

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 03
SH 99: At W. Airport
PROJECT NO. 126-1002

- 1) **CONTRACTOR:** Main Lane Industries, LTD
- 2) **CHANGE ORDER WORK STATION LIMITS:**
 Entire Project
- 3) **DESCRIPTION OF CHANGE:**
 1. Asphalt milling for mainlanes at Oyster Creek.
 2. Add standard for rolling closure for construction of overhead sign. - RFI-010 (No cost difference)
 3. Revise north side u-turn alignment and width, and move curb inlet to avoid electrical ground box - RFI-003 (No cost difference)
- 4) **NEW OR REVISED PLAN SHEET(S) / SKETCHES ARE ATTACHED AND NUMBERED:**
 New - Sheet 82A
 Revised plan sheets - 14, 121, 168 and 171.

CONTRACTOR: Main Lane Industries, LTD		RECOMMENDED FOR EXECUTION:	
By	 <div style="text-align: right; margin-right: 50px;">7-11-2022</div> <div style="text-align: right;">DATE</div>		 <div style="text-align: right; margin-right: 50px;">1-11-2022</div> <div style="text-align: right;">DATE</div>
Printed Name	<u>Lee Hergenrather</u>	CONSTRUCTION MANAGER	
Printed Title	<u>Project Manager</u>	FBGPTRA REPRESENTATIVE	DATE
Time Ext #: <u>N/A</u>	Days added on this C.O.: <u>N/A</u>	Recommended	
		 <div style="text-align: right; margin-right: 50px;">11-Jan-2023</div>	
Amount added by this change order: \$23,761.91		FBGPTRA REPRESENTATIVE	DATE
		Approved	


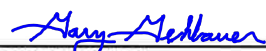

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 03
SH 99: AT PEEK RD.
PROJECT NO. 126-1010

Date: 7/8/2022

Item	Code	Description	Unit	Quantity Adjustment by This Change Order	Unit Price	Amount Adjustment by This Change Order
		FORCE ACCOUNT - ASPHALT MILLING		1.00	\$23,761.91	\$23,761.91
		AMOUNT ADDED BY THIS CHANGE ORDER=				\$23,761.91

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 04
SH 99: At W. Airport
PROJECT NO. 126-1002

- 1) **CONTRACTOR:** Main Lane Industries, LTD
- 2) **CHANGE ORDER WORK STATION LIMITS:**
 SB Frtg Rd - Sta 1006+93.36 to 1013+51.60
 NB Frtg Rd - Sta 1005+25.55 to 1011+21.22
- 3) **DESCRIPTION OF CHANGE:**
 1. Remove existing curb by saw cutting pavement where existing pavement is widened.
- 4) **NEW OR REVISED PLAN SHEET(S) / SKETCHES ARE ATTACHED AND NUMBERED:**
 Revised Sheets - 117, 119




CONTRACTOR: Main Lane Industries, LTD		11-16-2022		RECOMMENDED FOR EXECUTION:	
By 		DATE			
Printed Name <u>Lee Hergenrather</u>		CONSTRUCTION MANAGER		1-11-2023 DATE	
Printed Title <u>Project Manager</u>		FBGPTRA REPRESENTATIVE		DATE	
Time Ext #: <u>10</u> Days added on this C.O.: <u>10</u>		Recommended			
Amount added by this change order: <u>\$29,589.75</u>				11-Jan-2023 DATE	
		FBGPTRA REPRESENTATIVE		DATE	
		Approved			

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 04
SH 99: AT W. AIRPORT
PROJECT NO. 126-1002

Item	Code	New Item	Description	Unit	Quantity Adjustment by This Change Order	Unit Price	Amount Adjustment by This Change Order
9000	9001	✓	SAW CUTTING CURB REMOVAL - CO4	LF	1360.00	\$21.76	\$29,589.75
				AMOUNT ADDED BY THIS CHANGE ORDER=			\$29,589.75

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 05
SH 99: At W. Airport
PROJECT NO. 126-1002

- 1) **CONTRACTOR:** Main Lane Industries, LTD
- 2) **CHANGE ORDER WORK STATION LIMITS:**
 NB Frtg Rd - Sta 1005+25.55 to 1011+21.02
 NB Frtg Rd - Sta 1030+72
- 3) **DESCRIPTION OF CHANGE:**
 1. Add concrete curb to inside of northbound entrance ramp that was inadvertently omitted.
 2. Revise electrical overhead service pole to underground service pole per Centerpoint request.
- 4) **NEW OR REVISED PLAN SHEET(S) / SKETCHES ARE ATTACHED AND NUMBERED:**
 Revised Plan Sheets - Vol 1 - 13, 117 & Vol 2 - 51, 52


