUANTITIES	USE ONLY	
	545	6019		CRASH CUSH ATTEN (INSTL)(and	S)(N)(TL3) DOLLARS CENTS	EA	4.000	47
	618	6023		CONDT (PVC) (SCH 40) (2") and	DOLLARS CENTS	LF	190.000	48
	618	6047		CONDT (PVC) (SCH 80) (2") (BC and	DRE) DOLLARS CENTS	LF	190.000	49
	620	6007		ELEC CONDR (NO.8) BARE and	DOLLARS CENTS	LF	848.000	50
	620	6008		ELEC CONDR (NO.8) INSULAT	ED DOLLARS CENTS	LF	1,696.000	51
	624	6002		GROUND BOX TY A (122311)W	VAPRON DOLLARS CENTS	EA	5.000	52
	644	6064		IN BRIDGE MNT CLEARANCE ASSM(TY N) and	SGN  DOLLARS  CENTS	EA	2.000	53
	658	6027		INSTL DEL ASSM (D-SY)SZ (BI	RF)CTB (BI) DOLLARS CENTS	EA	6.000	54
	658	6062		INSTL DEL ASSM (D-SW)SZ 1(1) and	BRF)GF2(BI) DOLLARS CENTS	EA	16.000	55
	666	6170	007	REFL PAV MRK TY II (W) 4" (SI and	LD) DOLLARS CENTS	LF	560.000	56
	666	6207	007	REFL PAV MRK TY II (Y) 4" (SL and	DOLLARS CENTS	LF	560.000	57
	666	6224	007	PAVEMENT SEALER 4" and	DOLLARS CENTS	LF	1,120.000	58

	ITEM-CODE						DEPT
ALT	ITEM DESC S.P. NO CODE NO.			UNIT BID PRICE ONLY. WRITTEN IN WORDS		APPROX QUANTITIES	USE ONLY
	666	6303	007	RE PM W/RET REQ TY I (W)4"(SLD)(100M)	L) LF	520.000	59
				DOLLAR	S		
				and CENTS			
	666	6315	007	RE PM W/RET REQ TY I (Y)4"(SLD)(100MI	*	520.000	60
				DOLLAR	S		
				and CENTS			
	672	6009		REFL PAV MRKR TY II-A-A	EA	14.000	61
				DOLLAR	.S		
				and CENTS			
	678	6001		PAV SURF PREP FOR MRK (4")	LF	1,120.000	62
				DOLLAR	S		
				and CENTS			
	3076	6006		D-GR HMA TY-B PG70-22	TON	188.000	63
				DOLLAR	S		
				and CENTS			
	3076	6024		D-GR HMA TY-C SAC-A PG70-22	TON	157.000	64
				DOLLAR	S		
				and CENTS			
	3076	6066		TACK COAT	GAL	171.000	65
				DOLLAR	.S		
				and CENTS			
	6001	6002		PORTABLE CHANGEABLE MESSAGE SIG	N EA	6.000	66
				DOLLAR	S		
				and CENTS			
	6185	6002	002	TMA (STATIONARY)	DAY	40.000	67
				DOLLAR	S		
				and CENTS			

# \*\*\*\*\*\*\* General Notes \*\*\*\*\*\*\*

# **Specification Data**

# Table 1 Basis of Estimate

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Item	Description	Rate
310	Prime Coat (AE-P) (El Paso County)	0.15 gal./sq.yd.
3076	Dense-Graded Hot-Mix Asphalt	1 in. = 110 lb./sq.yd.
	Tack Coat (TRAIL) <sup>2</sup>	0.15 gal./sq.yd.

- 1. Deviation from the rates shown will require approval.
- 2. Tack Coat to be applied to each layer as directed by the Engineer. Rate shown is based on the desired residual application of 0.10 gal./sq.yd.

#### **General Requirements**

Maintain the entire project area in a neat and orderly manner throughout the duration of the work. Remove all construction litter and undesirable vegetation within the right of way inside the project limits. This work will be subsidiary to the various bid items.

General Project Description – This project consists of bridge replacement, roadway approach reconstruction, MBGF reconstruction, signing, and striping on FM 3380 over IH 10 in El Paso, Texas.

#### **Traffic**

Contact the Engineer or the City when construction operations are within 400 feet of a signalized intersection to determine/verify the location of loop detectors, conduit, ground-boxes, etc. Repair or replace any signal equipment damaged by construction operations. The method of repair or replacement shall be pre-approved and inspected. This work shall be completed at the Contractor's expense.

Inform the Engineer and the respective utility companies, when it becomes apparent that the utility lines will interfere with the work in progress.

The following Standard Detail sheets have been modified:

• SIG-44 (MOD)

Contractor questions on this project are to be addressed to the following individual(s):

Monica Ruiz, P.E.
District Construction Engineer
Monica.Ruiz@txdot.gov

Aldo Madrid, P.E.
Director of Construction
Aldo.Madrid@txdot.gov

Contractor questions will be accepted through email, phone, and in person by the above individuals.

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following Address:

https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting%20Responses/

All questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, CCSJ/Project Name.

