

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: STP 2022(942)HES

CONTROL: 0272-05-033

COUNTY: LAMPASAS

LETTING: 08/03/2022

REFERENCE NO: 0726

**PROPOSAL ADDENDUMS**

- 
- PROPOSAL COVER
  - BID INSERTS (SH. NO.: ALL )
  - GENERAL NOTES (SH. NO.: E-M )
  
  - SPEC LIST (SH. NO.: )
  - SPECIAL PROVISIONS: )
  - ADDED: )
  
  - DELETED:
  
  - SPECIAL SPECIFICATIONS:
  - ADDED:
  
  - DELETED:
  
  - OTHER: PLAN SHEET & OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

\*\*\*\*\* BID INSERTS \*\*\*\*\*

REVISED QUANTITIES FOR THE FOLLOWING BID ITEMS:  
275-6010

ADDED THE FOLLOWING BID ITEMS:  
275-6001

\*\*\*\*\* GENERAL NOTES \*\*\*\*\*

- SHEET E: LINES SHIFTED
- SHEET F: LINES SHIFTED
- SHEET G: LINES SHIFTED
- SHEET H: LINES SHIFTED
- SHEET I: REMOVED NOTES FOR ITEM 504 FIELD OFFICE AND LABORATORY
- SHEET J: REMOVED NOTES FOR ITEM 504 FIELD OFFICE AND LABORATORY
- SHEET K: LINES SHIFTED DUE TO ABOVE CHANGES
- SHEET L: LINES SHIFTED DUE TO ABOVE CHANGES
- SHEET M: SHEET OMITTED DUE TO ABOVE CHANGES

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

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

SHEET 2 (INDEX): REVISED SHEET NUMBERS FOR GENERAL NOTES  
SHEET 6B (GENERAL NOTES): LINES SHIFTED  
SHEET 6C (GENERAL NOTES): LINES SHIFTED  
SHEET 6D (GENERAL NOTES): REMOVED NOTES FOR ITEM 504 FIELD OFFICE AND LAB  
SHEET 6E (GENERAL NOTES): LINES SHIFTED DUE TO ABOVE CHANGES  
SHEET 6F (GENERAL NOTES): SHEET OMITTED DUE TO ABOVE CHANGES  
SHEET 7 (QUANTITY SHEET): ADDED ITEM 275-6001 CEMENT, REVISED QUANTITIES  
SHEET 7A (QUANTITY SHEET): LINES SHIFTED DUE TO ABOVE CHANGES  
SHEET 7B (QUANTITY SHEET): LINES SHIFTED DUE TO ABOVE CHANGES  
SHEET 8 (QUANTITY SUMMARY SHEET): REVISED QUANTITIES  
SHEET 9 (QUANTITY SUMMARY SHEET): REVISED DESCRIPTION

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3, 4, 5	TYPICAL SECTION	97 - 98	SCC - 3 & 4
6, 6A-6E	GENERAL NOTES & SPEC. DATA	99 - 100	SCC - 5 & 6
6F	OMITTED	101 - 102	SCC - 7
7, 7A-7B	ESTIMATE AND QUANTITY	103 - 104	SCC - 8
8-9	QUANTITY SUMMARY SHEET	105	SCC - MD
10-11	EARTHWORK SUMMARY	106 - 107	MC 6 - 16
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12	COLORADO RIVER TCP	108 - 109	MC 7 - 16
13	ANTELOPE CREEK TCP	110	MC - MD
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<b>TRAFFIC CONTROL STANDARDS</b>			
15-26	BC (1)-21 THRU BC (12)-21	112	SCP-4
27	TCP (1-1) - 18	113	SCP-5
28	TCP (1-4) - 18	114	SCP-6
29	TCP (2-1) - 18	115	SCP-7
30	TCP (2-4) - 18	116	SCP-8
31	TCP (2-8) - 18	117 - 119	SETB - FW - 0
32	TCP (3-1) - 13	120 - 122	SETB - FW - S
33	TCP (3-3) - 14	123 - 124	SETB - CD
34	TCP (7-1) - 13	125 - 127	SETP - FW - 0
35	WZ (UL) - 13	128 - 130	SETP - FW - 15
36	WZ (STPM) - 13	131 - 132	SETP - CD
37	WZ (BRK) - 13	<b>SIGNING PLAN</b>	
38	WZ (RS) - 22	133 - 136	SIGN SUMMARY
39	TREATMENT FOR VARIOUS EDGE CONDITIONS	137	SPECIAL SIGNS
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40, 40A	COLORADO RIVER BRIDGE RAIL TRANSITION DETAILS	<b>SIGNING STANDARDS</b>	
41	COLORADO RIVER BRIDGE RAIL LAYOUT	138	SMD (GEN) - 08
42	ANTELOPE CREEK BRIDGE RAIL LAYOUT	139 - 141	SMD (SLIP-1), (SLIP-2), (SLIP-3) - 08
43	MBGF LAYOUT	142 - 144	TSR (3), (4), (5) - 13
44-65	PROJECT LAYOUT	<b>PAVEMENT MARKINGS DETAILS</b>	
66	MAILBOX/DRIVEWAY SUMMARY	145 - 156	PAVEMENT MARKING LAYOUT
67	DRIVEWAY DETAILS	<b>PAVEMENT MARKINGS STANDARDS</b>	
68	PIPE UNDERDRAIN	157	PM (1) - 20
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72	SGT (12S) - 35-18	160	RS (2) - 13
73	SGT (15) 31-20	161	RS (4) - 13
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<b>BRIDGE STANDARDS</b>			
75-77	T131RC	163	TS2 (PL-1) - 18 (MOD)
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78-95	CULVERT LAYOUTS	<b>ENVIRONMENTAL ISSUES</b>	
		164	EPIC
		165	SW3P
		166 - 187	SW3P LAYOUT
		188	EC (1) - 16
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THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.



07/26/2022

**US 190  
PROJECT INDEX**

**J.S.**  
**1** ADDENDUM #1, 7/26/2022, REPLACE SHEET



CONT	SECT	JOB	HIGHWAY
0272	05	033	US 190
DIST	COUNTY		SHEET NO.
23	LAMPASAS		2

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“Final” embankment that is not accounted for in the cross section(s) or typical section(s) but that has been estimated or shown for informational purposes, e.g., additional areas under guard fence, around S.E.T.s, etc.; will be measured in its final position as defined in Section 132.4.1. Shrinkage or swell factors will not be considered in determining the calculated quantities.

