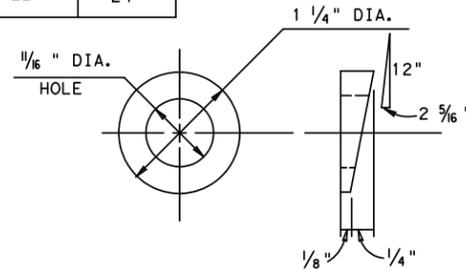
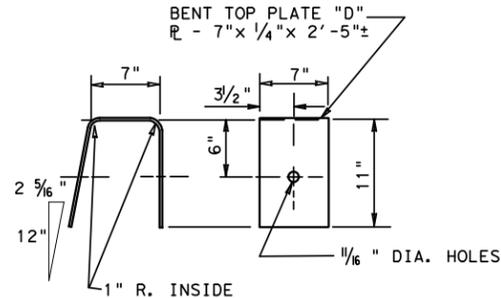


	ANCHOR BOLTS					
	BOLT LENGTH					
	ΔBOLT A ₁ SSTR RAIL SSTR(MOD)	ΔBOLT A ₂ C223 RAIL C223(MOD) T223 RAIL	ΔBOLT B SSTR RAIL SSTR(MOD) C223 RAIL T223 RAIL	ΔBOLT B C223(MOD)	ΔBOLT C SSTR RAIL SSTR(MOD) C223 RAIL T223 RAIL	ΔBOLT C C223(MOD)
4" TUBING	14 1/2"	19"	12"	14"	20"	22"
6" TUBING	16 1/2"	21"	14"	16"	22"	24"

ANCHOR BOLT "A" SHALL BE 5/8" Ø AND ANCHOR BOLT "B" AND "C" SHALL BE 3/4" Ø. BOTH ANCHOR BOLTS SHALL BE ASTM A325 WITH HEX HEAD, PLAIN WASHERS, LOCK WASHERS, SPACER, SPACER PLATE AND NUT.

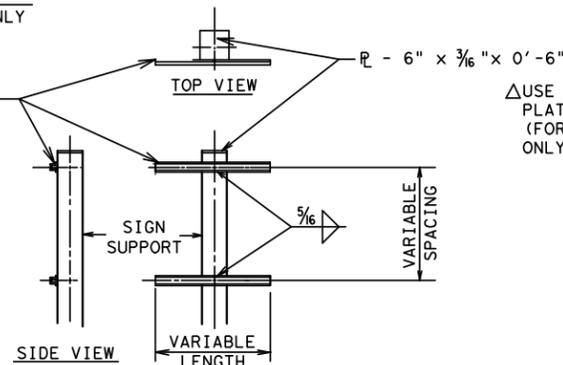


H.S. METAL SPACER DETAIL
Δ TO BE USED WITH SSTR OR SSTR(MOD) ONLY

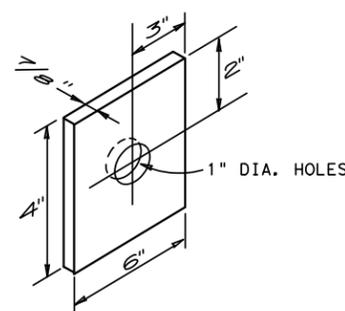


TOP PLATE "D" DETAIL
Δ TO BE USED WITH SSTR OR SSTR(MOD) ONLY

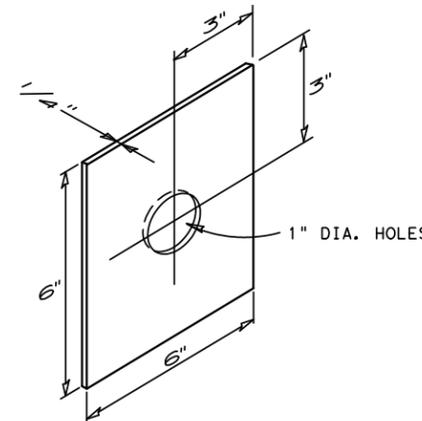
PROP. WINGED CHANNEL SIGN PANEL SUPPORTS SEE INDIVIDUAL SIGN DETAILS FOR SPACING & LENGTHS. (1.12 LBS/FT)



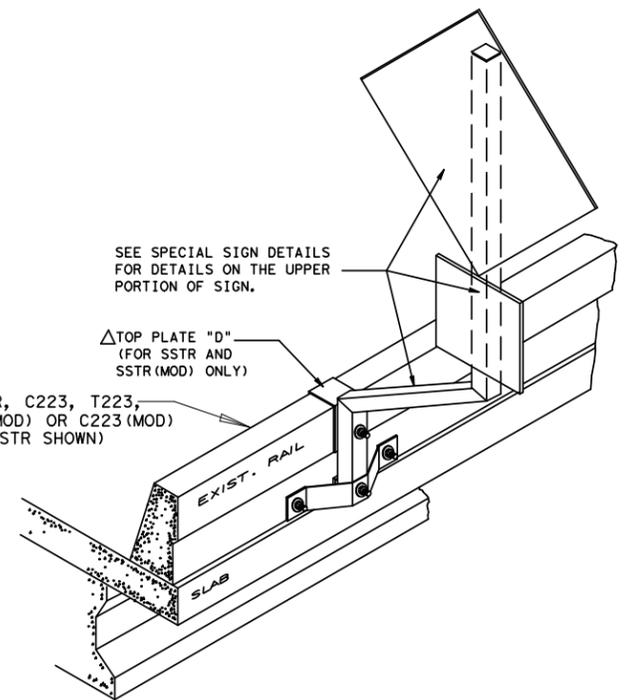
WINGED CHANNEL DETAIL



CENTER SPACER PLATE DETAIL
4" x 6" x 1/8"
Δ TO BE USED WITH SSTR, C223, T223



OUTER SPACER PLATE DETAIL
6" x 6" x 1/4"



SPECIAL SIGN MOUNT PICTORIAL

Δ SSTR AND SSTR(MOD):
5/8" Ø ANCHOR BOLT SET IN A 7/8" Ø HOLE FIELD DRILLED INTO RAIL USING EITHER ROTARY OR CORING TYPE EQUIPMENT. HOLE SHALL BE THOROUGHLY CLEANED OUT.

Δ SSTR AND SSTR(MOD): H.S. METAL SPACER - SEE DETAIL THIS SHEET

Δ C223, C223(MOD) AND T223:
5/8" Ø ANCHOR BOLT CAST IN PLACE TO A DEPTH OF 12 1/2". BOLT A₂ IS TO BE TIED TO THE RAIL REINFORCING BAR V SHOWN ON THE RAIL STANDARD.

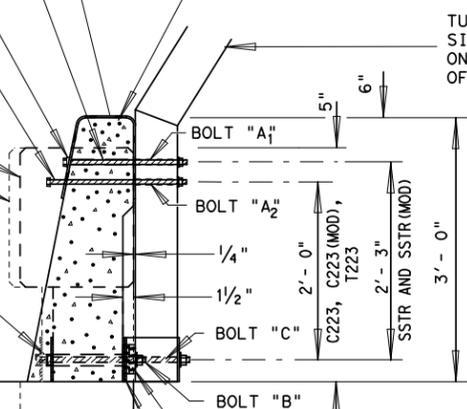
Δ SSTR AND SSTR(MOD):
3/4" Ø ANCHOR BOLT SET IN A 1 1/2" Ø X 10 1/2" DEEP HOLE FIELD DRILLED INTO RAIL USING EITHER ROTARY OR CORING TYPE EQUIPMENT. HOLE SHALL BE THOROUGHLY CLEANED OUT AND THE BOLT SET IN PLACE WITH AN EPOXY ADHESIVE ANCHOR. *

Δ C223, C223(MOD) AND T223:
DRILL THROUGH RAIL AND SET A 3/4" Ø BOLT IN A 1" Ø HOLE. USE 1 OUTER SPACER PLATE FOR THE BACKUP PLATE ON THE TRAFFIC SIDE OF RAIL.

TOP PLATE "D" SEE DETAIL THIS SHEET

SSTR RAIL

TUBE STEEL - SEE SPECIAL SIGN DETAILS FOR DETAILS ON THE UPPER PORTION OF SIGN.

