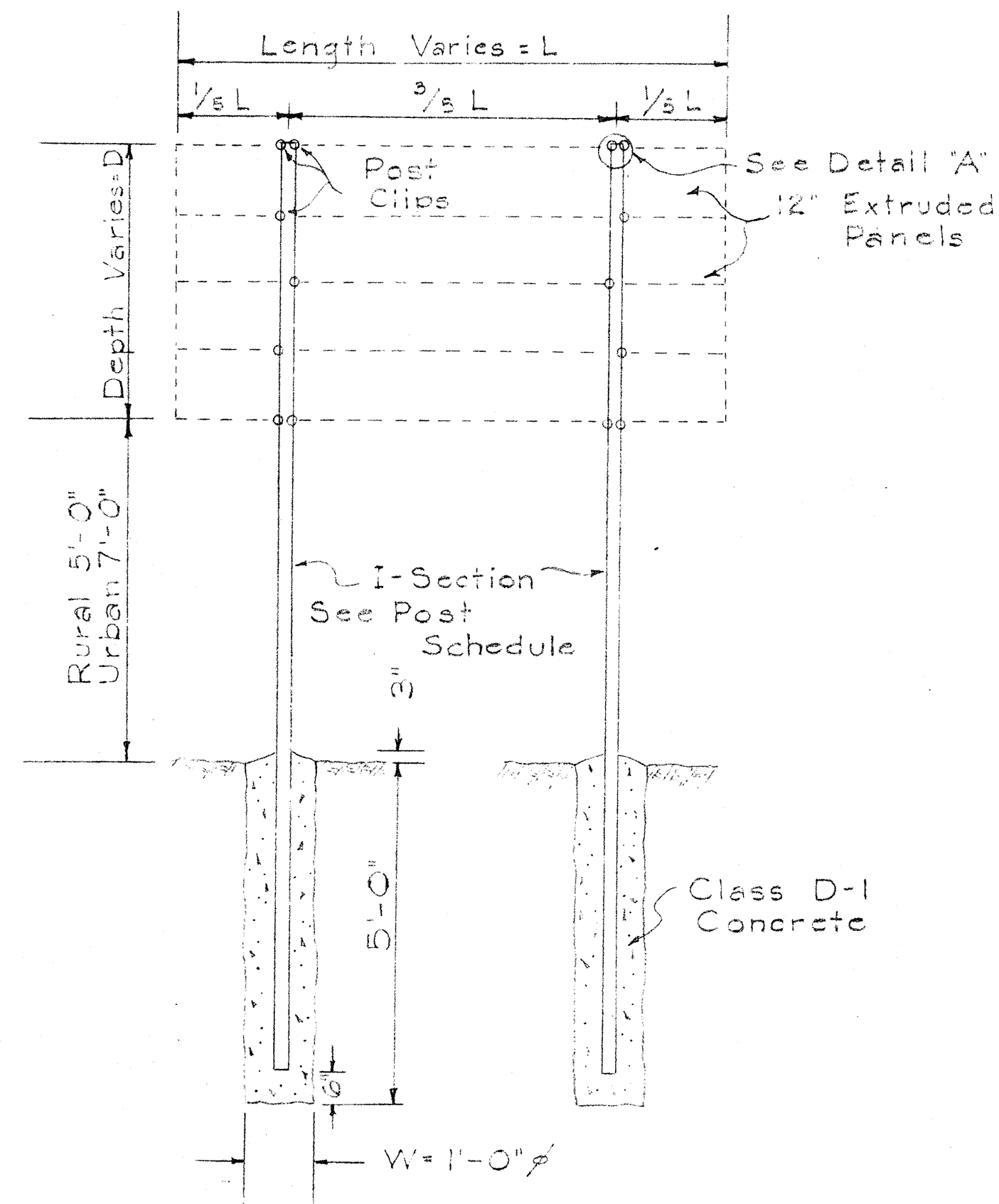
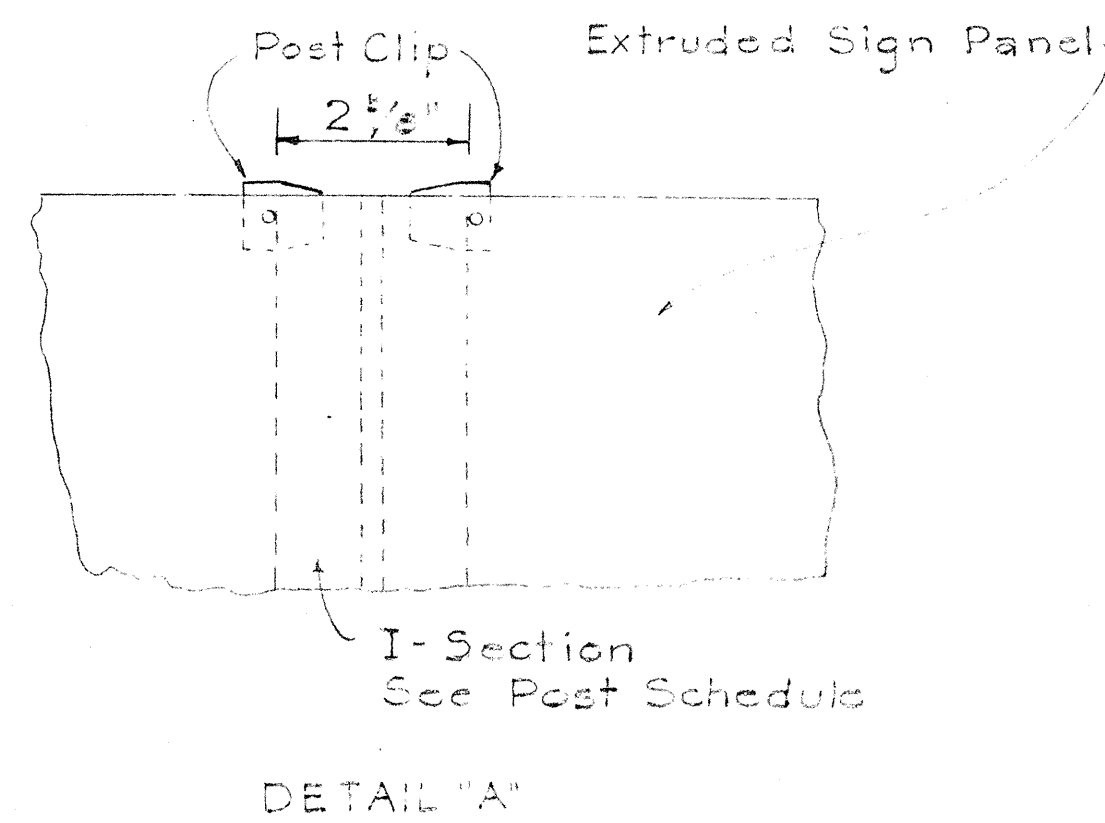




TYPICAL EXTRUDED SIGN PANEL AND POST



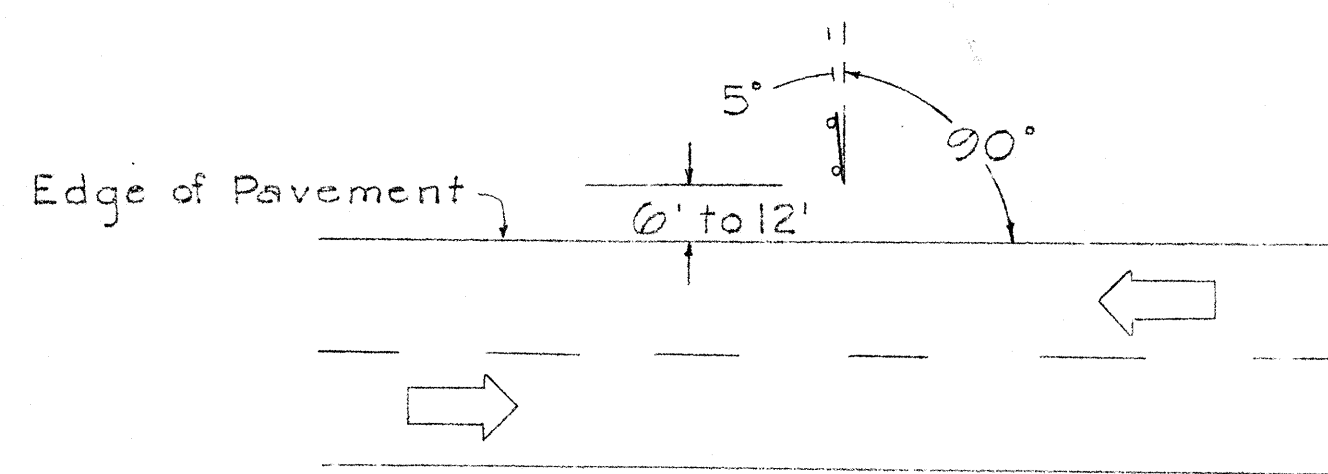
NOTE:
Both the top and bottom of the sign panel require two post clips and the intermediate locations require one post clip (staggered).

POST SCHEDULE

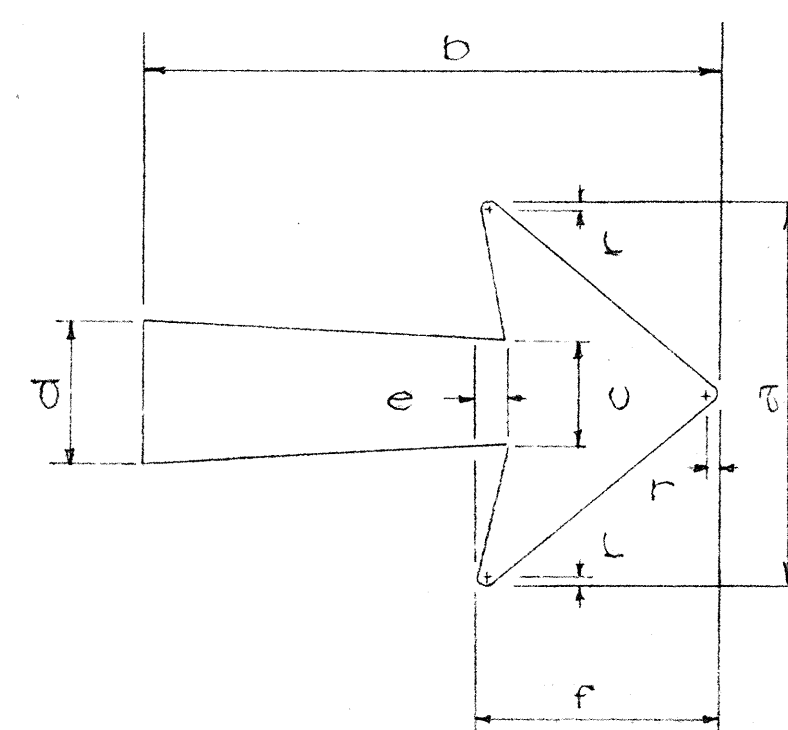
POST SIZE	MAXIMUM SIGN AREA
3" I 5.7 #	30 sq. ft.
6" J 8.5 #	50 sq. ft.

GENERAL NOTES

1. Use series "E" modified upper and lower case letters from the "Standard Alphabet for Highway Signs," Bureau of Public Roads, 1961.
2. All destination signs shall be constructed of bolted type extruded aluminum panels weighing 2.090 ^{lb}/_{ft} (min.) for 12" panel width and 1.103 ^{lb}/_{ft} (min.) for 6" panel width.
3. All letters, borders, and symbols shall be white, embossed, reflectorized cut-outs. The background shall be matte black.
4. Arrows shall conform to the details below.
5. For typical corner and border details, see detail below.
6. For details on Extruded Panels see Standard Details "Solid Aluminum Extruded Sign Panel and Accessory Details" Sheet #
7. All sign post shall be hot-dip galvanized.
8. All cut-outs shall be riveted to the sign panel.

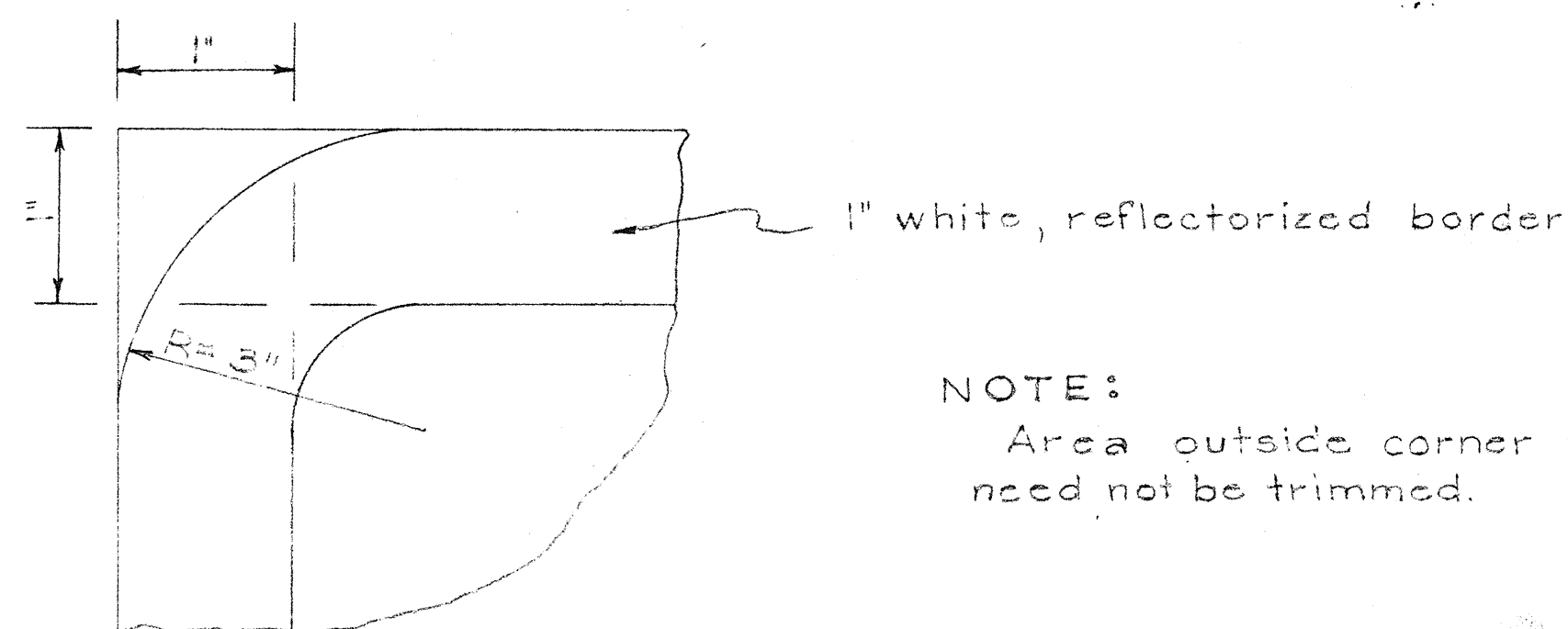


TYPICAL SIGN LOCATION



Arrow Size	Dimensions in inches							
	a	b	c	d	e	f	g	
11/4 x 12 3/4	11/4	7 1/4	3 1/8	3 7/8	7/8	12 3/4	5/8	
14 1/4 x 12 3/4	14 1/4	8 1/4	3 1/8	3 7/8	7/8	12 3/4	5/8	
11 1/4 x 18 1/4	11 1/4	8 3/4	3 1/8	3 7/8	7/8	18 1/4	5/8	

TYPICAL ARROW DETAILS



NOTE:
Area outside corner radius need not be trimmed.