Embankment as shown in the plans or placed as directed will be placed before the installation of MBGF.

**ITEM 164 SEEDING FOR EROSION CONTROL**

Additional wildflower seed will be required to be added to the seeding mixture. The wildflower seed will be provided by TxDOT and is estimated at 5 lbs/acre in addition to the required seeding as specified in Item 164. The Contractor will notify the Area Engineer a minimum of 4 weeks in advance of permanent/final seeding to ensure time for the proper seed to be acquired. The Contractor can acquire this additional seed at the County Maintenance office. The equipment, labor, tools, and incidentals to mix and apply this seed will be considered subsidiary to Item 164.

**ITEM 166 FERTILIZER**

Fertilize all areas of project to be seeded.

Furnish and apply fertilizer with analysis of 20-10-10 at a rate of 300 bulk pounds per acre.

**ITEM 168 VEGETATIVE WATERING**

Water all areas of project to be seeded or sodded.

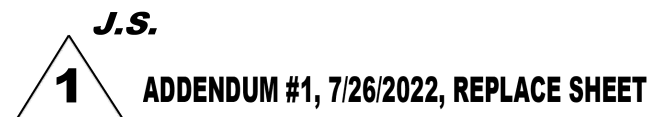
Vegetative watering is estimated at 1 inch per week for 4 weeks.

Vegetative watering may be adjusted as directed by the Engineer to ensure saturation for vegetative establishment.

**ITEM 210 ROLLING**

Required Roller Type and Size for Compacted Layers

Thickness of compacted lift	Minimum Static weight of roller (tons)	Drum Type
< 6 inches	12	Smooth
6 to 7 inches	15	Smooth or Padfoot
8 to 9 inches	18	Padfoot
10 inches or greater	20	Padfoot



**ITEM 216 PROOF ROLLING**

Proof Rolling subgrade and flex base will be required for each traffic lane (travel lanes, center turn lanes, right-hand/left-hand turn lanes, deceleration lanes, acceleration lanes, etc.) throughout the entire project and is estimated at 8 hours.

**ITEM 247 FLEXIBLE BASE**

Refer to Item 210 for additional roller requirements.

Ride quality will be measured before the application of prime coat unless otherwise approved in writing by the Engineer.

A grader (a road grader, a blade, a maintainer, or a motor grader) will be used to process base unless otherwise approved by the Engineer.

Do not add field sand to modify the finish material to meet requirements.

Place new flexible base in lifts of approximately equal depth not to exceed 6 inches unless otherwise directed.

Density requirements for this item may be waived for the construction of detours as directed by the Engineer.

**ITEM 251 REWORKING BASE COURSES**

Refer to Item 210 for additional roller requirements.

Grade flexible base to typical section and profile to match existing grade. Contractor will establish grade to produce a smooth ride as directed.

In accordance with Section 251.4.2.3, proof rolling will be required and soft spots will corrected as approved or directed by the Engineer.

**ITEM 310 PRIME COAT**

Cure prime placed with a cutback asphalt binder for 21 days before placing subsequent surface courses unless otherwise directed by the Engineer.

Finished base must be dampened before the application of a cutback asphalt binder is placed. This work will not be paid for directly but will be considered subsidiary to Item 310.

**ITEM 316 SURFACE TREATMENTS**

All precoated aggregate will use PG 64-22 asphalt.

Furnish aggregate with a minimum B surface aggregate classification.

Warm season asphalts are not to be placed between September 1<sup>st</sup> and April 30<sup>th</sup> unless otherwise directed/approved.

CRS-2P will be used for cool season use, unless otherwise directed by the Engineer; and can be placed between September 1st and April 30th in accordance with the suppliers recommendations. A 90 day cure time may be required prior to placing 2nd course.

Protect all existing bridges, and other exposed concrete surfaces within the limits of this project(s), as much as practical, from asphalt materials by any means approved by the Engineer at the contractor's expense.

Use a medium pneumatic roller meeting the requirements of Item 210 as directed by the Engineer. This work will be subsidiary to the various bid items.

**ITEM 351 FLEXIBLE PAVEMENT STRUCTURE REPAIR**

The contractor will mark locations of flexible pavement repair for approval by the Engineer before starting work on the repair areas.

Locations may be changed and/or added as directed by the Engineer.

For maintaining the existing pavement during construction, a Dense-Grade Hot-Mix Asphalt Ty B 64-22 at 8" thick will be used unless otherwise approved. 1000 SY for repair is estimated for this project.

**ITEM 360 CONCRETE PAVEMENT**

Two-piece tie-bars will be required and used for all longitudinal construction joints.

Single-piece tie-bars will be allowed only for longitudinal contraction joints.

**ITEM 401 FLOWABLE BACKFILL**

All flowable backfill will be "Non-Excavatable" unless otherwise specified.

**ITEM 420 CONCRETE SUBSTRUCTURES**

Culverts will be constructed in conjunction with roadway construction phasing, unless otherwise directed by the Engineer.

All Class C Concrete has been measured for plan quantity payment.

No. 6 dowels by three feet (3') long placed on one foot (1") spacing will be required at interior walls for all multiple box culvert extensions. All materials, tools, labor, equipment and incidentals necessary to complete this work will not be paid for directly but will be subsidiary to Item 420 "Concrete Substructures".

Unless otherwise shown on the plans, all culvert extensions and safety end treatments will conform to the existing culvert slope

**ITEM 421 HYDRAULIC CEMENT CONCRETE**

Furnish dome lids with 4" x 8" cylinder test molds.

Strength testing equipment is not required for Contract controlling test.

**ITEM 432 RIPRAP**

Locations and quantities may be varied as directed by the Engineer to accommodate field conditions.

Riprap (Conc) (CI B) is required inside all Type I safety end treatments, unless otherwise directed by the Engineer.

Limit excavation to within 1' of riprap. If excavation exceeds these limits without the Engineer's approval, riprap will be extended to the limits of the disturbance. No additional compensation will be allowed for this work.