# **Traffic**

Contact City of El Paso Streets and Maintenance Department at <a href="mailto:linespots@elpasotexas.gov">linespots@elpasotexas.gov</a> and <a href="mailto:pasotexas.gov">pavementcut@elpasotexas.gov</a> to request all City of El Paso utility line locates within project limits. The City will locate one time only. Record locates for refreshing and maintaining all markings throughout the duration of the project.

#### **General ITS**

Contact the Department's El Paso District Signal Shop at 915-790-4245 and <a href="mailto:txdotelplocates@txdot.gov">txdotelplocates@txdot.gov</a> to request all Department utility line locates within the project limits. The Signal Shop will locate one time only, upon request. Record locates for the purpose of refreshing and maintaining all markings throughout the duration of the project.

- Video Interface Card (Input) (Extreme)
- Video Interface Card (Output) (Extreme)
- E&M Card (Extreme)
- Ethernet Interface Card (Extreme)
- Workstation (Extreme)
- Field Terminal Server

# <u>Item 2 – Instructions to Bidders</u>

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following Address:

ftp://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting%20Responses/El%20Paso%20District/

All questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, CCSJ/Project Name.

Request a proposal electronically from the Department's website:

http://www.txdot.gov/business-cq/pr.htm

Or use the electronic bidding site:

http://www.txdot.gov/business/letting-bids/ebs.html

#### Item 4 - Scope of Work

Schedule and perform all work to assure proper drainage during the course of construction or maintenance operations. All labor, tools, equipment and supervision required, to ensure drainage, removal, and handling of water shall be considered incidental work.

#### Item 5 – Control of Work

The Department will furnish horizontal and vertical reference points. Contractor must verify horizontal and vertical reference points with conventional survey methods before proceeding with construction activities. Verification must be submitted for review and approval to the Department's R.P.L.S. prior to start of construction. Any discrepancies not reported will be at no additional cost to the Department.

Plan datum for this project is NAD 83 for horizontal and NAVD 88 for elevation based.

Electronic earthwork cross sections are available upon request, at bidding Contractor's expense, at the Area Engineer's office.

Keep traveled surfaces used in hauling operations clear and free of dirt or other material.

Existing pavement, utilities, structures, etc. damaged as a result of the operations will be repaired at no additional cost to the Department.

Protect from damage and destruction all areas of the right of way, which are not included in the actual limits of the proposed construction areas. Exercise care to prevent damage to trees, vegetation, and other natural features. Protect trees, shrubs, and other landscape features from

abuse, marring, or damage within the actual construction and/or fenced protection areas designated for preservation.

Restore any area disturbed or damaged to a condition "as good as" or "better than" prior to start of construction operation. This work will be at the Contractor's expense.

#### **Precast Alternate Proposals.**

When a precast or cast-in-place concrete element is included in the plans, a precast concrete alternate may be submitted in accordance with "Standard Operating Procedure for Alternate Precast Proposal Submission" found online at <a href="https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/bridge.html#design">https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/bridge.html#design</a>

Acceptance or denial of an alternate is at the sole discretion of the Engineer. Impacts to the project schedule and any additional costs resulting from the use of alternates are the sole responsibility of the Contractor.

#### <u>Item 6 – Control of Materials</u>

Materials to be furnished by the Department can be picked up at the Traffic Signal Shop designated below. Contact the supervisor twenty-four (24) hours in advance of picking up materials.

Traffic/ITS materials to be furnished by the Department shall be picked up at the El Paso District Headquarters. Contact the Engineer forty-eight (48) hours in advance of picking up materials to notify the Traffic Signal Shop.

#### <u>Item 7 – Legal Relations and Responsibilities</u>

Comply with all requirements of the Environmental Permits Issues and Commitments (EPIC) Sheet.

Do not discharge any liquid pollutant from vehicles onto the roadside. Immediately clean spills and dispose in compliance with local, state, and federal regulations to the satisfaction of the Engineer at no additional cost to the Department.

Occupational Safety & Health Administration (OSHA) regulations prohibit operations that bring people or equipment within 10 ft. of an energized electrical line. Where workers and/or equipment may be close to an energized electrical line, notify the electrical power company and make all necessary adjustments to ensure the safety of workers near the energized line.

No significant traffic generator events identified.

#### **Law Enforcement Personnel**

Submit charge summary and invoices using the Department forms.

Patrol vehicles must be clearly marked to correspond with the officer's agency and equipped with appropriate lights to identify them as law enforcement. For patrol vehicles not owned by a law enforcement agency, markings will be retroreflective and legible from 100 ft. from both sides and the rear of the vehicle. Lights will be high intensity and visible from all angles.

No payment will be made for law enforcement personnel needed for moving equipment or payment for drive time to/from the event site.

# <u>Item 8 – Prosecution and Progress</u>

Working days will be calculated in accordance with Section 8.3.1., "Standard Workweek."

Create and maintain a Critical Path Method (CPM) schedule.

Submit baseline schedule and obtain approval prior to beginning construction. The monthly progress payment will be held if the monthly update is not submitted.

