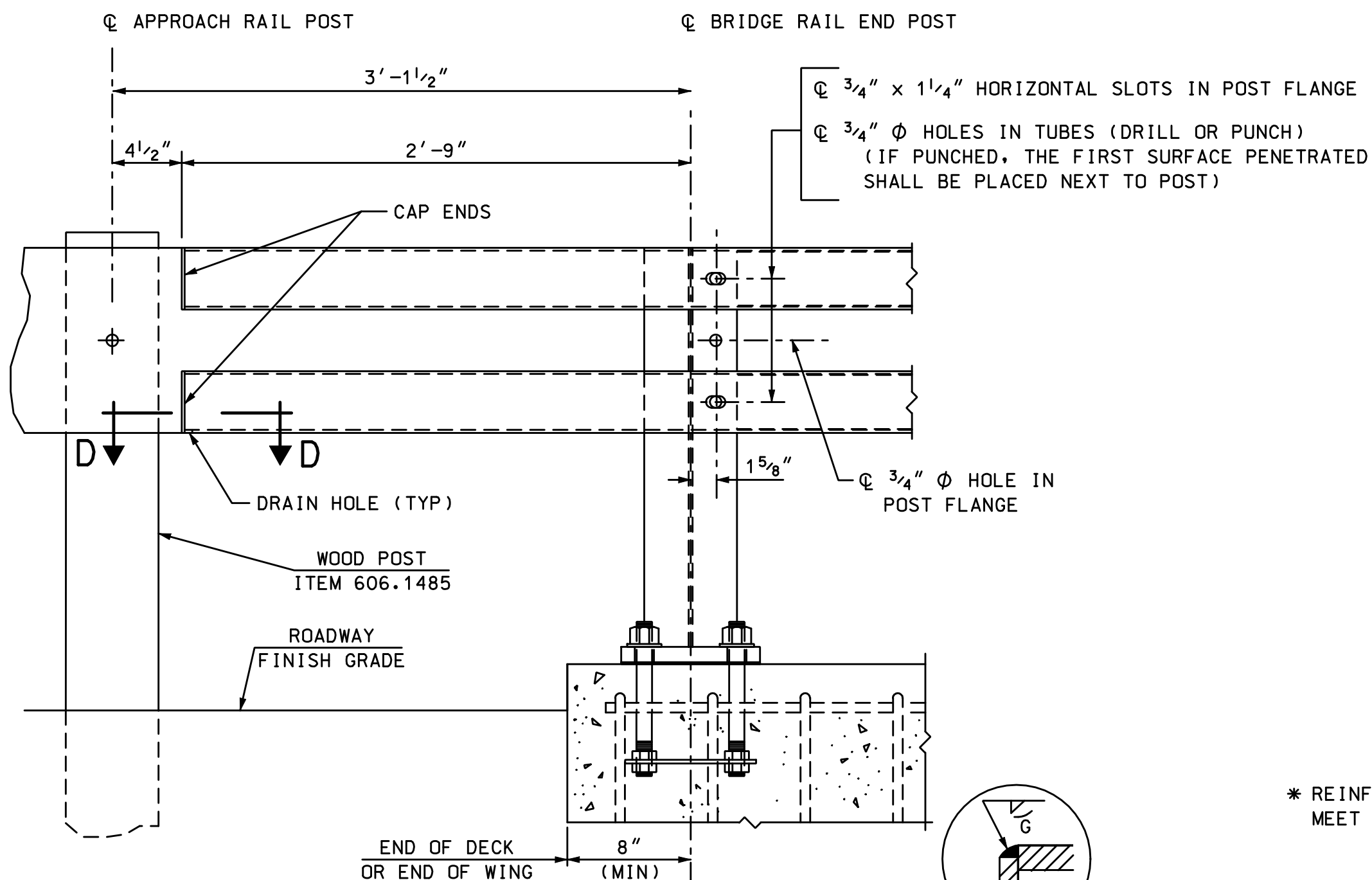


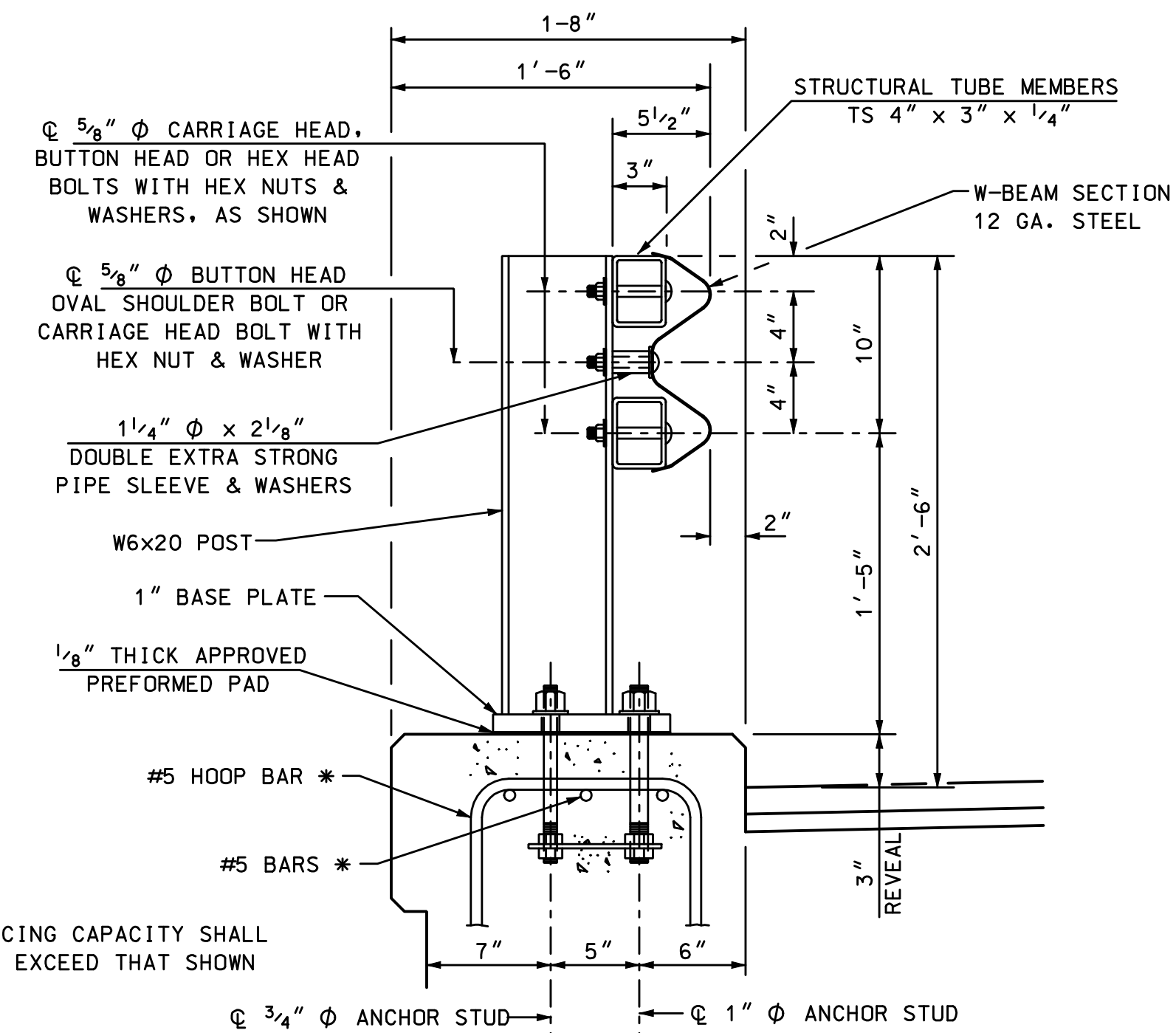
**APPROACH RAIL LAYOUT**

SCALE: 3/8" = 1'-0"



