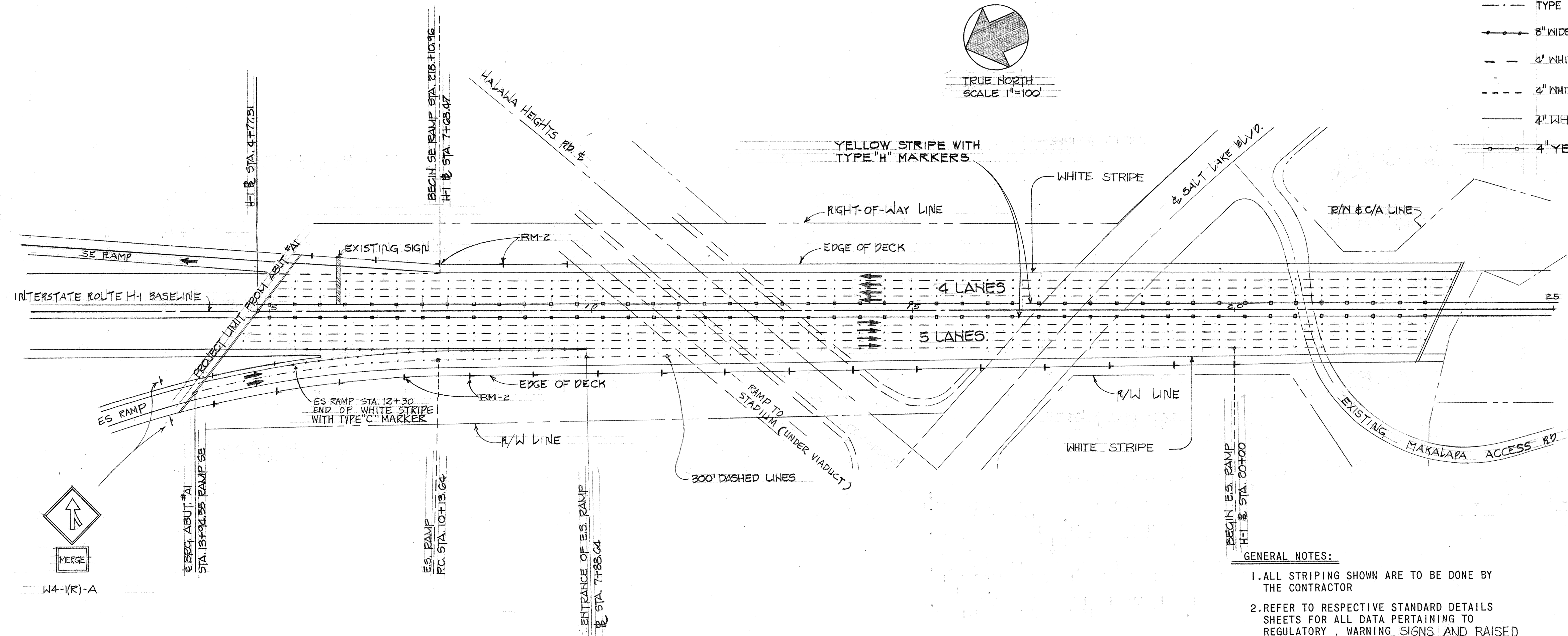


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1 (71):14	1974	10	61

**LEGEND:**

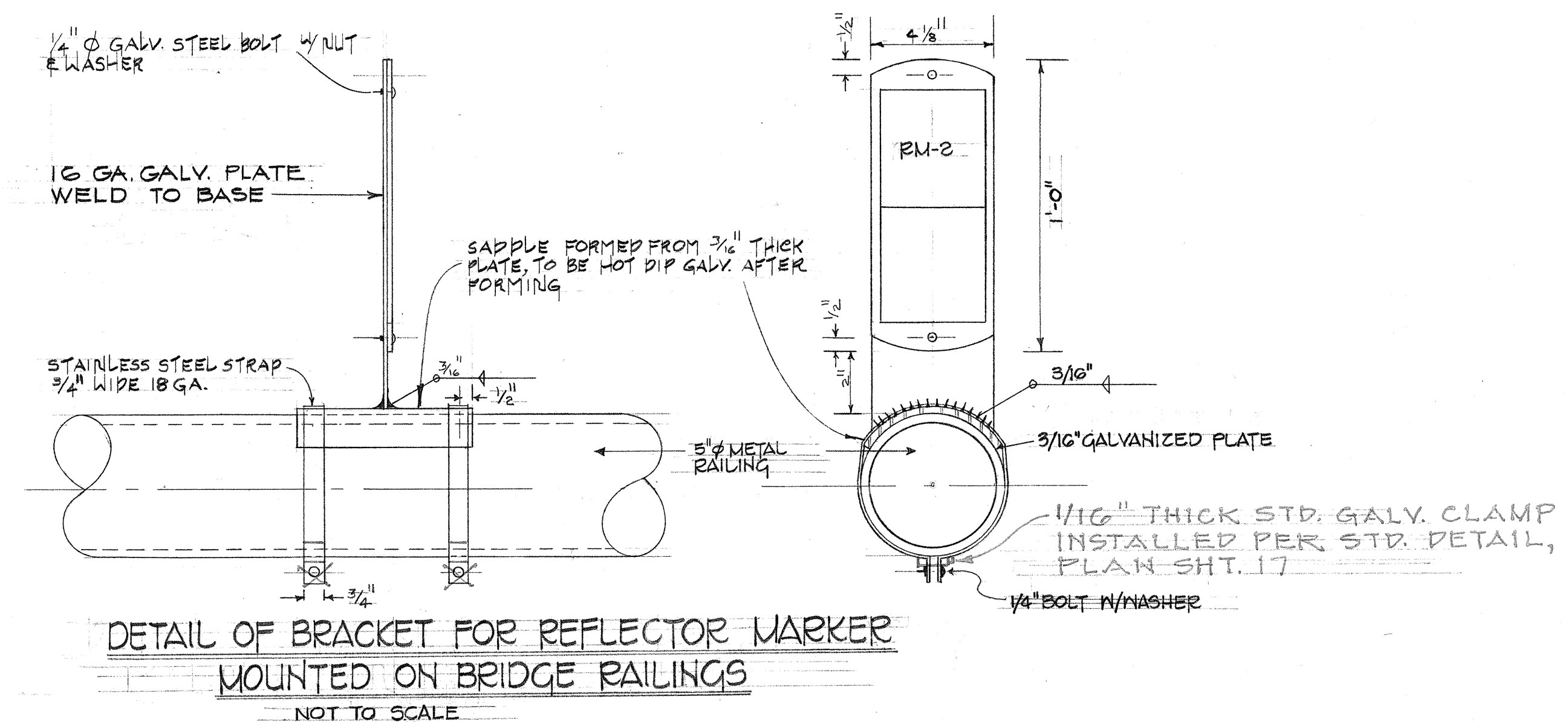
- RM-2 DELINEATOR (DOUBLE AMBER UNIT)
- TYPE A AND C RAISED PAVEMENT MARKER
- 8" WIDE WHITE STRIPE WITH TYPE "C" MARKER
- 4" WHITE STRIPE, 15 FT. IN LENGTH WITH 25 FT. GAPS
- 4" WHITE STRIPE, 2 FT. IN LENGTH WITH 4 FT. GAPS
- 4" WHITE STRIPE
- 4" YELLOW STRIPE WITH TYPE "H" MARKERS



