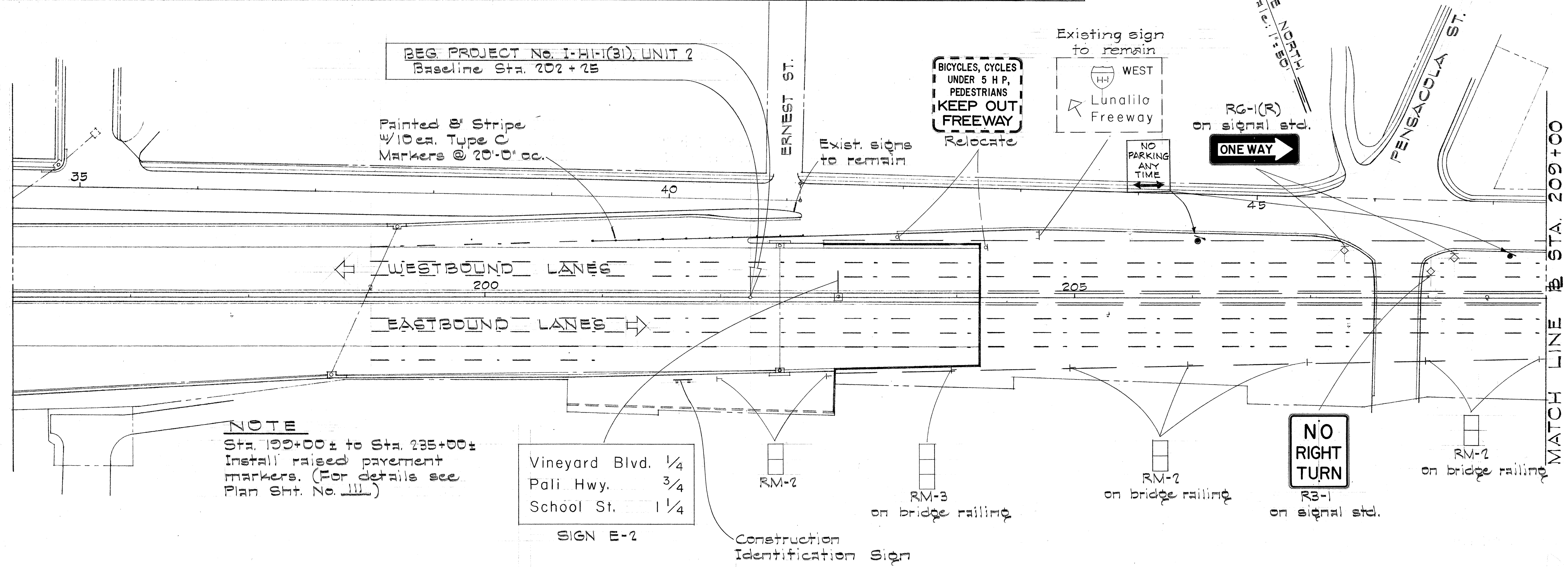
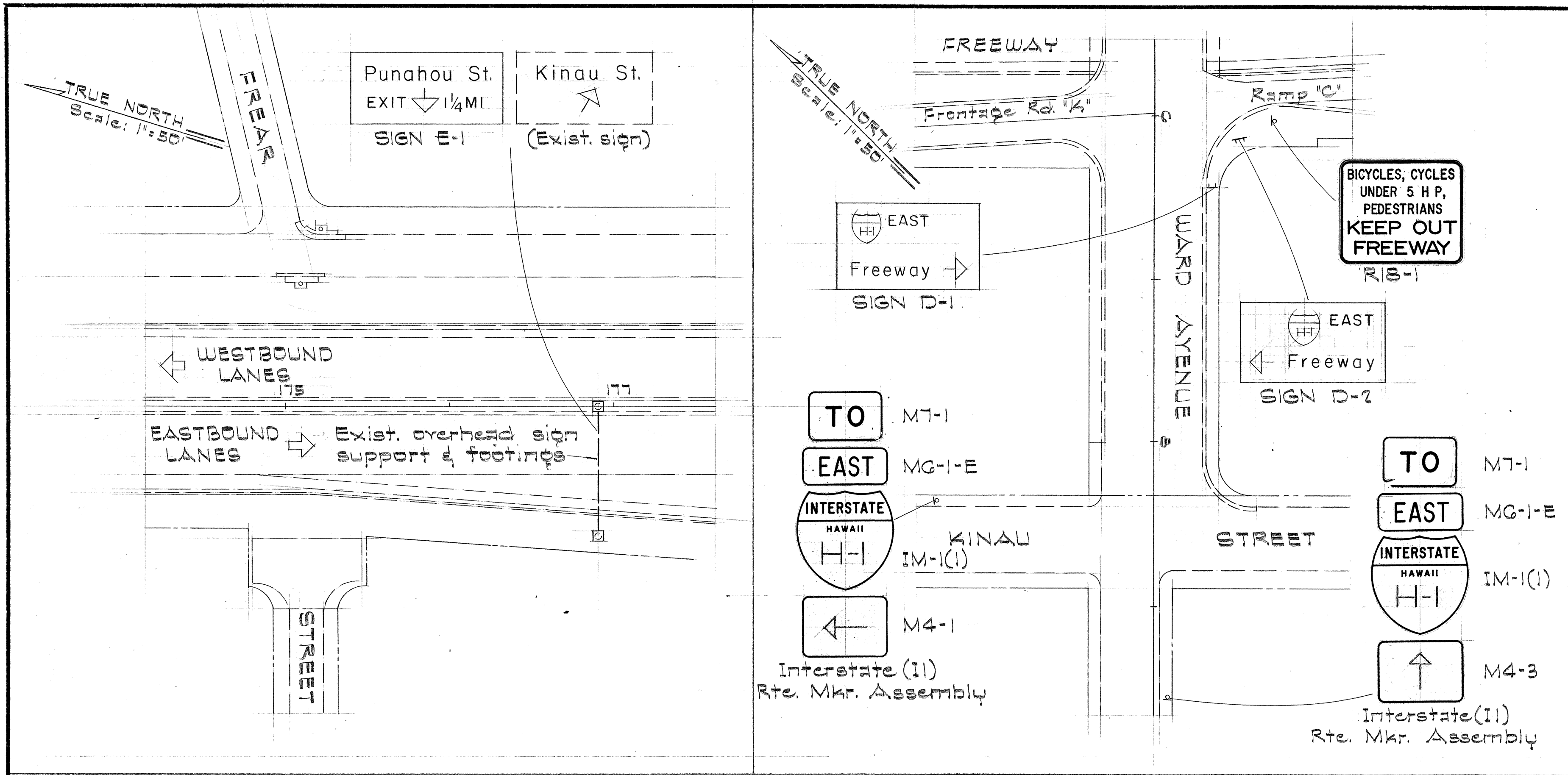


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(31) UNIT 2	1967	88	217



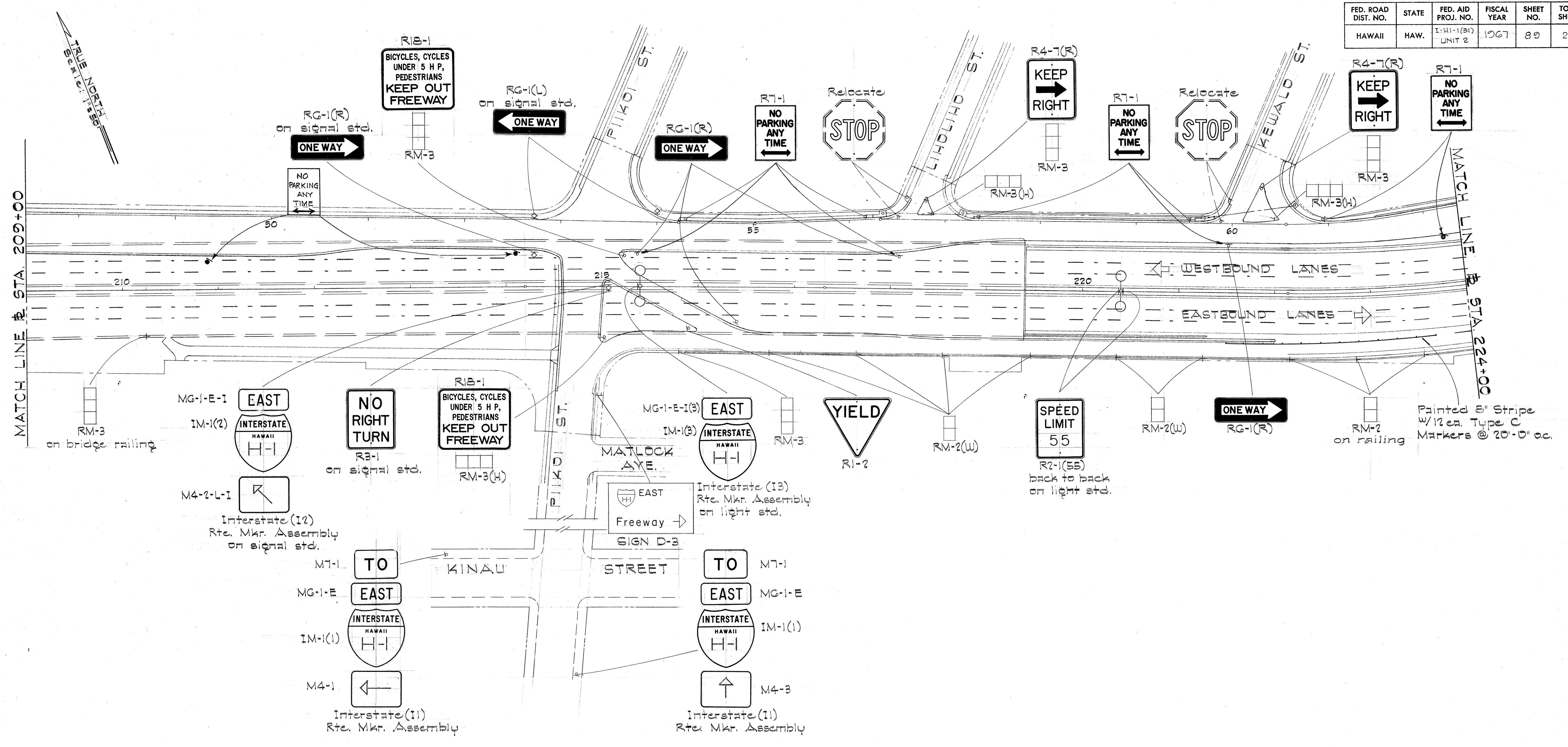
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TRAFFIC SIGNS
AND
PAVEMENT MARKINGS**

INTERSTATE ROUTE H-1
Victoria St. to Keolu St.
F.A.I. Proj. No. I-HI-1(31), Unit 2
Scale: As Shown April 1967

SHEET No. 1 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(31) UNIT 2	1967	89	217



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TRAFFIC SIGNS
AND
PAVEMENT MARKINGS**

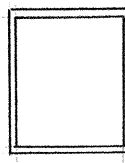
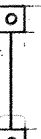
INTERSTATE ROUTE H-1
Victoria St to Keeaumoku St
F.A.I. Proj. No. I-HI-1(31), Unit 2
Scale: As Shown April 1967

SHEET No. 2 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(31) UNIT 2	1967	91	217

SUMMARY OF REGULATORY & WARNING SIGNS				
TYPE	DESCRIPTION	QUANTITY		
		w/ Post	w/o Post	Relocate
R1-1	STOP	1		2
R1-2	YIELD	1		
R2-1(55)	SPEED LIMIT - 55		2	
R3-1	NO RIGHT TURN		3	
R4-7(R)	KEEP → RIGHT	2		
R5-5(1)	WRONG WAY		1	
RG-1(R)	ONE WAY →	4	3	
RG-1(L)	← ONE WAY		2	
R7-1	NO PARKING ANYTIME ↔	9		
R7-1(R)	" " " →	6		
R7-1(L)	" " " ←	6		
R18-1	KEEP OUT FREEWAY	3		1
W1-G(R)	→	1		
W13-3(25)	EXIT 25 MPH		1	
W13-4	NOT A THROUGH STREET	1		
R5-1	DO NOT ENTER	1		
TOTAL		35	12	3

TRAFFIC SIGN LEGEND

-  New Sign
-  Existing Sign
- b Sign mounted on galvanized iron pipe.
- r Reflector marker (Type of mounting as shown on plans).
-  Overhead Expressway Sign (Span)
-  Overhead Expressway Sign (Cantilever)
-  Ground mounted Destination Sign.
-  Sign mounted on traffic signal standard.
-  Sign mounted on light standard.
-  Construction Identification Sign.

GENERAL NOTES

- Exact location of signs to be determined in the field by the Engineer.
- Existing signs not incorporated in the completed highway shall be removed unless otherwise noted. (All costs incidental to the various contract items).

SUMMARY OF REFLECTOR MARKERS			
TYPE	DESCRIPTION	QUANTITY	
		w/ Post	w/o Post
RM-1	Single Unit - Clear	4	1
RM-2	Double Unit - Amber	4	
RM-2(W)	" " " on wall		6
RM-2 (BRIDGE RAIL)	" " " on bridge rail		13
RM-2 (FENCE)	" " " on fence		3
RM-3	Triple Unit - Amber	2	3
RM-3(H)	" " " Horizontal	2	2
RM-3 (BRIDGE RAIL)	" " " on bridge rail		2
TOTAL		12	30

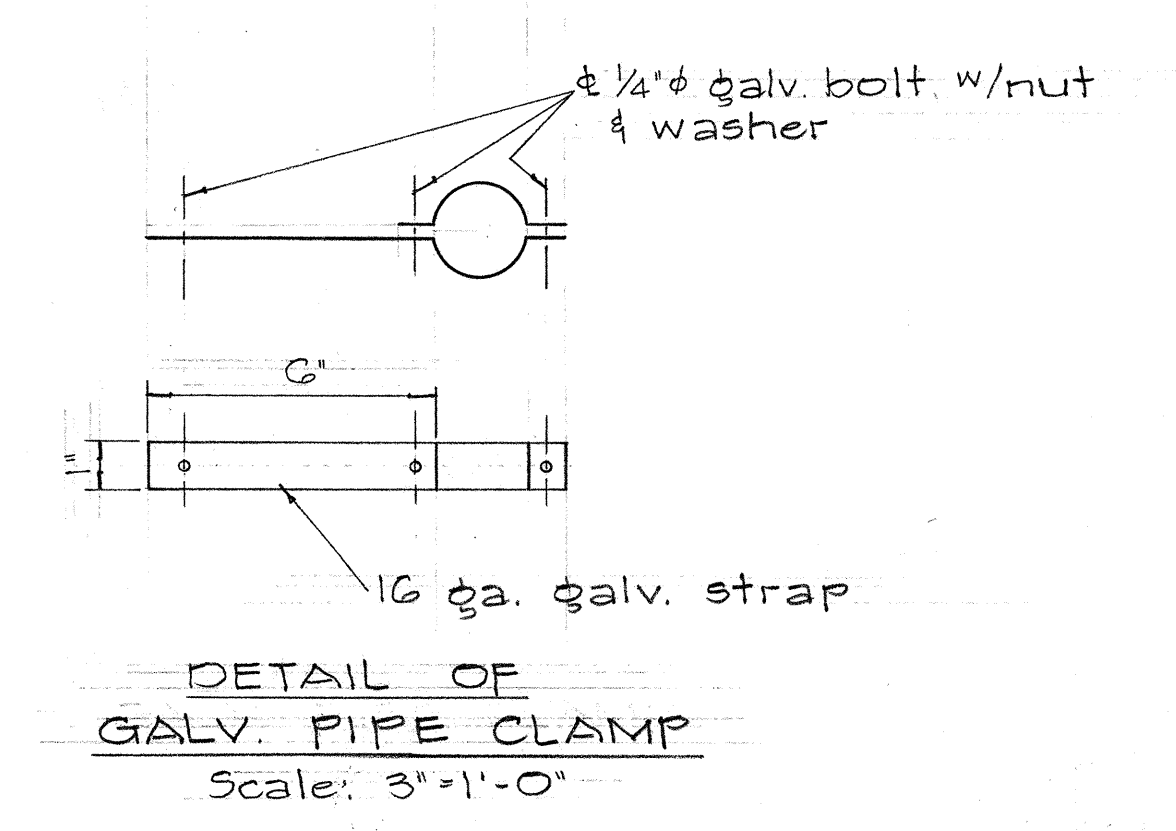
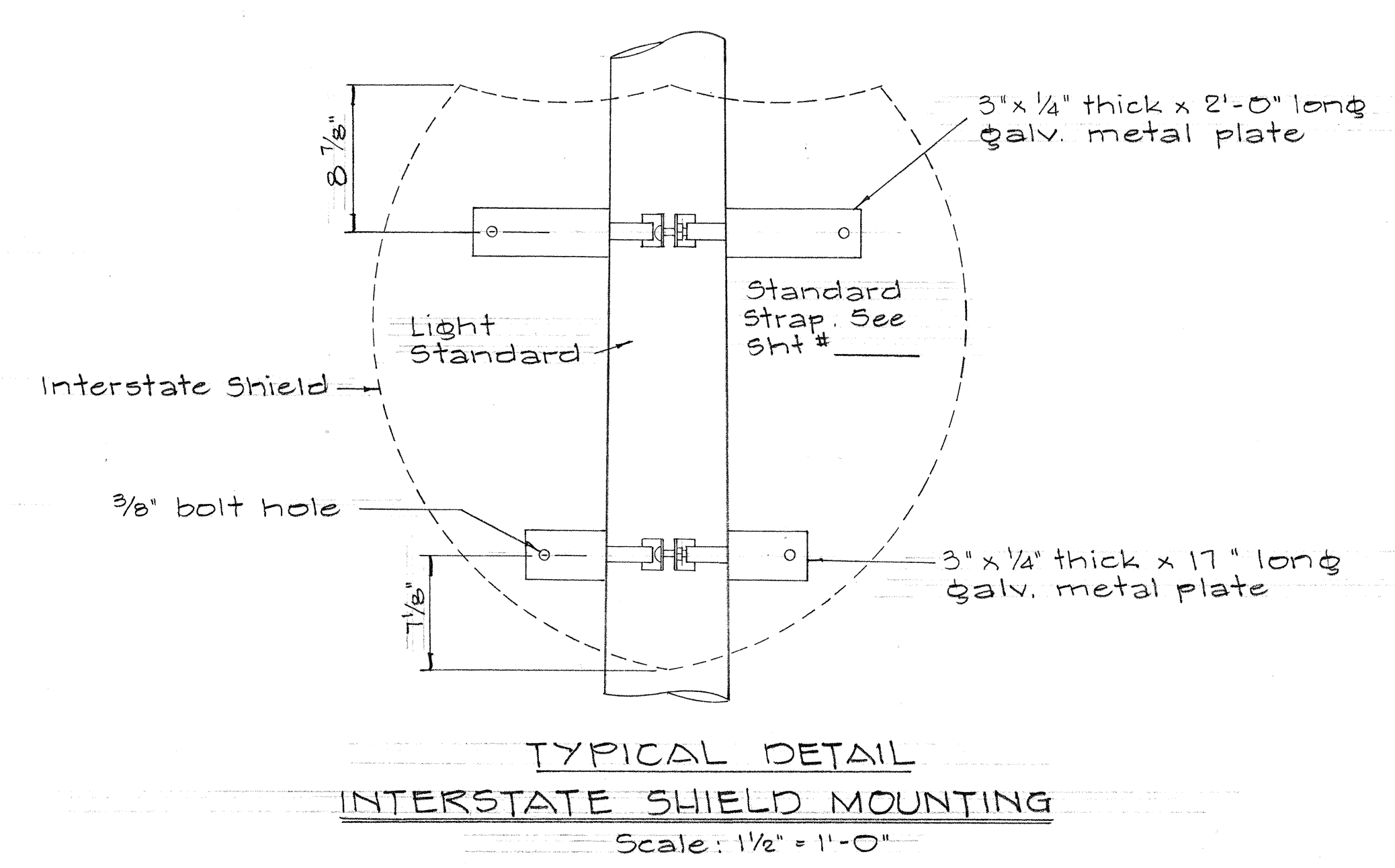
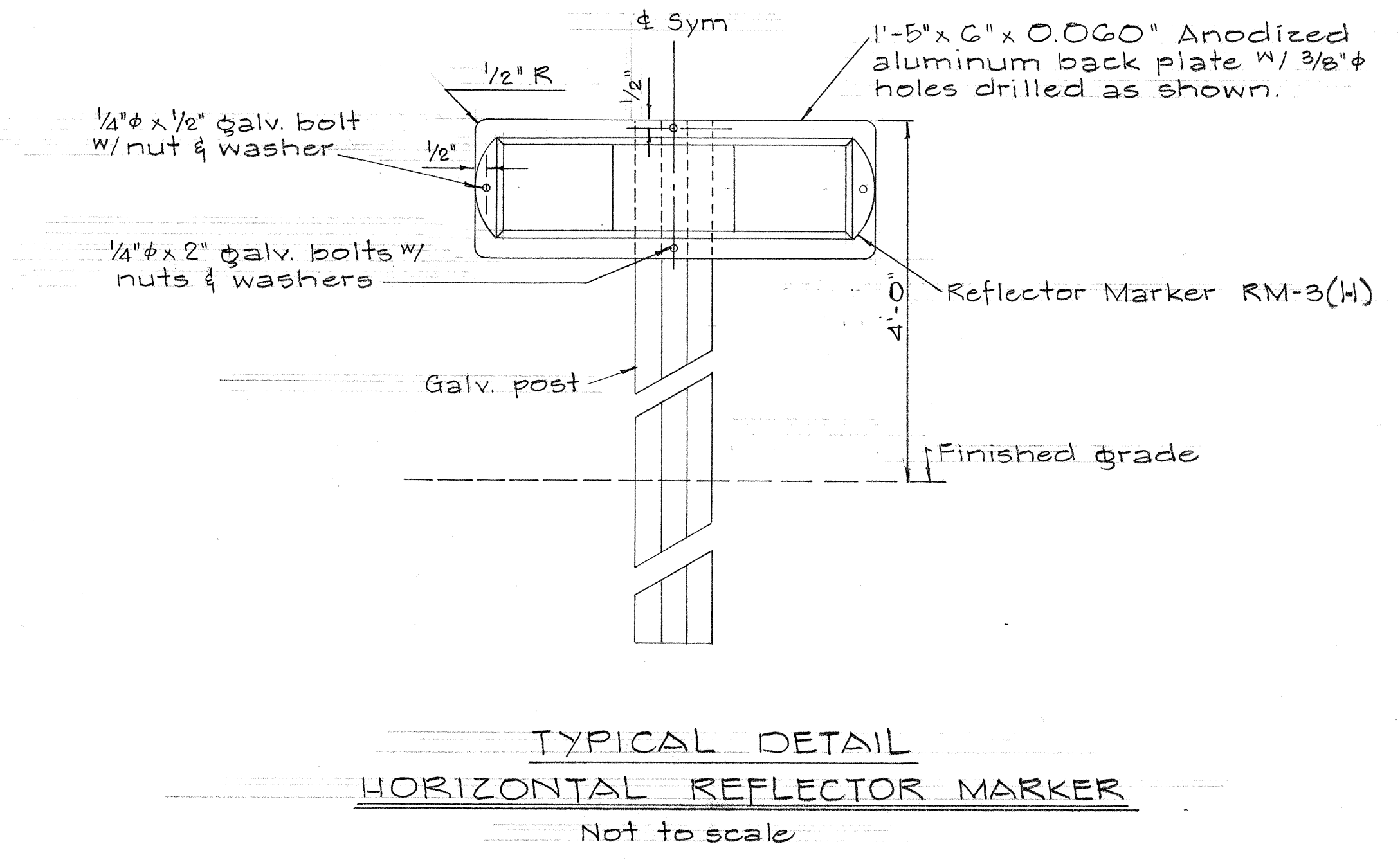
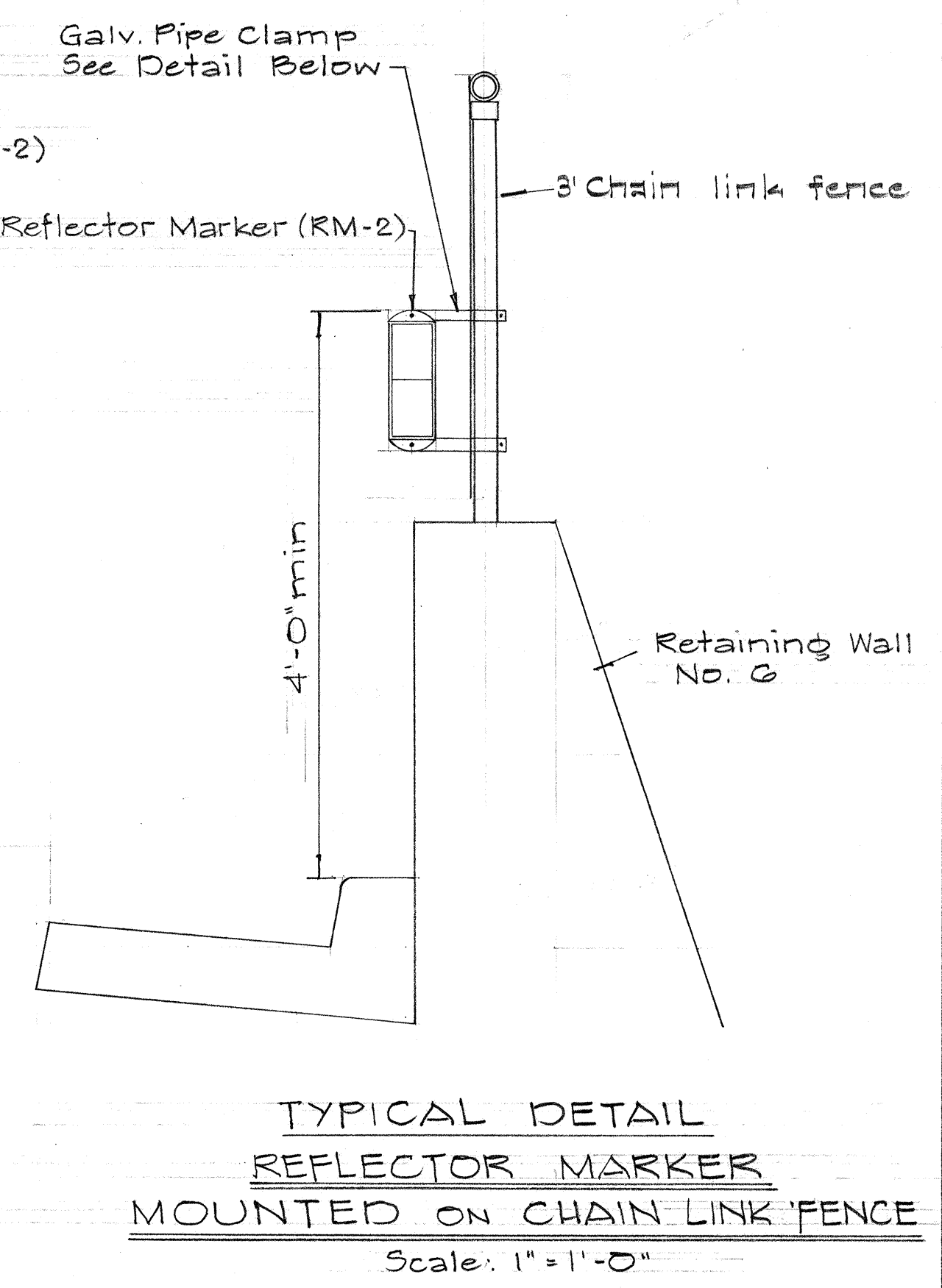
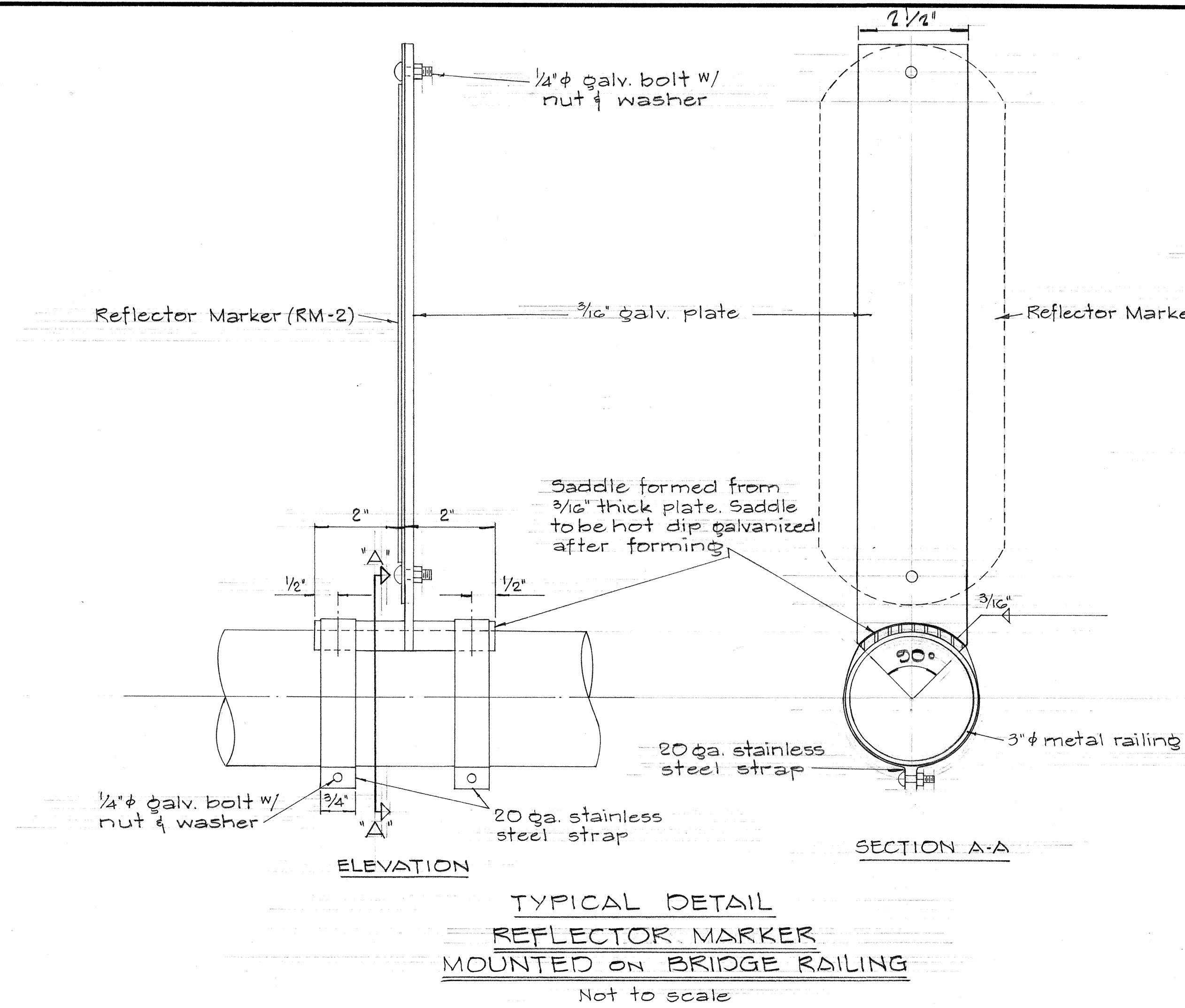
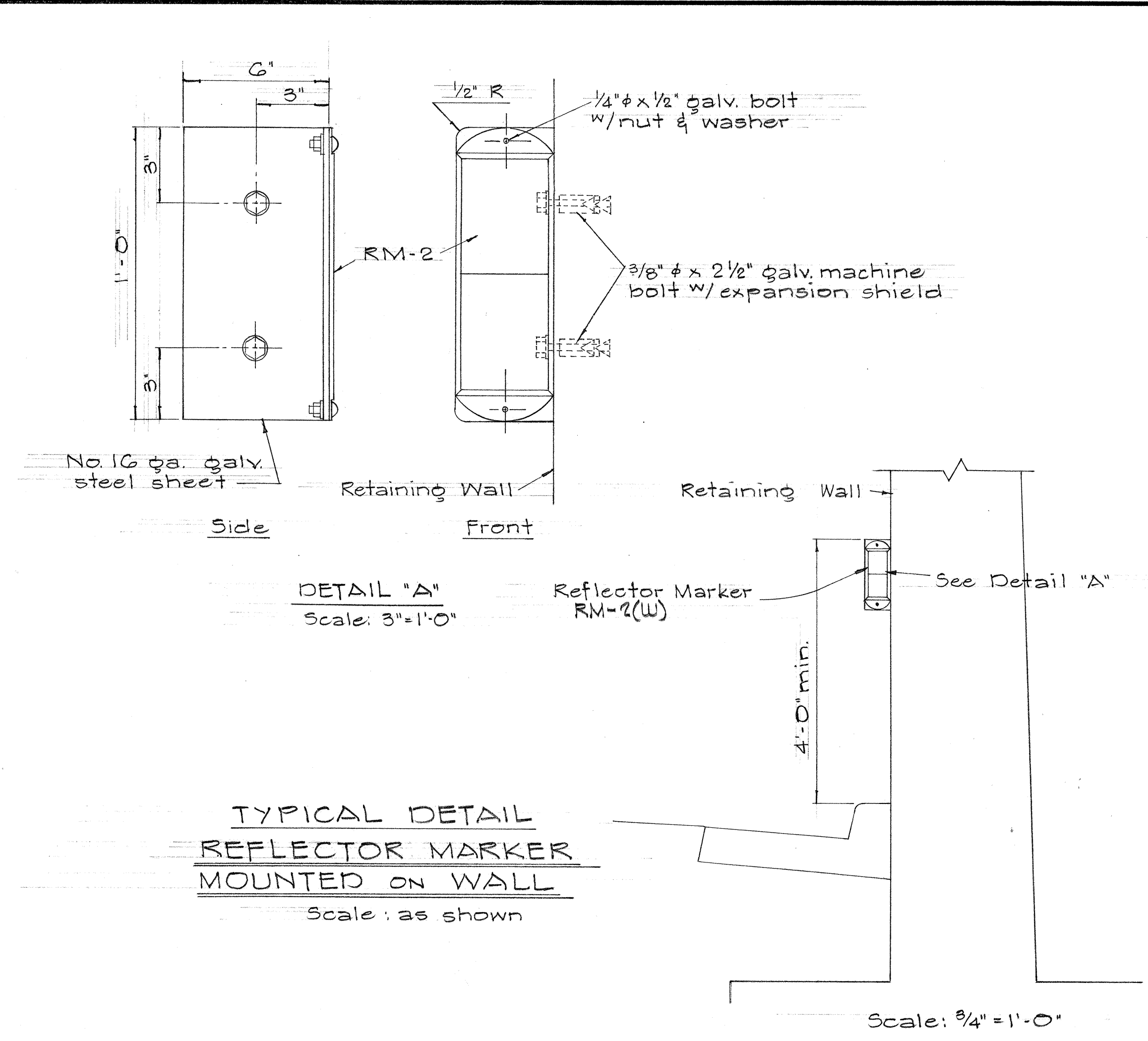
SUMMARY OF INTERSTATE ROUTE MARKER ASSEMBLIES			
TYPE	DESCRIPTION	QUANTITY	
		w/ Post	w/o Post
IM-1(1)	Interstate Shield - 18"	4	
IM-1(2)	" " 24"		1
IM-1(3)	" " 36"		2
M4-1	Auxiliary Marker - ←		2
M4-2-L-I	" " ↖		1
M4-3	" " ↑		2
MG-1-E	" " EAST		4
MG-1-E-I	" " EAST (WHITE ON BLUE)		1
MG-1-E-I(3)	" " EAST 30'x15'		2
M1-1	" " TO		4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGN SUMMARY

INTERSTATE ROUTE H-1
Victoria St. to Keeaumoku St.
F.A.I. Proj. No. I-HI-1(31), Unit 2
No Scale April 1967
SHEET No. 4 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(31) UNIT 2	1967	92	217



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1
Victoria St to Keeaumoku St.
F.A.I. Proj. No. I-HI-1(31), Unit 2
Scale: As Shown April 1967

SHEET No. 5 OF 25 SHEETS

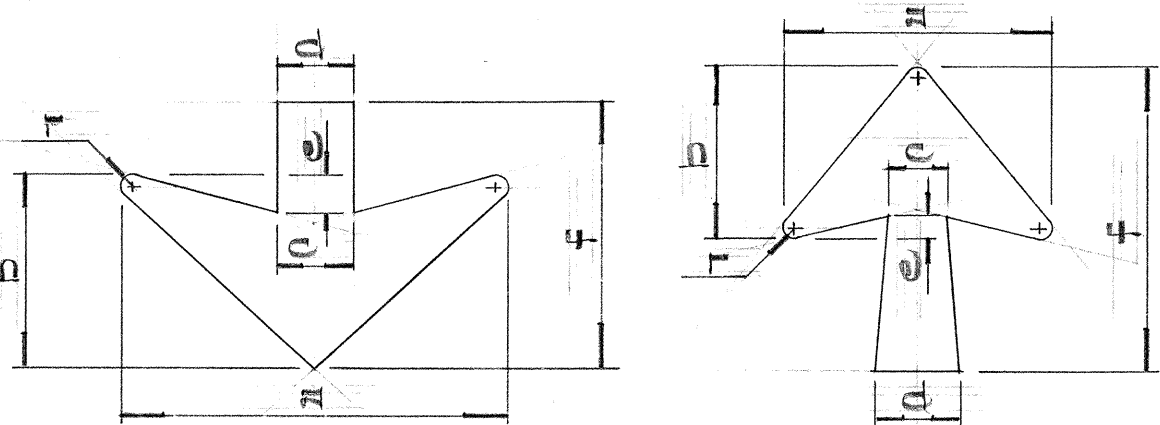
DATE	DESIGNED BY	TRACED BY	NOTED BY	CHECKED BY

GENERAL NOTES

1. Sign message shall be lettered in upper case according to "Standard Alphabets for Highway Signs", Bureau of Public Roads, 1952, and lower case according to "Standard Lower Case Alphabets for Highway Signs", Bureau of Public Roads, 1962. Use Series "E" modified letters unless otherwise noted.
2. Arrows, borders and route markers shall conform with details as shown on plans.
3. Letters, numerals, symbols and borders shall be demountable aluminum cut-outs with white reflective sheeting or clear reflex reflectors, and shall be fastened on the sign panel with blind rivets. See Special Provisions.
4. Destination Signs(D) shall have white reflective sheeting on aluminum cut-outs on green reflective sheeting background.
5. Expressway Signs(E) shall have either white reflective sheeting on aluminum cut-outs or clear reflex reflectors set in white porcelain enameled aluminum cut-outs. Background for the expressway signs shall be green porcelain enamel.