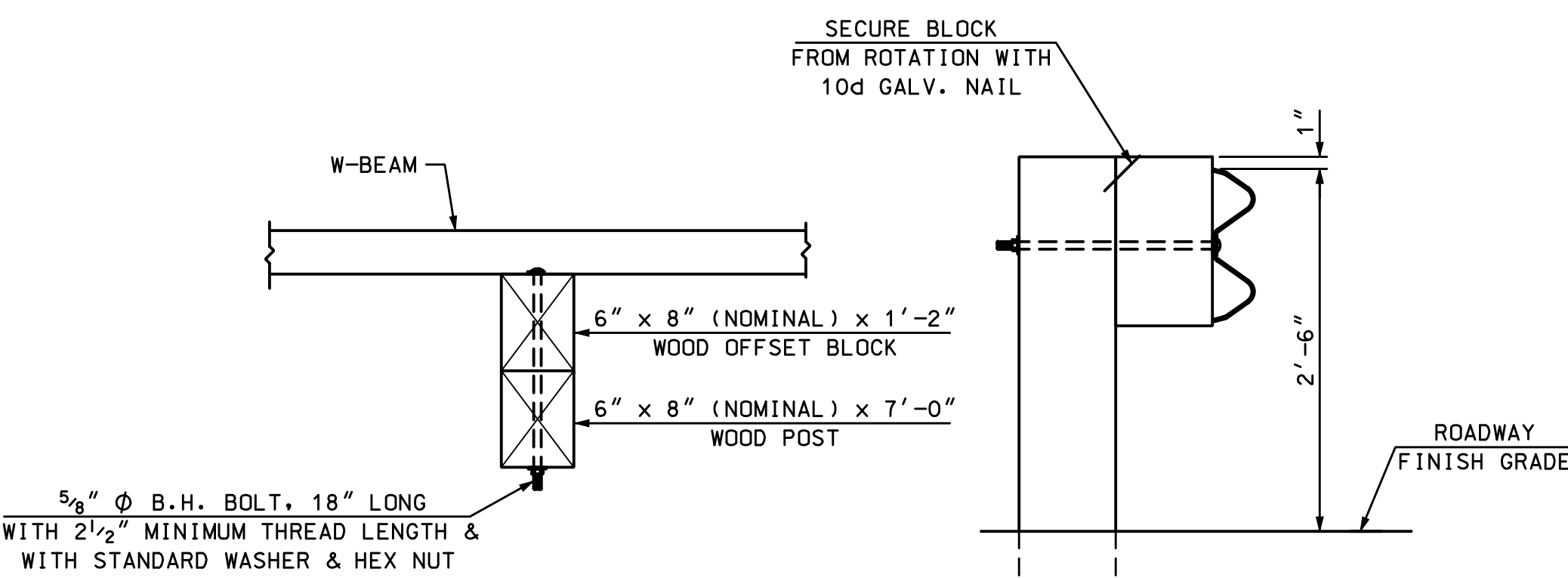
**END POST DETAIL**

SCALE: 1 1/2" = 1'-0"



**BRIDGE RAIL DETAIL**

SCALE: 1 1/2" = 1'-0"