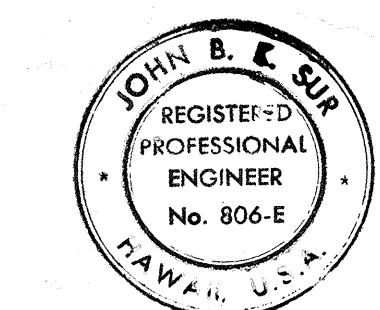
**GENERAL NOTES:**

1. ALL STRIPING SHOWN ARE TO BE DONE BY THE CONTRACTOR
2. REFER TO RESPECTIVE STANDARD DETAILS SHEETS FOR ALL DATA PERTAINING TO REGULATORY, WARNING SIGNS AND RAISED PAVEMENT MARKERS
3. UNLESS OTHERWISE NOTED, LOCATION OF TRAFFIC SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
4. THE CONTRACTOR SHALL MAINTAIN ALL SIGNS IN GOOD CONDITION UNTIL COMPLETION OF CONTRACT
5. ALL MARKING SHALL BE DONE ON SUNNY DAYS AND WHEN PAVEMENT IS DRY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ALONG THE MARKING AREAS BEFORE PAINTING.

ESTIMATED QUANTITIES				
RAISED PAVEMENT MARKERS	TYPE	I.B. LANES (RIGHT)	O.B. LANES (LEFT)	
		TYPE "A"	776	552
		TYPE "C"	240	138
RM-2 AMBER		10	6	



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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
**HIGHWAYS DIVISION**

**PAVEMENT STRIPING AND TRAFFIC SIGN DELINEATORS PLAN**  
AT VIADUCT SECTION

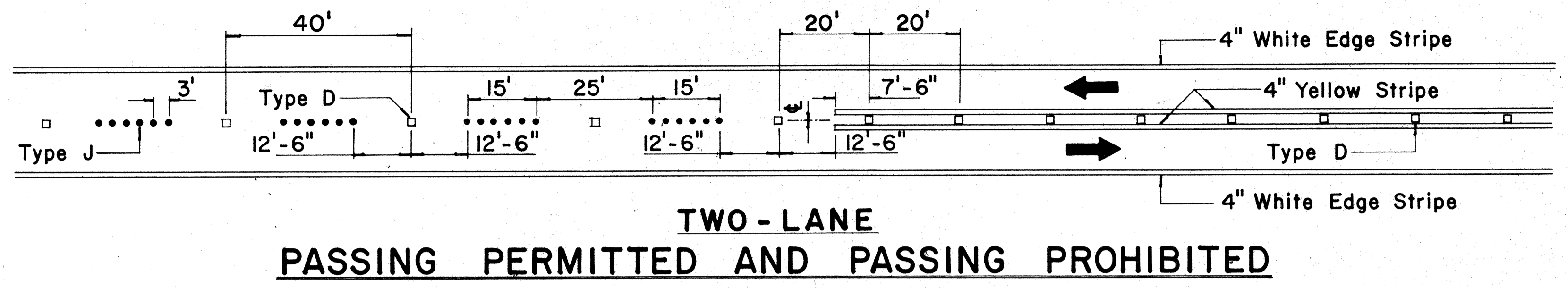
INTERSTATE ROUTE H-1  
F.A.T. PROJECT NO. 1-HI-(71):14