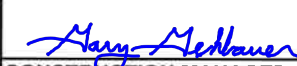

CONTRACTOR: Main Lane Industries, LTD		10-17-2022		RECOMMENDED FOR EXECUTION:	
 By _____		DATE			
Printed Name <u>Lee Hergenrather</u>				 CONSTRUCTION MANAGER	
Printed Title <u>Project Manager</u>				1-11-2023 DATE	
Time Ext #: <u>N/A</u> Days added on this C.O.: <u>N/A</u>				FBGPTRA REPRESENTATIVE	
Amount added by this change order: <u>\$2,978.06</u>				Recommended  FBGPTRA REPRESENTATIVE	
				11-Jan-2023 DATE	
				Approved	

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 05
SH 99: AT W. AIRPORT
PROJECT NO. 126-1002

Item	Code	New Item	Description	Unit	Quantity Adjustment by This Change Order	Unit Price	Amount Adjustment by This Change Order
529	6002		CONC CURB (TY II)	LF	595.00	\$4.00	\$2,380.00
628	6087	✓	ELC SRV TY A 240/480 100(SS)SS(E)SP(U)- CO5	EA	1.00	\$7,598.06	\$7,598.06
628	6086		ELC SRV TY A 240/480 100(SS)SS(E)SP(O)	EA	1.00	(\$7,000.00)	(\$7,000.00)
				AMOUNT ADDED BY THIS CHANGE ORDER=			\$2,978.06

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 06
SH 99: At W. Airport
PROJECT NO. 126-1002

- 1) **CONTRACTOR:** Main Lane Industries, LTD
- 2) **CHANGE ORDER WORK STATION LIMITS:**
Sta 952+80 to 960+00
- 3) **DESCRIPTION OF CHANGE:**
 1. Remove existing toll zone approach pavement markings that are in conflict with the ramp relocations.
 2. Add toll zone approach pavement markings in advance of new exit ramp..
 3. Revise sign panels on large ground mounted signs to show "Free Exit".
- 4) **NEW OR REVISED PLAN SHEET(S) / SKETCHES ARE ATTACHED AND NUMBERED:**
 Revised Plan Sheets - Vol 1 - 106 & 193
 New - 228A




CONTRACTOR: Main Lane Industries, LTD		RECOMMENDED FOR EXECUTION:	
By	 <div style="text-align: right; padding-right: 50px;">DATE</div>	 CONSTRUCTION MANAGER	1-11-2023 DATE
Printed Name	<u>Lee Hergenrather</u>	FBGPTRA REPRESENTATIVE	DATE
Printed Title	<u>Project Manager</u>	Recommended	
Time Ext #: <u>N/A</u>	Days added on this C.O.: <u>N/A</u>	 FBGPTRA REPRESENTATIVE	11-Jan-2023 DATE
Amount added by this change order: <u>\$16,659.08</u>		Approved	

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 06
SH 99: AT W. AIRPORT
PROJECT NO. 126-1002

Item	Code	New Item	Description	Unit	Quantity Adjustment by This Change Order	Unit Price	Amount Adjustment by This Change Order
668	6027		PREFAB PAV MRK TY B (W)(WORD)	EA	8.00	\$650.00	\$5,200.00
668	6032	✓	PREFAB PAV MRK TY B (W)(SYMBOL) - CO6	EA	4.00	\$377.00	\$1,508.00
677	6012	✓	ELIM EXT PAV MRK & MRKS (WORD) - CO6	EA	8.00	\$38.00	\$304.00
677	6017	✓	ELIM EXT PAV MRK & MRKS (SYMBOL) - CO6	EA	4.00	\$22.00	\$88.00
678	6016		PAV SURF PREP FOR MRK (WORD)	EA	8.00	\$20.00	\$160.00
678	6021	✓	PAV SURF PREP FOR MRK (SYMBOL) - CO6	EA	4.00	\$11.00	\$44.00
636	6002		ALUMINUM SIGNS (TY G)	SF	148.00	\$63.21	\$9,355.08
				AMOUNT ADDED BY THIS CHANGE ORDER=			\$16,659.08

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 07
SH 99: At W. Airport
PROJECT NO. 126-1002

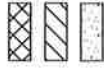
- 1) **CONTRACTOR:** Main Lane Industries, LTD
- 2) **CHANGE ORDER WORK STATION LIMITS:**
Sta 1057+31 to 1060+40 (SBRMP1)
- 3) **DESCRIPTION OF CHANGE:**
 1. Extend MBGF and replace SET past existing overhead sign column since column is in clear zone due to auxiliary lane addition.
- 4) **NEW OR REVISED PLAN SHEET(S) / SKETCHES ARE ATTACHED AND NUMBERED:**
 Revised Plan Sheets - Vol 1 - 20, 21, 103 & 122