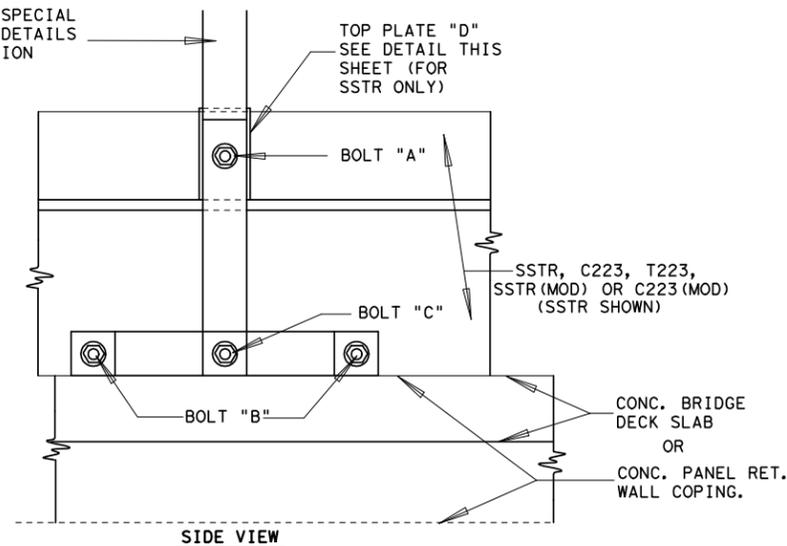


ELEVATION

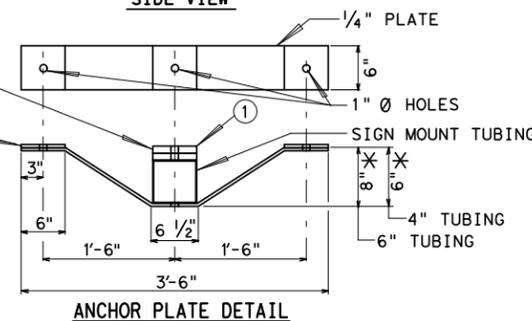
CONC. BRIDGE BEAM AND DECK SLAB
OR
CONC. PANEL RETAINING WALL WITH COPING.

2 - CENTER SPACER PLATES SEE SPACER PLATE DETAIL THIS SHEET. ①

1 - OUTER SPACER PLATE SEE SPACER PLATE DETAIL THIS SHEET.



SIDE VIEW



ANCHOR PLATE DETAIL

THE STEEL TUBING SHALL CONFORM TO ASTM A500 AND ALL NUTS AND BOLTS, ETC. SHALL CONFORM TO ASTM A193-B7 OR A687, THREADS FOR BOLTS AND NUTS SHALL BE 8 UN THREADS. ALL STEEL PLATES SHALL CONFORM TO ASTM A36. ALL WELDS SHALL BE IN ACCORDANCE WITH ITEM 441 (STEEL STRUCTURES) AND ITEM 448 (STRUCTURAL WELDING). THE PLATES, NUTS AND BOLTS ETC. SHALL BE GALVANIZED IN ACCORDANCE WITH ITEM 442 (METAL FOR STRUCTURES).

WHERE THE GALVANIZING HAS BEEN SCRAPPED OFF FROM SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPECIFICATION ASTM A-780.

FOR PAYMENT, ALL TUBING, PLATE, CHANNELS, BOLTS, NUTS WASHERS ETC. USED FOR THE ERECTION OF THE SPECIAL SIGN MOUNT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM 644 "SMALL ROAD SIDE TRAFFIC SUPPORTS".

* EPOXY ADHESIVE ANCHOR SYSTEM/INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

Δ WHEN SIGNS ARE MOUNTED TO SSTR(MOD) AND C223(MOD), CENTER SPACERS ARE NOT REQUIRED. THE ROUGH FORMED SURFACE OF THE BARRIER WILL BE SMOOTHED AT POINTS OF CONTACT WITH THE SIGN MOUNTS TO ASSURE ADEQUATE BEARING. CARE WILL BE TAKEN NOT TO DAMAGE FORMED SURFACE SURROUNDING SIGN MOUNTS.

* DECREASE DIMENSION BY 1 3/4" FOR SSTR(MOD) AND C223(MOD) RAILS TO ACCOUNT FOR THE REMOVAL OF CENTER SPACER PLATES.

① REMOVE CENTER SPACER PLATES FOR SSTR(MOD) AND C223(MOD) RAILS.

Δ THE SAN ANTONIO DISTRICT STANDARD "SPECIAL SIGN MOUNT DETAILS" WAS MODIFIED TO ACCOMMODATE MOUNTING TO SSTR(MOD), C223, C223(MOD) AND T223 TRAFFIC RAILS.

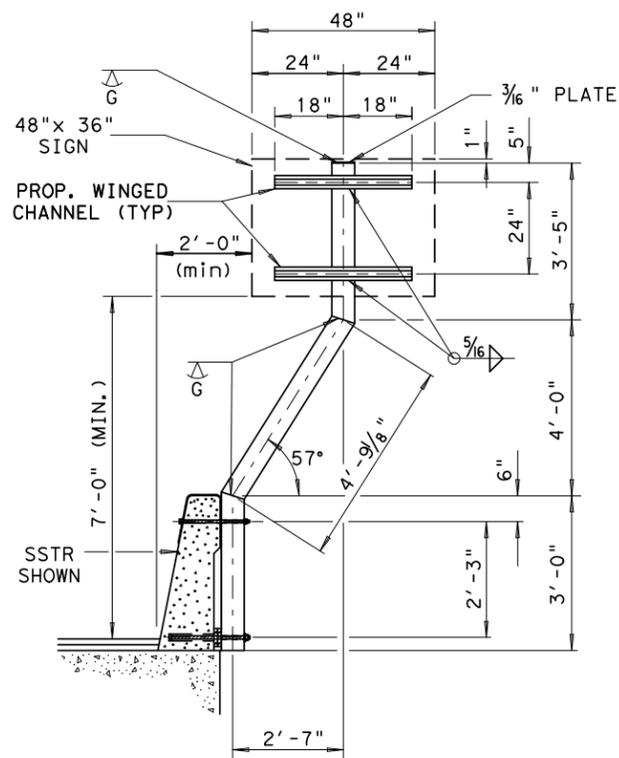
ACC:
LEVELS DISPLAYED
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SSTR, C223, T223
SSTR(MOD), AND C223(MOD)

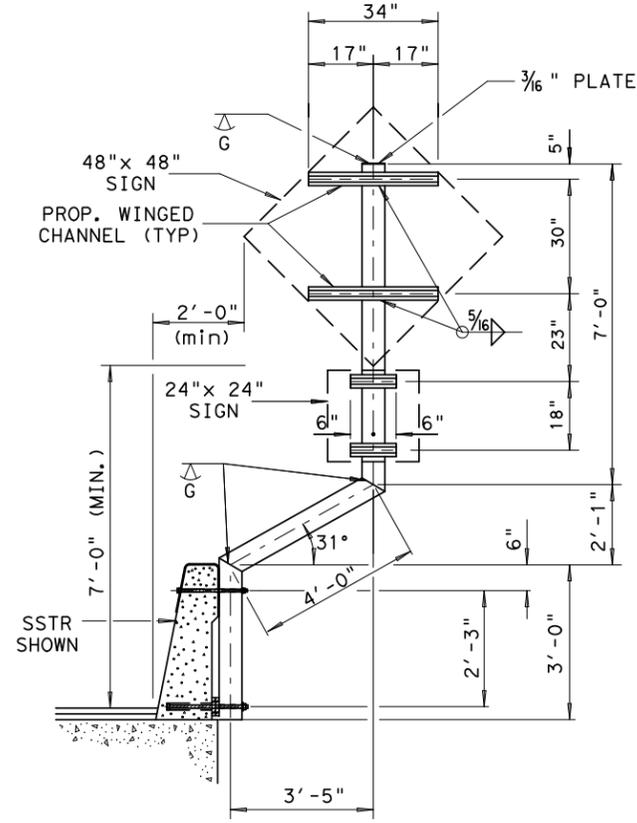
San Antonio District Standard
**SPECIAL SIGN MOUNT
DETAILS (1) (MOD)**