TYPICAL CORNER AND BORDER DETAIL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

EXTRUDED ALUMINUM DESTINATION
SIGNS POST AND FRAMES

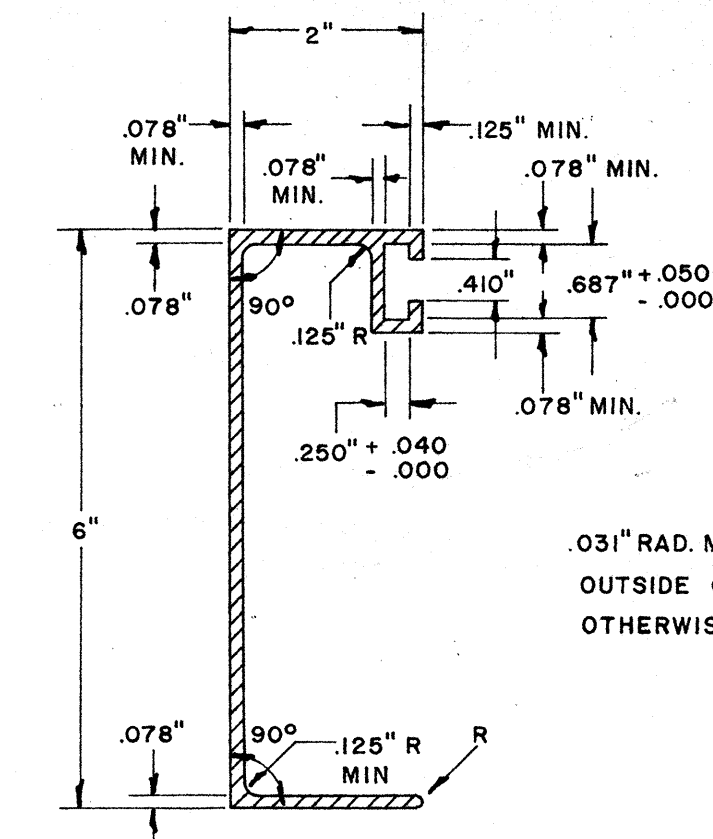
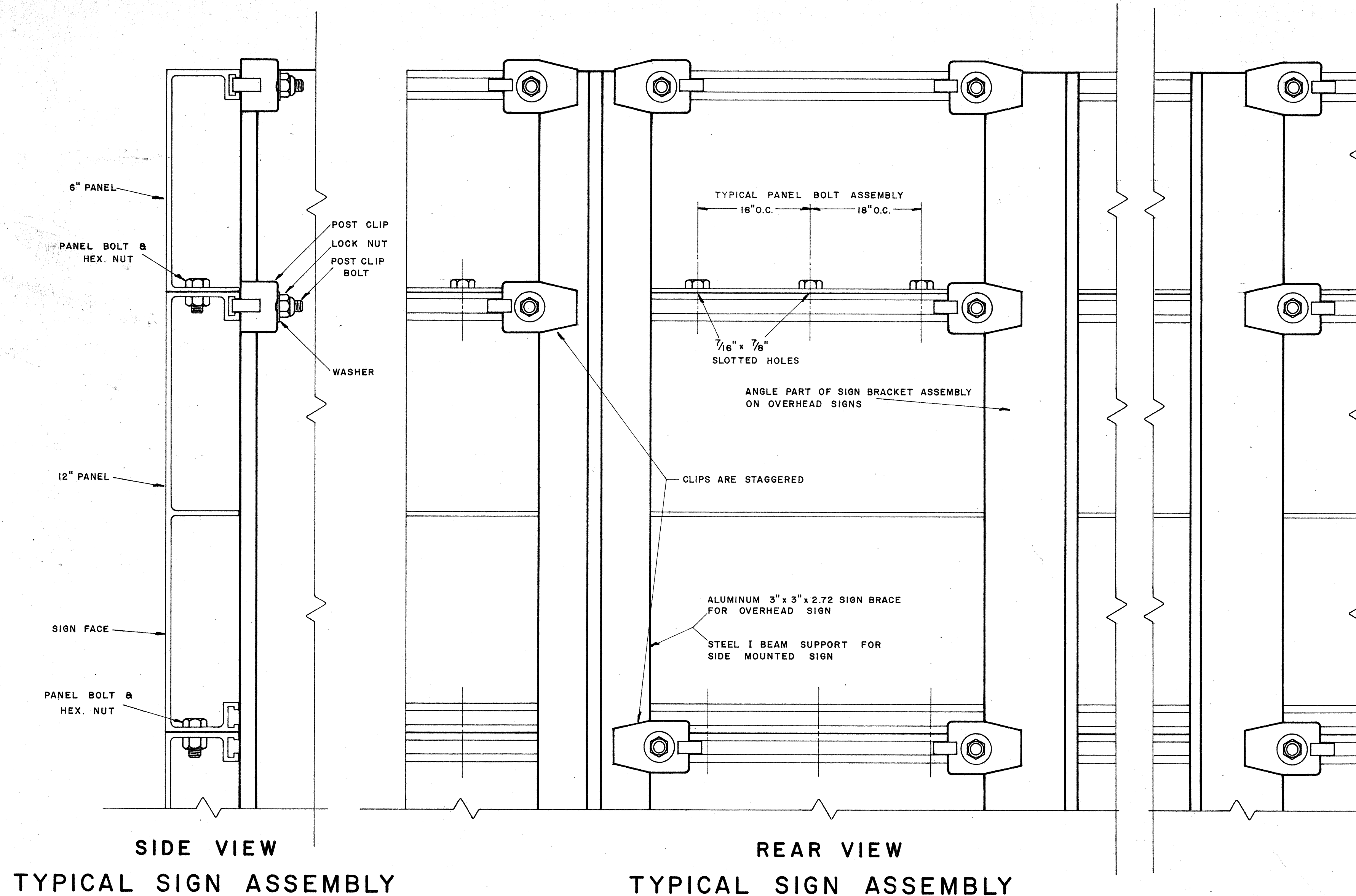
KAWAIHAE - PUAKO ROAD
PROJ. NO. G-3257-01-60

SCALE: AS SHOWN

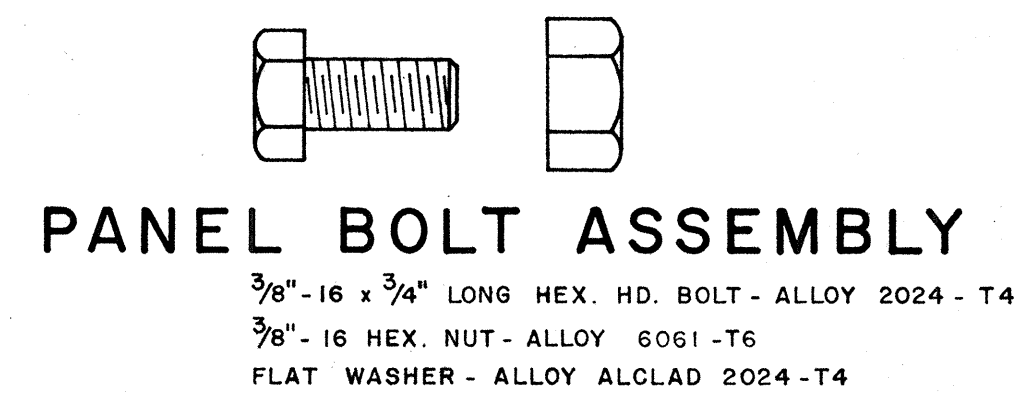
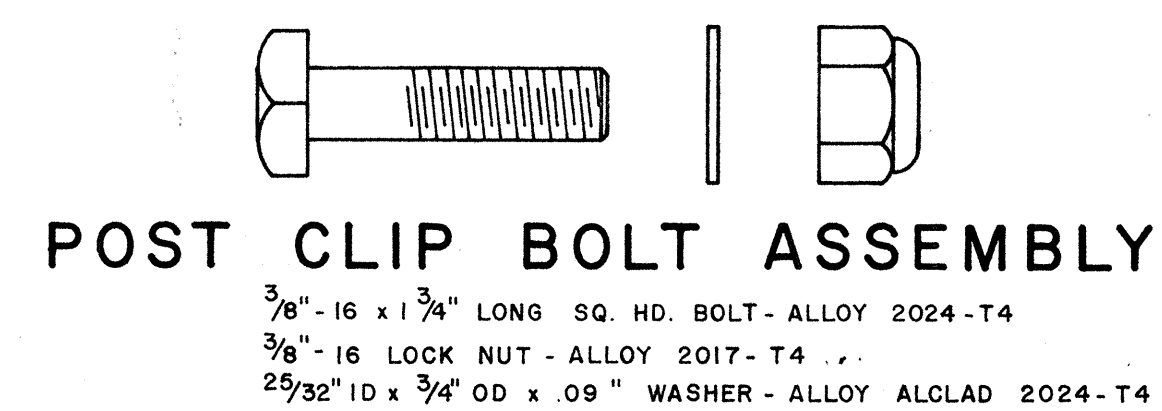
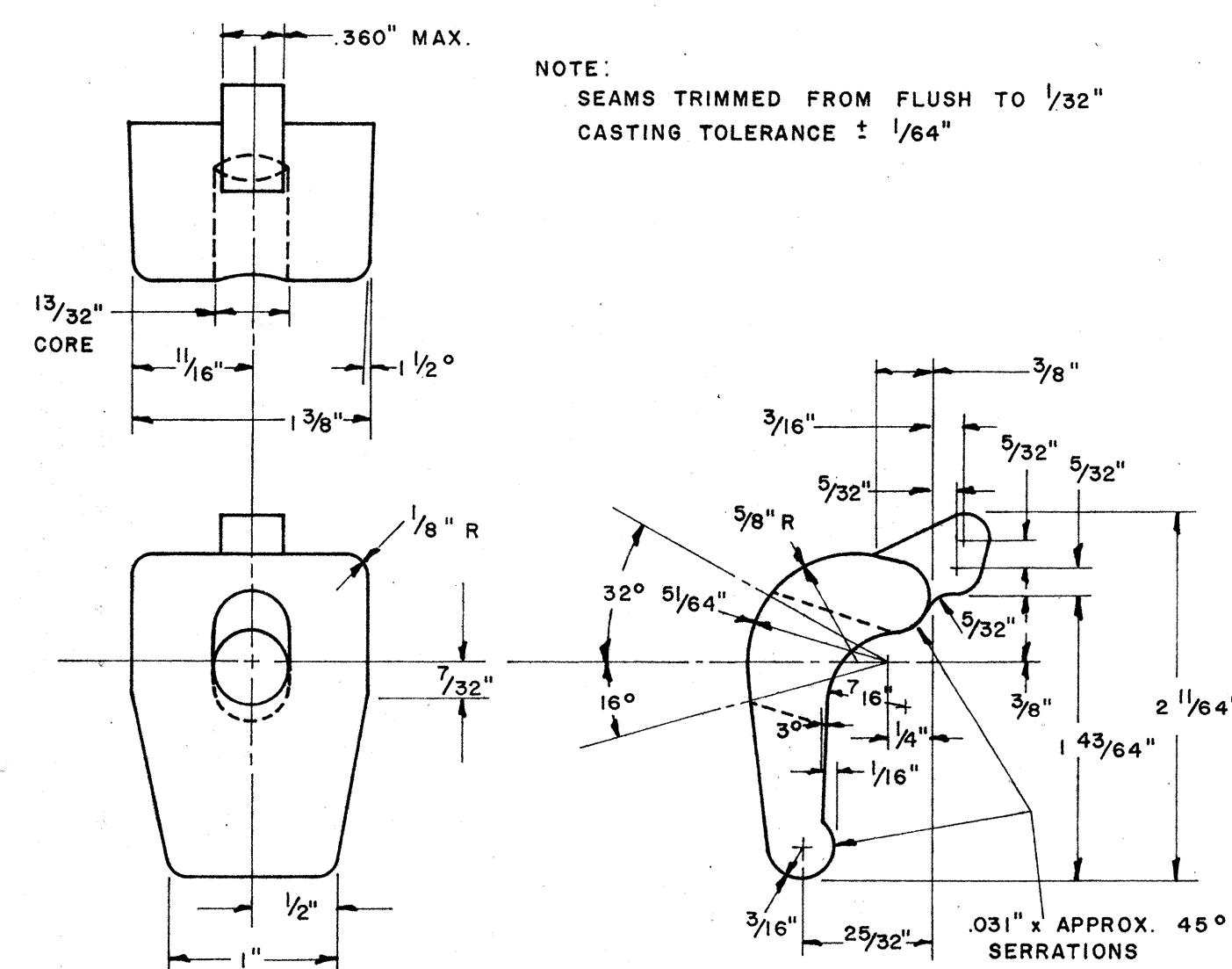
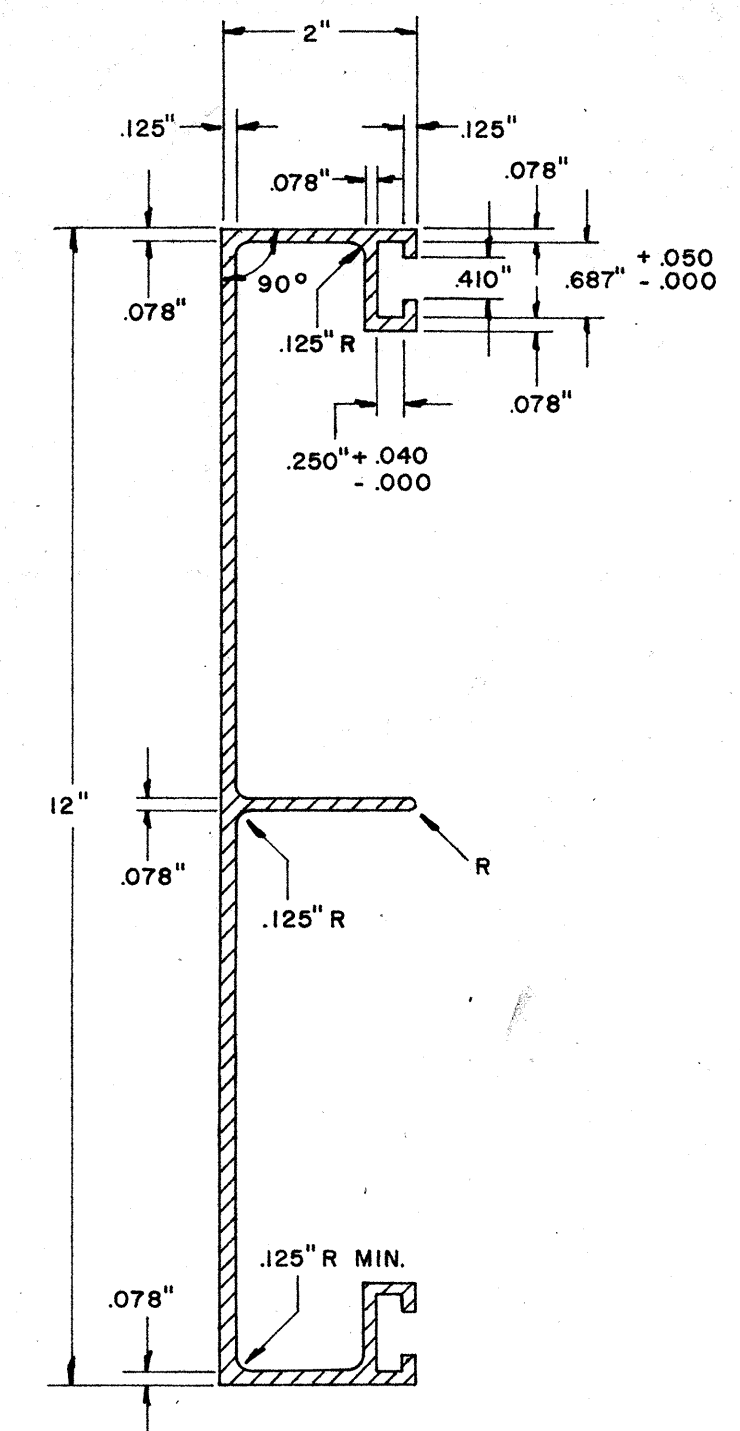
SHEET No. OF SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	3-3297-01-20	1962	28	30