CONTRACTOR: Main Lane Industries, LTD		1-10-2023	
 By _____		DATE	
Printed Name <u>Lee Hergenrather</u>		 CONSTRUCTION MANAGER	
Printed Title <u>Project Manager</u>		1-11-2023 DATE	
Time Ext #: <u>N/A</u> Days added on this C.O.: <u>N/A</u>		FBGPTRA REPRESENTATIVE Recommended	
Amount added by this change order: \$6,414.36		 FBGPTRA REPRESENTATIVE Approved	
		11-Jan-2023 DATE	

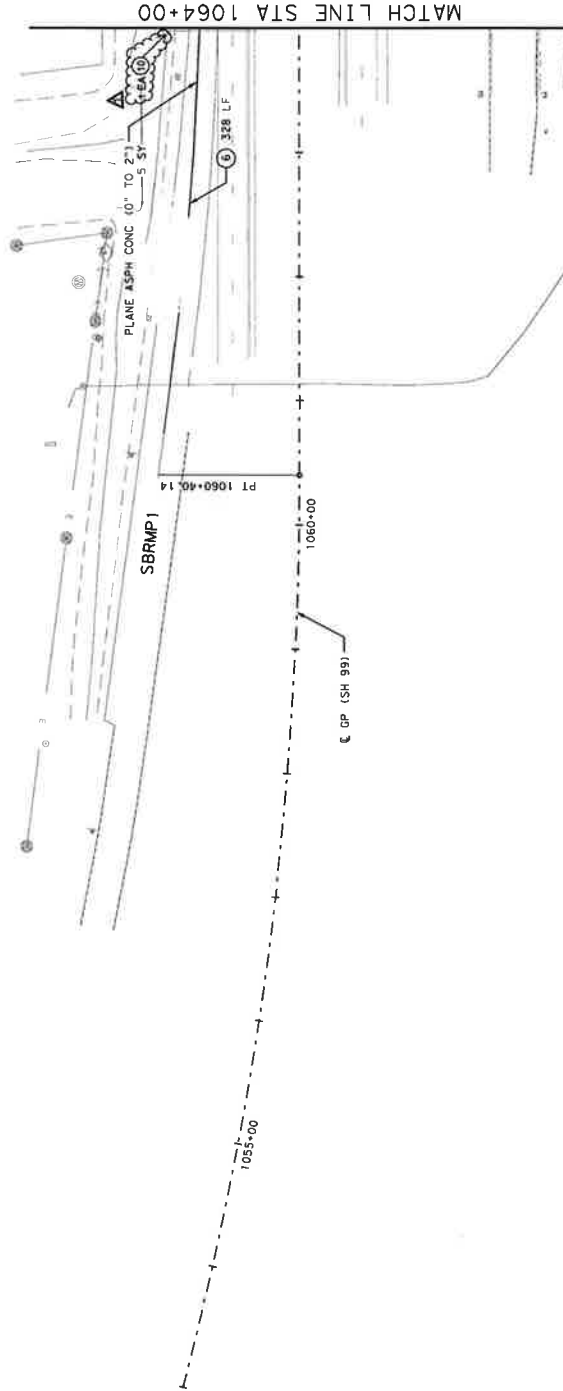
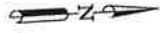
FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY
FORT BEND GRAND PARKWAY TOLL ROAD
CONSTRUCTION CONTRACT CHANGE ORDER NUMBER : 07
SH 99: AT W. AIRPORT
PROJECT NO. 126-1002

Item	Code	New Item	Description	Unit	Quantity Adjustment by This Change Order	Unit Price	Amount Adjustment by This Change Order
540	6001		MTL W-BEAM GD FEN (TIM POST)	LF	75.00	\$28.00	\$2,100.00
544	9001	✓	GUARDRAIL END TREATMENT (REMOVE & INSTALL	EA	1.00	\$4,314.36	\$4,314.36
				AMOUNT ADDED BY THIS CHANGE ORDER=			\$6,414.36

LEGEND



- 1 REMOVING CONC (RIPRAP)
- 2 REMOVING CONC (MEDIANS)
- 3 REMOVING CONC (CURB)
- 4 REMOVING CONC (CTB)
- 5 REMOVE SM RD SN SUPP/AM
- 6 ELIM EXT PAV MK & MKS (6")
- 7 ELIM EXT PAV MK & MKS (8")
- 8 ELIM EXT PAV MK & MKS (24")
- 9 REMOVING MBGF
- 10 REMOVE SOT
- 11 REMOVE DAT
- 12 SAWCUT