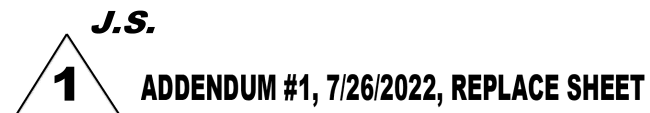
**ITEM 451 RETROFIT RAILING**

Salvage existing rail elements and stockpile (palletize, block off the ground, or other approved method) at the San Saba County Maintenance yard. Notify the Maintenance Supervisor(s) 5 working days before delivering the rail elements to the designated location(s). Stockpile rail elements in an area designated by the Maintenance Supervisor(s).

The San Saba County Maintenance yard is located at 2502 West Wallace (US 190), San Saba, TX 76877.  
Lat/Long: 31.198003, -98.745075  
Phone: (325) 372-3527

**ITEM 467 SAFETY END TREATMENT**

For SET's being installed on existing corrugated metal pipe, upon removal of the existing SET and if there is damage to the existing end of pipe, the Contractor will saw cut a straight end and remove 3ft minimum of existing CMP. This new length of pipe will be supplied by the Contractor before installing the proposed SET. The removal and replacement of the length of pipe will be considered subsidiary to the SET. Any deviation to this process will have to approved in writing by the Engineer.



**ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING**

The Contractor will be required to keep all TCP devices clean. If notified by the Engineer to clean the TCP devices, the Contractor will have until the end of that daylight period to comply. Failure to comply will result in a suspension of all work until the TCP devices are clean. Time will not be suspended.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, 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.

The Engineer will determine the locations of regulatory construction speed zone signs. The Contractor will furnish, install and remove speed zone signs at locations as directed by the Engineer.

Excavations in Intersections adjacent to travel lanes will not be exposed or open overnight. Backfilling will take place the day excavations are made.

The Contractor will be responsible for maintaining the edge of the roadway throughout the project in a traversable condition and/or as directed by the Engineer. Salvaged milling may be used as directed by the Engineer. This work will not be paid for directly and will be considered subsidiary to Item 502 "Barricades, Signs, and Traffic Handling".

All devices shown on the TCP Standards are required and considered subsidiary to Item 502 unless specifically outlined elsewhere in the plans.

All signs will be constructed in accordance with the details shown in the current Standard Highway Sign Designs for Texas manual.

**ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS**

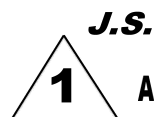
The Contractor should anticipate multiple mobilizations for the installation of BMP's on this project.

The Engineer will determine actual time and placement locations of BMP's and temporary measures.

Contractor will not install BMPs until locations are approved by the Engineer.

Stockpile sites may be cleared of cover vegetation, but the vegetation root system will not be destroyed.

Erosion Control Logs Dam (CL-D) shall have stakes placed upstream in an alternating pattern of the downstream stakes as shown for CL-SST or CL-SSL details on the Erosion Control Standards.



**ADDENDUM #1, 7/26/2022, REPLACE SHEET**

**ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS**

The Contractor will always maintain access to driveways unless otherwise coordinated with the property owner(s) and approved by the Engineer.

All intersections, driveways, and turnouts will be primed and receive a two course surface treatment matching the rates as shown on the basis of estimate for "ROADWAY" unless otherwise shown on the plans or directed by the Engineer.

Drainage pipes at driveway locations will not be placed until final excavation/embankment is complete.

**ITEM 540 METAL BEAM GUARD FENCE**

The area shown on the Roadway Details – MBGF sheets having a one course surface treatment will match the rates as shown on the basis of estimate for "ROADWAY" unless otherwise directed by the Engineer.

Metal beam guard fence will not be installed until the embankment, flex base, and/or one course surface treatment is complete.

**ITEM 556 PIPE UNDERDRAINS**

2000' LF of Type 8 pipe underdrain has been estimated for this project and will be installed as directed by the Engineer. See additional details elsewhere in the plans.

**ITEM 585 RIDE QUALITY FOR PAVEMENT SURFACES**

Surface Test Type B will be required on this project.

Schedule 2 will be used when calculating Pay Adjustment for Ride quality.

Diamond grinding will not be allowed unless otherwise approved by the Engineer.

Refer to Item 247 and **SP 247-003** for ride quality requirements.

**ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES**

The Contractor will notify the Engineer 5 working days before installing any sign base. The Engineer will coordinate with the Contractor and the Maintenance office to assure proposed sign placements are in accordance with the current version of the Sign Crew Field Book and the TMUTCD. Any signs that are placed without this coordination by the Contractor that are not located correctly will be removed and relocated at the Contractor's expense.

For Triangular Slip Base systems use HWYCOM (3 way set screw), Southern Plains (2 bolt clamp), or approved equivalent.

Build signs not detailed in the plans according to the latest edition of the Standard Highway Sign Designs for Texas.

TxDOT will mark the locations of the SPEED LIMIT (R2-1) and REDUCED SPEED LIMIT AHEAD (W3-5) signs.

Existing roadside signs are to be removed/relocated and mounted on temporary supports and placed during construction as directed by the Engineer. The removal/relocation and temporary mounting of any existing sign (stop, yield, warning, etc.) will not be paid for directly but will be considered subsidiary to Item 644 unless otherwise directed by the Engineer.

Signs that are to be transferred to new posts must be placed upon the new supports before the end of the working day. Regulatory signs must be transferred immediately.

Conformable Retroreflective Sheeting in accordance with DMS 8300 will be required on all Warning, Stop, and Yield signs. Retroreflective sheeting wrapped around a sign support is yellow unless the sign on the support is a Stop or Yield, in which case the sheeting will be red. Retroreflective sheeting will have a height on the post of 12 inches and the bottom of the sheeting will be 4 feet above the edge of the travel lane. Retroreflective sheeting will not be paid for directly but will be considered subsidiary to Item 644 Small Roadside Sign Assemblies.

Rock may be encountered at sign locations and should be anticipated by the Contractor. No additional payment will be made where rock is encountered.

**ITEM 662 WORK ZONE PAVEMENT MARKINGS**

Temporary tabs will not be placed on a road more than 24 hours prior to operations beginning on the road.

The temporary tabs will be removed by an acceptable method approved by the Engineer once final striping has been placed.

TY II Paint will be allowed for Non-Removable work zone pavement markings.

**ITEM 666 RETROREFLECTORIZED PAVEMENT MARKINGS**

A mobile retroreflectometer is not required for this project.