SCALE AS NOTED      DATE: JUNE 5, 1974

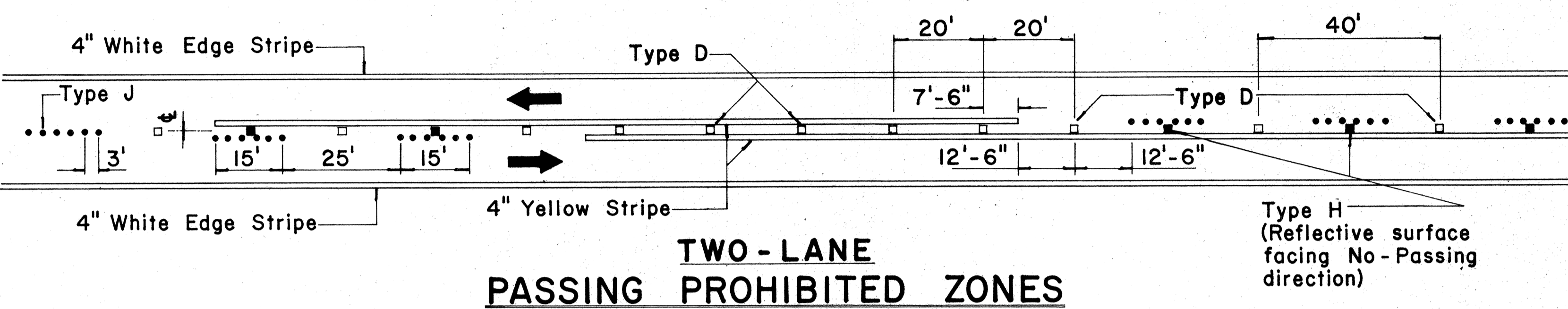
**SHEET No. 1 OF 11 SHEETS**



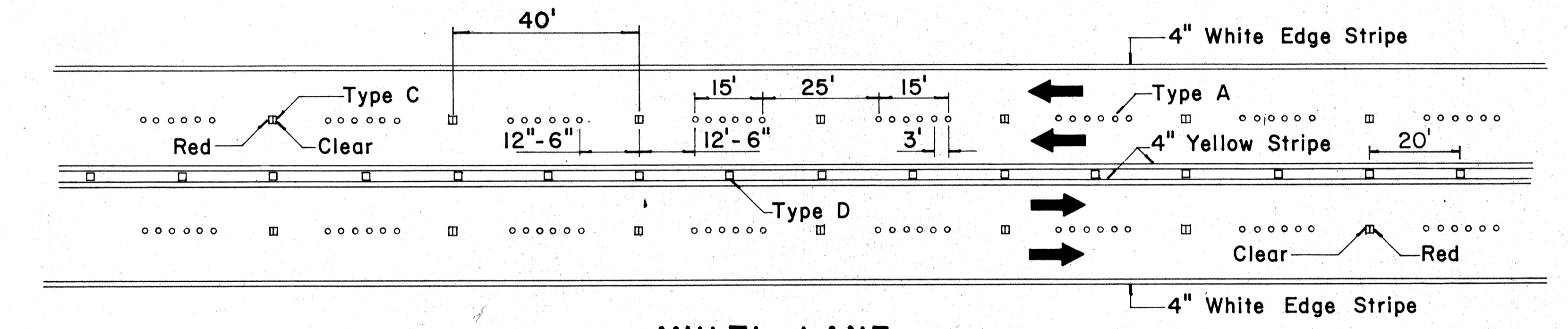
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11(7)14	1974	12	61