# Item 9 - Measurement and Payment

Monthly progress payments will be made for items of work completed by the 27<sup>th</sup> day of each month. Any work completed after the 27<sup>th</sup> will be included for payment in the subsequent monthly progress payment.

Submit Material on Hand (MOH) payment requests at least **three (3)** working days before the end of the month for payment consideration on that month's estimate.

When approved, provide uniformed, off-duty law enforcement officers with marked vehicles during work that requires a lane closure. The officer in marked vehicles shall be located as approved to monitor or direct traffic during the closure. The method used to direct traffic at signalized intersections shall be as approved. Additional officers and vehicles may be provided when approved or directed.

Complete the daily tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

Show proof of certification by the Texas Commission on Law Enforcement Standards.

All law enforcement personnel used in Work Zone Traffic Control shall be trained for performing duties in work zones and are required to take "Safe and Effective Use of Law Enforcement

Personnel in Work Zones" (Course #133119) which can be found online at the following site: www.nhi.fhwa.dot.gov

Certificates of completion should be available to all who finish the course. These should be kept by the officers in order to substantiate completion when reporting to the work site.

Minimums, scheduling fees, etc. will not be paid; TxDOT will consider paying cancellation fees on a case by case basis.

#### <u>Item 104 – Removing Concrete</u>

All work items required to saw-cut the existing concrete sidewalks, driveways, curb and gutter, etc. as shown on the plans, or as directed is considered subsidiary to this Item.

# Item 110 - Excavation

To eliminate all drop-off conditions, construct tapers as directed. This work will not be paid for directly but will be considered subsidiary to pertinent bid items.

# Item 132 - Embankment

Scarify and compact top 6 in. of existing roadway as directed before additional embankment or base course is placed. This work is subsidiary to various bid items.

Track the side slopes of the embankment to control erosion. This work will be subsidiary to various bid items.

Provide a material that does not exceed a sulfate concentration of 1,000 ppm when tested in accordance with Tex-145-E.

#### Item 134 – Backfilling Pavement Edges

Backfill pavement edges immediately after the surface course has begun unless determined otherwise by the Engineer.

Backfill edges to allow no more than a 1:3 slope from pavement edge to existing ground.

Reclaimed asphalt pavement (RAP) may be used to backfill pavement edges. If insufficient RAP is available, then substitute Flexible Base of a type and grade acceptable by the Engineer to backfill pavement edges at no additional cost to the Department.

If Contractor elects to use RAP material for backfill pavement edges, the RAP material must pass a 2" sieve. All material not passing sieve will be removed and disposed of properly. This shall be considered subsidiary to Item 134.

Apply emulsified asphalt at a 50/50 solution of water to emulsion over the disturbed area with backfill material. The application rate shall achieve a final emulsion rate of 0.15 gal/SY residual asphalt. This item shall be considered subsidiary to Item 134.

#### <u>Item 247 – Flexible Base</u>

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A 20-ton vibratory pad foot roller will be required for compaction of lifts 10 inches or greater, unless otherwise directed by the Engineer.

When requested, stake with blue tops at 100-foot intervals, the lines, and grade shown in the plans. (For Item 247.4)

Provide flexible base that does not exceed a sulfate content of 1,000 ppm when tested in accordance with Tex-145-E. The sulfate concentration of water used for compaction shall not exceed 2,000 ppm.

▲ TxDOT's flex base (RAP) stockpile is located at 1430 Joe Battle Blvd, El Paso, TX 79928.

# **≜** <u>Item 310 – Prime Coat</u>

Cure prime coat for at least 48 hr. prior to beginning hot-mix asphalt placement operations.

Contractor is to place the seal coat or pavement course as indicated on plans within 14 calendar days of initial prime coat application. Otherwise, reapply prime coat as directed by the Engineer. Reapplication of the prime coat will be at the Contractor's expense.

#### Item 416 – Drilled Shaft Foundations

Construct retaining wall and drilled shaft at all abutments as per the approved method.

Stake all foundations and locations approved by the Engineer prior to commencement of drilling operations in order to ensure no conflicts with utility lines. Coordinate with the Utility companies for utility location within the project limits. Repair any damage to existing utilities to the satisfaction of the Engineer and the utility owner at no additional cost to the Department.

Use Class "C" concrete.

Cover drilled shafts with plywood and delineate them with cones, to the satisfaction of the Engineer, when not working in them and after work hours.

Replace faulty anchor bolts as directed. Do not weld anchor bolts.

Remove spoils, daily, out of the drainage areas or as directed.

#### Item 420 – Concrete Substructures

Provide High Performance Concrete (HPC) and Epoxy Coated Reinforcement Steel for all bridge substructure elements (Deck, Bent Caps, Columns, Abutments, and Backwalls).

Slope top of Abutment Caps, Bent Caps, except the Bearing Seats, such that water will drain away from the backwall. Maintain bridge components so that they shall remain free of all debris during construction. This work will not be paid for directly but shall be considered subsidiary to the pertinent items.

#### <u>Item 421 – Hydraulic Cement Concrete</u>

Provide strength-testing equipment in accordance with the Contract controlling test(s). Furnish curing facilities adequately sized for this project as approved. Strength-testing equipment and curing facilities shall be at a location approved by the Engineer.