Furnish a needlepoint micrometer gauge Mitutoyo - Model 342-711-30 or equivalent.

Sealed roadways will be allowed to cure for 3 days before final striping is placed unless otherwise directed by the Engineer.

All raised profile striping (edgeline and centerline) will use transverse bar profiles as described in section 666.4.3.1.2.

Unless otherwise approved, all 4 in. longitudinal striping (centerline, edgeline, etc.) will be placed and approved before any other striping (crosswalks, stop bars, arrows, numbers, etc.) is allowed to begin.

**ITEM 672 RAISED PAVEMENT MARKERS**

Place raised pavement markers no sooner than 24 hours after final striping has been placed or as directed.

**ITEM 3076 DENSE-GRADED HOT-MIX ASPHALT (QCQA)**

700 tons D-GR HMA TY-B PG76-22 (LEVEL-UP) has been estimated for rut fill and patching and is to be used as directed by the engineer.

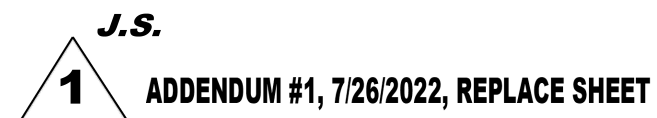
**ITEM 6185 TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)**

Provide the number of vehicles with truck mounted attenuators (TMA) listed in the table below. 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.

STANDARD / PHASE	# TMA'S REQUIRED
TCP(1-1)	1
TCP(1-4)	1
TCP(2-1)	1
TCP(2-4)	1
TCP(2-8)	0
TCP(3-1)	2
TCP(3-3)	2 or 3
TCP(7-1)	N/A to be used in conjunction with another TCP

Stationary shadow vehicle(s) with TMA are estimated at 150 days for this project. (75 days x 2 TMA's)

Mobile shadow vehicle(s) with TMA are estimated at 6 days for this project. (3 days x 2 TMA's)

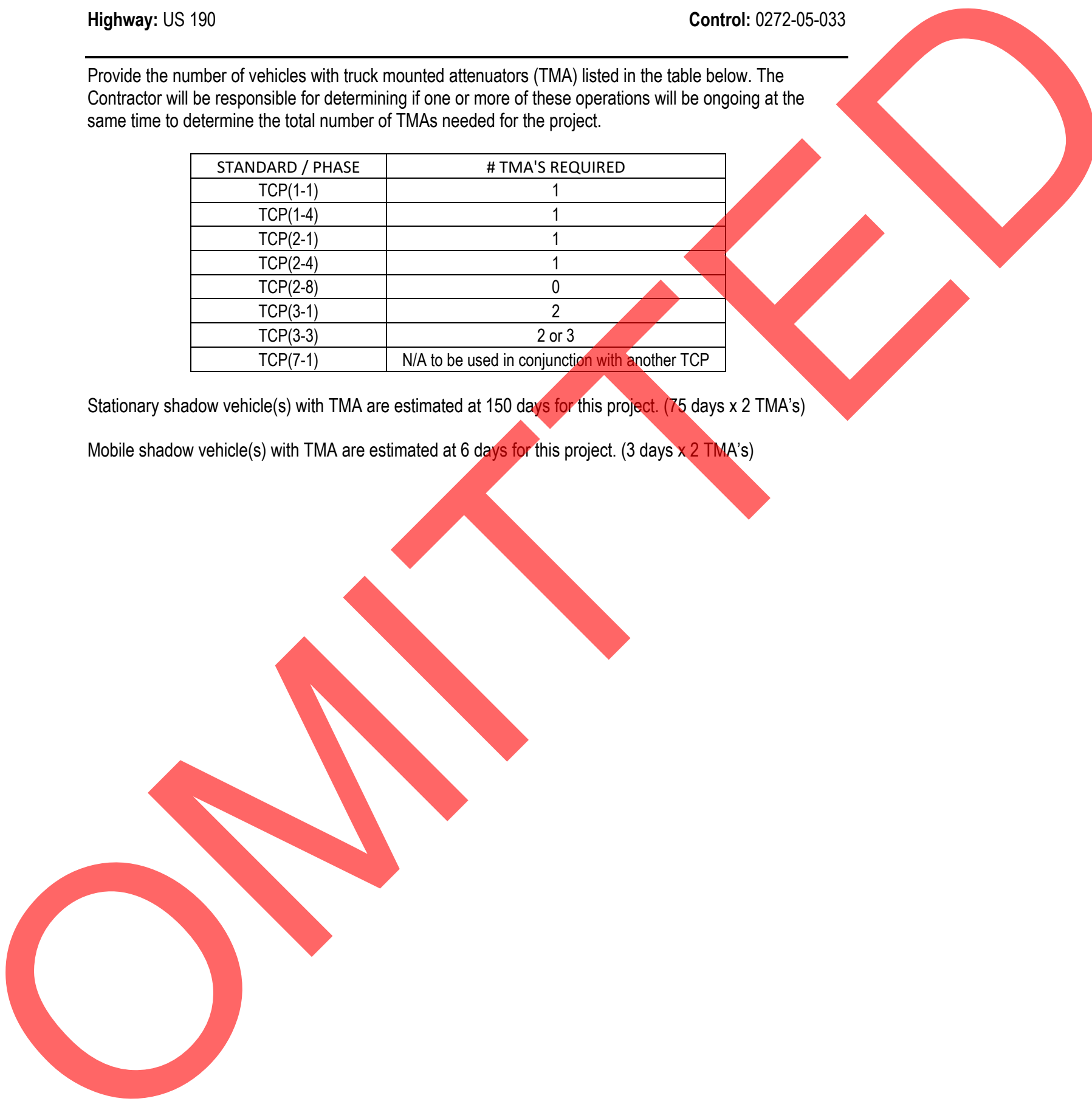


Provide the number of vehicles with truck mounted attenuators (TMA) listed in the table below. The Contractor will be responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMAs needed for the project.