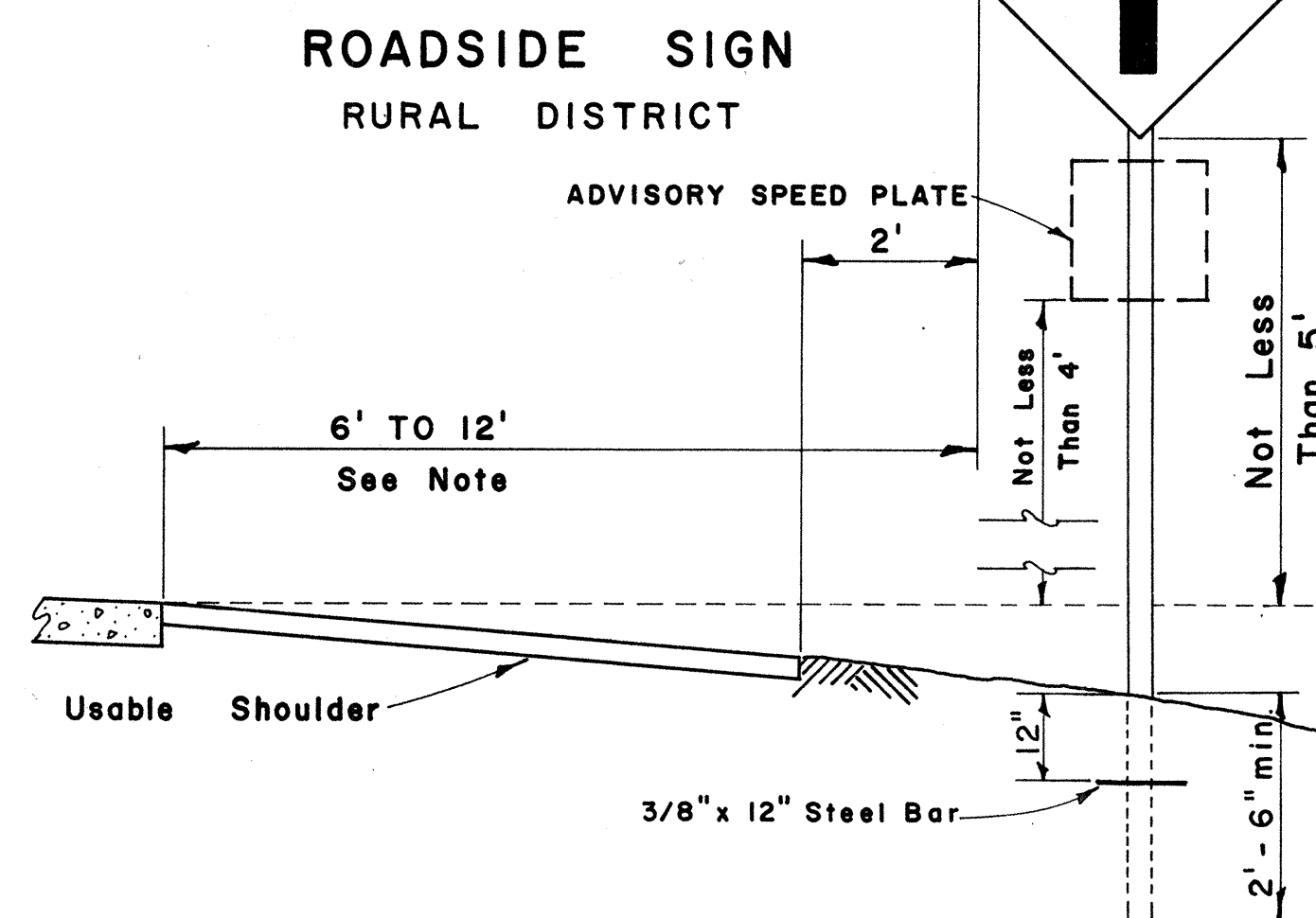
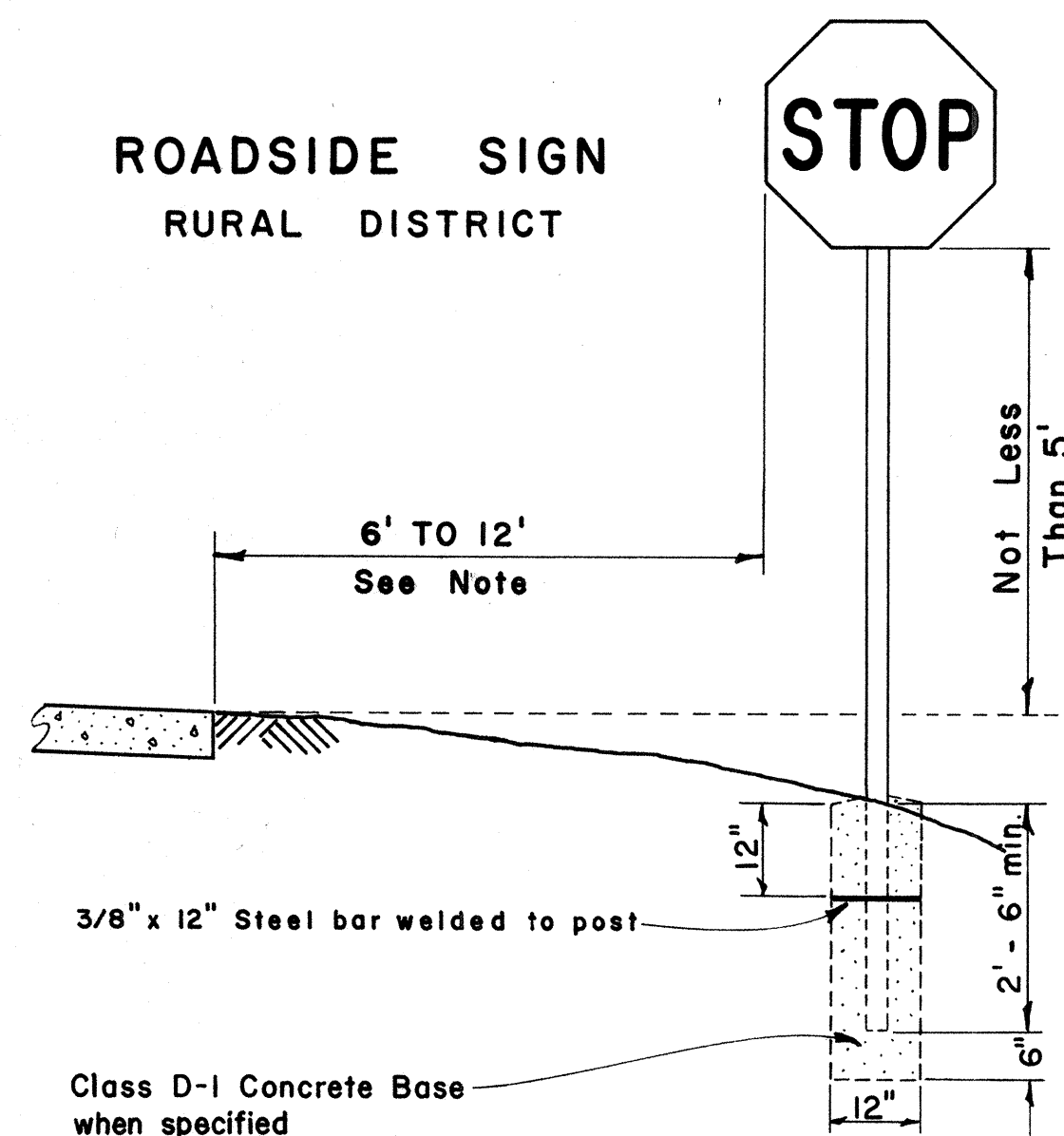
SOLID EXTRUDED SIGN PANEL DETAILS



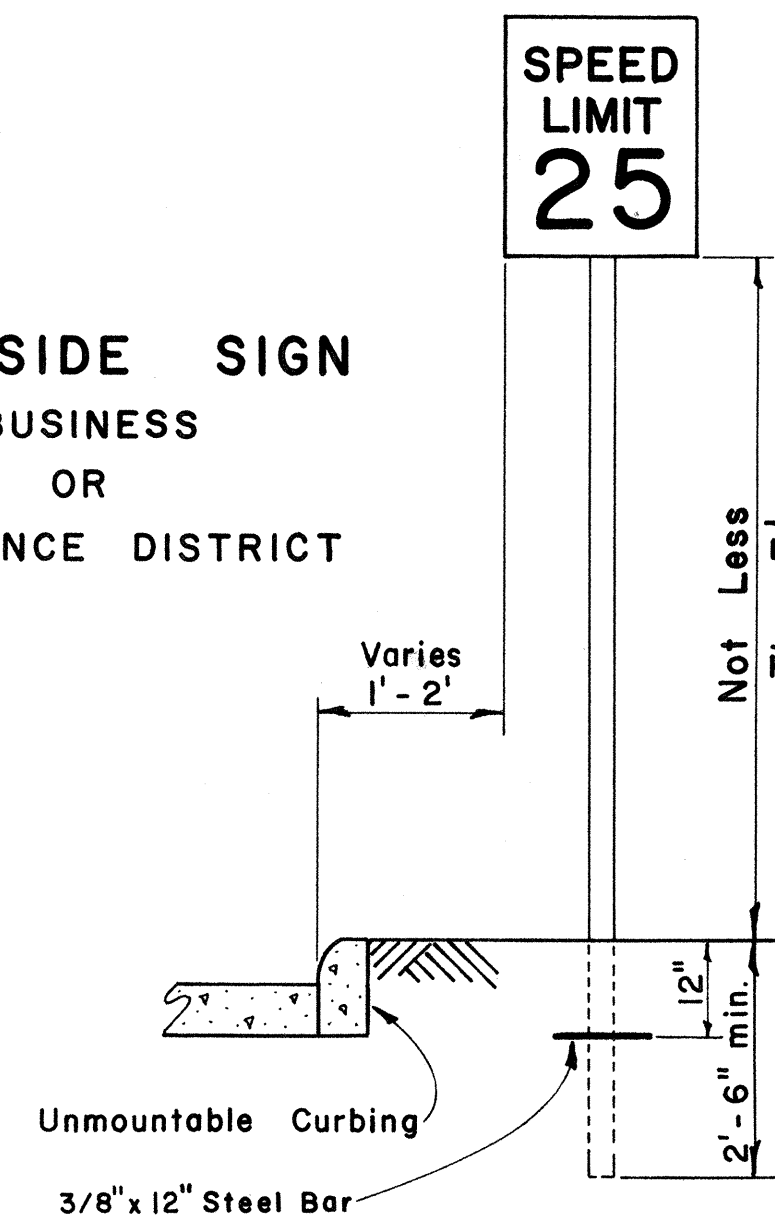
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
SOLID ALUMINUM
EXTRUDED SIGN PANEL
AND
ACCESSORY DETAILS
SCALE: AS SHOWN

SHEET No. OF SHEETS

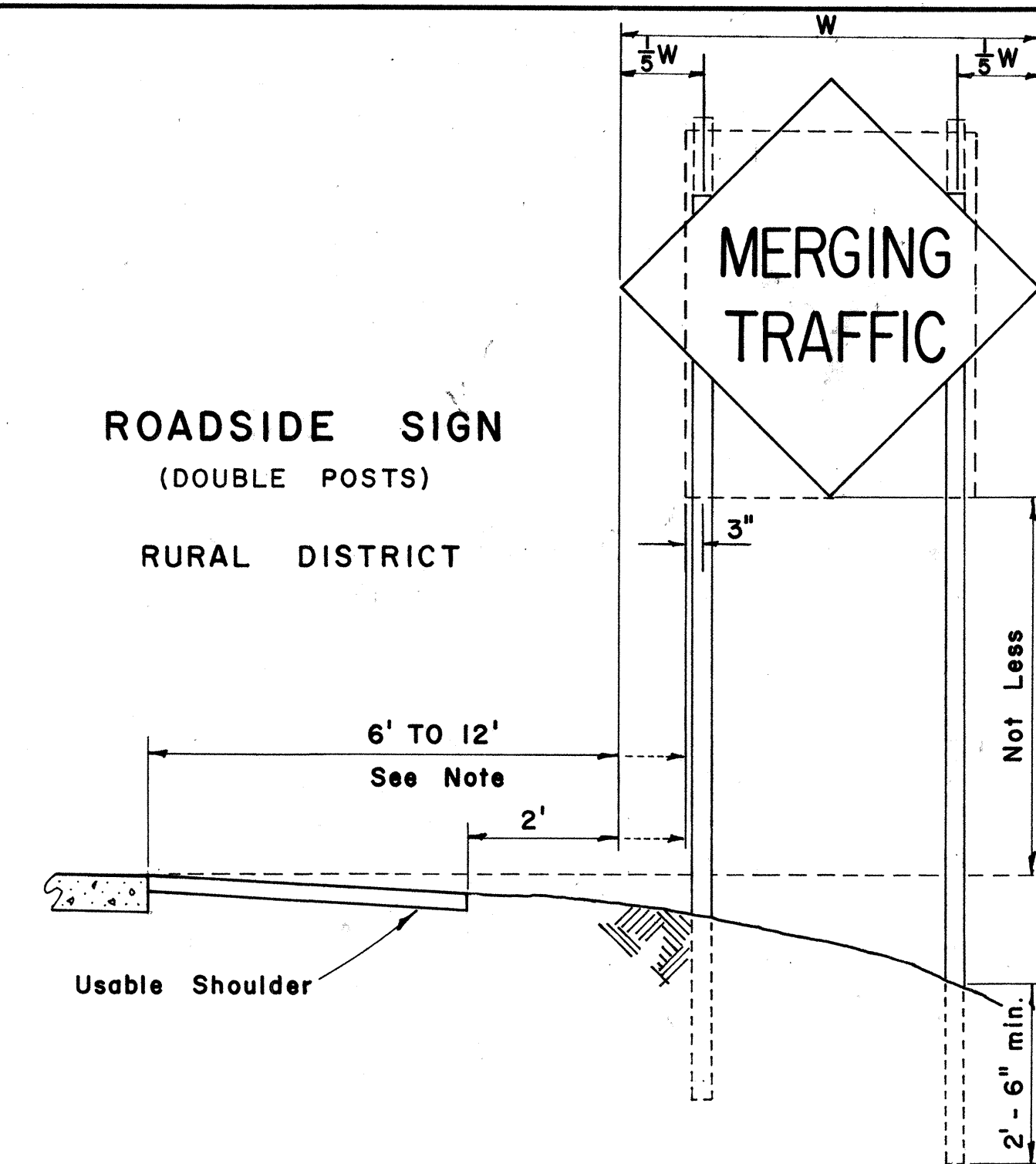
- NOTE:
1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 2. Except as noted below, sign posts shall be 3" galv. std. pipe for signs larger than 24" in any dimension and 2" galv. std. pipe for signs not over 24" in any dimension, with two $\frac{3}{8}$ " ϕ bolt holes or adjustable band brackets.
 3. Sign shall be attached to post with $\frac{5}{16}$ " galvanized carriage bolts with nuts and $\frac{7}{8}$ " x $\frac{7}{16}$ " x .120 stainless-steel washers with neoprene rubber gasket.
 4. Clearance Markers (RM-4, RM-3) shall be installed with the inside edge of the marker in line with the inner edge of the obstruction.
 5. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 3" galv. std. pipe with appropriate $\frac{3}{8}$ " bolt holes.



