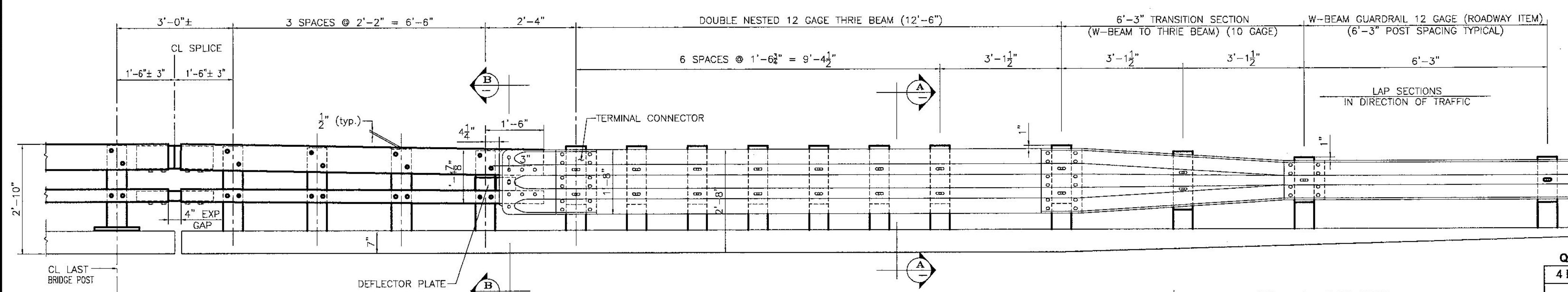
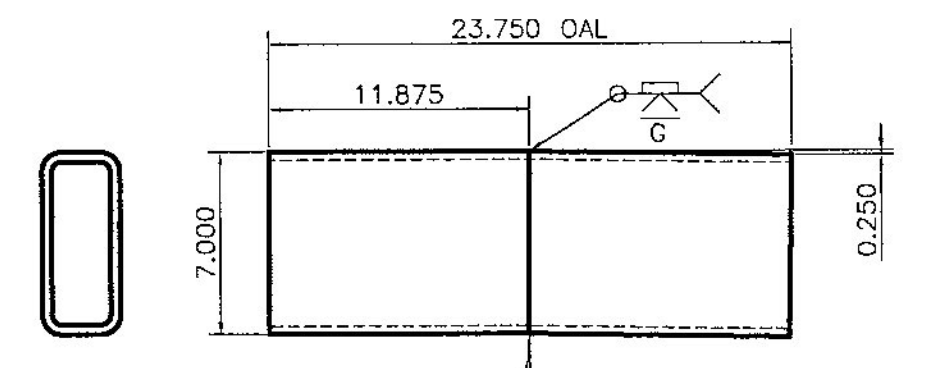
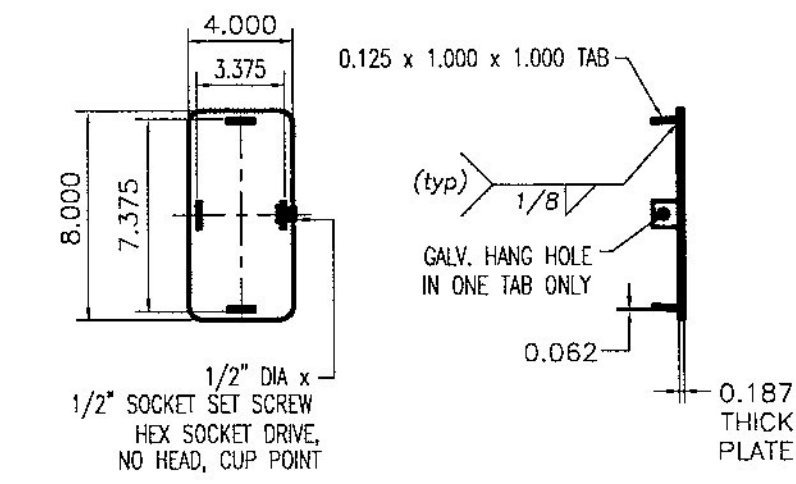


- NOTES:
- PAYMENT FOR GUARDRAIL APPROACH SECTION - GALVANIZED 2 RAIL, SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, THE DEFLECTOR PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
 - ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
 - TUBE AND STEEL POST MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL UNLESS OTHERWISE NOTED.
 - APPROACH RAIL BOLTS SHALL BE ASTM A307 GRADE A AND NUTS SHALL BE AASHTO M291 (ASTM S63 GRADE A OR BETTER (GALVANIZED)). WASHERS SHALL BE ASTM F844.
 - WELD TOP SPLICE BAR TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).

