

STANDARD SHEET G-4-7
POSTS & FASTENERS - GALVANIZED STEEL BEAM GUARDRAIL

- DESIGN: J. T. B. CHKD: E. L. W.
- REVISIONS
- 4/1/71, NOMENCLATURE CHANGES FOR A.I.S.C. SPEC., D.M.E.
 - 10/10/74, ADDED 6"-C STRONG POST AS ALTERNATE FOR W6x9.5 STEEL POST, R.T.C.
 - 1/30/76 ADDED NOTES CONCERNING GALVANIZING AND USE OF 60 R.T.C.
 - 5/11/76 ADDED BURNING NOTE R.F.R.
 - 8/4/76 NOMENCLATURE CHANGES AND SHORT WOOD POST BOLT LENGTH REVISIONS R.F.R.
 - 10/2/78 WOOD AND STEEL POSTS REVISED - STEEL POST SIZES UPDATED R.F.R.
 - 5/15/84 ADDED REFLECTORIZED WASHER DETAIL B.E.B.

APPROVED: *[Signature]* 8/19/70
 DIRECTOR OF HIGHWAYS
[Signature] 8/19
 DEPUTY DIRECTOR - CHIEF ENGINEER

FASTENERS INCLUDE BOLTS, NUTS, AND WASHERS. SOME OF THE NUT AND BOLT DRAWINGS INCLUDE A WASHER DETAIL; OTHERS DO NOT. THE SIGNIFICANCE OF THIS IS THAT A PARTICULAR WASHER MAY BE USED WITH MORE THAN ONE BOLT OR THAT A PARTICULAR BOLT MAY BE USED WITH MORE THAN ONE WASHER AND, TO AVOID EXCLUSIONS AND EXPLANATORY NOTES ON THE DRAWINGS, THE PARTS HAVE BEEN SEGREGATED.

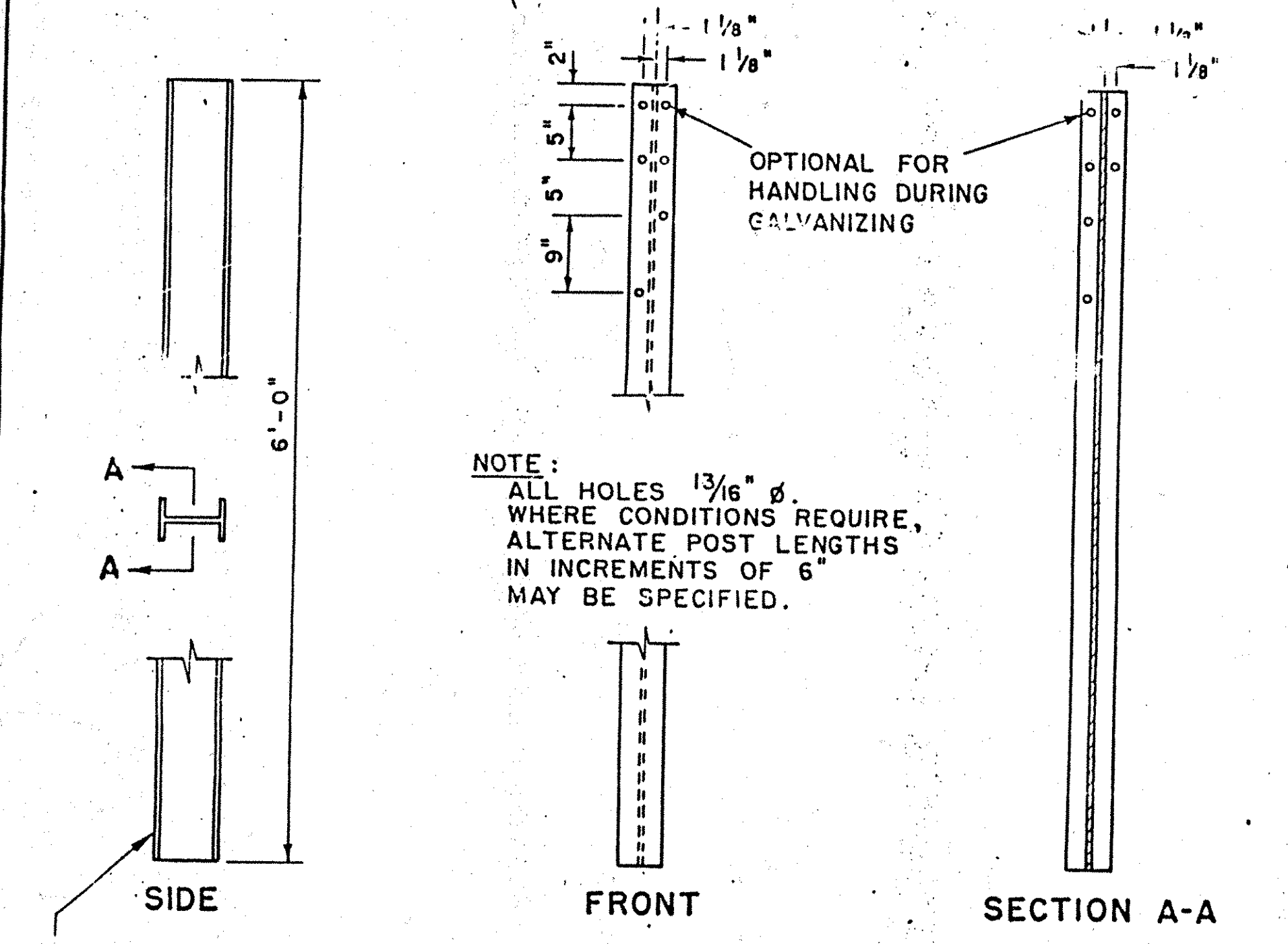
STEEL AND WOOD POSTS AND OFFSET BLOCKS ARE SHOWN FOR "W" BEAM GUARDRAIL AND "W" BEAM MEDIAN BARRIER SYSTEMS ONLY.