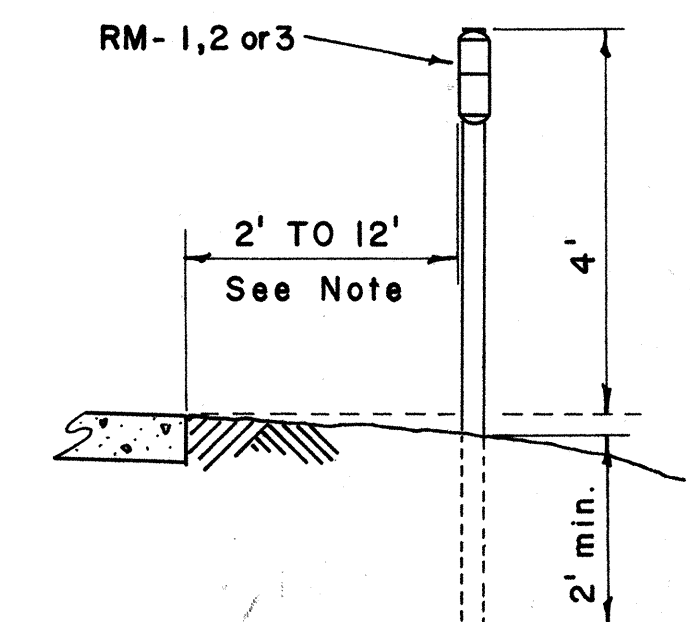
ROADSIDE SIGN
BUSINESS
OR
RESIDENCE DISTRICT



ROADSIDE SIGN
(DOUBLE POSTS)
RURAL DISTRICT

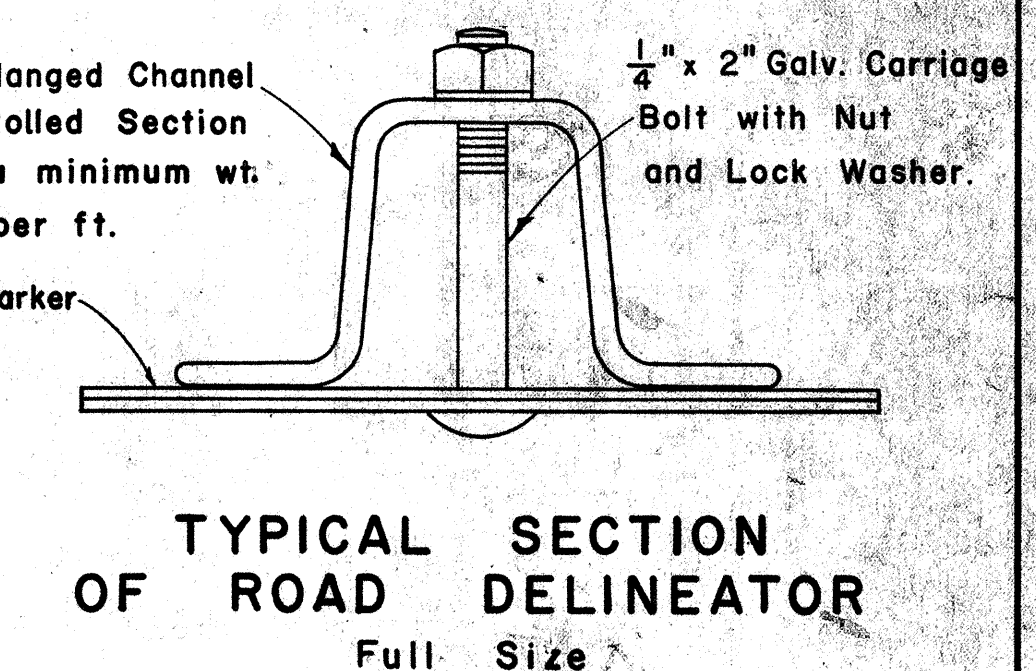
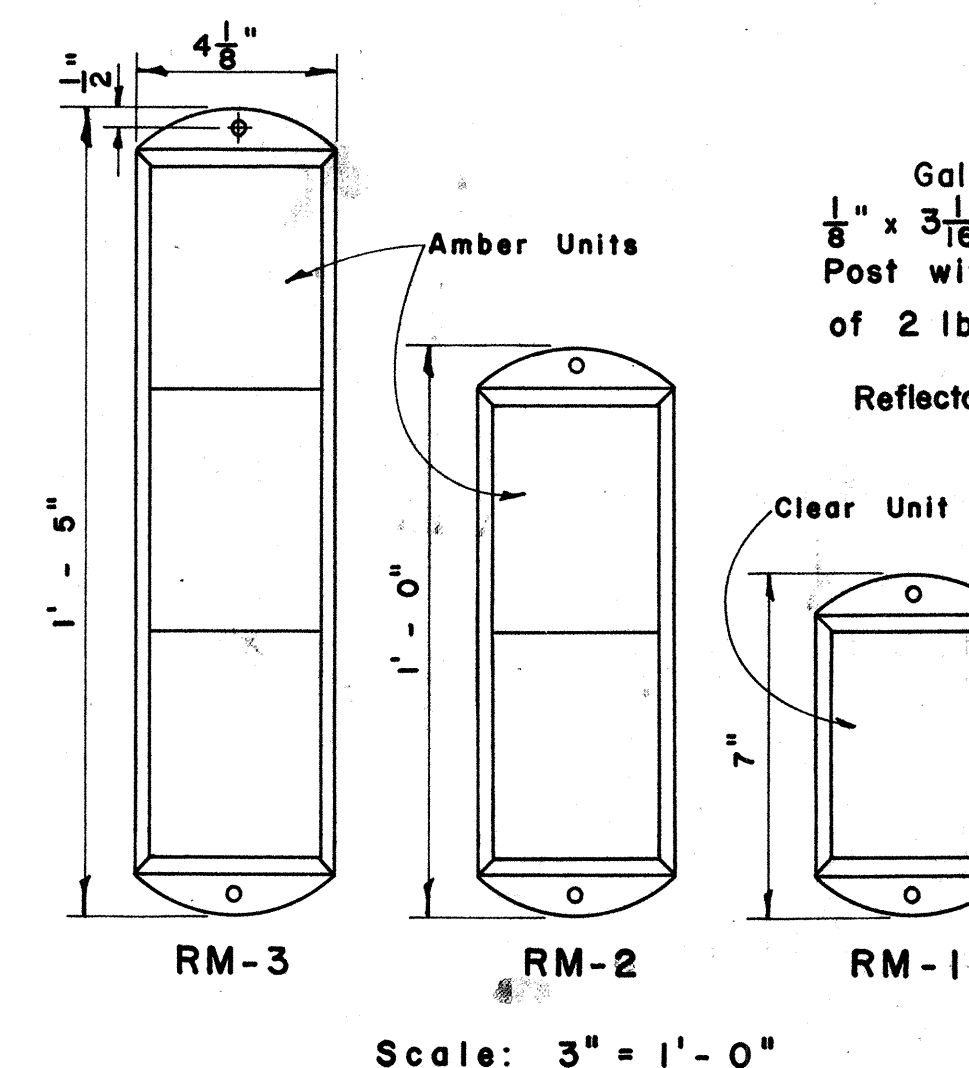
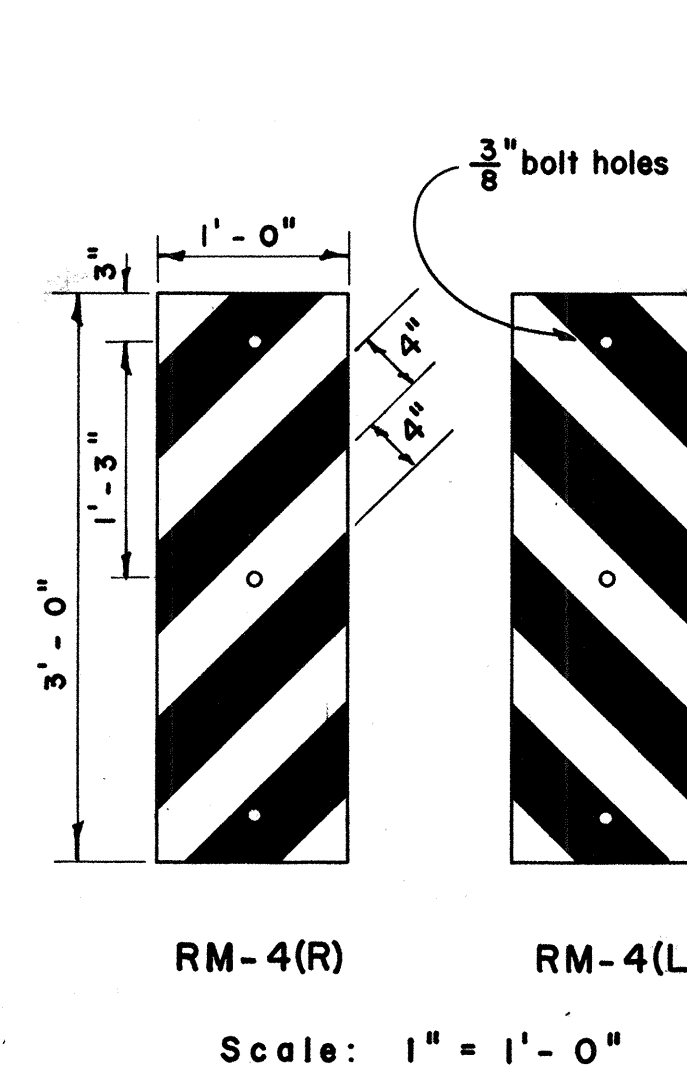
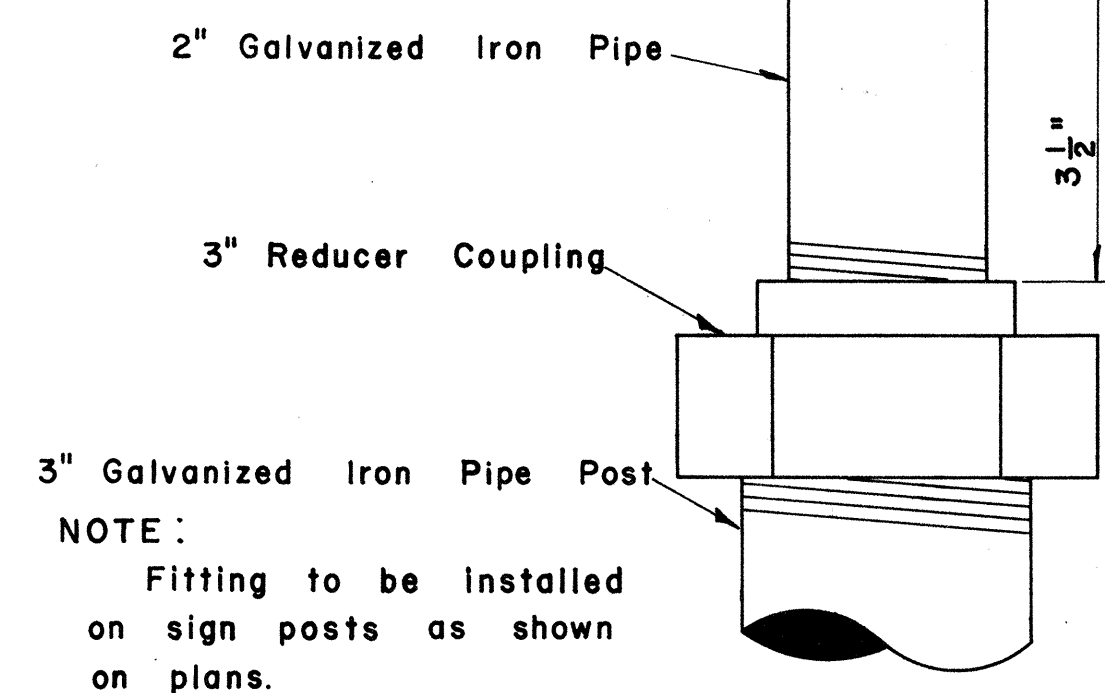
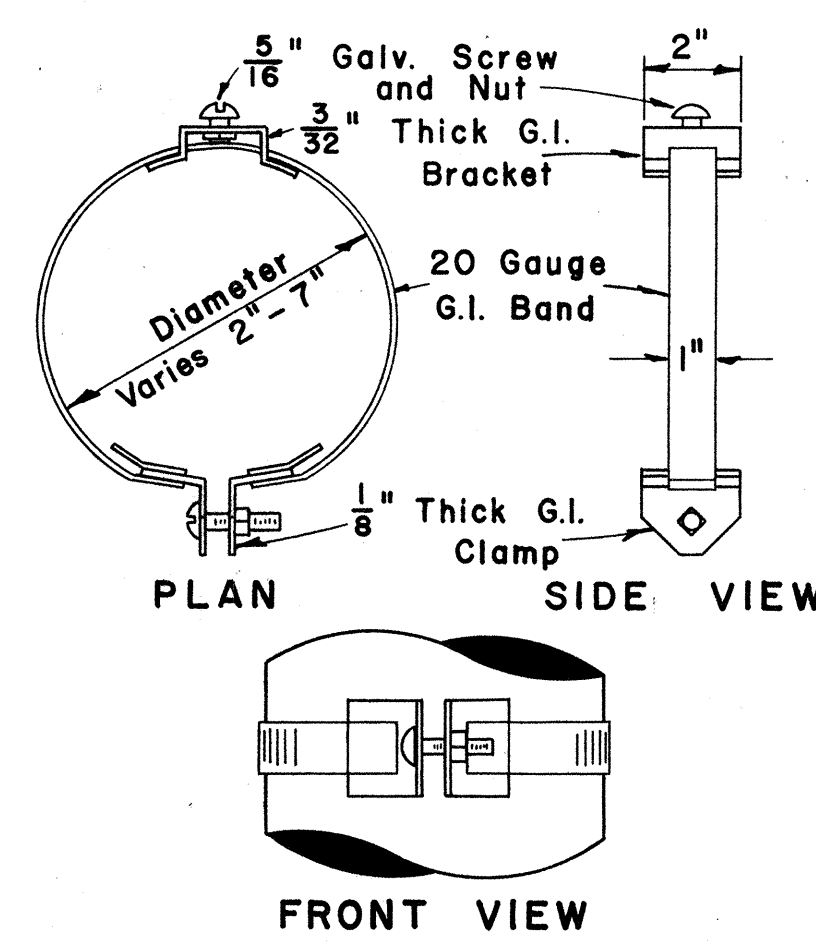
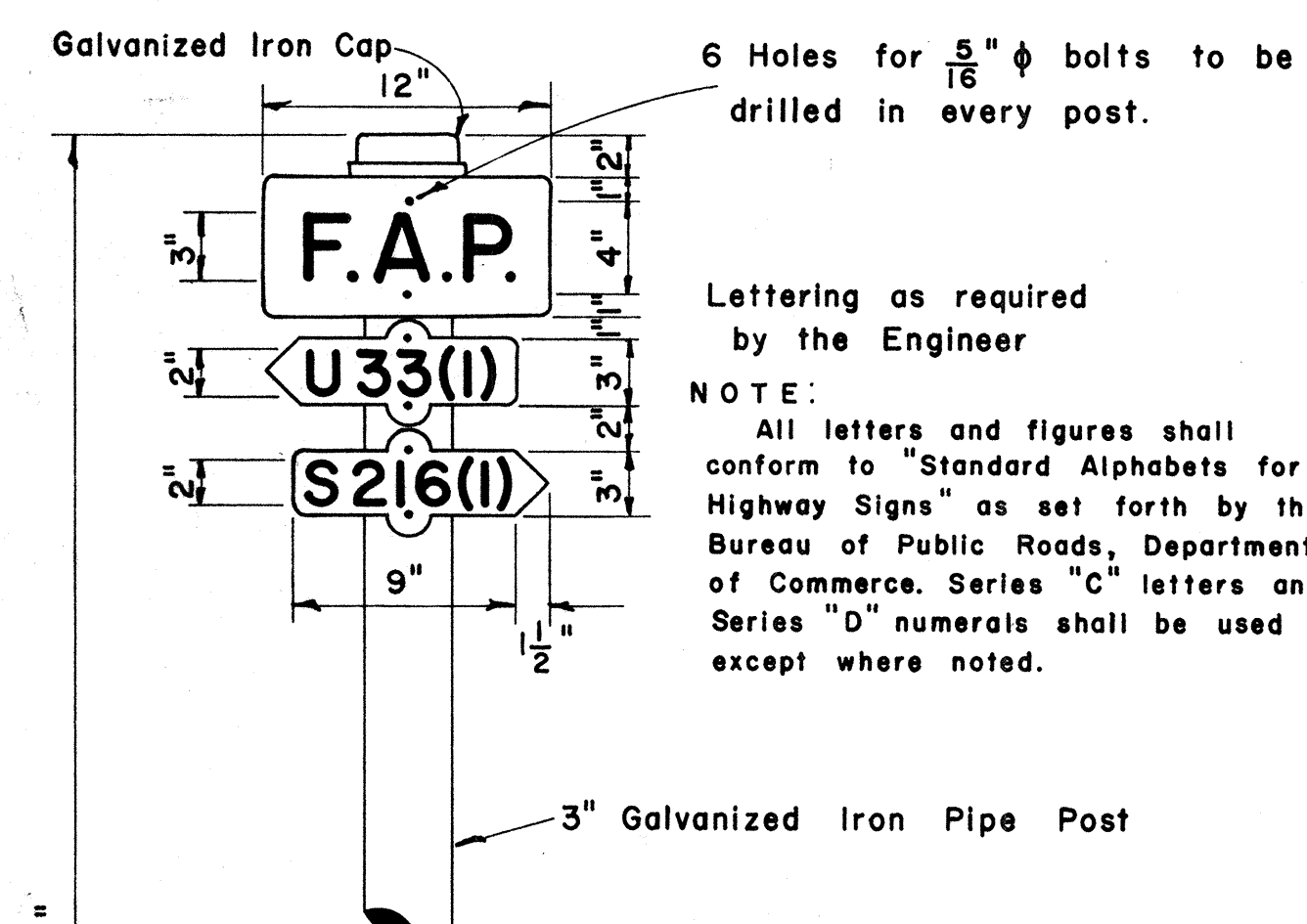


