

DESCRIPTION	REVISIONS	DATE
RE-ISSUE		

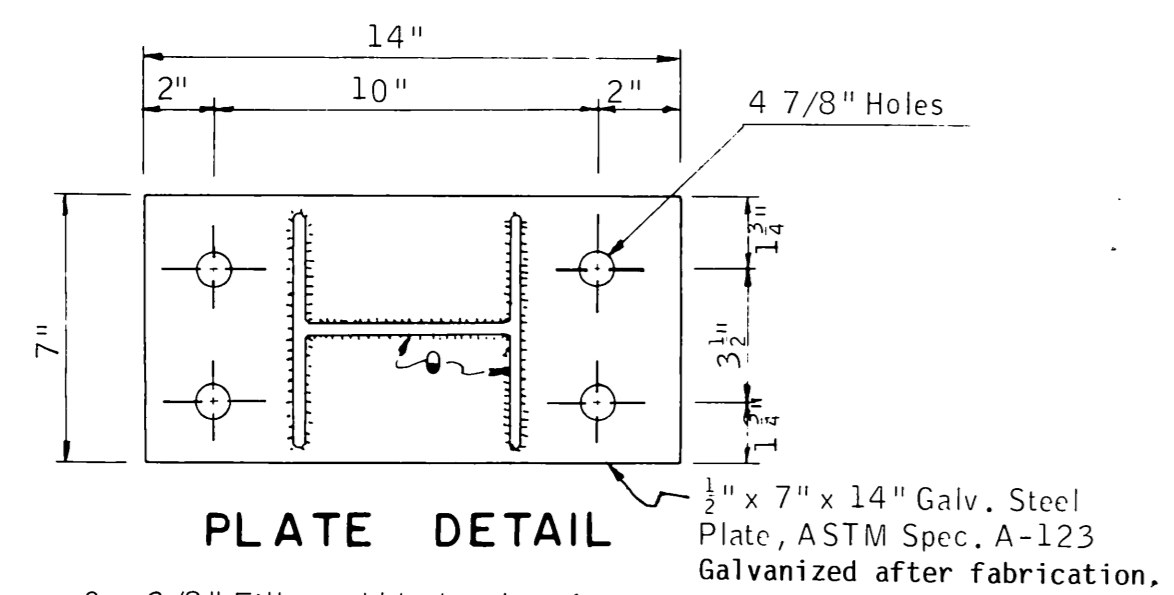
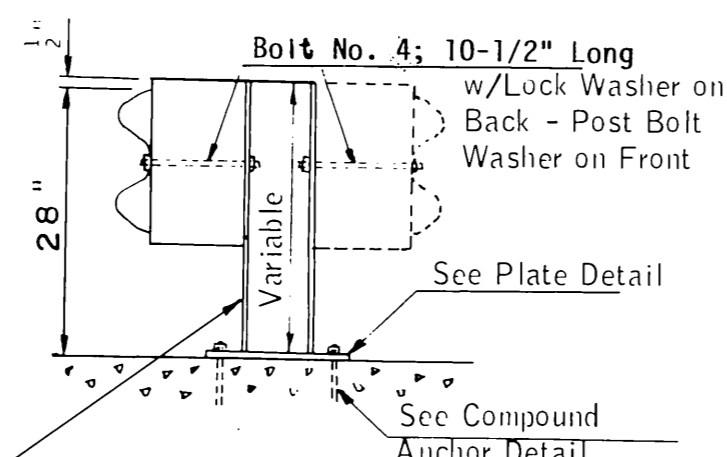
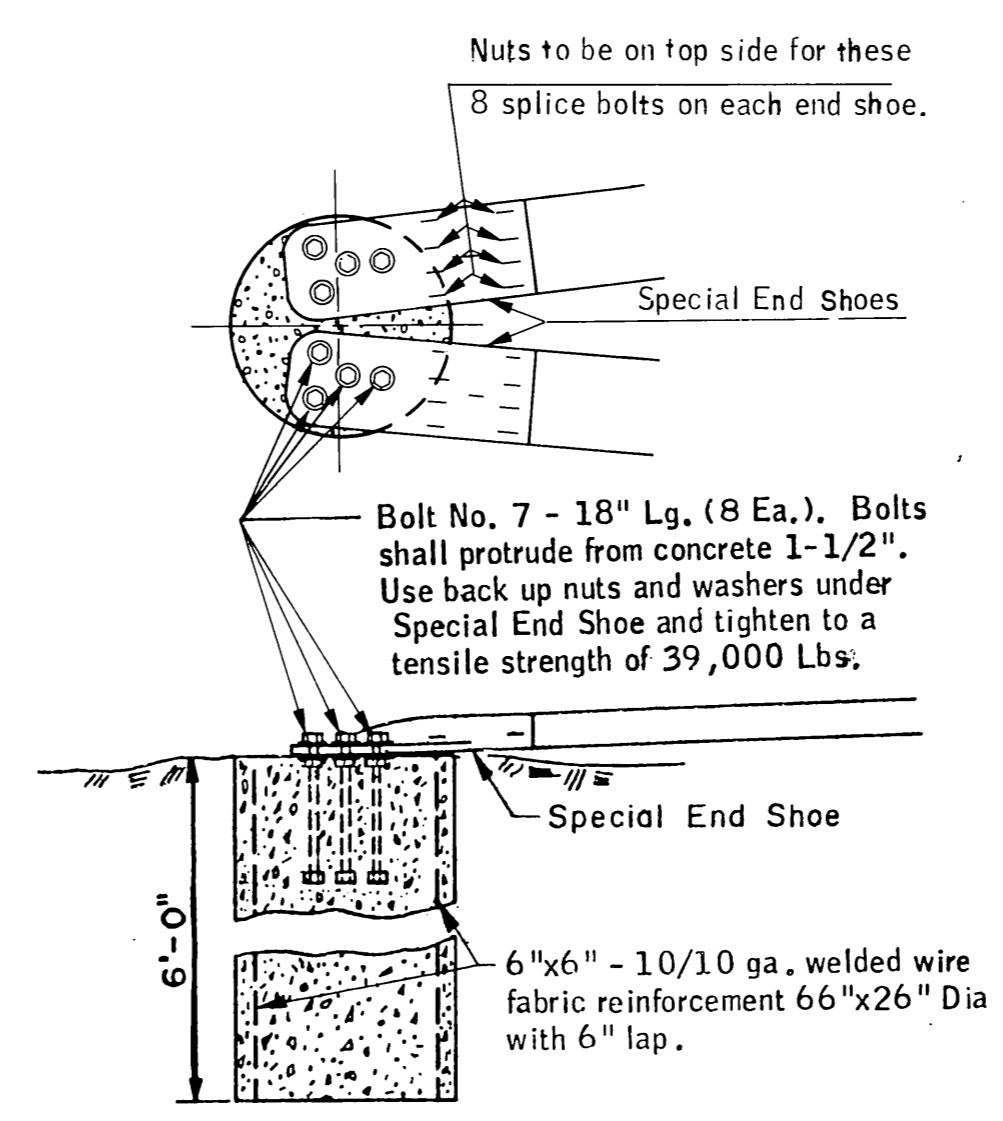