ALTERNATE 6"-C-STRONG POST MAY BE USED IN PLACE OF W6x9 STEEL POST IN ACCORDANCE WITH F.H.W.A. N 5040.2 APRIL 30, 1974. SEE DETAIL THIS SHEET 6"-C-STRONG POST.

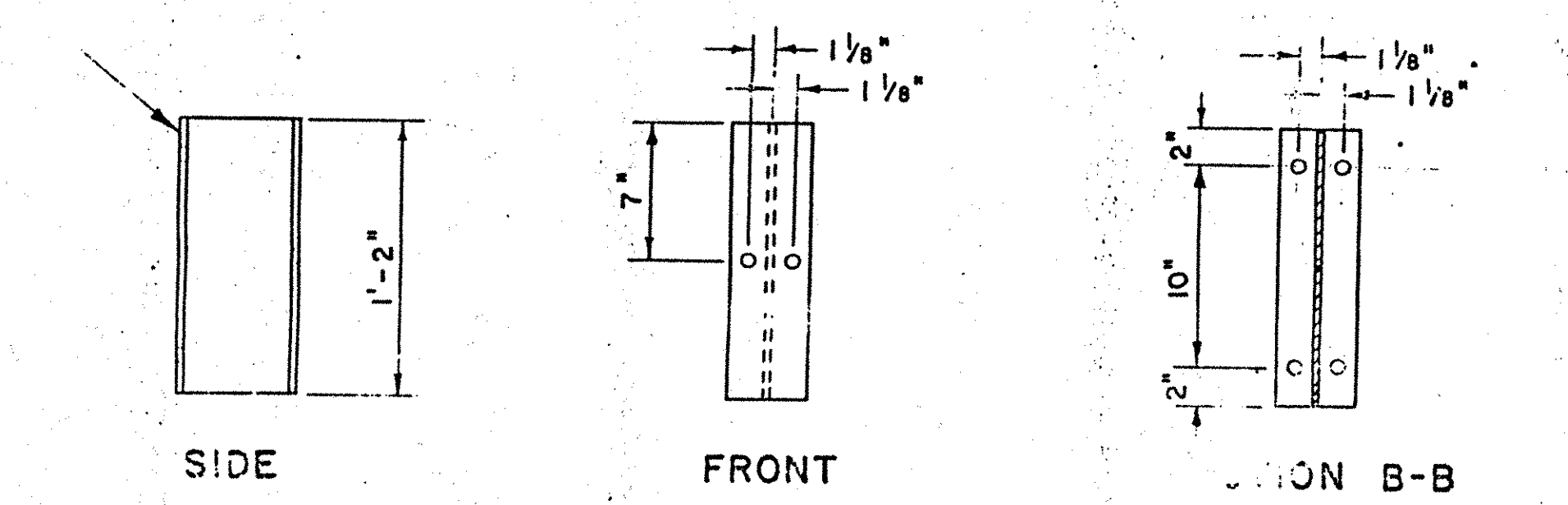
THE THREADS OF ALL BOLTS SHALL BE BURRED AFTER INSTALLATION OF THE GUARDRAIL HAS BEEN COMPLETED.

NO PUNCHING, DRILLING OR CUTTING OF GALVANIZED STEEL BEAM GUARDRAIL POST OR BLOCKS WILL BE PERMITTED AFTER GALVANIZING.