ROAD DELINEATOR

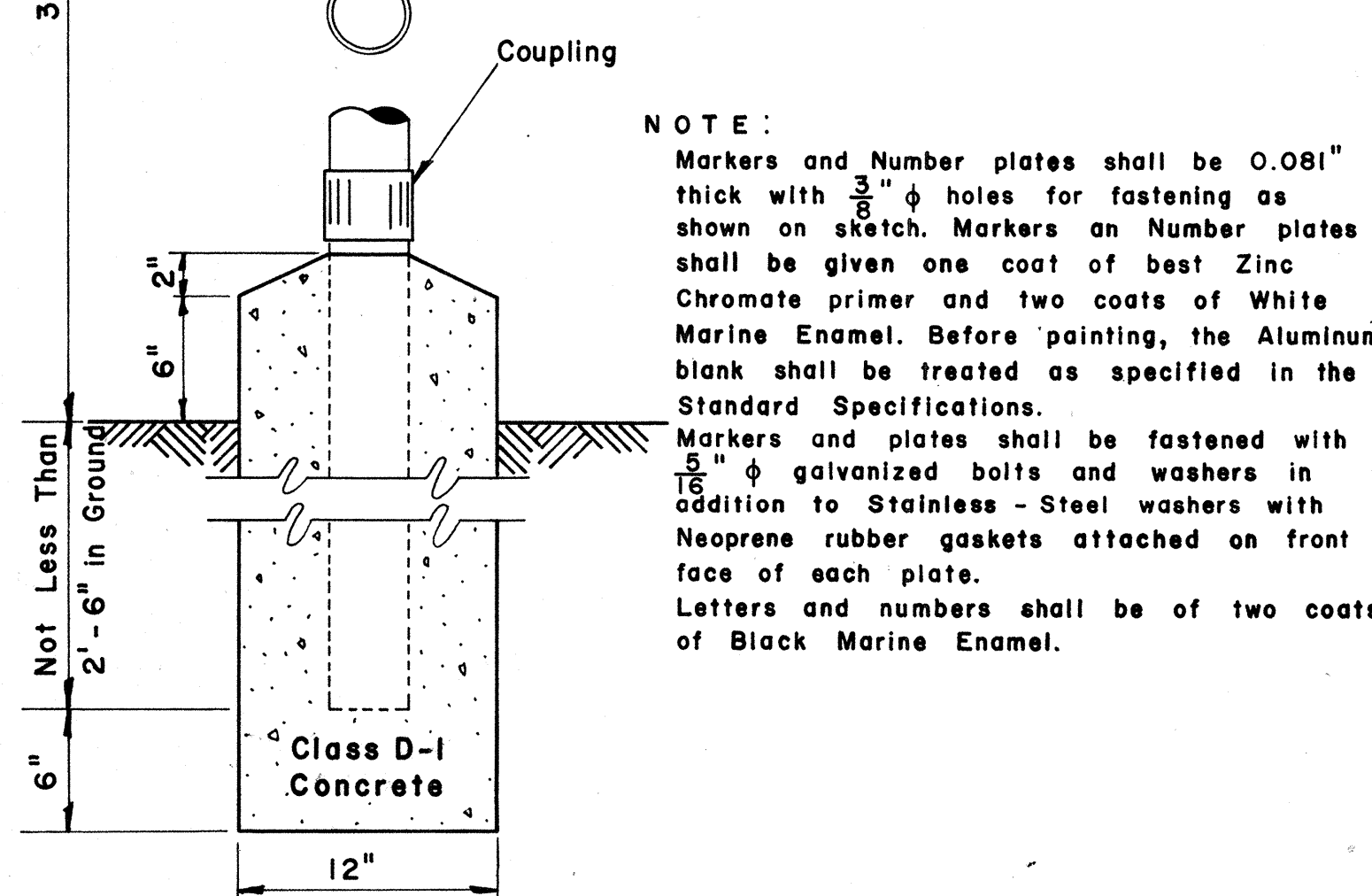


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS

Scale: $\frac{1}{2}$ " = 1' - 0"

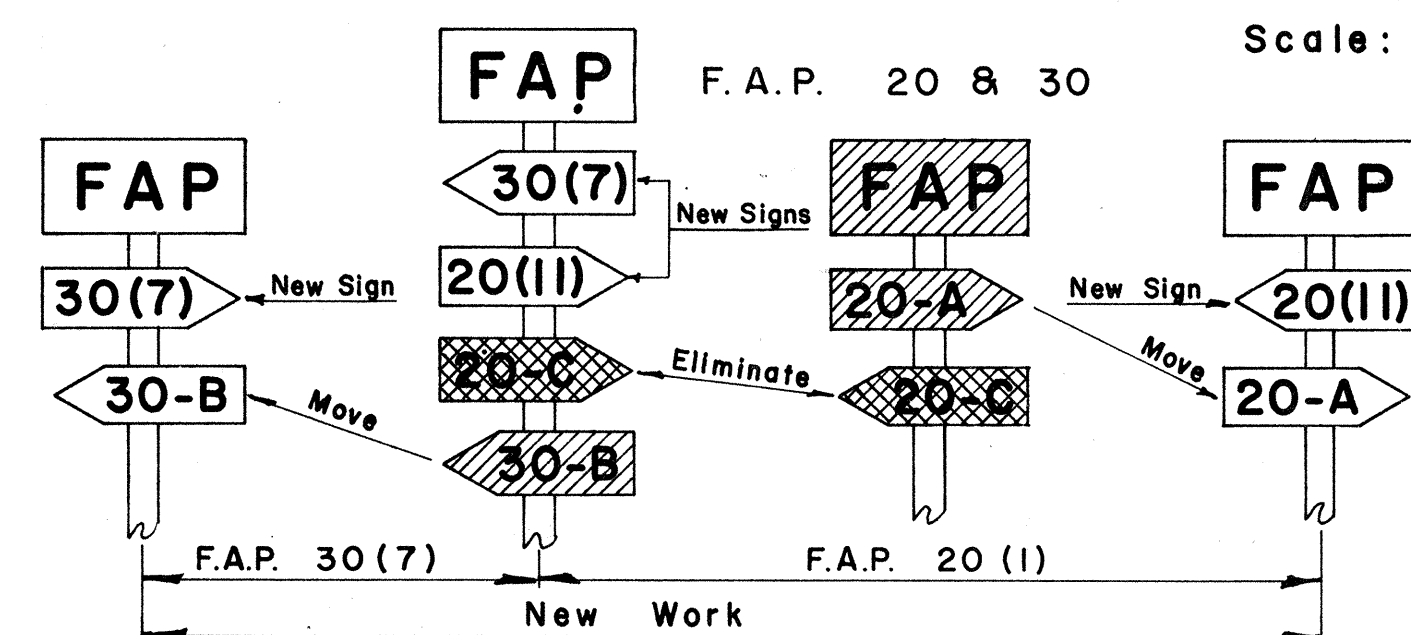


NOTE: Reflector Units for RM-1, 2, 3 shall be 4" x 5" in size and shall consist of reflective sheeting encapsulated in acrylic plastic.

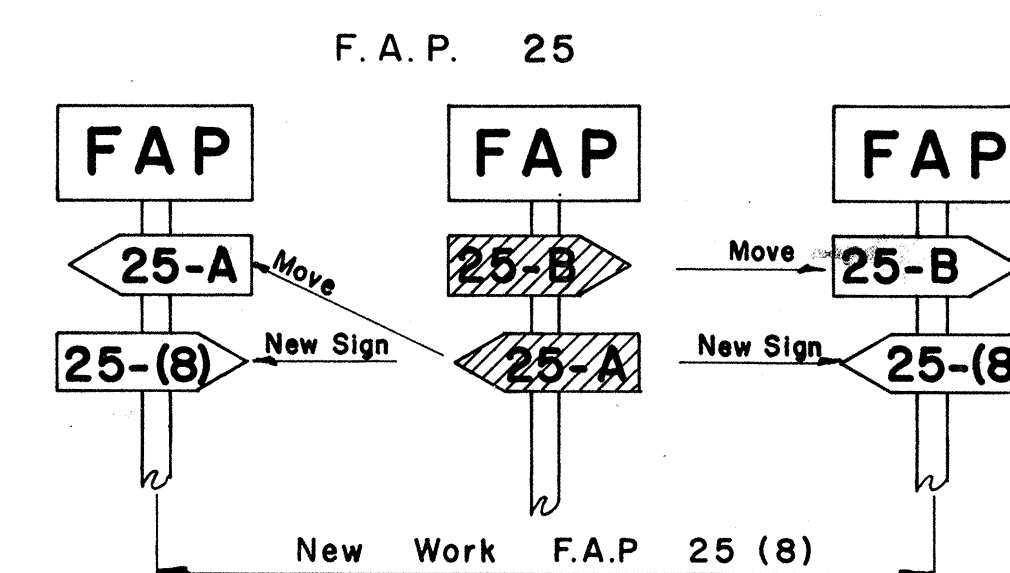


FEDERAL AID MARKER

Scale: $\frac{1}{2}$ " = 1' - 0"

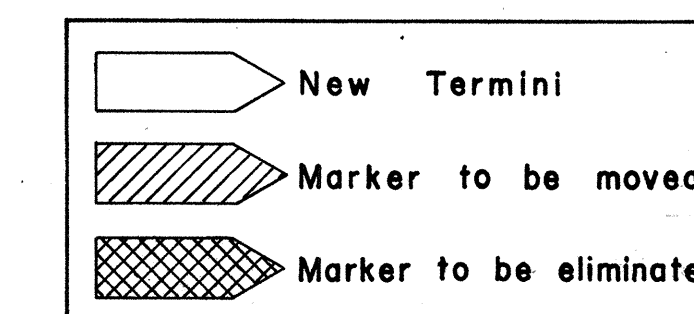


METHOD OF MARKING F.A. PROJECTS AT OVERLAPS
(USING NUMBER SUFFIX ON NEW WORK)