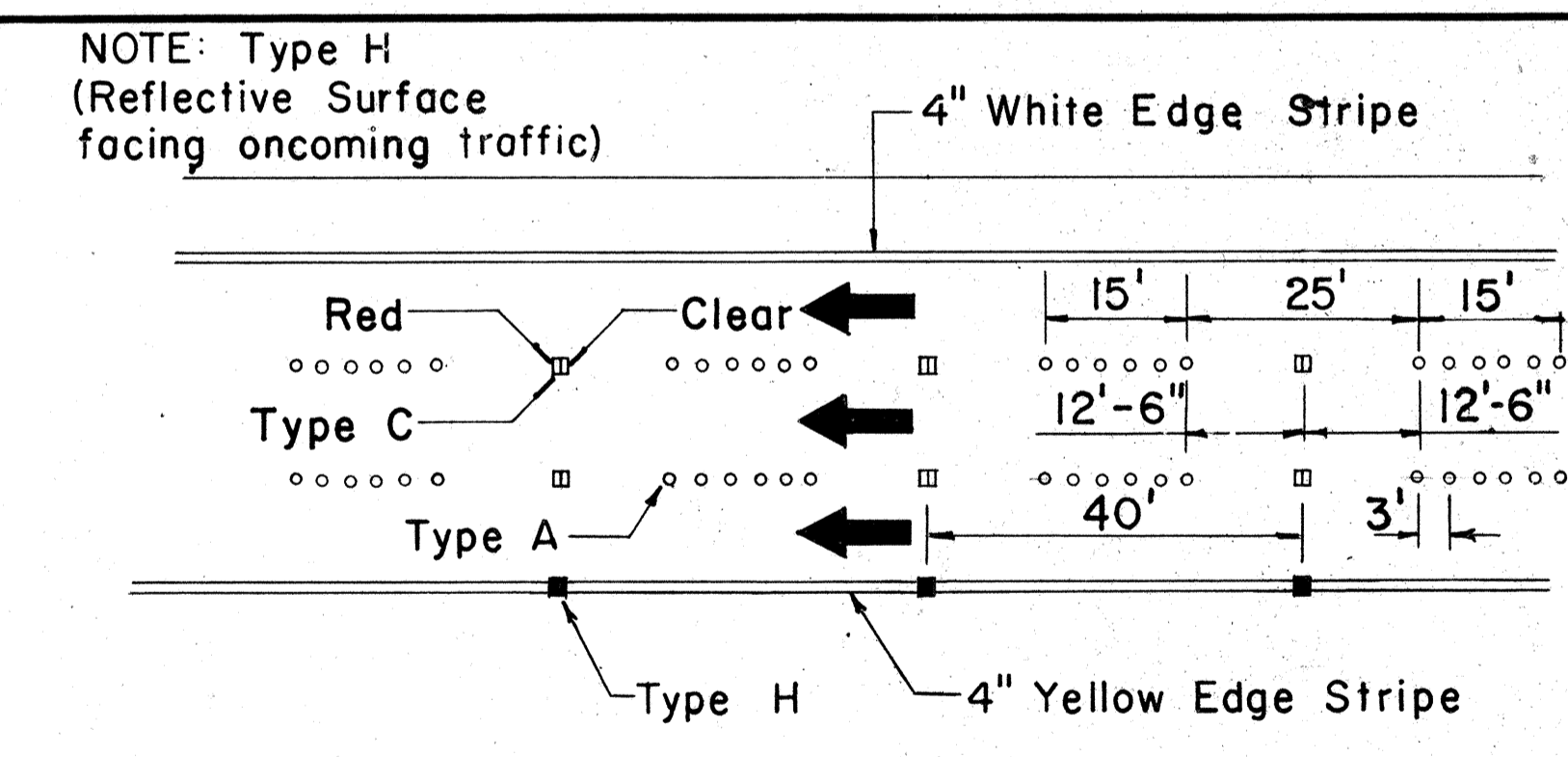
**TWO-LANE  
PASSING PERMITTED AND PASSING PROHIBITED**



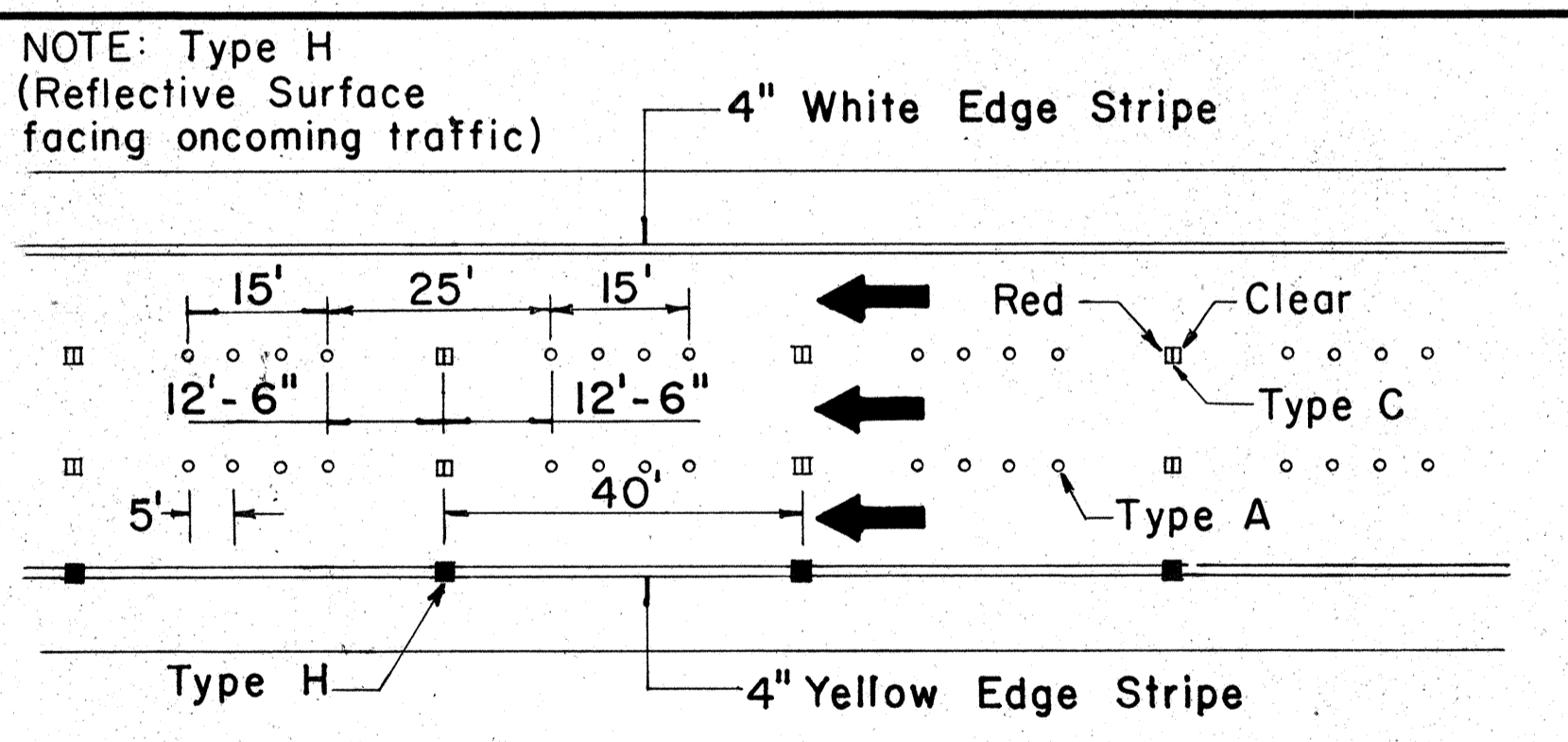
**TWO-LANE  
PASSING PROHIBITED ZONES**



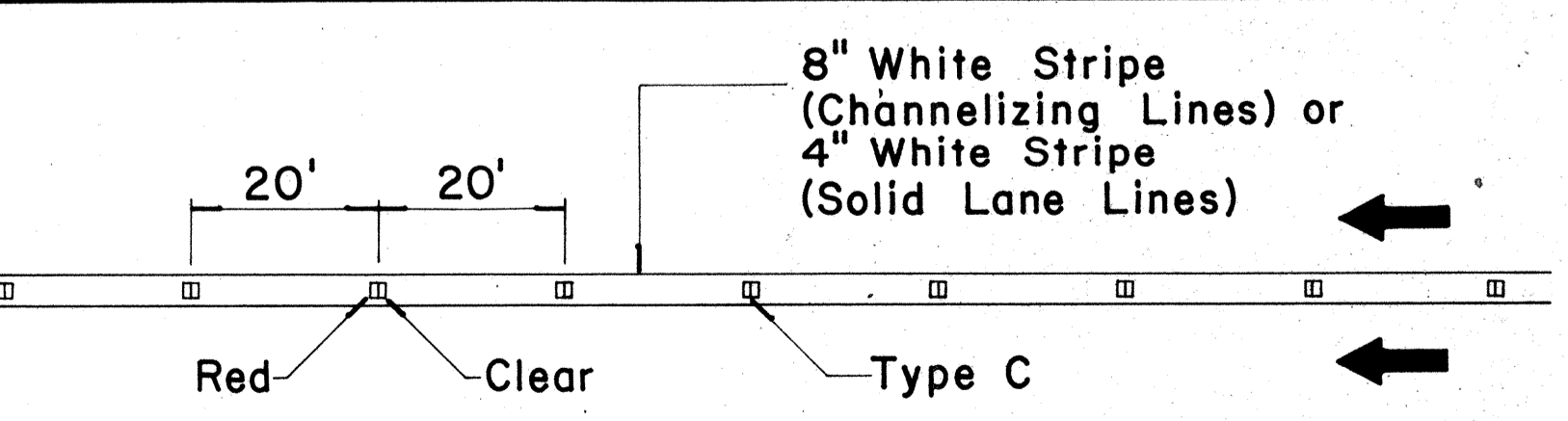
**MULTI-LANE  
LANE LINES AND CENTER LINE**