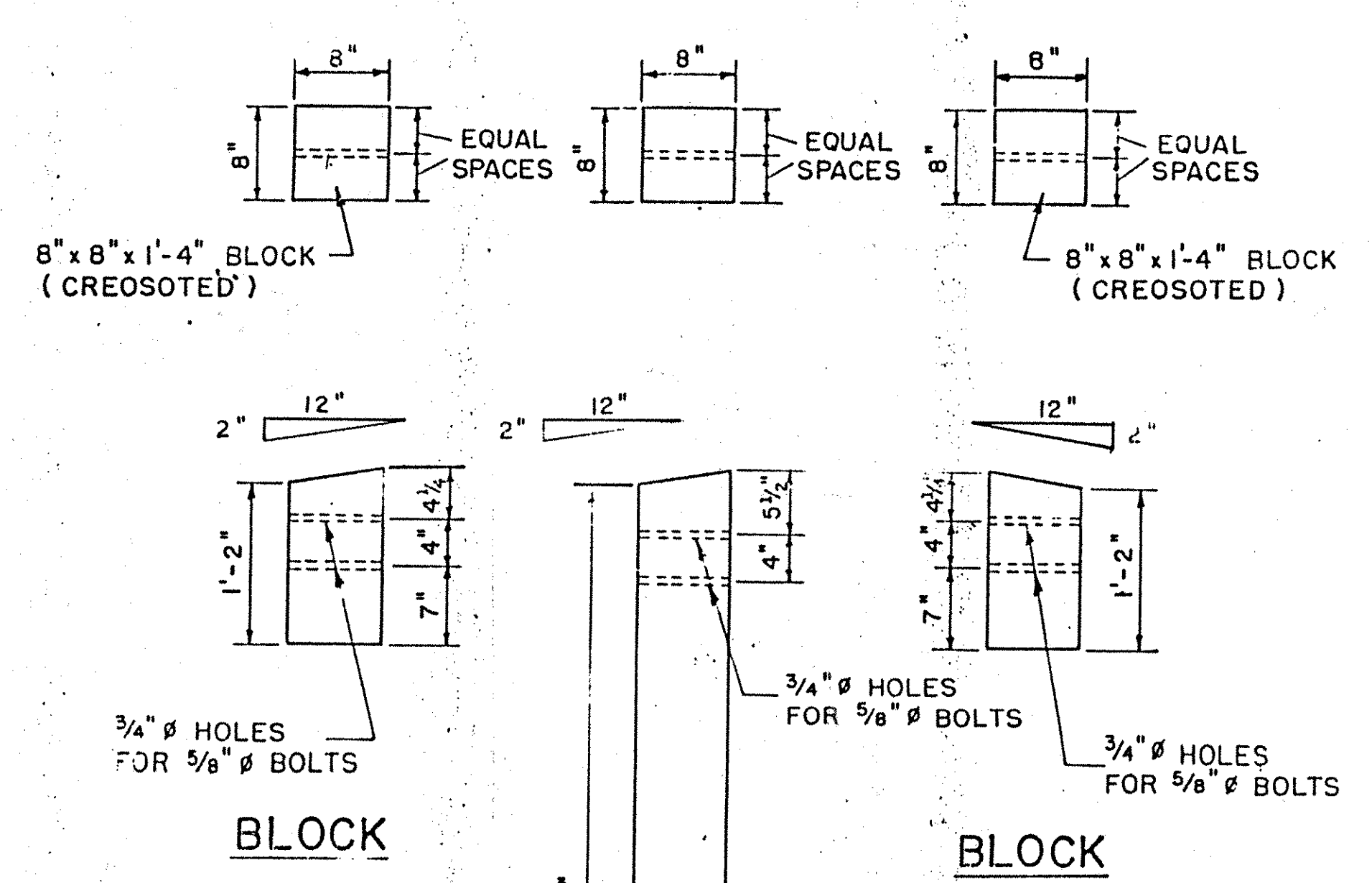
ALL WOOD POST DIMENSIONS ARE NOMINAL



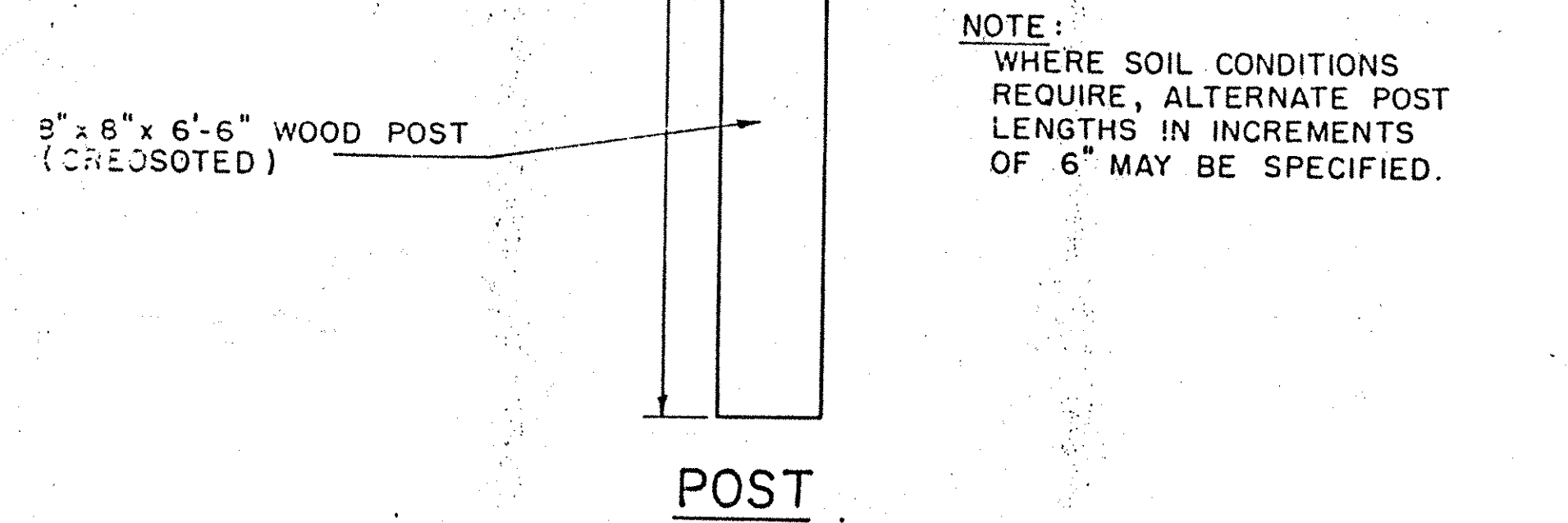
W6x9 GALVANIZED STEEL BEAM GUARDRAIL POST