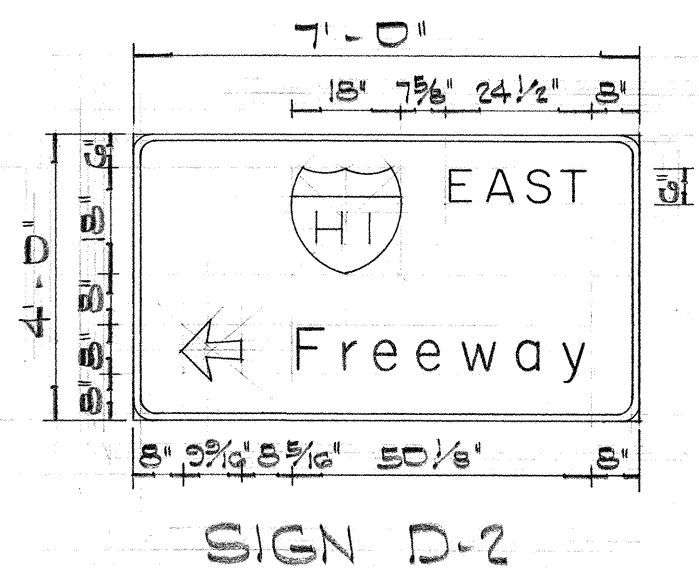
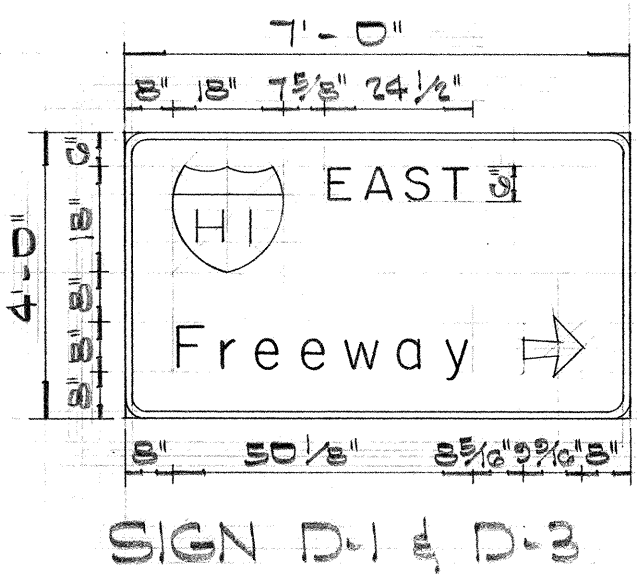
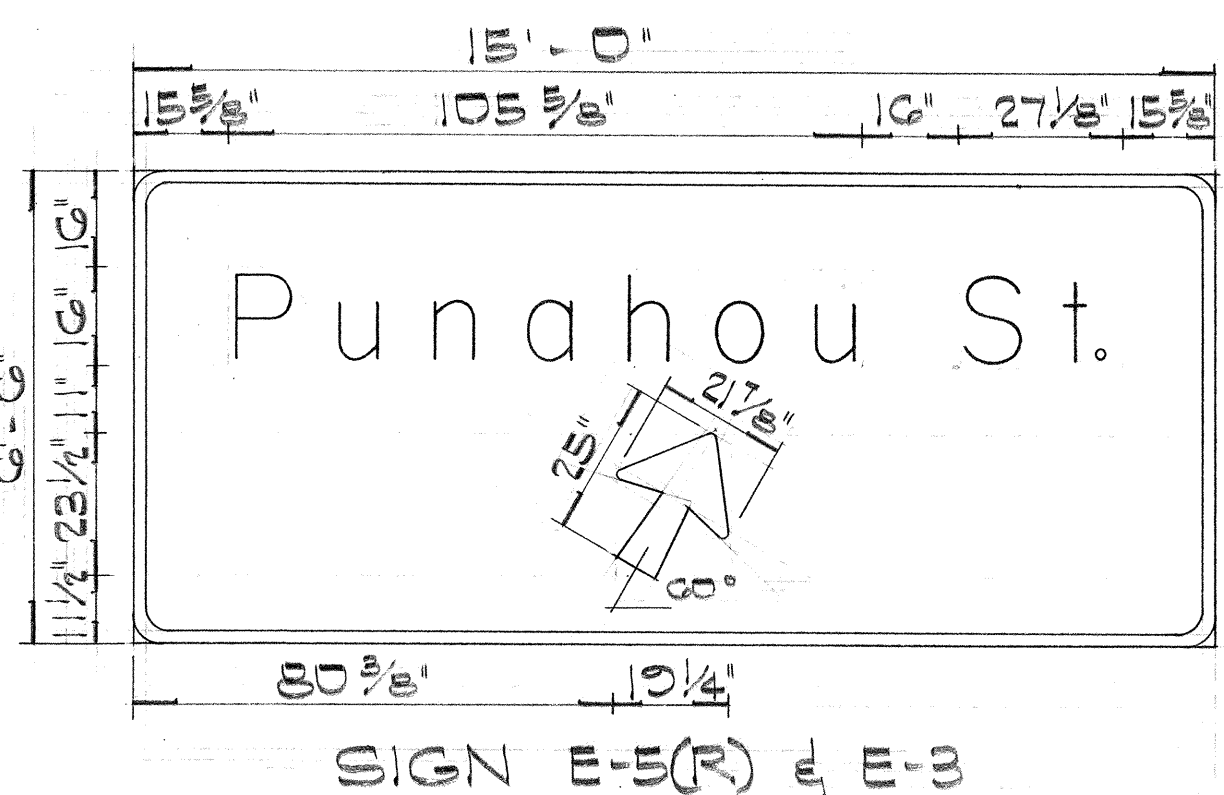
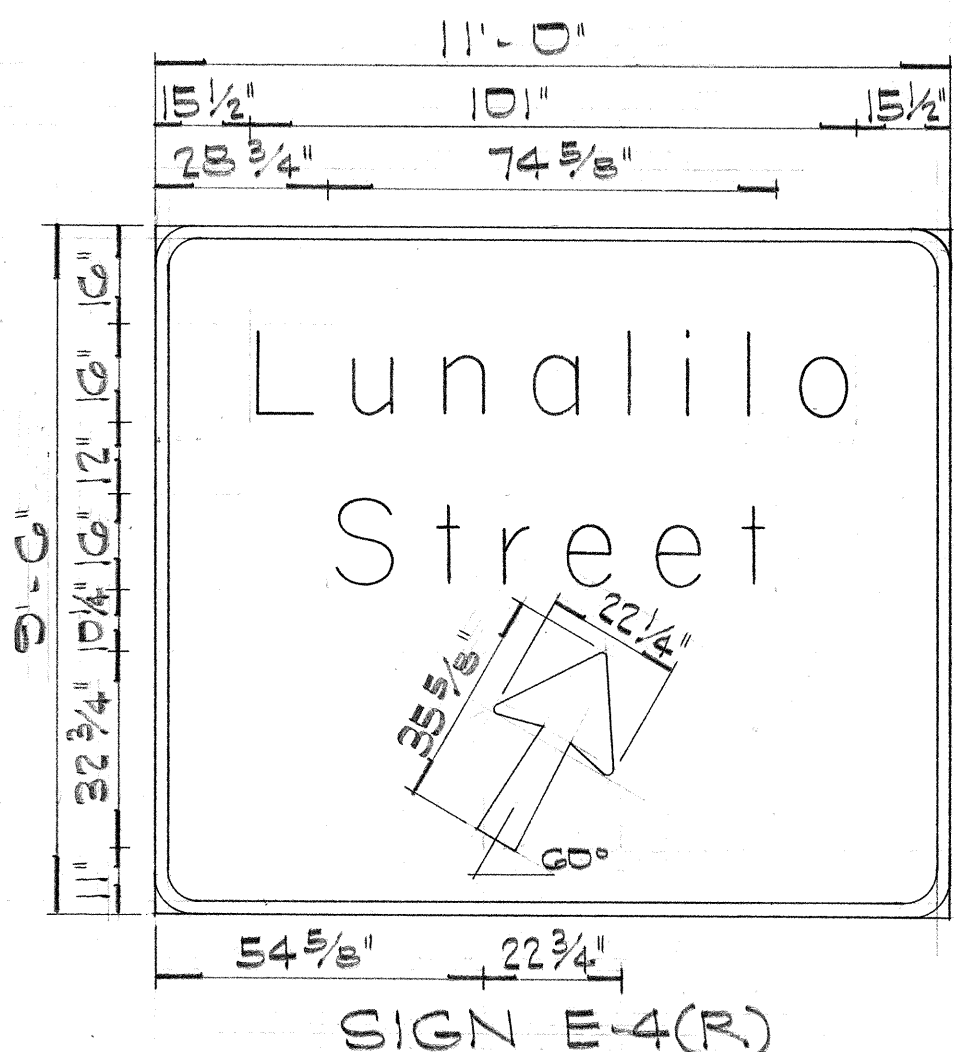
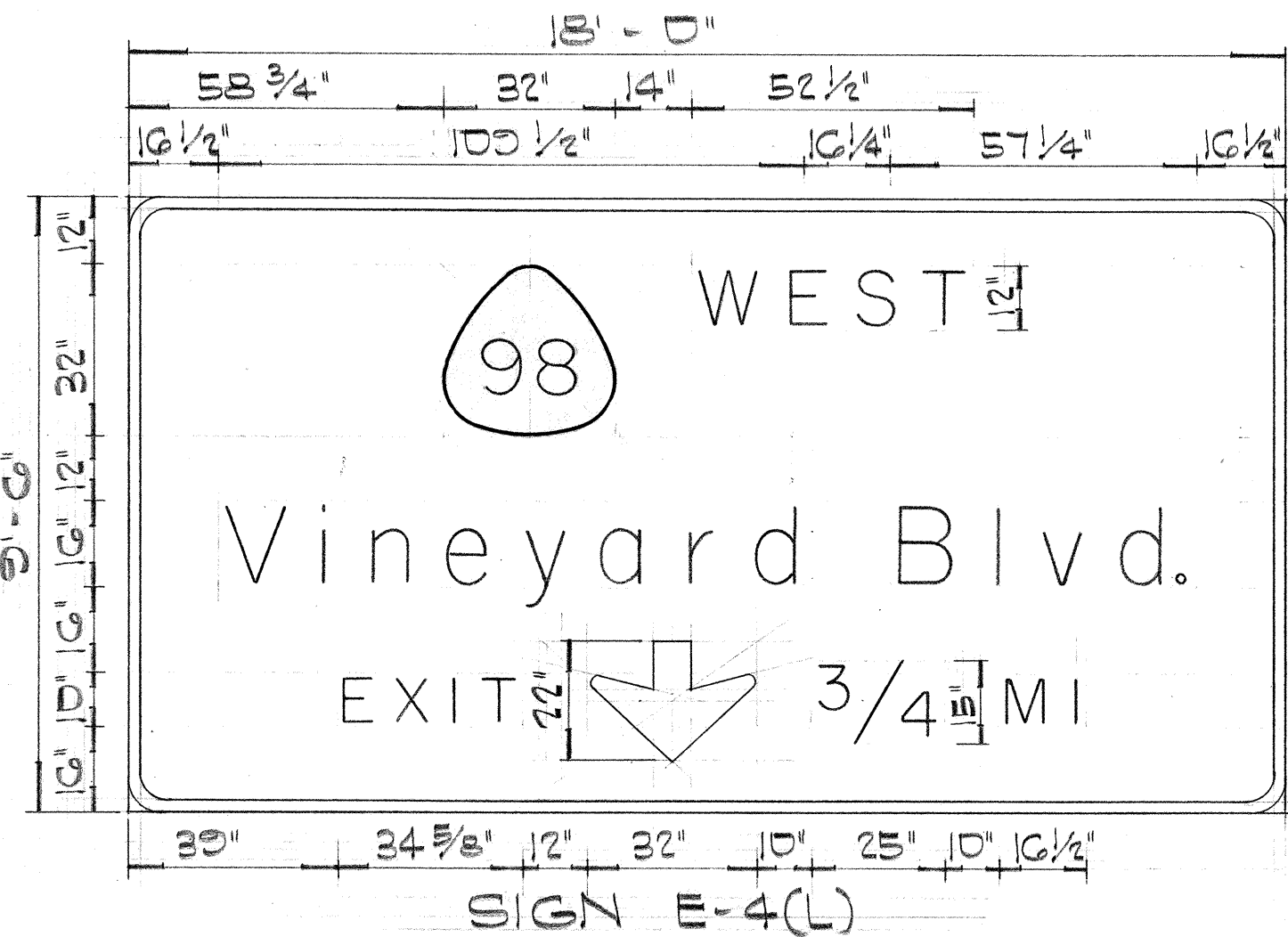
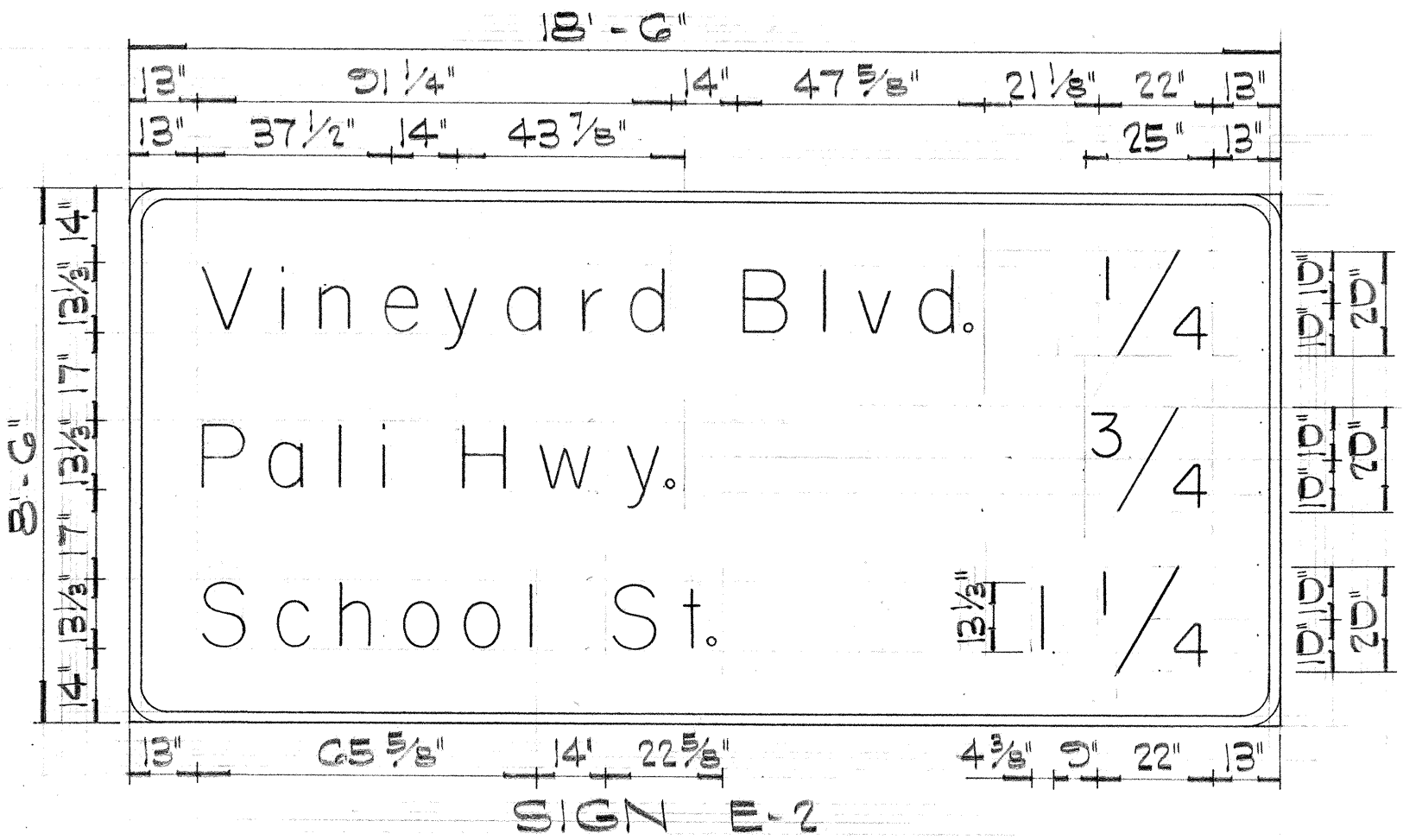
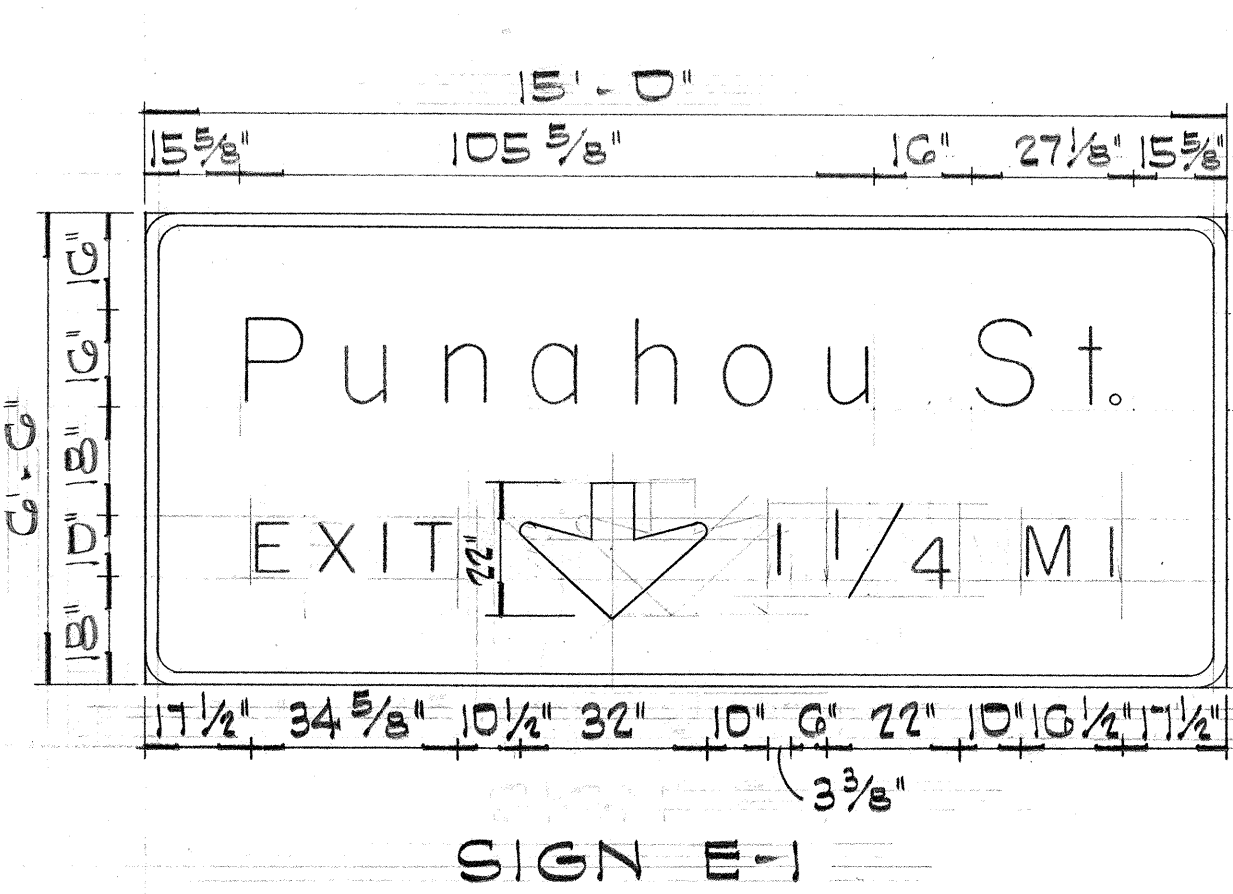
SUMMARY OF EXPRESSWAY AND DESTINATION SIGNS

SIGN NO.	MESSAGE	AREA(Sq. ft.)
E-1	Punahou St.	97.50
E-2	Vineyard Blvd., etc.	187.25
E-3	Punahou St.	97.50
E-4(L)	Vineyard Blvd.	171.00
E-4(R)	Lunalilo Street	104.50
E-5(L)	Bingham St.	97.50
E-5(R)	Punahou St.	97.50
	TOTAL	822.75
D-1	Freeway	28.00
D-2	Freeway	28.00
D-3	Freeway	28.00
	TOTAL	84.00



Arrow Size	Arrow Dimensions in Inches						
	a	b	c	d	e	f	g
22" x 32"	32	10	6 1/2	6 1/2	3	22	1
22 1/4" x 35 5/8"	22 1/4	17	5 3/8	7 1/8	1 3/4	35 5/8	1
21 5/8" x 25"	21 5/8	14 1/4	5	6 3/4	1 3/4	25	1
8 1/2" x 9 3/4"	8 1/2	5 1/4	2 5/8	2 15/16	5/8	9 3/4	1/2

TYPICAL ARROW DETAILS



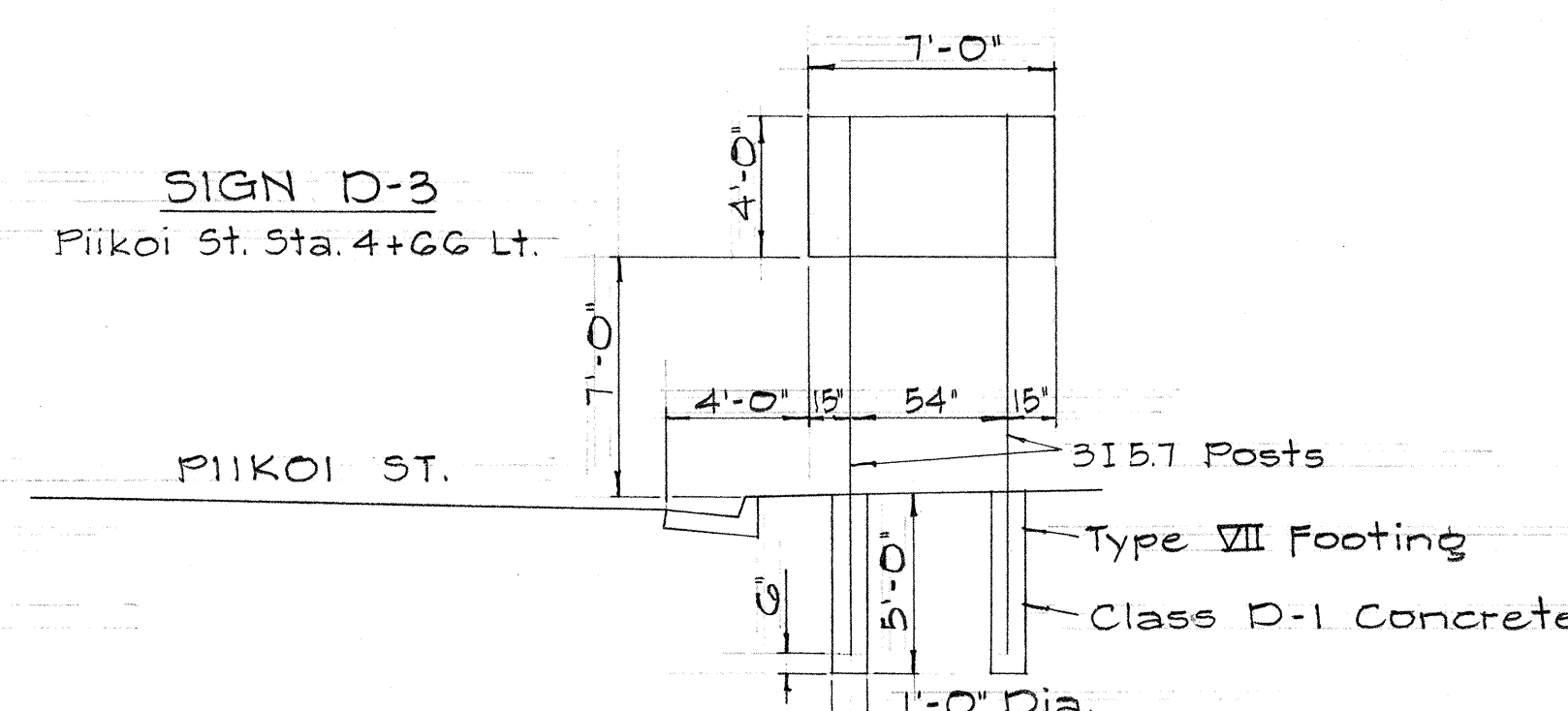
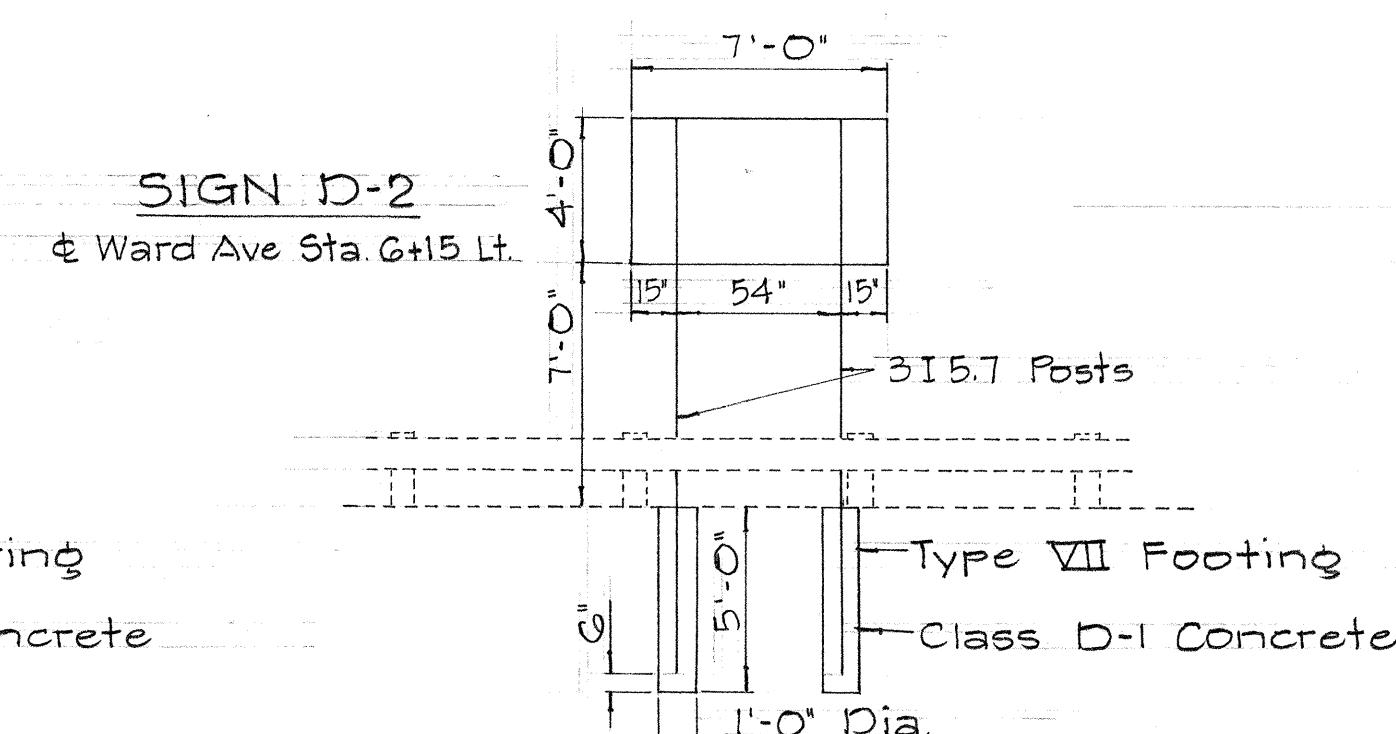
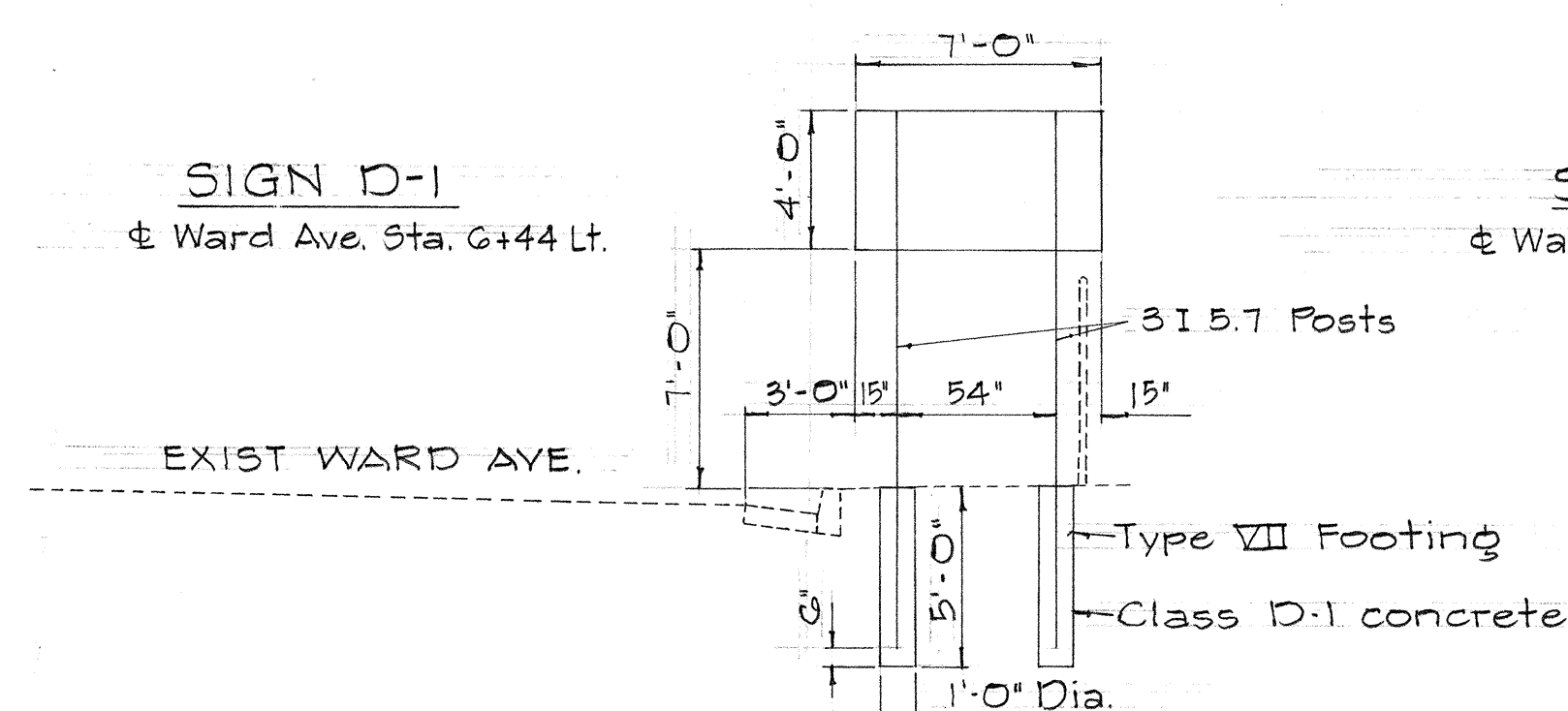
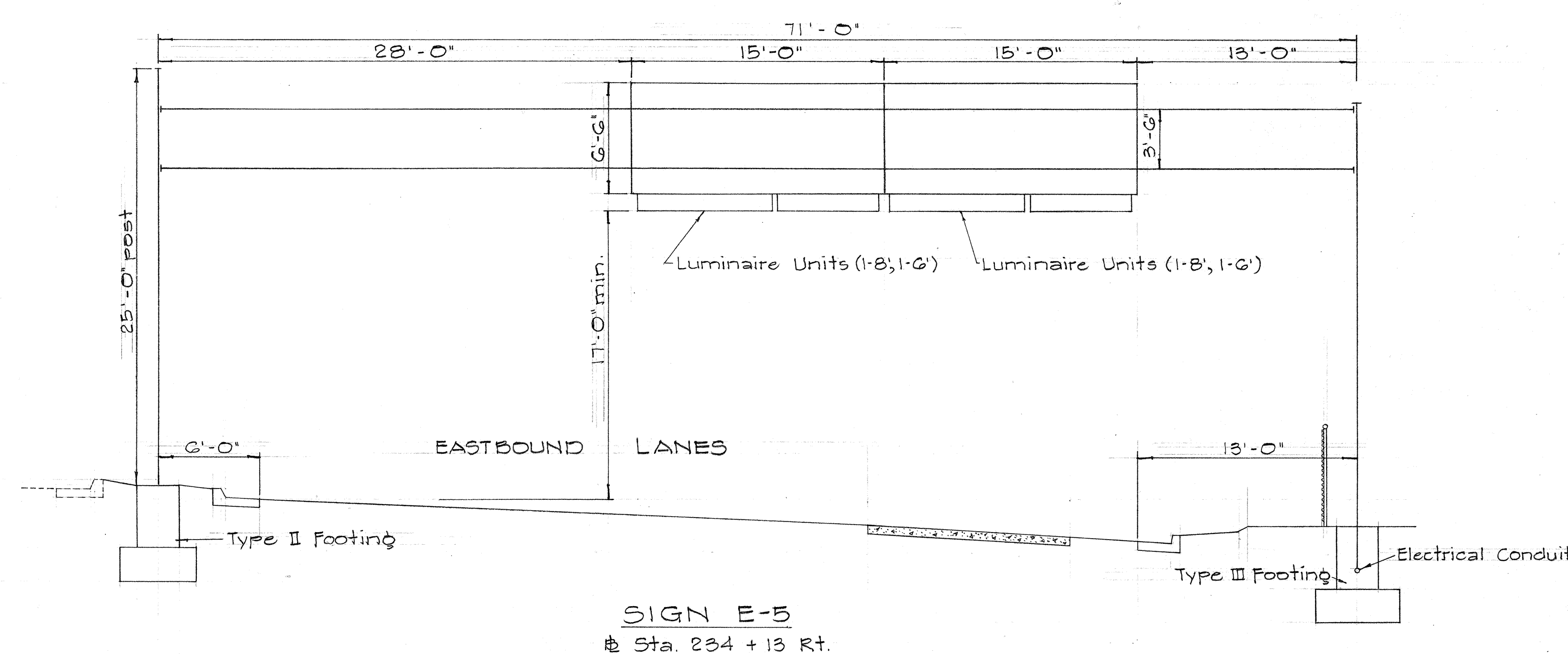
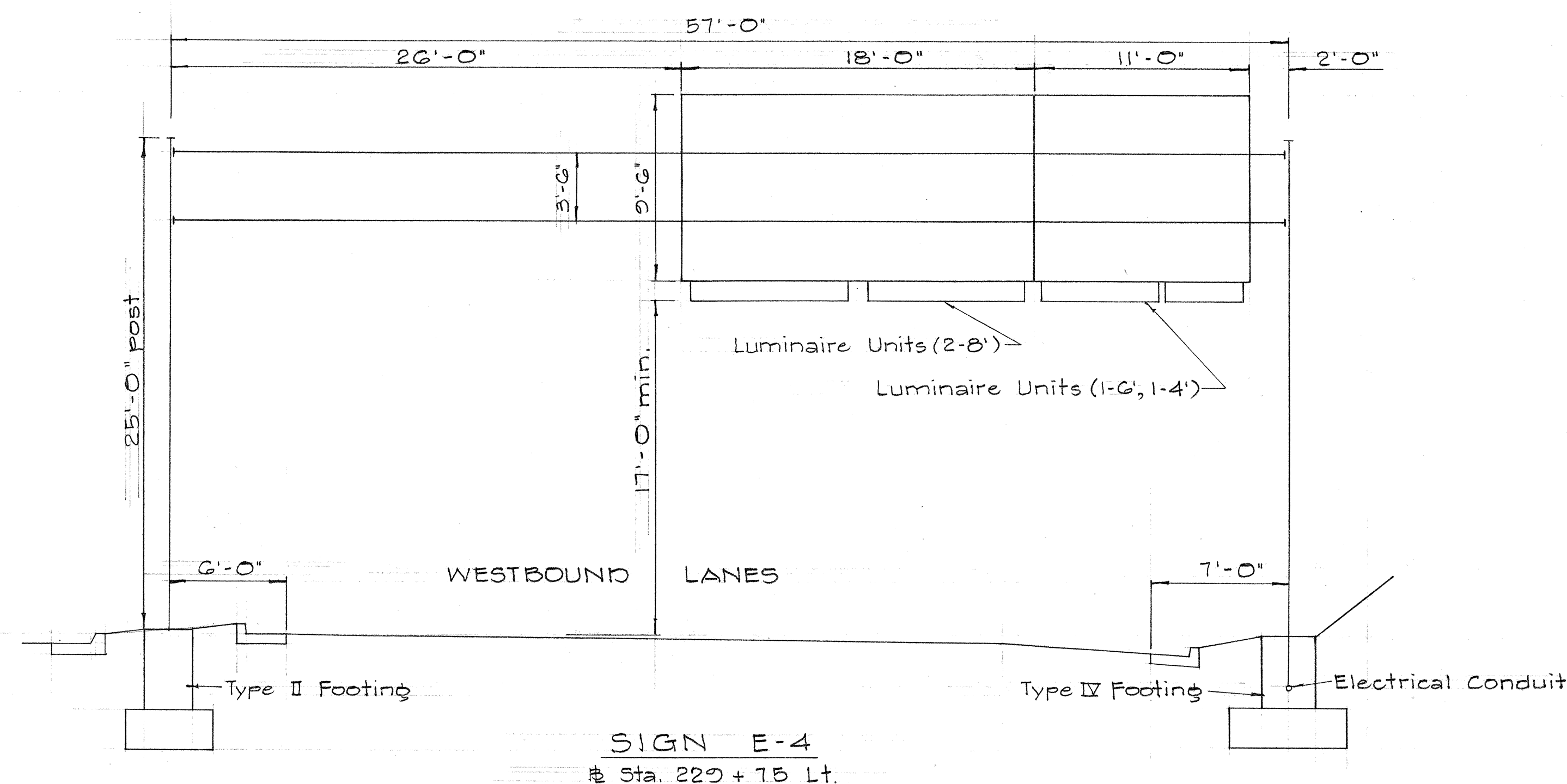
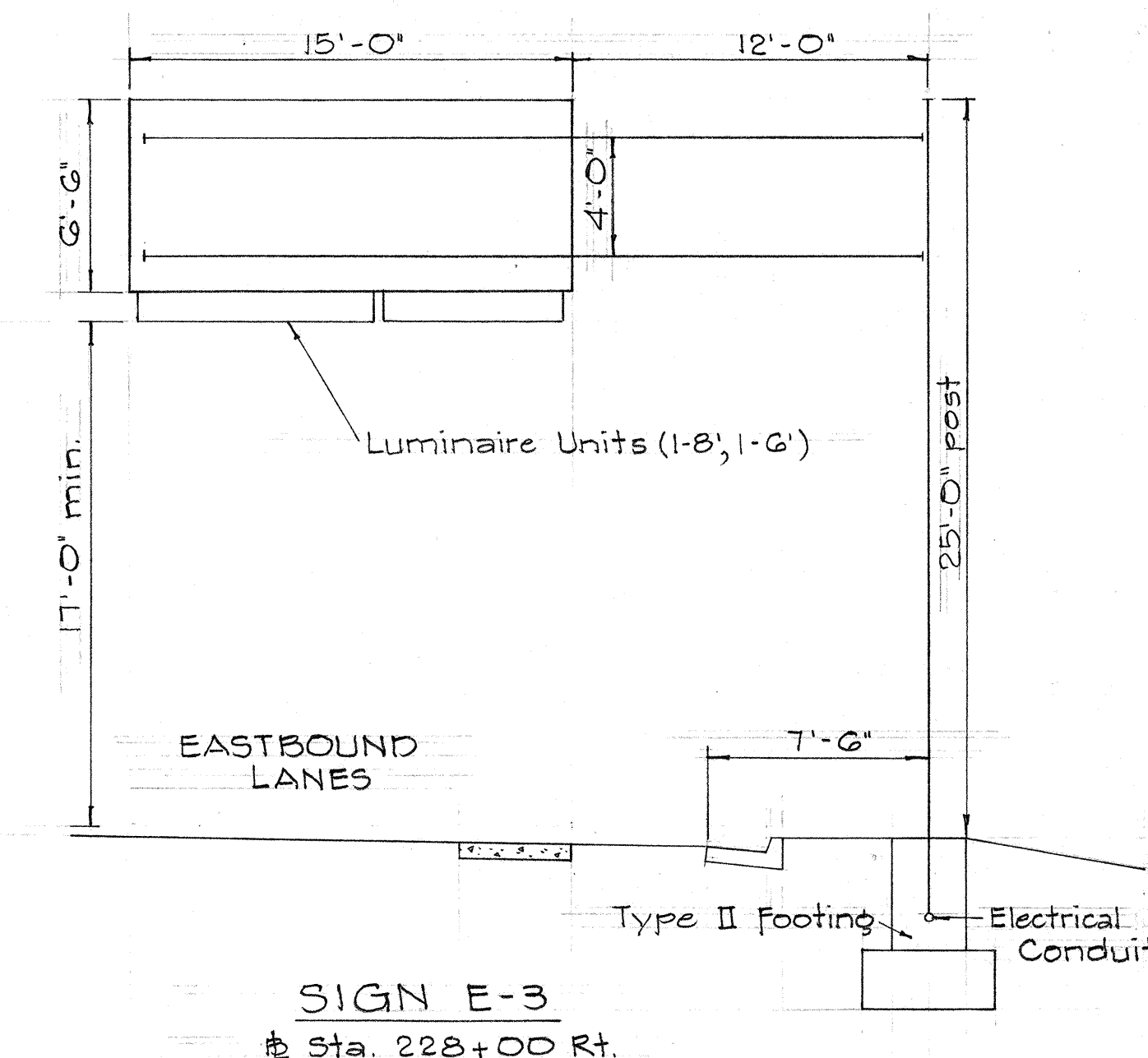
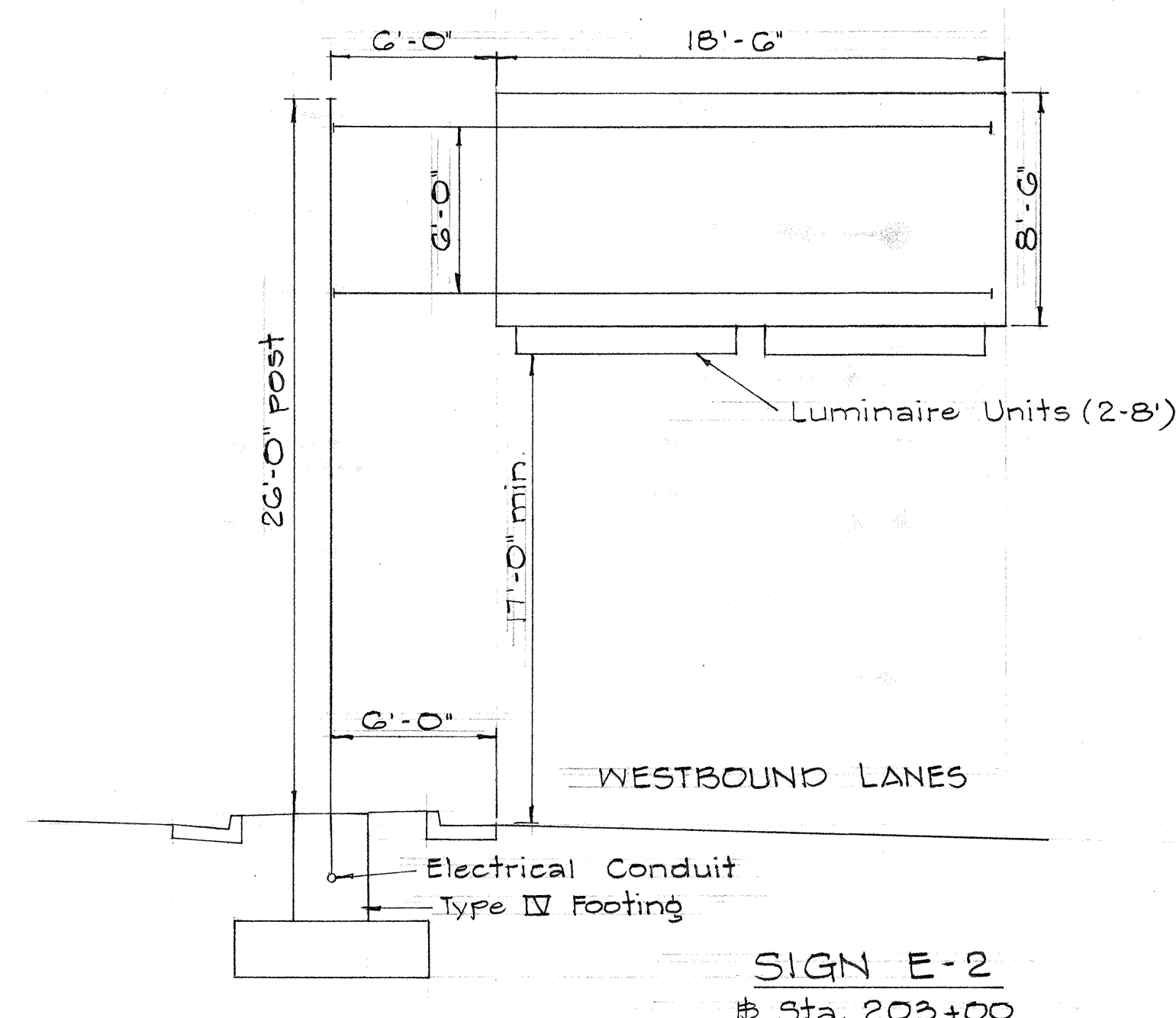
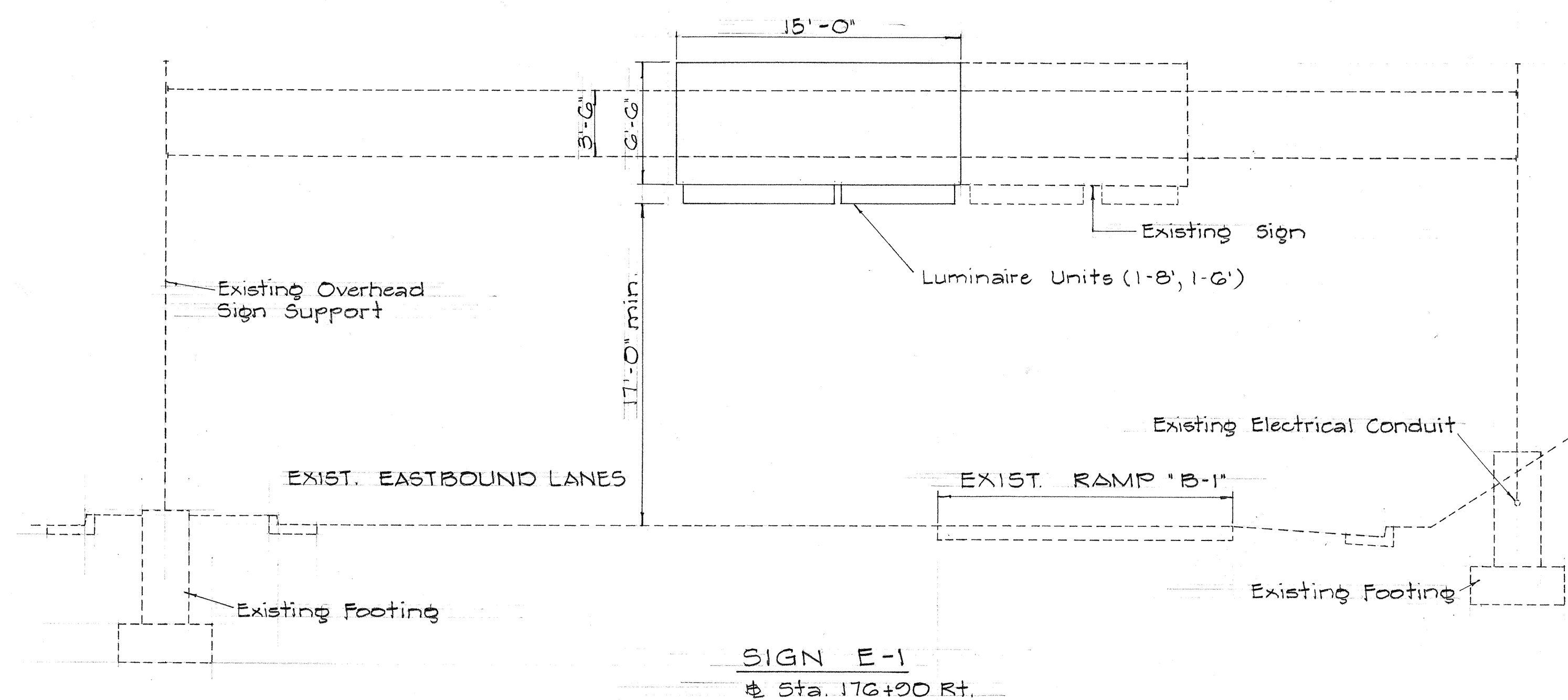
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PANEL LAYOUT

INTERSTATE ROUTE H-1
Victoria St. to Keeaumoku St.
F.A.I. Proj. No. I-HI-1(31), Unit 2
Not to Scale April 1967
SHEET No. 6 OF 25 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-1(31) UNIT 2	1967	94	217



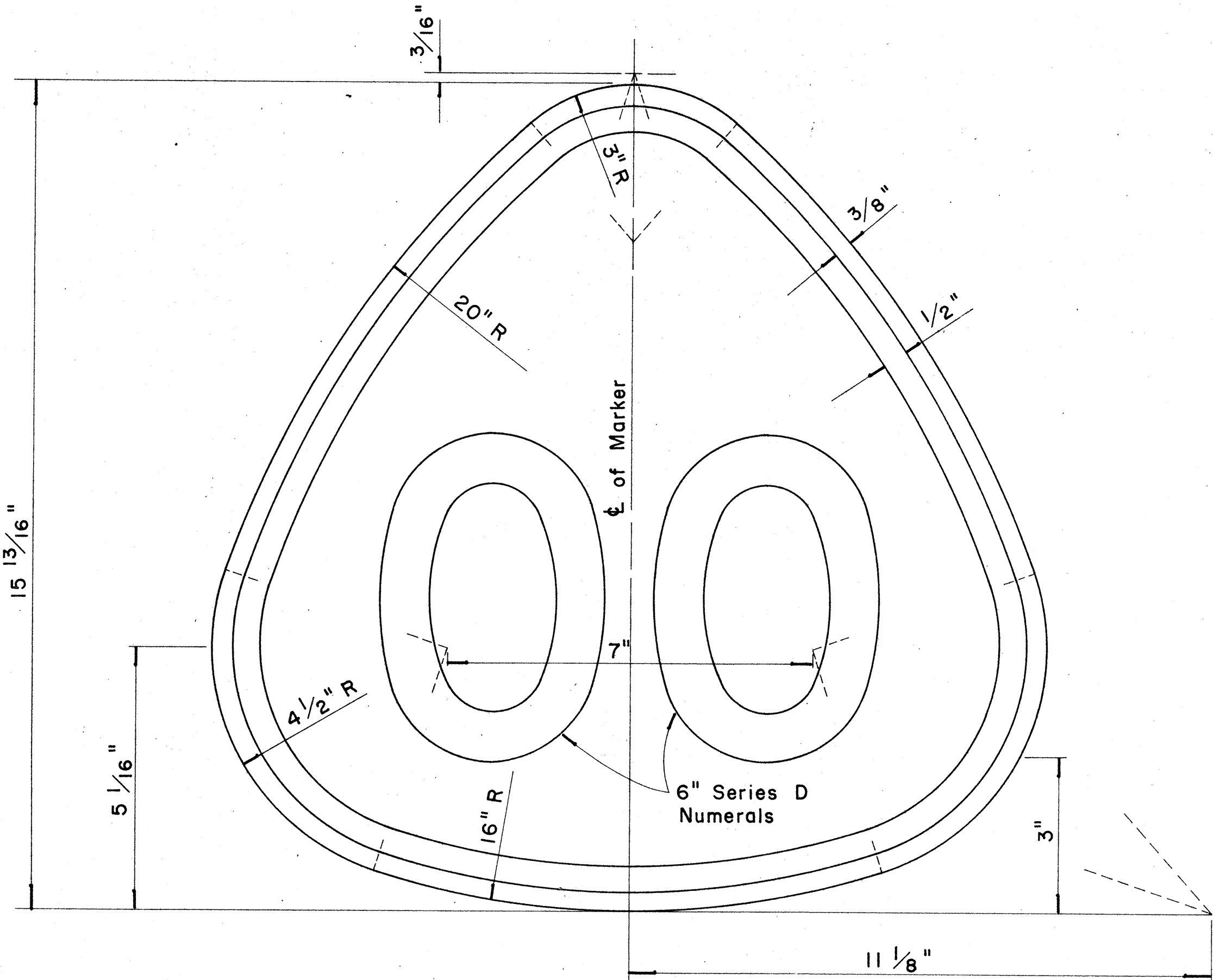
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

FRAME LAYOUT

INTERSTATE ROUTE H-1
Victoria St. to Keeaumoku St.
F.A.I. Proj. No. I-HI-1(31), Unit 2
Not to Scale April 1967
SHEET No. 7 OF 25 SHEETS

DESIGNED BY	DATE
DRAWN BY	" "
CHECKED BY	" "
NOTED BY	" "
NO.	" "

Shield Size	Multiply Dimensions by	Numeral Size
16"	1	6" Series D
21"	1.3	8" Series D
32"	2.0	12" Series D



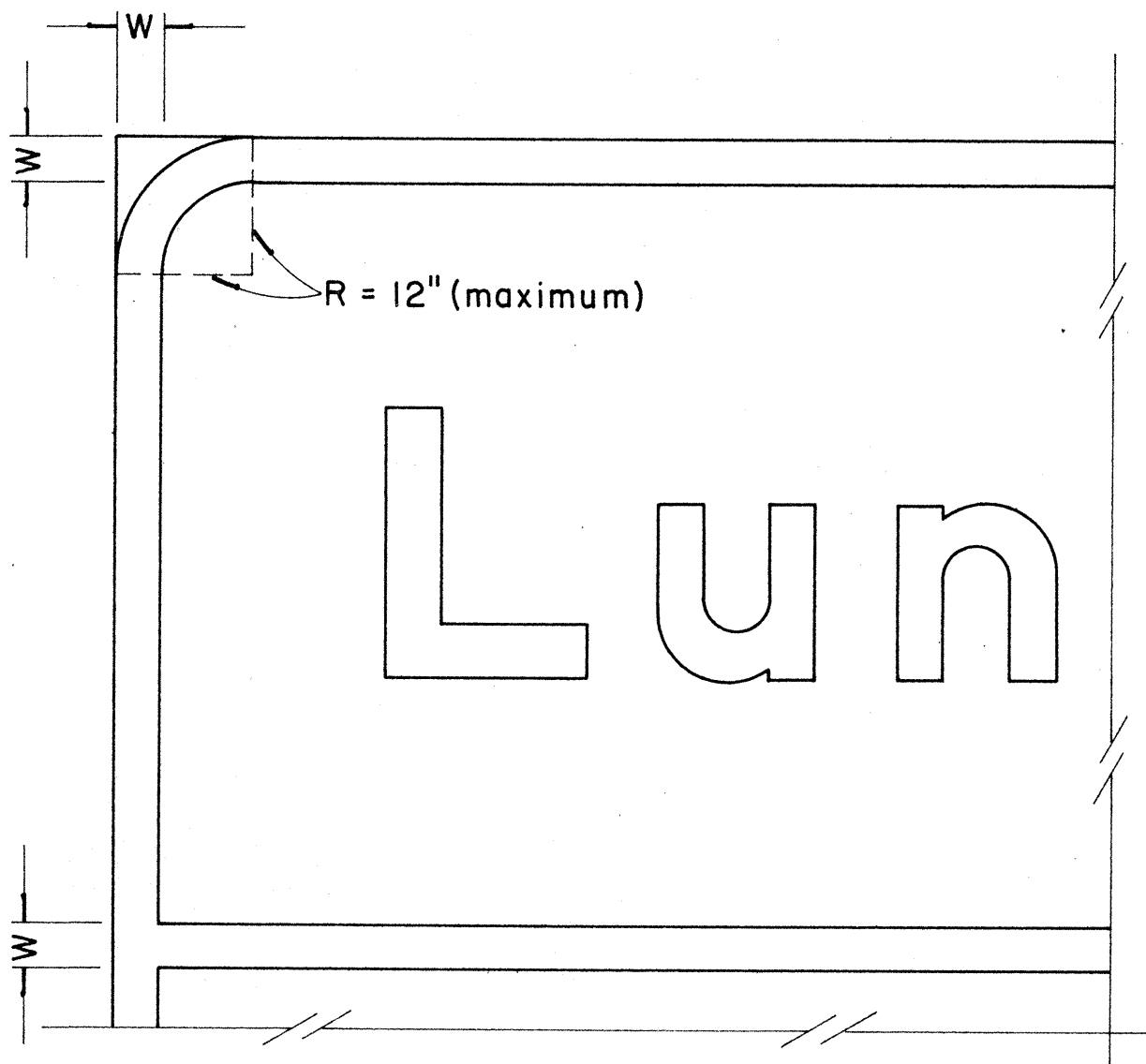
STATE ROUTE MARKER FOR DESTINATION & EXPRESSWAY SIGNS

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

NOTE:

- State Route Markers on Destination and Expressway signs shall have black numerals and borders on a white reflectorized background mounted on a flat aluminum cut-out.
- All numerals shall be Series "D" from the "Standard Alphabets for Highway Signs," Bureau of Public Roads, 1957.
- All Cut-outs shall be fastened on sign panel with Aluminum blind rivets. See Special Provisions.