REFLECTOR MARKERS

Scale: As Shown

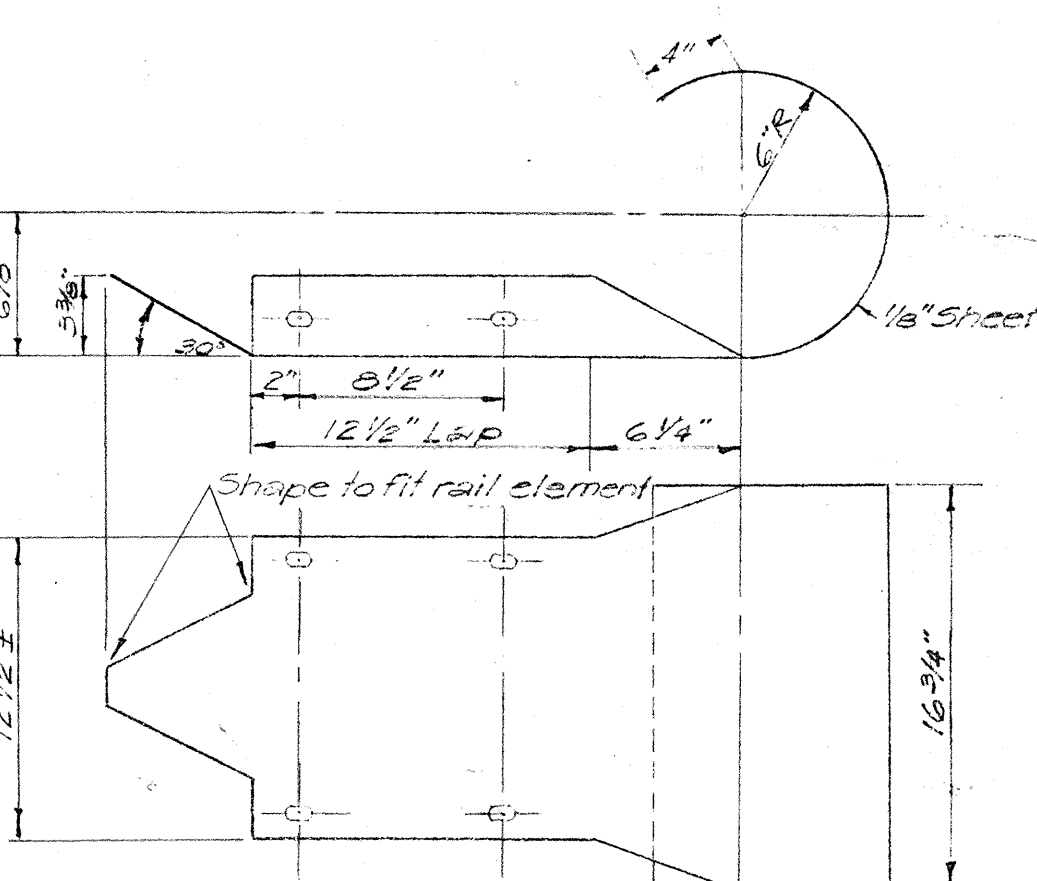
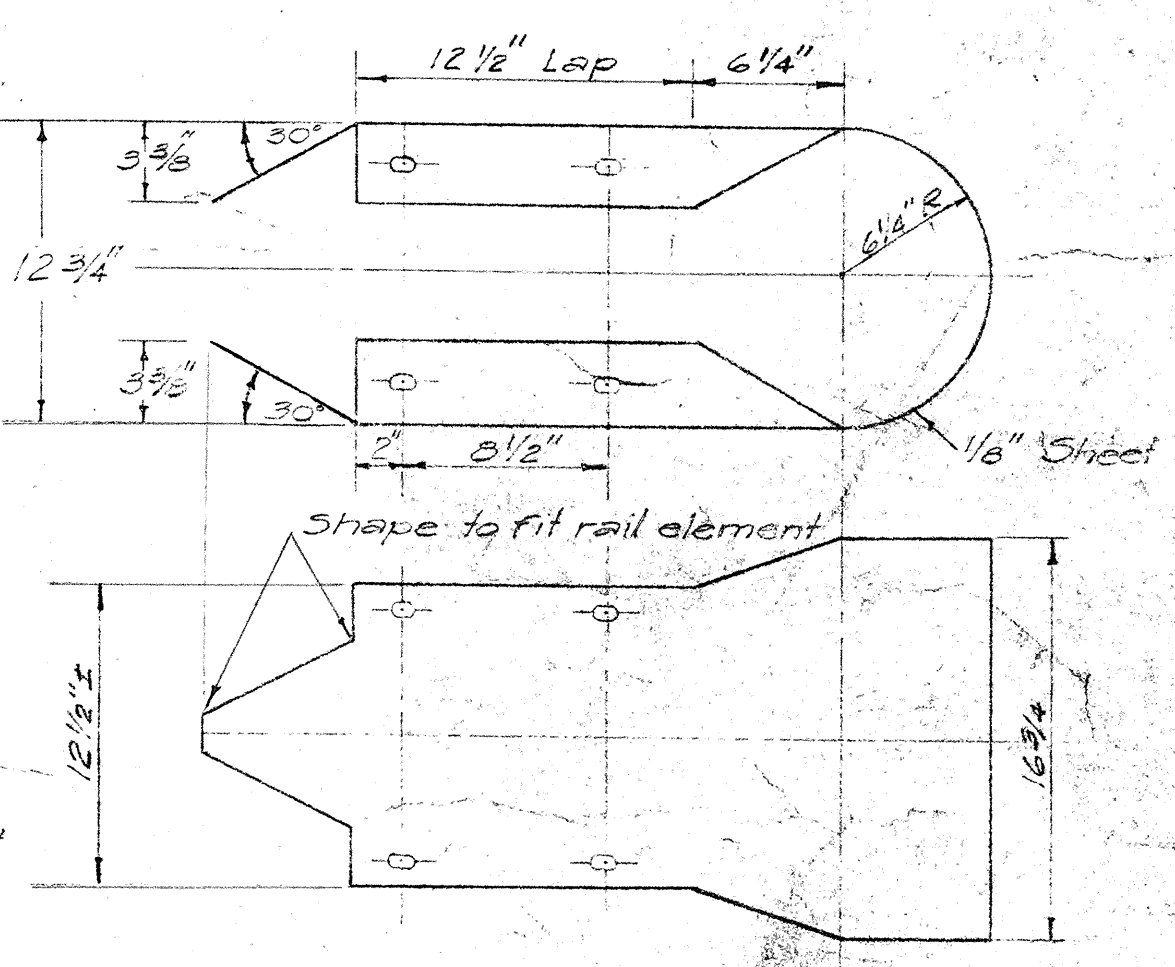
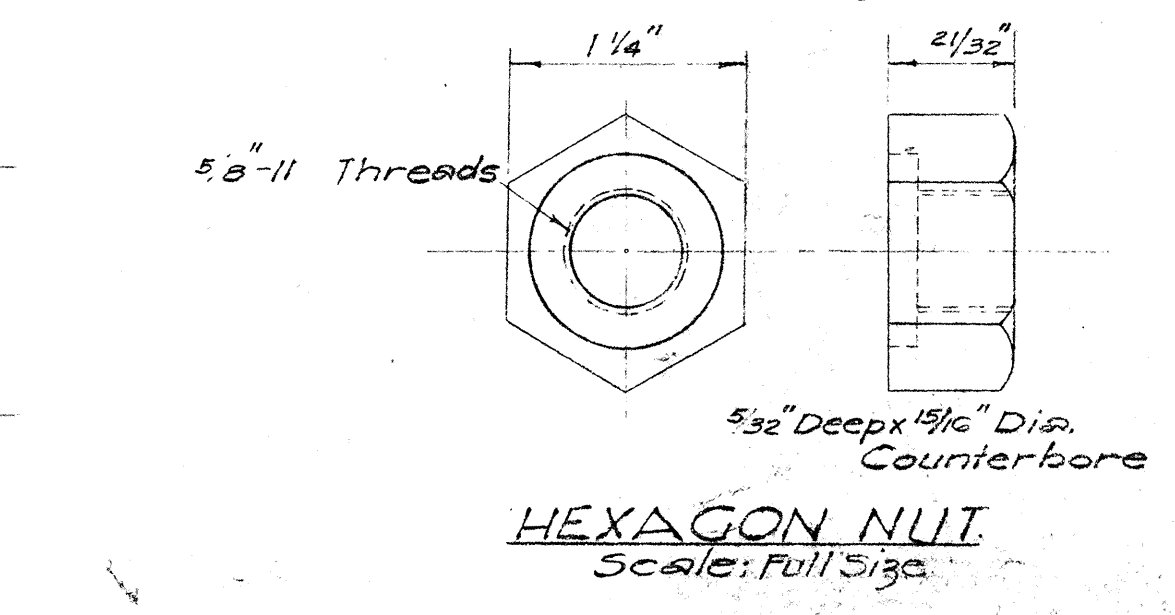
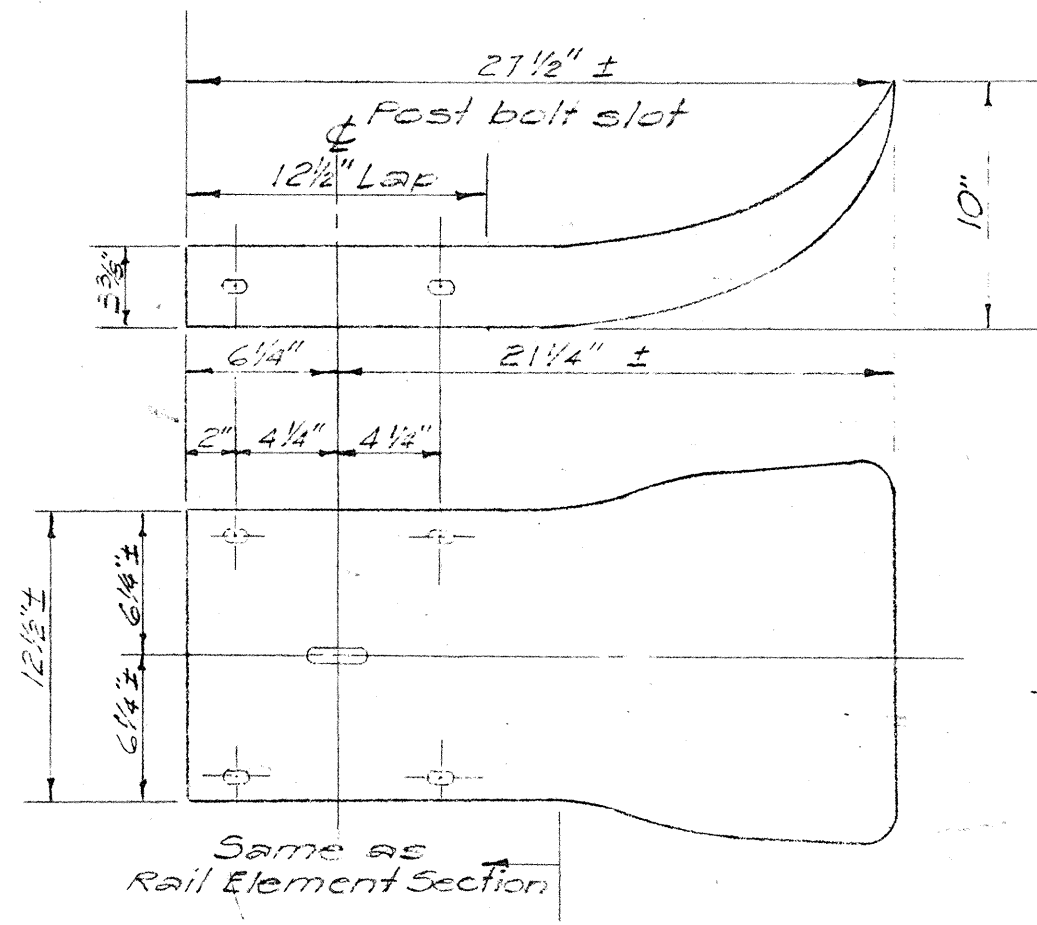
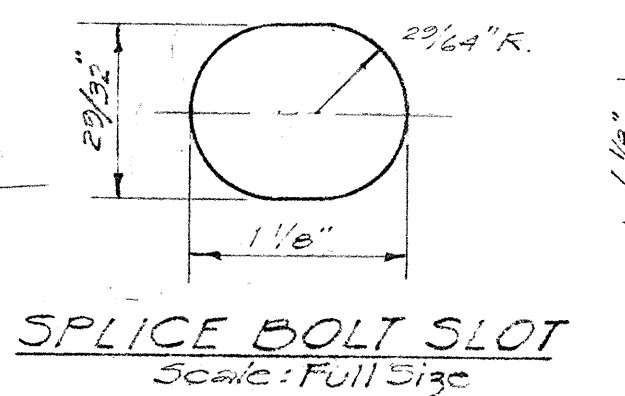
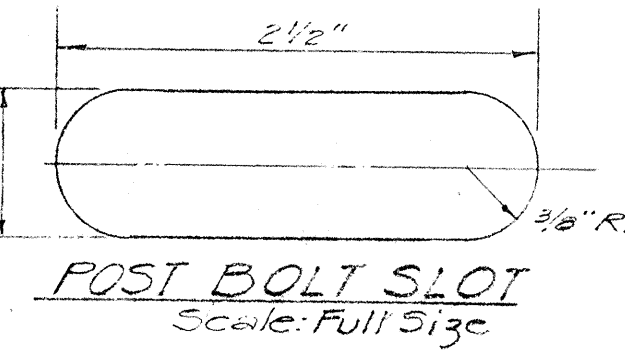
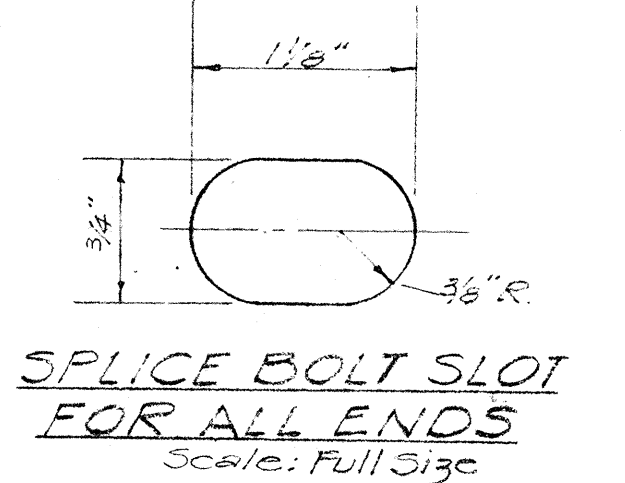