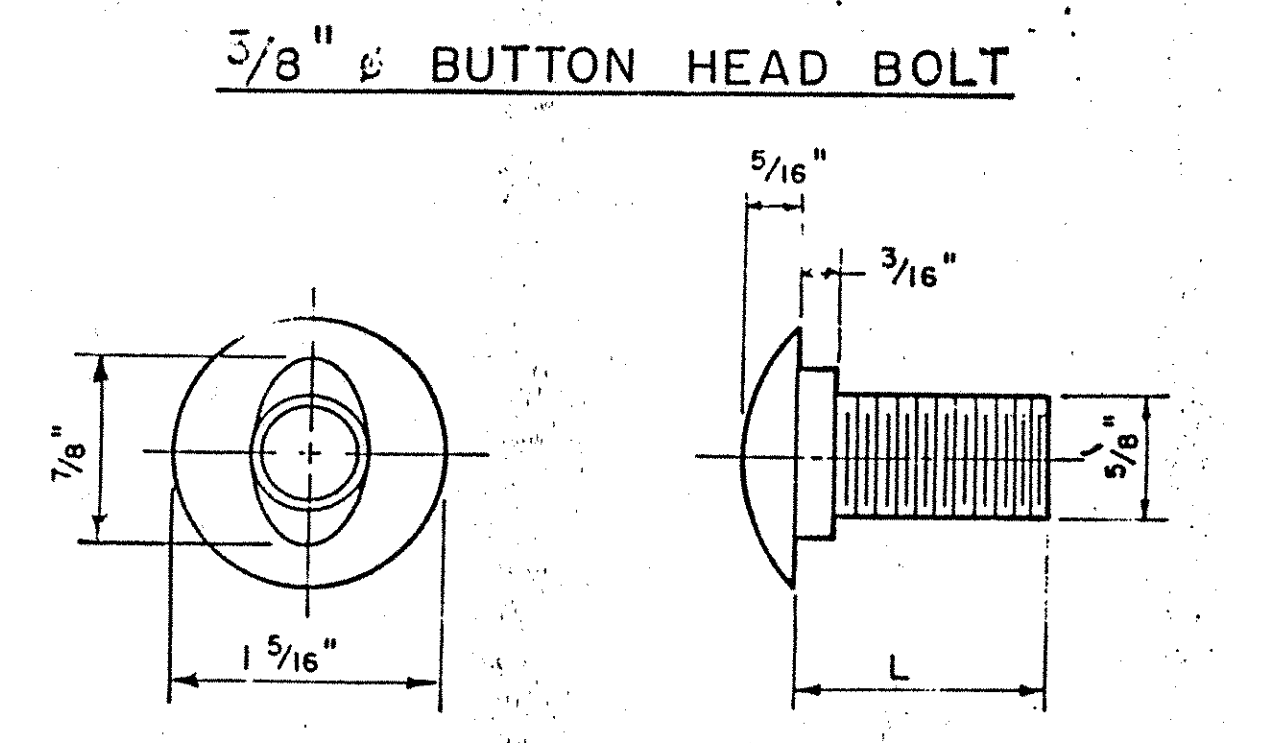
W6x9 GALVANIZED STEEL BEAM GUARDRAIL BLOCK