RADII FOR EXPRESSWAY SIGNS		
Least Dimension of Sign	W	R
3' - 0" to 4' - 6"	2"	3"
4' - 9" to 5' - 6"	2"	6"
5' - 9" to 7' - 6"	2"	9"
7' - 9" and greater	2"	12"
RADII FOR DESTINATION SIGNS		
Any Size	1"	3"



BORDER DETAIL FOR DESTINATION & EXPRESSWAY SIGNS

No Scale

NOTE:

- Area outside corner radius need not be trimmed.
- All borders shall be embossed cut-outs, white and reflectorized.
- All signs shall have borders.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DESTINATION & EXPRESSWAY SIGNS

STATE ROUTE MARKER

AND

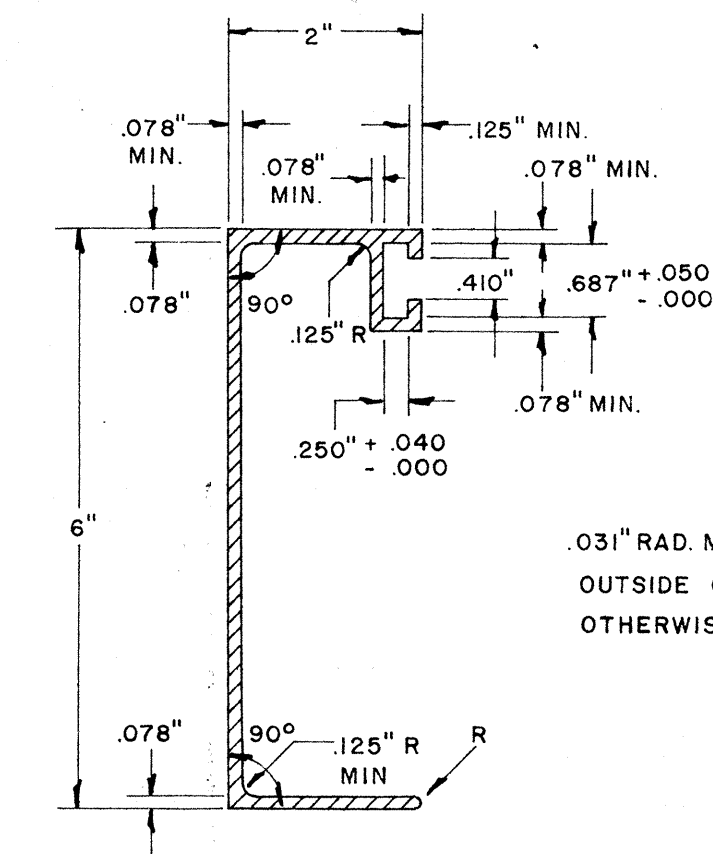
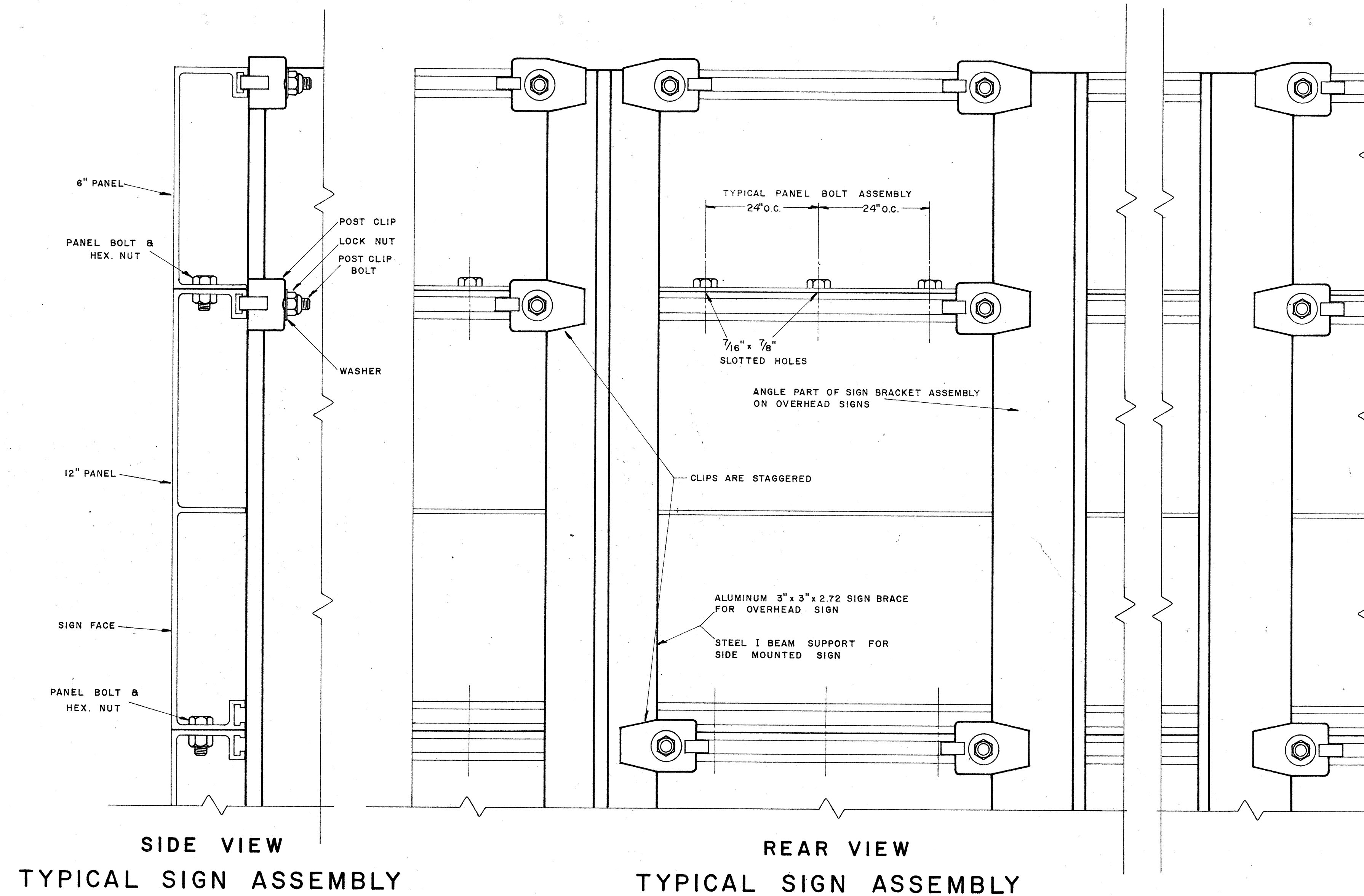
BORDER DETAIL

Scale: As Shown

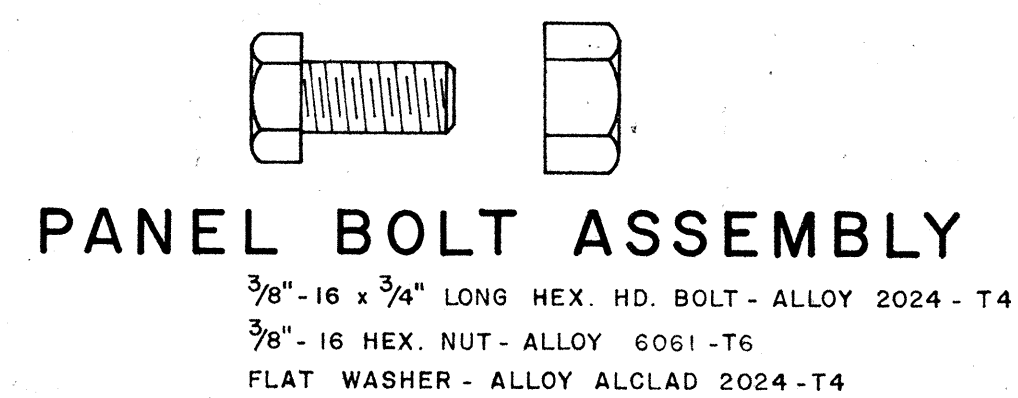
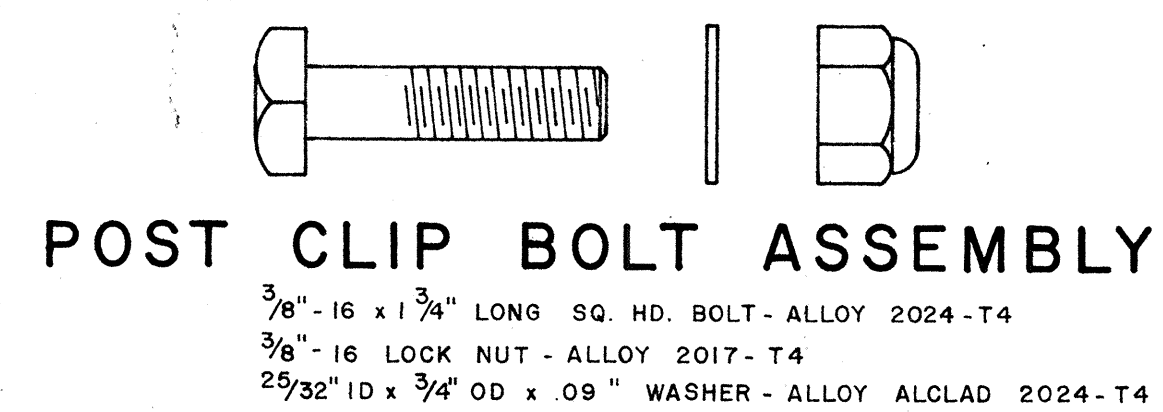
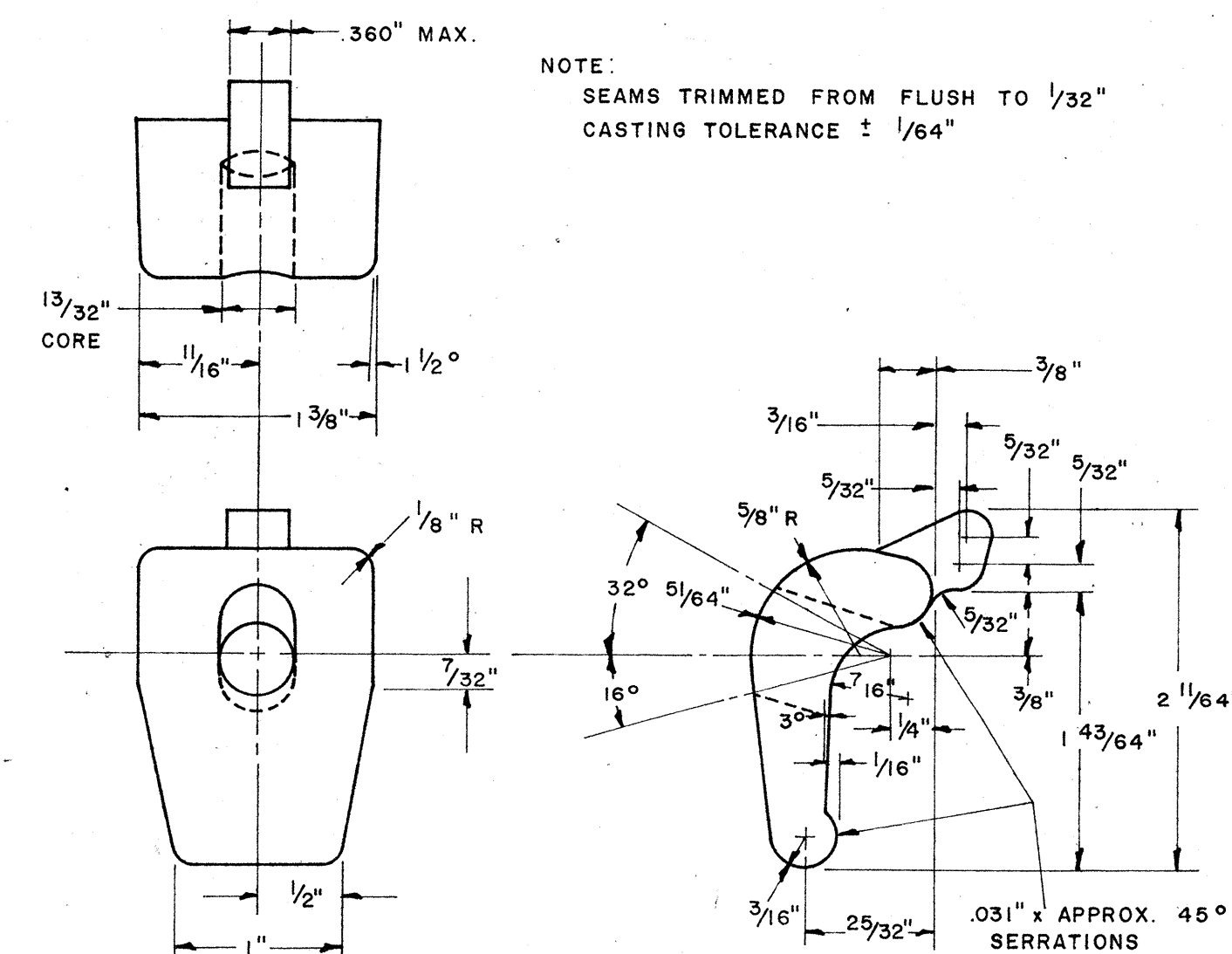
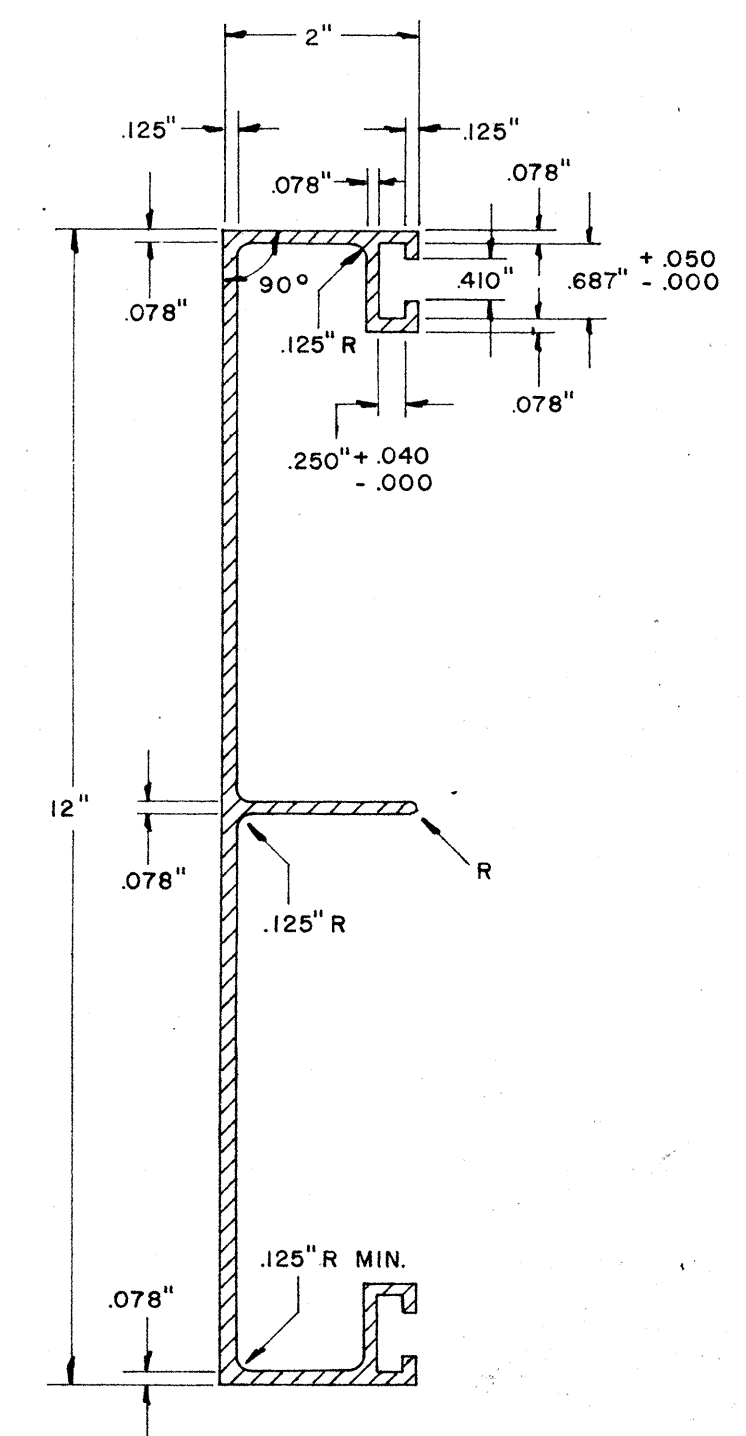
SHEET No. 8 OF 25 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(8) UNIT 2	1967	96	217



SOLID EXTRUDED SIGN PANEL DETAILS



NOTE:
Extruded Aluminum Panels may be used for
Destination Signs with Reflective Sheeting Background.

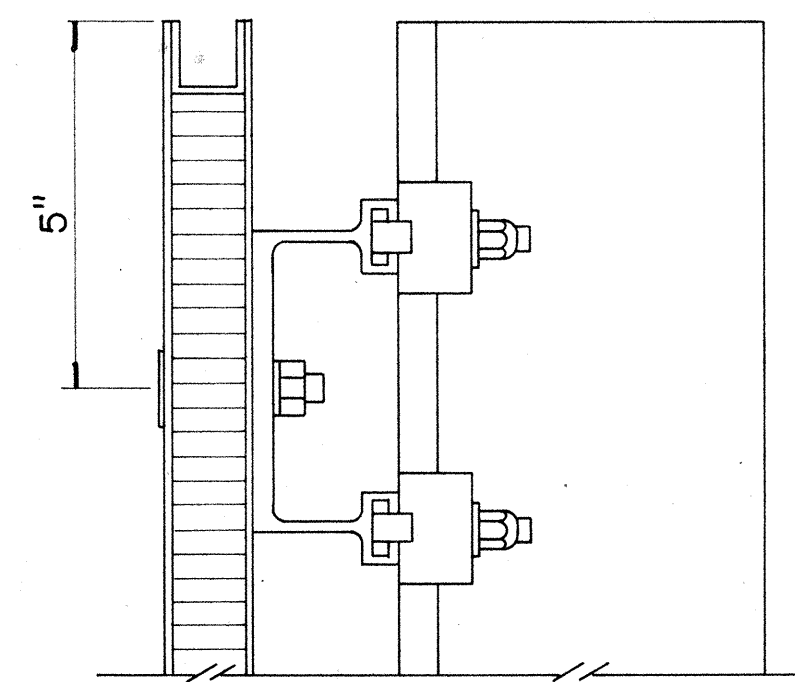
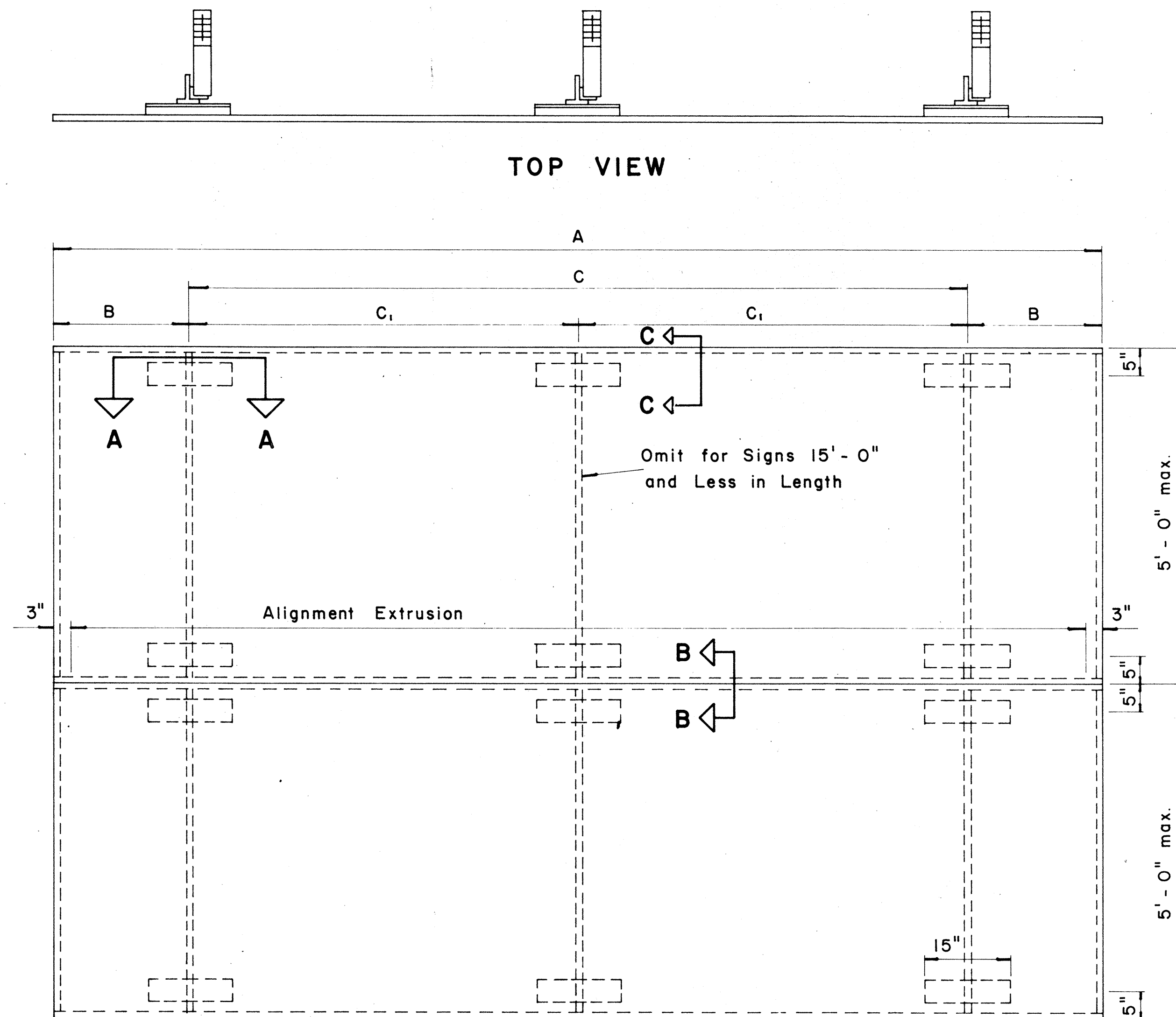
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
SOLID ALUMINUM
EXTRUDED SIGN PANEL
AND
ACCESSORY DETAILS
SCALE:

SHEET No. 9 OF 25 SHEETS

DESIGNED BY	DATE
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO. BOOK	
NO.	

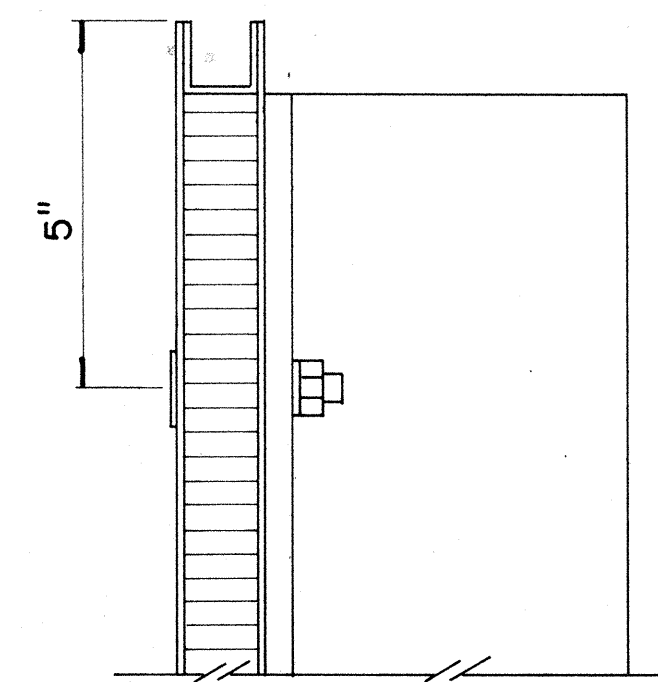
(OVERHEAD SIGNS)
SUPPORT SPACING TABLE

PANEL THICK.	LENGTH OF SIGN A	NO. OF SUPPORTS	OVERHANG B	SUPPORT SPACING C or C ₁
1"	6'-0"	2	12"	48"
1"	6'-6"	2	15"	48"
1"	7'-0"	2	15"	54"
1"	7'-6"	2	18"	54"
1"	8'-0"	2	18"	60"
1"	8'-6"	2	20"	62"
1"	9'-0"	2	22"	64"
1"	9'-6"	2	23"	68"
1"	10'-0"	2	24"	72"
1"	10'-6"	2	24"	78"
1"	11'-0"	2	24"	84"
1"	11'-6"	2	27"	84"
1"	12'-0"	2	30"	84"
1"	12'-6"	2	30"	90"
1"	13'-0"	2	30"	96"
1"	13'-6"	2	30"	102"
1"	14'-0"	2	30"	108"
1"	14'-6"	2	36"	102"
1"	15'-0"	2	36"	108"
1"	15'-6"	3	24"	69"
1"	16'-0"	3	24"	72"
1"	16'-6"	3	24"	75"
1"	17'-0"	3	24"	78"
1"	17'-6"	3	24"	81"
1"	18'-0"	3	24"	84"
1"	18'-6"	3	27"	84"
1"	19'-0"	3	27"	87"
1"	19'-6"	3	27"	90"
1"	20'-0"	3	30"	90"
1"	20'-6"	3	30"	93"
1"	21'-0"	3	30"	96"
1"	21'-6"	3	33"	96"
1"	22'-0"	3	36"	96"
1"	22'-6"	3	36"	99"
1"	23'-0"	3	36"	102"
1"	23'-6"	3	36"	105"
1"	24'-0"	3	36"	108"



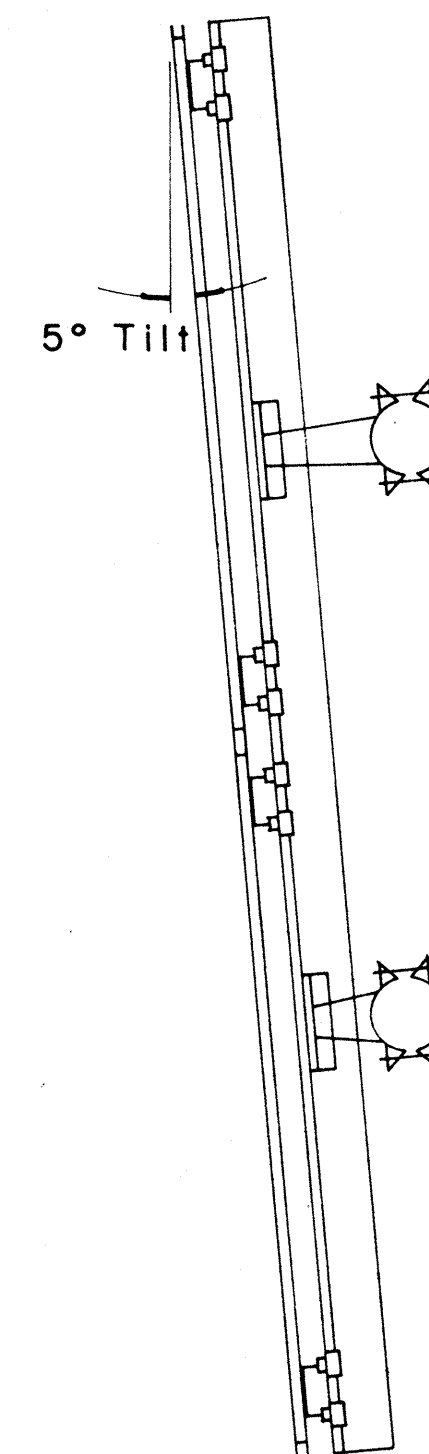
SECTION "C-C"

Scale: $\frac{3}{8}$ " = 1"

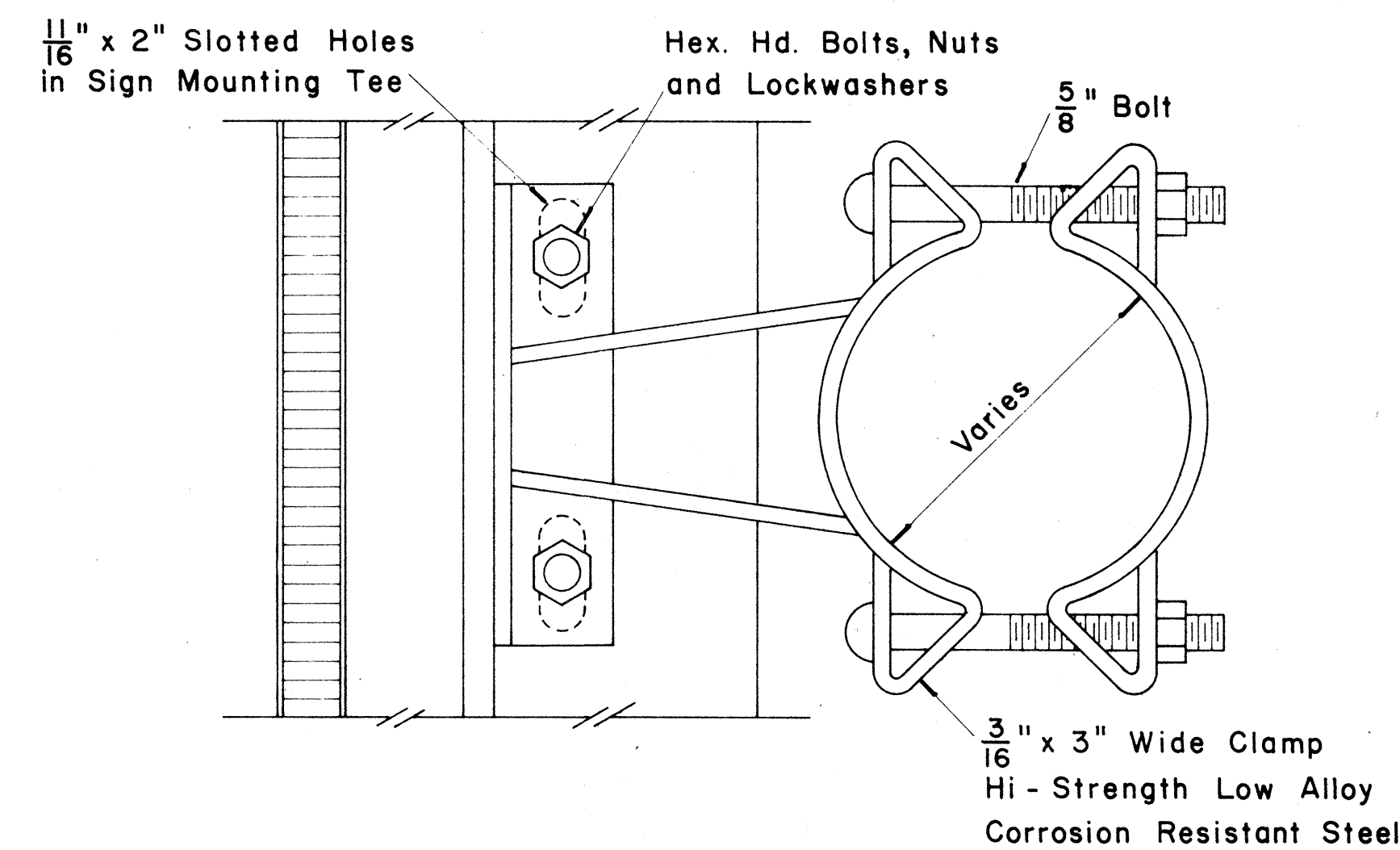


SECTION "C-C" (Alternate)

Scale: $\frac{3}{8}$ " = 1"

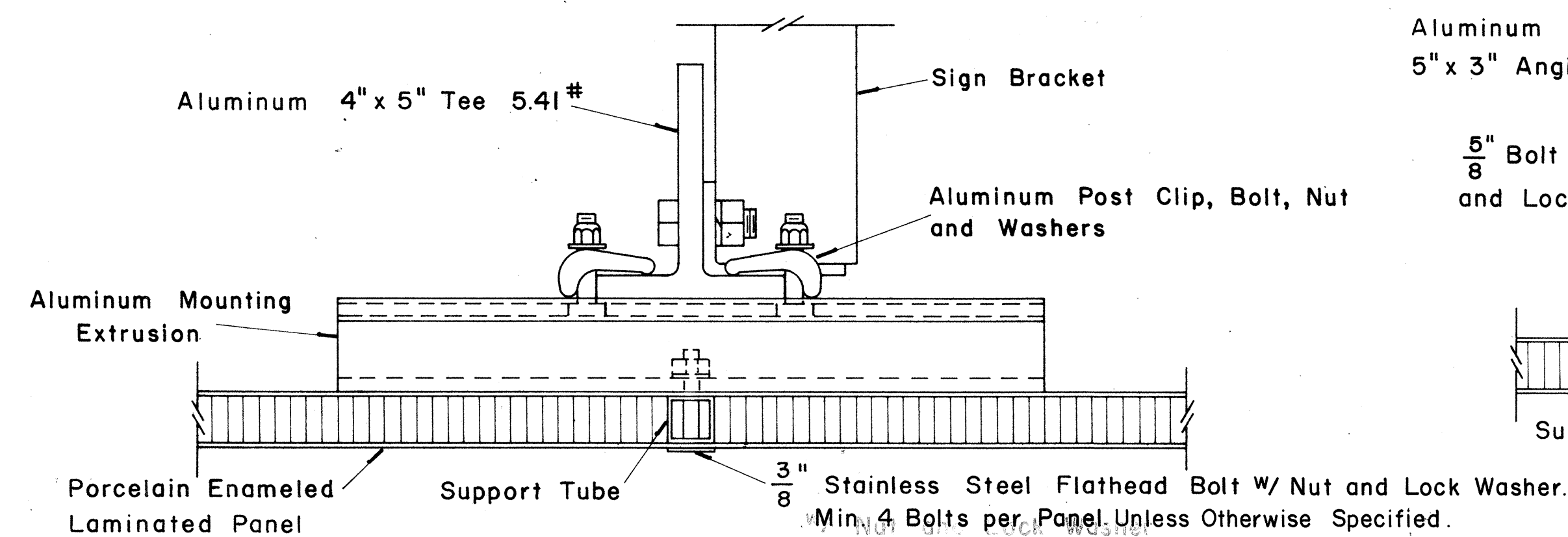


SIDE VIEW



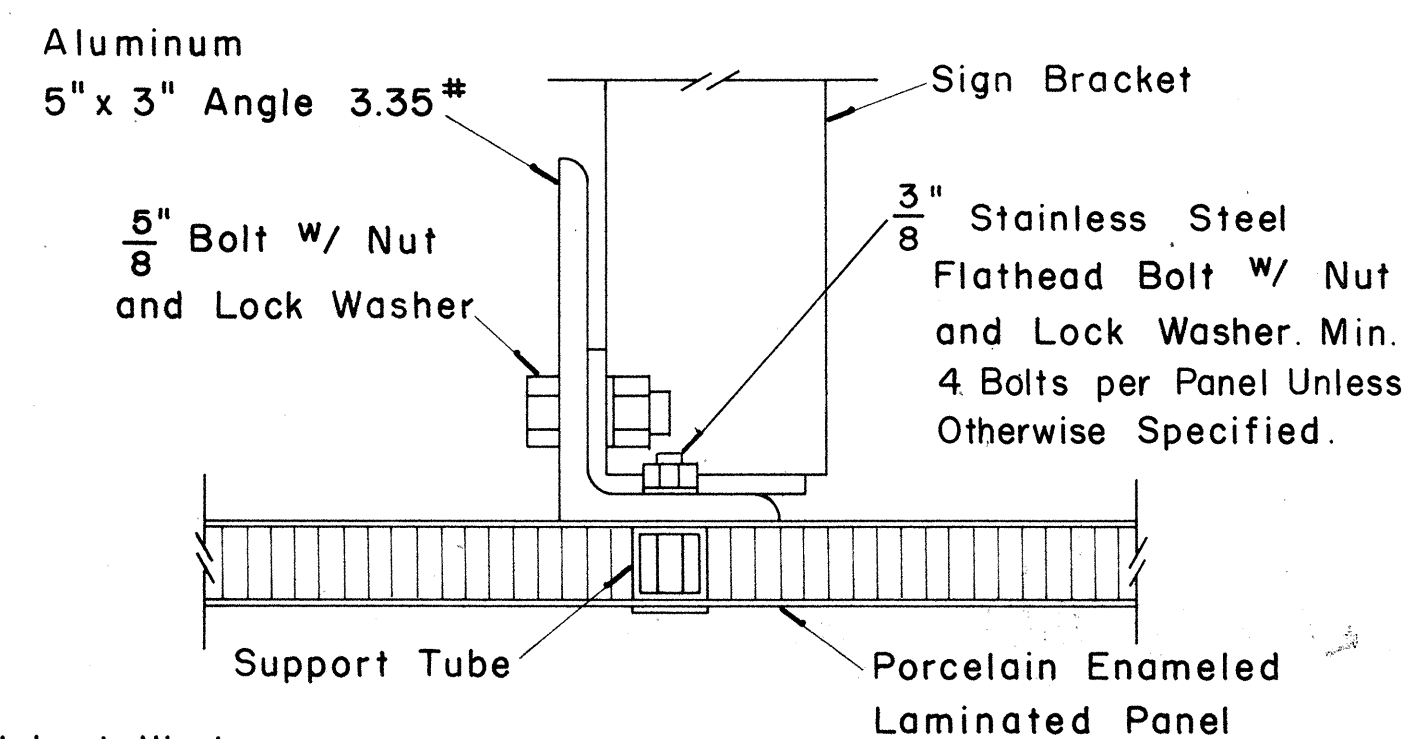
SIGN BRACKET ASSEMBLY

Scale: $\frac{3}{8}$ " = 1"



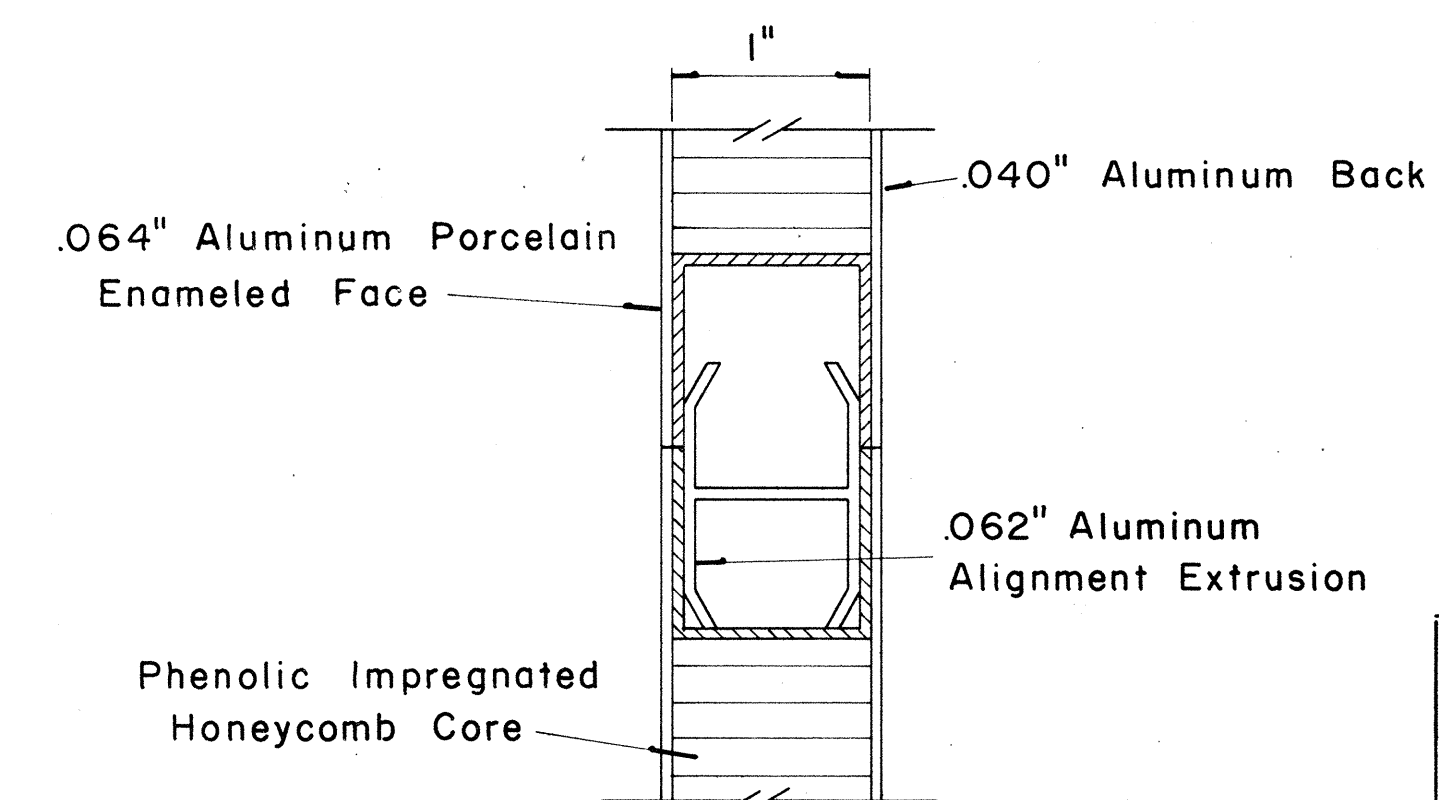
SECTION "A-A"

Scale: $\frac{3}{8}$ " = 1"



SECTION "A-A" (Alternate)

Scale: $\frac{3}{8}$ " = 1"



CLOSURE DETAIL SECTION "B-B"

FULL SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

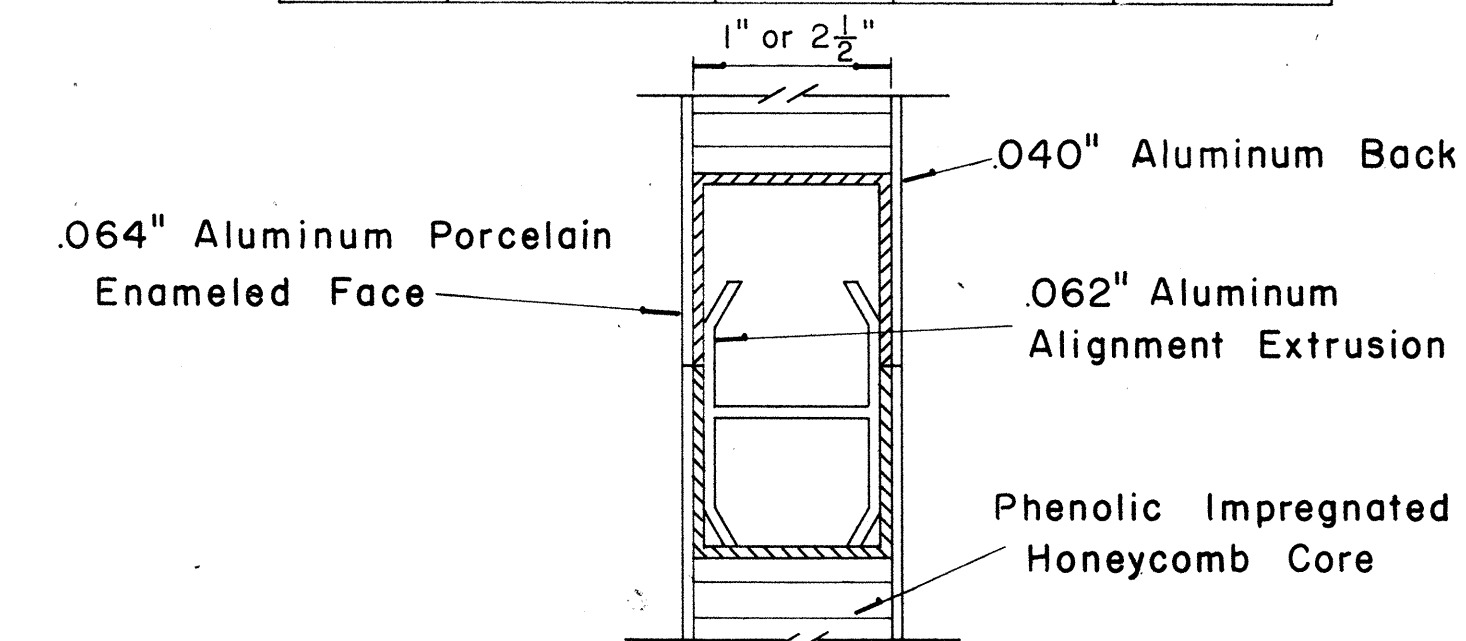
STANDARD DETAILS
LAMINATED ALUMINUM
SIGN PANELS
(OVERHEAD)