NO.	DATE	REVISION	QAO	APPROVED
1	11/22	REMOVE MBGF		



7/9/2020

**Fort Bend Grand Parkway
Toll Road Authority**

LJA Engineering, Inc.
FORT BEND GRAND PARKWAY TOLL
ROAD AUTHORITY

REMOVAL LAYOUT

BEGIN TO STA 1064+00

DESIGNED	CA	HORIZ SCALE	SHEET 8 OF 12
CHECKED	JB	VERT SCALE	
APPROVED	JB	DATE	7/9/2020
		SHEET NO.	103
CSJ		SECTION	

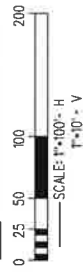


Gregory A. Ofield

THE SEAL OF GREGORY A. OFIELD, P.E., NO 64178
SHOWN HEREON APPLIES ONLY TO THE CHANCES
AND/OR MODIFICATIONS TO THE DESIGN
AS INDICATED BY

11/11/2022

10" CONC PMWT (CRCP)	(A)	10" CONC PMWT (CRCP)	(A)
12" CONC PMWT (CRCP)	(B)	12" CONC PMWT (CRCP)	(B)
CONC CURBITY (1)	(C)	CONC CURBITY (1)	(C)
NOT USED	(D)	NOT USED	(D)
1" ASB (BONDBREAKER)	(E)	1" ASB (BONDBREAKER)	(E)
6" CEMENT TREATED SAND	(F)	6" CEMENT TREATED SAND	(F)
SANICUT	(G)	SANICUT	(G)
BLACK SODDING	(H)	BLACK SODDING	(H)
NOT USED	(I)	NOT USED	(I)
6" LIME TREATED SUBGRADE	(J)	6" LIME TREATED SUBGRADE	(J)
NO. 6 TIE BAR DOWN EXISTING CONCRETE PAVEMENT	(K)	NO. 6 TIE BAR DOWN EXISTING CONCRETE PAVEMENT	(K)
CONC MEDIAN	(L)	CONC MEDIAN	(L)
10" FAST TRACK	(M)	10" FAST TRACK	(M)
U-TURN CURB	(N)	U-TURN CURB	(N)
TYPICAL SECTION	(O)	TYPICAL SECTION	(O)
PROPOSED CONCRETE PAVEMENT	(P)	PROPOSED CONCRETE PAVEMENT	(P)
PROPOSED CONCRETE MEDIAN	(Q)	PROPOSED CONCRETE MEDIAN	(Q)
PROPOSED OVERLAY LIMIT	(R)	PROPOSED OVERLAY LIMIT	(R)
REMOVE OR MILL EXISTING PAVEMENT	(S)	REMOVE OR MILL EXISTING PAVEMENT	(S)
PROPOSED MILL AND PATCH	(T)	PROPOSED MILL AND PATCH	(T)
PROPOSED MILL AND PATCH	(U)	PROPOSED MILL AND PATCH	(U)
PROPOSED MILL AND PATCH	(V)	PROPOSED MILL AND PATCH	(V)
PROPOSED MILL AND PATCH	(W)	PROPOSED MILL AND PATCH	(W)
PROPOSED MILL AND PATCH	(X)	PROPOSED MILL AND PATCH	(X)
PROPOSED MILL AND PATCH	(Y)	PROPOSED MILL AND PATCH	(Y)
PROPOSED MILL AND PATCH	(Z)	PROPOSED MILL AND PATCH	(Z)



1	11/22	ADD MBGF	GAO	
NO.	DATE	REVISION		APPROVED



7/9/2020


Fort Bend Grand Parkway
Toll Road Authority

LJA Engineering, Inc.

SB/NB MAINLANES
ROADWAY PLAN AND PROFILE
BEGIN TO STA 1069+00

DRAWN: CA		HORIZ SCALE:	
DESIGNED: CA		VERT SCALE:	
CHECKED: JRB		DATE: 7/9/2020	
APPROVED: JRB		SHEET NO. 122	
CSJ:		SECTION	

[illegible]

THE SEAL OF GREGORY A. OFIELD, P.E., NO 64178
SHOWN HEREON APPLIES ONLY TO THE CHANCES
AND/OR MODIFICATIONS TO THE DESIGN
AS INDICATED BY 
11/11/2022