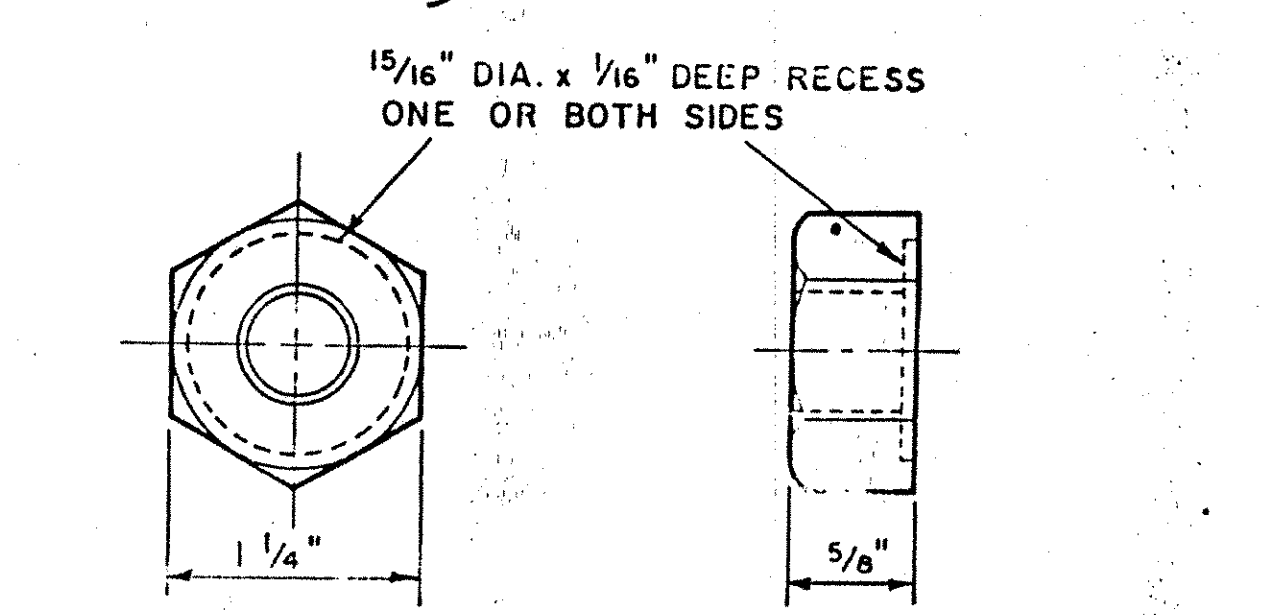
8"x8"x1-4" BLOCK (CREOSOTED)



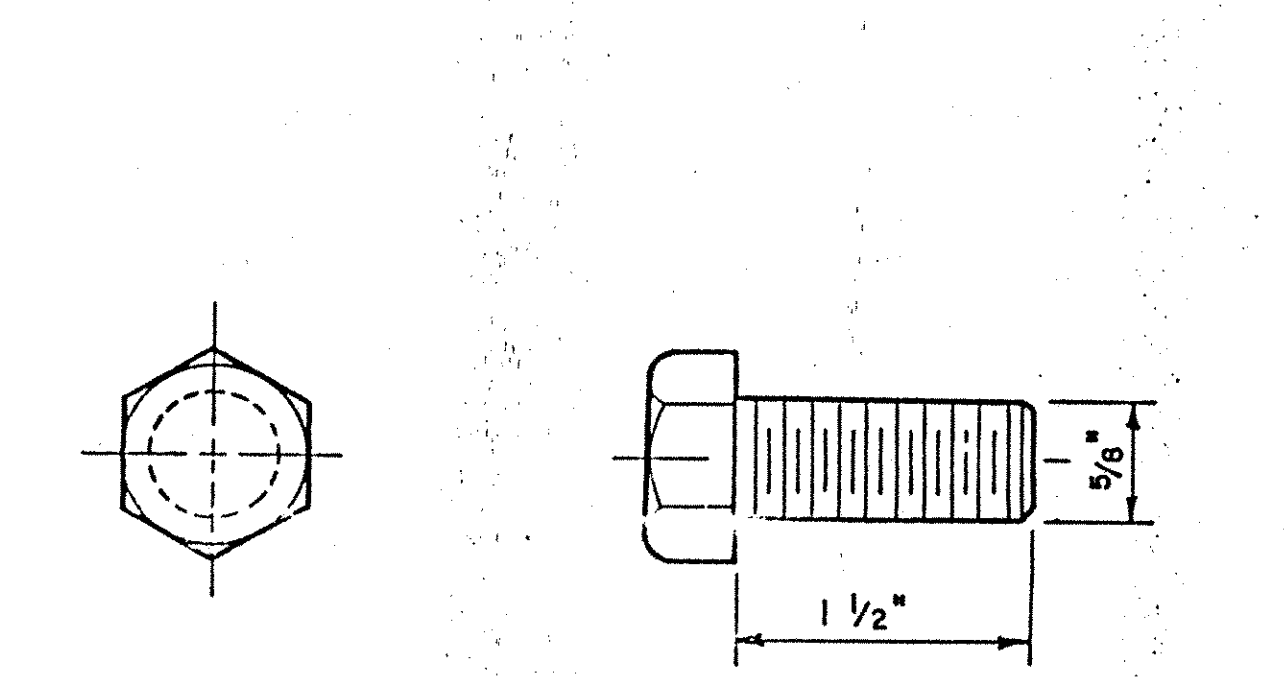
8"x8"x6-6" WOOD POST (CREOSOTED)