STANDARD / PHASE	# TMA'S REQUIRED
TCP(1-1)	1
TCP(1-4)	1
TCP(2-1)	1
TCP(2-4)	1
TCP(2-8)	0
TCP(3-1)	2
TCP(3-3)	2 or 3
TCP(7-1)	N/A to be used in conjunction with another TCP

Stationary shadow vehicle(s) with TMA are estimated at 150 days for this project. (75 days x 2 TMA's)

Mobile shadow vehicle(s) with TMA are estimated at 6 days for this project. (3 days x 2 TMA's)








CONTROLLING PROJECT ID 0272-05-033

DISTRICT Brownwood  
HIGHWAY US 190

COUNTY Lampasas

# Estimate & Quantity Sheet

CONTROL SECTION JOB				0272-05-033		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00063873			
COUNTY				Lampasas			
HIGHWAY				US 190			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	100-6002	PREPARING ROW	STA	559.000		559.000	
	100-6012	PREP ROW (TREE) (18"-36" DIA.)	EA	108.000		108.000	
	100-6016	PREPARING ROW (TREE) (36" TO 48" DIA)	EA	25.000		25.000	
	110-6001	EXCAVATION (ROADWAY)	CY	43,753.000		43,753.000	
	132-6005	EMBANKMENT (FINAL)(ORD COMP)(TY C)	CY	18,424.000		18,424.000	
	164-6002	BROADCAST SEED (PERM) (RURAL) (SANDY)	AC	18.100		18.100	
	216-6001	PROOF ROLLING	HR	8.000		8.000	
	247-6053	FL BS (CMP IN PLC)(TYD GR1-2)(FNAL POS)	CY	14,876.000		14,876.000	
	251-6106	REWORK BS MTL (TY B) (12")(ORD COMP)	SY	7,591.000		7,591.000	
	251-6273	REWORK BS MTL (TY C)(12")(ORD COMP)	SY	9,511.000		9,511.000	
	275-6001	CEMENT	TON	398.000		398.000	
	275-6010	CEMENT TREAT (SUBGRADE) (8")	SY	35,321.000		35,321.000	
	310-6009	PRIME COAT (MC-30)	GAL	11,262.000		11,262.000	
	316-6017	ASPH (AC-20-5TR)	GAL	91,498.000		91,498.000	
	316-6175	AGGR(TY-B GR-4 SAC-B)	CY	470.000		470.000	
	316-6222	AGGR(TY-PB GR-3 SAC-B)	CY	2,026.000		2,026.000	
	351-6004	FLEXIBLE PAVEMENT STRUCTURE REPAIR(8")	SY	1,000.000		1,000.000	
	420-6051	CL C CONC (CULV)	CY	152.300		152.300	
	420-6066	CL C CONC (RAIL FOUNDATION)	CY	4.600		4.600	
	432-6001	RIPRAP (CONC)(4 IN)	CY	2.000		2.000	
	432-6002	RIPRAP (CONC)(5 IN)	CY	153.400		153.400	
	450-6055	RAIL (TY T221) (MOD)	LF	18.300		18.300	
	451-6004	RETROFIT RAIL (TY T131RC)	LF	290.000		290.000	
	460-6010	CMP AR (GAL STL DES 3)	LF	302.000		302.000	
	464-6005	RC PIPE (CL III)(24 IN)	LF	33.000		33.000	
	464-6008	RC PIPE (CL III)(36 IN)	LF	102.000		102.000	
	467-6090	SET (TY I)(S=2 FT)(HW=3FT)(3:1)(C)	EA	2.000		2.000	
	467-6105	SET (TY I)(S=3 FT)(HW=3FT)(3:1)(C)	EA	6.000		6.000	
	467-6106	SET (TY I)(S=3 FT)(HW=3FT)(4:1)(C)	EA	10.000		10.000	
	467-6109	SET (TY I)(S=3 FT)(HW= 3 FT)(6:1)(C)	EA	2.000		2.000	
	467-6111	SET (TY I)(S=3 FT)(HW= 4 FT)(3:1)(C)	EA	4.000		4.000	
	467-6112	SET (TY I)(S=3 FT)(HW= 4 FT)(4:1)(C)	EA	3.000		3.000	
	467-6137	SET (TY I)(S= 4 FT)(HW= 3 FT)(3:1) (C)	EA	1.000		1.000	
	467-6139	SET (TY I)(S= 4 FT)(HW= 3 FT)(4:1) (C)	EA	1.000		1.000	
	467-6143	SET (TY I)(S= 4 FT)(HW= 4 FT)(3:1) (C)	EA	2.000		2.000	
	467-6144	SET (TY I)(S= 4 FT)(HW= 4 FT)(4:1) (C)	EA	3.000		3.000	
	467-6146	SET (TY I)(S= 4 FT)(HW= 4 FT)(6:1) (C)	EA	1.000		1.000	