FBGPTRA**Request for Change Order**

PROJECT#: 126-1002 FBGPTRA SH 99

28" TY Guardrail End Treatment

1

COUNTY: FORT BEND

HIGHWAY: SH-99

LABOR

LABORER

Qty	Days	Rate	Hours	Total
	1	\$ 16.50	10	\$ -
				\$0.00

EQUIPMENT

Qty	Days	FHWA Hourly Rate	Hours	Total
				\$0.00

MATERIAL/SUPPLIES

Unit	Qty	Price	Total
			\$ -

SUBCONTRACTORS

Willow City

Unit	Qty	Price	Total
EA	1	\$4,068.23	\$ 4,068.23
			\$4,068.23

Base Labor

	\$ -
Burden 55%	\$ -
Markup 25%	\$ -
Sub-Total	\$ -

Equipment

	\$ -
Markup 15%	\$ -
Sub-Total	\$ -

Materials, Supplies

	\$ -
25%	\$ -
Sub-Total	\$ -

Subcontractors

	\$ 4,068.23
5%	\$ 203.41
Sub-Total	\$ 4,271.64

Bond

Sub-Total	\$ 4,271.64
1%	\$ 42.72
Sub-Total	

Total Price * \$ 4,314.36****\$ 4,314.36**

WILLOW CITY SIGN & RAIL, INC.
P.O. Box 455
Magnolia, Texas 77353
Cindy Rhoades, President
Phone #281-356-6663 Fax #281-356-6387
DBE, WBE, MBE, SBE, HUB
TXDOT, COH, POH & METRO CERTIFIED

November 23, 2022

Main Lane Industries

ATTN: Lee Hergenrather

RE: Fort Bend Grand Parkway Toll Road Authority
Project: SH 99
ML Job # 210222

Subject: Added Remove & Install Guardrail End Treatment (TY I)(Old Spec - 28") (1EA)

<u>MATERIAL:</u>			<u>Unit Price</u>	<u>TOTAL</u>
1	EA	Guardrail End Treatment (TY I)	\$ 2,090.00	\$ 2,090.00
		15% Compensation		\$ 313.50
<u>LABOR:</u>				
4.5	HRS	Foreman	\$ 35.00	\$ 157.50
4.5	HRS	Common Labor	\$ 25.50	\$ 114.75
4.5	HRS	Common Labor	\$ 25.50	\$ 114.75
4.5	HRS	Common Labor	\$ 24.00	\$ 108.00
4.5	HRS	Common Labor	\$ 24.00	\$ 108.00
		55% Burden		\$ 331.65
		15% Compensation		\$ 90.45
<u>EQUIPMENT:</u>				
4.5	HRS	2019 Chevrolet 6500, SFA 4x2 Diesel	\$ 67.85	\$ 305.33
4.5	HRS	2000 Starlite 30' Trailer(Non-Tilt Deck Utility) Gooseneck	\$ 2.48	\$ 11.16
4.5	HRS	2018 Bobcat Skid Loader (S185)	\$ 48.68	\$ 219.06
4.5	HRS	Small Generator Set, 5000 W, 11 HP, Gas	\$ 4.59	\$ 20.66
		15% Compensation		\$ 83.43
			TOTAL	\$ 4,068.23

NOTE: This Quote Includes Removal/Installation Within Same Mobilization of Guardrail LF Extension
1 Mobilization Included

NOTE: This Quote Includes Furnishing An Old Spec (28") TY I Guardrail End Treatment - MATERIAL IS NOT MASH COMPLIANT

NOTE: This Quote Does Not Include Replacement of Entire Existing Guardrail Layout (Extension to be Applied to Existing Materials Per FBGPTRA)

NOTE: This Quote Does Not Include Delivery of Any Removed Materials

NOTE: This Quote Does Not Include Any Concrete Removal and/or Repair Work

NOTE: Concrete Mow Strip, Non- Mow Strip or 2 Sack Grout is not included

NOTE: Removal of Mow Strip is not included in this quote.

NOTE: TY II CONCRETE CURB IS NOT INCLUDED IN THIS QUOTE

NOTE: THERE IS NO TRAFFIC HANDLING INCLUDED IN THIS QUOTE.

NOTE: This Quote does not include Performance or Payment Bonds.

NOTE: Night Work or Sunday is not included in this quote

NOTE: This Quote Does Not Include Railroad Safety Orientations/ or Railroad Insurance

**NOTE: THIS QUOTE IS GOOD FOR 30 DAYS FROM THIS DATE DUE TO EXTREME
CHANGES IN STEEL MATERIAL COST.**

SUBMITTED BY: KRYSTA HADLEY



P.O. Box 938
Round Rock, TX 78680
(512) 388-0588
(512) 388-0417 Fax
www.txcorr.com

QUOTE

Grates
Sign Post
Geotextiles
Bridge Railing
Metal Fabrication
Safety Pipe Runners
Corrugated Steel Pipe
Cast Iron Rings & Covers
Metal Beam Guard Fence

WILLOW CITY SIGN & RAIL

ATTN: KRYSTA

FORT BEND GRAND PARKWAY
SH99 AT WEST AIRPORT
Project: CHANGE ORDER

DESCRIPTION	UNIT	QUANTITY	PRICE	EXT
GUARDRAIL END TREATMENT (TY I)	EA	1.00	\$2,090.00	\$2,090.00

TERMS OF PAYMENT: NET 30 DAYS
PRICES VALID FOR 30 DAYS
SALES TAX NOT INCLUDED
TOLERANCES: INDIVIDUAL PART: $\pm .25"$; LINEAR: $\pm 3"$ (CMP) &
 $\pm .5"$ (RAIL, SIGN SUPPORT); ANGULAR: $\pm 1^\circ$