Furnish and properly maintain all test molds. Furnish test molds meeting the requirements of Tex-447-A. The test molds must be ready for use when needed. The Contractor will be responsible for curing and transporting concrete specimens as directed. Furnish proper equipment to remove concrete specimens from the molds. For all concrete items, provide a wheelbarrow or other acceptable container to the Engineer. This will not be paid directly, but will be subsidiary to the various bid items.

Obtain approval for all concrete mix designs and concrete aggregate sources.

Provide sulfate-resistant concrete for all structural concrete in contact with soil or groundwater.

Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water at designated areas approved by the Engineer.

#### Item 422 - Concrete Superstructures

Provide High Performance Concrete (HPC) with Air Entrainment, and Epoxy Coated Reinforcement Steel for all bridge superstructure elements (Bridge Deck, Bridge Rail, and Bridge Approach Slabs).

# Item 432 - Riprap

Wire mesh and fibers for concrete will not be allowed on this project for this Item. Reinforce all concrete riprap using bar reinforcement conforming to Item 440, "Reinforcement for Concrete," as shown on the plans, or as directed.

Finish concrete riprap with a smooth (wood float) finish, unless otherwise directed.

# Item 502 - Barricades, Signs, and Traffic Handling

Prior to beginning construction, the Engineer will approve the routing of traffic and sequence of work.

Additional signs and barricades, placed as directed, will be considered subsidiary to this Item.

In accordance with Section 7.2.6.1, designate, in writing, a Contractor Responsible Person (CRP) and a CRP alternate to take full responsibility for the set-up, maintenance, and necessary corrective measures of the traffic control plan. The CRP or CRP alternate must be present at site and implement the initial set up of every traffic control phase/stage, at each location, and/or each call out, for the entire duration of the project.

At the written request of the Engineer, immediately remove the CRP or CRP alternate from the project if, in the opinion of the Engineer, is not competent, not present at initial TCP set-ups, or does not perform in a proper, skillful, or safe manner. These individuals shall not be reinstated without written consent of the Engineer.

CRP and CRP alternate must be trained using Department approved training. Provide a copy of the certificate of completion to the Engineer for project records. Refer to Table 2 for Department approved Training.

Table 2

Contractor Responsible Person and Alternate

Provider	Course Number	Course Title	Duration	Notes
American Traffic Safety Services Association	TCS	Traffic Control Supervisor	2 days	
National	133112	Design and Operation of Work Zone	1 day	Both courses are required to meet
Highway Institute	133113	Traffic Control  Work Zone  Traffic Control for	1 day	minimum required training.

		Maintenance Operations		
Texas Engineering Extension Services	133112A	Design and Operation of Work Zone Traffic Control	3 days	
University of Texas Arlington Division for Enterprise Development	WKZ421	Traffic Control Supervisor	16 hours	Contact UTA for training needs.

All contractor workers involved with the traffic control implementation and maintenance must participate and complete a Department approved training course. Provide a copy of the certificate of completion to the Engineer for project records. Refer to Table 3 for Department approved training.

Table 3
Other Work Zone Personnel

Provider	Course Number	Course Title	Duration	Notes
American Traffic Safety Services Association	тст	Traffic Control Technician	1 day	
Texas Engineering Extension Services	HWS002	Work Zone Traffic Control	16 hours	Identical to HWS-410. Counts for 3 year CRP requirement.
National Highway Institute	133116	Maintenance of Traffic for Technicians	5 hours	Web based
National Highway Institute	134109-I	Maintenance Training Series: Basics of Work Zone Traffic Control	1 hour	Free, Web based
University of Texas at Arlington, Division for Enterprise Development	WKZ100	Work Zone Safety: Temporary Traffic Control	4 hours	Note name change. Free, Web based

TxDOT/AGC Joint Development	N/A	Safe Workers Awareness Highway Construction Work Zone Hazards	16 minutes 18 minutes	Videos available through AGC of Texas offices. English & Spanish
AGC America	N/A	Highway Work Zone Safety Training	1 day	
Texas Engineering Extension Service	HWS400	Temporary Traffic Control Worker	4 hours	Contact TEEX, if interested in course
TxDOT/AGC Joint Development	N/A	Work Zone Fundamentals	10 minutes	Videos available through ACT of Texas offices. English & Spanish

Contractor may choose to train workers involved with the traffic control implementation and maintenance with a contractor developed training in lieu of Department approved training. Contractor developed training must be equivalent to the Department approved training shown in Table 2. Provide the Engineer a copy of the course curriculum for pre-approval, prior to conducting the contractor developed training. Provide the Engineer a copy of the log of attendees after training completion for project records.

Existing regulatory signs, route marker auxiliaries, guide signs, and warning signs that must be removed due to widening shall be relocated temporarily and erected on approved supports at locations shown in the plans, or as directed. This work will not be paid for directly, but considered subsidiary to this Item.

Notify the Department officials when major traffic changes are to be made, such as detours. Coordinate with the Department on all traffic changes. Advance notification for the following week's work must be made by 5 P.M. on Wednesdays.