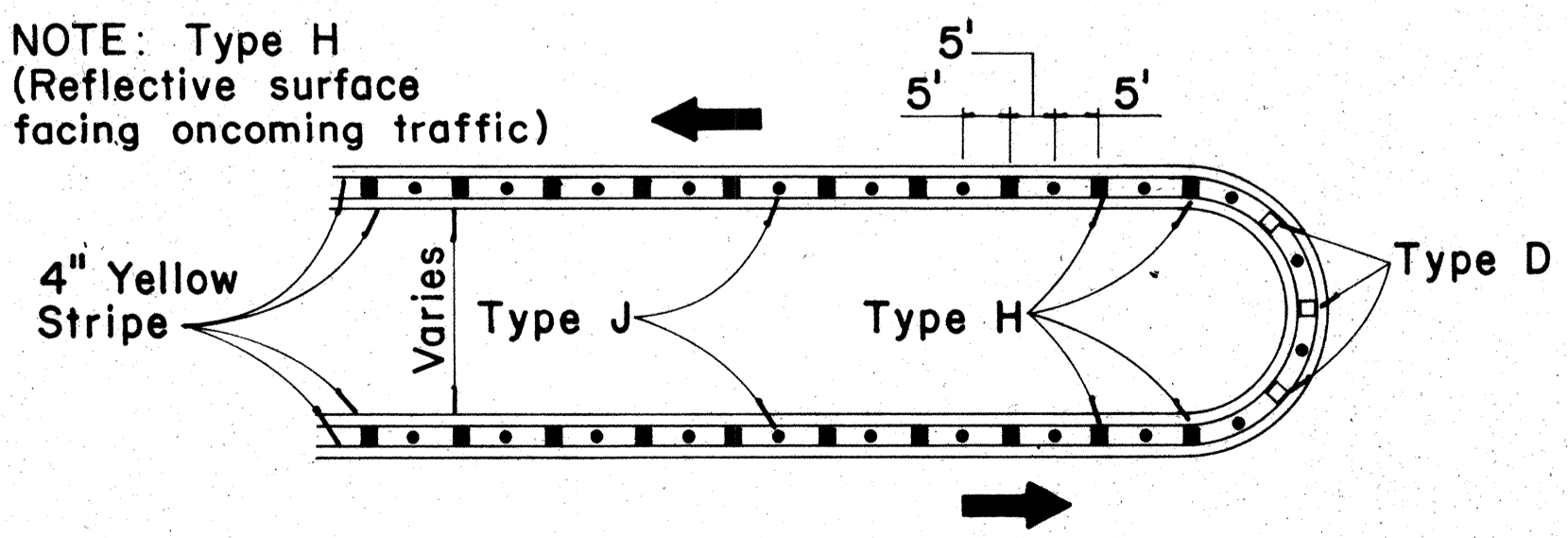
**DIVIDED HIGHWAY LANE LINES**



**FREEWAY LANE LINES**



**CHANNELIZING LINES  
OR SOLID LANE LINES**



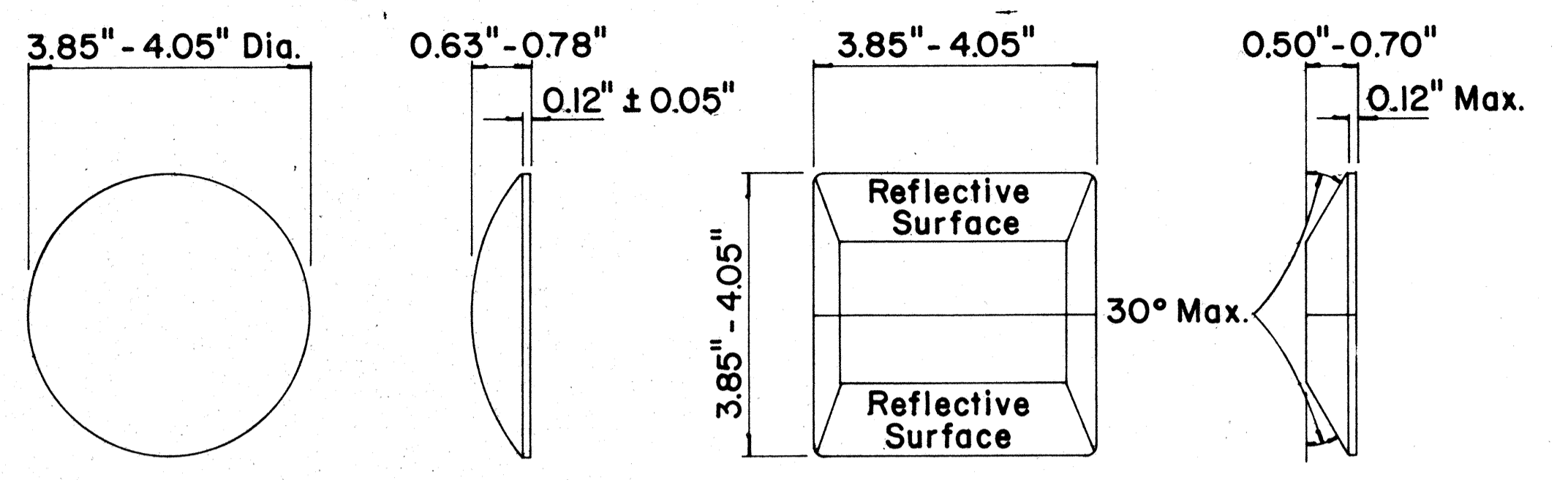
**MEDIAN NOSE DELINEATION**

TWO - LANE

MULTI - LANE

DIVIDED HIGHWAY  
AND  
FREEWAY

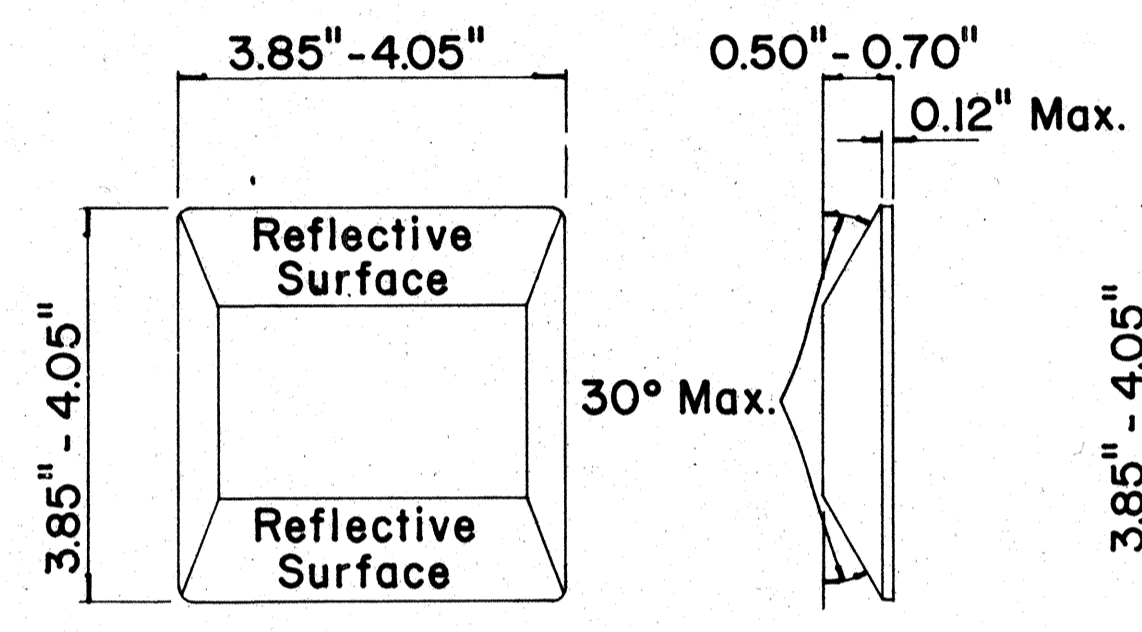
MISCELLANEOUS



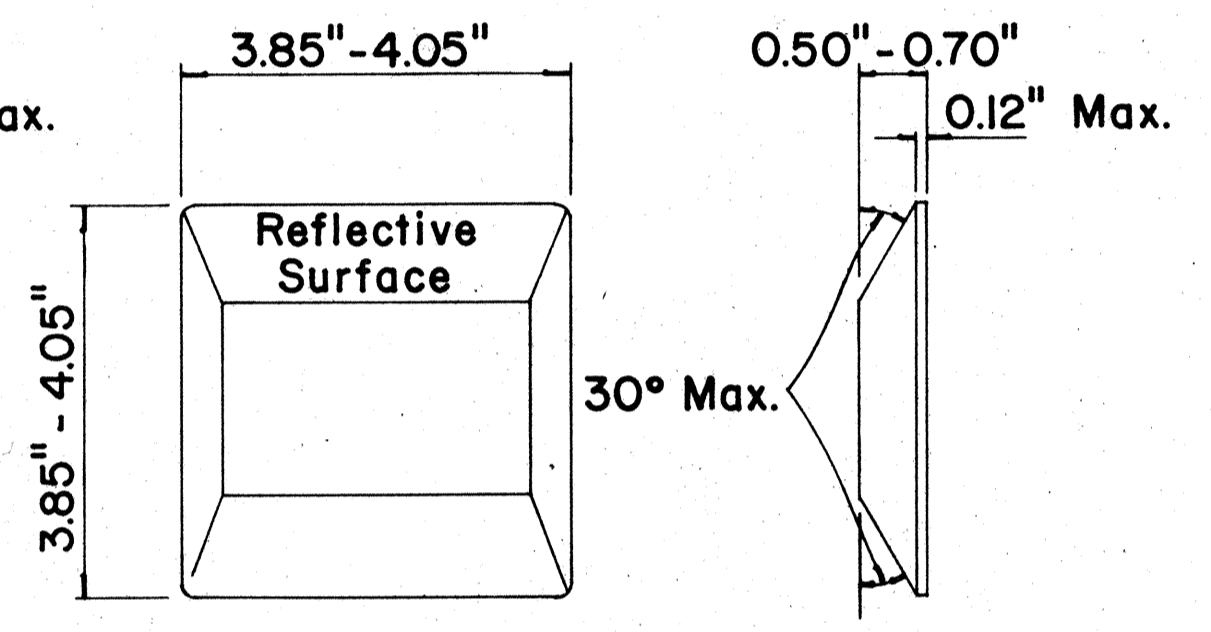
**TYPE A  
NON-REFLECTIVE WHITE MARKER**

**TYPE C  
RED-CLEAR REFLECTIVE MARKER**

**TYPE J  
NON-REFLECTIVE YELLOW MARKER**



**TYPE D  
TWO-WAY YELLOW REFLECTIVE MARKER**



**TYPE H  
ONE-WAY YELLOW REFLECTIVE MARKER**

**GENERAL NOTES**

1. Painted stripes to be done by Contractor unless otherwise specified.

**LEGEND**

- Type A
- Type C
- Type D
- Type H
- Type J

APPROVAL RECOMMENDED:  
*Eishi Tanaka* 11/18/71  
TRAFFIC ENGINEER DATE

APPROVED:  
*Shiget Sato* 11/18/71  
ASSISTANT CHIEF, ENGINEERING DATE

No.	REVISION	APPROVED BY	DATE
1	Add reflector marker in each line gap.	H.K.	10-21-72
2	Revised General Notes.	H.K.	10-21-72
3	Change 4" white edge stripe to 4" solid yellow edge stripe to left edge of a travel path and Add Type H Reflector Marker	H.K.	5-22-74