DELIVERY: 2-3 WEEKS
F.O.B. POINT: TRUCKS-CUSTOMER YARD W/
A FULL TRUCK LOAD ORDER

Subject to being awarded the contract, we accept your proposal
to furnish the job requirements at the unit prices quoted above

Company Name _____

Print Name _____

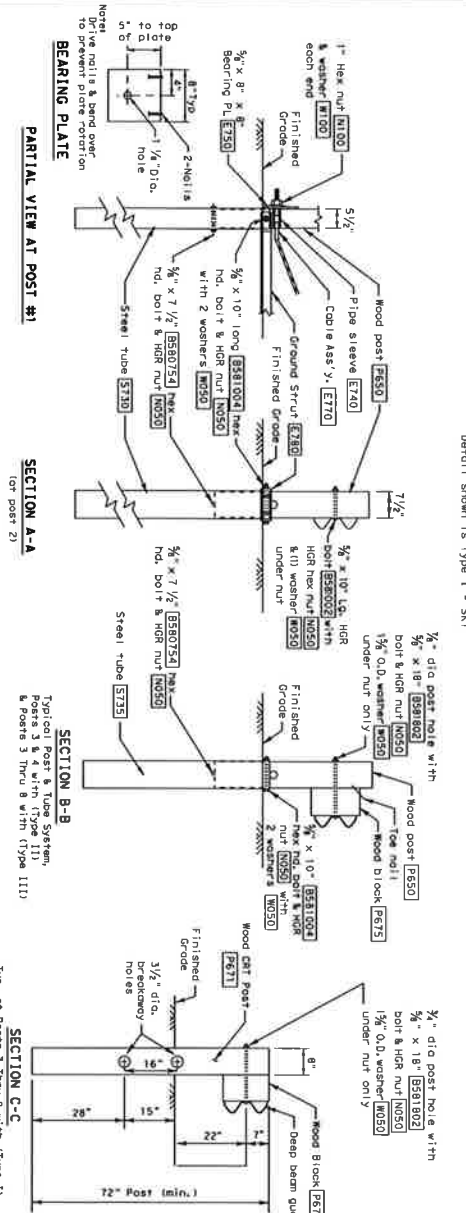
Signature _____ Date _____

Respectfully submitted,

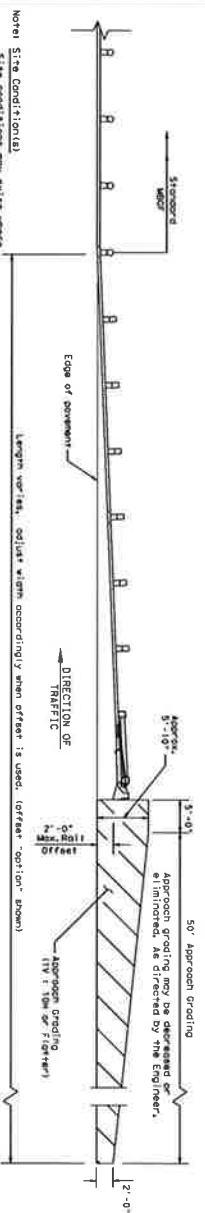
TEXAS CORRUGATORS-AUSTIN DIVISION, INC

NAME: RYAN COLE

DATE: 11/22/2022



APPROACH GRADING AT GUARDRAIL END TREATMENTS



All measurements should be taken from bottom of posts.
UNIVERSAL WOOD POST

Technical drawing of a mechanical part. The drawing shows a cross-section of a part with a slanted top surface. The dimensions are labeled as $7 \frac{1}{2}$ and $\frac{5}{16}$. A label "bottom of post" points to the bottom edge of the part.

γ_1
 Mole

20 45°

1/6 = 0.1667

Technical drawing of a mechanical part, likely a bracket or support. The drawing shows a side view with a vertical plate and a horizontal flange. Dimensions are indicated: a vertical dimension of 1 1/2 inches, a horizontal dimension of 1 1/2 inches, and a circular feature with a diameter of 1/8 inch. The text "1 1/2 Dia." is written vertically next to the circular feature.

WOOD BLOCK
P675

0
0
0
-
4
9
0
-
0
-
0
-
0
-

Note.
See Alternative
Guardrail Installation.

2. An object marker shall be

1. For curb installations, behind the curb. The post connection bolt to

When the wood shrinks, rotation.