Contractor to coordinate with PIO two weeks before any detour.

If Law Enforcement Personnel is required by the Engineer, coordinate with local law enforcement as directed or agreed. Complete the weekly tracking form provided by the Department and submit invoices with 5% allowance for Law Enforcement payments by Contractor that agree with the tracking form for payment at the end of each month where approved services were provided.

Provide access to intersecting side roads and driveways at all times, unless otherwise directed.

Any approved change to the sequence of work or TCP, must be signed and sealed by a Contractor's Licensed Professional Engineer assuming full responsibility for any additional barricade signs and devices needed.

Use striping operations to channelize traffic into the newly completed roadway, as directed. Maintain shoulders and median areas in a condition capable of serving as emergency paths, as approved. This work will be subsidiary to this Item.

Use portable changeable message signs (PCMS) to alert public of construction two weeks prior to construction.

Use flaggers when directed. Provide two-way radio communication for all flaggers.

Place and maintain sufficient additional warning signs, beacons, delineators, and barricades to warn and guide the public of all hazards through the construction zone at all times, and as directed.

Use flashing arrow boards on all tapers for each lane closure.

Some signs, barricades, and channelization devices may not be shown at the precise or measured position. Place the barricades, devices, or signs, with approval, in positions to meet field conditions.

Fill any holes left by barricade or sign supports and restore the area to its original condition.

Use Type A flashing warning lights or delineators to mark open excavation, footings, foundations, or other obstructions near lanes that may be open to traffic, as directed.

For additional information pertaining to channelization, signing, spacing details, and flagging procedures required to regulate, warn, and guide traffic through project, refer to the "Barricade and Construction Standards," BC(1)-21 and to the current *Texas Manual on Uniform Traffic Control Devices(TMUTCD)*.

Remove or cover signs that do not apply to current conditions at the end of each day's work.

Repair and/or replace all signs damaged by the public or due to weather events.

#### **Safety Contingency**

The contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancement, to improve the effectiveness of the TCP that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

#### Item 506 – Temporary Erosion, Sedimentation, and Environmental Controls

Place Best Method Practices (BMP's) in locations as designated in the plans or as directed to meet field conditions.

Place a weatherproof bulletin board containing the Texas Commission on Environmental Quality (TCEQ) required information on the project at a site as directed. Post the following documents:

TCEQ "TPDES Storm Water Program" Construction Site Notice; Primary Construction Site Notices from both Contractor and Department, completed and signed.

Place rain gauge(s) at locations, as designated.

The total disturbed area for this project is 1.33 acres. Establish the authorization requirements for Storm Water Discharges for soil disturbed area in this project, all project locations in the Contract, and Contractor Project Specific Locations (PSLs), within one mile of the project limits. Both the Department and the Contractor shall obtain an authorization to discharge storm water from TCEQ for the construction activities shown on the plans. Obtain required authorization from the TCEQ for any Contractor PSLs for construction support activities on or off right of way. When the total area disturbed for all projects in the Contract and PSLs within one mile of the project limits exceeds five acres, provide a copy of the Contractor NOI PSLs on the right of way to the Engineer (to the appropriate Municipal Separate Storm Sewer System (MS4) Operator when on an Off-system State route).

Best Method Practices (BMP's) may be adjusted to meet field conditions, or as directed. Engineer will verify all locations prior to placement of BMPs. Within the project limits, keep all inlets functional as long as possible to accept storm water as part of the Storm Water Pollution Prevention Plan (SWP3), as directed.

Grading operations will be limited to the catch point of the proposed cross-section.

Preserve any vegetation outside these limits.

#### Item 529 – Concrete Curb, Gutter and Combined Curb and Gutter

Use Class A concrete for these Items, unless otherwise shown on the plans. Wire mesh and fibers for concrete will not be allowed. Reinforce all concrete using reinforcement conforming to Item 440, "Reinforcement for concrete," as shown on the plans or as directed.

Construct the curb opening with metal plate configuration detailed in the plans, or as directed, to ensure roadway drainage to the earthen ditch. No direct payment will be made for these features. Payment will be made under this Item. All required manipulations or incidentals required to complete the work will be considered subsidiary to these items.

Perform all requiring grading for proposed concrete curb, gutter, and combined curb and gutter construction as shown on the plans. All grading, including excavation and fill/embankment will be subsidiary to this Item.

After construction, restore the adjacent surface to a condition approved by the Engineer. Consider this work subsidiary to this Item.

#### Item 540 - Metal Beam Guard Fence

Provide composite blockouts for all Metal Beam Guard Fence (MBGF) posts.

Install guardrails in the direction of traffic flow.

Stake the locations for approval prior to beginning the installation of the proposed MBGF.

Remove all delineators and object markers associated with the MBGF. This work will be subsidiary to the various bid items.

Verify MBGF post lengths and heights prior to ordering materials.

Place reflectors, as per Delineator and Pavement Marker Standard sheet D&OM (1)-20 on the metal beam rail element or as directed.