APPROACH RAILING SHOWN STRAIGHT - SEE SHEETS 1 & 2 FOR CURVE REQUIREMENTS

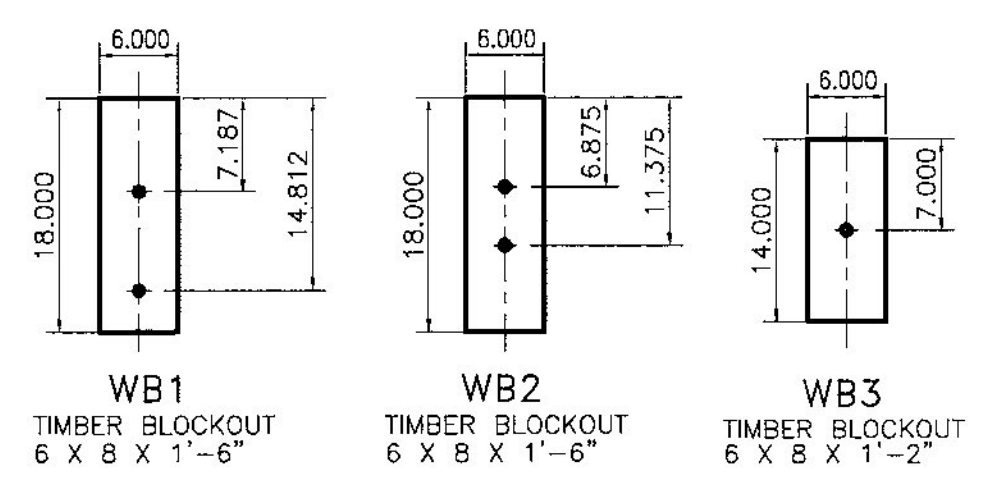
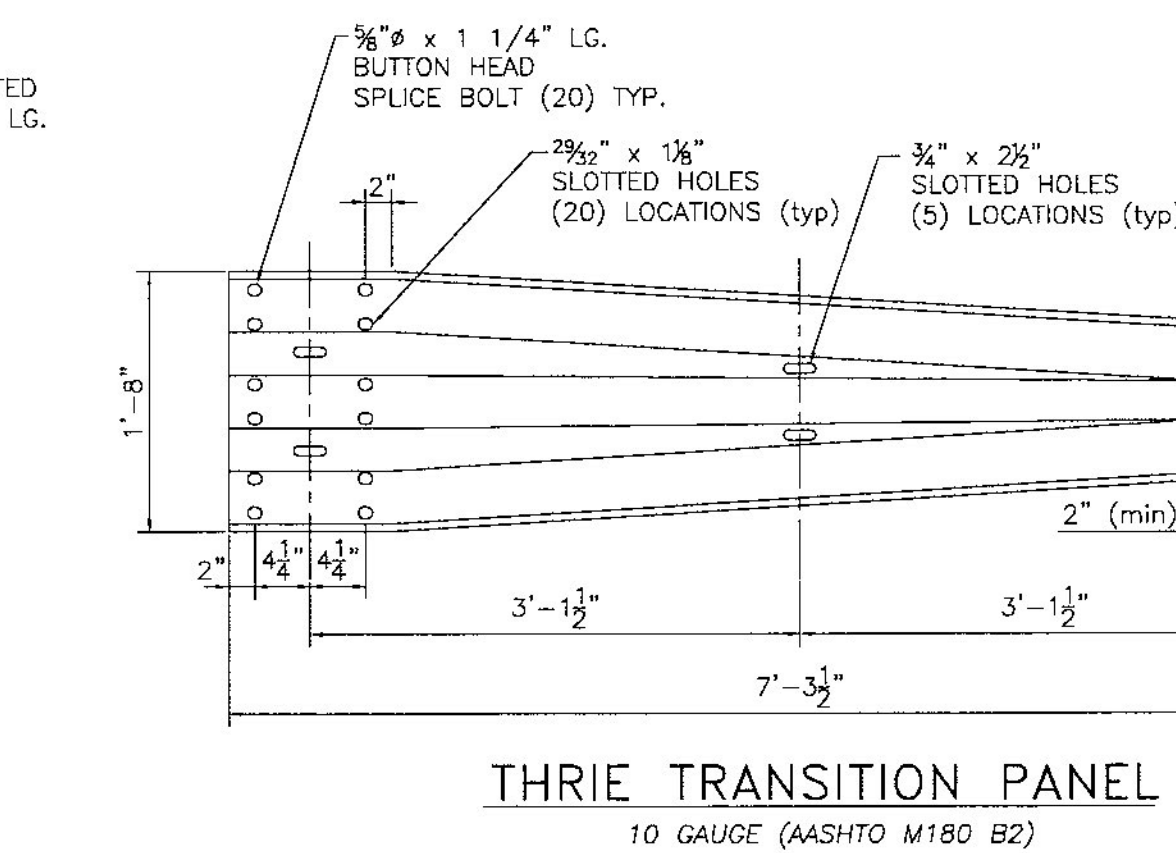