Scale: As Shown

SHEET No. 10 OF 25 SHEETS

(GROUND MOUNTED SIGNS)
SUPPORT SPACING TABLE

PANEL THICK.	LENGTH OF SIGN	NO. OF SUPPORTS	OVERHANG	SUPPORT SPACING
	A		B	C
1"	6'-0"	2	12"	48"
1"	6'-6"	2	15"	48"
1"	7'-0"	2	15"	54"
1"	7'-6"	2	18"	54"
1"	8'-0"	2	18"	60"
1"	8'-6"	2	20"	62"
1"	9'-0"	2	22"	64"
1"	9'-6"	2	23"	68"
1"	10'-0"	2	24"	72"
1"	10'-6"	2	24"	78"
1"	11'-0"	2	24"	84"
1"	11'-6"	2	27"	84"
1"	12'-0"	2	30"	84"
1"	12'-6"	2	30"	90"
1"	13'-0"	2	30"	96"
1"	13'-6"	2	30"	102"
1"	14'-0"	2	30"	108"
1"	14'-6"	2	36"	102"
1"	15'-0"	2	36"	108"
2.5"	15'-6"	2	36"	114"
2.5"	16'-0"	2	39"	114"
2.5"	16'-6"	2	39"	120"
2.5"	17'-0"	2	39"	126"
2.5"	17'-6"	2	42"	126"
2.5"	18'-0"	2	42"	132"
2.5"	18'-6"	2	45"	132"
2.5"	19'-0"	2	45"	138"
2.5"	19'-6"	2	45"	144"
2.5"	20'-0"	2	48"	144"
2.5"	20'-6"	2	48"	150"
2.5"	21'-0"	2	51"	150"
2.5"	21'-6"	2	51"	156"
2.5"	22'-0"	2	51"	162"
2.5"	22'-6"	2	54"	162"
2.5"	23'-0"	2	54"	168"
2.5"	23'-6"	2	54"	174"
2.5"	24'-0"	2	57"	174"

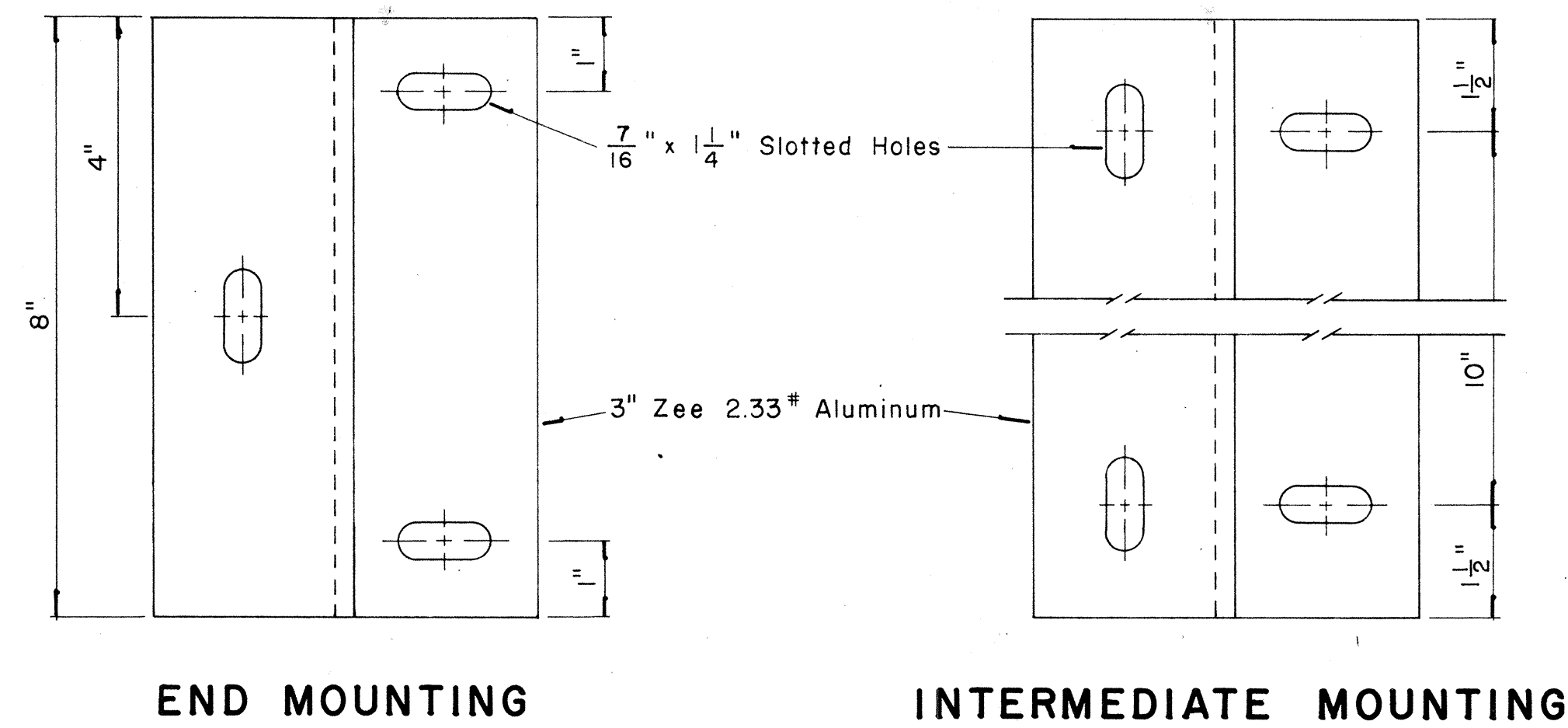


CLOSURE DETAIL
SECTION "C-C"
FULL SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

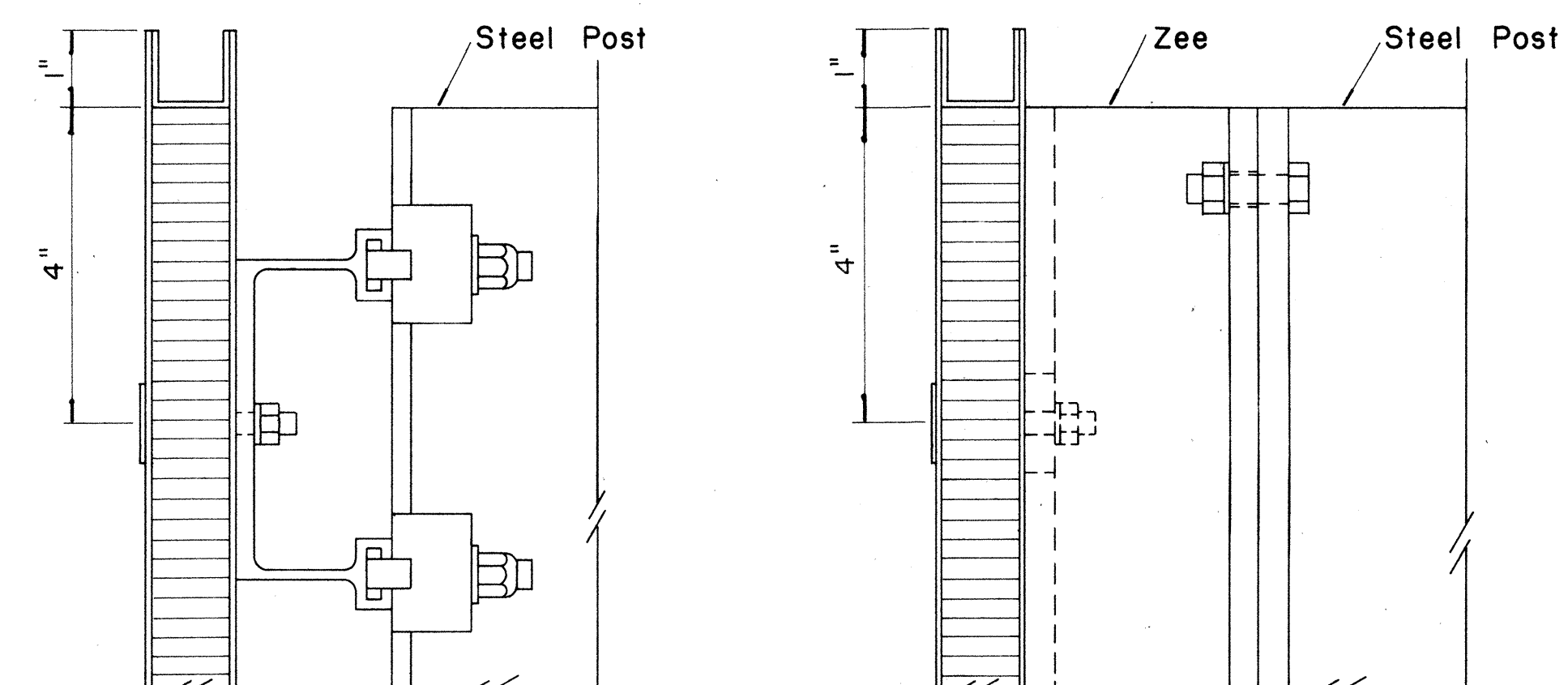
STANDARD DETAILS
LAMINATED ALUMINUM
SIGN PANELS
(GROUND MOUNTED)
Scale: As Shown

SHEET No. 11 OF 25 SHEETS



ZEE MOUNTING DETAILS

Scale: $\frac{1}{2}$ " = 1"

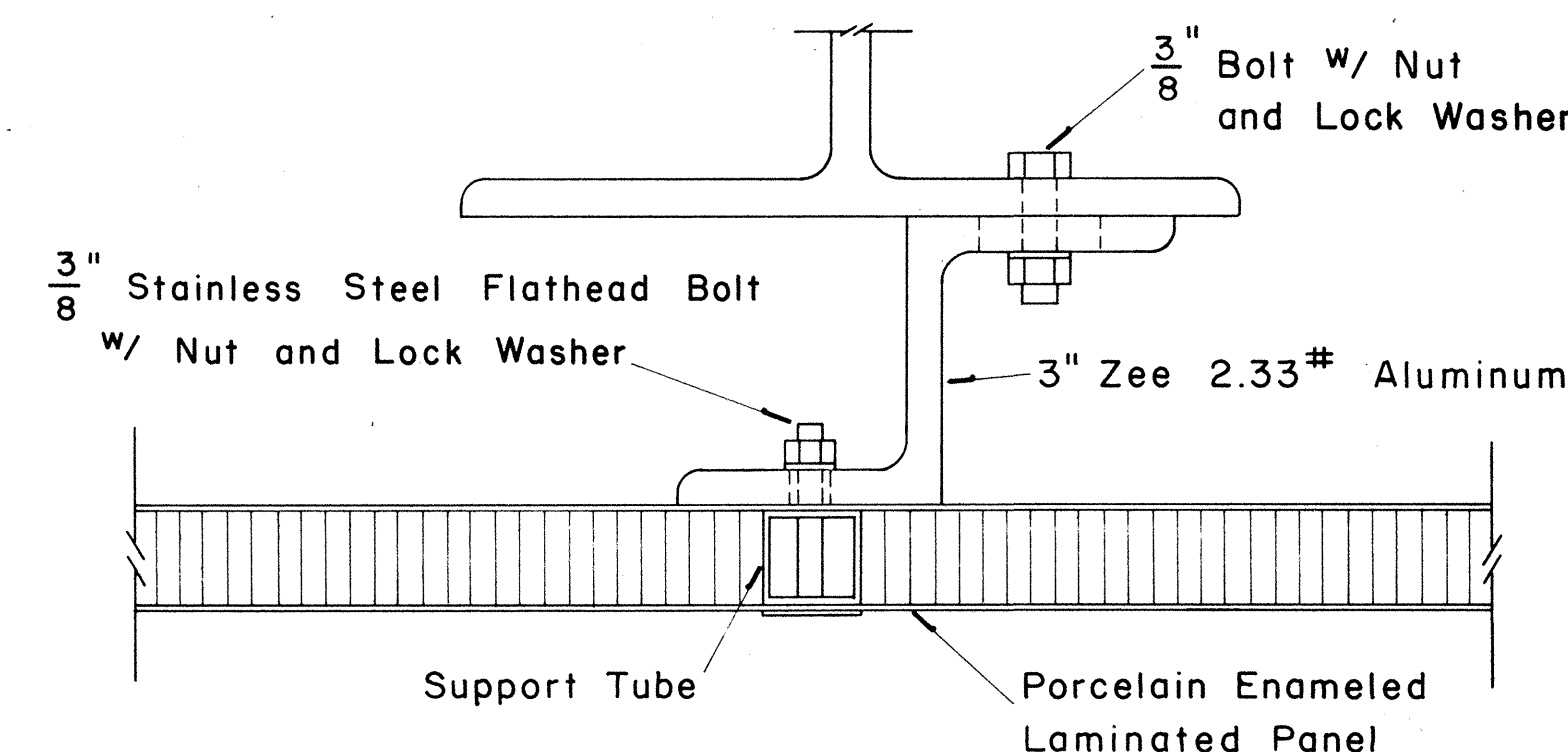


SECTION "B-B"

Scale: $\frac{1}{2}$ " = 1"

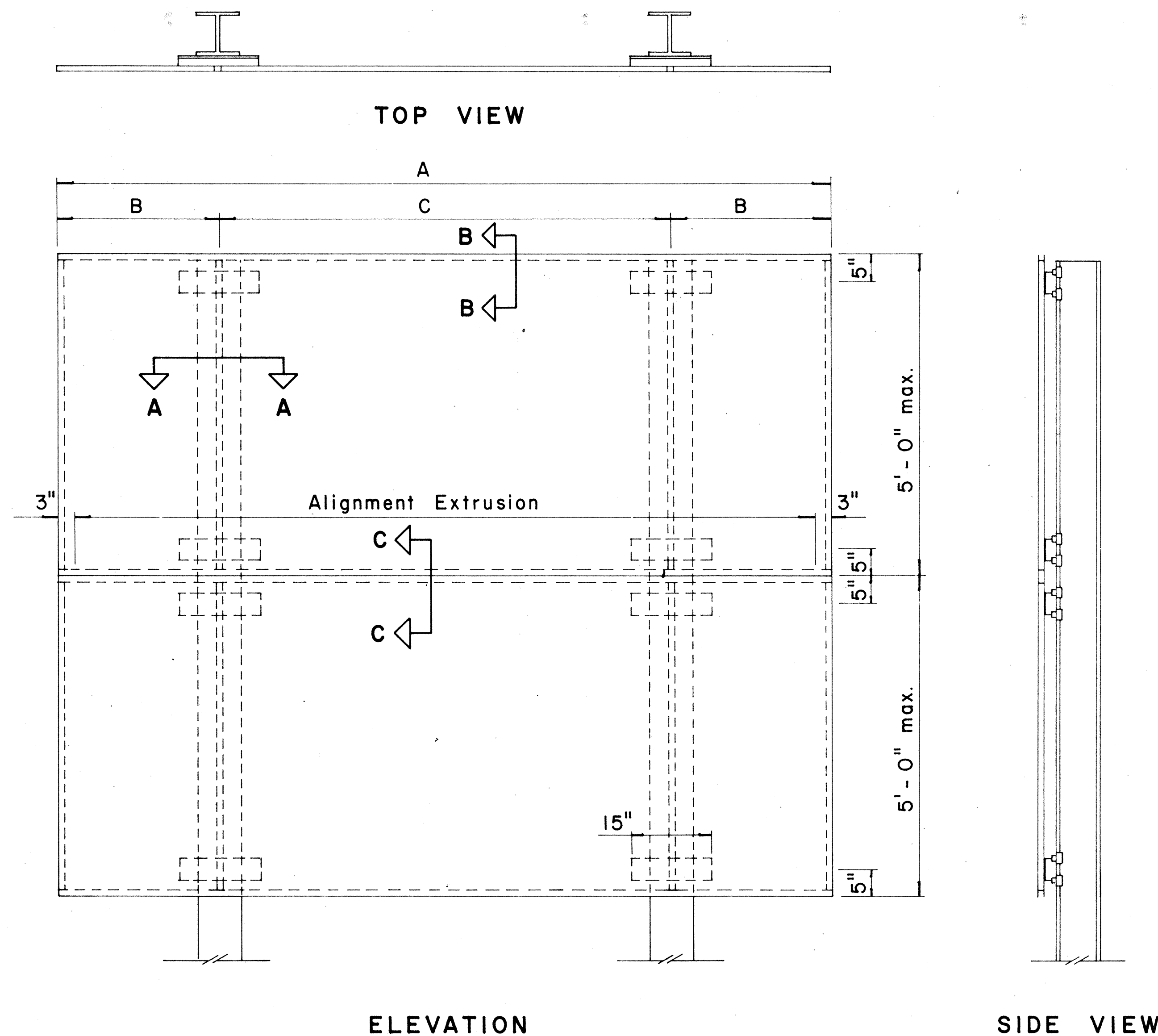
SECTION "B-B"
(Alternate)

Scale: $\frac{1}{2}$ " = 1"



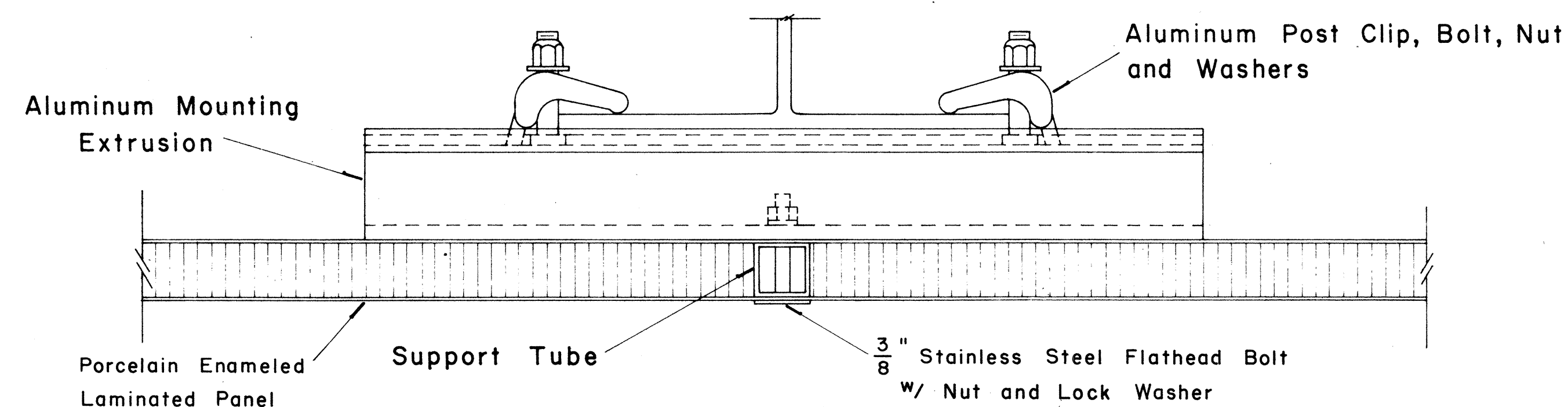
SECTION "A-A"
(Alternate)

Scale: $\frac{1}{2}$ " = 1"



TYPICAL SIGN ASSEMBLY

Scale: $\frac{3}{4}$ " = 1'-0"



SECTION "A-A"

Scale: $\frac{1}{2}$ " = 1"

SURVEY PLOTTED BY
DATE
DESIGNED BY
CHECKED BY
NOTE BOOK
QUANTITIES BY
No.

SINGLE SIGN POST
CENTER MOUNTED TYPE
DOUBLE MASTARM
TYPE B

Nipples For Wire

$\frac{1}{2}$ " Hi-Stregh. Bolts

$\frac{1}{2}$ " Gusset Plates

Arm Tube

Cont. Welds

Cont. Welds Inside And Outside

ARM ATTACHMENT

Wiring
See Detail

#8 ga. Aluminum bolt
#10 ga. Galv. steel bolt

2" (4)

Hub

Wiring
See Detail

Nipple

Lock Nut

Neoprene M.P.
Washer

Lock Nut

Pole

WIRING HUB
DETAIL "A"
Not to Scale

14"

4 7/8"

1 1/2"

14 3/4"

14"

FRONT THRU VIEW

Scale 1/4" = 1'-0"

Hinged Door

Wasp Locking

Ballast Box
20" H x 14" W x 8" D

N.P. Louvers with
Screen Behind

FRONT VIEW

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

Hand-drawn diagram of two ballast bins. The left bin has a height of $15\frac{3}{4}$ and a width of $11\frac{3}{16}$. The right bin has a height of $15\frac{3}{4}$ and a width of $11\frac{3}{16}$. The distance between the centers of the two bins is $2'$. The distance from the center of the left bin to the left edge is $4\frac{5}{32}$, and the distance from the center of the right bin to the right edge is $4\frac{5}{32}$. The width of each bin is $3\frac{3}{4}$.

2-BALLAST DIM.

WEATHER PROOF BALLASTS MOUNTING DETAIL

Technical drawing of a lighting pole assembly, showing side and end views with dimensions and labels.

Labels:

- Socket and Photo Cell (Similar to Roadway Ltg. Luminaire) with Weather Tight Fittings.
- Removable Top See Photo Cell Detail
- Arm Dim.
- End Plates
- 1 1/4" Blind Half Coupling Wire Outlet
- NOTE:
Arms Over 20 ft. To be Truss Type with 3"x3"x3/8" Center Angles
- 7'-0" See Note
- Pole Dim.
- Weatherproof Ballast Box
- 4"x6 1/4" Handhole with Frame and Cover
- Heavy sq. Nuts Under base for Plumbing
- 1/4" Gusset Plates

Dimensions:

- 7'-0" (Arm length, see note)
- 12" (Top section height)
- 6'-0" (Pole section height)
- 12" (Base section height)

Diagram illustrating the Arm Attachment. The assembly consists of a central tube (Arm Tube) with a nipple for wire passing through it. The tube is secured by gusset plates (labeled 1/4" Gusset Plates) which are welded to the tube. The welds are labeled "Cont. Welds Inside and Outside". The tube is also secured by 1 1/2" Hi-Strength Bolts. The diagram shows the internal structure and the connection points.

Photo Cell

Reducer

Weatherproof Pipe Flange

Pole Top

**METAL POLE TOP
PHOTOCELL INSTALLATION**
Not to Scale

Technical drawing showing the N.P. Ballast Mounting Detail. The drawing includes a side view and a front view of the ballast box assembly.

Side View Annotations:

- Channel Iron (3"m) Welded To Support Top & Bottom as Shown. Bolt Ballast Box to (3"m) Channel Supports
- N.F. Beam Support
- Top Beam Tube
- Bottom Beam Tube
- Separate with Neoprene Washer
- Galvanized $\frac{3}{16}$ " x 3" wide H.I. Strgth. Low Alloy Corrosion Resistance Std. Clamps with $\frac{1}{8}$ " ϕ Bolts
- Gusset
- Hex Hd. Nuts Stainless Steel $\frac{1}{8}$ " Bolts and Lockwashers
- $\frac{1}{16}$ " x 2" Slotted holes in Angle for Vertical Adjustment
- 5" Tilt off Vert. Axis
- 3" x 3" x 2.12" Aluminum Tee
- 6" O.D. To Finish Grade
- To Cast Metal JB At Footing

Front View Annotations:

- Conduit Side Exit
- Lock Nut and Washer Bottom Entry

Labels:

- SIDE VIEW AT TYPE "A" SIGN SUPPORT
- FRONT VIEW
- Scale 1" = 1'-0"
- N.P. BALLAST MOUNTING DETAIL

NOTE:

Minimum of one sign bracket assembly

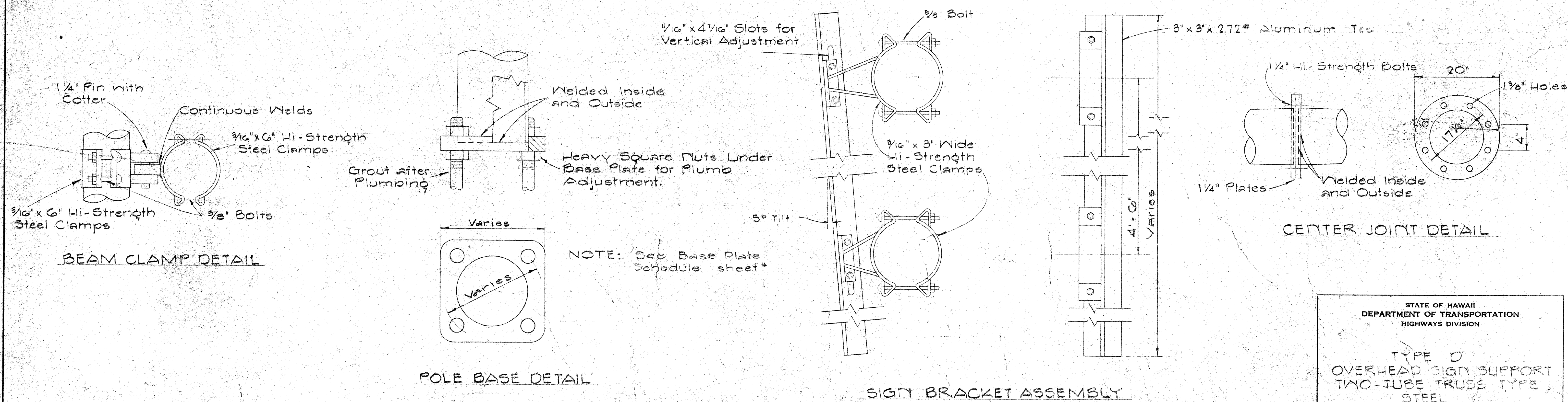
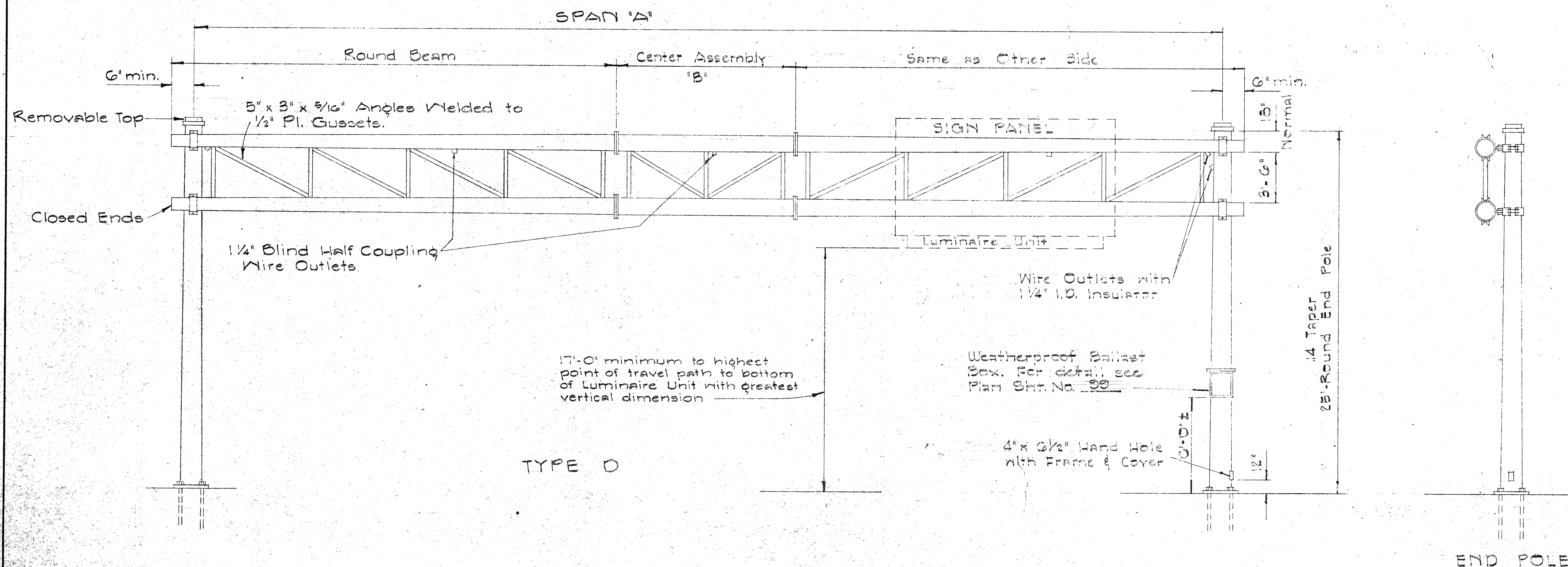
NOTE:
Minimum of one sign bracket assembly required for each 5 linear ft. of sign width for signs over 7 ft. high. Minimum of one sign bracket assembly for each 7 linear ft. of sign width for signs up to 7 ft. high.

SIGN BRACKET ASSEMBLY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPE B & C
OVERHEAD SIGN SUPPORT
BALLAST MOUNTING
DETAIL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-(30) UNIT 2	1967	100	217



TYPE D
OVERHEAD SIGN SUPPORT
TWO-TUBE TRUSS TYPE
STEEL

SHEET No. 13 OF 25 SHEETS

100

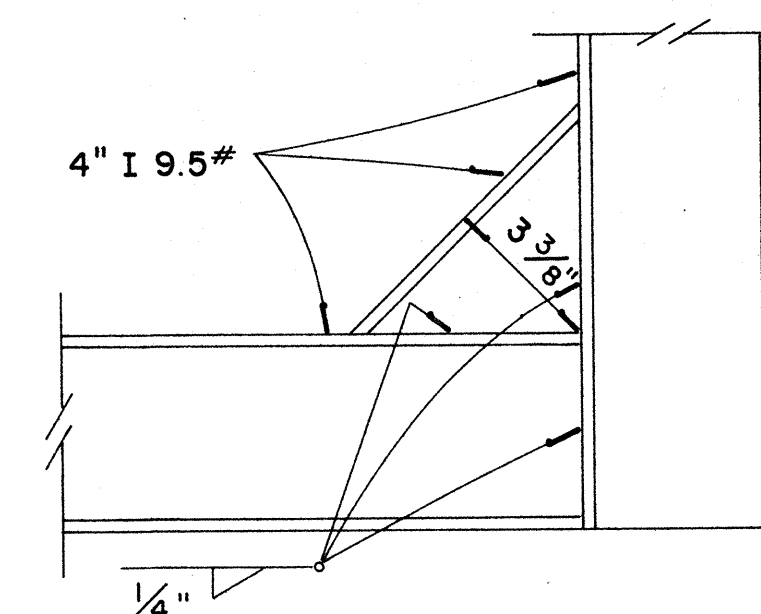
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-41-1(30)	1967	101	219

GENERAL NOTES

- Conduit sizes: $\frac{3}{4}$ " diameter for one or two Luminaire Units, 1" diameter for three or more Luminaire Units.
- Fluorescent Fixtures shall be installed as recommended by the manufacturer.
- Luminaire brackets shall be spaced to fit 4'-0" to 6'-0" luminaires with fittings. Eight feet (8'-0") luminaires shall have an additional bracket at midpoint.
- All parts of the bracket shall be hot-dip galvanized, prime coated with a suitable primer and painted with three coats of dark green enamel.

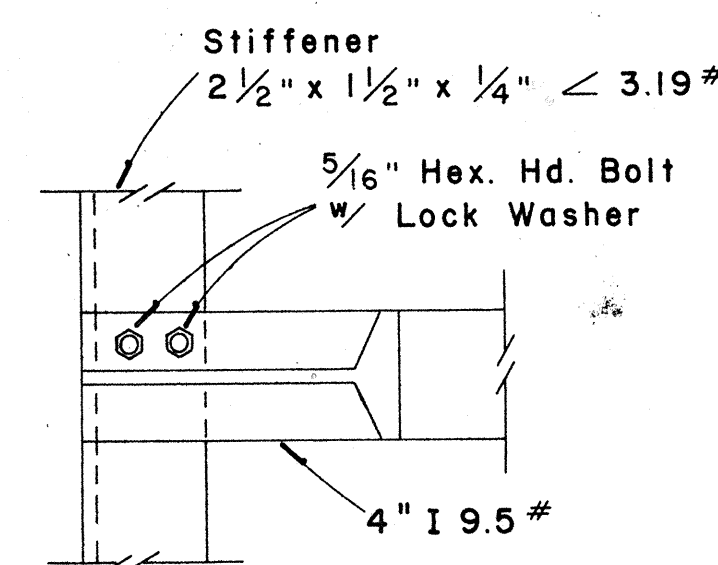
CONDUIT STRAP DETAIL

Scale: 3" = 1'-0"



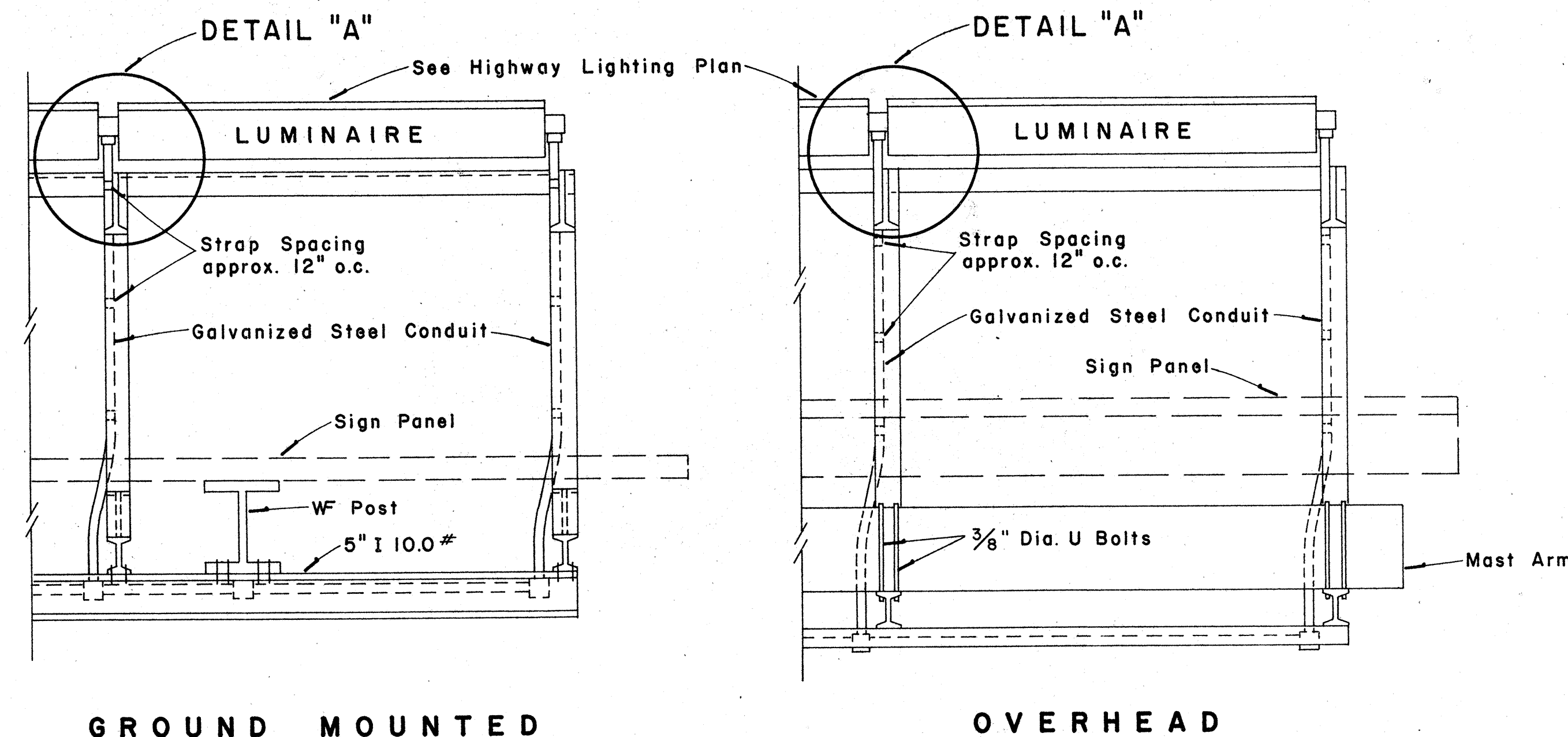
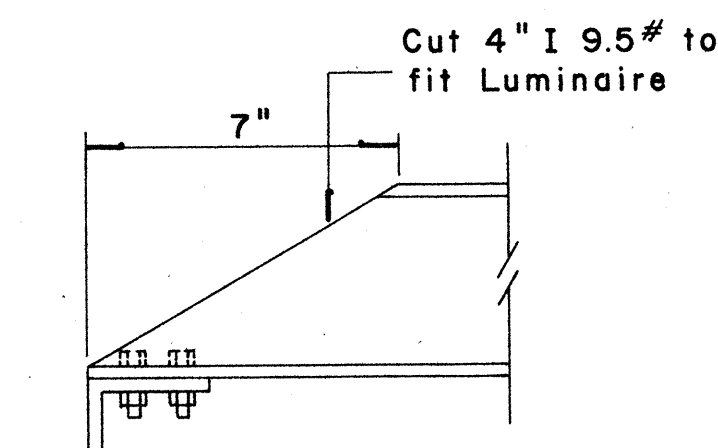
DETAIL "B"

Scale: 3" = 1'-0"



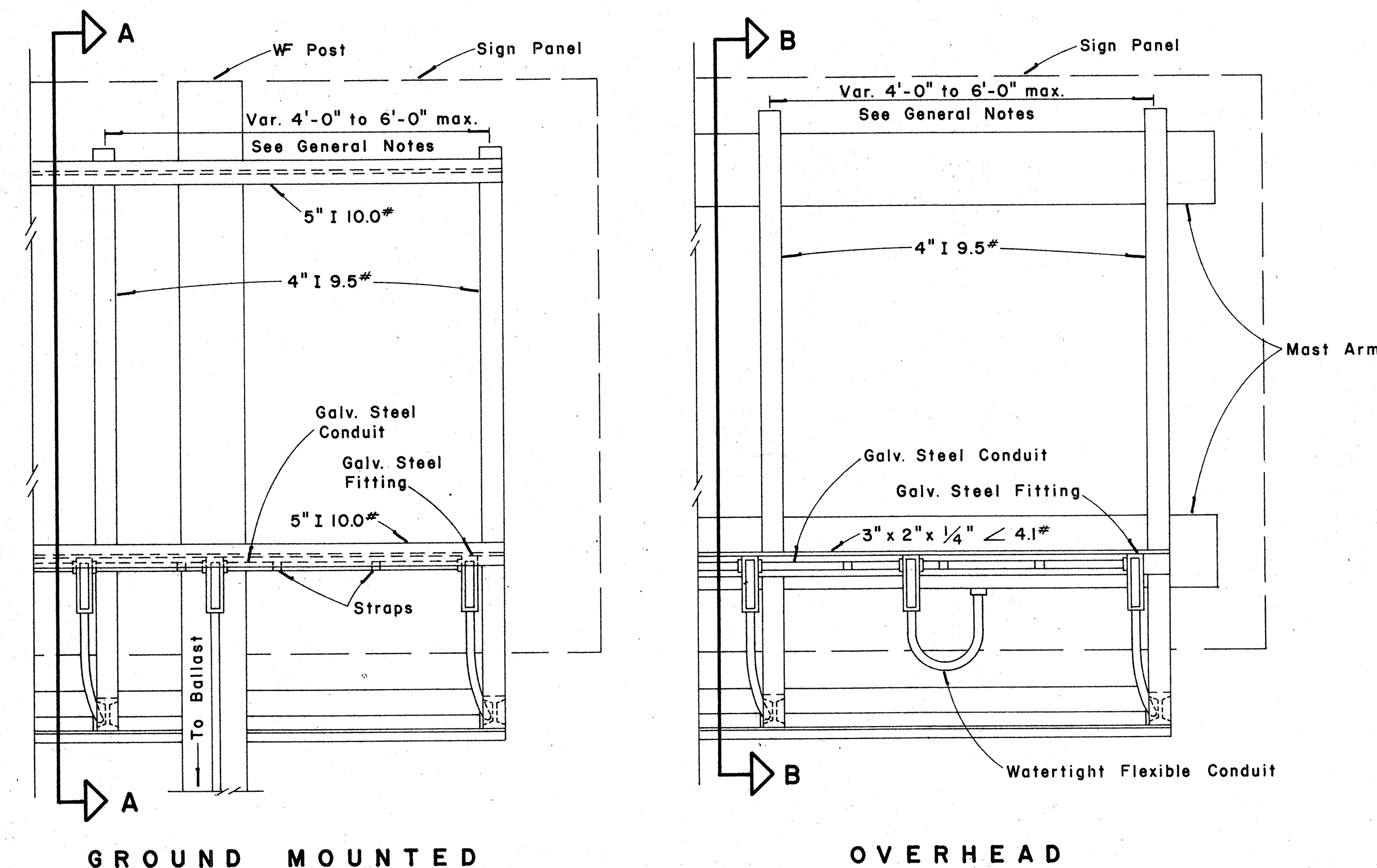
DETAIL "A"

Scale: 3" = 1'-0"



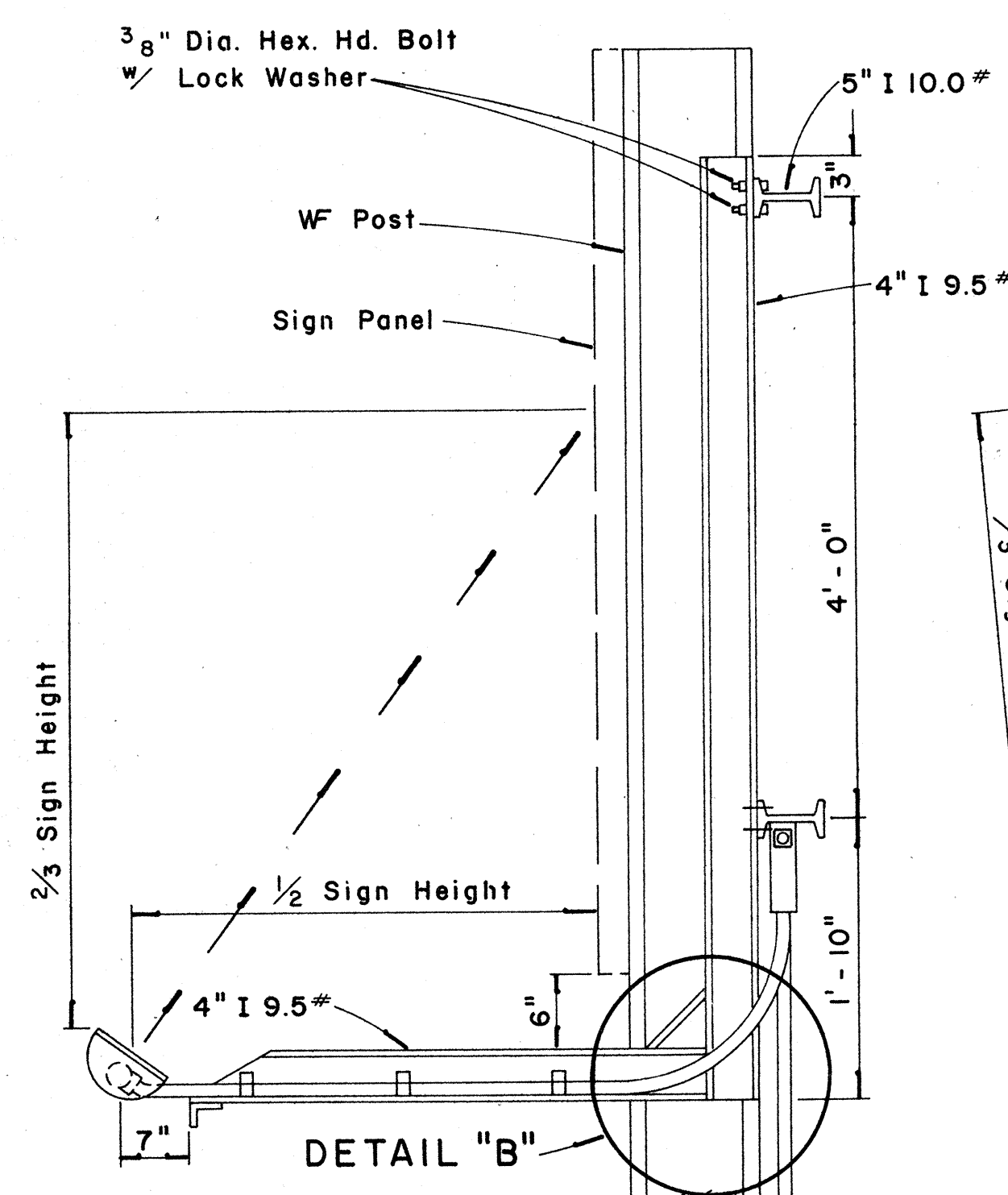
TOP VIEW LUMINAIRE MOUNTING

Scale: 1" = 1'-0"