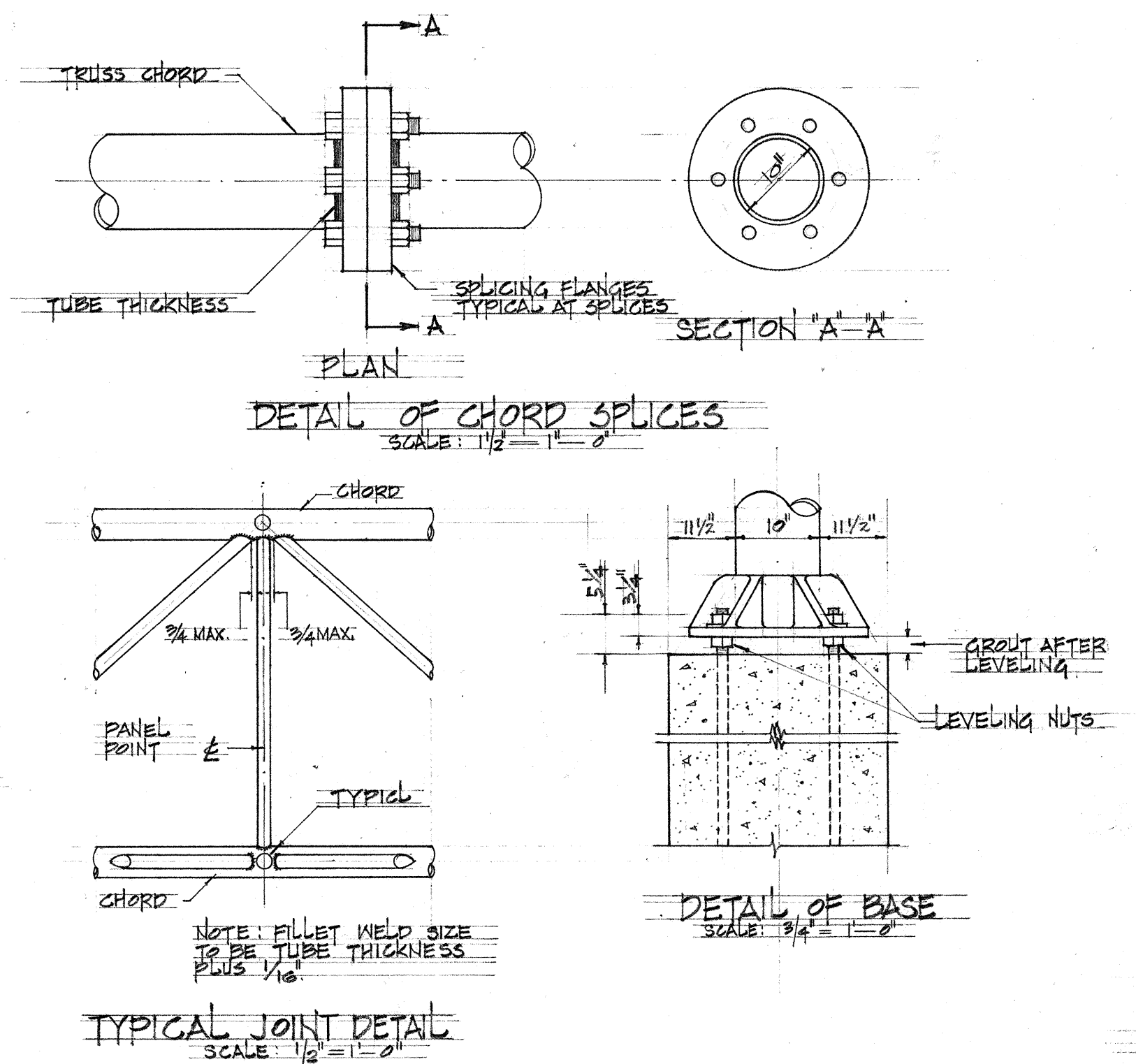
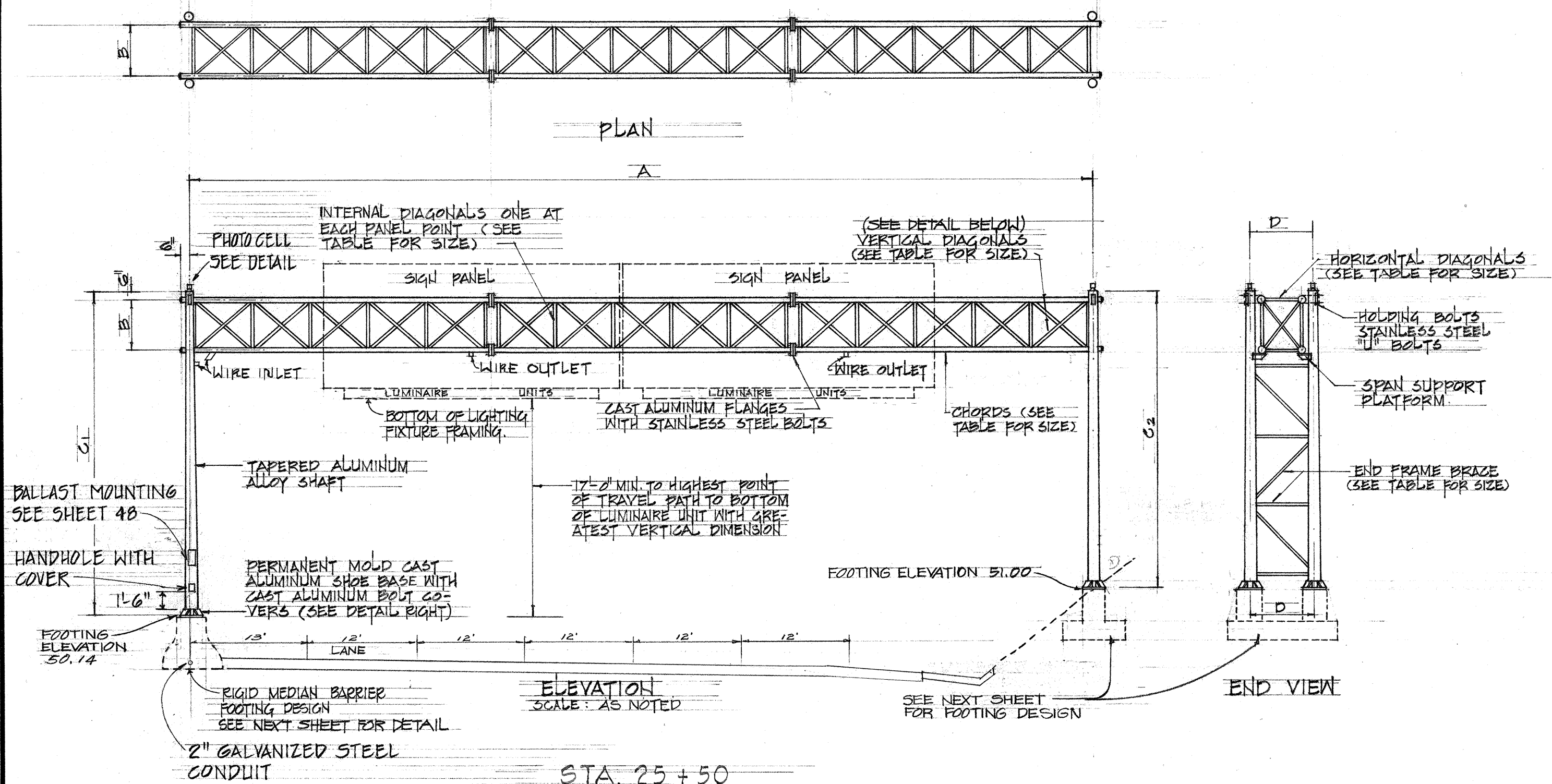
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS  
RAISED PAVEMENT MARKERS**