**J.S.**  
 **ADDENDUM #1, 7/26/2022, REPLACE SHEET**

DISTRICT	COUNTY	CCSJ	SHEET
Brownwood	Lampasas	0272-05-033	<b>7</b>




CONTROLLING PROJECT ID 0272-05-033

DISTRICT Brownwood  
HIGHWAY US 190

COUNTY Lampasas

# Estimate & Quantity Sheet

CONTROL SECTION JOB				0272-05-033		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00063873			
COUNTY				Lampasas			
HIGHWAY				US 190			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	467-6177	SET (TY I)(S= 5 FT)(HW= 4 FT)(4:1) (C)	EA	4.000		4.000	
	467-6227	SET (TY I)(S= 6 FT)(HW= 7 FT)(3:1) (C)	EA	6.000		6.000	
	467-6228	SET (TY I)(S= 6 FT)(HW= 7 FT)(4:1) (C)	EA	3.000		3.000	
	467-6231	SET (TY I)(S= 6 FT)(HW= 8 FT)(3:1) (C)	EA	8.000		8.000	
	467-6232	SET (TY I)(S= 6 FT)(HW= 8 FT)(4:1) (C)	EA	9.000		9.000	
	467-6260	SET (TY I)(S= 7 FT)(HW= 8 FT)(3:1) (C)	EA	4.000		4.000	
	467-6261	SET (TY I)(S= 7 FT)(HW= 8 FT)(4:1) (C)	EA	2.000		2.000	
	467-6262	SET (TY I)(S= 7 FT)(HW= 9 FT)(3:1) (C)	EA	2.000		2.000	
	467-6283	SET (TY I)(S= 8 FT)(HW= 7 FT)(3:1) (C)	EA	2.000		2.000	
	467-6388	SET (TY II) (24 IN) (RCP) (3: 1) (C)	EA	2.000		2.000	
	467-6453	SET (TY II) (36 IN) (RCP) (6: 1) (C)	EA	3.000		3.000	
	467-6537	SET (TY II) (DES 3) (CMP) (6: 1) (P)	EA	20.000		20.000	
	496-6007	REMOV STR (PIPE)	LF	2,300.000		2,300.000	
	496-6050	REMOV STR (DRIVEWAY CULVERT)	EA	3.000		3.000	
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	10.000		10.000	
	506-6002	ROCK FILTER DAMS (INSTALL) (TY 2)	LF	455.000		455.000	
	506-6011	ROCK FILTER DAMS (REMOVE)	LF	455.000		455.000	
	506-6038	TEMP SEDMT CONT FENCE (INSTALL)	LF	525.000		525.000	
	506-6039	TEMP SEDMT CONT FENCE (REMOVE)	LF	525.000		525.000	
	506-6041	BIODEG EROSN CONT LOGS (INSTL) (12")	LF	6,060.000		6,060.000	
	506-6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	6,060.000		6,060.000	
	510-6003	ONE-WAY TRAF CONT (PORT TRAF SIG)	MO	2.000		2.000	
	530-6006	DRIVEWAYS (SURF TREAT)	SY	1,442.000		1,442.000	
	540-6002	MTL W-BEAM GD FEN (STEEL POST)	LF	800.000		800.000	
	540-6006	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	4.000		4.000	
	540-6020	MTL W - BEAM GD FEN (LOW FILL CULVERT)	LF	50.000		50.000	
	542-6001	REMOVE METAL BEAM GUARD FENCE	LF	880.000		880.000	
	544-6001	GUARDRAIL END TREATMENT (INSTALL)	EA	8.000		8.000	
	556-6008	PIPE UNDERDRAINS (TY 8) (6")	LF	2,000.000		2,000.000	
	560-6007	MAILBOX INSTALL-S (WC-POST) TY 3	EA	1.000		1.000	
	636-6007	REPLACE EXISTING ALUMINUM SIGNS(TY A)	SF	575.000		575.000	
	644-6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA	11.000		11.000	
	644-6007	IN SM RD SN SUP&AM TY10BWG(1)SA(U)	EA	4.000		4.000	
	644-6076	REMOVE SM RD SN SUP&AM	EA	7.000		7.000	
	658-6062	INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2(BI)	EA	22.000		22.000	
	658-6073	INSTL OM ASSM (OM-2Y)(WC)GND(BI)	EA	68.000		68.000	

**J.S.**  
 **ADDENDUM #1, 7/26/2022, REPLACE SHEET**

DISTRICT	COUNTY	CCSJ	SHEET
Brownwood	Lampasas	0272-05-033	<b>7A</b>




# Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0272-05-033

DISTRICT Brownwood  
HIGHWAY US 190

COUNTY Lampasas

CONTROL SECTION JOB				0272-05-033		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00063873			
COUNTY				Lampasas			
HIGHWAY				US 190			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	662-6004	WK ZN PAV MRK NON-REMOV (W)4"(SLD)	LF	3,635.000		3,635.000	
	662-6016	WK ZN PAV MRK NON-REMOV (W)24"(SLD)	LF	72.000		72.000	
	662-6109	WK ZN PAV MRK SHT TERM (TAB)TY W	EA	543.000		543.000	
	662-6111	WK ZN PAV MRK SHT TERM (TAB)TY Y-2	EA	742.000		742.000	
	666-6072	REFL PAV MRK TY I(W)(LNDP ARW)(100MIL)	EA	4.000		4.000	
	666-6168	REFL PAV MRK TY II (W) 4" (DOT)	LF	734.000		734.000	
	666-6300	RE PM W/RET REQ TY I (W)4"(BRK)(100MIL)	LF	4,930.000		4,930.000	
	666-6315	RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL)	LF	7,350.000		7,350.000	
	666-6342	REF PROF PAV MRK TY I(W)4"(SLD)(100MIL)	LF	59,360.000		59,360.000	
	666-6345	REF PROF PAV MRK TY I(Y)4"(SLD)(100MIL)	LF	59,360.000		59,360.000	
	672-6007	REFL PAV MRKR TY I-C	EA	247.000		247.000	
	672-6009	REFL PAV MRKR TY II-A-A	EA	958.000		958.000	
	677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	7,865.000		7,865.000	
	677-6007	ELIM EXT PAV MRK & MRKS (24")	LF	72.000		72.000	
	3076-6051	D-GR HMA TY-D PG76-22 (LEVEL-UP)	TON	700.000		700.000	
	6056-6001	PREFORMED IN-LANE(TRANS) RUMBLE STRIP	LF	320.000		320.000	
	6185-6002	TMA (STATIONARY)	DAY	150.000		150.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	6.000		6.000	
	18	EROSION CONTROL MAINTENANCE: CONTRACTOR FORCE ACCOUNT WORK (PART)	LS	1.000		1.000	
		SAFETY CONTINGENCY: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	

**J.S.**  
 **1** **ADDENDUM #1, 7/26/2022, REPLACE SHEET**

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ROADWAY QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
100	6002	PREPARING ROW	STA	559	GN, 44-65
100	6012	PREP ROW (TREE) (18"-36" DIA.)	EA	108	44-65
100	6016	PREPARING ROW (TREE) (36" TO 48" DIA)	EA	25	44-65
110	6001	EXCAVATION (ROADWAY)	CY	43,753	11
132	6005	EMBANKMENT (FINAL) (ORDCOMP) (TY C)	CY	18,424	10, 43
216	6001	PROOF ROLLING	HR	8	GN
247	6053	FL BS (CMP IN PLC) (TYDGR1-2) (FINAL POS)	CY	14,876	4
251	6106	REWORK BS MTL (TY B) (12") (ORD COMP)	SY	7,591	4
251	6273	REWORK BS MTL (TY C) (12") (ORD COMP)	SY	9,511	4
*275	6001	CEMENT	TON	398	4
275	6010	CEMENT TREAT (SUBGRADE) (8")	SY	35,321	4
351	6004	FLEXABLE PAVMENT STRUCTURE REPAIR 8"	SY	1,000	GN
432	6001	RIPRAP (CONC) (4 IN)	CY	2	68
496	6007	REMOVE STR (PIPE)	LF	2,300	49-54
556	6008	PIPE UNDERDRAINS (TY 8) (6")	LF	2,000	68
658	6062	INSTL DEL ASSM (D-SW) SZ 1 (BRF) GF2 (BI)	EA	22	42, 43
3076	6051	D-GR HMA TY-D PG76-22 (LEVEL-UP)	TON	700	GN