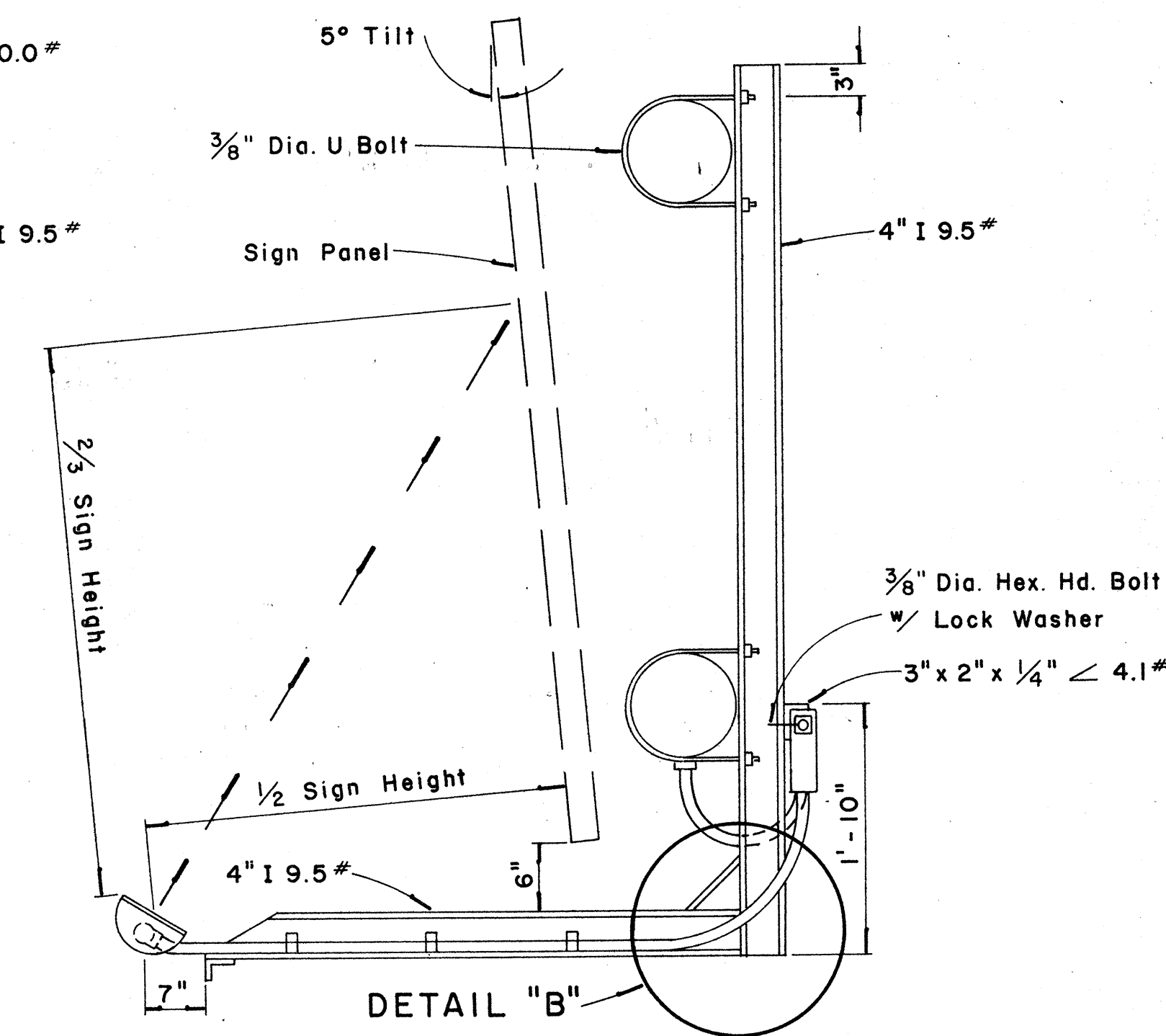
REAR VIEW LUMINAIRE MOUNTING

Scale: 1" = 1'-0"



SECTION "A-A"

Scale: 1" = 1'-0"



SECTION "B-B"

Scale: 1" = 1'-0"

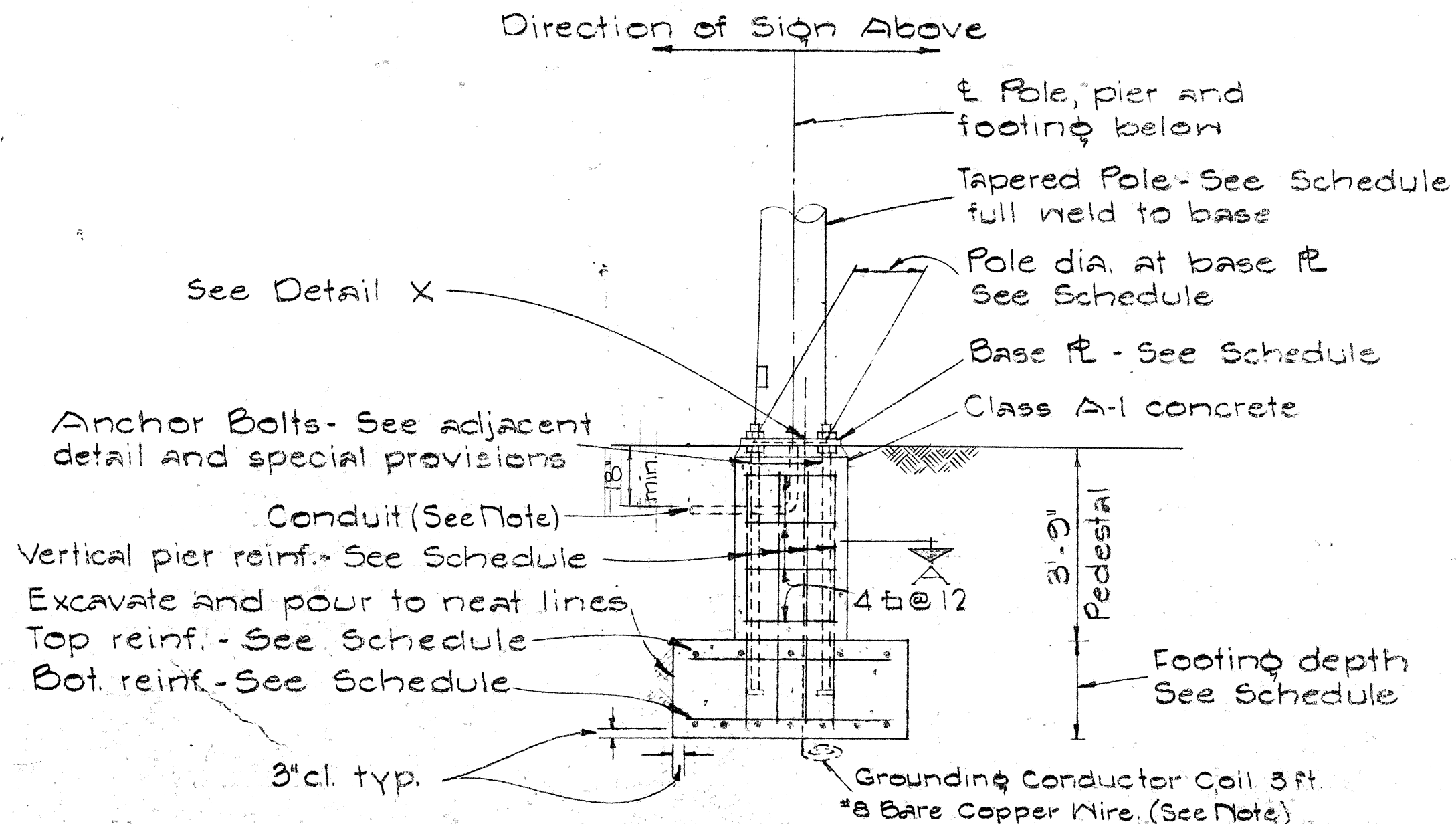
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXPRESSWAY SIGNS LUMINAIRE MOUNTINGS

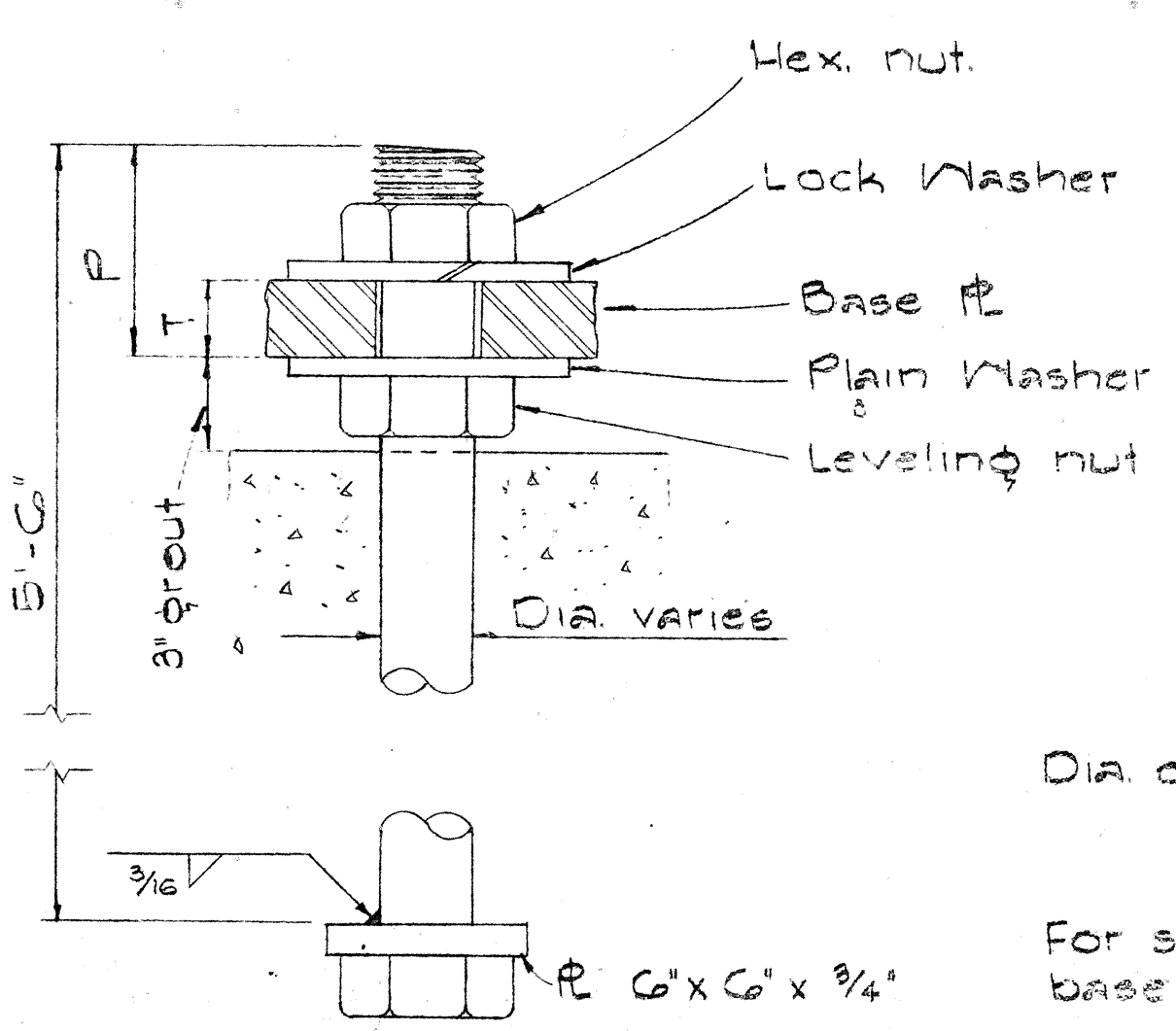
Scale: As Shown

SHEET No. 14 OF 25 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

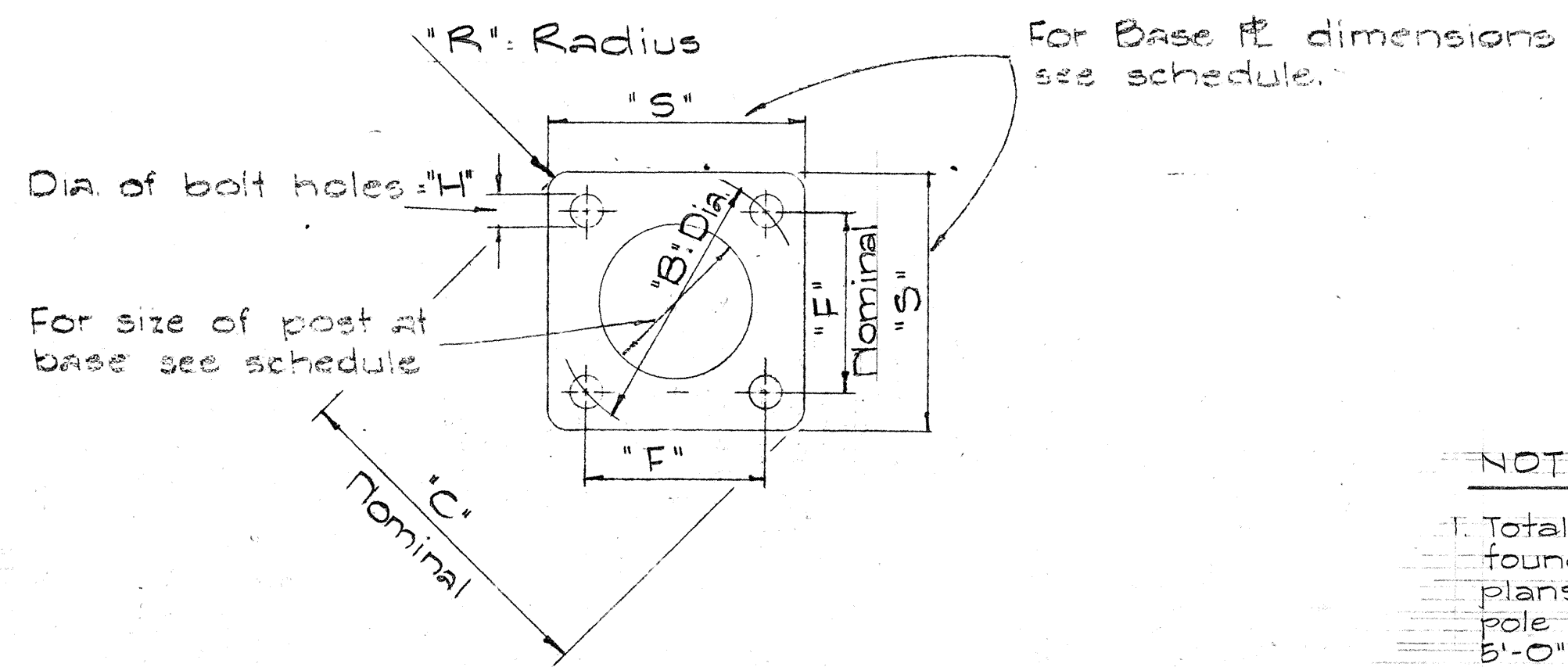


TYPICAL POLE FOUNDATION DETAIL



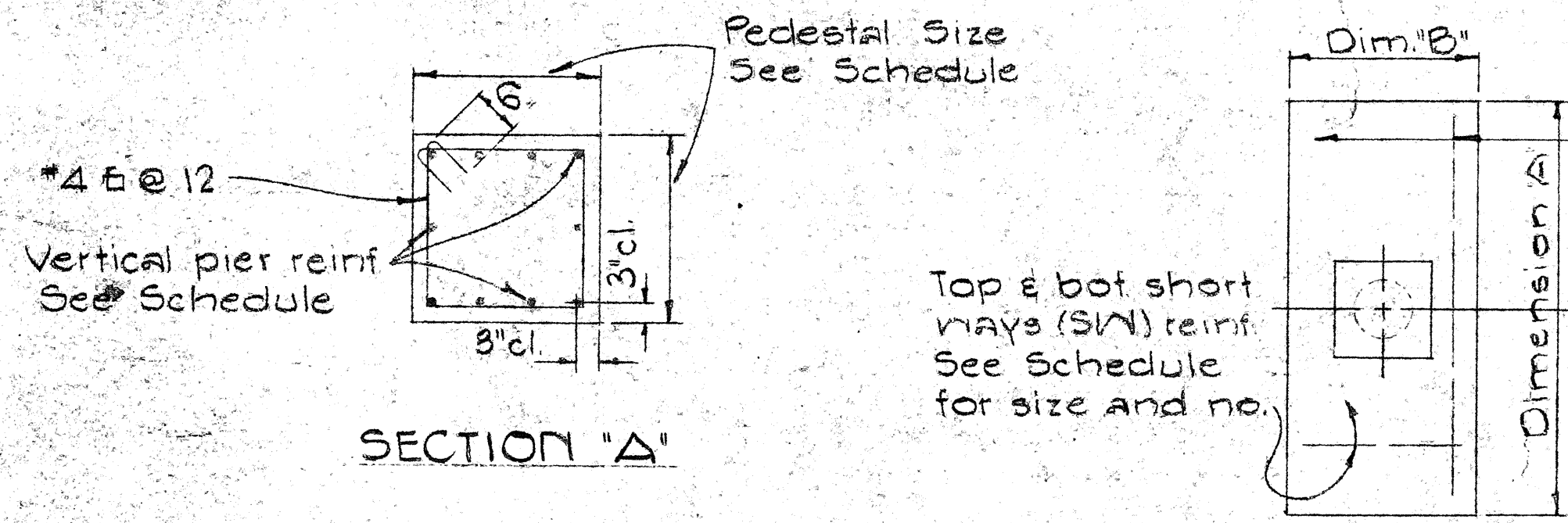
TYPICAL ANCHOR BOLT 4 REQ'D

BASE PLATE SCHEDULE										
Gage No.	Post Dia.	B	C	F	H	P	R	S	T	Bolt Dia.
3	18	25 1/2	33	18	2 3/8	5	5 1/2	26 1/2	2	2
0	18	25 1/2	33	18	2 3/8	G	5 1/2	26 1/2	2 1/2	2 1/4
747	16	23 1/2	30 1/2	16 3/8	2 3/8	G	5	24 1/2	2 1/2	2 1/4

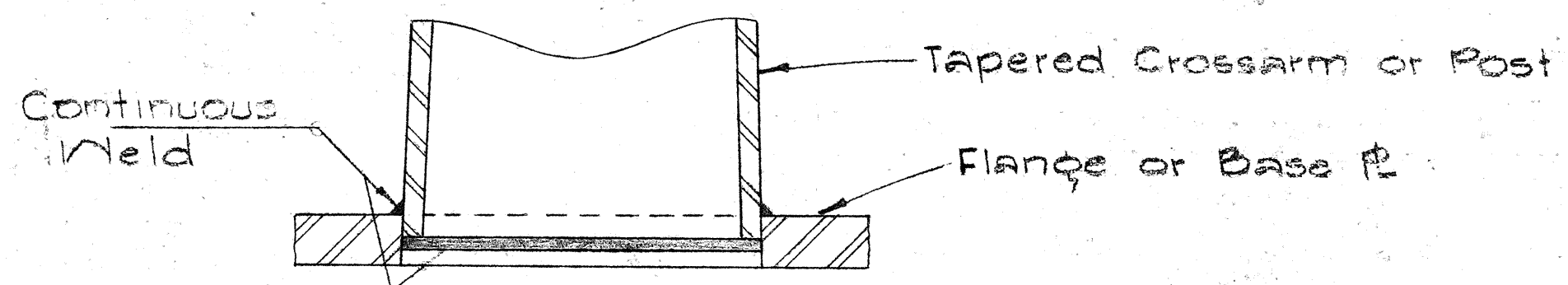


TYPICAL BASE PLATE

NOTE:
 1. Total number of conduits into pole foundation as indicated on Lighting plans. Conduits shall slope away from pole foundation. Conduit shall stub out 5'-0" min. for direct burial entry.
 2. Grounding conductor shall be bonded to sign support.



TYPICAL FOOTING PLAN



DETAIL "X"

FOUNDATION SCHEDULE									
Type	Dimension		Depth	Bot. Reinf.		Top Reinf.		Pedestal	
	A	B		L.W.	S.W.	L.W.	S.W.	Size	Vert. Reinf.
I	7'-0"	3'-0"	2'-0"	3-#4	8-#4	*4 @ 12 Each Way.		1'-11"	10-#5
II	9'-0"	4'-0"	2'-0"	6-#6	10-#4	Do.		2'-6"	10-#7
III	10'-0"	5'-0"	2'-0"	5-#8	11-#4	Do.		2'-6"	10-#8
IV	12'-0"	6'-0"	2'-0"	7-#9	13-#4	Do.		2'-9"	10-#10
V	14'-0"	7'-0"	2'-0"	8-#11	12-#4	Do.		2'-9"	10-#11

TYPE D - TWO TUBE TRUSS - SPAN									
Sign No.	Station	Cross Beams	Center Section "B"	Post Dia.		Base Plate	Footing		
				Left	Right		Type	Anchor Bolts	
E-1	± 176 + 00 Rt.	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing
E-4	± 220 + 75 Lt.	3 ga. 14.25" x 29'-0"	None	7 1/4 ga. 16" x 25'-0"	24 1/2" x 2 1/2" x 24 1/2"	II	IV	8 @ 2 1/4" Dia.	
E-5	± 234 + 13 Rt.	3 ga. 14.25" x 28'-0"	312 x 14.238 OD x 16'-0"	7 1/4 ga. 16" x 25'-0"	24 1/2" x 2 1/2" x 24 1/2"	II	III	8 @ 2 1/4" Dia.	

TYPE C - DOUBLE MASTARM - SINGLE POST - CANTILEVER							
Sign No.	Station	Arm Dimensions	Post Dimension	Base Plate	Footing		
					Type	Anchor Bolts	
E-2	± 203 + 00	7 ga. 12.5" x 23'-3"	0 ga. 18" x 26'-0"	26 1/2" x 2 1/2" x 26 1/2"	IV	4 @ 2 1/4" Dia.	
E-3	± 228 + 00 Rt.	7 ga. 12.5" x 25'-0"	3 ga. 18" x 25'-0"	26 1/2" x 2" x 26 1/2"	II	4 @ 2" Dia.	

GROUND MOUNTED DESTINATION SIGNS						
Sign No.	Station	Post Size		Base Plate	Footing	
		Left	Right		Left	Right
D-1	± Ward Ave. G+44 Lt.	3 I 5.7#		None	Type VII	Type VII
D-2	± Ward Ave. G+15 Lt.	3 I 5.7#		None	Type VII	Type VII
D-3	Piikoi St. 4+66 Lt.	3 I 5.7#		None	Type VII	Type VII

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

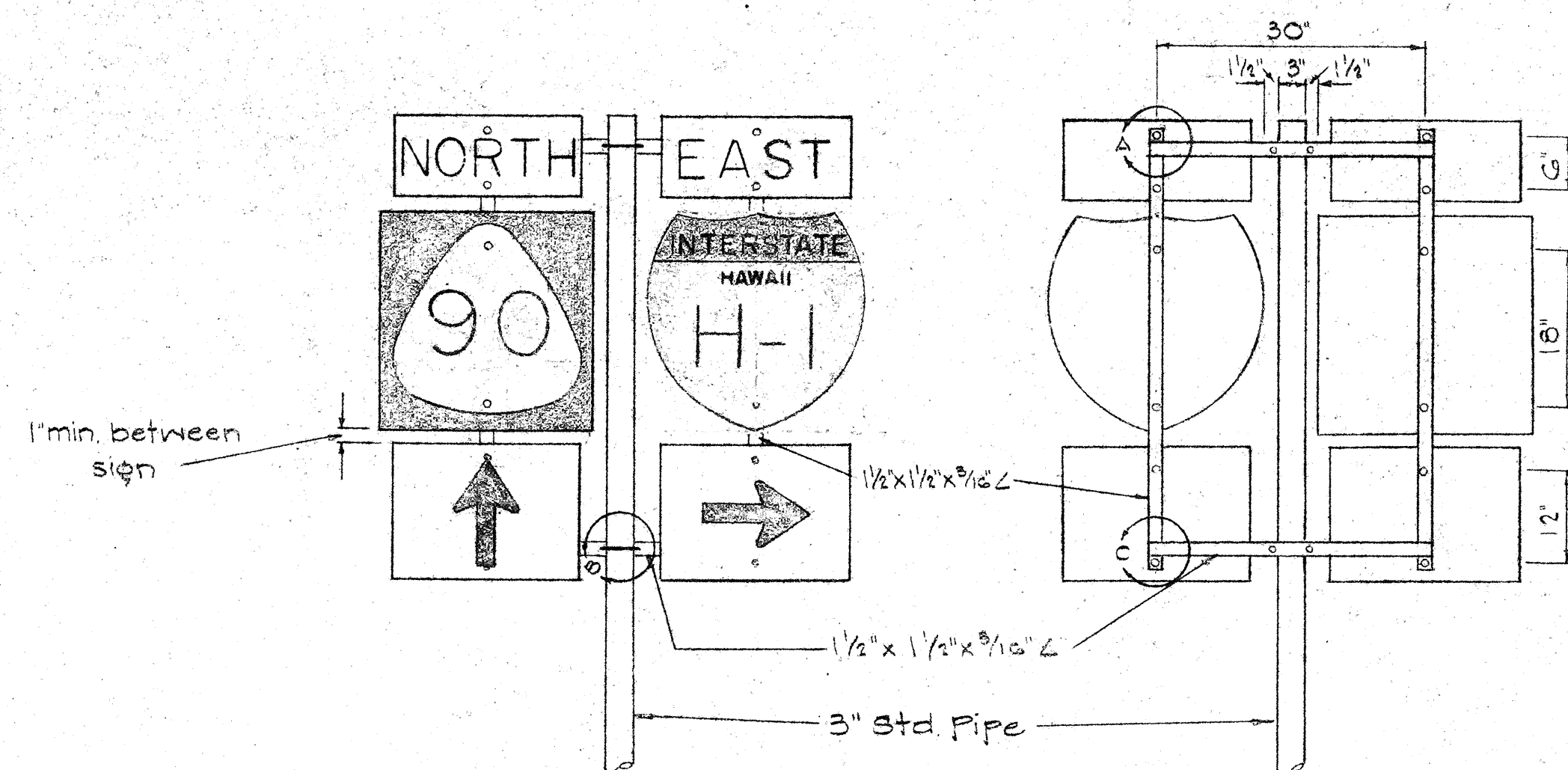
DETAILS & SCHEDULES

INTERSTATE ROUTE H-1
 Victoria St. to Keeoumoku St.
 F.A.I. Proj. No. I-H1-1(31), Unit 2

Not to Scale April 1967

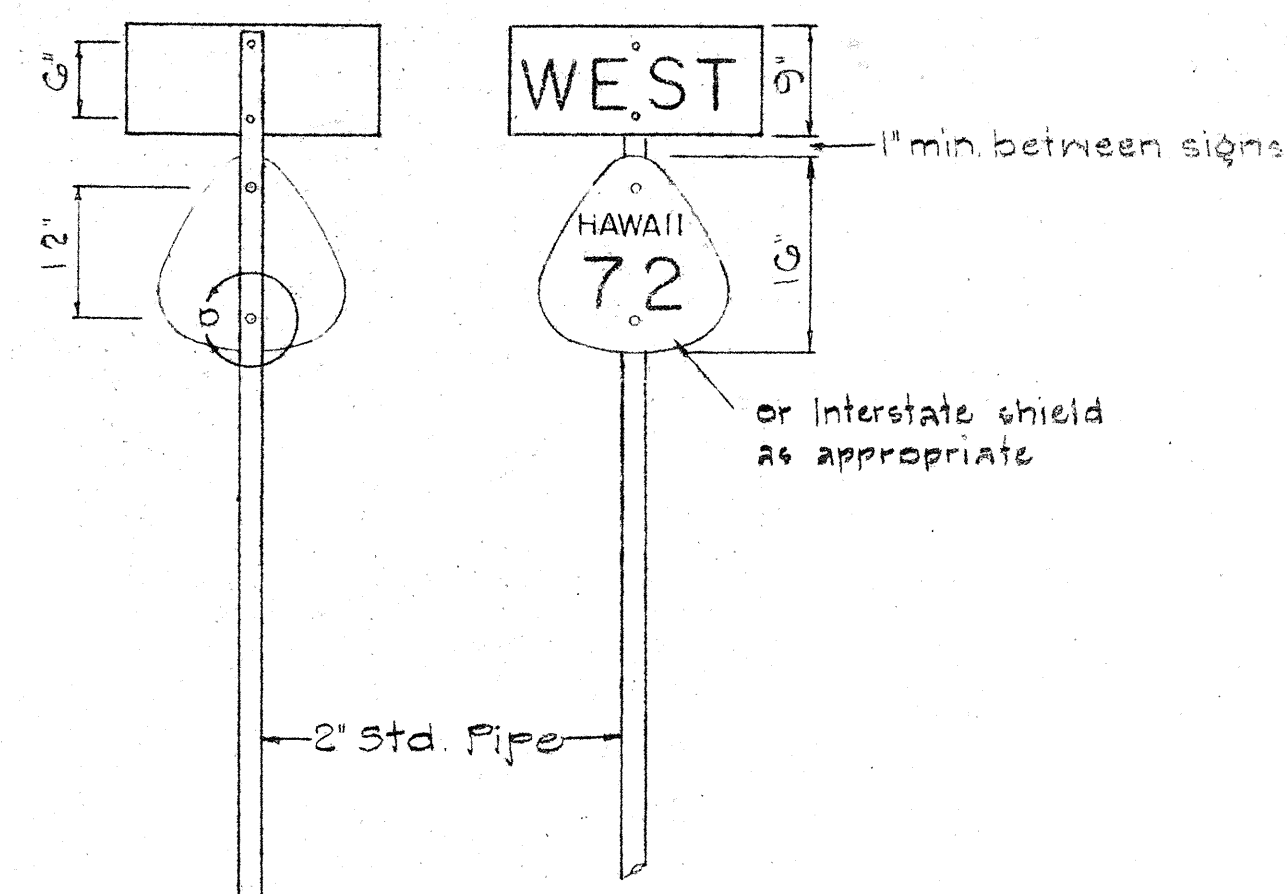
SHEET No. 15 OF 25 SHEETS

SURVEY PLANNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 NOTE BOOK: _____
 QUANTITIES BY: _____
 CHECKED BY: _____
 NO. _____



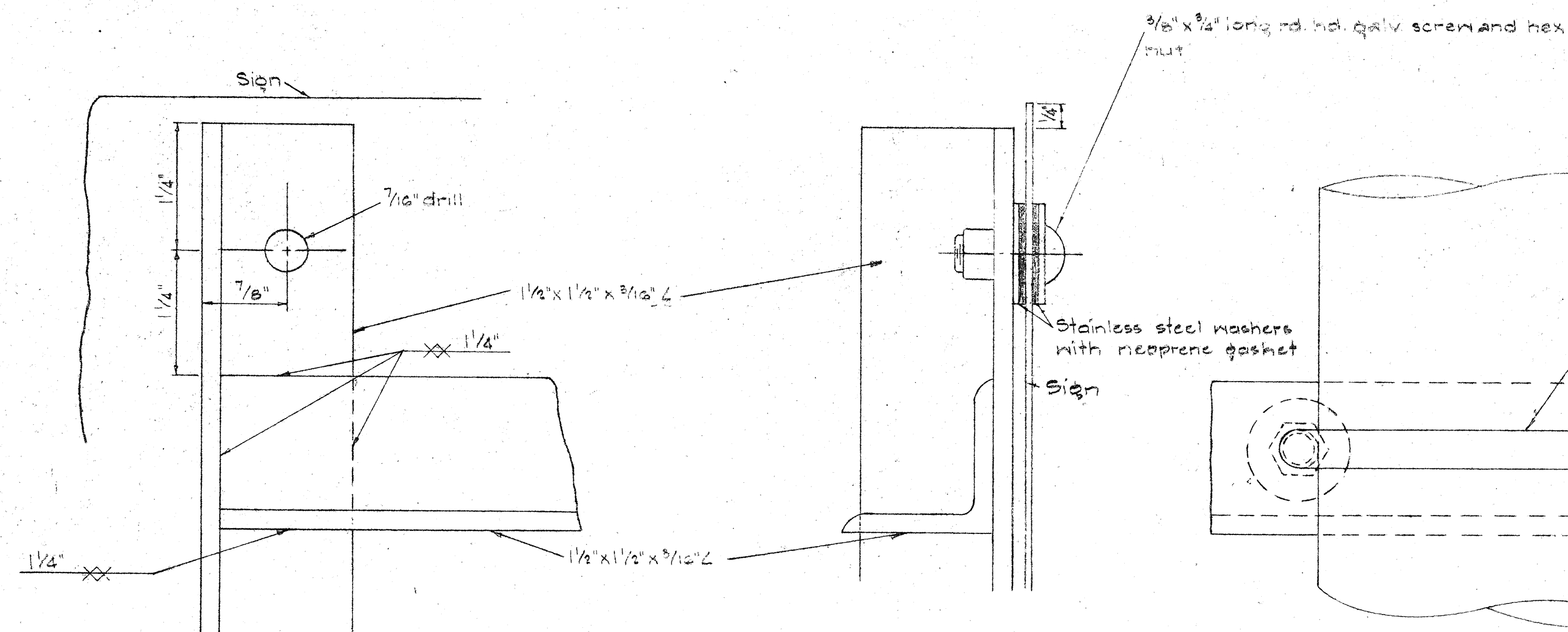
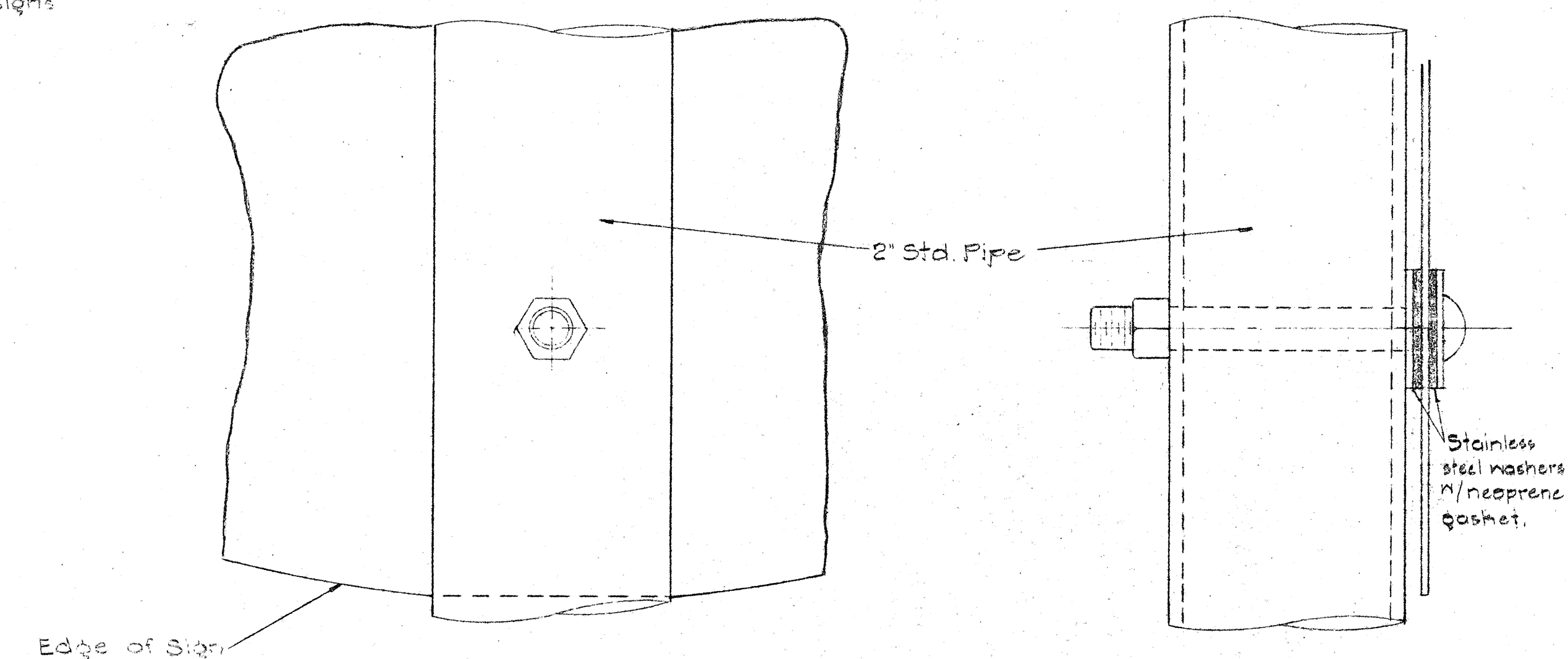
TYPE "B" ASSEMBLY
NOT TO SCALE

NOTE:
Minimum clearance between signs shall be 1 inch. (Larger clearances shall be in multiples of 1 inch.)

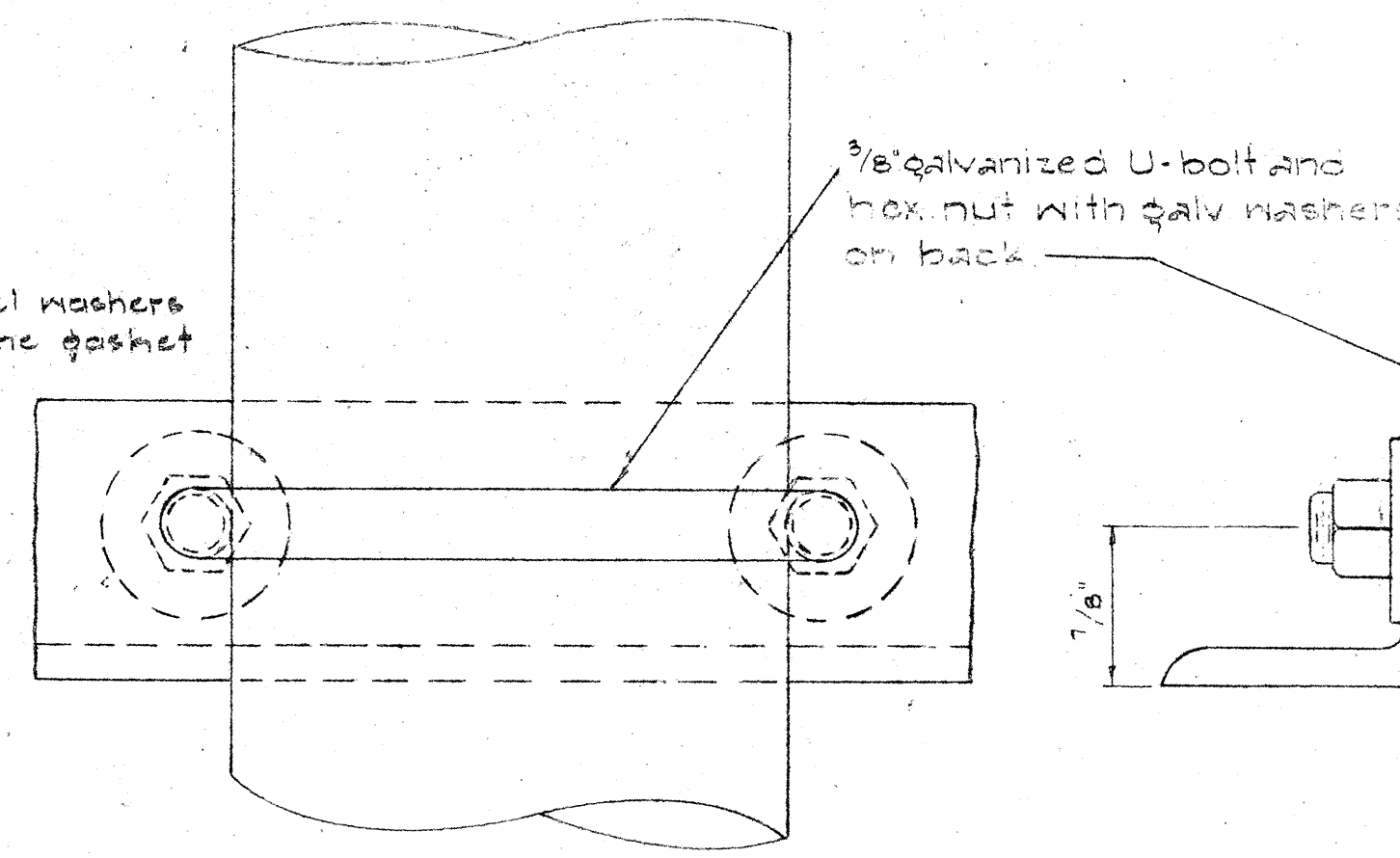


TYPE "A" ASSEMBLY
NOT TO SCALE

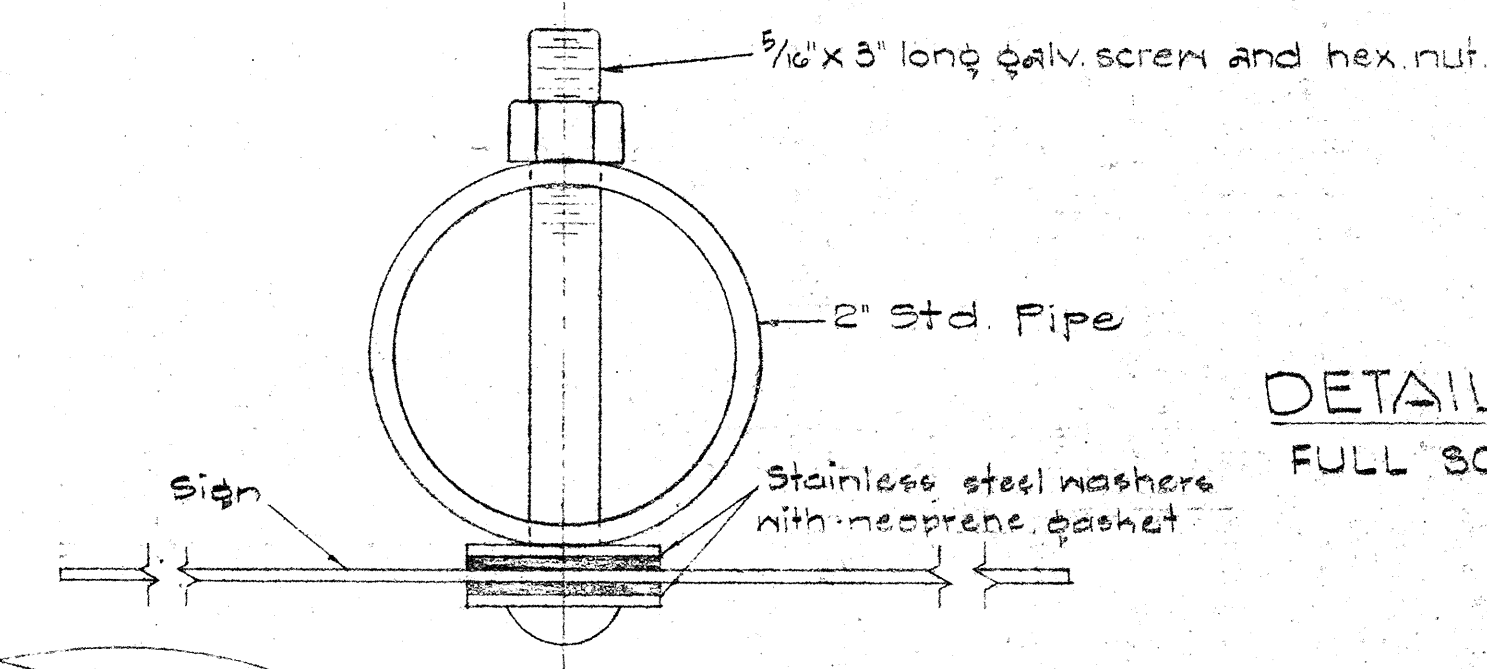
NOTE:
Use 2" Standard Pipe for Type "A" assembly.
Use 3" Standard Pipe for Type "B" assembly.