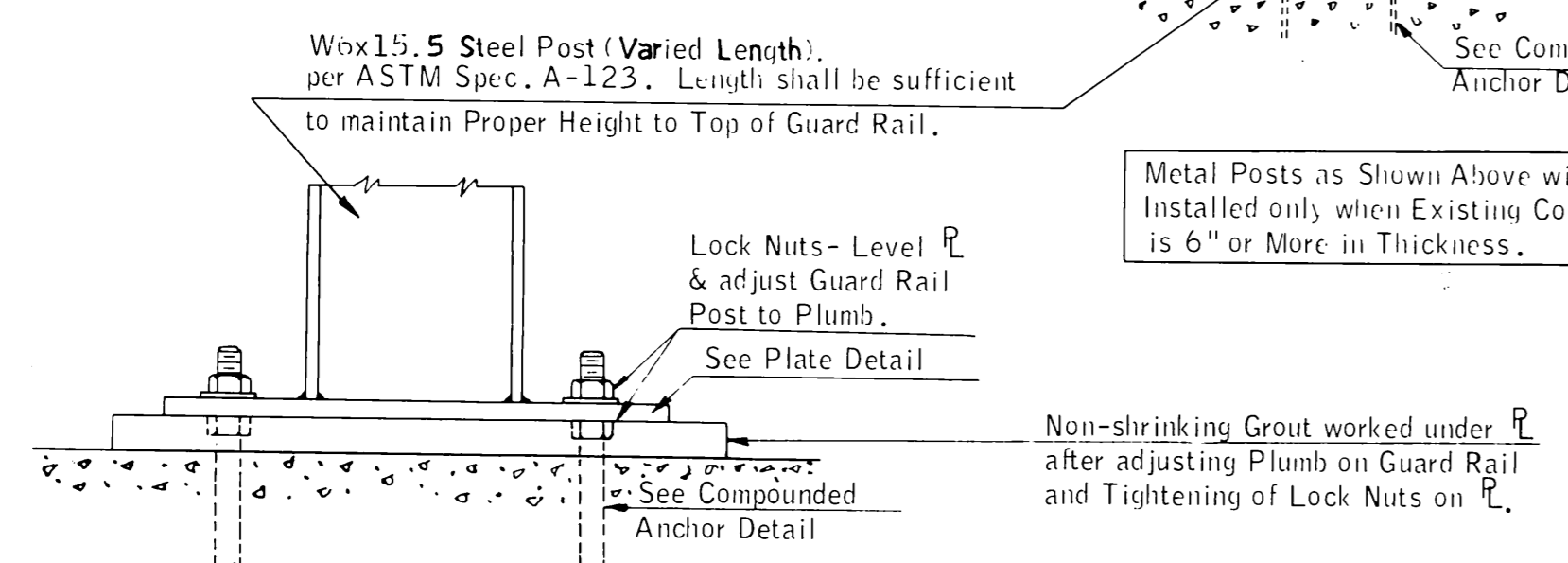
PLATE DETAIL
 1/2" x 7" x 14" Galv. Steel Plate, ASTM Spec. A-123 Galvanized after fabrication.
 3/8" Fillet weld both sides of Flanges - 1/8" Fillet weld both sides of Web.