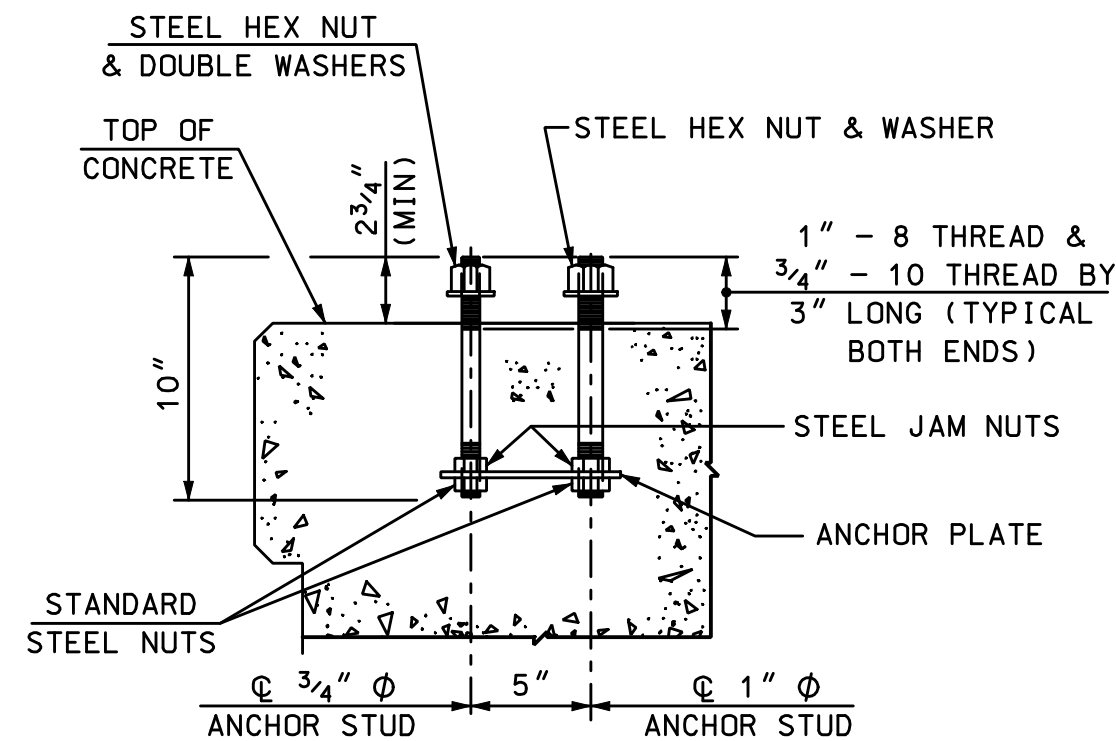
**DETAIL A**

SCALE: 1" = 1'-0"

**SECTION C-C**

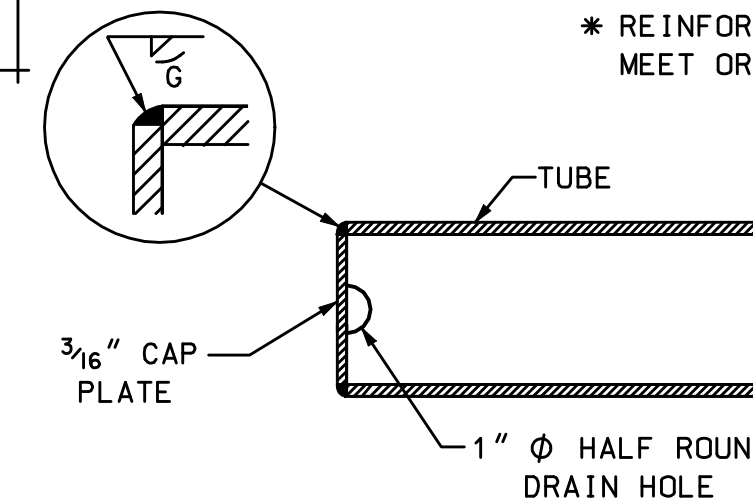
SCALE: 1" = 1'-0"

NOTE: THE DIFFERENCE BETWEEN THE OUTSIDE DIMENSIONS OF SPLICE BARS AND THE INSIDE DIMENSIONS OF THE RAIL SHALL BE APPROXIMATELY 1/8" (NOT TO EXCEED 3/16") ALONG EITHER AXIS TO PERMIT CLEARANCE FOR INSIDE WELD FLASH