DETAIL "A"
FULL SCALE

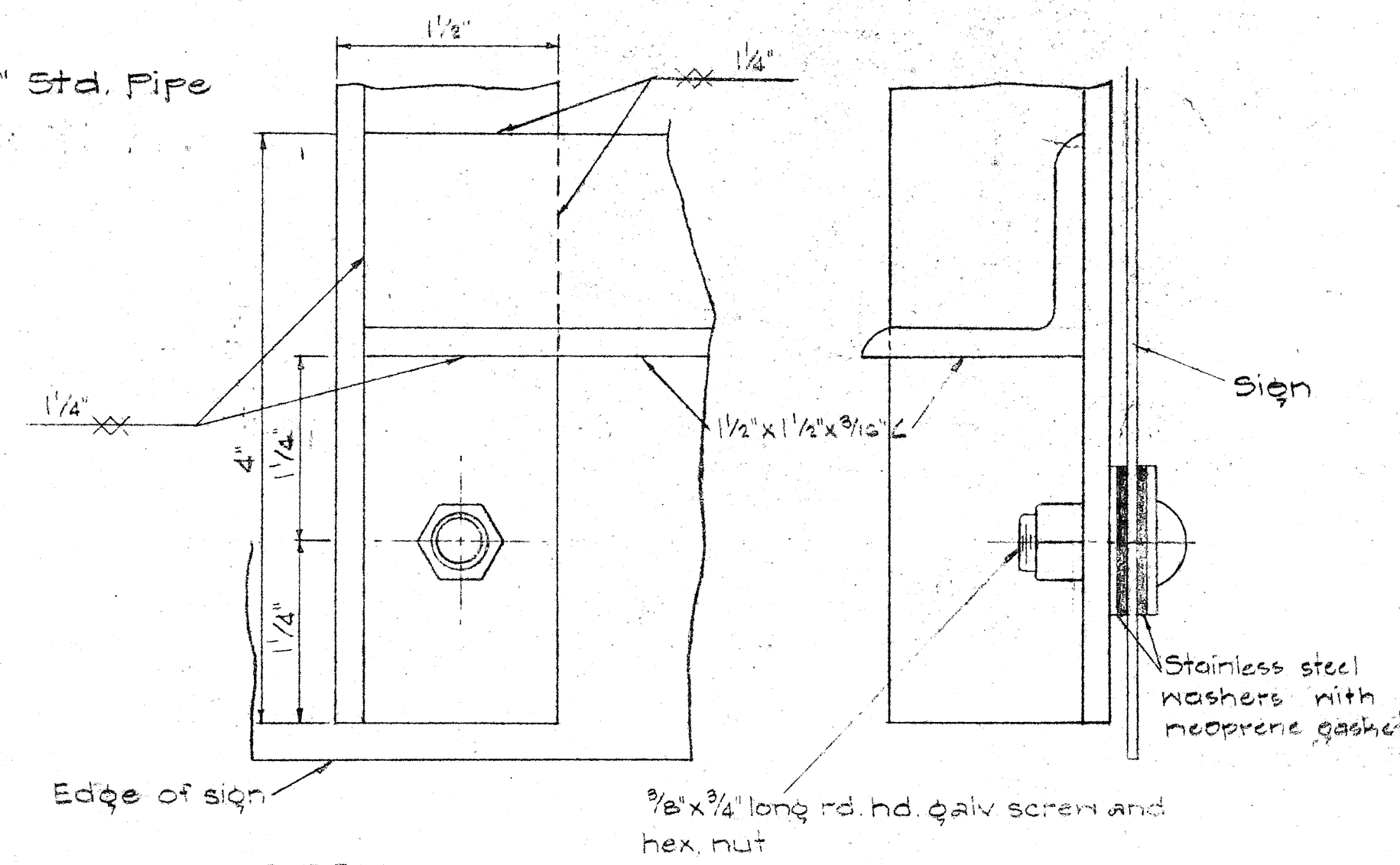


DETAIL "B"
FULL SCALE



DETAIL "C"
FULL SCALE

DETAIL "D"
FULL SCALE

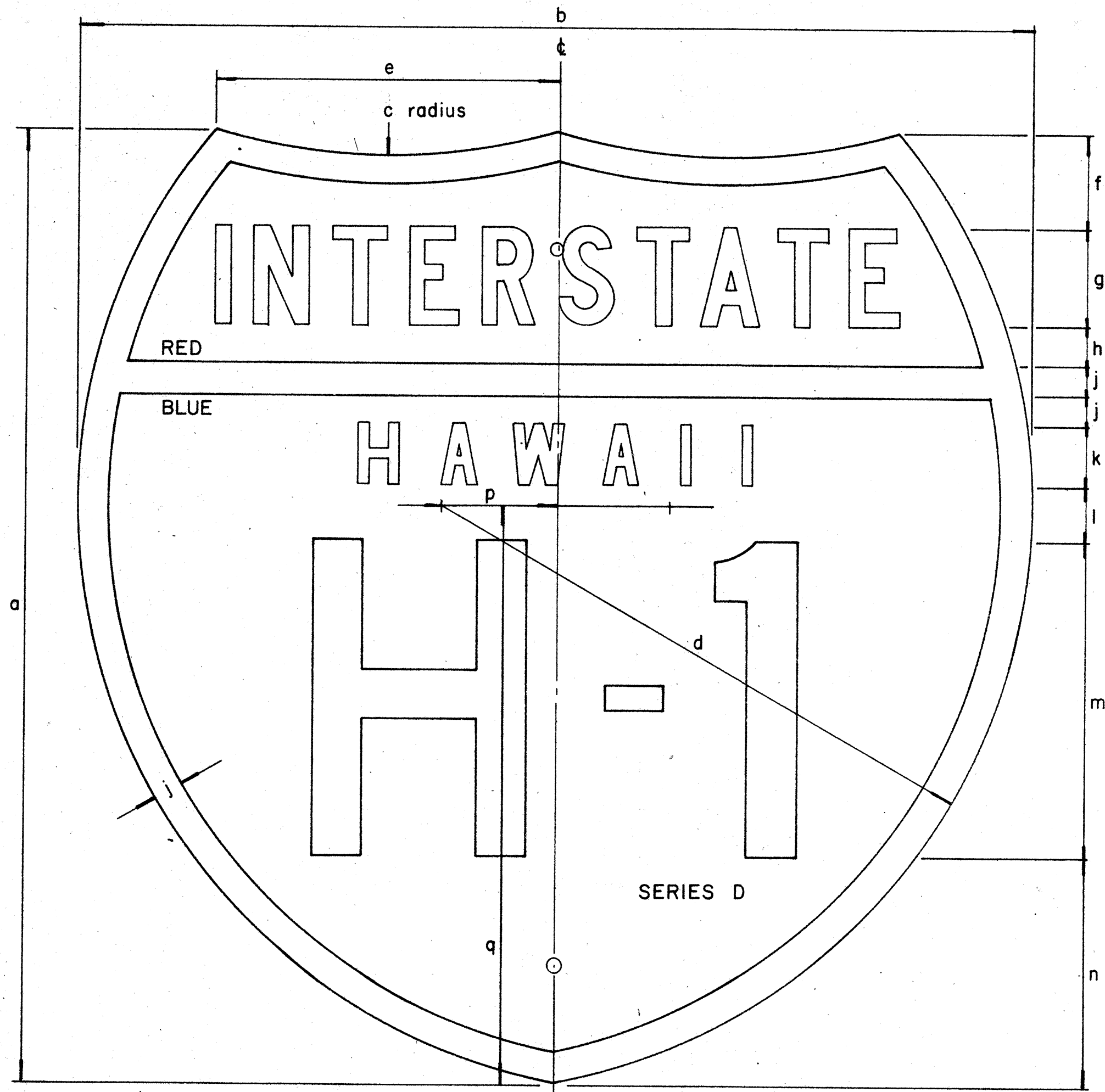


NOTE:
For height and lateral location of Route Marker Assembly, see Sheet No. 103

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DETAILS OF
ROUTE MARKER ASSEMBLY
Scale: As Noted

SHEET No. 103 OF 25 SHEETS

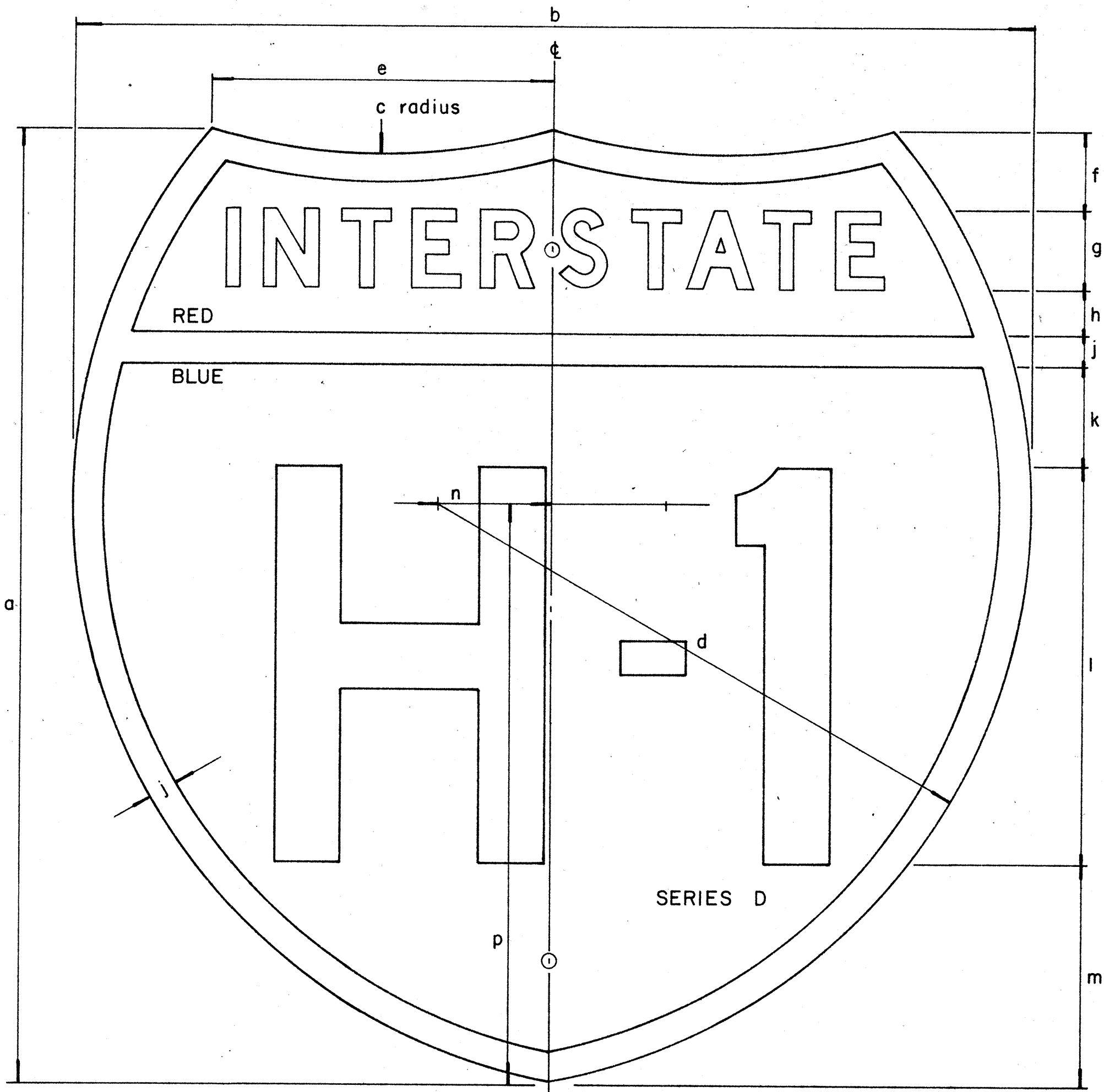
10-3



INTERSTATE ROUTE MARKER
IM-1()

INTERSTATE SHIELDS - INDEPENDENT USE

()	a	b	c	d	e	f	g	h	j	k	l	m	n	p	q
1	18	21	13 7/8	12 9/16	9 3/16	12 5/32	1 7/8 C	3/4	9/16	1 1/8 D	1 1/32	6	4 5/16	2 1/16	12 7/16
2	24	24	15	14 7/8	8 5/8	2 3/8	2 1/2 C	1	3/4	1 1/2 D	1 3/8	8	5 3/4	2 7/8	14 5/8
3	36	36	22 1/2	22 5/16	12 15/16	3 9/16	3 3/4 C	1 1/2	1 1/8	2 1/4 D	2 1/16	12	8 5/8	4 5/16	21 15/16



INTERSTATE ROUTE MARKER
IM-2()

INTERSTATE SHIELDS ON GUIDE SIGNS

()	a	b	c	d	e	f	g	h	j	k	l	m	n	p
2	24	24	15	14 7/8	8 5/8	2	2 D	1 3/16	3/4	2 9/16	10	5 1/2	2 7/8	14 5/8
3	36	36	22 1/2	22 5/16	12 15/16	3 7/16	3 C	1 5/16	1 1/8	3 1/8	15	9	4 5/16	21 15/16
4	48	48	30	29 3/4	17 1/4	4 3/4	5 C	2	1 1/2	4	18	12 3/4	5 3/4	29 1/4
5	18	18	11 1/4	11 3/16	6 1/2	1 3/4	1 1/2 C	1 1/16	9/16	1 9/16	7 1/2	4 1/2	2 3/16	11

GENERAL NOTES

- The shape, dimensions, symbols, wording, lettering, color and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June, 1961 and the BPR manual "Standard Highway Signs," dated September, 1961, unless otherwise specified.
- All letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1952
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.
- The Interstate Route Marker shall be a cut-out shield, in a red, white and blue design as shown on the plans.

STATE OF HAWAII

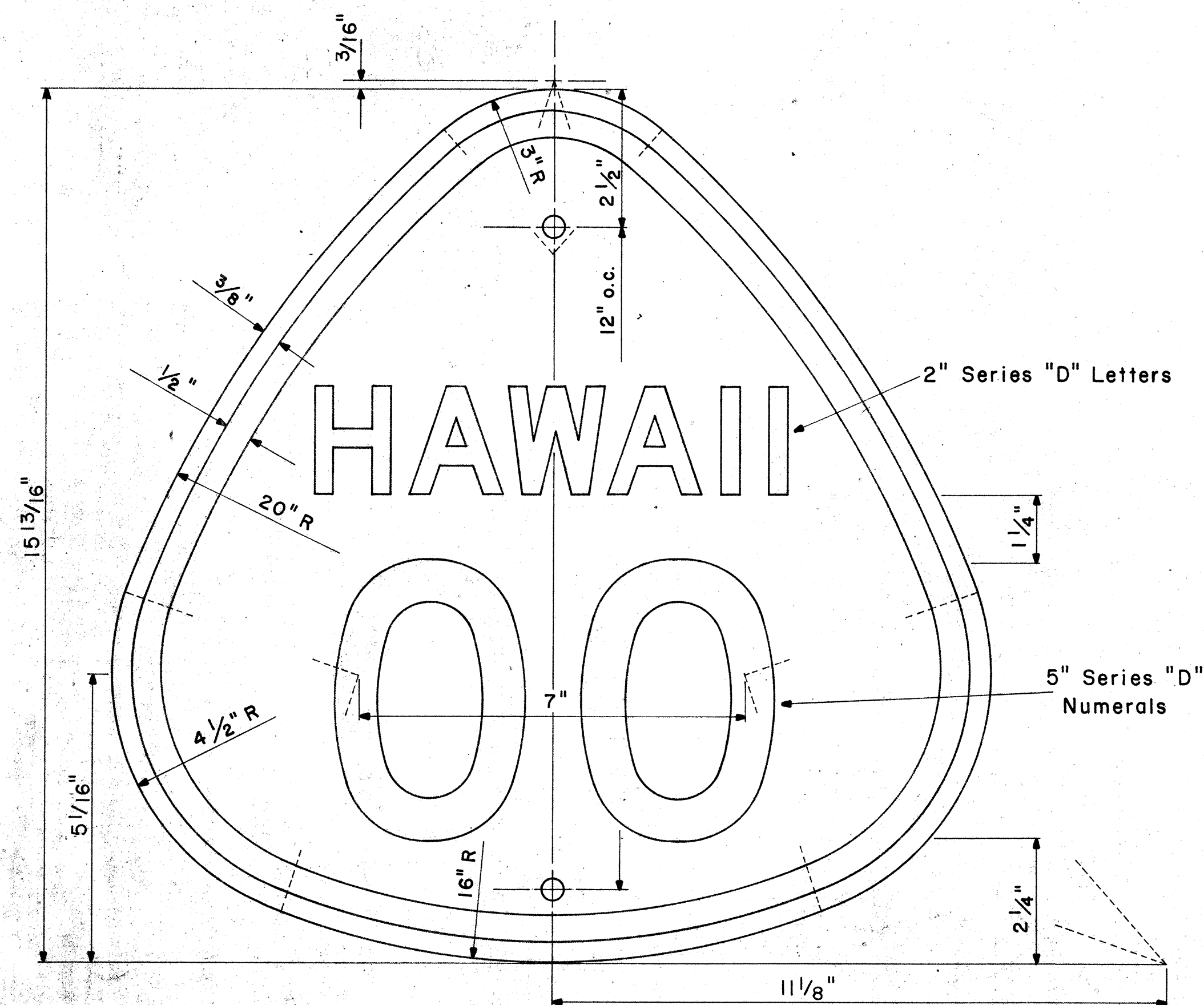
DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD DETAILS

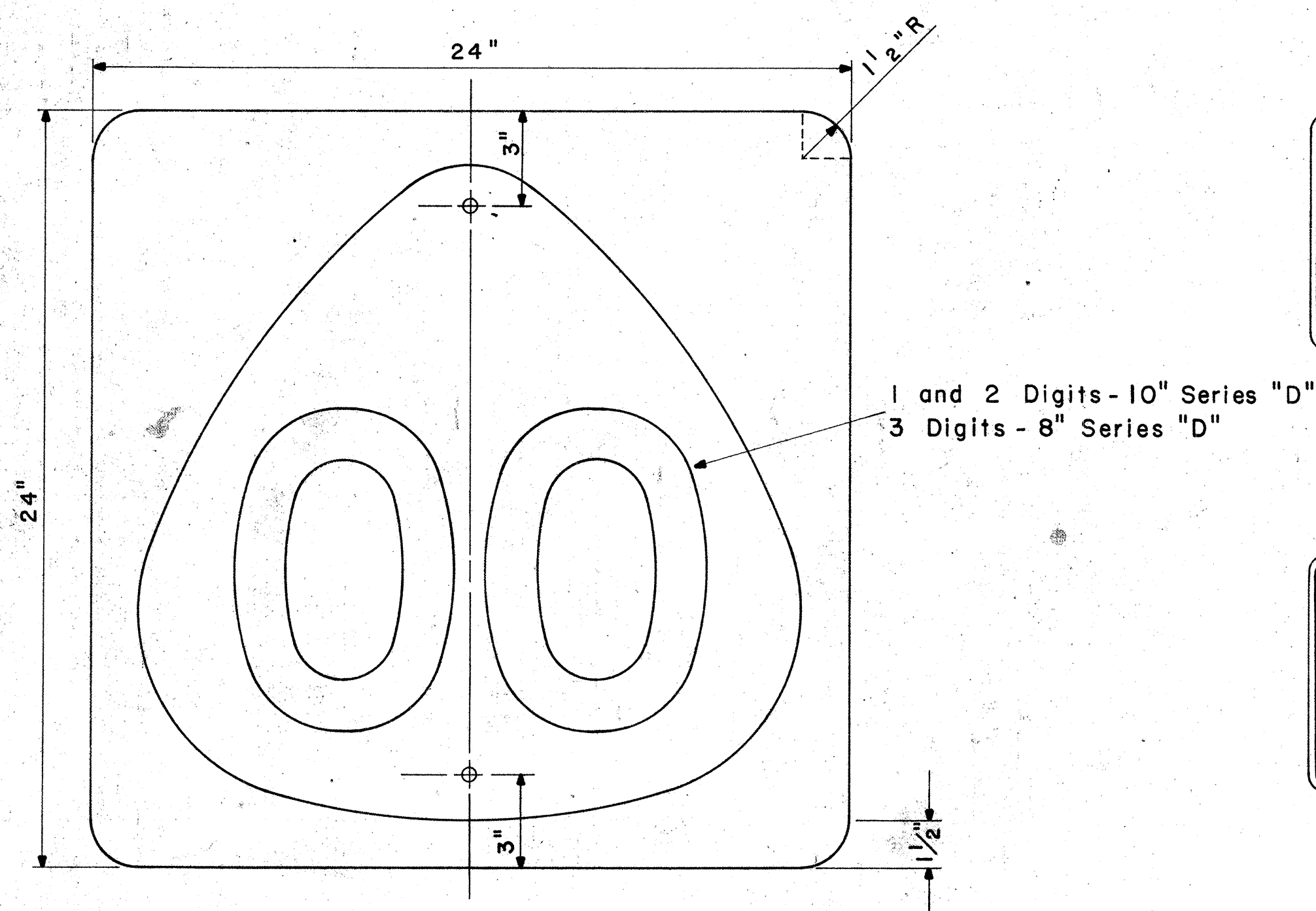
INTERSTATE ROUTE MARKERS

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



**STATE ROUTE MARKER
MI-3(00)**

Scale: $\frac{1}{2}$ " = 1"

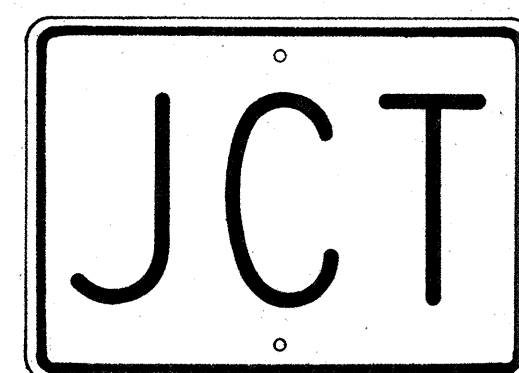


**STATE ROUTE MARKER
MI-4(00)**

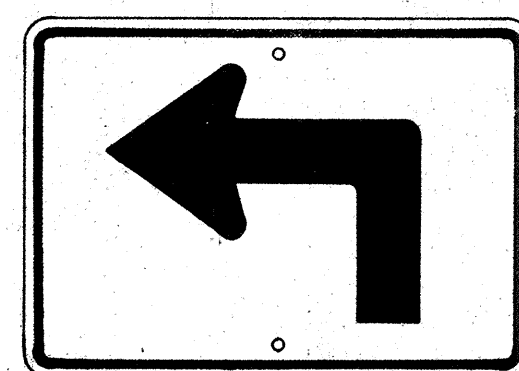
Scale: $\frac{1}{4}$ " = 1"

NOTE:

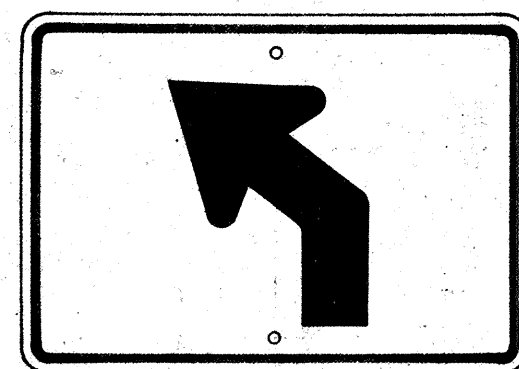
Multiply all dimensions of State Route Marker MI-3 by 1.3 for the dimensions of the shield for MI-4.



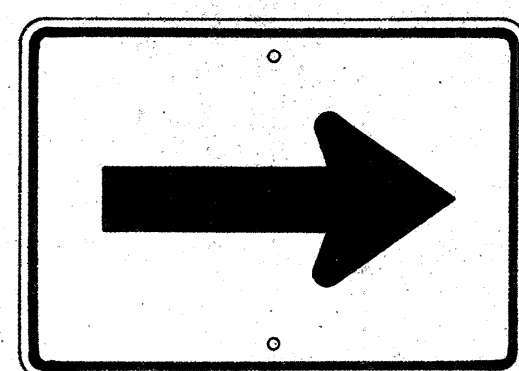
M2-1
21" x 15"



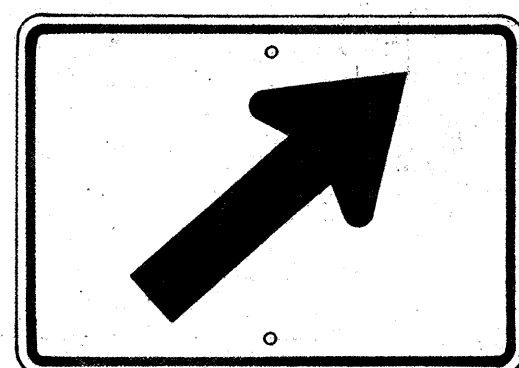
M3-1-L
* M3-1-R ↗
21" x 15"



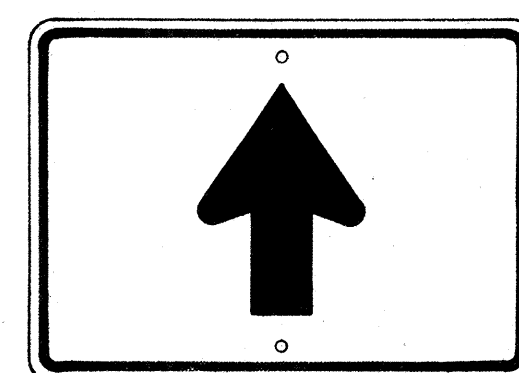
M3-2-L
* M3-2-R ↗
21" x 15"



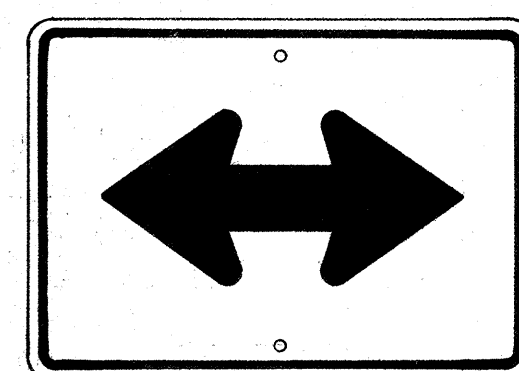
M4-1
21" x 15"



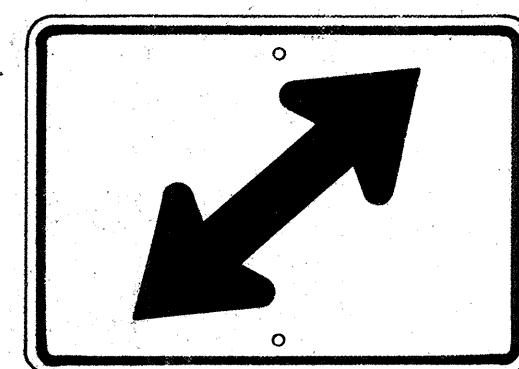
M4-2-R
* M4-2-L ↙
21" x 15"



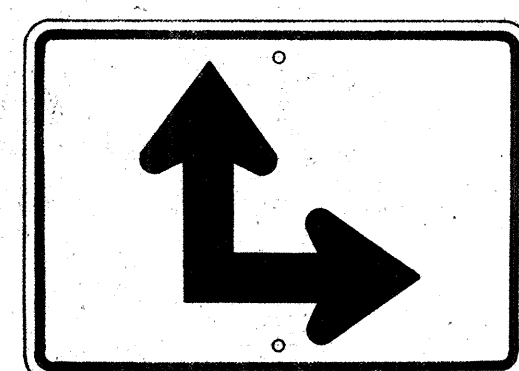
M4-3
21" x 15"



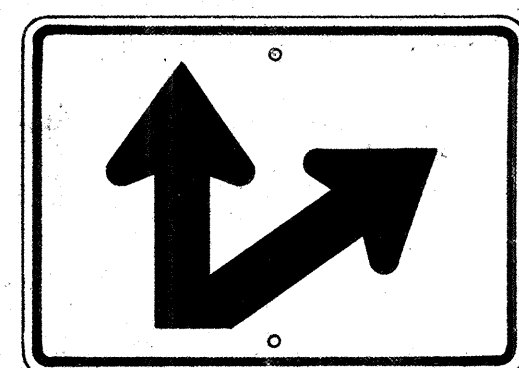
M4-4
21" x 15"



M4-5-R
* M4-5-L ↙
21" x 15"



M4-6-R
* M4-6-L ↙
21" x 15"



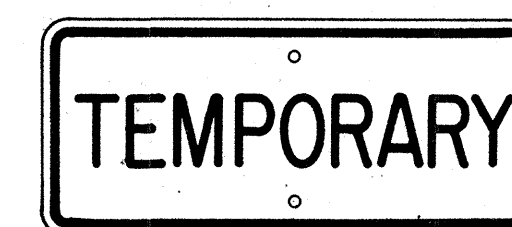
M4-7-R
* M4-7-L ↙
21" x 15"

AUXILIARY MARKERS

Scale: $\frac{1}{8}$ " = 1"

*** NOTE:**

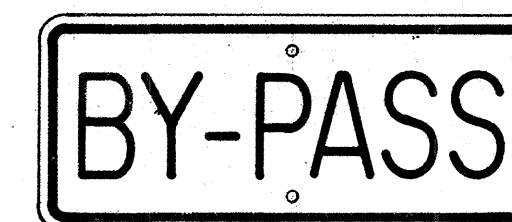
Signs shall be similar but opposite in direction.



M5-1
21" x 9"



M5-2
21" x 9"



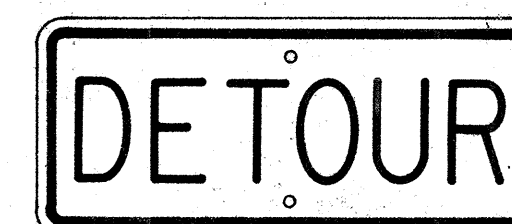
M5-3
21" x 9"



M5-4
21" x 9"



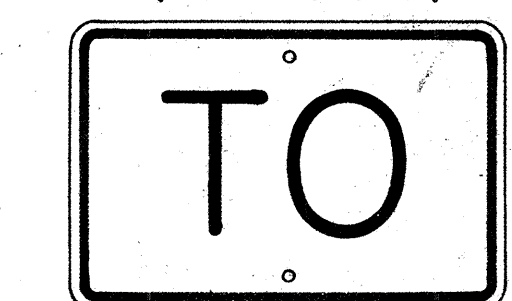
M5-5
21" x 9"



M5-6
21" x 9"



M6-1-N
21" x 9"
(See Note 6)



M7-1
18" x 12"

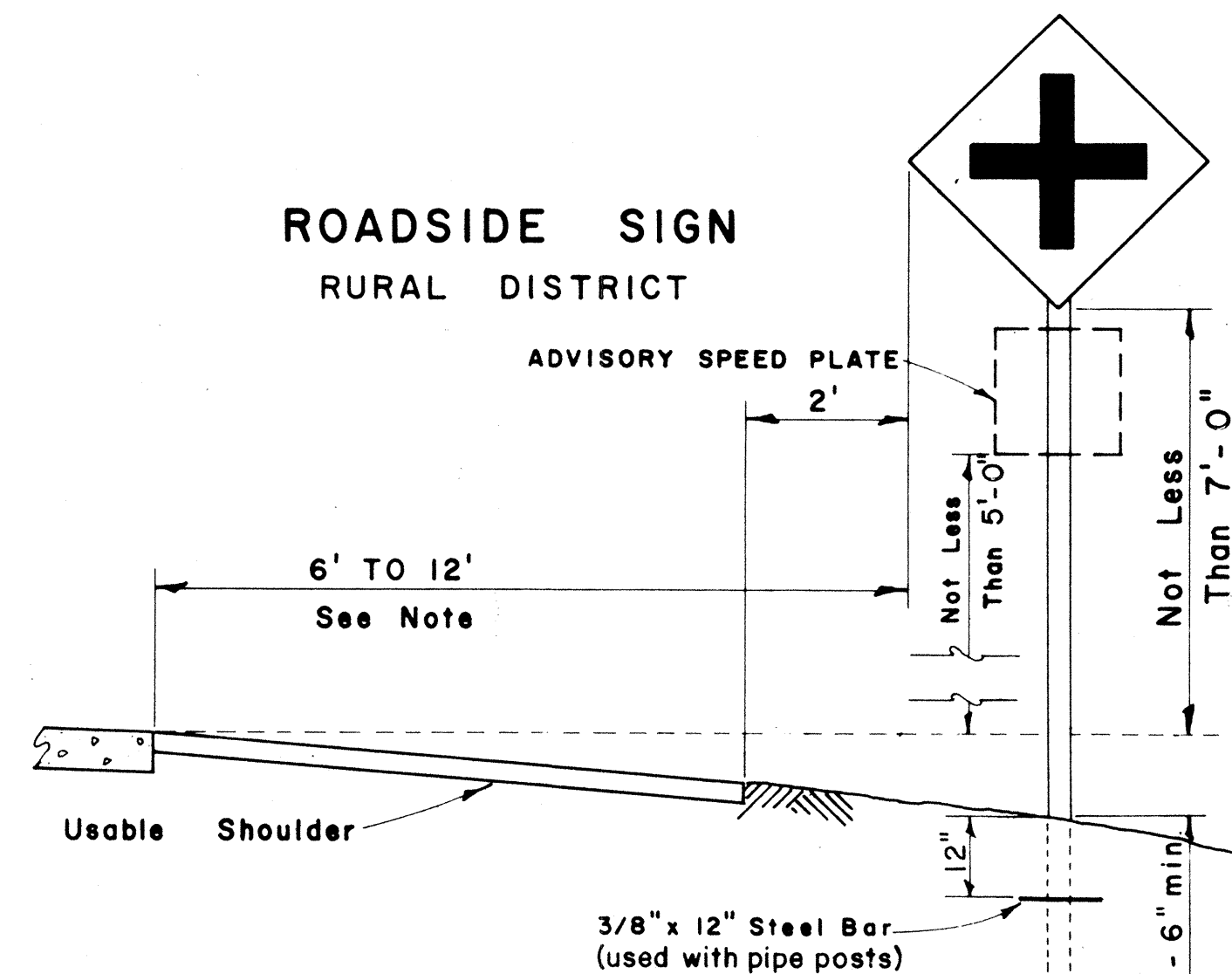
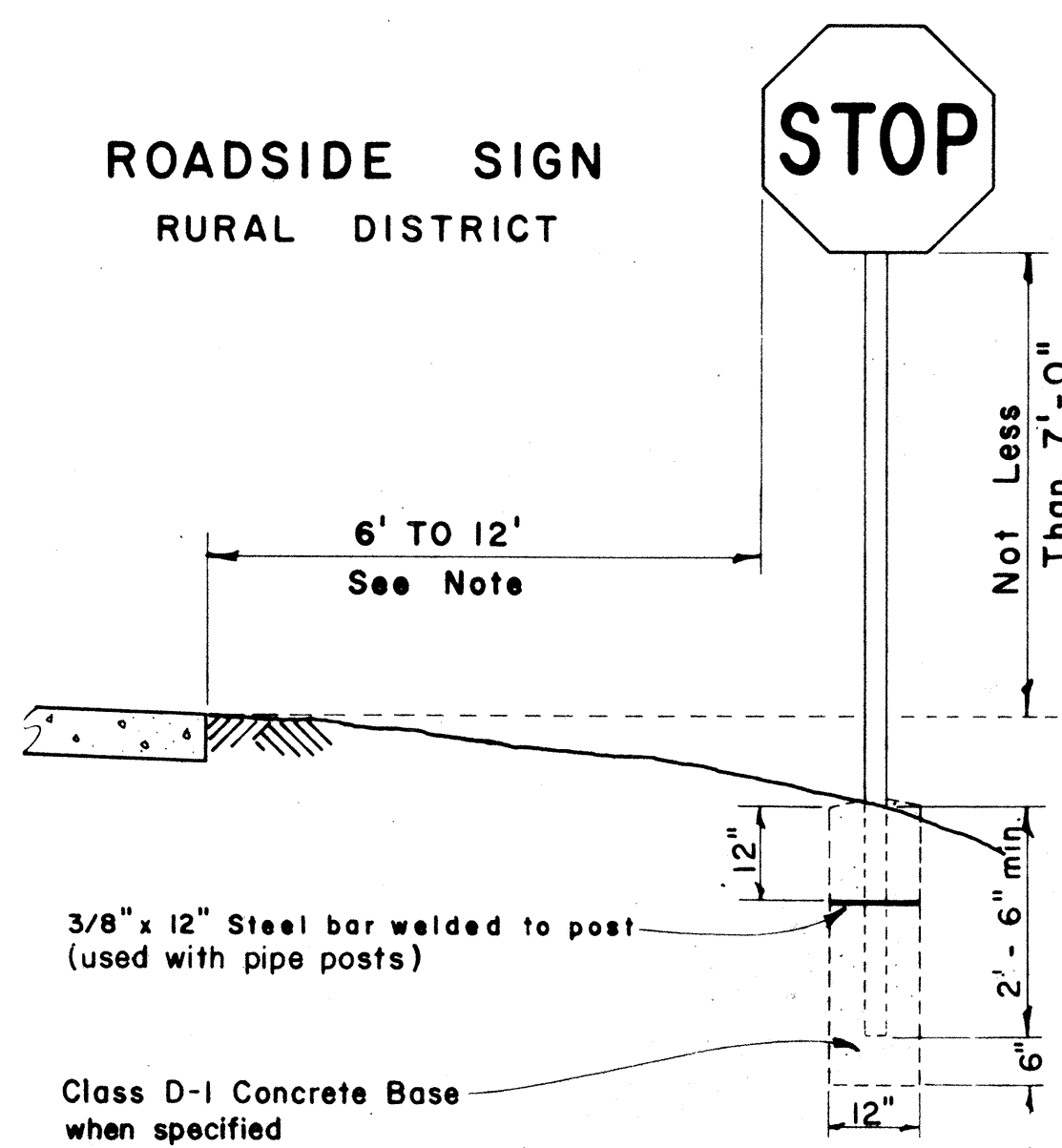
GENERAL NOTES

- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
- All letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1952.
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise specified.
- All markers shall have a black legend on a white background unless otherwise specified.
- Sign message of Cardinal Direction Marker (M6-1) shall be denoted by the following suffixes:
M6-1-N : NORTH
M6-1-E : EAST
M6-1-S : SOUTH
M6-1-W : WEST
- Auxiliary markers denoted with the suffix "I" (M4-1-I) shall have a white legend on a blue background.
- Cardinal Direction Marker (M6-1) with suffix I (3) shall have a white legend on a blue background and shall be 30" x 15" in size.
- For MI-3 and MI-4 signs, number in () indicates route number and shall be as shown on the plan.

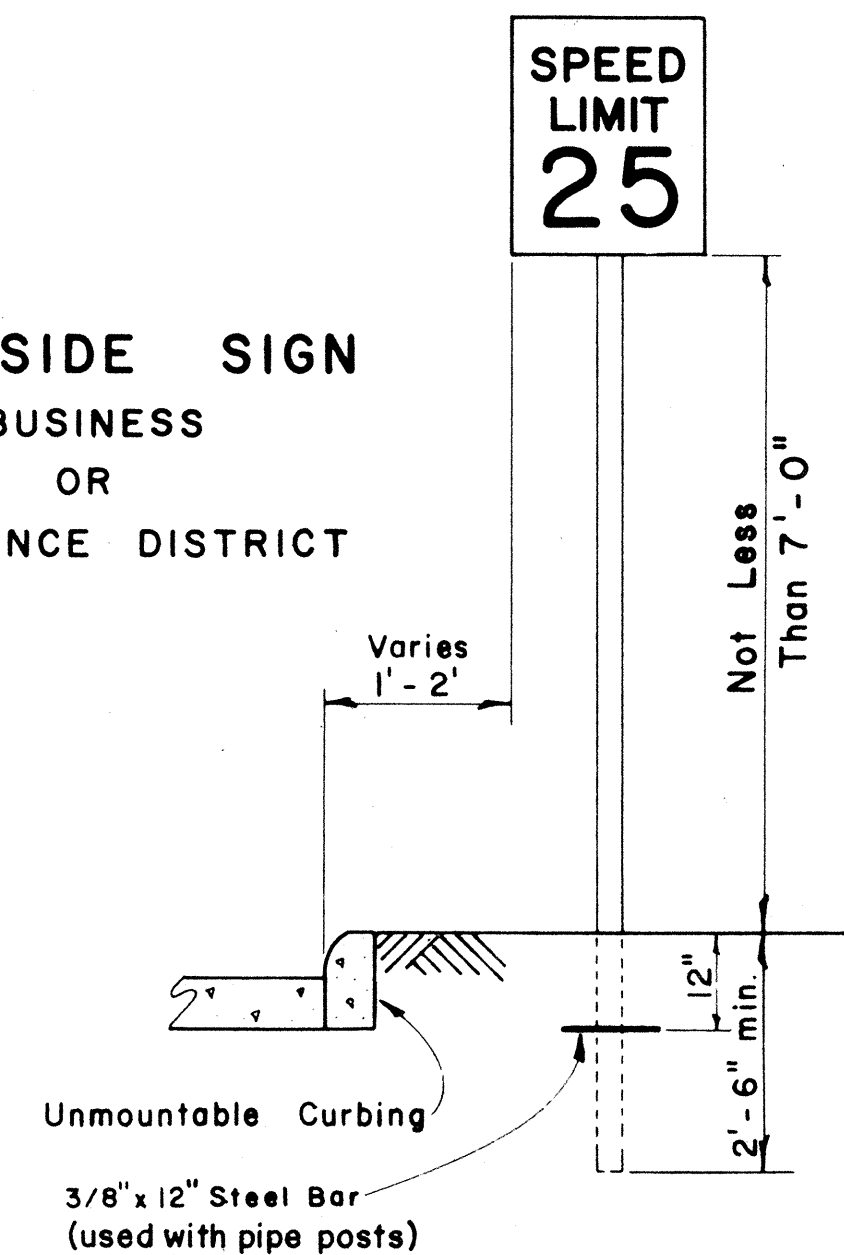
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
STATE ROUTE MARKERS
AND
AUXILIARY MARKERS
Scale: As Noted
SHEET NO. 105 OF 217 SHEETS

ORIGINAL	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
	No.	

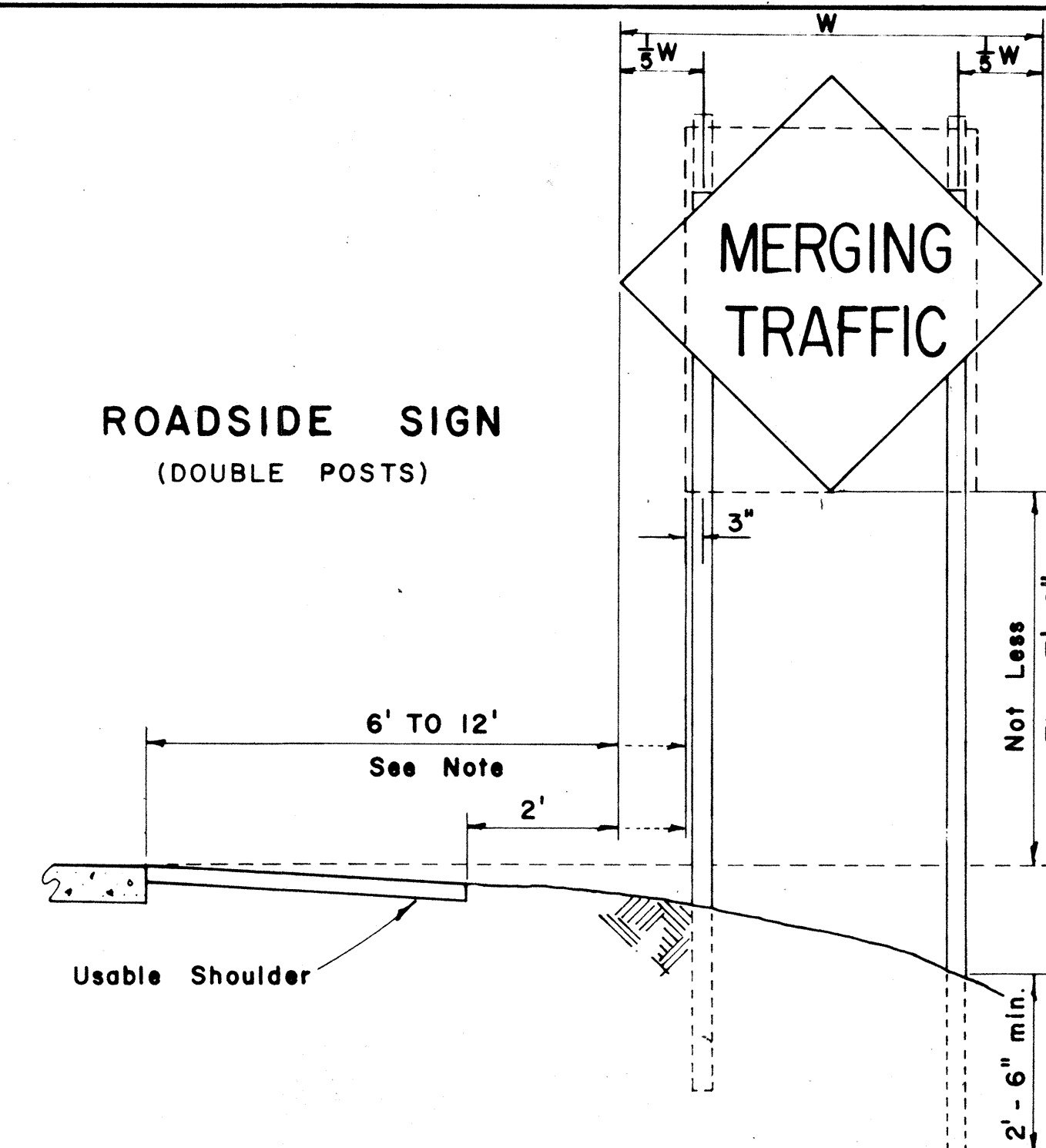
- NOTE:
1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 2. Except as noted below, sign posts shall be either 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts for signs larger than 24" in any dimension; 2" galv. std. pipe or 2" x 2" galv. square tube posts for signs 24" or less in any dimension.
 3. Sign shall be attached to post with 5/16" galvanized bolts with nuts and 7/8" x 7/8" x .120" stainless-steel washers with neoprene rubber gasket.
 4. Clearance Markers (RM-3, RM-4) 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 or two 2 1/2" x 2 1/2" galv. square tube posts.