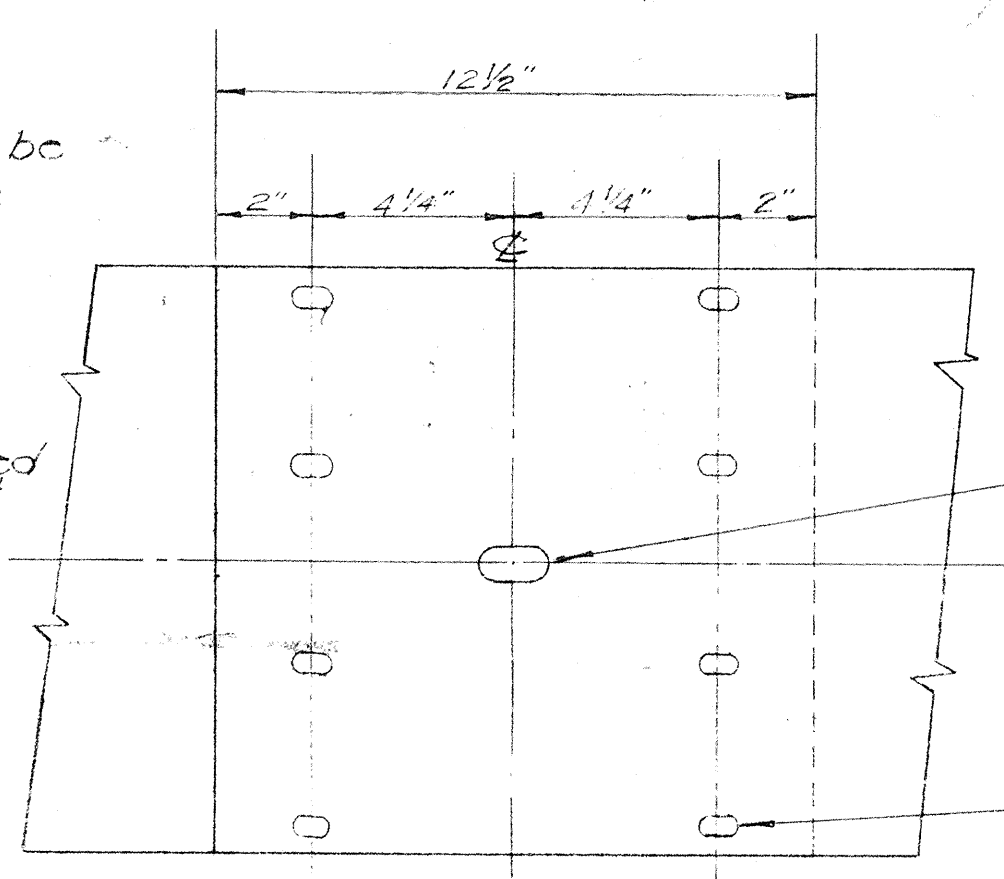
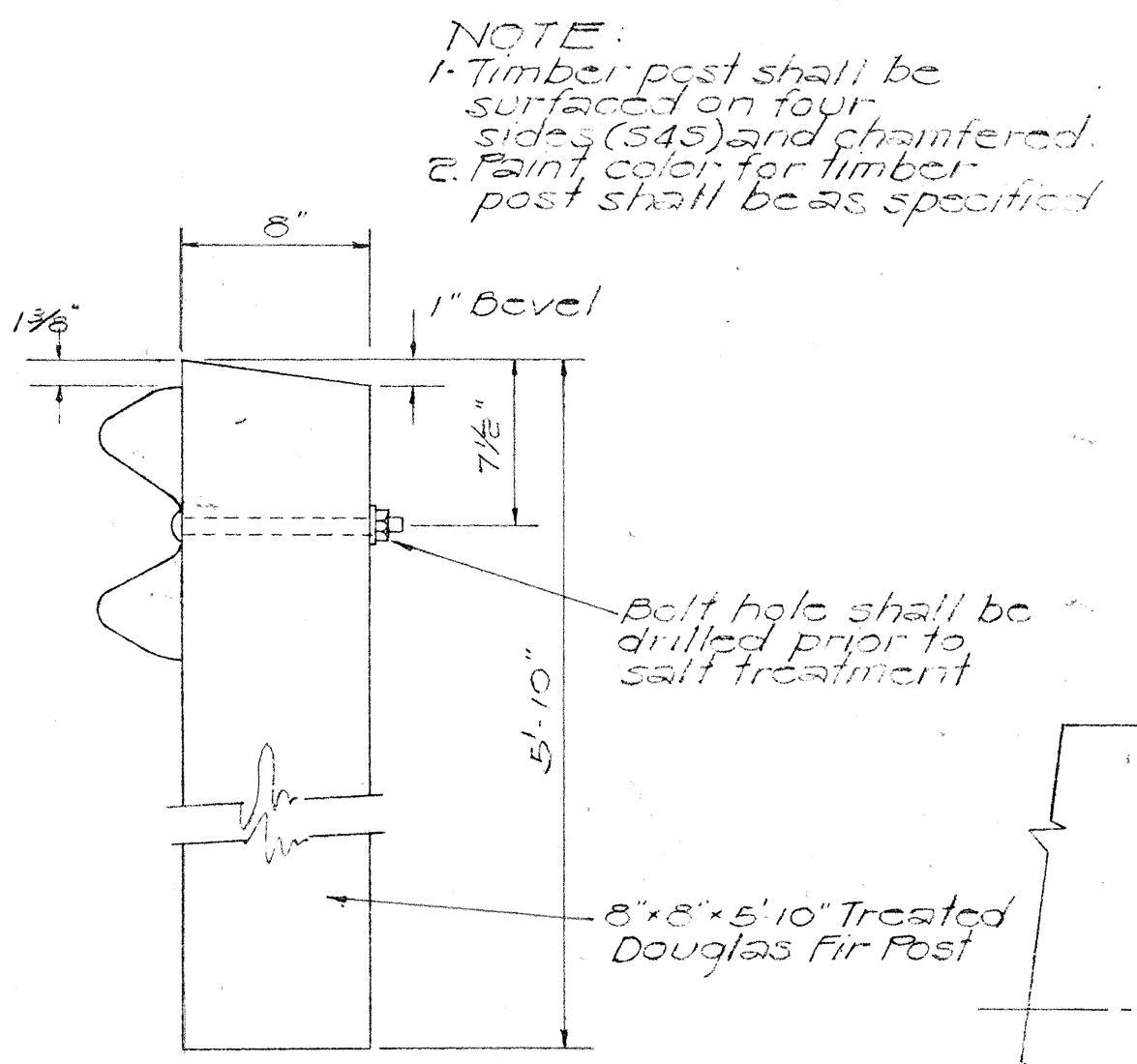
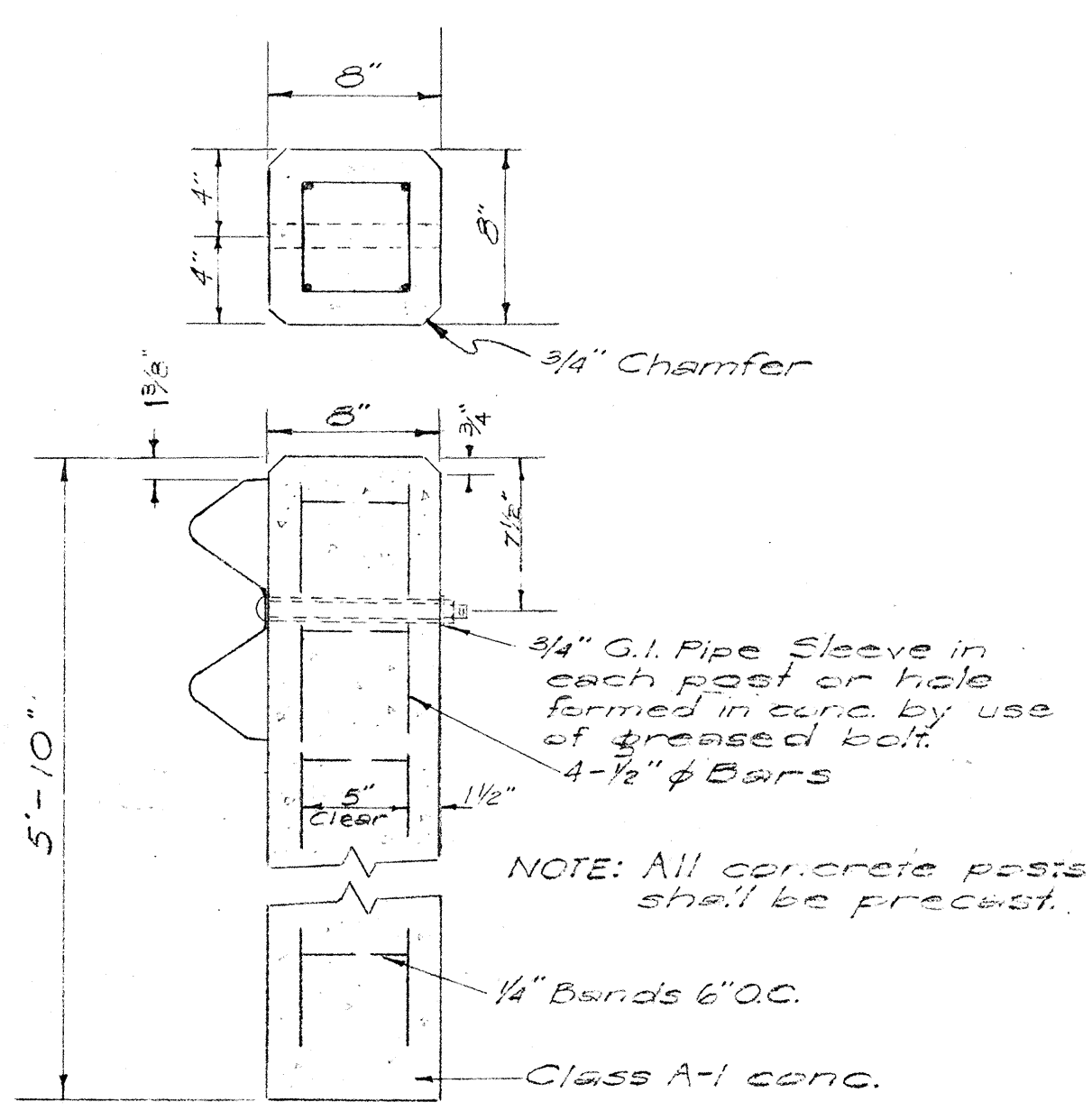
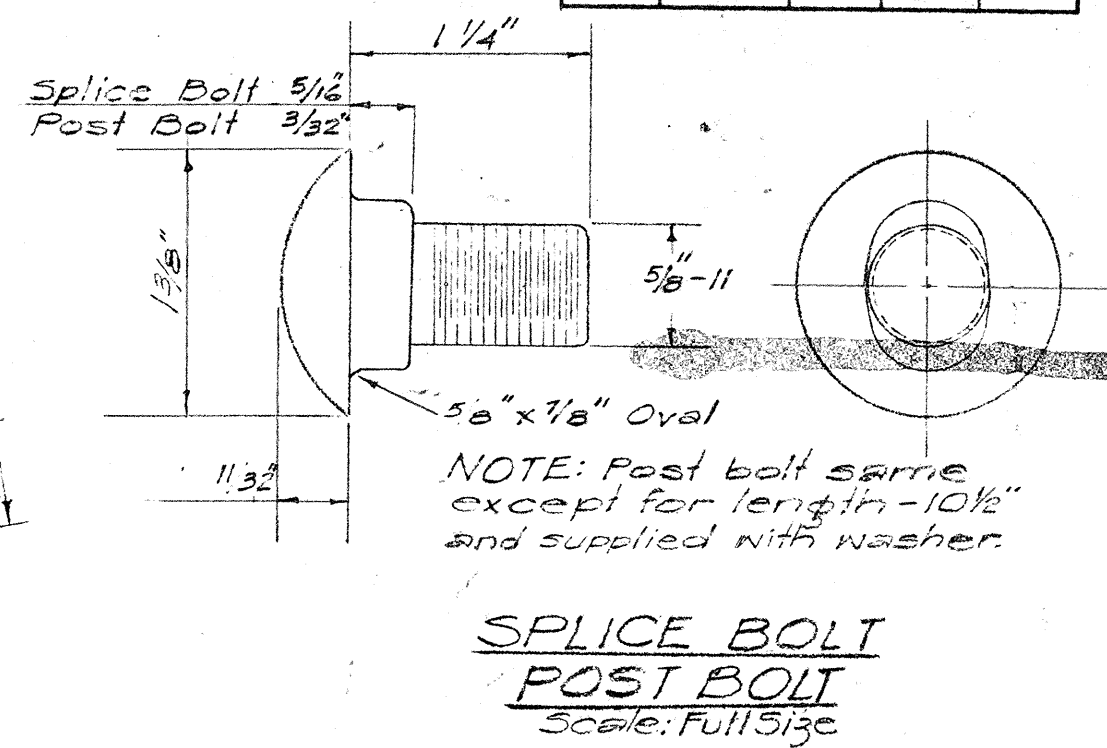
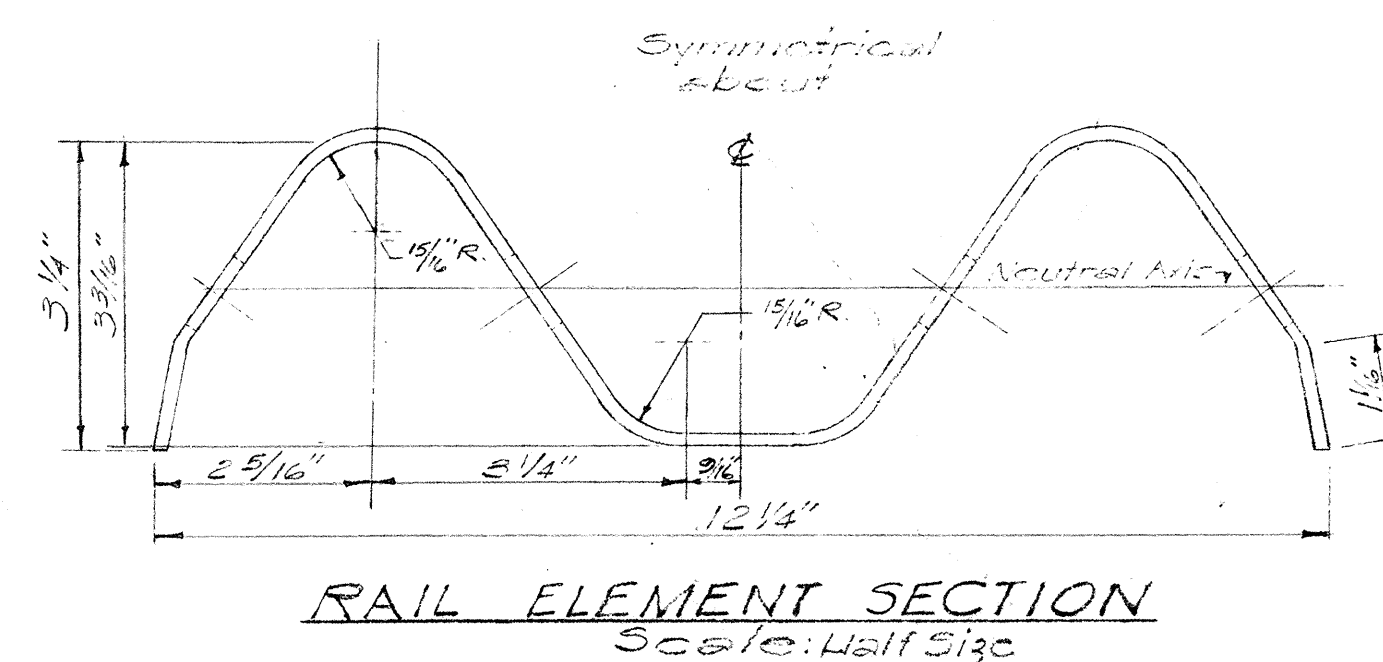
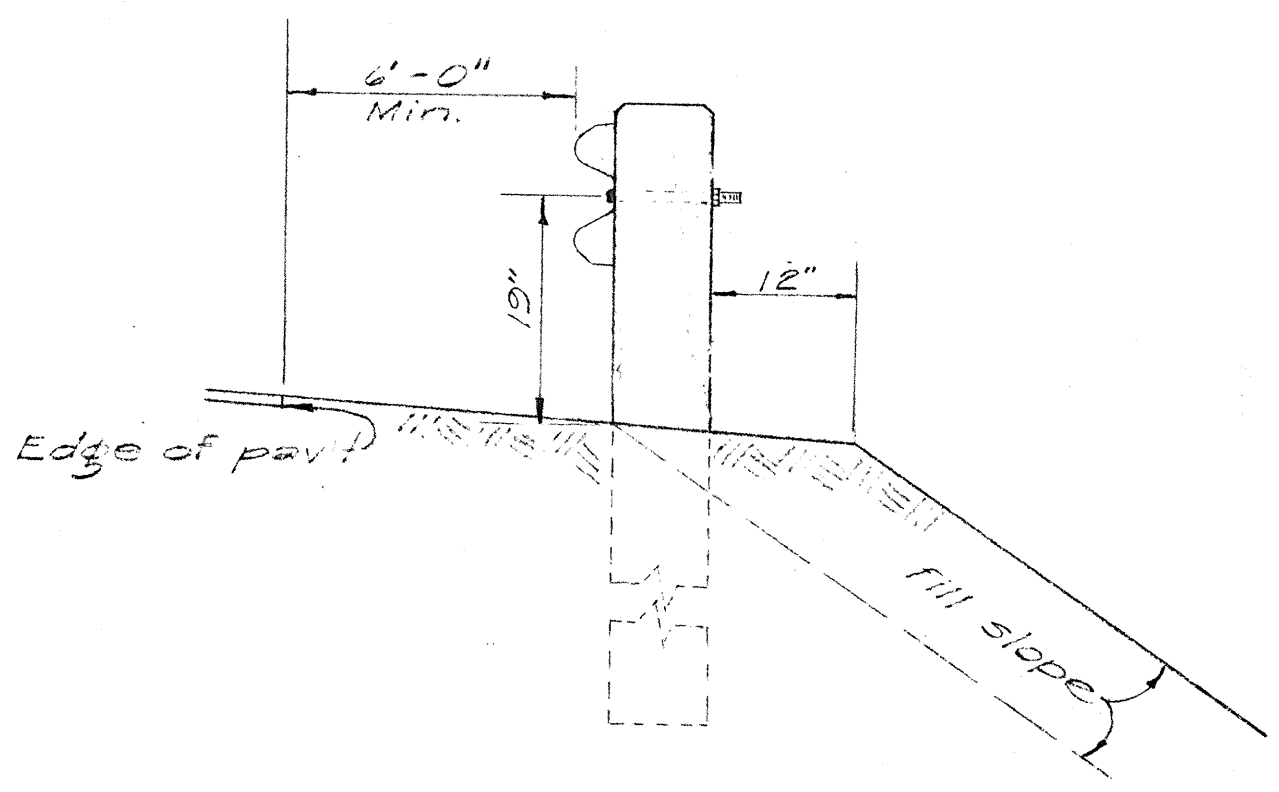
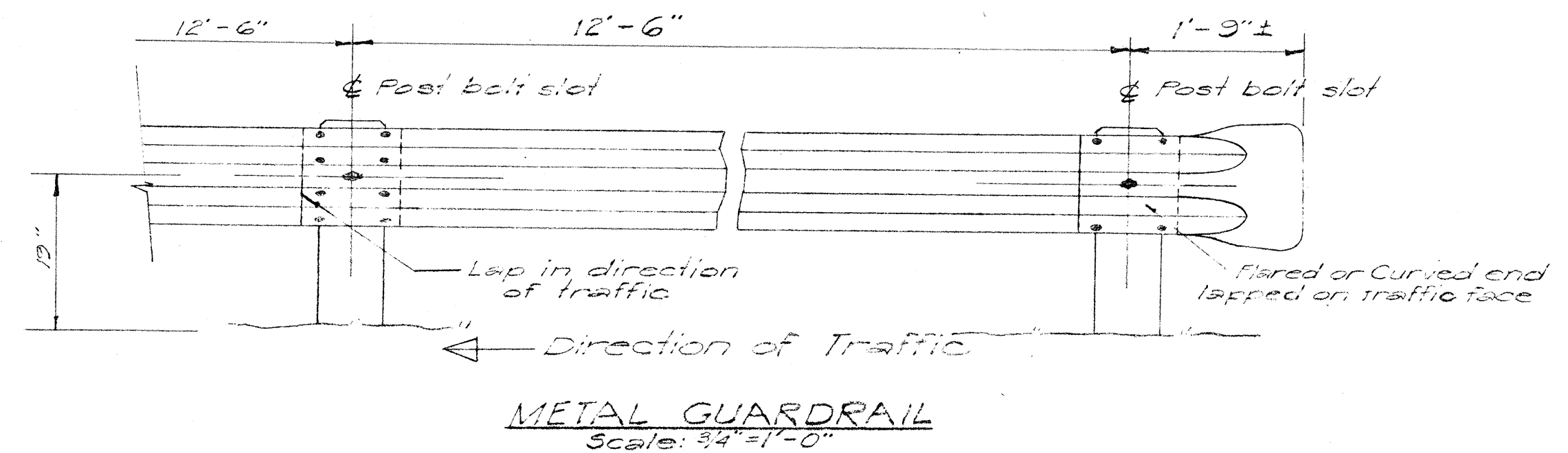