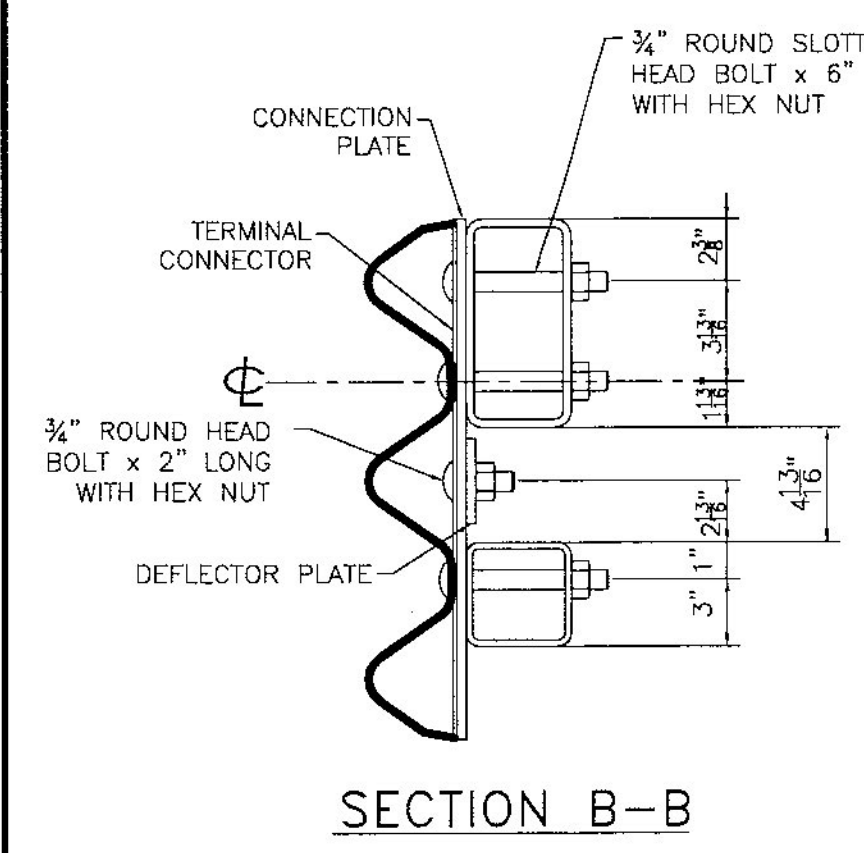
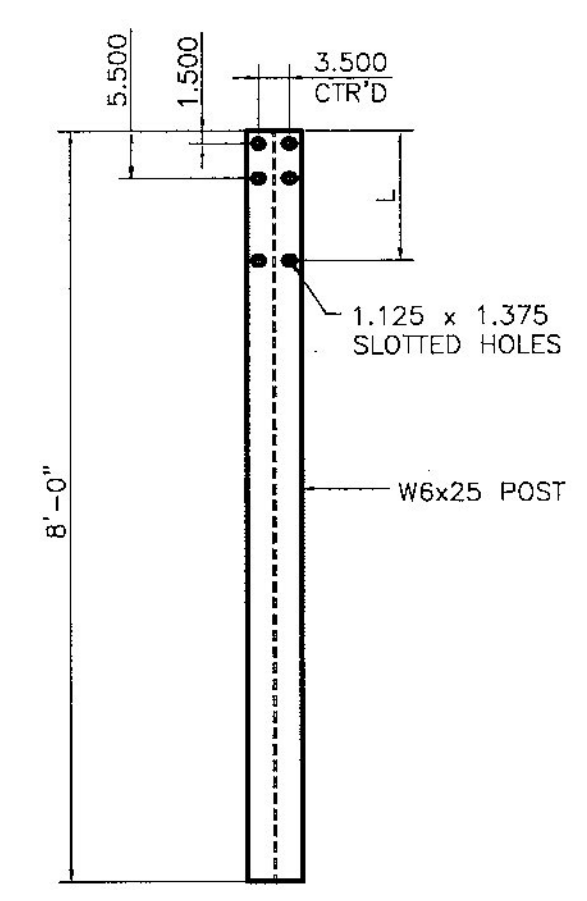