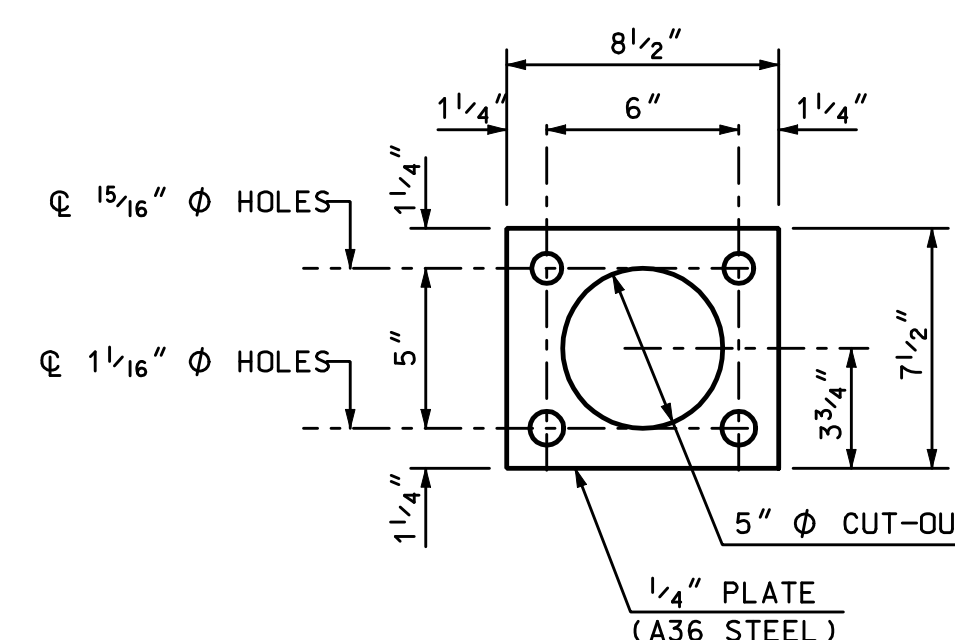
**POST ANCHOR ASSEMBLY**

SCALE: 1 1/2" = 1'-0"