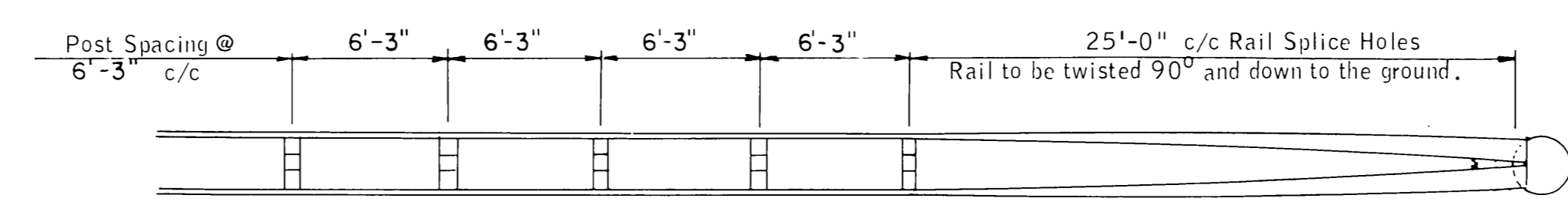
3 UNIT PLAIN SET ANCHOR DETAIL
 A 3/4"x9" Anchor Bolt set in Melted Sulfur or Epoxy Pourable Grout may be used in lieu of Compound Anchor.
 2 Nuts & 1 Std. Washer, Each Bolt- Leveling Devices
 Fill Hole with Non-shrinking Grout prior to setting Leveling DE.
 3/4"x9" Anchor Rod
 3-Unit Plain Set Compound Anchor
 1 3/8" Hole-Drilled a Min. 6" Deep