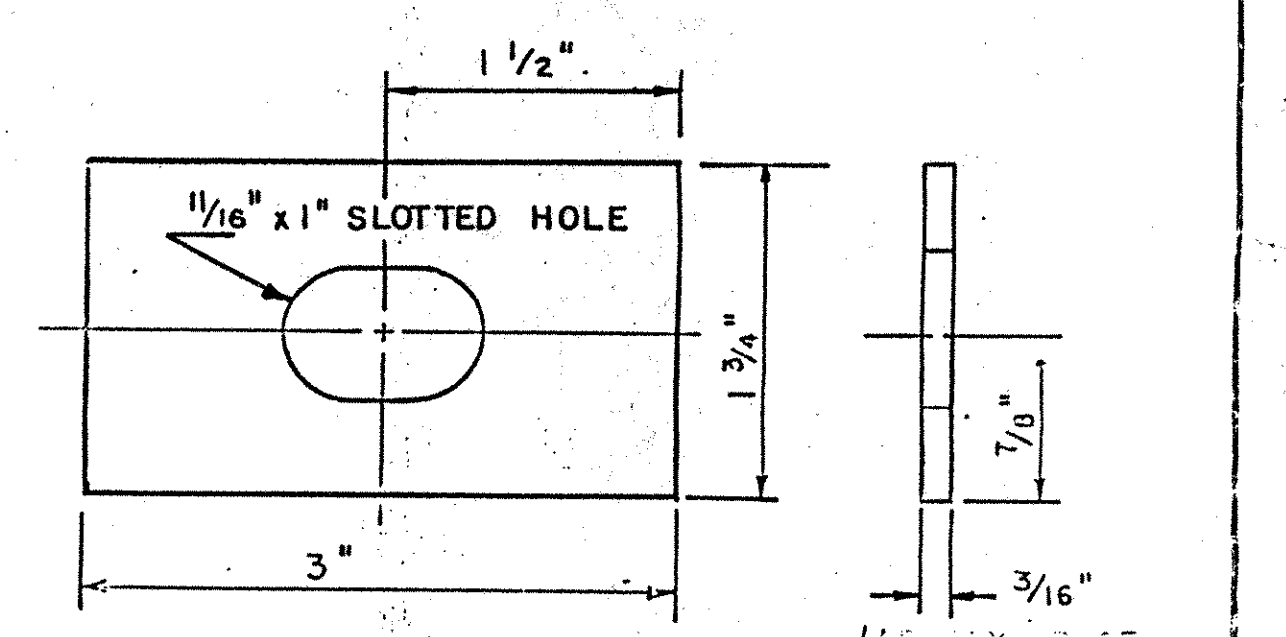
SPLICE BOLTS	L	THREAD LENGTH
RAIL TO BLOCK BOLTS	1 1/4"	FULL LENGTH THREAD
SHORT RAIL TO WOOD POST BOLTS AND SHORT WOOD POST BOLTS	2"	1 1/2" MIN. THREAD LENGTH
LONG RAIL TO WOOD POST BOLTS AND LONG WOOD POST BOLTS	24 1/2"	2" MIN. THREAD LENGTH