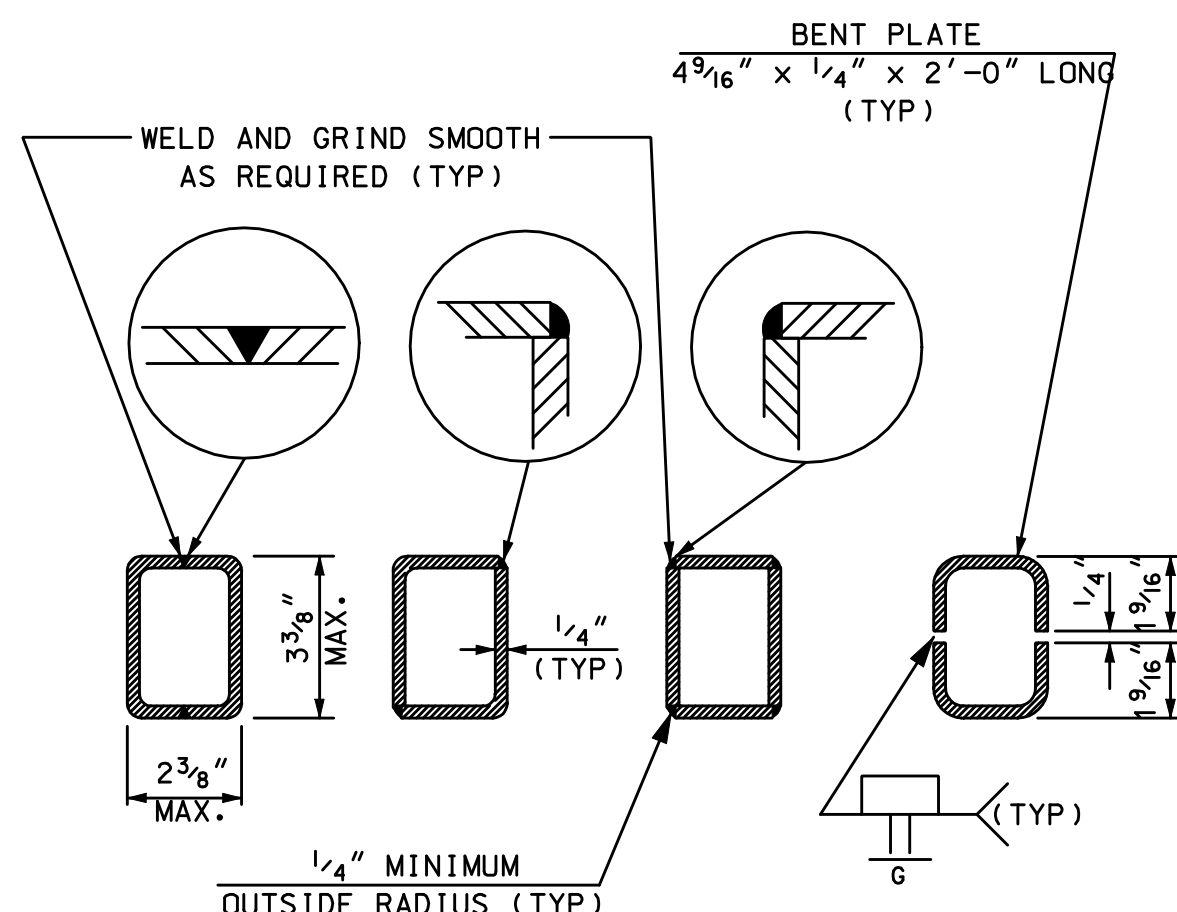
**RAIL CAP DETAIL (SECTION D-D)**

SCALE: 3" = 1'-0"



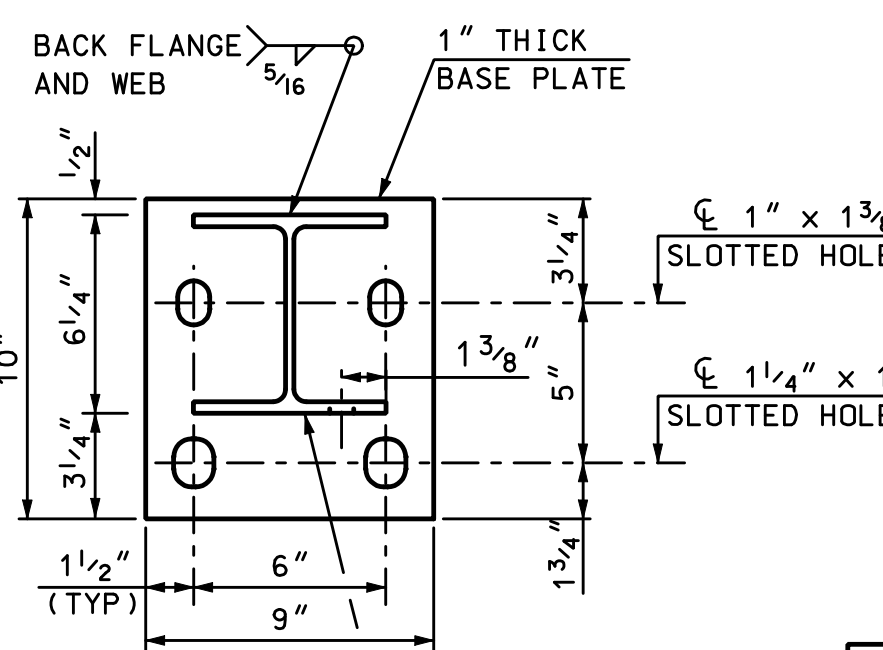
**ANCHOR PLATE DETAIL**

SCALE: 2" = 1'-0"



NOTE: OTHER SECTIONS OF EQUAL OR GREATER STRENGTH ARE ACCEPTABLE FOR SPLICE BARS

**SPLICE BAR FABRICATION OPTIONS**



**BASE PLATE DETAIL (SECTION B-B)**

SCALE: 2" = 1'-0"