0. The wood blocks shall be

3. The breakaway cable assembly should be used to connect

3. If solid rock is encountered, installation of concrete

7. The steel tubes may be drilled with a 1/2-in. (12.7-mm) hole in the wood post in the tube. If desired, the satisfactorily compacted

5. The steel tubes shall not to meet this requirement.

head from encroaching the installations, if directed

t. All bolts, nuts cable ass
A flare rate of 25:1 may

3. SGT's placed within the "elements may be installed

Type
Type

systems performance. **Pg** Type

2. The Type of SGT unit will post position. The Type

For additional information



Texas Department of Transportation
 Design Division
 Standard

SINGLE GUARDRAIL TERMINAL

(SKT 350)
 (WOOD POST)

SGT (8) - 1 4

		TITLE SGT (8) - 1 4	
DATE JULY 2000		REVISIONS	
DRAWN	BY	CHKD BY	DATE
COUNTY		SHEET NO.	

ITEM	QTY	UNIT	DESCRIPTION
31000	1	1	IMPOST HEAD
31005	1	1	#1 Deep Beam (curved) (1/2 Co.)
31025	1	1	#2 Deep Beam (curved) (1/2 Co.)
31030	1	1	GURRALL (12 GA.) 12'-6" SRT
3103A	1	1	GURRALL (12 GA.) 12'-6"
5150	2	2	Steel Tube - 6" x 8" x 1/2" x 1/2" min. of 3/4"
5175	0	2	Steel Tube - 6" x 8" x 1/2" x 1/2" min. of 3/4"
PE50	4	4	WOOD Posts - 5 1/2" x 7 1/2" x 45
PE51	4	4	WOOD CH Posts - 6" x 8" x 72
PE15	6	6	WOOD BLOCS - 6" x 8" x 14"
ET40	1	1	Piering Plate - 2" STD. PLATE x 5 1/2"
ET50	1	1	Anchor Bolt - 3/4" x 8" x 8"
ET70	1	1	Cable Anchor Box
ET80	1	1	Cable Assembly
			Ground Strut
HARDWARE			
B80J24	2	4	3/4" x 1 1/2" Hex Hd. Bolt
B80J04	2	4	3/4" x 10" Hex Hd. Bolt (Top of Tunnel)
W050	11	15	3/4" Washers
B80J02	1	1	3/4" x 10" Hex Post Bolt (Post 2)
B80J12	16	16	3/4" x 1 1/2" Hex Solid Bolt
N050	27	31	3/4" x 1 1/2" Hex Solid Bolt
N050	27	31	3/4" x 1 1/2" Hex Solid Bolt (4" Hdr.)
H050	2	2	1/2" x 18" High Post Bolt (For Posts 2-Strut)
E300	2	2	3/4" x 3" Lug Screw
E350	2	2	1" Hex Nut (Anchor Cable)
W100	2	2	1" Washer
S812A	8	8	Cable Anchor Cable
N012A	8	8	Cable Anchor Box Shoulder Bolts
W012A	8	8	1/2" Structural Nut
S151	1	1	1/2" Structural Washer
S151	1	1	Object Marker - (18" x 18")

For additional information contact: **INTERSTATE STEEL, Inc.** (432) 263-3735

GENERAL NOTES

1. The type of SST unit will be specified and displayed in the plans. The numbers in the circles indicate post position. The type of SST unit chosen is a maintenance consideration and does not affect the systems performance.

Post & Sill Options

Type I	Posts	1	2	3	4	5	6	7	8
Type II	Posts	1	2	3	4	5	6	7	8
Type III	Posts	1	2	3	4	5	6	7	8

None

2. SST's placed within the "minimum" 150 ft. radius, shall be installed straight. Standard rail elements may be installed within the radius, without special consideration.

3. All bolts, nuts and assemblies, cable anchors, steel tubes & bearing plates shall be galvanized.

4. A fire rating of 2 1/2 hr. may be used over the first 50 ft. of the system to prevent the terminal head from encroaching the shoulder. The fire rating may be decreased or eliminated for specific installations, if directed by the Engineer.

5. The steel tubes shall not protrude more than 4 inches above ground. Site grading may be necessary to meet this requirement.

6. The steel tubes may be driven with an approved driving head. They shall not be driven with the wood post in the tube. If the steel tubes are pried in drilled holes, the backfill material must be satisfactorily compacted to prevent tube settlement.

7. If solid rock is encountered, See the Manufacturer's installation manual for the proper installation guidelines.

8. The prewound cable assembly must be torn. A locking device (Vice grip or channel lock pliers) should be used to prevent the cable from twisting when tightening the nuts.

9. The wood blocks must be "tong noded" to the rectangular wood posts to prevent them from turning around the wood pin. The bearing plate on the front post shall also be the indicated to prevent rotation.