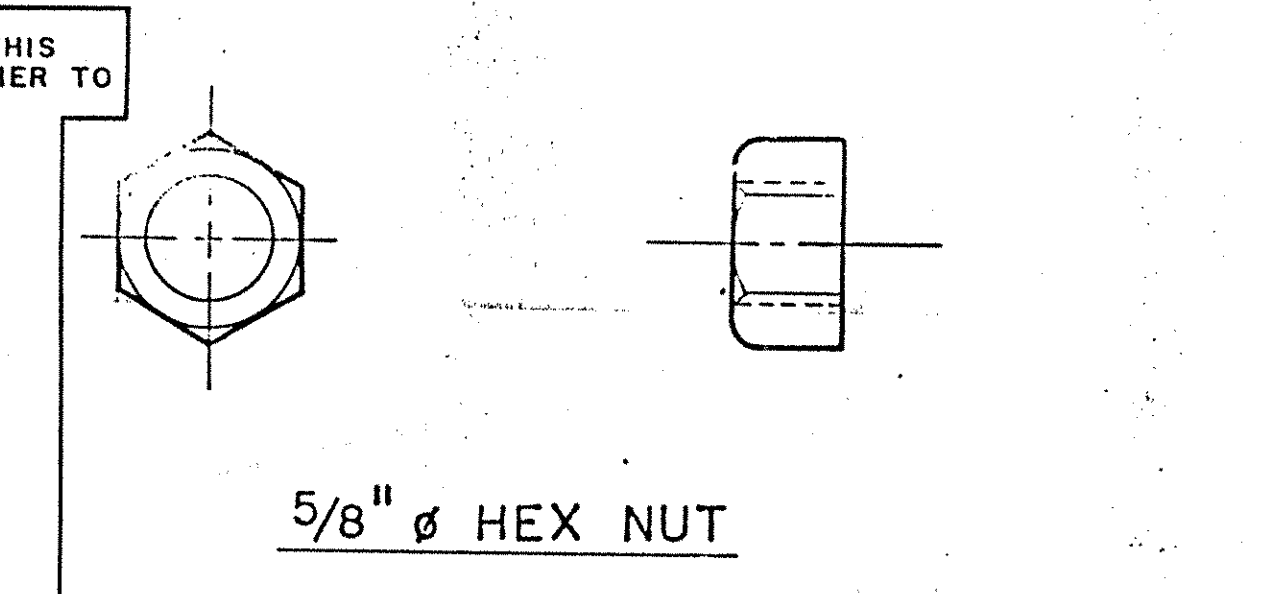
5/8" Ø RECESS NUT



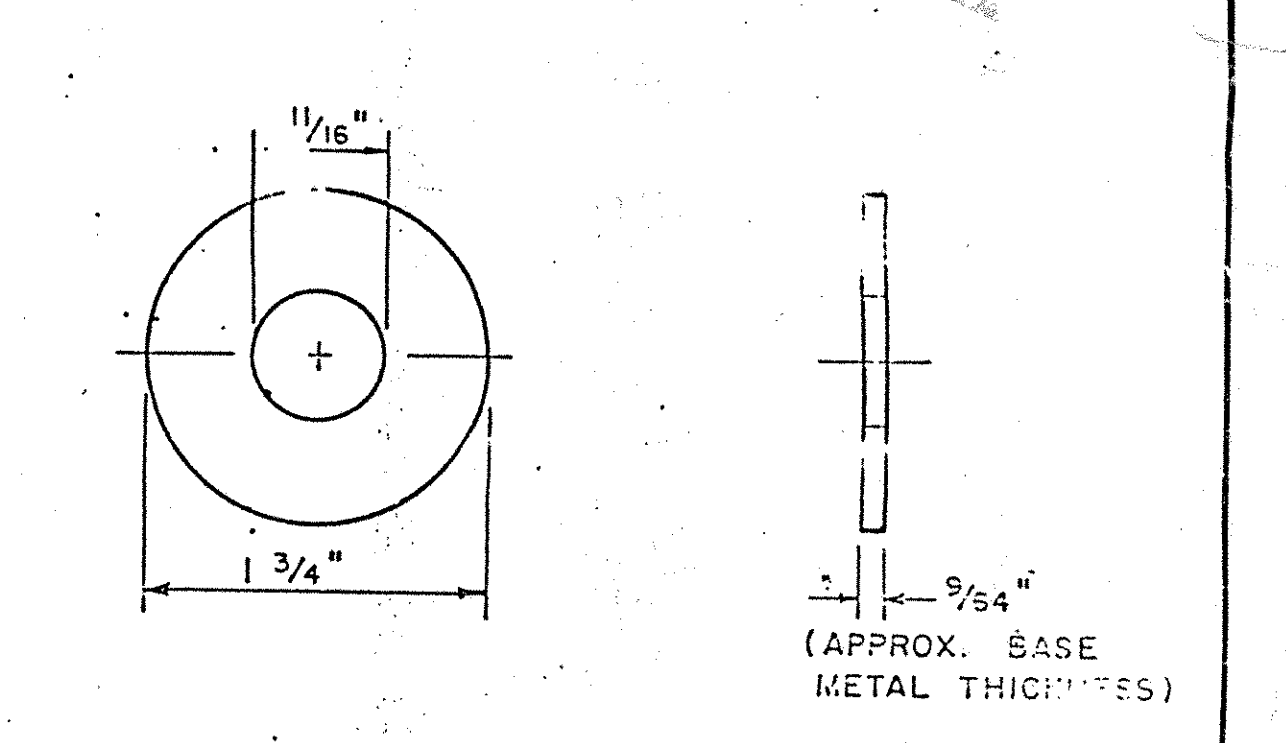
5/8" Ø HEX BOLT (BRACKET TO POST BOLTS)