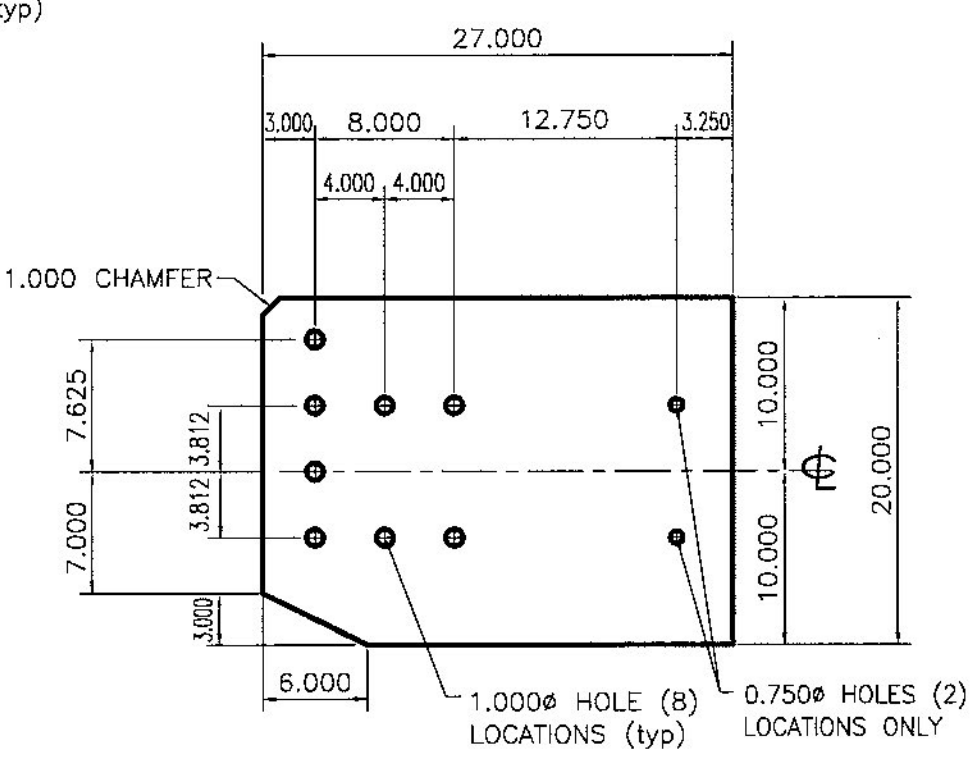
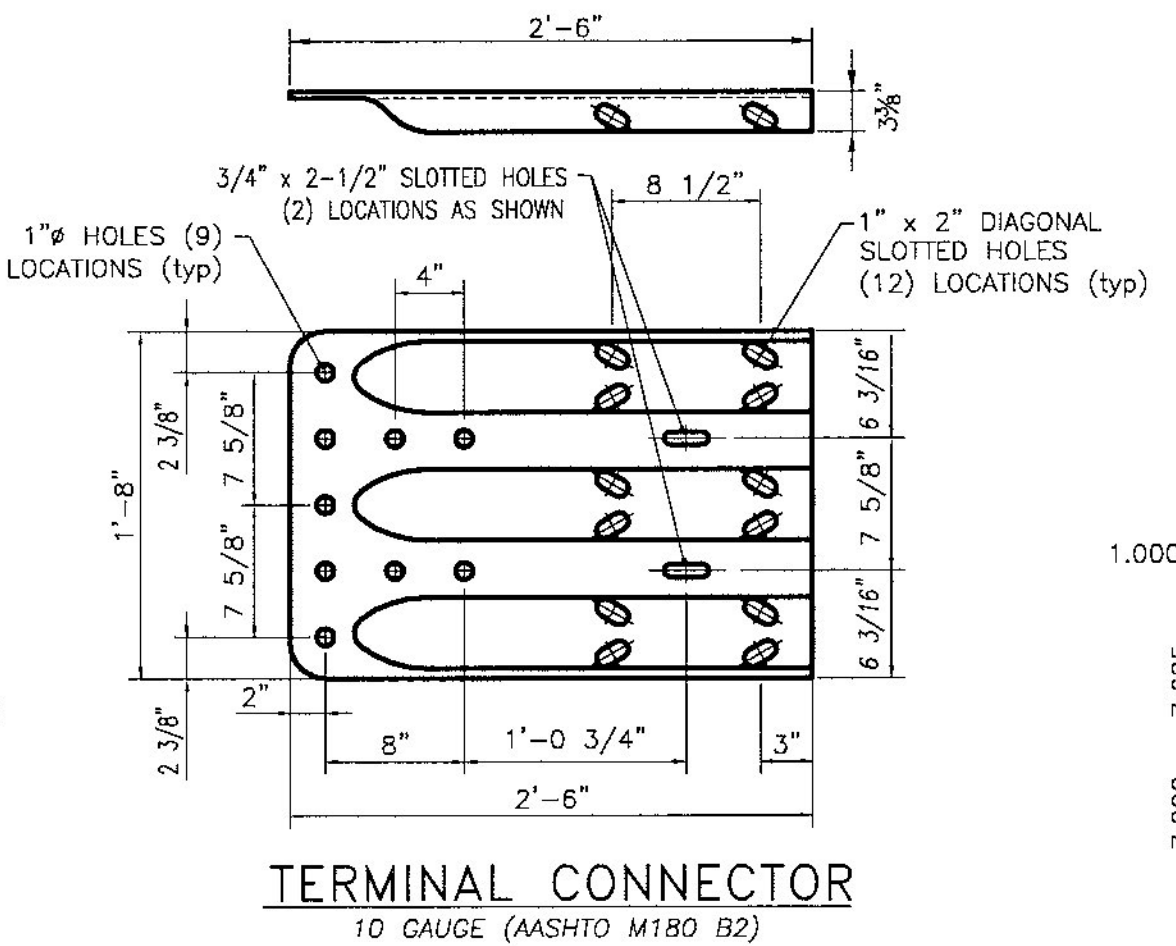