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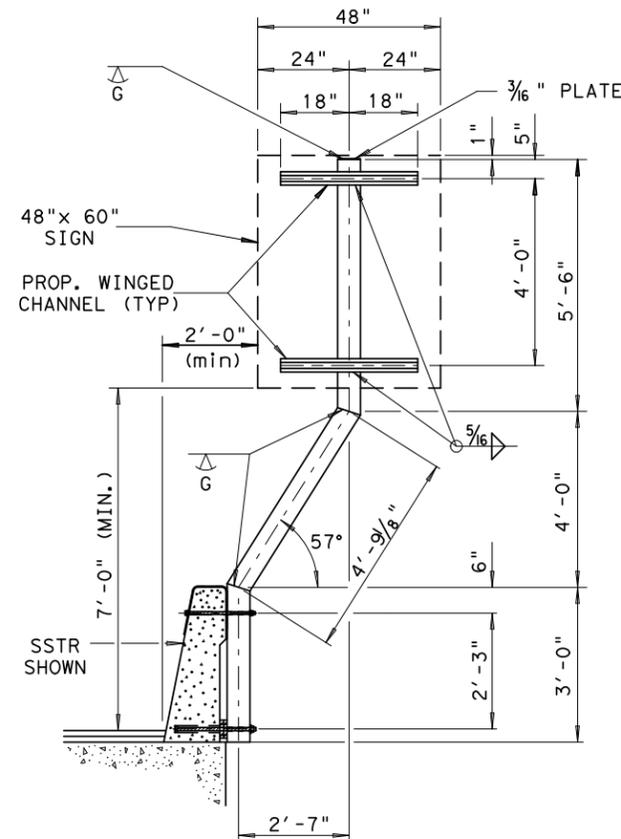
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
10-2008 12-2010	6		
	STATE	DIST.	COUNTY
	TEXAS	SAT	
	CONT.	SECT.	JOB HIGHWAY NO.



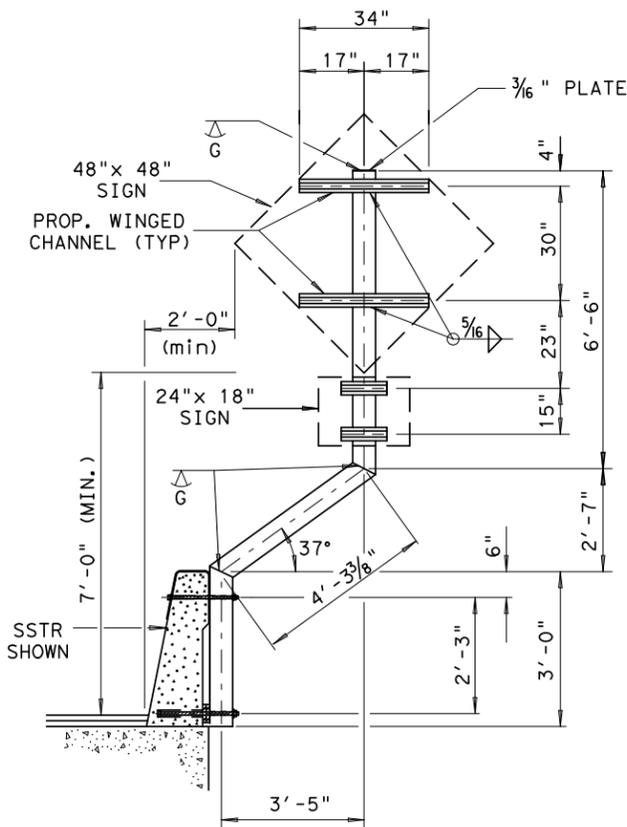
48" x 36" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



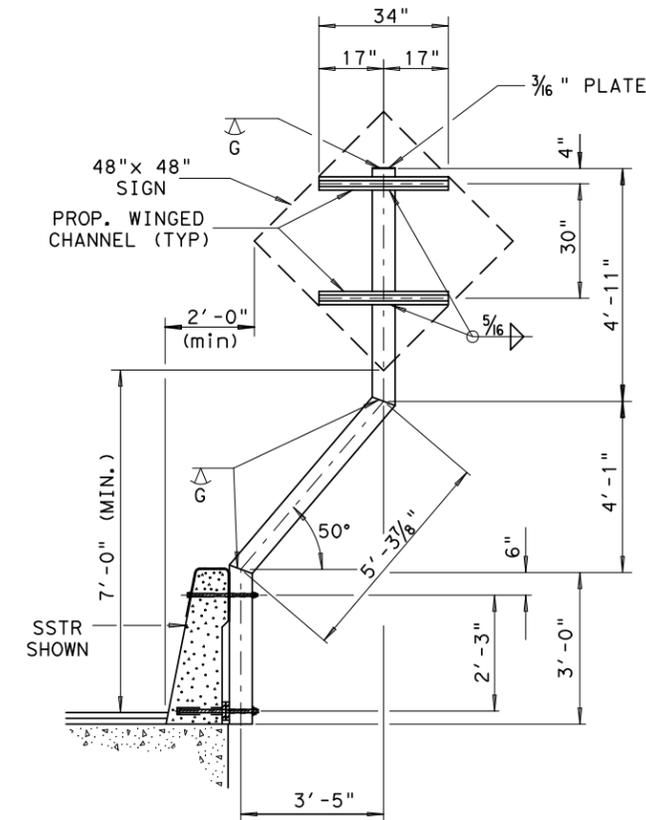
48" x 48" w/ 24" x 24" MULTI SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



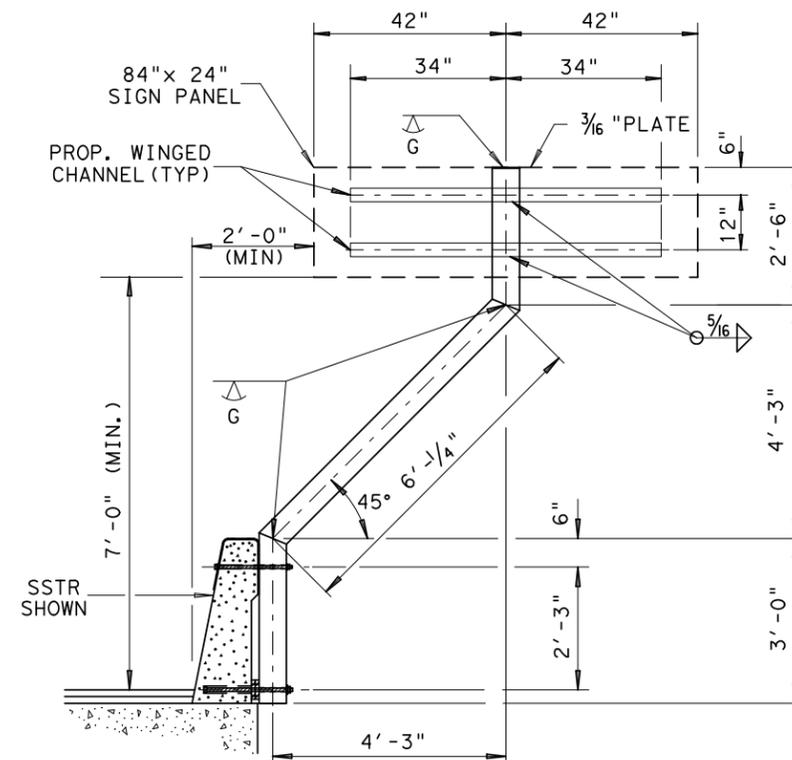
48" x 60" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



48" x 48" w/ 24" x 18" MULTI SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



48" x 48" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



84" x 24" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE

GENERAL NOTES

- FOR DETAILS ATTACHING SPECIAL SIGN MOUNT TO SINGLE SLOPE TRAFFIC RAIL (SSTR) AND DETAIL FOR PROPOSED WINGED CHANNEL SEE SHEET NO. _____
- THE STEEL TUBING SHALL CONFORM TO ASTM A500. ALL WELDS SHALL BE IN ACCORDANCE WITH ITEM 441 (STEEL STRUCTURES) AND ITEM 448 (STRUCTURAL WELDING). ALL GALVANIZING SHALL BE IN ACCORDANCE WITH ITEM 442 (METAL FOR STRUCTURES).
- WHERE THE GALVANIZING HAS BEEN SCRAPPED OFF FROM THE SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPECIFICATION ASTM A-780.