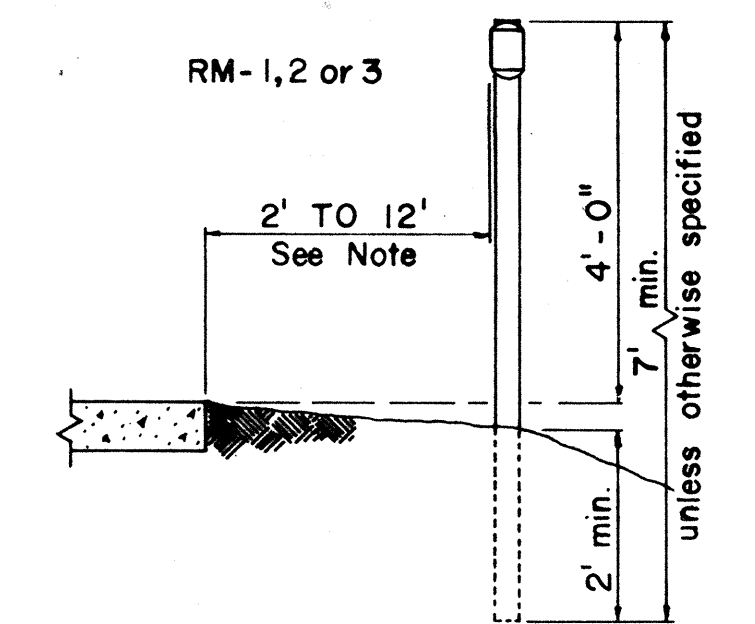
ROADSIDE SIGN
BUSINESS OR RESIDENCE DISTRICT



ROADSIDE SIGN
(DOUBLE POSTS)

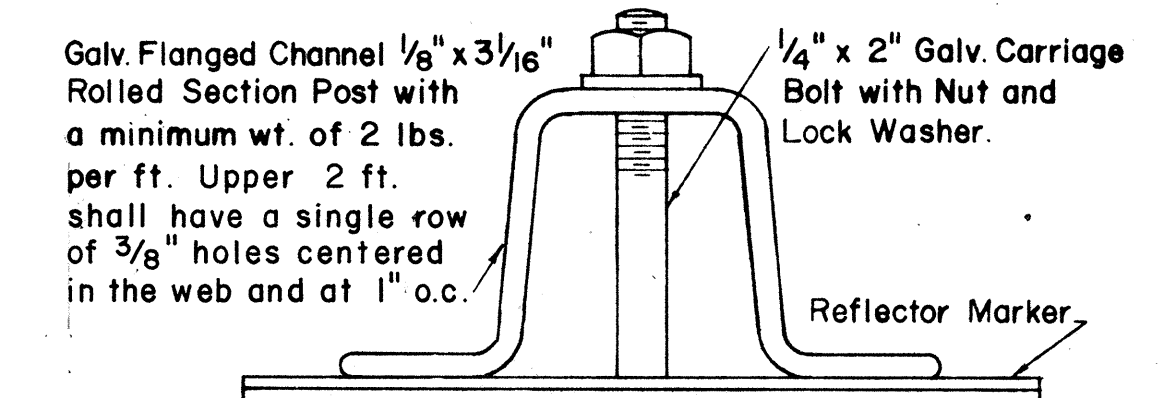


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(3) UNIT 2	1967	106	217

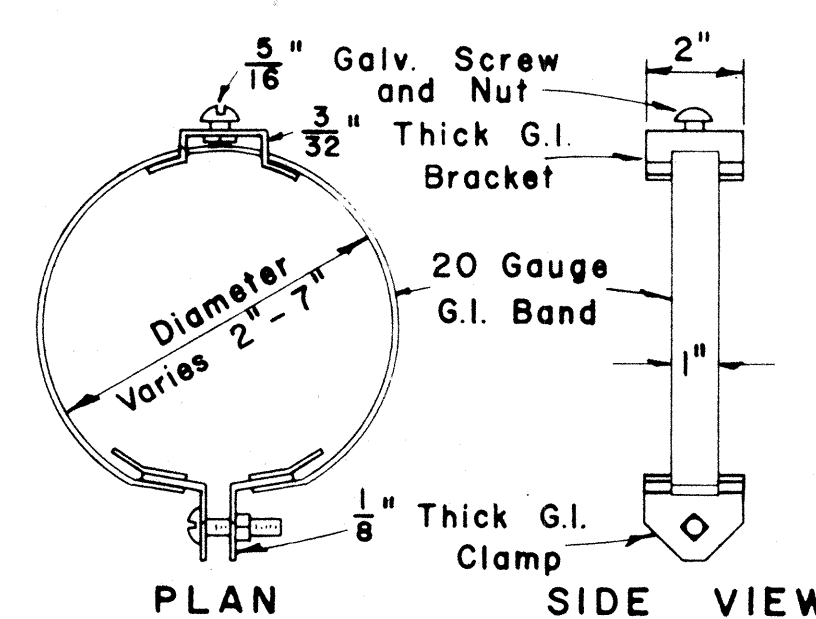
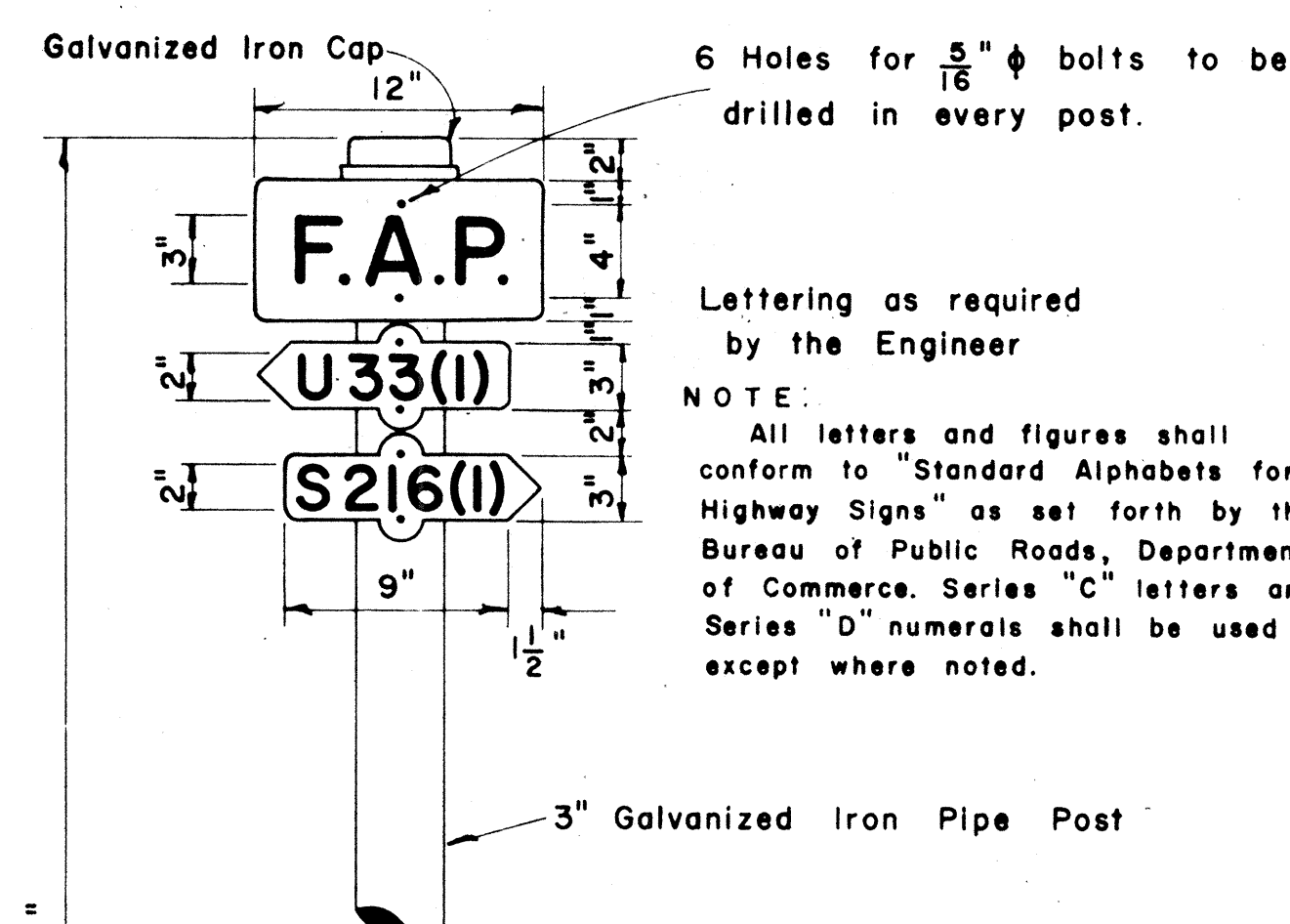


ROAD DELINEATOR

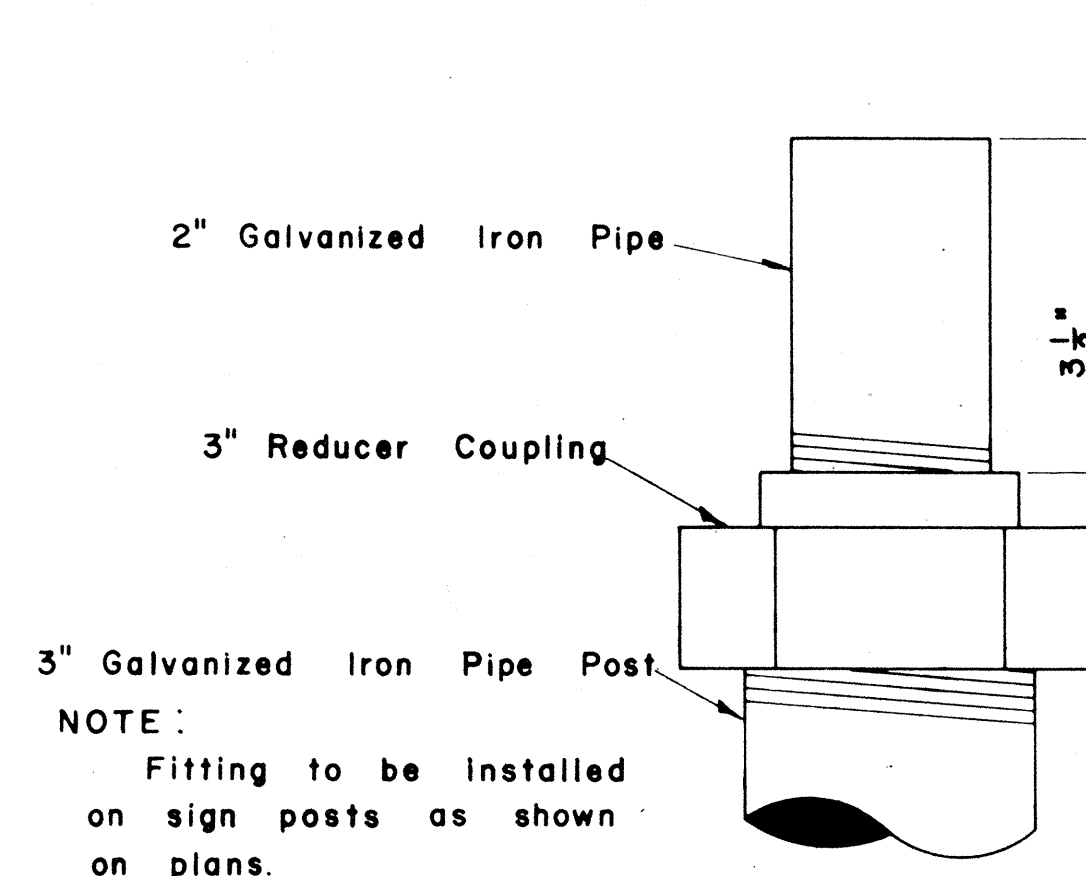
Scale: 1/2" = 1'-0"



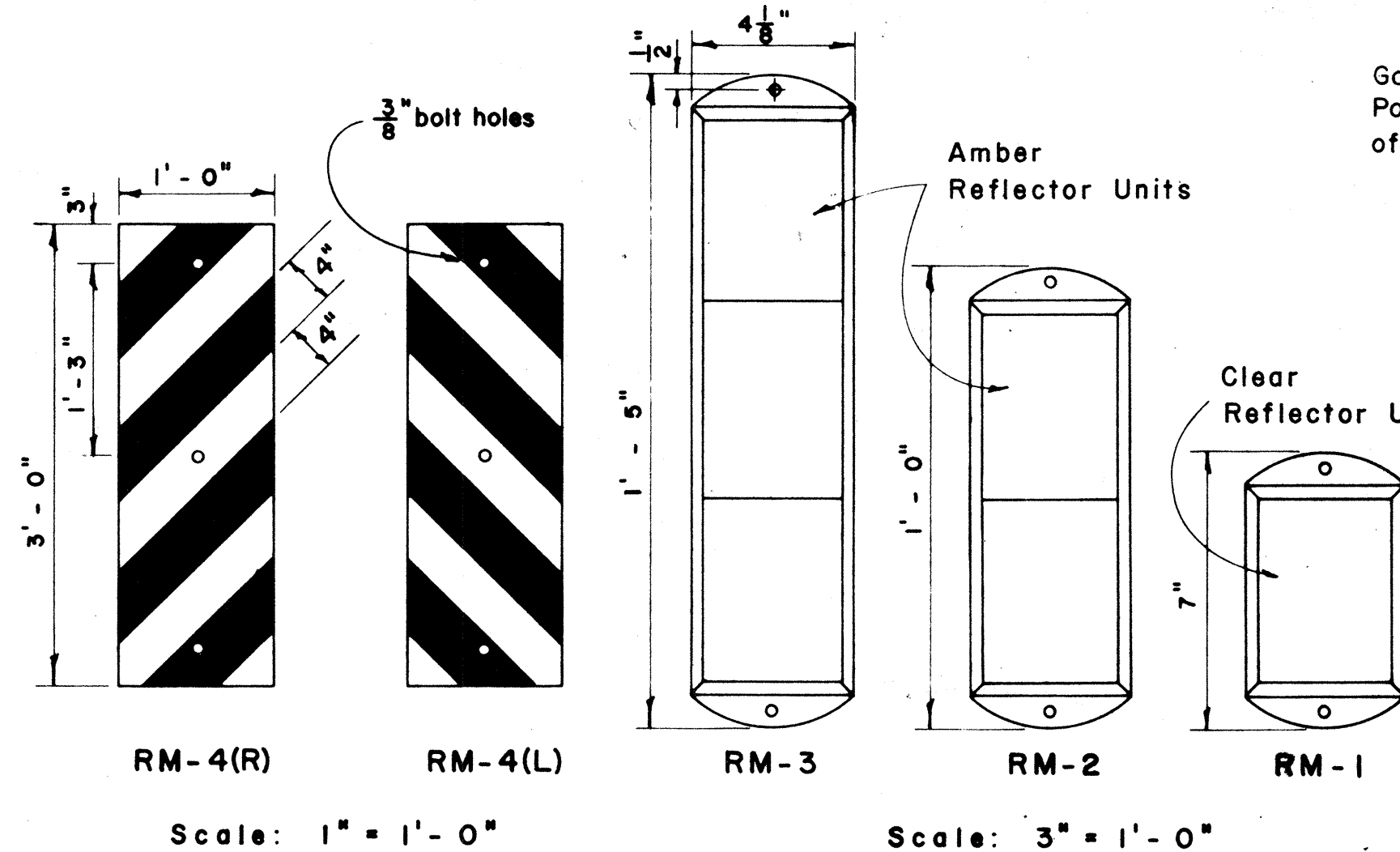
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS



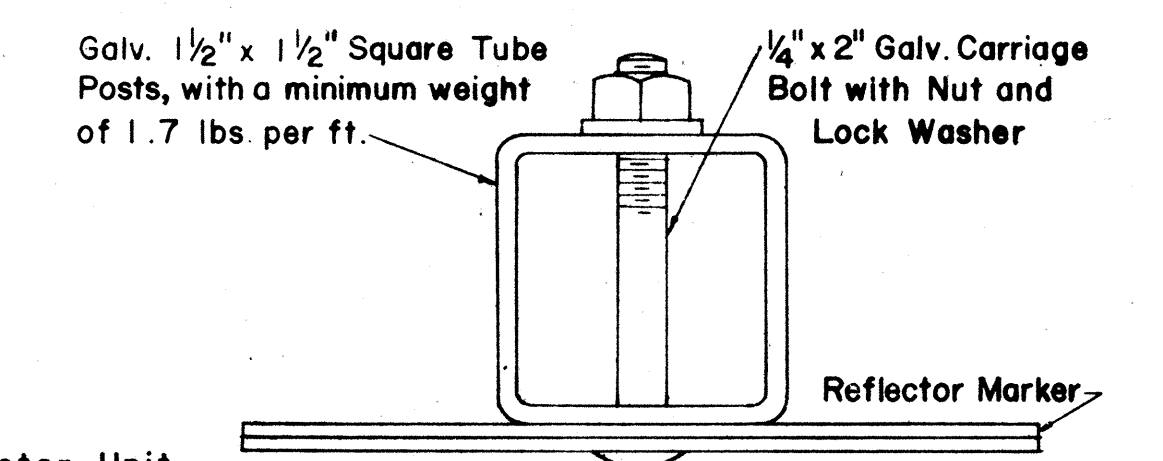
TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS
Scale: 3" = 1'-0"



DETAIL OF SIGN POST FITTING FOR CITY & COUNTY STREET NAME SIGNS
Scale: 1/2" = 1'

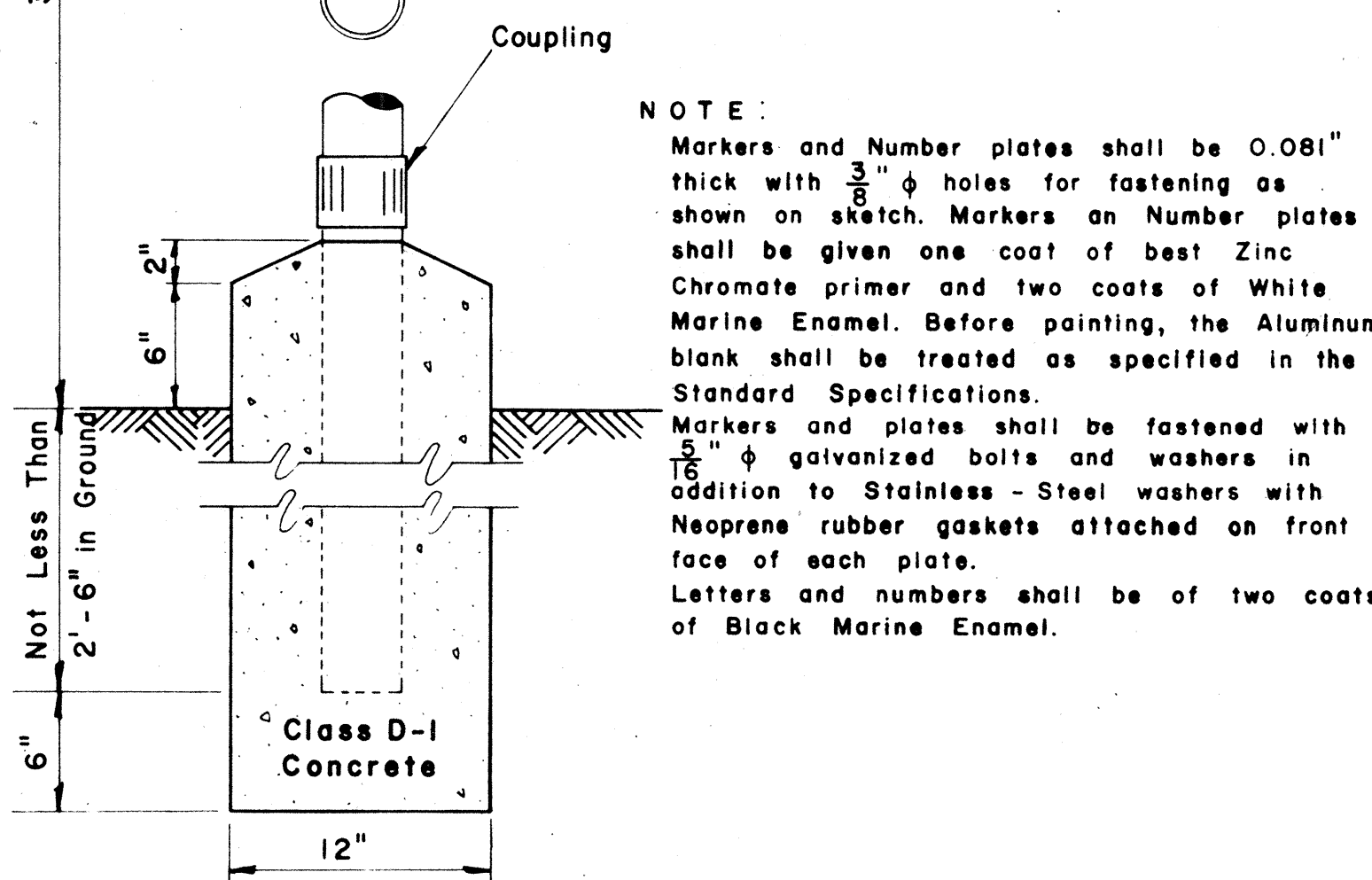


REFLECTOR MARKERS
Scale: As Shown



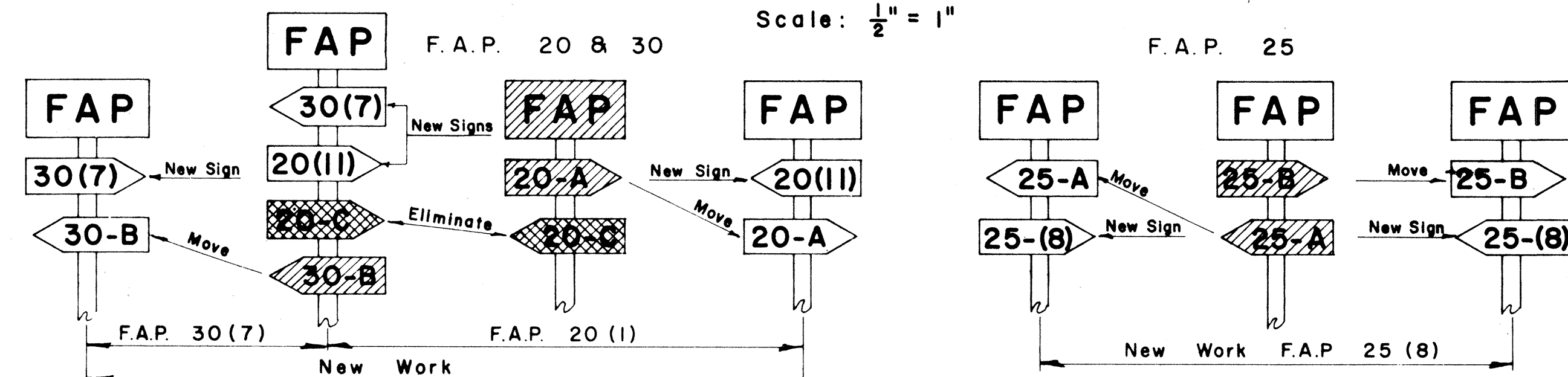
TYPICAL SECTION OF ROAD DELINEATOR
Full Size

NOTE: Reflector Markers RM-1, 2, 3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.

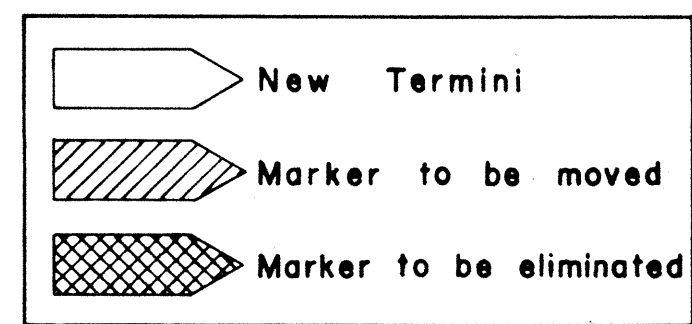


FEDERAL AID MARKER

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



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



APPROVED: _____ DATE: 1/27/67

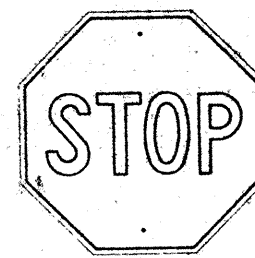
DIRECTOR OF TRANSPORTATION

JANUARY 27, 1967
DECEMBER 8, 1964
REVISED: FEBRUARY 25, 1964

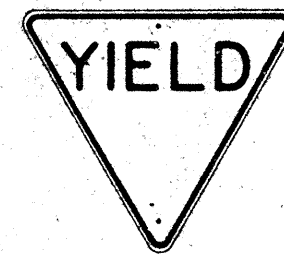
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
F. A. MARKER
AND
MISCELLANEOUS SIGN
DETAILS
Scale: As Shown

SHEET No. 10 OF 25 SHEETS

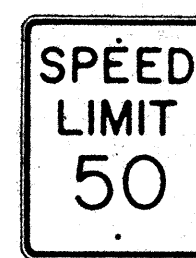
106



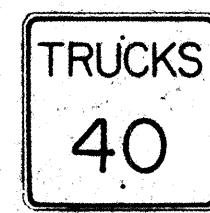
R1-1 30"x 30"



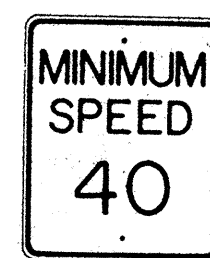
R1-2 36"x36"x36"
R1-2-E 48"x48"x48"
R1-2-I 60"x60"x60"



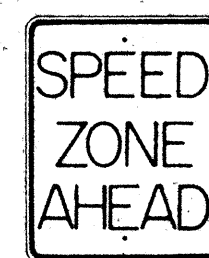
R2-1(50) 24"x 30"
R2-1(50)-E 36"x 48"
R2-1(50)-I 48"x 60"



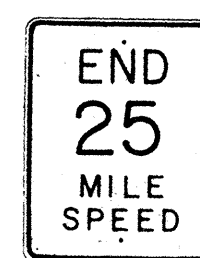
R2-2(40) 24"x 24"
R2-2(40)-E 36"x 36"
R2-2(40)-I 48"x 48"



R2-4(40) 24"x 30"
R2-4(40)-E 36"x 48"
R2-4(40)-I 48"x 60"



R2-5 24"x 30"
R2-5-E 36"x 48"
R2-5-I 48"x 60"



R2-6(25) 24"x 30"
R2-6(25)-E 36"x 48"
R2-6(25)-I 48"x 60"



R2-7 24"x 30"
R2-7-E 36"x 48"
R2-7-I 48"x 60"



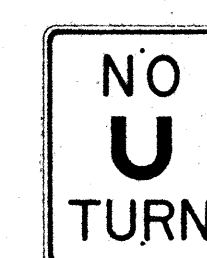
R3-1 24"x 30"
R3-1-E 36"x 48"



R3-2 24"x 30"
R3-2-E 36"x 48"



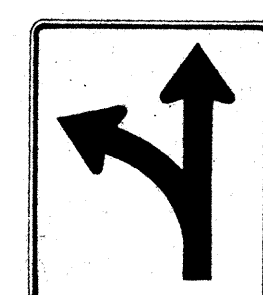
R3-3 24"x 24"



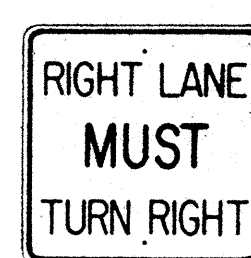
R3-4 24"x 30"
R3-4-E 36"x 48"
R3-4-I 48"x 60"



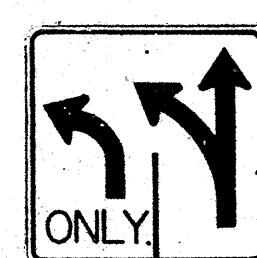
R3-5(L) 30"x 36"



R3-6(L) 30"x 36"



R3-7(R) 30"x 30"



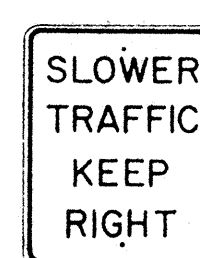
R3-8(L) 30"x 30"



R4-1 24"x 30"



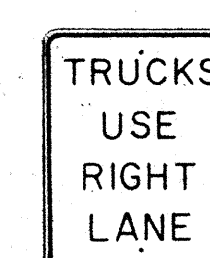
R4-2 24"x 30"



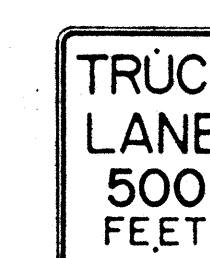
R4-3 24"x 30"
R4-3-E 36"x 48"
R4-3-I 48"x 60"



R4-4 24"x 30"
R4-4-E 36"x 48"
R4-4-I 48"x 60"



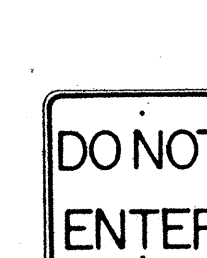
R4-5 24"x 30"
R4-5-E 36"x 48"



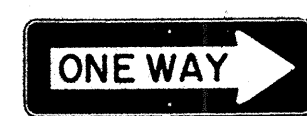
R4-6 24"x 30"
R4-6-E 36"x 48"



R4-7(R) 24"x 30"
R4-7(R)-E 36"x 48"



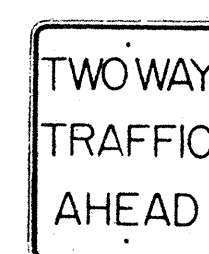
R5-1 24"x 24"



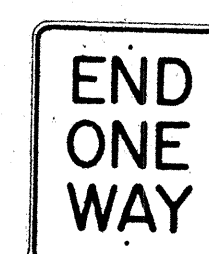
R6-1(R) 36"x 12"



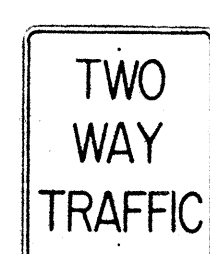
R6-2(R) 18"x 24"



R6-3 24"x 30"



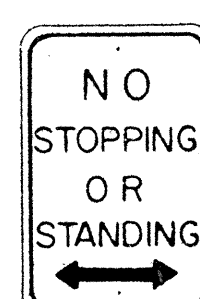
R6-4 24"x 30"



R6-5 24"x 30"



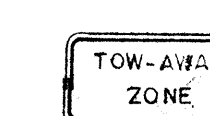
R7-1 12"x 18"



R7-4 12"x 18"
R7-4-E 24"x 30"



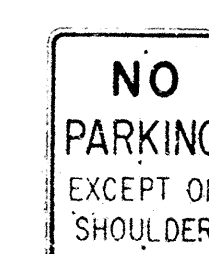
R7-107(R) 12"x 18"



R7-201 12"x 6"



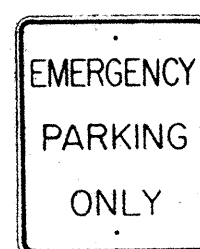
R8-1 24"x 30"
R8-1-E 36"x 48"
R8-1-I 48"x 60"



R8-2 24"x 30"
R8-2-E 36"x 48"



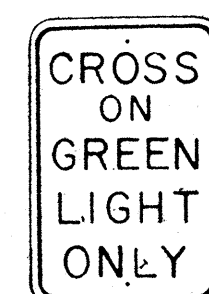
R8-3 24"x 30"
R8-3-E 36"x 48"



R8-4 24"x 30"
R8-4-E 36"x 48"
R8-4-I 48"x 36"



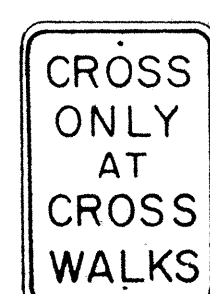
R9-1 18"x 24"



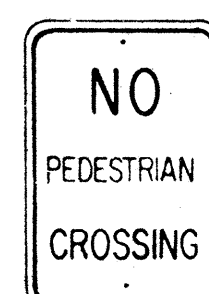
R9-2 12"x 18"



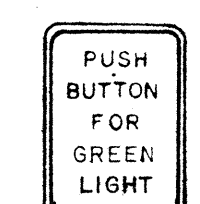
R9-3 12"x 18"



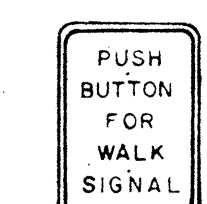
R9-4 12"x 18"



R9-5 12"x 18"



R9-6 9"x 12"



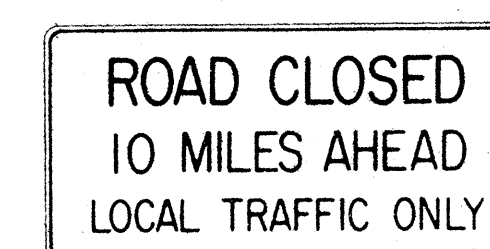
R9-7 9"x 12"



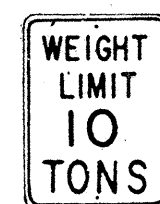
RIO-1 24"x 30"
RIO-1-E 36"x 48"
RIO-1-I 48"x 60"



RIO-2 48"x 30"



RIO-3(10) 60"x 30"



RIO-4(10) 18"x 24"

NOTE:

- The shape, color, dimensions, symbols, wording, lettering and reflectorization of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
- All regulatory signs shall be reflectorized unless otherwise specified.
- All regulatory signs shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise noted.
- The suffix "E" denotes Expressway signs and "I" denotes Interstate signs.
- For R2 signs, number in () indicates speed and shall be as shown on the plans.
- (R) or (L) indicates right or left and shall be as shown on the plans.
- For RIO-4 sign, number in () indicates weight and shall be as shown on the plan.

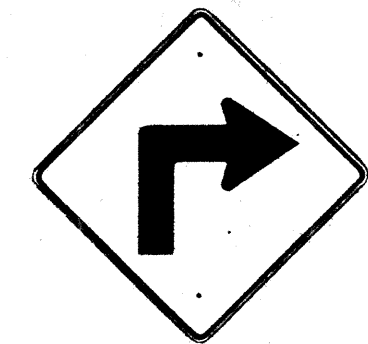
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
REGULATORY SIGNS

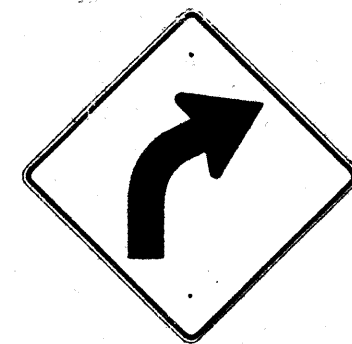
NOT TO SCALE

SHEET No. 107 OF 215 SHEETS

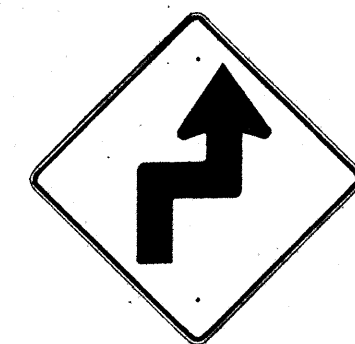
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	
	No.	



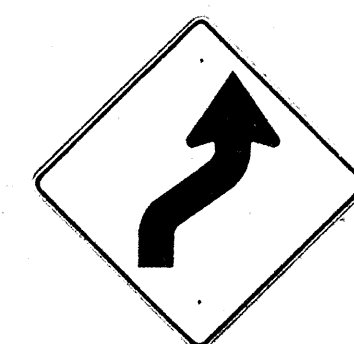
W1-1(R) 30" x 30"



W1-2(R) 30" x 30"



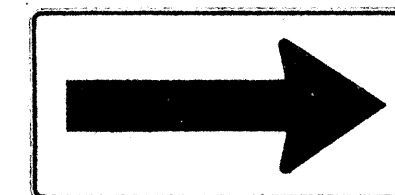
W1-3(R) 30" x 30"



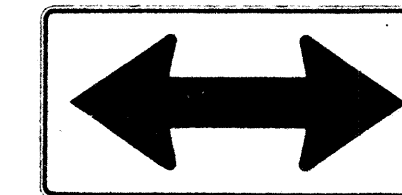
W1-4(R) 30" x 30"



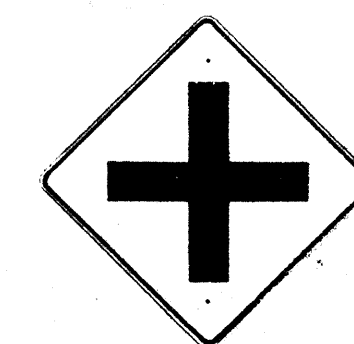
W1-5(R) 30" x 30"



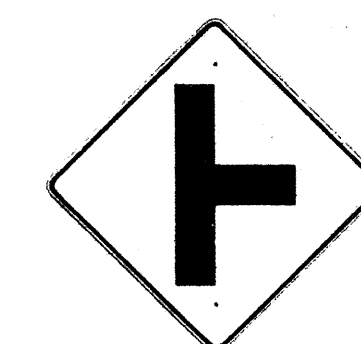
W1-6 48" x 24"



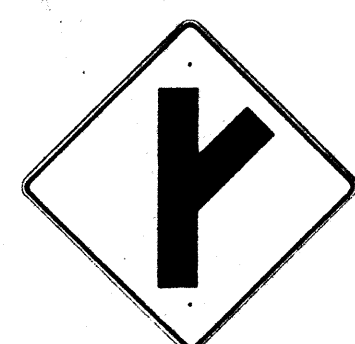
W1-7 48" x 24"



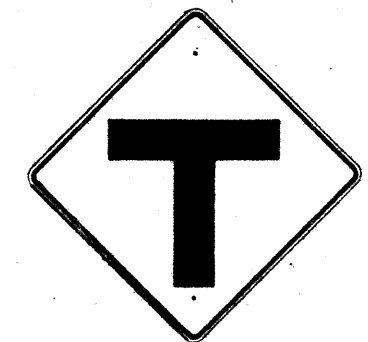
W2-1 30" x 30"



W2-2 30" x 30"



W2-3(R) 30" x 30"



W2-4 30" x 30"



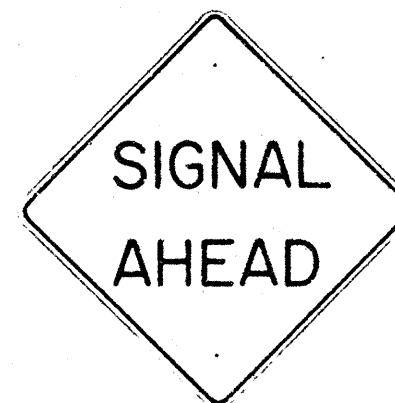
W2-5 30" x 30"



W3-1 30" x 30"



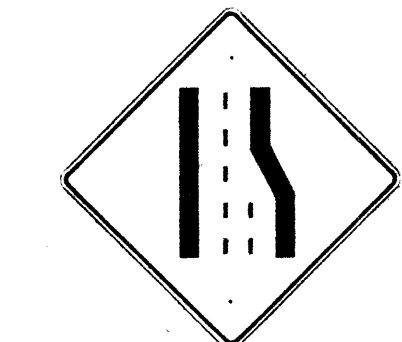
W3-2 30" x 30"



W3-3 36" x 36"



W4-1 30" x 30"
W4-1-E 36" x 36"
W4-1-I 48" x 48"



W4-2 30" x 30"
W4-2-E 36" x 36"



W5-1 30" x 30"
W5-1-E 36" x 36"



W5-2 30" x 30"



W5-3 30" x 30"



W6-1 36" x 36"



W6-2 36" x 36"



W7-1 30" x 30"



W8-1 30" x 30"



W8-2 30" x 30"



W8-3 30" x 30"



W8-4 30" x 30"



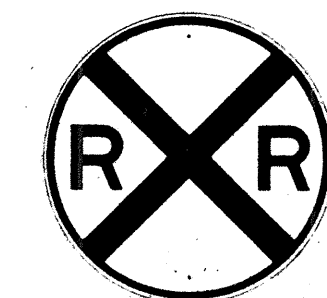
W8-5 30" x 30"



W9-1 30" x 30"



W9-2 30" x 30"



W10-1 36" DIAMETER



W11-1 30" x 30"



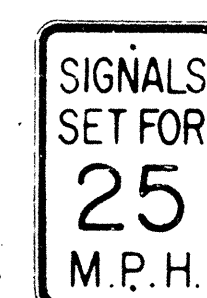
W11-5 30" x 30"



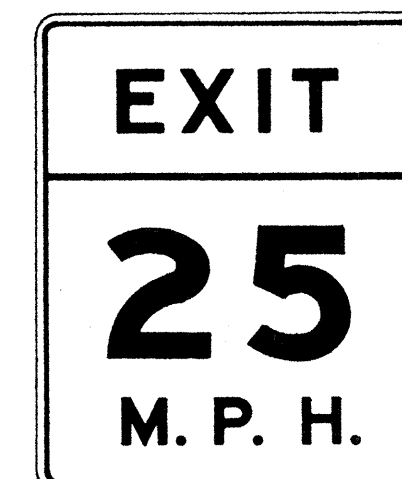
W12-2 36" x 36"



W13-1(35) 18" x 18"



W13-2(25) 12" x 18"



W13-3(25) 48" x 60"

NOTE:

1. The shape, color, dimensions, symbols, wording, lettering and reflectorization of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
2. All warning signs shall be reflectorized unless otherwise specified.
3. All warning signs shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise noted.
4. (R) or (L) indicates right or left and shall be as shown on the plan.
5. The suffix "E" denotes Expressway signs and "I" denotes Interstate signs.
6. For W13 sign, number in () indicates speed and shall be as shown on the plans.

ORIGINAL PLAN	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

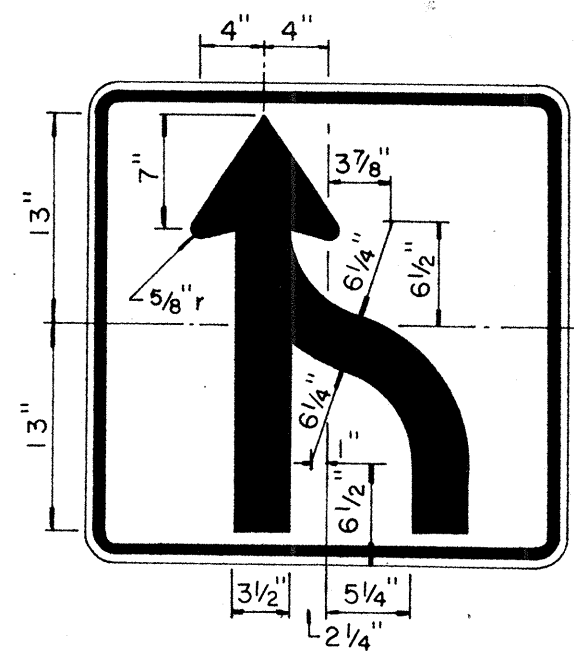
WARNING SIGNS

NOT TO SCALE

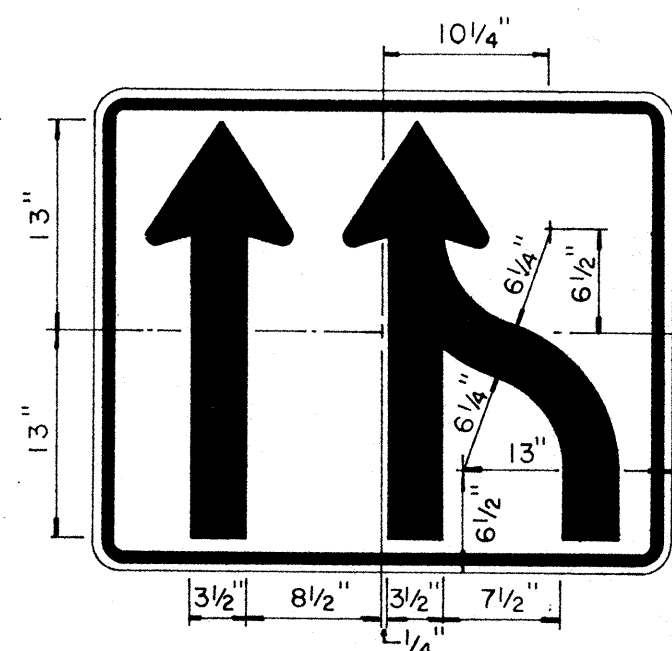
SHEET No. 21 OF 25 SHEETS

108

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-101(8)	1967	109	217



R3-9 30"x 30"

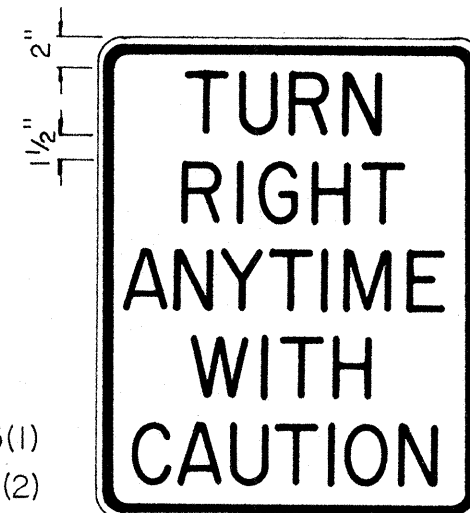


R3-10 36"x 30"

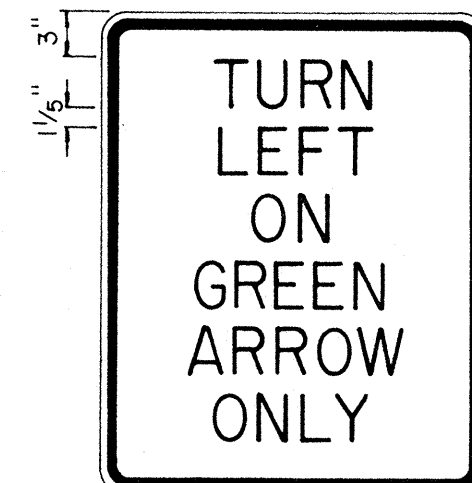


R5-5(1) 24" x 18"
R5-5(2) 36" x 24"

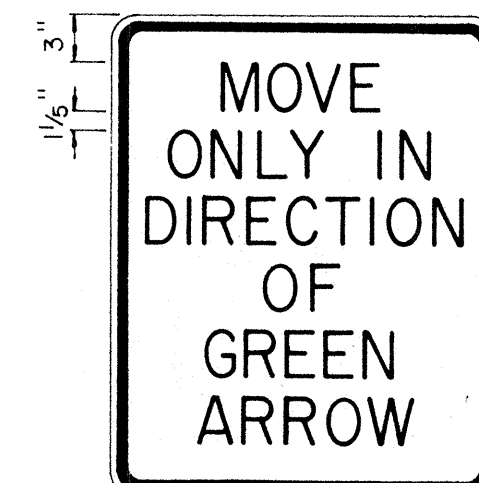
NOTE:
White legend and border
on Red background.