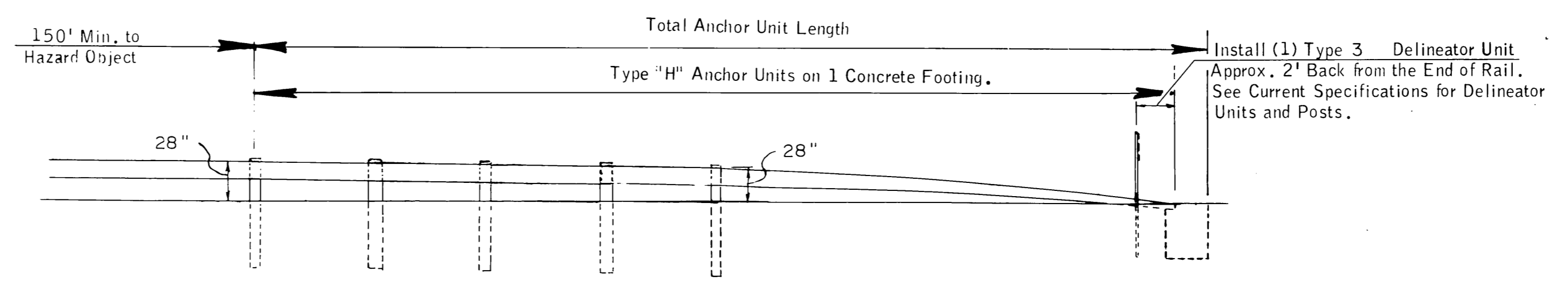
PLAN OF ANCHOR, TYPE "H" FOR DOUBLE FACED GUARD RAIL
 Bolt No. 7 - 18" Lg. (8 Ea.). Bolts shall protrude from concrete 1-1/2". Use back up nuts and washers under Special End Shoe and tighten to a tensile strength of 39,000 Lbs.
 Class A Conc. to be Placed into 30" Dia. Hole to a Depth of Approx. 6'-0". Slope Top of Conc. to Fit Slope. Class A Conc. = 1.09 C.Y.



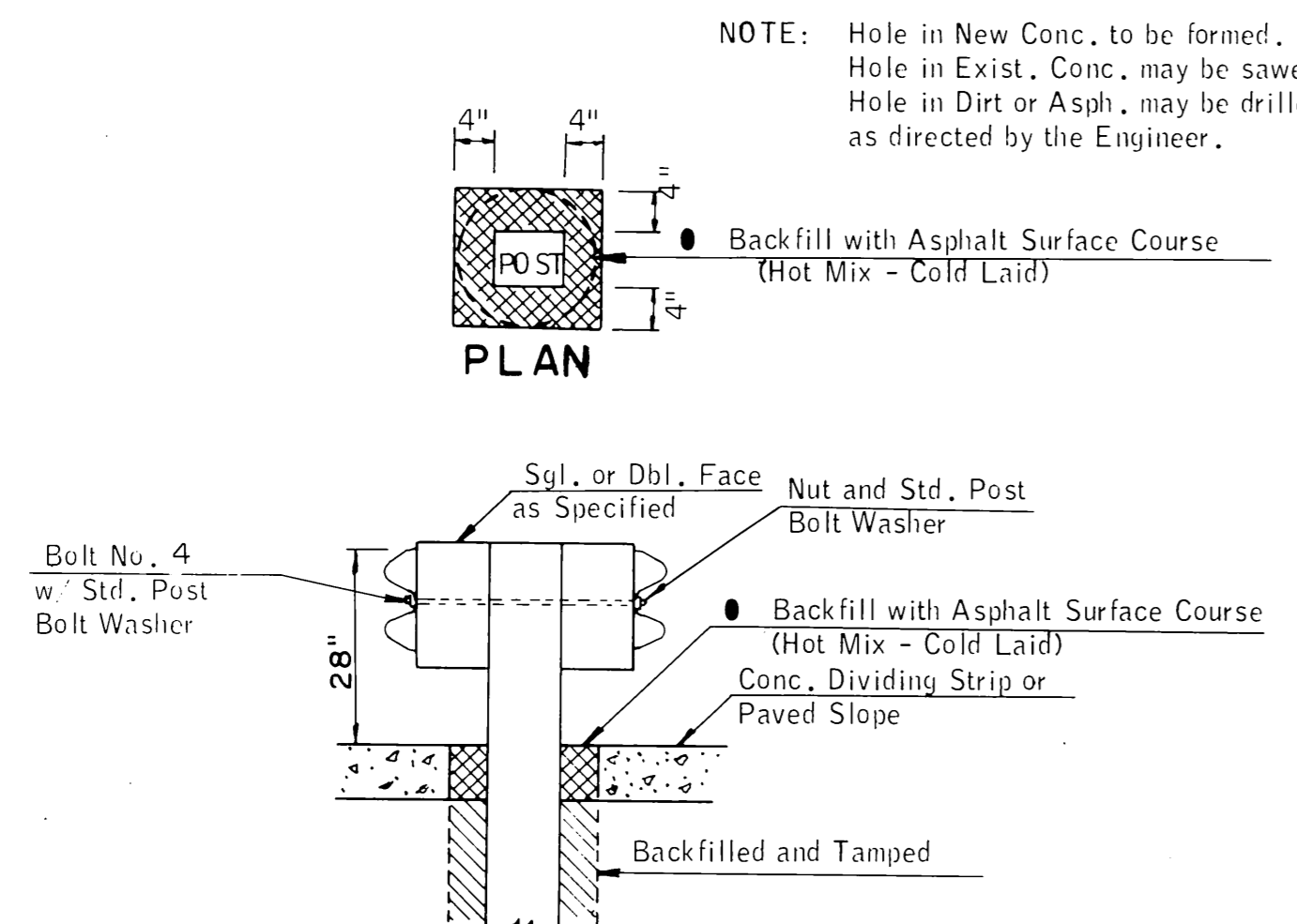
SPECIAL LEVEL DETAIL
 INSTALLATION ON EXISTING CONCRETE PAVEMENT OR CONCRETE MEDIAN
 1.5" Steel Post (Varied Length), per ASTM Spec. A-123. Length shall be sufficient to maintain Proper Height to Top of Guard Rail.
 Lock Nuts- Level & adjust Guard Rail Post to Plumb. See Plate Detail
 Metal Posts as Shown Above will be Installed only when Existing Conc. is 6" or More in Thickness.
 Non-shrinking Grout worked under after adjusting Plumb on Guard Rail and Tightening of Lock Nuts on