LEVELS DISPLAYED ACC:

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33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
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San Antonio District Standard

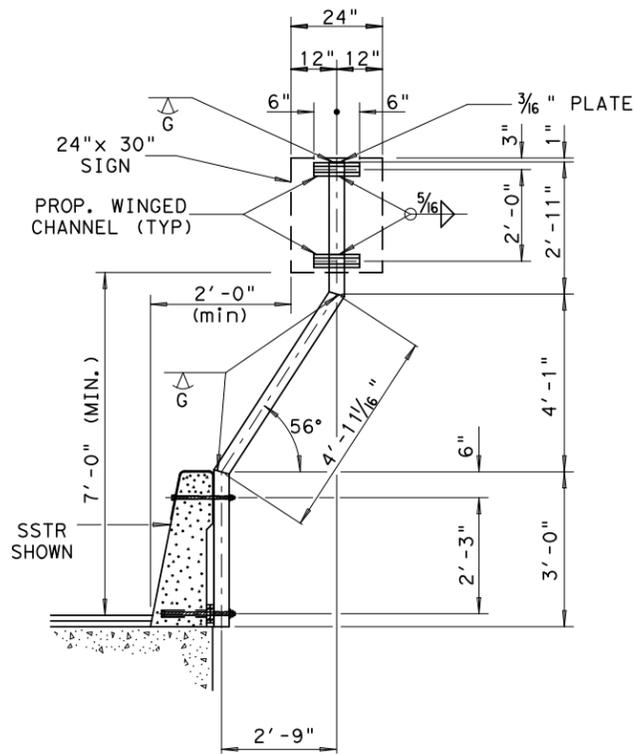
SPECIAL SIGN DETAILS (2)

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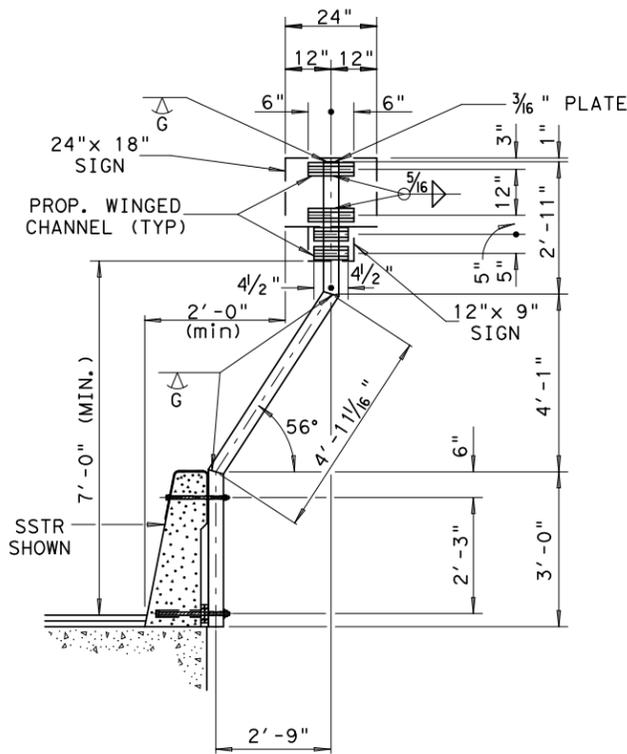
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
12-2010	6		
	STATE	DIST.	COUNTY
	TEXAS	SAT	
	CONT.	SECT.	JOB
			HIGHWAY NO.

GENERAL NOTES

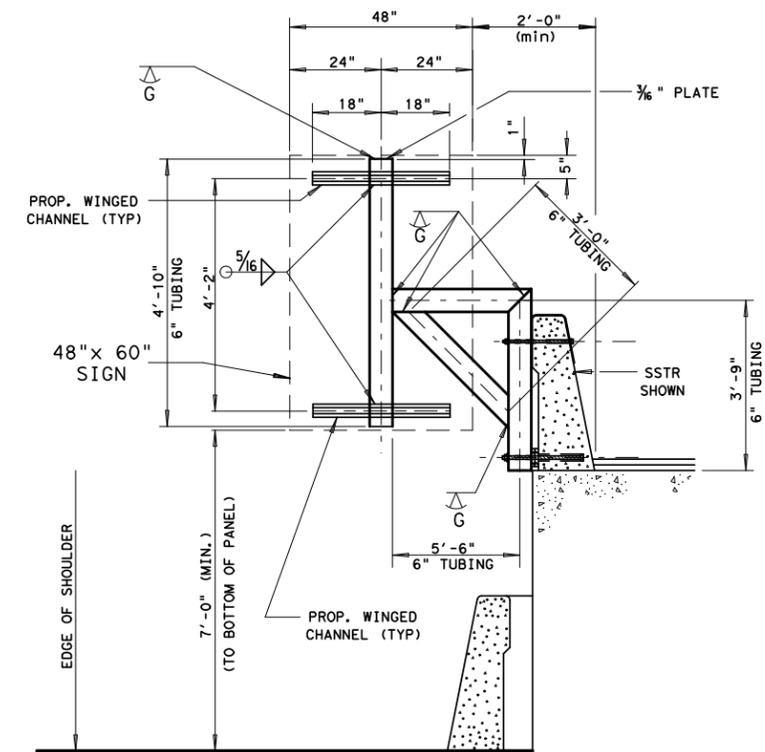
- FOR DETAILS ATTACHING SPECIAL SIGN MOUNT TO SINGLE SLOPE TRAFFIC RAIL (SSTR) AND DETAIL FOR PROPOSED WINGED CHANNEL SEE SHEET NO. _____
- THE STEEL TUBING SHALL CONFORM TO ASTM A500. ALL WELDS SHALL BE IN ACCORDANCE WITH ITEM 441 (STEEL STRUCTURES) AND ITEM 448 (STRUCTURAL WELDING). ALL GALVANIZING SHALL BE IN ACCORDANCE WITH ITEM 442 (METAL FOR STRUCTURES).
- WHERE THE GALVANIZING HAS BEEN SCRAPPED OFF FROM THE SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPECIFICATION ASTM A-780.



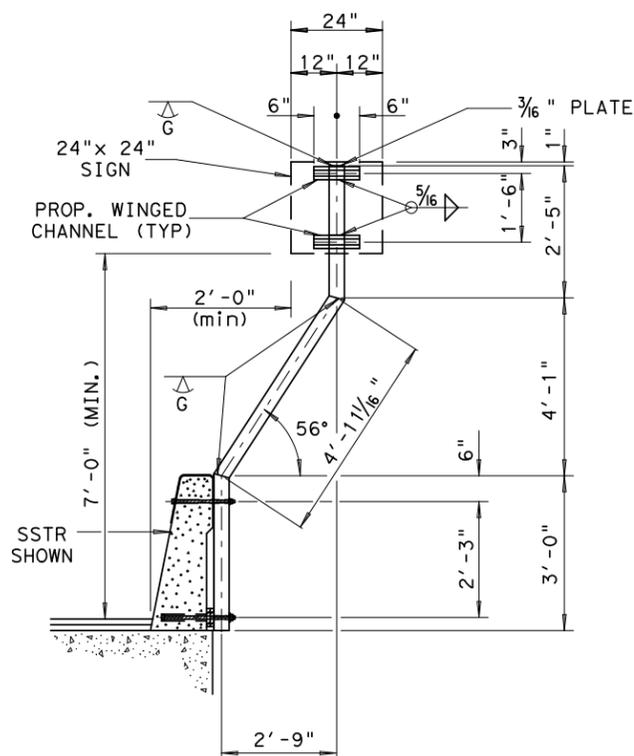
24" x 30" SIGN MOUNT DETAIL
TS 4" x 4" x 3/16" STEEL TUBE



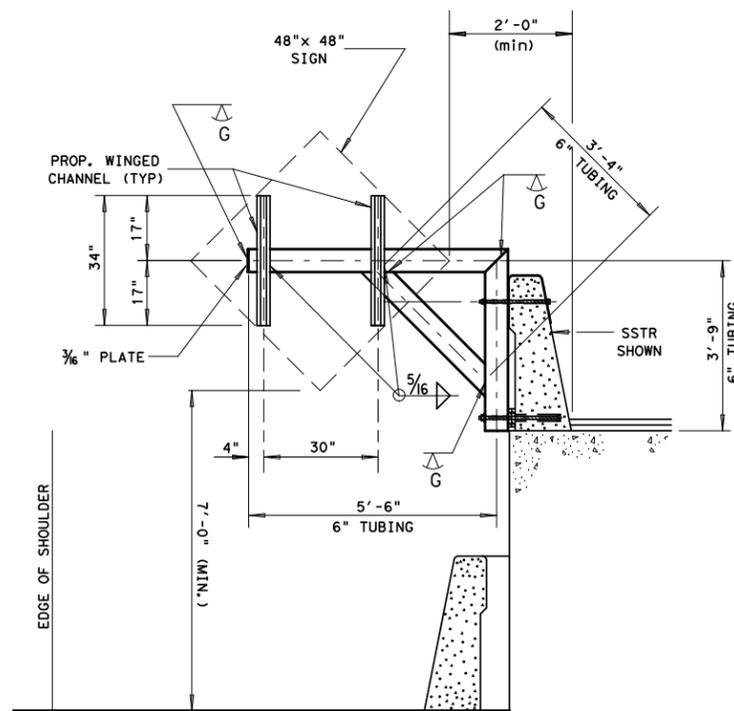
24" x 18" w/ 12" x 9" MULTI SIGN MOUNT DETAIL
TS 4" x 4" x 3/16" STEEL TUBE