APPROVED: _____ DATE: 1/23/61

DIRECTOR OF TRANSPORTATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
F. A. MARKER
AND
MISCELLANEOUS SIGN
DETAILS
Scale: As Shown

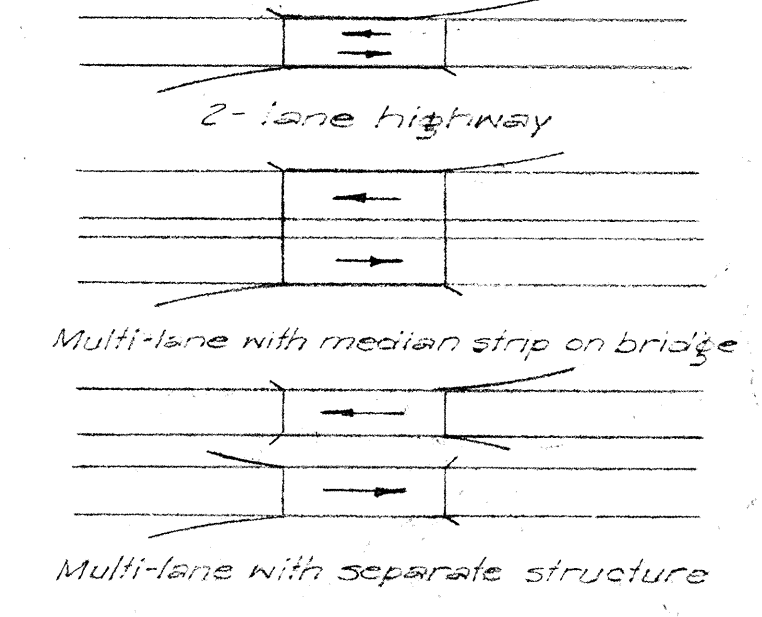
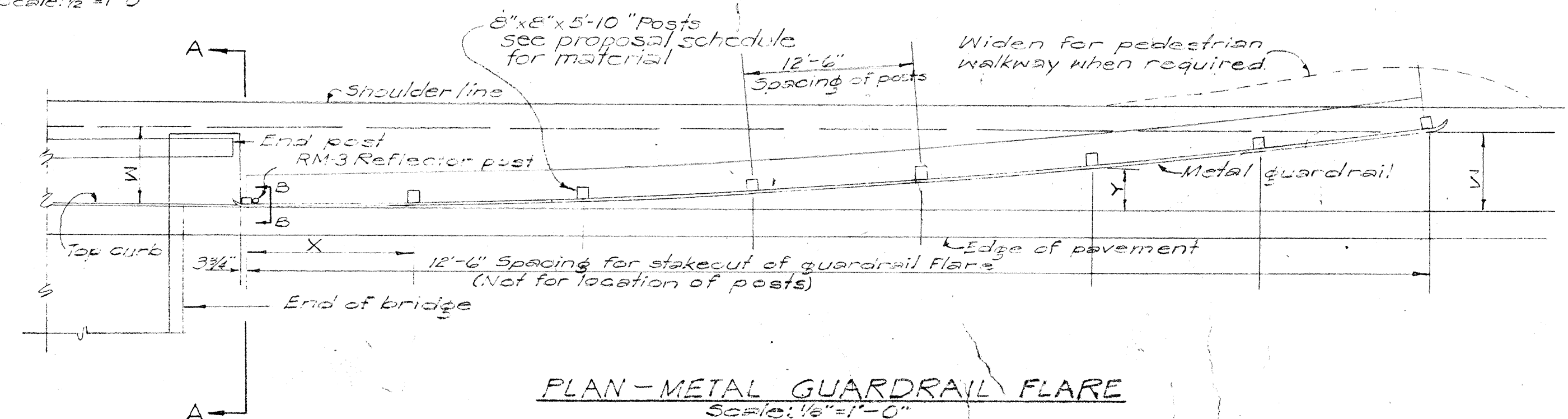
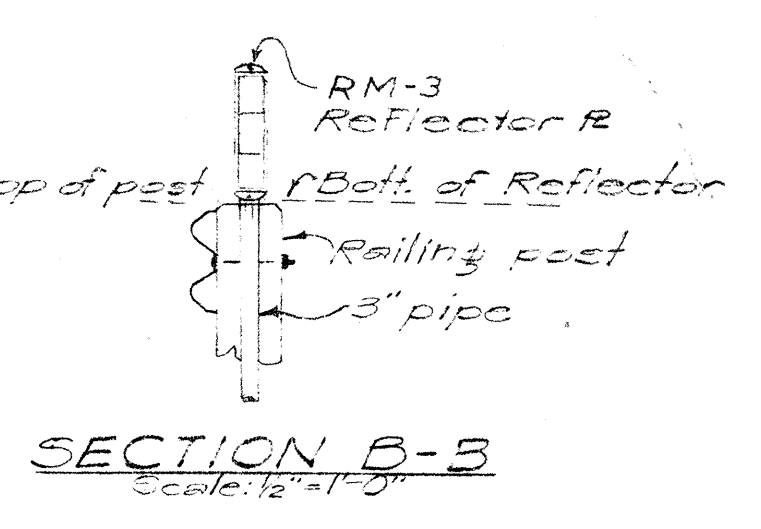
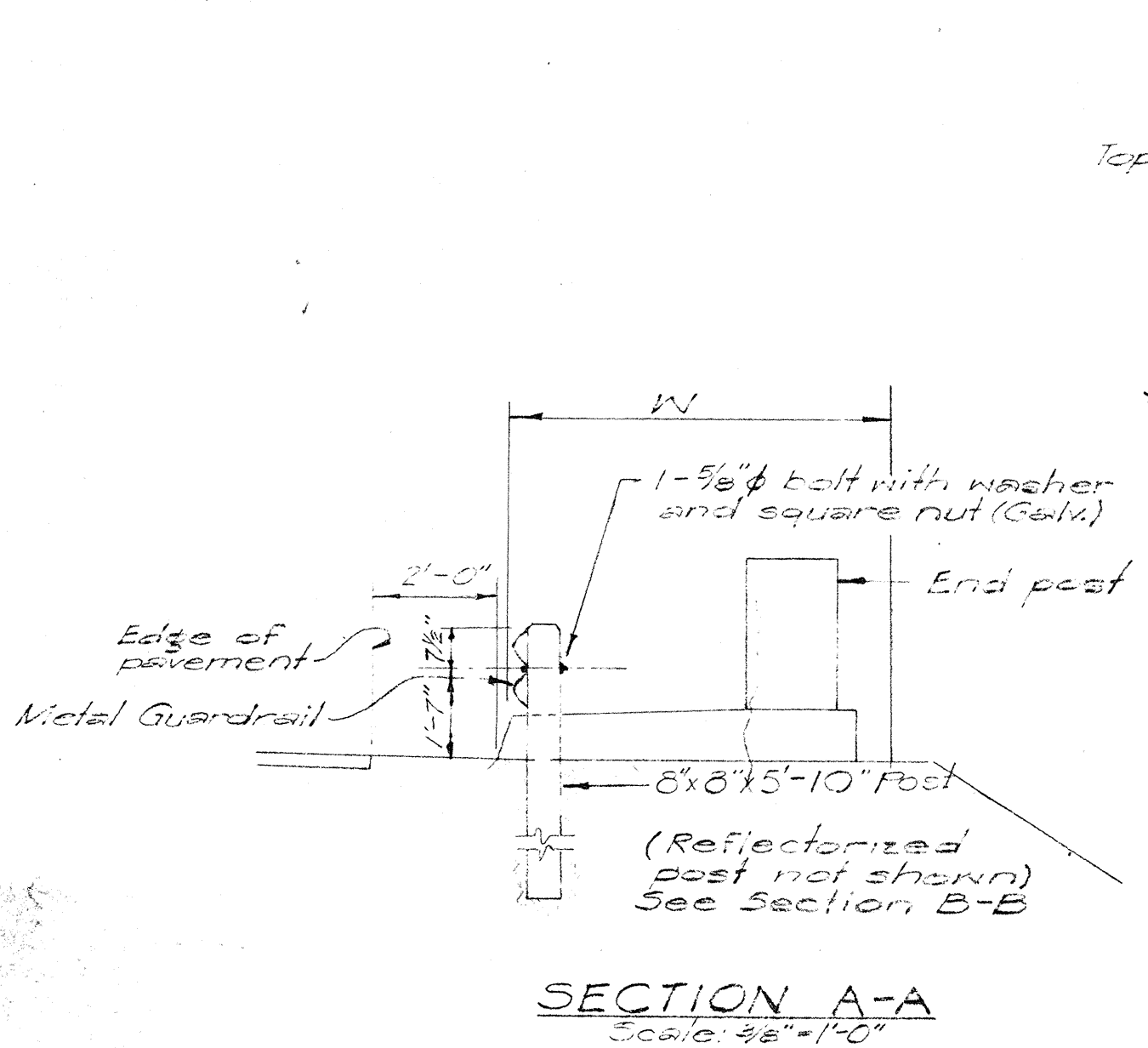
SHEET No. OF SHEETS



GUARDRAIL OFFSET

X	Y					
	N=3'	N=4'	N=5'	N=6'	N=7'	N=8'
12.5	0.19	0.16	0.14	0.12	0.09	0.08
25.0	0.75	0.64	0.55	0.49	0.35	0.32
37.5	1.69	1.44	1.25	1.10	0.78	0.72
50.0	3.00	2.56	2.22	1.96	1.38	1.28
62.5		4.00	3.47	3.06	2.16	2.00
75.0			5.00	4.41	3.17	2.88
87.5				6.00	4.23	3.92
100.0					5.53	5.12
112.5					7.00	6.48
125.0						8.00

W = Guardrail Flare.
X = Distance from post at bridge to offset points.
Y = Guardrail flare offset.



DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII

STANDARD DETAILS
METAL GUARD RAILS

KAWAIHAE - PUAKO ROAD
PROJ. NO. G-3257-01-60

SCALE: AS SHOWN

DATE
DESIGNED BY
DRAWN BY
CHECKED BY
QUANTITIES CHECKED BY
NO.