At the end of each work day, protect all untreated, incomplete, MBGF/Rail blunt ends exposed to traffic flow during construction until the permanent end treatment is in place. All work and incidentals are considered subsidiary to this Item.

MBGF not used will become the property of the Contractor.

# <u>Item 544 –Guardrail End Treatments</u>

Provide certifications from the approved manufacturer's online training for all personnel installing end treatments prior to beginning work.

# <u>Item 545 – Crash Cushion Attenuators</u>

Furnish crash cushion attenuators at the locations shown on the plans for temporary work zone and permanent applications. Crash Cushion attenuators shall meet the plan requirements and be on the Department's *Compliant Work Zone Traffic Control Devices* List.

### **Item 585 - Ride Quality for Pavement Surfaces**

Use Surface Test Type A to govern ride quality.

Use diamond grinding or equivalent to correct areas of localized roughness. Use CSS-1H emulsion to fog seal the corrected areas.

The contractor shall take care to ensure satisfactory profile results in the intermediate paving layers (mixture) to eliminate corrective action for excessive deviations in the final surface layers.

Milling will not be allowed as a corrective action for excessive deviations in the surface layer of hot mix.

#### Item 618 - Conduit

The location of conduit is diagrammatic and may be varied to meet local conditions upon approval of the Engineer.

When shown on the plans, use underground warning tape in the trench installation of conduit (PVC).

For conduit placement in pavement, an earth-saw may be used provided the cut does not exceed 6 in. Backfill as shown on the trench details in the plans.

For all underground conduit bends of 45°, provide rigid metal conduit. Where the rigid metal conduit is exposed at any point and where rigid metal extends into ground boxes, bond the metal conduit to the grounding conductor with grounding type bushings or by other UL-listed grounding connectors, approved by the Engineer. Rigid metal bends will not be paid for directly but will be considered incidental to the PVC conduit system.

Use rigid metal conduit when crossing bridges or culverts. All clamps, expansion joints, bolts and accessories necessary to install the rigid metal will be subsidiary to this Item.

Backfill roadway and driveway trench with cement-stabilized backfill at the end of each working day. Place an ACP patch at the end of the week or as directed by the Engineer.

All conduit elbows and rigid metal extensions required to be installed on PVC conduit systems will not be paid for separately but will be considered subsidiary to the various bid items.

All bore items shall be directional and shall be paid for under this item. Bore quantities include the distance beneath the roadway plus an additional 2 ft. on either side of the curb, sidewalk, or edge of pavement.

For conduits install by open trench method, backfill the trench as shown on the plans.

Place conduit for fiber optic cable at a minimum of 48 in. below pavement surface. Place all other conduit at a minimum depth of 18 in. below the pavement surface. Place conduit prior to the new pavement construction.

Fit both ends of each raceway with a temporary cap to prevent dirt and debris from entering during construction.

Install a continuous green insulated copper wire No. 8 AWG or larger in every conduit throughout the electrical system in accordance with the electrical detail sheets, and the latest edition of the National Electrical Code.

When conduit is to be installed where riprap presently exists, take care in breaking the existing riprap for placement of the conduit. Do not break out a greater area that is required for placement of the conduit. Replace broken riprap with Class "C" concrete to the exact slope, pattern, color and thickness of the existing riprap. Replacement of riprap will be subsidiary to this Item.

#### Item 620 - Electrical Conductors

Use NEC type XHHW for all conductors.

Insulate grounding conductors with a green jacket and neutral conductors with a white jacket.

At every accessible point, bond together the grounding conductors which share the same conduit, junction box, ground box or structure in accordance with the electrical detail sheets and the latest edition of the National Electrical Code.

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Department's Materials Producers List under "Roadway Illumination and Electrical Supplies." category. Fuse holder is shown on the list under Item 610, "Roadway Illumination Assemblies," and Item 620, "Electrical Conductors." Provide 10 amp time delay fuses.

Include extra cable length in each ground box or foundation for each run, to provide adequate slack, as provided in the plans or as directed.

Ensure a properly bonded electrical system by running one No. 8 wire between foundations and grounding it at each foundation ground-rod.

Bond metal junction boxes and metal conduit to the circuit grounding conductors in accordance with the National Electrical Code.

Refer to Article 7.18, "Electrical Requirements," for electrical certification and electrical licensing requirements

The required electrical certifications course is available and is scheduled periodically by Texas Engineering Extension Service (TEEX). Alternatively, Contractors may purchase an entire course for their personnel to be held at a time and location of their choice as negotiated through TEEX. For more information contact:

Texas Engineering Extension Service (TEEX) TxDOT Electrical System Course (979) 845-6563

#### <u>Item 624 – Ground Boxes</u>

Remove all conductors in ground boxes as shown on the plans to be abandoned. Payment for removal of conductors will be subsidiary to this Item.

# <u>Item 644 – Small Roadside Sign Assemblies</u>

Stake all sign locations and receive approval prior to sign placement.

As directed, some regulatory and guide signs will be relocated before construction begins. Mark and locate each reference marker perpendicular to the road and along the right of way, or as directed, prior to removal. Re-erect reference markers at their original location upon completion of construction.