48" x 60" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE



24" x 24" SIGN MOUNT DETAIL
TS 4" x 4" x 3/16" STEEL TUBE



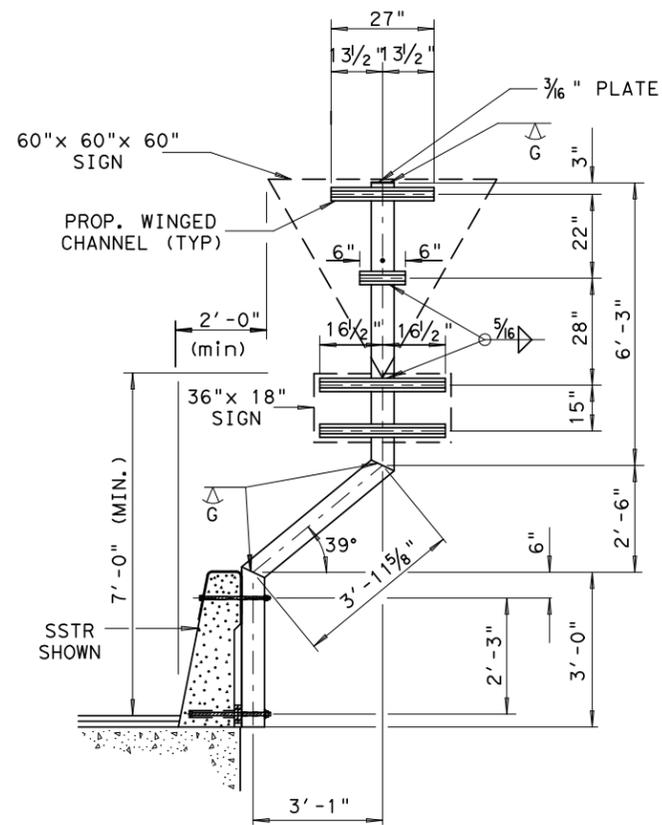
48" x 48" SIGN MOUNT DETAIL
TS 6" x 6" x 3/16" STEEL TUBE

LEVELS DISPLAYED	ACC:
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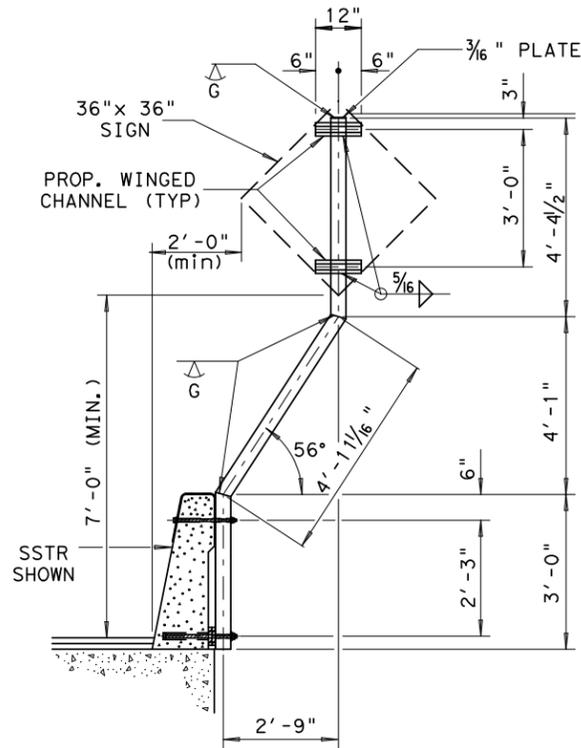
San Antonio District Standard
SPECIAL SIGN MOUNT
DETAILS (3)

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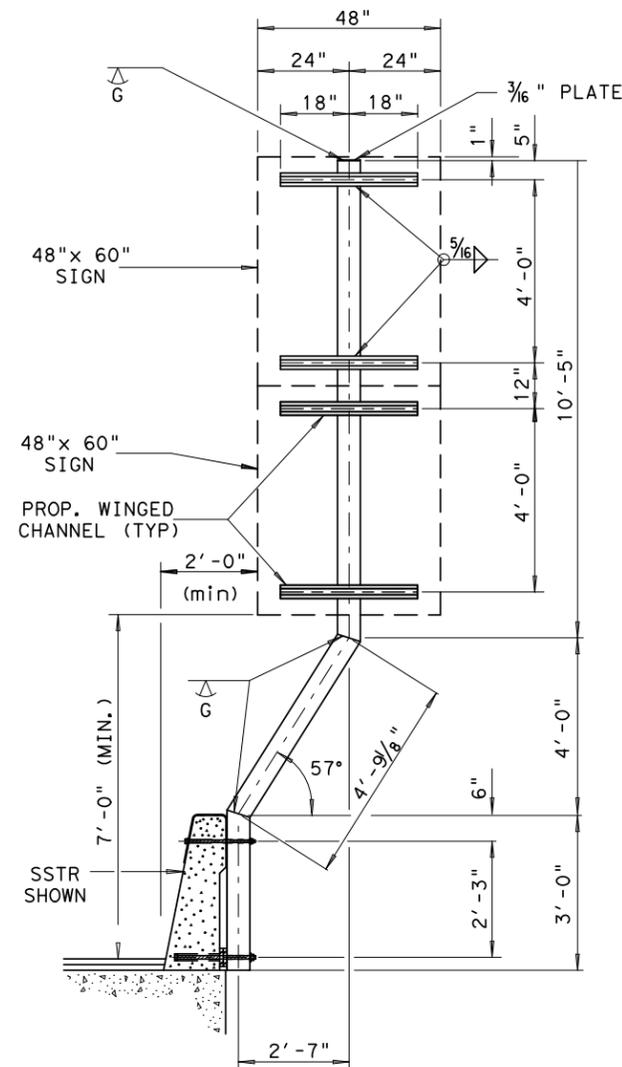
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
	6		
	STATE	DIST.	COUNTY
	TEXAS	SAT	
	CONT.	SECT.	JOB HIGHWAY NO.