**GENERAL NOTES**

- ITEM 563.3, BRIDGE RAIL T101 (F), SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR STUDS, PREFORMED PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STRUCTURAL TUBING, SPLICE BARS, PIPE SLEEVES AND W-BEAM SECTIONS.
  - ASTM A588 : POSTS AND BASE PLATES
  - ASTM A500 GRADE B (PAINTED) OR ASTM A588 (UNPAINTED) OR ASTM A847 (UNPAINTED) : STRUCTURAL TUBING
  - ASTM A36 : PIPE SLEEVES AND RAIL SPLICE BARS (PAINTED) AND ANCHOR PLATES (GALVANIZED)
  - ASTM A449 (GALV) : ANCHOR STUDS WITH STANDARD NUTS AND HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS
  - A325 TYPE 3 : RAIL BOLTS, NUTS AND WASHERS
  - AASHTO M180 TYPE IV : W-BEAM SECTIONS
- MEMBERS TO BE PAINTED SHALL FIRST BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH AASHTO M111 (ASTM A123) AND THEN OUTSIDE SURFACES SHALL BE SHOP PAINTED WITH ONE COAT OF 708 NH 3.21, HIGH BUILD EPOXY POLYAMIDE (4-6 MILS DFT) AND ONE COAT OF 708 NH 3.81, ALIPHATIC POLYURETHANE (1.5 TO 2.5 MILS DFT), DARK BROWN (REFER TO SPECIAL PROVISIONS FOR SECTION 550 FOR PAINT SPECIFICATIONS). EXPOSED ANCHOR BOLTS, NUTS, WASHERS & RAIL BOLTS SHALL BE PAINTED DARK BROWN IN THE FIELD WITH NH 3.81.
- HOLES IN BASE PLATES SHALL BE FILLED FLUSH WITH ELASTOMERIC SEALANT AFTER RAIL INSTALLATION (SUBSIDIARY TO ITEM 563.3).
- STRUCTURAL TUBING SHALL BE SUPPLIED AS ONE PIECE FOR BRIDGE RAIL 40 FEET OR LESS IN LENGTH. IN OTHER CASES, TUBING SHALL BE SPLICED WITH A SPLICE BAR (SEE SPLICE BAR DETAILS). NO TRANSVERSE BUTT WELDS ARE PERMITTED ON RAIL TUBING WITHIN A CONTINUOUS LENGTH.
- EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE POSTS.
- FOR BRIDGE RAIL POST SPACING, SEE BRIDGE RAIL LAYOUT. THE MAXIMUM BRIDGE RAIL POST SPACING SHALL BE 8'-4". A POST SPACING OF 8'-4" OR 6'-3" IS RECOMMENDED WHENEVER POSSIBLE FOR USE WITH 25' SECTIONS OF THE STANDARD W-BEAM RAIL.
- PREFORMED BEARING PADS SHALL CONFORM TO AASHTO M251.
- NUTS FOR THREADED ANCHOR STUDS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- THIS RAIL SYSTEM HAS BEEN SUCCESSFULLY EVALUATED BY FULL-SCALE CRASH TESTS TO MEET NCHRP REPORT 230 SL-2 CRITERIA (TEXAS TRAFFIC RAIL TYPE T101, REVISED 9/89).

(BROWN - 3" CURB REVEAL)

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN		BRIDGE NO.			STATE PROJECT				
LOCATION									
T101 BRIDGE & APPROACH RAIL (STEEL)								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL		BY		DATE		BY		DATE	
		DESIGNED		TEXAS/JSZ		3/90		CHECKED	
		DRAWN		PJP		12/05		CHECKED	
		QUANTITIES						CHECKED	
ISSUE DATE		3/6/91		FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS
REV. DATE		5/30/09							

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
English/T101	T101-3BROWN	AS NOTED