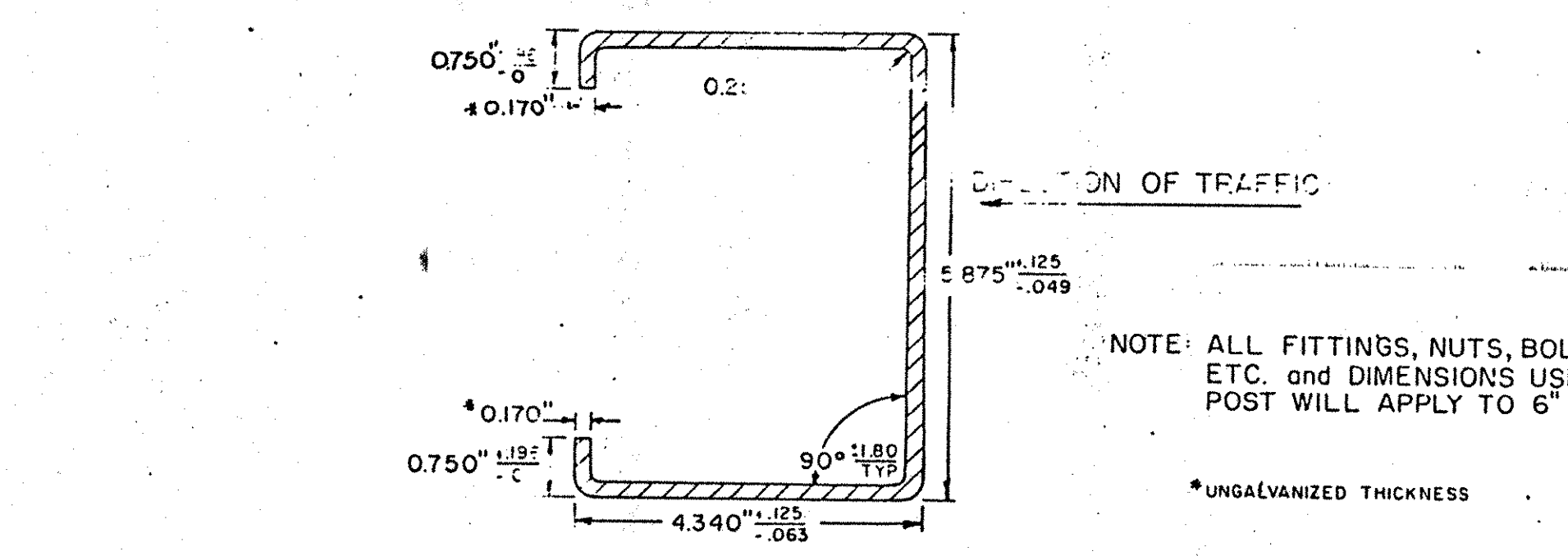
TYPE A WASHER



5/8" Ø HEX NUT

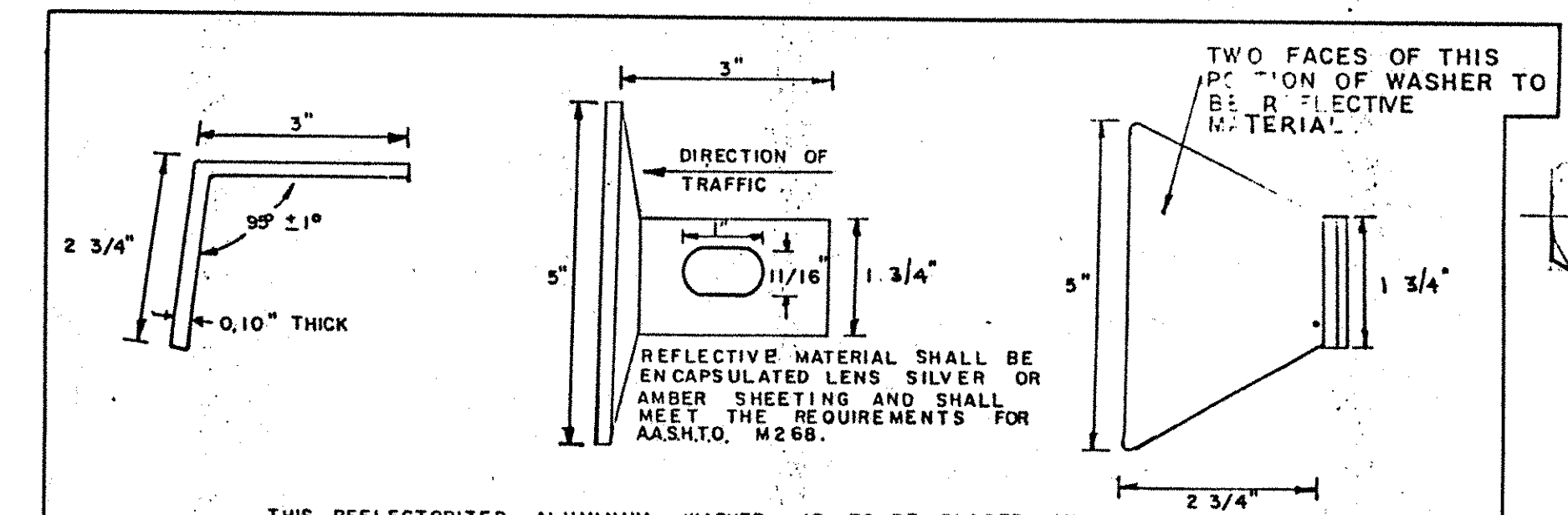


STEEL WASHER (APPROX. BASE METAL THICKNESS)



GALVANIZED STEEL BEAM GUARDRAIL 6"-C-STRONG POST

MATERIAL - ASTM - A570 - WITH MECHANICAL PROPERTIES - TO A36
 GALVANIZING - AASHTO - M111 (ASTM A123)



REFLECTORIZED WASHER

THIS REFLECTORIZED ALUMINUM WASHER IS TO BE PLACED IN VALLEY OF BEAM WHEN MOUNTING BEAM ONTO EACH FIFTH POST. WASHER SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B209 ALLOY 5052 - H32.
 COST OF REFLECTORIZED WASHER TO BE INCIDENTAL TO SECTION 715 - GALVANIZED STEEL BEAM GUARDRAIL.