60"x 60" x 60" w/ 36"x 18" MULTI SIGN MOUNT DETAIL
 TS 6"x 6"x 3/16" STEEL TUBE



36"x 36" SIGN MOUNT DETAIL
 TS 4"x 4"x 3/16" STEEL TUBE

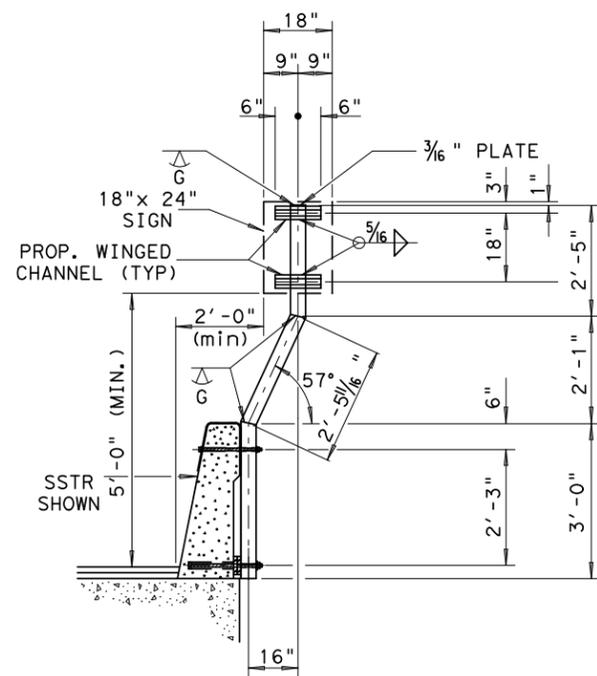


2 - 48"x 60" MULTI SIGN MOUNT DETAIL
 TS 6"x 6"x 3/16" STEEL TUBE

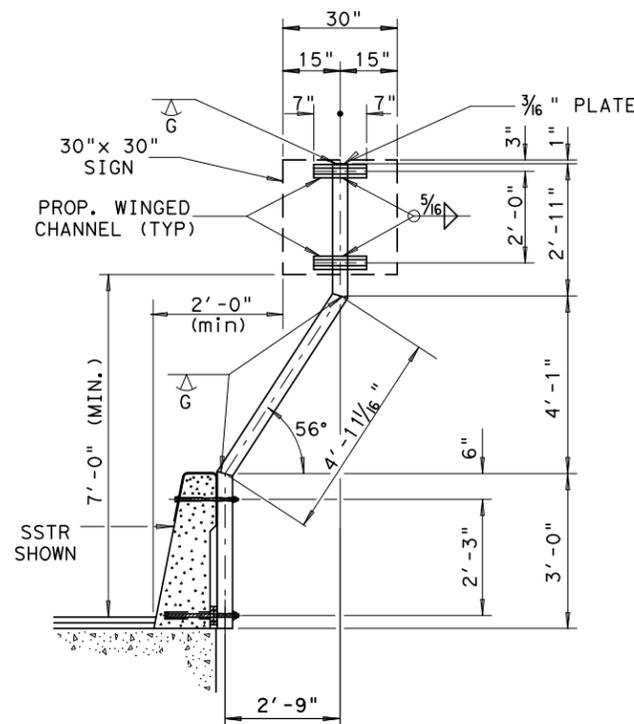
GENERAL NOTES

1. FOR DETAILS ATTACHING SPECIAL SIGN MOUNT TO SINGLE SLOPE TRAFFIC RAIL (SSTR) AND DETAIL FOR PROPOSED WINGED CHANNEL SEE SHEET NO. _____
2. THE STEEL TUBING SHALL CONFORM TO ASTM A500. ALL WELDS SHALL BE IN ACCORDANCE WITH ITEM 441 (STEEL STRUCTURES) AND ITEM 448 (STRUCTURAL WELDING). ALL GALVANIZING SHALL BE IN ACCORDANCE WITH ITEM 442 (METAL FOR STRUCTURES).
3. WHERE THE GALVANIZING HAS BEEN SCRAPED OFF FROM THE SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPECIFICATION ASTM A-780.

LEVELS DISPLAYED	ACC:
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	



18"x 24" SIGN MOUNT DETAIL
 TS 4"x 4"x 3/16" STEEL TUBE



30"x 30" SIGN MOUNT DETAIL
 TS 4"x 4"x 3/16" STEEL TUBE

San Antonio District Standard

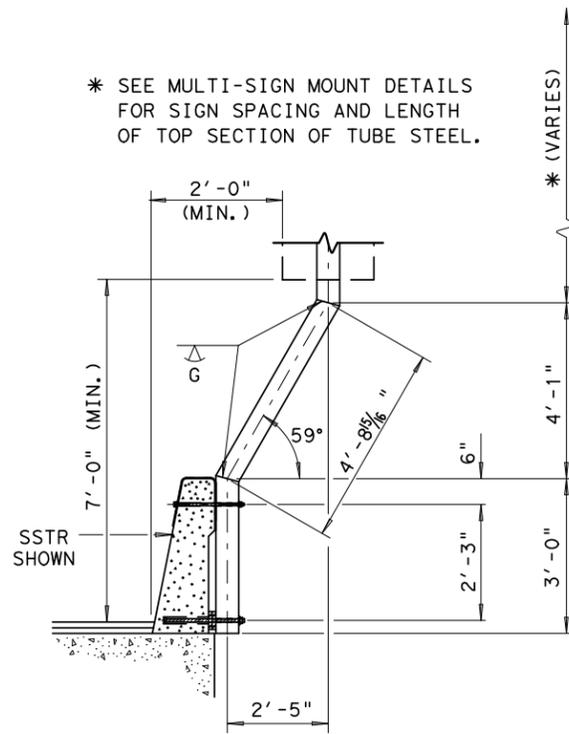
SPECIAL SIGN MOUNT DETAILS (5)



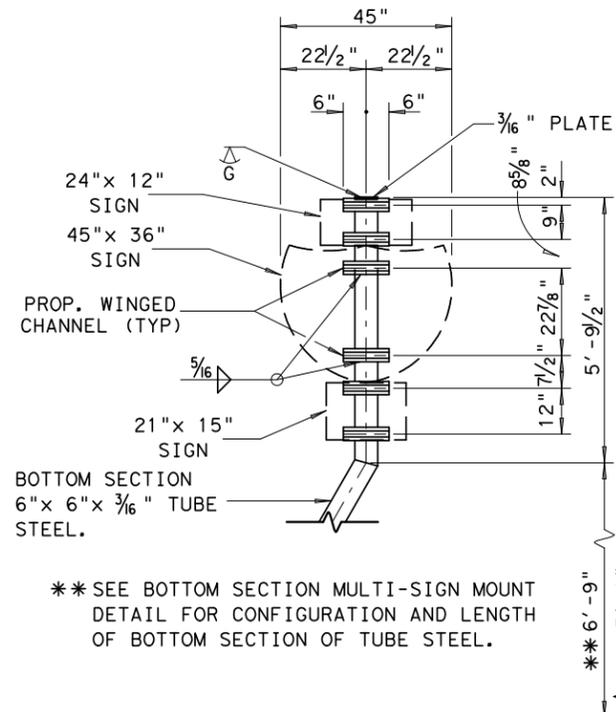
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
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			HIGHWAY NO.

GENERAL NOTES

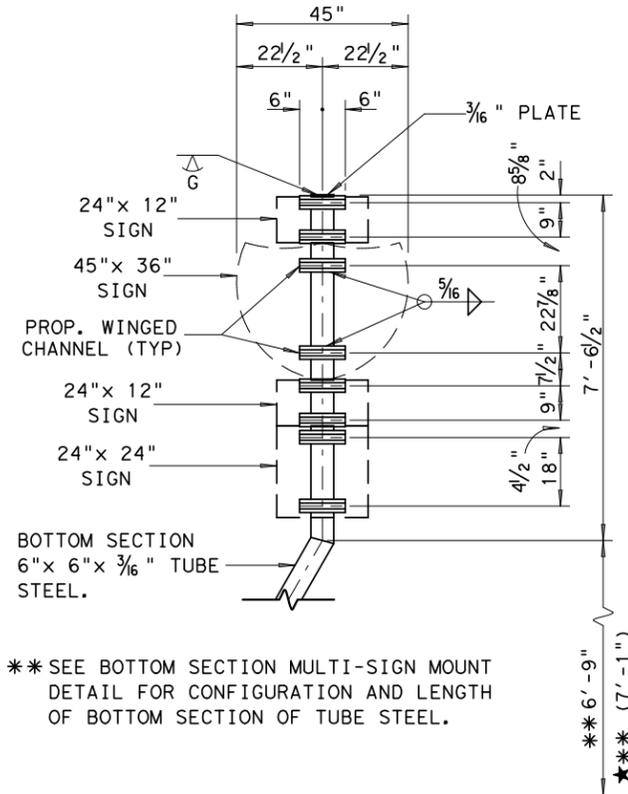
- FOR DETAILS ATTACHING SPECIAL SIGN MOUNT TO SINGLE SLOPE TRAFFIC RAIL (SSTR) AND DETAIL FOR PROPOSED WINGED CHANNEL SEE SHEET NO. _____
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- WHERE THE GALVANIZING HAS BEEN SCRAPED OFF FROM THE SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPEC. ASTM A-780.