10. The wood blocks must be "tong noded" to the rectangular wood posts to prevent them from turning around the wood pin. The bearing plate on the front post shall also be the indicated to prevent rotation.

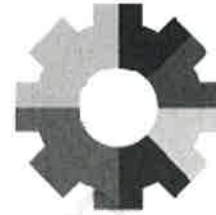
11. For each installation, the roll cases and posts shall be installed on the proper ground element. The bearing plate must be installed on the field of drilling and the post must be positioned to the roll to maintain the proper height of the roll above the gutter pan. The excess post length above the roll will be removed if directed by the Engineer.

12. An object marker shall be installed on the front of the impact head as detailed on (06A001A).

Rental Rate Blue Book®

November 7, 2022

Miscellaneous 4X2 35KGW DSL
On-Highway Truck Tractors

Size Class:
33,001 - 45,000 GVW
Weight:
12609 lbs

Configuration for 4X2 35KGW DSL

Axle Configuration	4X2	Horsepower	329.0
Maximum Gross Vehicle Weight	35000.0 lbs	Power Mode	Diesel

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$2,710.00	USD \$760.00	USD \$190.00	USD \$29.00	USD \$52.78	USD \$68.18
Adjustments						
Region (Texas: 98%)	(USD \$54.20)	(USD \$15.20)	(USD \$3.80)	(USD \$0.58)		
Model Year (2019: 99.9%)	(USD \$2.73)	(USD \$0.76)	(USD \$0.19)	(USD \$0.03)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	USD \$2,653.07	USD \$744.04	USD \$186.01	USD \$28.39	USD \$52.78	USD \$67.85

Non-Active Use Rates

	Hourly
Standby Rate	USD \$7.54
Idling Rate	USD \$55.64

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	50%	USD \$1,355.00/mo
Overhaul (ownership)	33%	USD \$894.30/mo
CFC (ownership)	4%	USD \$108.40/mo
Indirect (ownership)	13%	USD \$352.30/mo
Fuel (operating) @ USD 5.03	77%	USD \$40.57/hr

Revised Date: 4th quarter 2022

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

The equipment represented in this report has been exclusively prepared for JOSH HOUSTON
(houstonj@vmcmail.com)

Rental Rate Blue Book®

November 7, 2022

Miscellaneous TOW 2 1 6

Non-Tilt Deck Utility Trailers

Size Class:

All

Weight:

4500 lbs


Configuration for TOW 2 1 6

Capacity	6.0 t	Hitch Type	Tow
Number Of Axles	2.0	Number Of Tires	4.0
Power Mode	Manual		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$240.00	USD \$67.00	USD \$17.00	USD \$3.00	USD \$1.35	USD \$2.71
Adjustments						
Region (Texas: 96.8%)	(USD \$7.68)	(USD \$2.14)	(USD \$0.54)	(USD \$0.10)		
Model Year (2000: 85.67%)	(USD \$33.28)	(USD \$9.29)	(USD \$2.36)	(USD \$0.42)		
Adjusted Hourly Ownership Cost (100%)						
Hourly Operating Cost (100%)						
Total:	USD \$199.04	USD \$55.56	USD \$14.10	USD \$2.49	USD \$1.35	USD \$2.48

Non-Active Use Rates

	Hourly
Standby Rate	USD \$0.57
Idling Rate	USD \$1.13

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	50%	USD \$120.00/mo
Overhaul (ownership)	32%	USD \$76.80/mo
CFC (ownership)	4%	USD \$9.60/mo
Indirect (ownership)	14%	USD \$33.60/mo

Fuel cost data is not available for these rates.

Revised Date: 4th quarter 2022

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Rental Rate Blue Book®

November 7, 2022

Bobcat S185 (disc. 2013)

Skid Steer Loaders

Size Class:

1751 - 2200 lbs

Weight:

6220 lbs


Configuration for S185 (disc. 2013)

Operator Protection

ROPS/FOPS

Power Mode

Diesel

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$4,295.00	USD \$1,205.00	USD \$300.00	USD \$45.00	USD \$25.28	USD \$49.68
Adjustments						
Region (Texas: 95.9%)	(USD \$176.10)	(USD \$49.40)	(USD \$12.30)	(USD \$1.85)		
Model Year (2013: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	USD \$4,118.90	USD \$1,155.59	USD \$287.70	USD \$43.15	USD \$25.28	USD \$48.68

Non-Active Use Rates

Hourly

Standby Rate

USD \$11.70

Idling Rate

USD \$34.76

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	16%	USD \$687.20/mo
Overhaul (ownership)	68%	USD \$2,920.60/mo
CFC (ownership)	4%	USD \$171.80/mo
Indirect (ownership)	12%	USD \$515.40/mo
Fuel (operating) @ USD 5.03	45%	USD \$11.36/hr

Revised Date: 4th quarter 2022

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