All signs removed will remain property of the Department.

# <u>Item 658 – Delineator and Object Marker Assemblies</u>

Verify all locations with the Engineer prior to installation.

Removal and proper disposal of all existing delineators, object markers, and any non-standard hardware assemblies are not paid directly, but will be considered subsidiary to pertinent items for payment.

# <u>Item 666 –Retroreflectorized Pavement Markings</u>

Use a pilot line for final striping and remove pilot line after all striping is complete. Removal will be in accordance with the methods specified in Item 677, "Eliminating Existing Pavement Markings and Markers," and will be subsidiary to this Item.

Air blasting is required as pavement surface preparation.

In those areas where existing pavement markings are to be covered or removed, field locate and record the existing pavement markings by survey or other approved method by the Engineer as directed. Place final striping on these locations.

# <u>Item 672 – Raised Pavement Markers</u>

Use a pilot line for final striping and remove pilot line after all striping is complete. Removal will be in accordance with the methods specified in Item 677, "Eliminating Existing Pavement Markings and Markers," and will be subsidiary to this Item.

Air blasting is required for pavement surface preparation.

Furnish adhesives that conform to DMS-6100, "Epoxies and Adhesives," and DMS-6130, "Bituminous Adhesive for Pavement Markers," for this Item.

Do not place raised pavement markers when the pavement surface temperature is below 60°F.

Removal of all existing raised pavement markers will be considered subsidiary to the various bid items.

# <u>Item 3076 - Dense-Graded Hot-Mix Asphalt</u>

Provide aggregates with a Surface Aggregate Classification (SAC) of "A" for all surface mixes. Provide aggregates with a minimum SAC of B for all other layers unless otherwise shown on the plans.

In place of typical tack materials shown in Table 18 under Item 300, use a tracking resistant asphalt interlayer (TRAIL) material as a tack coat. Approved TRAIL products are found on TxDOT's Material Producer List under Asphalt Interlayer (Tracking Resistant) through <a href="http://www.txdot.gov/business/resources/materials.html">http://www.txdot.gov/business/resources/materials.html</a>.

Hydrated Lime shall be added as an additive as per Item 301 "Asphalt Antistripping Agents" between the rates of 1.0% minimum and 2.0% maximum by weight. If the Hamburg Wheel Test cannot be met within these limits, Liquid Antistripping agents as approved by the Engineer may be used in conjunction with lime.

Supply Warm-Mix Asphalt (WMA) under this Item.

When Reclaimed Asphalt Pavement (RAP) is used in the production of hot-mix asphaltic concrete, use fractionated RAP. Do not exceed 10.0% of Fractionated RAP on surface mixtures.

Use of RAS is not allowed for any mixtures.

Substitute PG Binders (grade dumping) will not be allowed for any mixtures.

Obtain the current version of the templates at <a href="http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html">http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html</a>. Submit electronically to the Engineer.

Design the mixture at 50 gyrations (Ndesign).

Do not cover with asphaltic material, any existing survey monuments, manholes, or valve covers, etc. Adjustments will be done in coordination with the respective utility owners.

Place a string line or other suitable marking to ensure smooth, neat lines, or as directed. Provide smooth transitions to existing driveways and intersections.

Place longitudinal joints approximately 6 in. from the broken striping, or as directed, to avoid placing under the wheel path.

Operate the spreading and finishing machine at a uniform forward speed consistent with the plant production rate, hauling capability, and roller train capacity to result in a continuous operation. The speed will be slow enough, so that stopping between trucks is not ordinarily required. If the

Engineer determines non-uniform delivery of material is affecting the HMA placement, the Engineer may require the paving operations to cease until acceptable methods are employed to minimize starting and stopping of the paver.

# <u>Item 6185 – Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)</u>

All TMA Operators must participate in a TMA workshop to be conducted by the El Paso District Safety Office, on the proper use of TMAs, prior to working on Department Right of Way (ROW). A certificate of completion will be issued to TMA Operators that successfully complete the TMA workshop. The certificate of completion must be carried by TMA Operators at all times while working on Department right of way.

Acquire the TCP and TMA Operator's certificates of completion prior to the authorization to begin work. No time suspension will be granted and no traffic control work will be allowed without certificates of completion.

In addition to the shadow vehicles with Truck Mounted Attenuator (TMA) that are specified as being required on the traffic control plan for this project, provide \_1\_ additional shadow vehicle with TMA for TCP (6-1)-12 and 4 – additional shadow vehicles with TMA for TCP (6-6)-12 as detailed on these standard sheets.

Therefore, 5 total shadow vehicles with TMA will be required for this type of work. The contractor will be 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 for the project.

The supporting vehicle for the TMA shall have a minimum gross (i.e., ballasted) vehicular weight of 19,000 pounds.

# <u>Item 6001 – Portable Changeable Message Sign</u>

Provide messages as directed.

Portable Changeable Message Sign to be available as deemed necessary.

CONTROL: 2121-05-046 PROJECT: BR 2022(646)

HIGHWAY: IH 10 COUNTY : EL PASO

#### TEXAS DEPARTMENT OF TRANSPORTATION

#### GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

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

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF ----- TRANSPORTATION NOVEMBER 1, 2014.