PAVEMENT MARKING QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
666	6072	REFL PAV MRK TY I (W) (LNDP ARW) (100MIL)	EA	4	156
666	6168	REFL PAV MRK TY II (W) 4" (DOT)	LF	734	156
666	6300	RE PM W/RET REQ TY I (W) 4" (BRK) (100MIL)	LF	4,930	156
666	6342	REF PROF PAV MRK TY I (W) 4" (SLD) (100MIL)	LF	59,360	156
666	6345	REF PROF PAV MRK TY I (Y) 4" (SLD) (100MIL)	LF	59,360	156
672	6007	REFL PAV MRKR TY I-C	EA	247	156
672	6009	REFL PAV MRKR TY II-A-A	EA	742	156

DRIVEWAY/ MAILBOX QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
460	6010	CMP AR (GAL STL DES 3)	LF	302	66
467	6537	SET (TY II) (DES 3) (CMP) (6: 1) (P)	EA	20	66
496	6050	REMOVE STR (DRIVEWAY CULVERT)	EA	3	66
530	6006	DRIVEWAYS (SURF TREAT)	SY	1,442	66
560	6007	MAILBOX INSTALL-S (WC-POST) TY 3	EA	1	66

BRIDGE QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
420	6066	CL C CONC (RAIL FOUNDATION)	CY	9.2	40A
450	6023	RAIL (TY T221) (MOD)	LF	36.6	40A
451	6004	RETROFIT RAIL (TY T131RC)	LF	290	42
540	6002	MTL W-BEAM GD FEN (STEEL POST)	LF	800	42, 43
540	6006	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	4	42
540	6020	MTL W -BEAM GD FEN (LOW FILL CULVERT)	LF	50	43
542	6001	REMOVE METAL BEAM GUARD FENCE	LF	880	42
544	6001	GUARDRAIL END TREATMENT (INSTALL)	EA	8	42, 43

WORK ZONE QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
510	6003	ONE-WAY TRAF CONT (PORT TRAF SIG)	MO	2	12, 13
662	6004	WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	LF	3,635	12, 13
662	6016	WK ZN PAV MRK NON-REMOV (W) 24" (SLD)	LF	72	12, 13
662	6109	WK ZN PAV MRK SHT TERM (TAB) TY W	EA	543	14
662	6111	WK ZN PAV MRK SHT TERM (TAB) TY Y-2	EA	742	14
666	6315	RE PM W/ RET REQ TY I (Y) 4" (SLD) (100MIL)	EA	7,350	12, 13
672	6009	REFL PAV MRKR TY II-A-A	EA	216	12, 13
677	6001	ELIM EXT PAV MRK & MRKS (4")	LF	7,865	12, 13
677	6007	ELIM EXT PAV MRK & MRKS (24")	LF	72	12, 13
6056	6001	PREFORMED IN-LANE (TRANS) RUMBLE STRIP	LF	320	12, 13
6185	6002	TMA (STATIONARY)	DAY	160	12, 13
6185	6005	TMA (MOBILE OPERATION)	DAY	6	13

EROSION CONTROL QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
164	6002	BROADCAST SEED (PERM) (RURAL) (SANDY)	AC	18.1	187
506	6002	ROCK FILTER DAMS (INSTALL) (TY 2)	LF	455	187
506	6011	ROCK FILTER DAMS (REMOVE)	LF	455	187
506	6038	TEMP SEDMT CONT FENCE (INSTALL)	LF	525	187
506	6039	TEMP SEDMT CONT FENCE (REMOVE)	LF	525	187
506	6041	BIODEG EROSN CONT LOGS (INSTL) (12")	LF	6,060	187
506	6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	6,060	187

SIGNING QUANTITIES					
ITEM	CODE	DESCRIPTION	UNIT	QUANTITY	SHEET #
636	6007	REPLACE EXISTING ALUMINUM SIGNS (TY A)	SF	575	133-136
644	6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA	11	133-136
644	6007	IN SM RD SN SUP&AM TY10BWG(1)SA(U)	EA	4	133-136
644	6076	REMOVE SM RD SN SUP&AM	EA	7	133-136

NOTE:

- \* CEMENT ESTIMATED AT 3% BY WEIGHT OF EXISTING MATERIAL
- \* EXISTING MATERIAL ESTIMATED AT 125 LB/CF

**US 190  
 QUANTITY  
 SUMMARY  
 SHEET**



**J.S.**  
**1 ADDENDUM #1, 7/26/2022, REPLACE SHEET**

CONT	SECT	JOB	HIGHWAY
0272	05	033	US 190
DIST	COUNTY		SHEET NO.
23	LAMPASAS		8

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**CROSS CULVERTS**

SHEET NO.	CULVERT #	LOCATION STA	LT/RT	420 6051	432 6002	464 6005	464 6008	467 6090	467 6105	467 6106	467 6109	467 6111	467 6112	467 6177	467 6227	467 6231	467 6232	467 6283	467 6388	467 6453	0658 6073
				CL C CONC (CULV)	RIPRAP (CONC) (5 IN)	RC PIPE (CL III) (24 IN)	RC PIPE (CL III) (36 IN)	SET (TY I) (S=2 FT) (HW=3 FT) (3:1) (C)	SET (TY I) (S=3 FT) (HW=3 FT) (3:1) (C)	SET (TY I) (S=3 FT) (HW=3 FT) (4:1) (C)	SET (TY I) (S=3 FT) (HW=3 FT) (6:1) (C)	SET (TY I) (S=3 FT) (HW=4 FT) (3:1) (C)	SET (TY I) (S=3 FT) (HW=4 FT) (4:1) (C)	SET (TY I) (S=5 FT) (HW=4 FT) (4:1) (C)	SET (TY I) (S=6 FT) (HW=7 FT) (3:1) (C)	SET (TY I) (S=6 FT) (HW=8 FT) (3:1) (C)	SET (TY I) (S=6 FT) (HW=8 FT) (4:1) (C)	SET (TY I) (S=8 FT) (HW=7 FT) (3:1) (C)	SET (TY II) (24 IN) (RCP) (3:1) (C)	SET (TY II) (36 IN) (RCP) (6:1) (C)	INSTL OM ASSM (OM-2Y) (WC) FND (BI)
				CY	CY	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
104	CULVERT #1	509+10.00	BOTH	0.4	2.6					2											2
104	CULVERT #2	514+12.00	LT	0.1	0.4				1												1
104	CULVERT #2	514+12.00	RT	1.4	1.4					1											1
104	CULVERT #3	526+40.00	LT	0.1	0.8					1											1
104	CULVERT #3	526+40.00	RT	0.2	1.4					1											1
104	CULVERT #4	564+05.00	BOTH	1.4	1.6					2											2
104	CULVERT #5	592+00.00	LT	0.3	5.1													1			1
104	CULVERT #5	592+00.00	RT	0.2	0												1				1
104	CULVERT #6	614+82.00	LT																1		1
104	CULVERT #6	614+82.00	RT			11												1			1
104	CULVERT #7	623+22.00	LT	0.8	1.4					1											1
104	CULVERT #7	623+22.00	RT	1.6	0						1										1
104	CULVERT #8	655+57.00	BOTH				26													2	2
104	CULVERT #9	684+00.00	LT				5				1										1
104	CULVERT #9	684+00.00	RT				24												1		1
104	CULVERT #10	696+67.00	LT				0				1										1
104	CULVERT #10	696+67.00	RT				17					1									1
104	CULVERT #11	705+84.00	BOTH				13						2								2
104	CULVERT #12	723+21.50	BOTH			22		2													2
104	CULVERT #13	740+50.00	BOTH				17					2									2
104	CULVERT #14	749+00.00	BOTH	6.3	0.8				2												2
104	CULVERT #15	761+60.00	LT	1.0	10.8											4					2
104	CULVERT #15	761+60.00	RT	47.4	0										4						2
104	CULVERT #16	775+60.00	BOTH	9.4	2.7									2							2
104	CULVERT #17	806+00.00	LT	0.1	0.5				1												1
104	CULVERT #17	806+00.00	RT	0.1	1.9						1										1
104	CULVERT #18	813+00.00	BOTH	2.6	2.7									2							2
104	CULVERT #19	861+70.33	BOTH	29.9	32.6												8				4
TOTAL						33	102	2	4	8	2	4	3	4	4	4	8	2	2	3	

**J.S.**  
 **ADDENDUM #1, 7/26/2022, REPLACE SHEET**

**CROSS CULVERTS CONT'D**

SHEET NO.	CULVERT #	LOCATION STA	LT/RT	420 6051	432 6002	467 6105	467 6106	467 6137	467 6139	467 6143	467 6144	467 6146	467 6227	467 6228	467 6231	467 6232	467 6260	467 6261	467 6262	0658 6073	
				CL C CONC (CULV)	RIPRAP (CONC) (5 IN)	SET (TY I) (S=3 FT) (HW=3 FT) (3:1) (C)	SET (TY I) (S=3 FT) (HW=3 FT) (4:1) (C)	SET (TY I) (S=4 FT) (HW=3 FT) (3:1) (C)	SET (TY I) (S=4 FT) (HW=3 FT) (4:1) (C)	SET (TY I) (S=4 FT) (HW=4 FT) (3:1) (C)	SET (TY I) (S=4 FT) (HW=4 FT) (4:1) (C)	SET (TY I) (S=4 FT) (HW=4 FT) (6:1) (C)	SET (TY I) (S=6 FT) (HW=7 FT) (3:1) (C)	SET (TY I) (S=6 FT) (HW=7 FT) (4:1) (C)	SET (TY I) (S=6 FT) (HW=8 FT) (3:1) (C)	SET (TY I) (S=6 FT) (HW=8 FT) (4:1) (C)	SET (TY I) (S=7 FT) (HW=8 FT) (4:1) (C)	SET (TY I) (S=7 FT) (HW=8 FT) (4:1) (C)	SET (TY I) (S=7 FT) (HW=9 FT) (3:1) (C)	INSTL OM ASSM (OM-2Y) (WC) FND (BI)	
				CY	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
104	CULVERT #20	892+95.00	LT	5.2	5.5							1								1	
104	CULVERT #20	892+95.00	RT	3.7	2.5						1									1	
104	CULVERT #21	895+00.00	LT	19.0	8.7										3					2	
104	CULVERT #21	895+00.00	RT	10.0	0								3							2	
104	CULVERT #22	911+25.00	LT	2.8	1.9						1									1	
104	CULVERT #22	911+25.00	RT	0.2	2.5						1									1	
104	CULVERT #23	946+80.00	LT	1.6	1.5				1											1	
104	CULVERT #23	946+80.00	RT	0.1	0.5			1												1	
104	CULVERT #24	963+30.00	LT	1.4	1.4		1													1	
104	CULVERT #24	963+30.00	RT	0.1	0.4	1														1	
104	CULVERT #25	972+50.00	LT	0.3	7.7										1					1	
104	CULVERT #25	972+50.00	RT	0.3	4.4											1				1	
104	CULVERT #26	986+40.00	LT	0.1	0.0	1														1	
104	CULVERT #26	986+40.00	RT	0.1	0.8		1													1	
104	CULVERT #27	1006+75.00	BOTH	2.0	2.8					2										2	
104	CULVERT #28	1021+40.00	LT	0.9	9.5														2	2	
104	CULVERT #28	1021+40.00	RT	0.1	7.5											2				2	
104	CULVERT #29	1039+00.00	LT	0.1	3.6								1							1	
104	CULVERT #29	1039+00.00	RT	0.3	4.2								1							1	
104	CULVERT #30	1062+95.00	LT	0.6	13.8													2		2	
104	CULVERT #30	1062+95.00	RT	0.1	7.5												2			2	
TOTAL				154	159.6	2	2	1	1	2	3	1	2	3	4	1	4	2	2	2	70

**US 190  
 QUANTITY  
 SUMMARY  
 SHEET**



CONT	SECT	JOB	HIGHWAY
0272	05	033	US 190
DIST	COUNTY		SHEET NO.
BWD	LAMPASAS		9