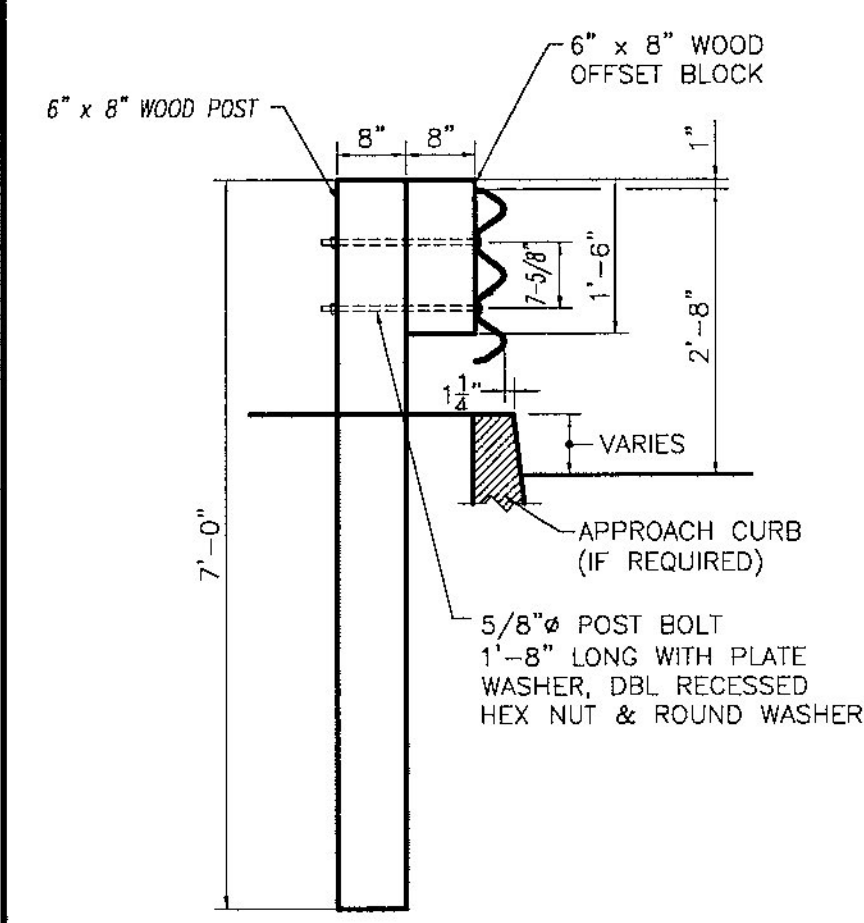
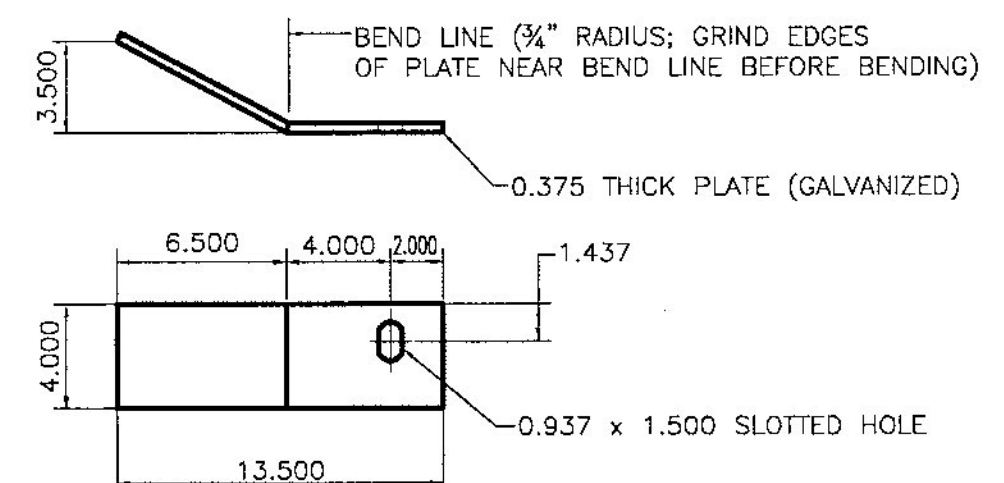