PLAN



ELEVATION
 END TREATMENT
 DOUBLE FACE GUARD RAIL
 DETAIL OF 90° TWIST AND ANCHOR
 TYPE "H" ANCHOR UNIT



DETAIL OF HOLE IN CONCRETE DIVIDING STRIP OR PAVED SLOPES
 NOTE: Hole in New Conc. to be formed. Hole in Exist. Conc. may be sawed. Hole in Dirt or Asph. may be drilled, as directed by the Engineer.
 Backfill with Asphalt Surface Course (Hot Mix - Cold Laid)
 Sgl. or Dbl. Face as Specified
 Nut and Std. Post Bolt Washer
 Bolt No. 4 w. Std. Post Bolt Washer
 Backfill with Asphalt Surface Course (Hot Mix - Cold Laid)
 Conc. Dividing Strip or Paved Slope
 Backfilled and Tamped
 See Current Specifications - Sec. 405 Asphalt Surface Course (Hot Mix - Cold Laid) Cost to be included in bid for Beam Type Guard Rail.
 See Std. GRH-1 For Alternate Posts when Posts are Placed on the ground.

GENERAL NOTES

ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
623.06(B)	BEAM GUARD RAIL-W-BEAM-DOUBLE	L. F.
623.06(F)	GUARD RAIL ANCHOR UNIT (TYPE ▲)	EA.

▲ TYPE OF ANCHOR UNIT SHALL BE SPECIFIED

APPROVED BY				
RURAL DES. ENGR.	URBAN DES. ENGR.	BRIDGE ENGINEER	CONST. ENGINEER	ASS'T. DIR. ZDES.
W. J. Hill	C. J. Taylor	W. J. Hill	J. C. Hill	R. B. Hankin
DATE 12-9-88	DATE 12-12-88	DATE 12-14-88	DATE 12-14-88	DATE 12-22-88
DESIGN				
DRAWN				
CHECKED	LGC	9/88		
SQUAD	ENG. SUPPT. BRANCH			
RURAL/URBAN DESIGN				
1988 SPECIFICATIONS				

OKLAHOMA DEPT. OF TRANSPORTATION
 STANDARD
 DOUBLE FACED GUARD RAIL
 OBSOLETE
 DFGR-1-3
 104C

2/2/89