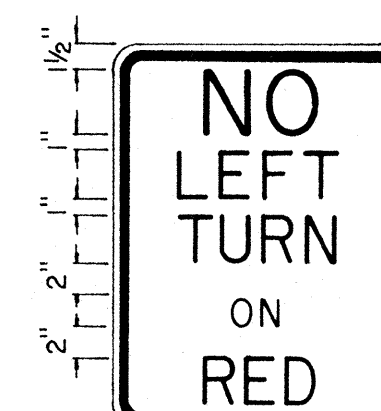
R15-1 24" x 30"



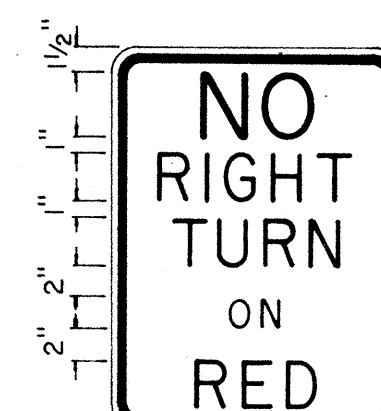
R16-1 24" x 30"



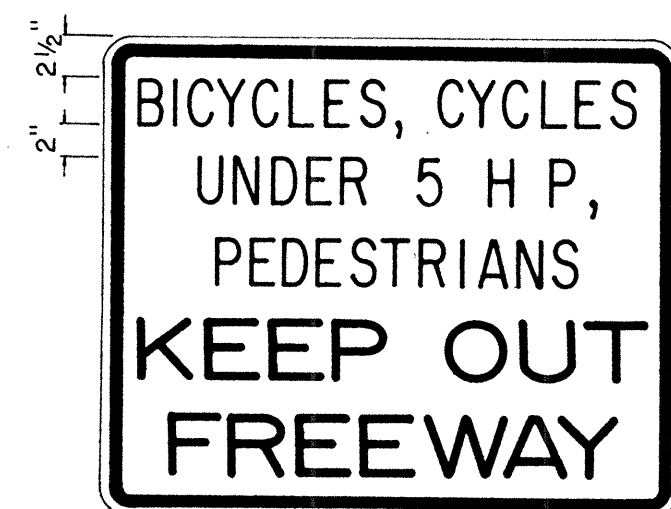
R16-2 24" x 30"



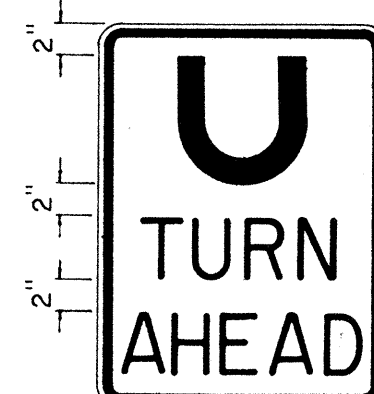
R17-1 18" x 24"



R17-2 18" x 24"



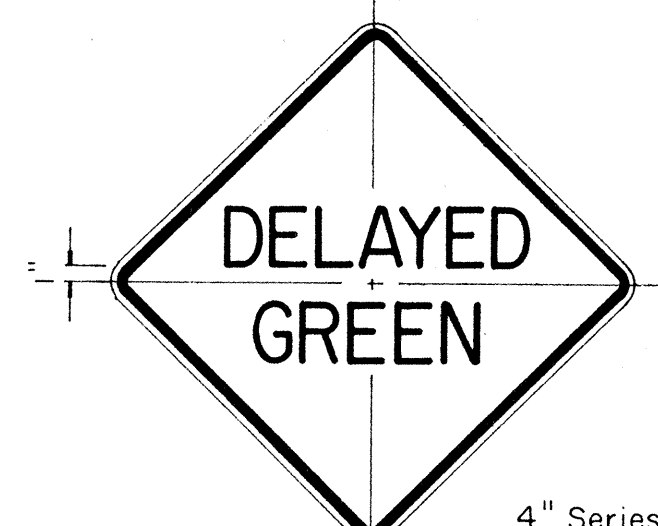
R18-1 36" x 30"



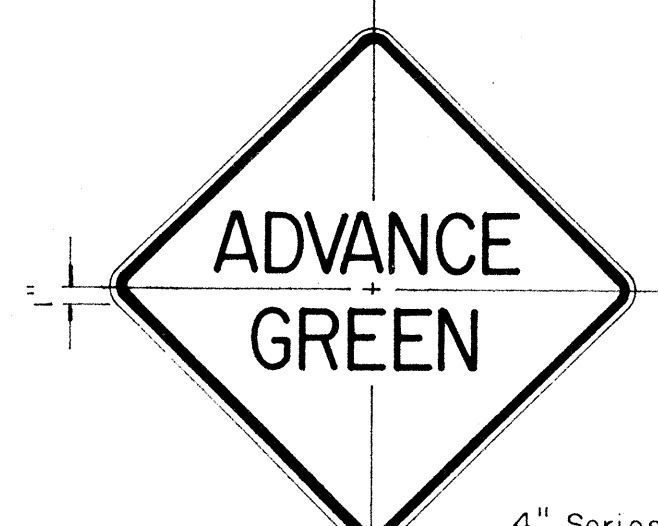
R19-1 18" x 24"



W13-4 24" x 24"



W15-1 24" x 24"



W15-2 24" x 24"

NOTE:

1. The shape, color, plate details, lettering and reflectorization of Regulatory signs (Prefix R) and Warning signs (Prefix W) shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
2. All regulatory and warning signs shall be reflectorized unless otherwise specified.
3. All regulatory and warning signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS
REGULATORY & WARNING SIGNS

Scale: 1" = 1' - 0"

SHEET No. 22 OF 25 SHEETS

109



W7-2 48"x48"



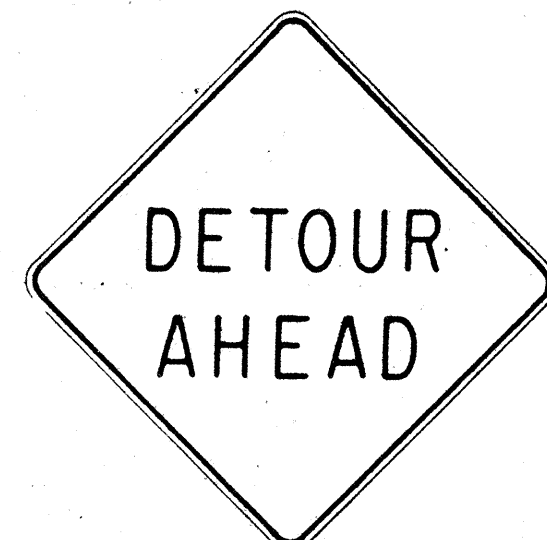
W8-7 30"x30"



W14-1 30"x30"



W20-1a 48"x48"



W20-2d 48"x48"



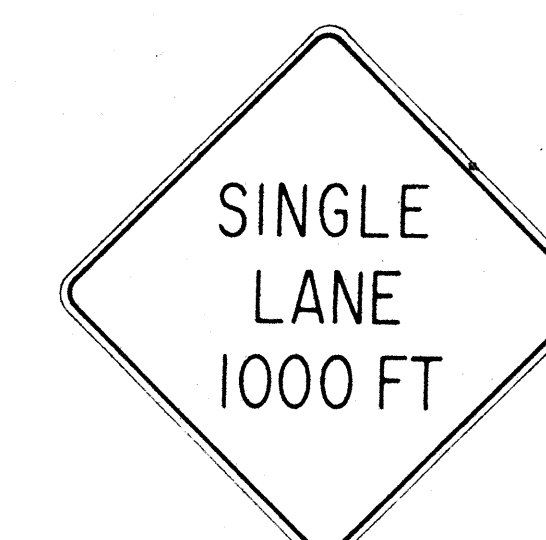
W20-3b 48"x48"



W20-4d 48"x48"



W20-5d(L) 48"x48"



W20-6b 48"x48"



W20-7c 48"x48"



W21-1 30"x30"



W21-2 24"x24"



W21-3 36"x36"



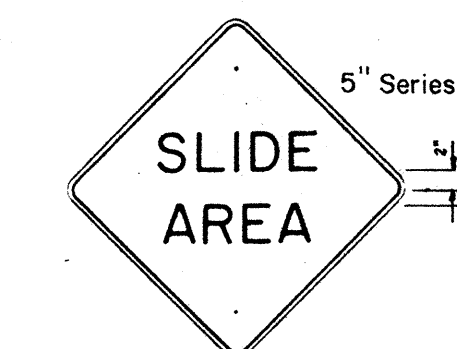
W21-4 30"x30"



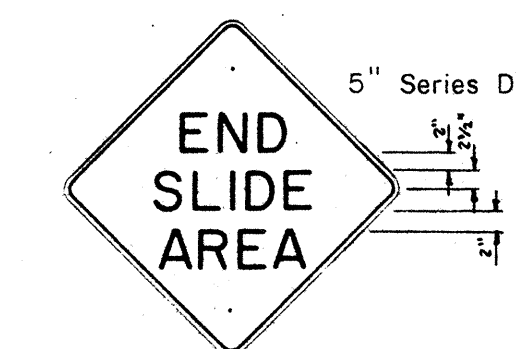
W21-5 30"x30"



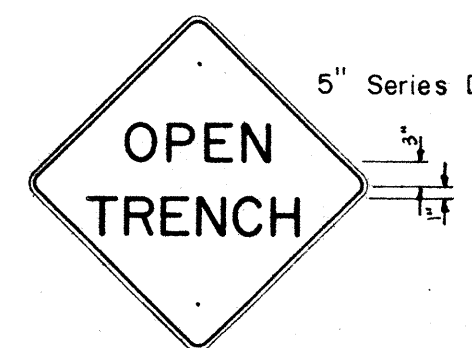
W21-6 30"x30"



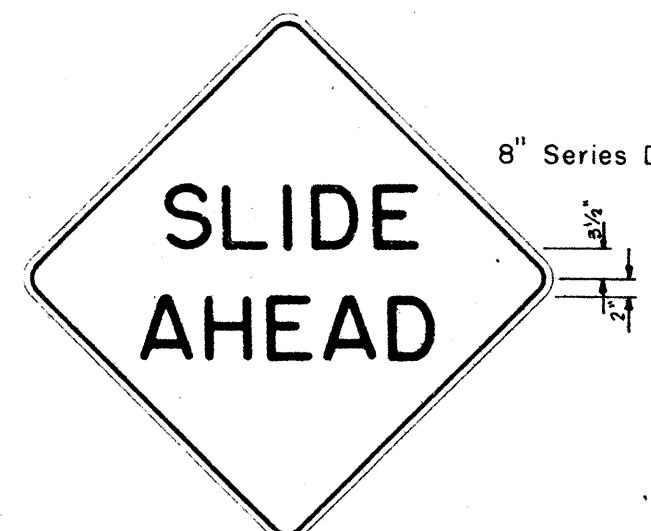
W22-1 30"x30"



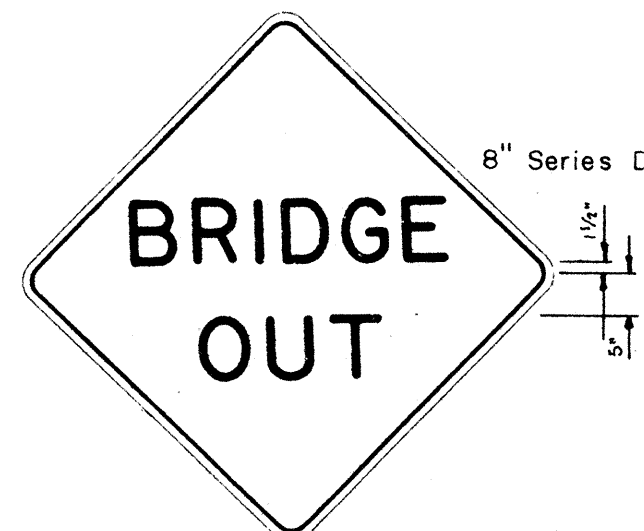
W22-2 30"x30"



W22-3 30"x30"



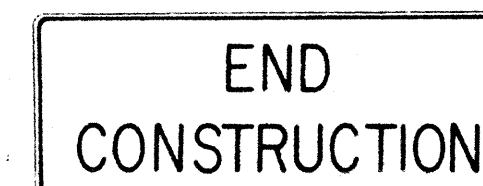
W22-4 48"x48"



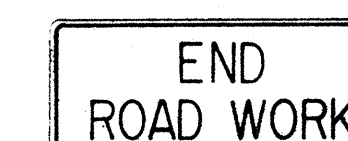
W22-5 48"x48"



G20-1(5) 60"x36"



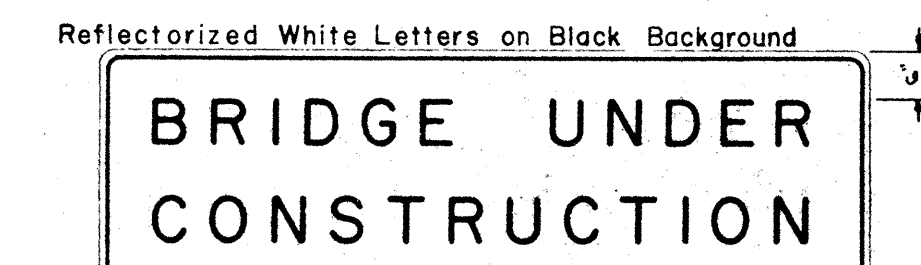
G20-2 60"x24"



G20-3 42"x18"



M5-7(L) 48"x18"



CW-1 96"x30"

NOTE:

1. The shape, color, dimensions, symbols, wording, lettering and reflectorization of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
2. All signs shall be reflectorized unless otherwise specified.
3. All signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise noted.
4. For W20 series signs, suffixes a,b,c and d are as follows a 1500 FT, b 1000 FT, c 500 FT and d AHEAD
5. (R) or (L) indicates right or left and shall be as shown on the plans.
6. Number in () indicates miles and shall be as shown on the plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

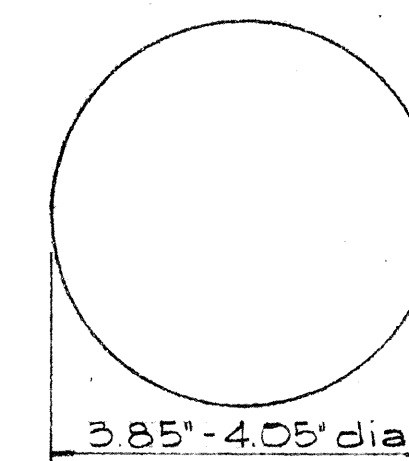
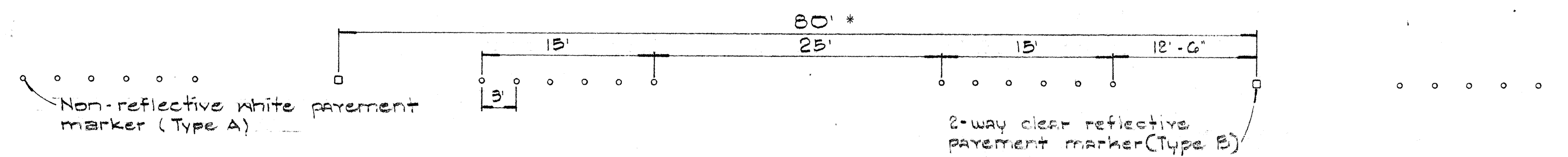
STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

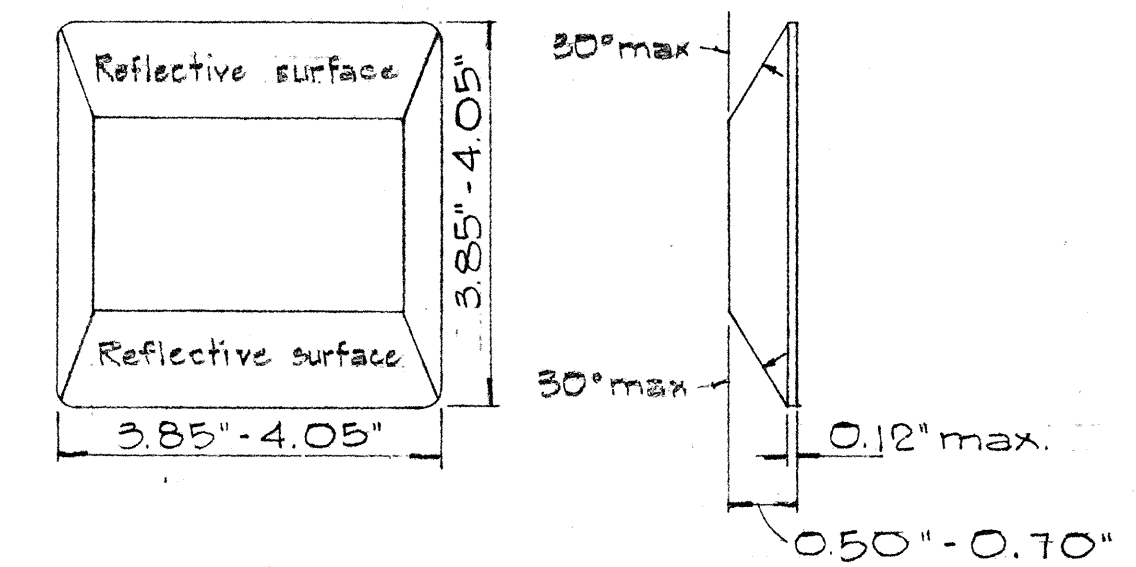
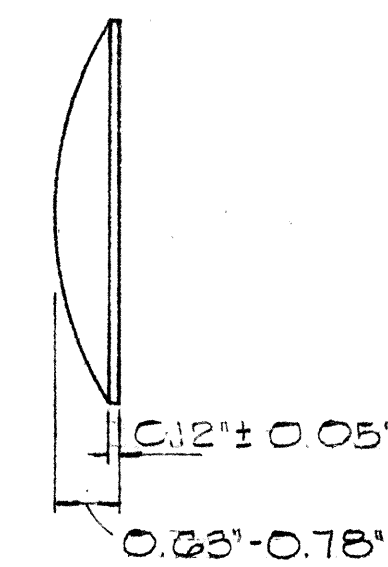
SHEET No. 23 OF 25 SHEETS

ORIGINAL	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	"
NOTE BOOK	TRACED BY	"
	DESIGNED BY	"
	CHECKED BY	"
No.		

① CENTER LINES ON TWO-LANE RURAL ROADS AND CITY STREETS



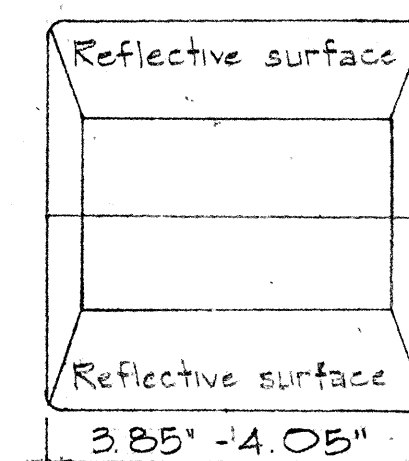
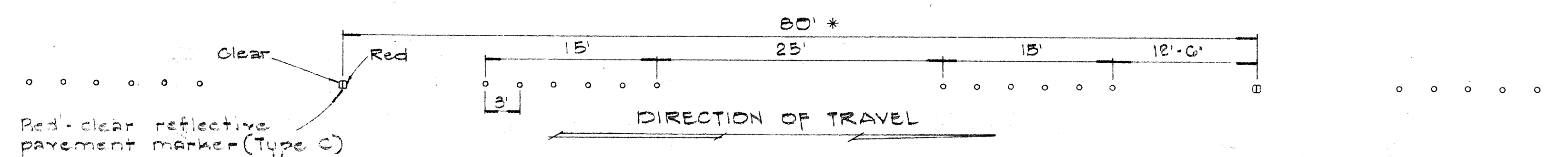
TYPE A
Non-reflective white marker



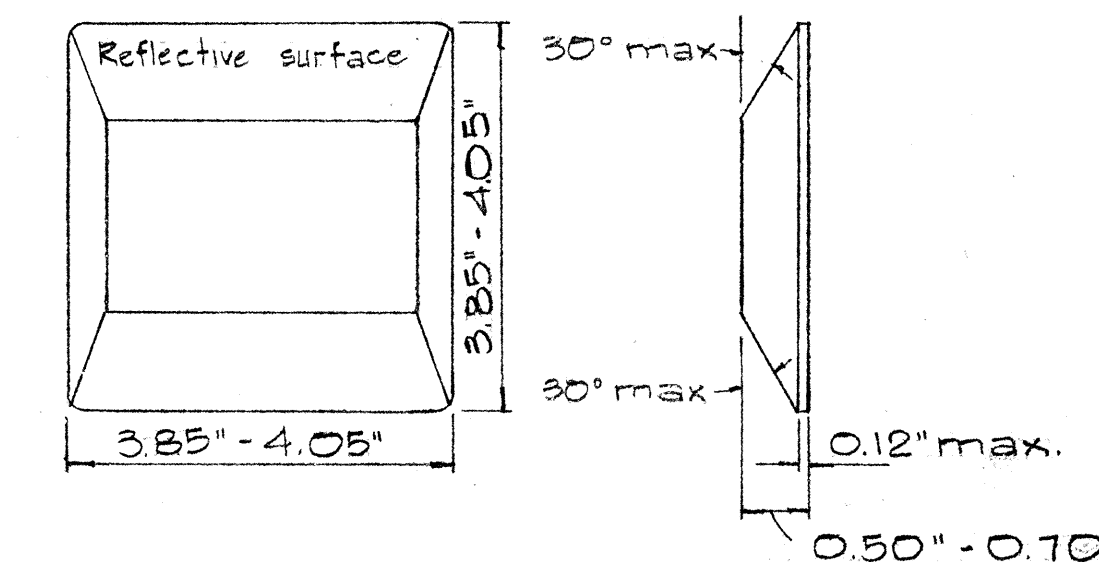
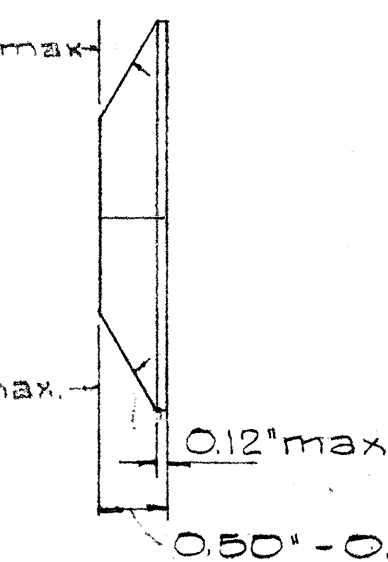
TYPE B
2-way clear reflective surface

TYPE D
2-way yellow reflective surface

② LANE LINES



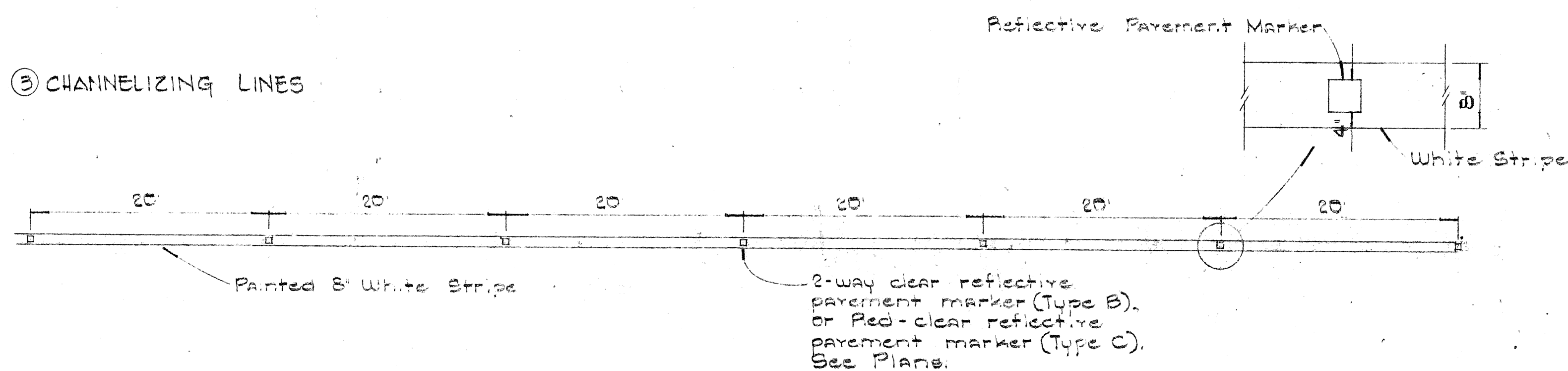
TYPE C
Red-clear reflective surface



TYPE H
One-way yellow reflective surface

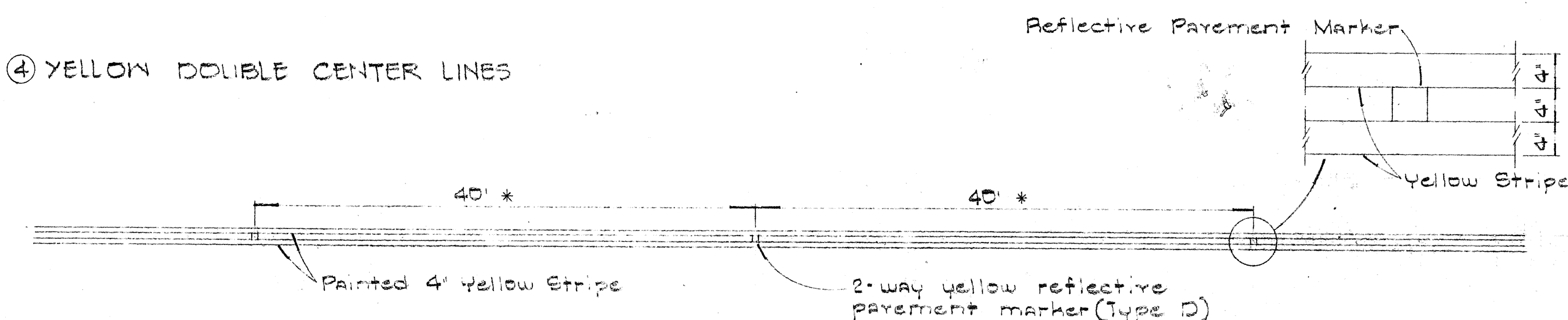
TYPE G
One-way clear reflective surface

③ CHANNELIZING LINES

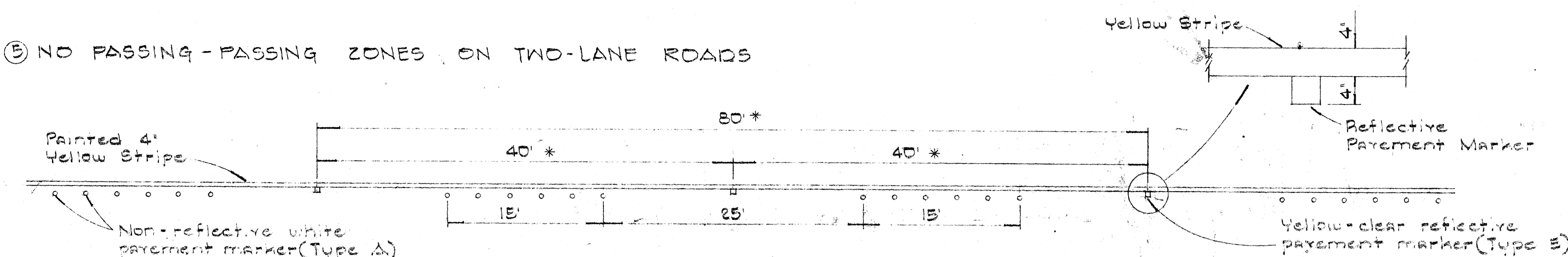


TYPE E
Yellow-clear reflective surface

④ YELLOW DOUBLE CENTER LINES



⑤ NO PASSING - PASSING ZONES ON TWO-LANE ROADS



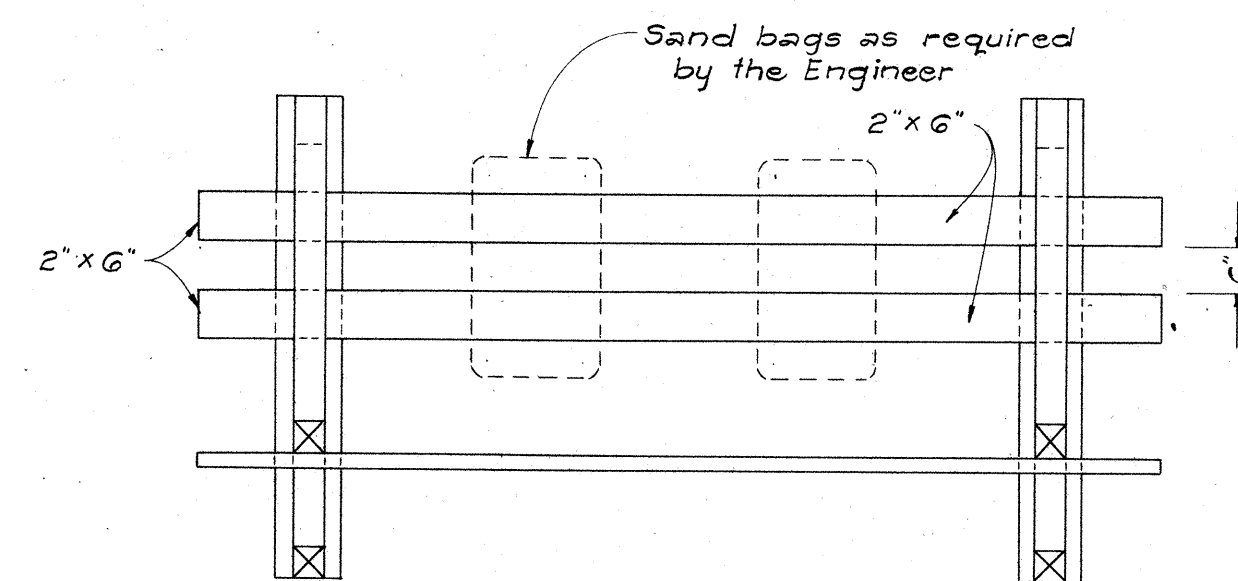
NOTE:
Painted stripes to be done by State forces.

REVISED: April 14, 1967
REVISED: April 13, 1967

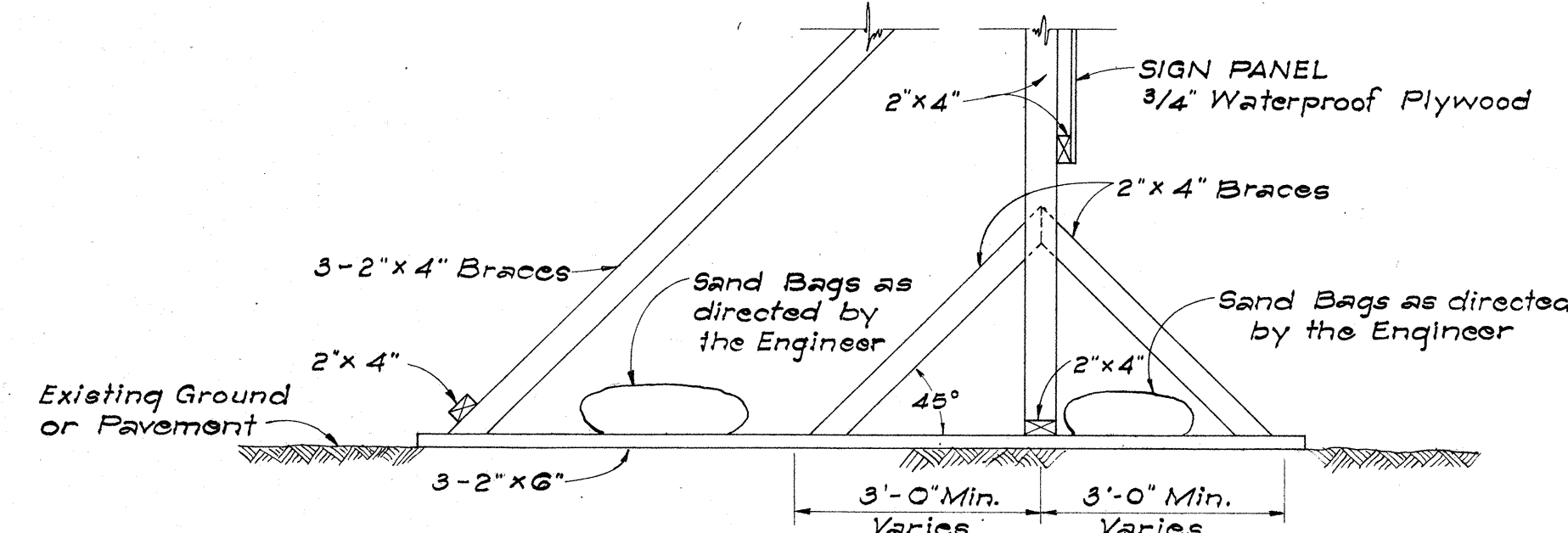
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS

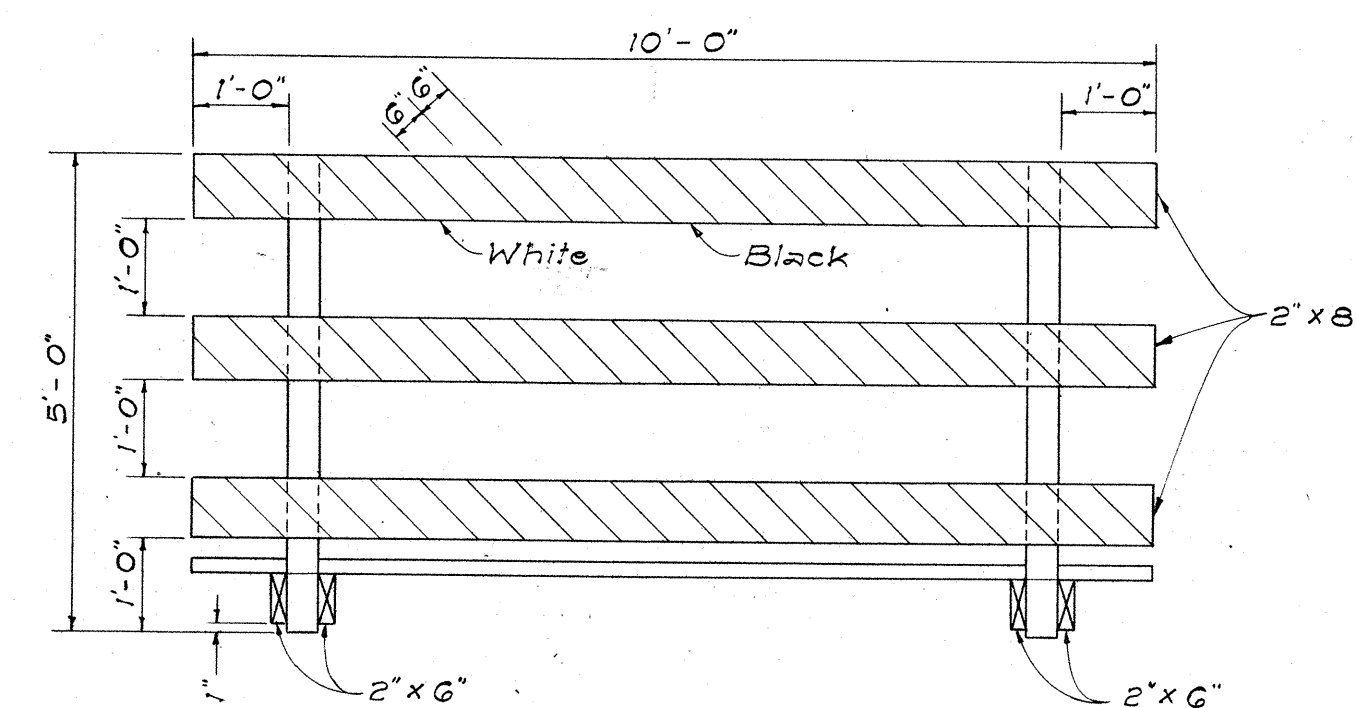
Not to Scale
SHEET No. 24 OF 25 SHEETS



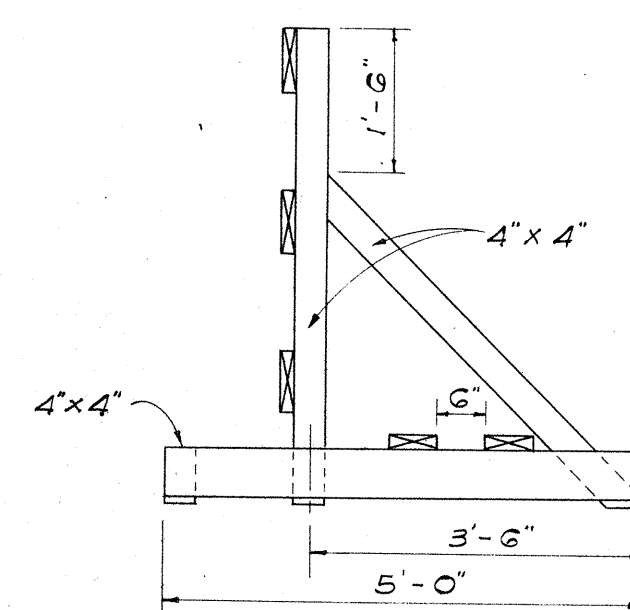
PLAN VIEW



SIDE VIEW
(SIGN FRAME WEIGHTED DOWN)

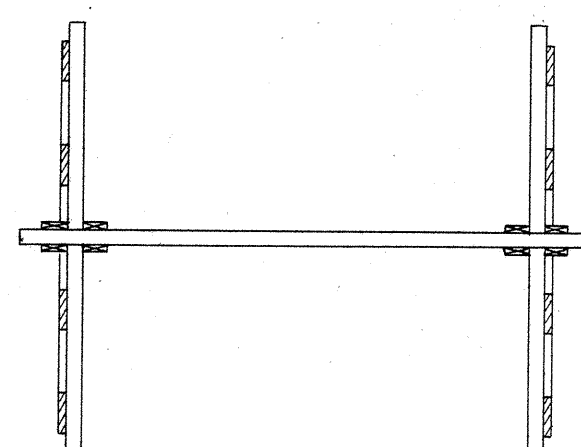


FRONT VIEW

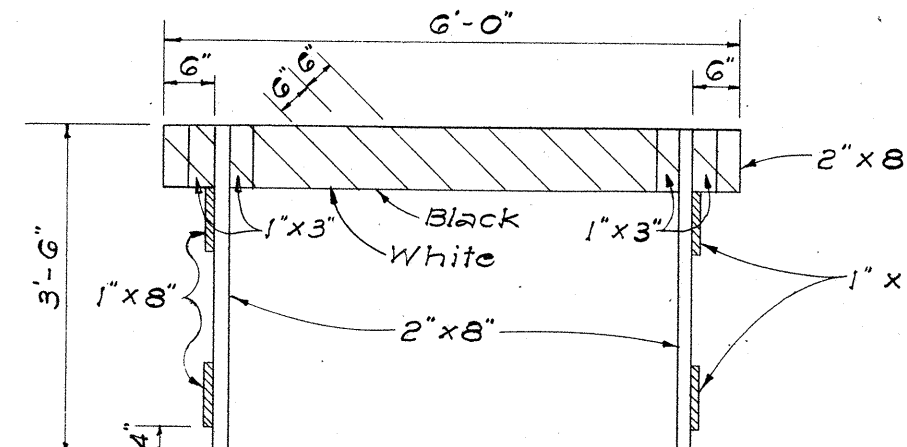


END VIEW

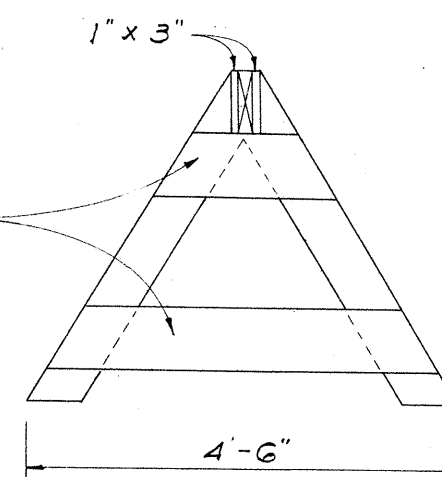
CLASS I BARRICADE



PLAN VIEW



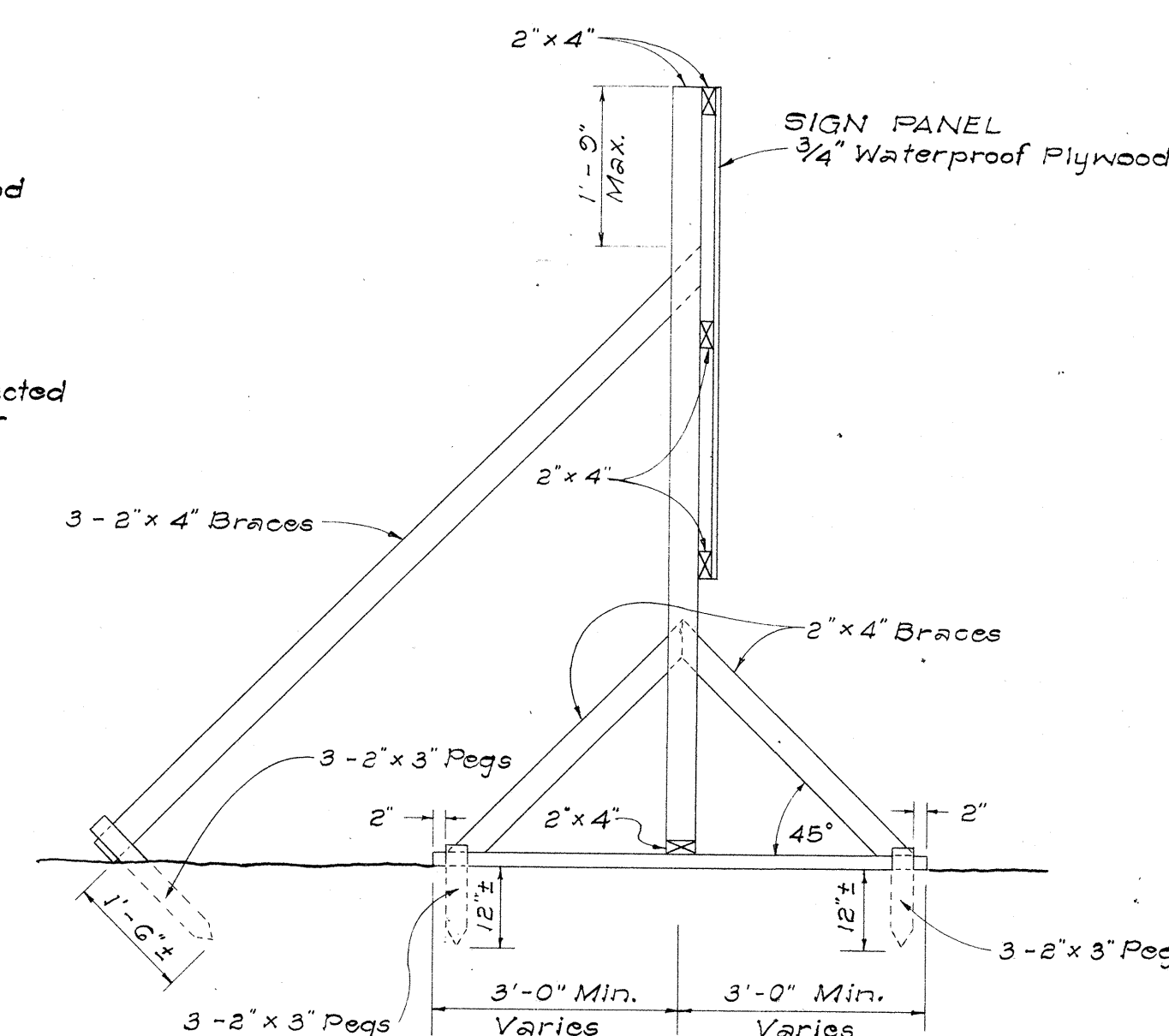
FRONT VIEW



END VIEW

CLASS II BARRICADE

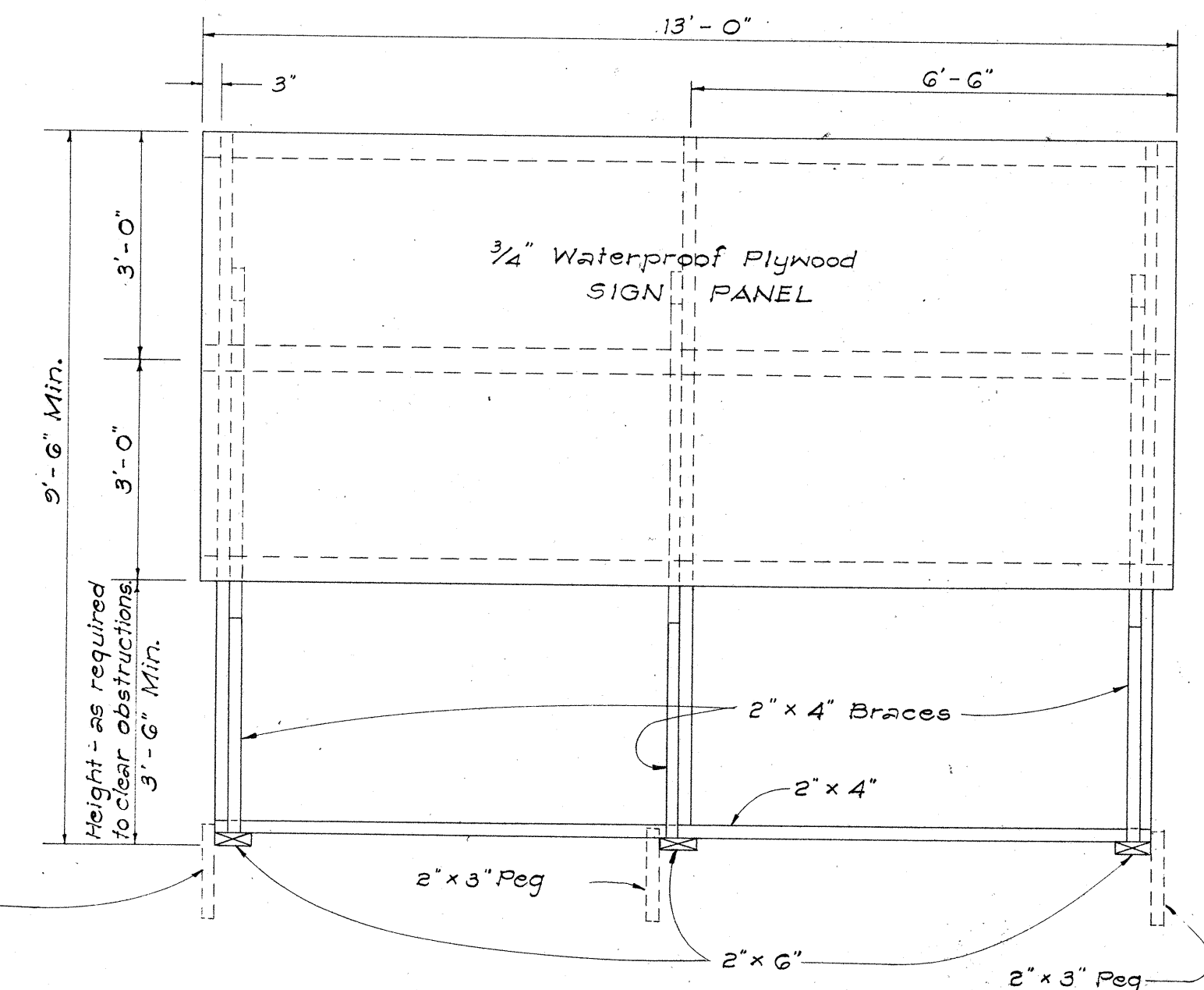
Scale: 1/2" = 1'-0"



SIDE VIEW
(SIGN FRAME ANCHORED IN GROUND)

ELEVATIONS

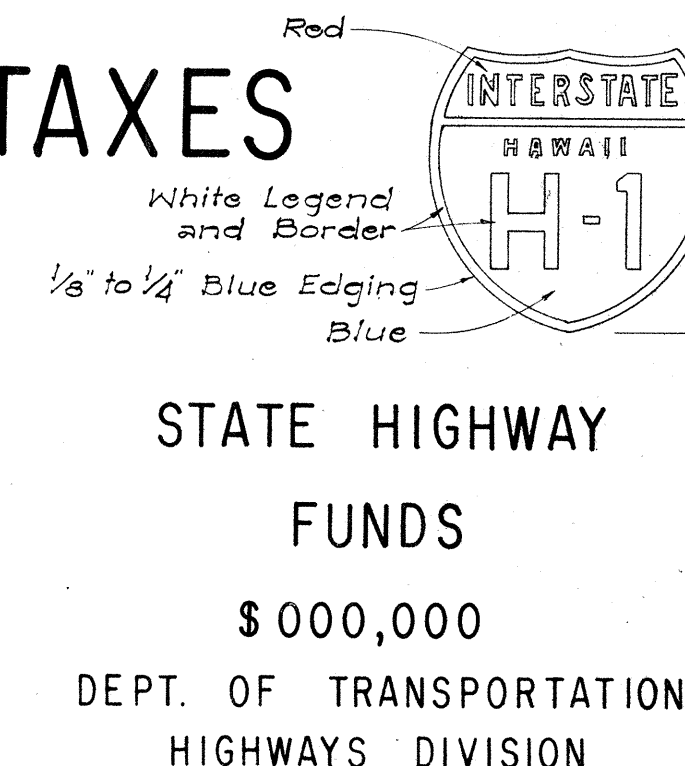
Scale: 1/2" = 1'-0"



FRONT VIEW

YOUR HIGHWAY TAXES
AT WORK

FEDERAL HIGHWAY
TRUST FUNDS
\$ 0,000,000
U.S. DEPT. OF COMMERCE
Bureau of Public Roads



SIGN PANEL
Scale: 3/4" = 1'-0"

INTERSTATE SYSTEM CONSTRUCTION IDENTIFICATION SIGN

Scale: As Shown

NOTES:

A. CONSTRUCTION IDENTIFICATION SIGNS

- The sign legend shall be black on white background except for the Interstate Route marker which shall be as shown on the plan.
- The Contractor shall construct, install and maintain the project signs at the locations shown on the Plans and as ordered by the Engineer.
- The signs shall be removed and stockpiled upon completion of the project as ordered by the Engineer and are to become State property.
- Letters shall be Series "C" of the sizes shown on the Plan and shall conform with the Standard Alphabet for Highway Signs, Bureau of Public Roads, 1952.
- The Contractor shall fill in the proper numerals in place of alphas as ordered by the Engineer.

B. WOOD BARRICADES

- The Contractor shall construct, install and maintain the wood barricades at the locations shown on the Plans and as ordered by the Engineer.
- The permanent wood barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS
CONSTRUCTION IDENTIFICATION SIGN
AND
WOOD BARRICADES

SCALE: As Shown

DATE:

SHEET No. 25 OF 25 SHEETS