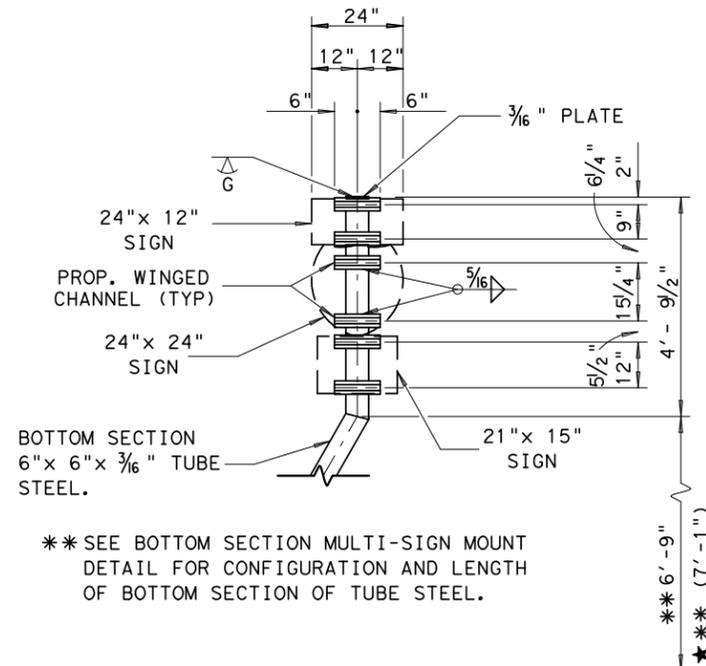
BOTTOM SECTION MULTI-SIGN MOUNT DETAIL
TS 6"x 6"x 3/16" STEEL TUBE



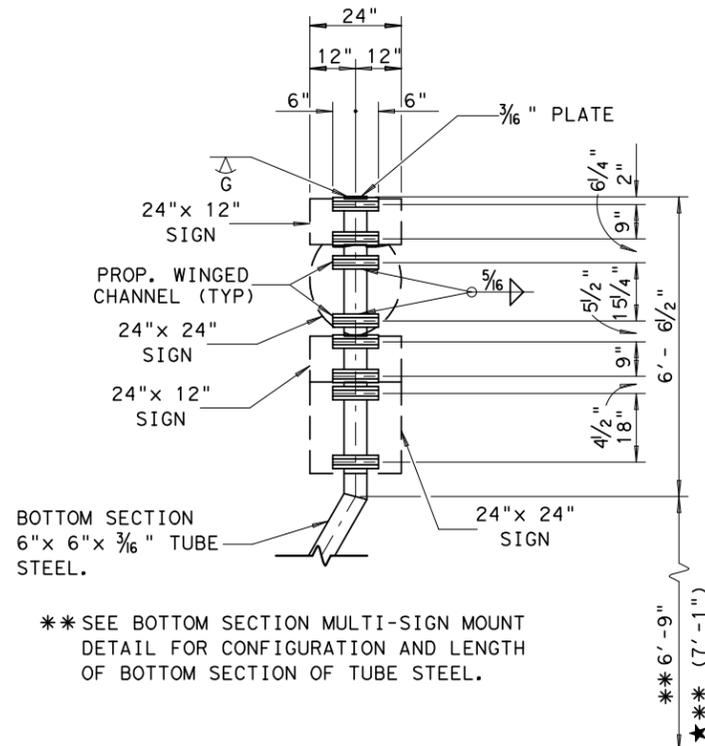
24"x 12" w/ 45"x 36" & 21"x 15" TOP SECTION MULTI-SIGN MOUNT DETAIL
TS 6"x 6"x 3/16" STEEL TUBE



24"x 12" & 45"x 36" w/ 24"x 12" & 24"x 24" TOP SECTION MULTI-SIGN MOUNT DETAIL
TS 6"x 6"x 3/16" STEEL TUBE



24"x 12" & 24"x 24" w/ 21"x 15" TOP SECTION MULTI-SIGN MOUNT DETAIL
TS 6"x 6"x 3/16" STEEL TUBE



24"x 12" & 24"x 24" w/ 24"x 12" & 24"x 24" TOP SECTION MULTI-SIGN MOUNT DETAIL
TS 6"x 6"x 3/16" STEEL TUBE

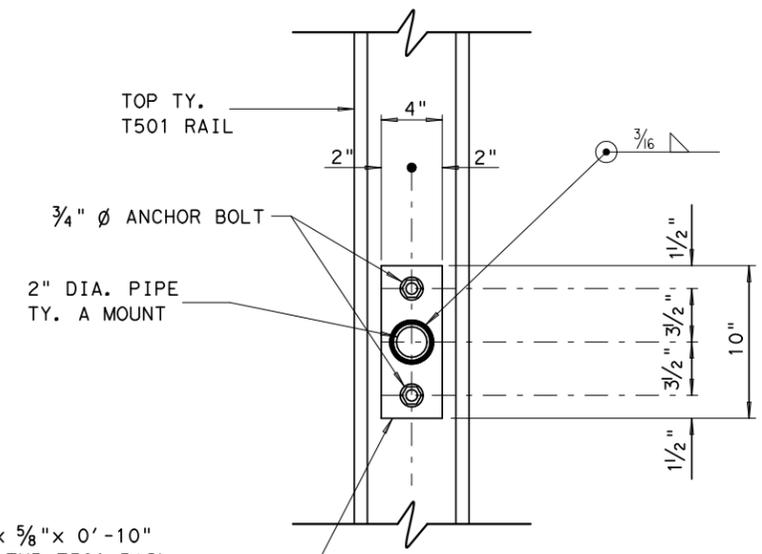
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ACC: 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
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49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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SPECIAL SIGN MOUNT DETAILS (6)

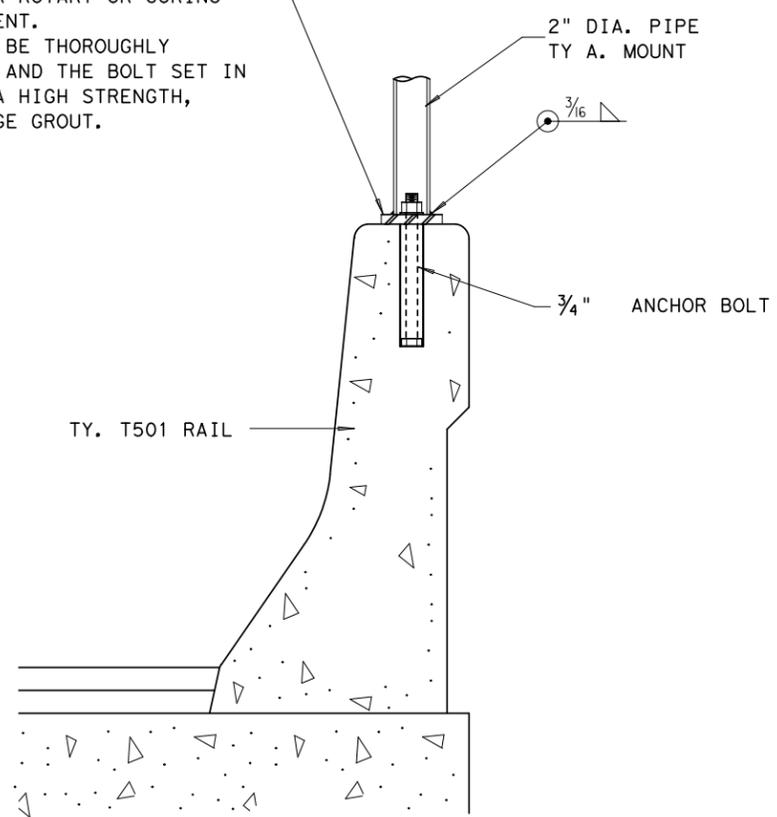
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	6		
	STATE	DIST.	COUNTY
	TEXAS	SAT	
	CONT.	SECT.	JOB
			HIGHWAY NO.



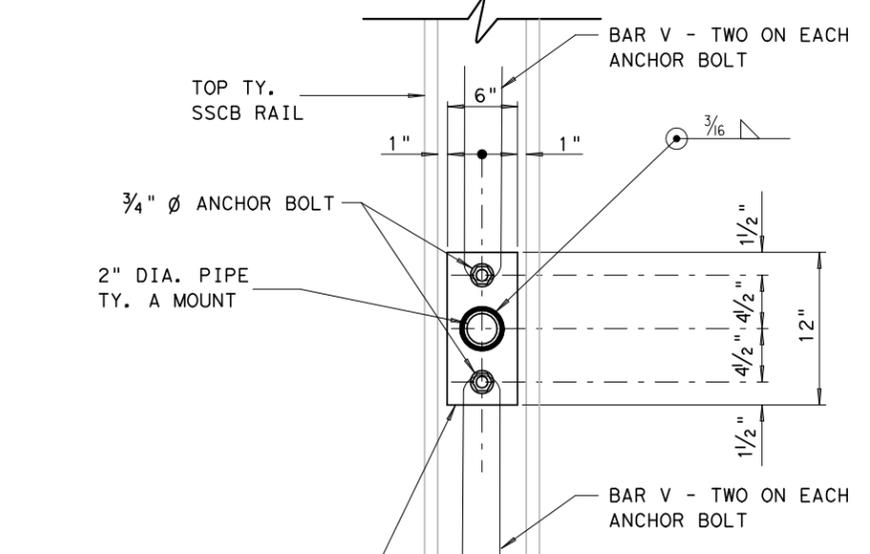
BASE R - 4" x 5/8" x 0'-10"
 ATTACHED TO TYP. T501 RAIL
 w/ 2- 3/4" Ø x 10" LONG ANCHOR
 BOLTS SET IN A 1 1/2" Ø x 8" DEEP
 HOLE DRILLED INTO TOP OF RAIL
 USING EITHER ROTARY OR CORING
 TYPE EQUIPMENT.
 HOLES SHALL BE THOROUGHLY
 CLEANED OUT AND THE BOLT SET IN
 PLACE WITH A HIGH STRENGTH,
 LOW SHRINKAGE GROUT.