STANDARD SPECIFICATIONS ARE INCORPORATED

INTO THE CONTRACT BY REFERENCE.

- ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
- ITEM 100 PREPARING RIGHT OF WAY (103)
- 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 168 VEGETATIVE WATERING
- ITEM 247 FLEXIBLE BASE (105) (204) (210) (216) (520)
- ITEM 310 PRIME COAT (300)(316)(3096)
- ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (110)(132)(401) (402) (403) (416) (420) (421) (423)
- 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 422 CONCRETE SUPERSTRUCTURES (420)(421)(424)(438)(440)(448) (454)(780)
- ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (409) (420) (421) (424) (426) (427) (434) (440) (442) (445)
- ITEM 432 RIPRAP (247) (420) (421) (431) (440)
- ITEM 450 RAILING (420)(421)(422)(424)(440)(441)(442)(445)(446)
- ITEM 454 BRIDGE EXPANSION JOINTS (442)
- 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 TRAFFIC BARRIER (420)(421)(424)(440)(442)
- ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360) (420)(421)(440)

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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 618 CONDUIT (400)(476)
ITEM 620 ELECTRICAL CONDUCTORS (610)(628)
ITEM 624 GROUND BOXES (420)(421)(432)(440)(618)(620)
ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421)(440)(441)(442)(445)
           (636) (643) (656)
ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)
ITEM 666 RETROREFLECTORIZED PAVEMENT MARKINGS (316) (502) (662) (677)
           (678) (6438)
ITEM 672 RAISED PAVEMENT MARKERS (677) (678)
ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)
SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE
                      PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED
                       HEREON WHEREVER IN CONFLICT THEREWITH.
REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS
                       (FORM FHWA 1273, MAY, 2012)
WAGE RATES
SPECIAL PROVISION "NONDISCRIMINATION" (000---002)
SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT"
                        (000 - - - 003)
SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO
                       ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE
                       ORDER 11246" (000---004)
SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
                        CONSTRUCTION CONTRACT SPECIFICATIONS" (000---005)
SPECIAL PROVISION "ONTHEJOB TRAINING PROGRAM" (000---006)
SPECIAL PROVISION "CERTIFICATE OF INTERESTED PARTIES (FORM 1295)"
                        (000 - -1019)
SPECIAL PROVISION "CARGO PREFERENCE ACT REQUIREMENTS IN FEDERAL AID
                       CONTRACTS" (000---241)
SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERALAID
                       CONTRACTS" (000---394)
SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000---658)
SPECIAL PROVISION "NOTICE OF CONTRACTOR PERFORMANCE EVALUATIONS"
                        (000---659)

        SPECIAL PROVISIONS TO ITEM
        2 (002---009)(002---011)(002---013)

        SPECIAL PROVISIONS TO ITEM
        3 (003---011)(003---013)

        SPECIAL PROVISIONS TO ITEM
        5 (005---002)(005---003)

SPECIAL PROVISIONS TO ITEM
                                 6 (006---001)(006---012)
SPECIAL PROVISIONS TO ITEM 7 (007---004)(007---010)
                                      (007 - - - 011)

        SPECIAL PROVISIONS TO ITEM
        8 (008---030)(008---033)

        SPECIAL PROVISIONS TO ITEM
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SPECIAL PROVISION TO ITEM 340 (340---004)
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SPECIAL PROVISION TO ITEM 502
                                (502 - - - 008)
SPECIAL PROVISION TO ITEM 506 (506---005)
SPECIAL PROVISION TO ITEM 520 (520---002)
SPECIAL PROVISION TO ITEM 540 (540---001)
SPECIAL PROVISION TO ITEM 636 (636---001)
SPECIAL PROVISION TO ITEM 643 (643---001)
SPECIAL PROVISION TO ITEM 656 (656---001)
SPECIAL PROVISION TO ITEM 666 (666---007)
SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6185 (6185--002)
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#### SPECIAL SPECIFICATIONS:

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ITEM 3076 DENSE-GRADED HOT-MIX ASPHALT (300) (301) (316) (320) (340) (341) (342) (347) (348) (520) (585) (3079) (3081) (3082) (3096)
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- ITEM 3079 PERMEABLE FRICTION COURSE (PFC)
- ITEM 3081 THIN OVERLAY MIXTURES (TOM)
- ITEM 3082 THIN BONDED FRICTION COURSES
- ITEM 3096 ASPHALTS, OILS, AND EMULSIONS
- ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
- ITEM 6185 TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)
- ITEM 6438 MOBILE RETROREFLECTIVITY DATA COLLECTION FOR PAVEMENT MARKINGS

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 ABOVELISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL
PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFICATIONS FOR THIS PROJECT.

# **Special Provision to Item 300 Asphalt, Oils, and Emulsions**



Item 300, "Asphalt, Oils, and Emulsions" of the Standard Specifications is replaced by Special Specification 3096, "Asphalts, Oils, and Emulsions." All Item 300 Special Provisions are no longer available, beginning with the April 2022 letting.