END CAP (4x4)
0.187 x 4.000 x 4.000 (A709 gr 36)



BILL OF MATERIAL

Qty	mk	Description	Spec.
4 EA		ITEM 621.72 GUARDRAIL APPROACH SECTION, GALVANIZED, 2 RAIL BOX BEAM	
4	01	W6x25 APPROACH POST - #1 x 8'-0" OAL (GALV)	A709 gr 50
4	02	W6x25 APPROACH POST - #2 x 8'-0" OAL (GALV)	A709 gr 50
4	03	W6x25 APPROACH POST - #3 x 8'-0" OAL (GALV)	A709 gr 50
4	04	W6x25 APPROACH POST - #4 x 8'-0" OAL (GALV)	A709 gr 50
4		UPPER RAIL APPROACH TUBE HSS 8 x 4 x 5/16 x 9'-4.000" w/ 3.500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
4		LOWER RAIL APPROACH TUBE HSS 4 x 4 x 5/16 x 9'-4.000" w/ 3.500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
4		CONNECTION PLATE PL 0.375" x 20.000" x 27.000" (GALV)	A709 gr 36
2		DEFLECTOR PLATE (RIGHT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
2		DEFLECTOR PLATE (LEFT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
4		END CAP FOR 8x4 TUBE 0.187 THICK PLATE 8.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		END CAP FOR 4x4 TUBE 0.187 THICK PLATE 4.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		(ANGLED) SPLICE TUBE (EXPANSION) FOR 8x4 UPPER RAIL HSS 7 x 3 x 3/8 x 1'-11.750" OAL (GALV)	A500 gr B
4		SPLICE TUBE (EXPANSION) FOR 4x4 LOWER RAIL HSS 3 x 3 x 5/16 x 1'-11.750" OAL (GALV)	A500 gr B
32		WOOD POST (WP1) 6 x 8 x 7'-0"	TIMBER
32		WOOD BLOCKOUT (WB1) 6 x 8 x 1'-6"	TIMBER
4		WOOD POST (WP2) 6 x 8 x 7'-0"	TIMBER
4		WOOD BLOCKOUT (WB2) 6 x 8 x 1'-6"	TIMBER
4		WOOD POST (WP3) 6 x 8 x 7'-0"	TIMBER
4		WOOD BLOCKOUT (WB3) 6 x 8 x 1'-2"	TIMBER
4		THRIE FLAT LIP BRIDGE SHOE (MODIFIED) 10 GA. GALV	aashto M180 B2
4		THRIE TRANSITION PANEL 6'-3" / 3'-1 1/2" 10 GA. GALV.	aashto M180 B2
6		THRIE PANEL 12'-6" / 1'-6 3/4" 12 GA. GALV.	aashto M180 A2
2		THRIE PANEL 12'-6" / 1'-6 3/4" 12 GA. GALV. (SHOP CURVE 24.83' CONVEX RADIUS)	aashto M180 A2
92		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. (GLV) w/ LOCK NUT & FLAT WASHER	A449
4		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 2" LG. (GLV) w/ HEX NUT	A449
8		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-8" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
68		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-6" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
32		HEX HEAD BOLT 5/8 x 1-3/4" (GALV) w/ FLAT WASHER	A325
128		PANEL SPLICE BOLT 5/8 x 1-1/4" (GALV) w/ DOUBLE RECESSED NUT	A307
76		RECTANGULAR PLATE WASHER 0.187 x 1.750 x 3.000 (GALV)	A709 gr 36
32		SPACER PIPE - GALVANIZED 3/4" SCH. 40 x 1/2" LONG (GLV)	A53 gr B



STEEL POST CHART

No.	L
#1	1'-3.250"
#2	1'-3.000"
#3	1'-2.687"
#4	1'-2.375"

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 621.72 GUARDRAIL APPROACH, GALV 2 RAIL BOX BEAM (S-360B)

TOWN OF NEW HAVEN, VERMONT
TH 2 (CLASS 2 - MAJOR COLLECTOR) BRIDGE #10
ADDISON COUNTY BR# 0183(1)

GENERAL CONTRACTOR
SUB CONTRACTOR
VT REC

DATE 02-15-16 SCALE NONE SIZE D

HSC JOB NO. 2091
SHEET NO. 4 of 4

CERTIFIED FABRICATOR