TOP VIEW



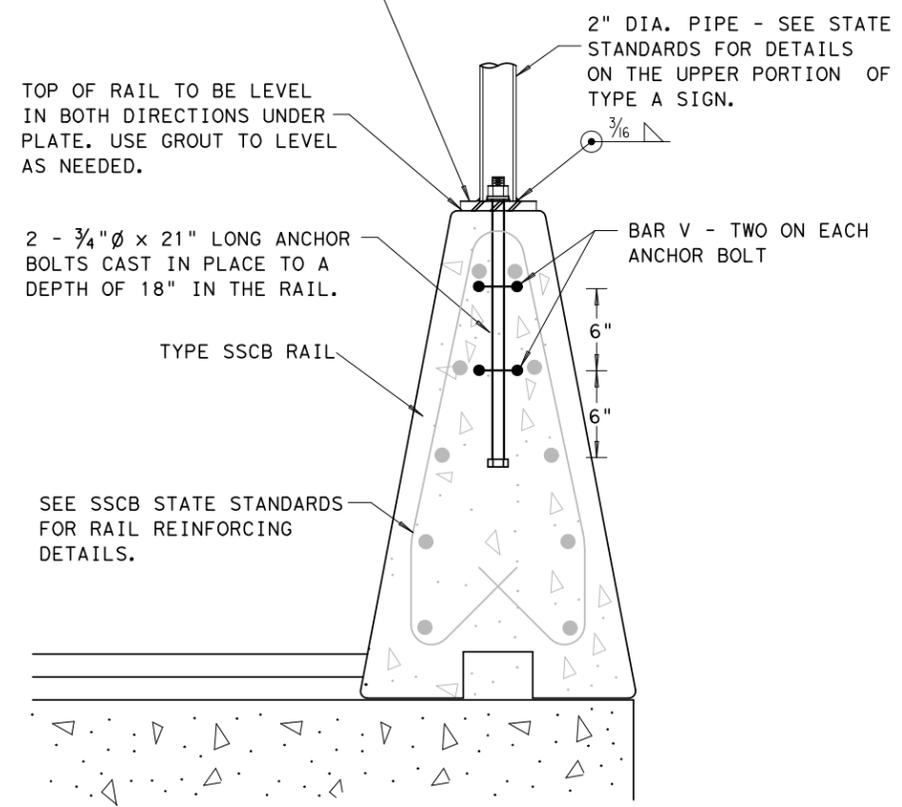
ELEVATION

DETAIL
 SIGN MOUNT TO T501 RAIL



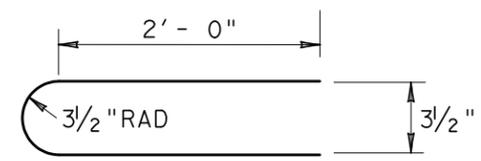
BASE R - 6" x 12" x 3/4"
 ATTACHED TO TYP. SSCB RAIL
 WITH ANCHOR BOLTS.

TOP VIEW

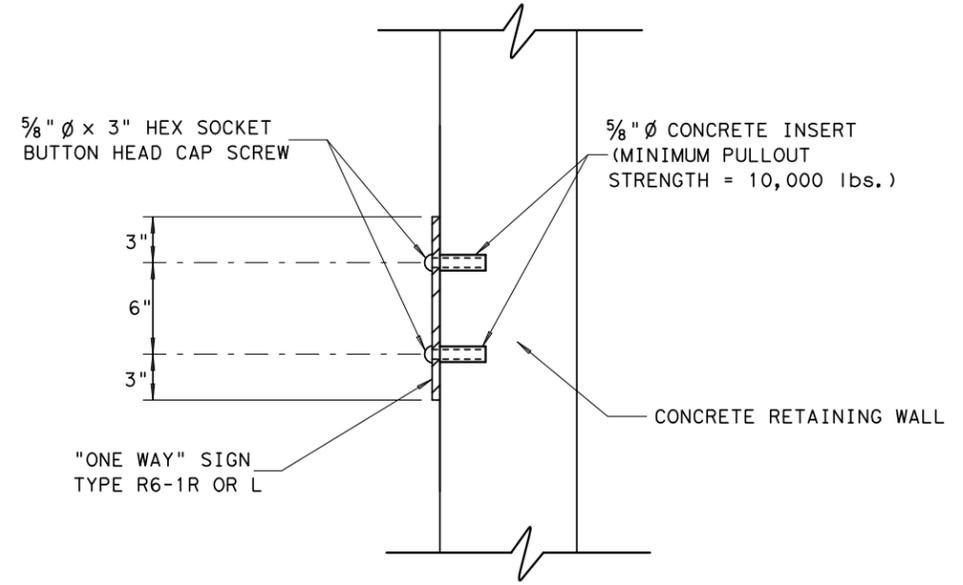


ELEVATION

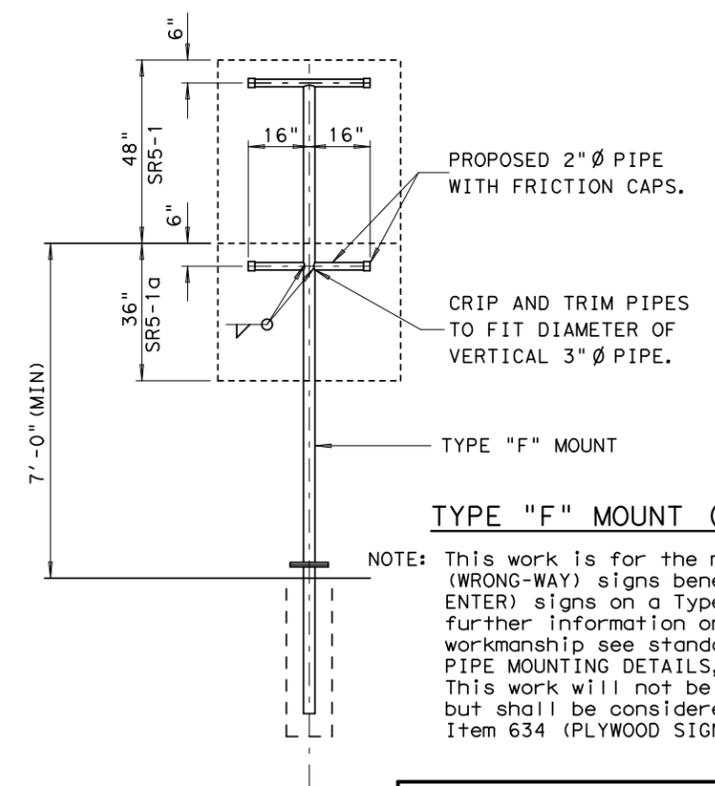
DETAIL
 SIGN MOUNT TO SSCB RAIL



BARS V (#4)



DETAIL
 SIGN MOUNT TO RETAINING WALL



TYPE "F" MOUNT (MOD) DETAIL

NOTE: This work is for the mounting of SR5-1a (WRONG-WAY) signs beneath SR5-1 (DO-NOT-ENTER) signs on a Type "F" Mount. For further information on materials and workmanship see standard sheet SMD (1-3) PIPE MOUNTING DETAILS, sheet no. _____. This work will not be paid for separately but shall be considered subsidiary to the Item 634 (PLYWOOD SIGNS TYPE A).

LEVELS DISPLAYED

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

ACC:

San Antonio District Standard

SPL SIGN MOUNT
 DETAILS (7)

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12-2010	6		
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	CONT.	SECT.	JOB
			HIGHWAY NO.