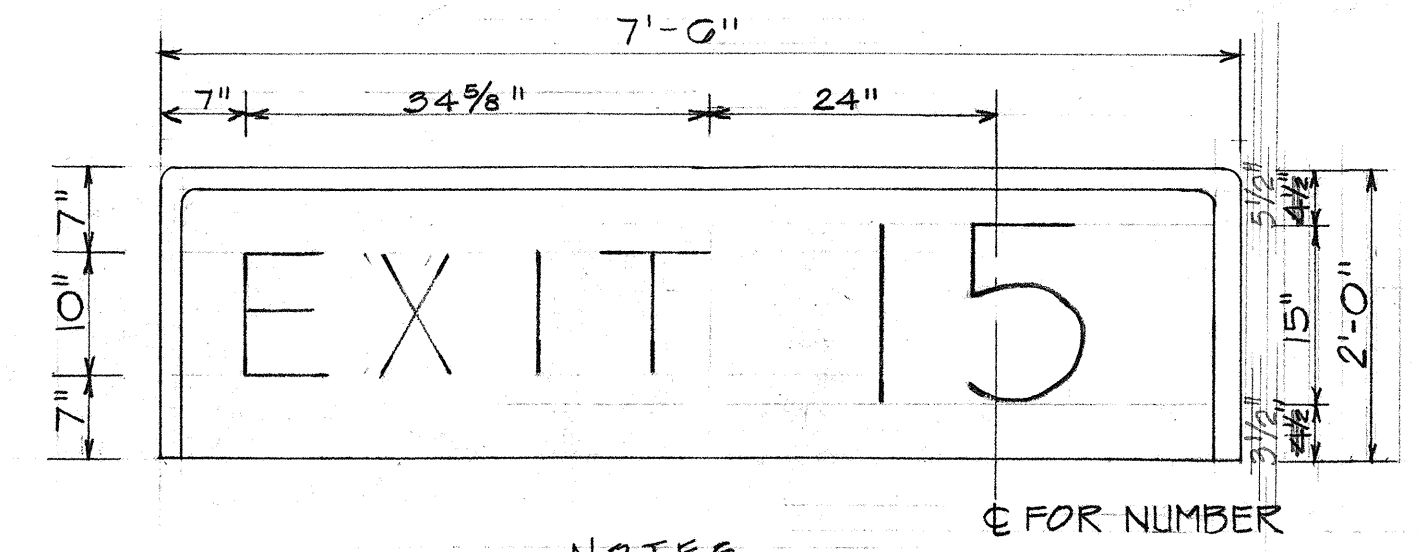
Not to Scale October 1971  
SHEET No. OF SHEETS DT 300

DATE  
SURVEY PLOTTED BY  
DRAWN BY  
CHECKED BY  
NOTE BOOK  
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1 (71):14	1974	13	21

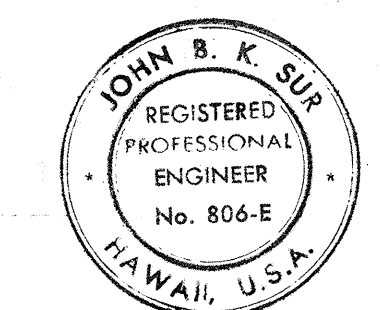
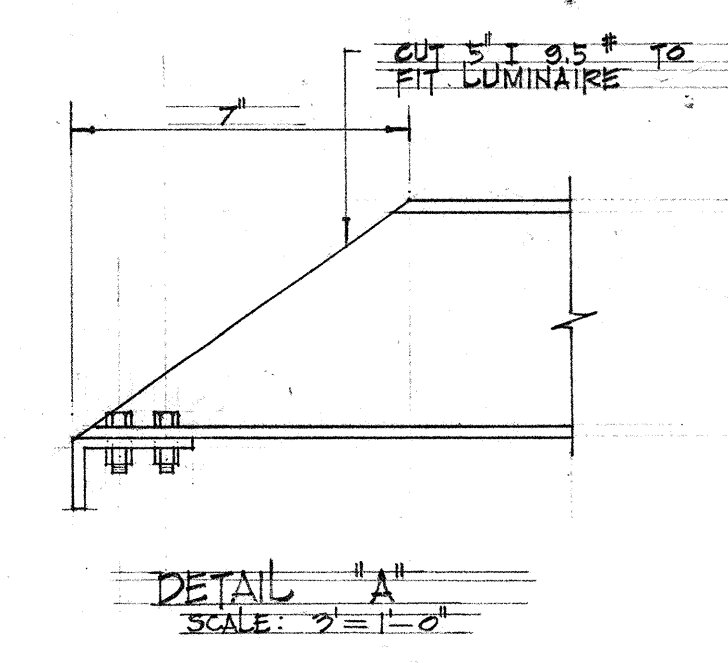
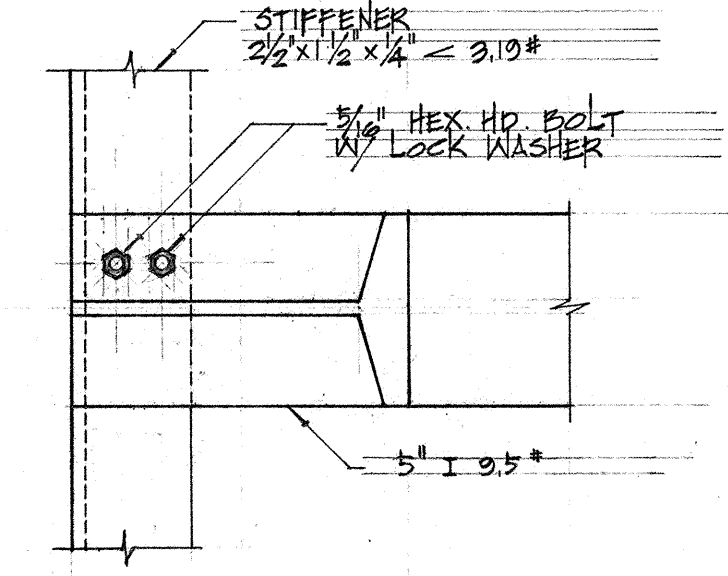
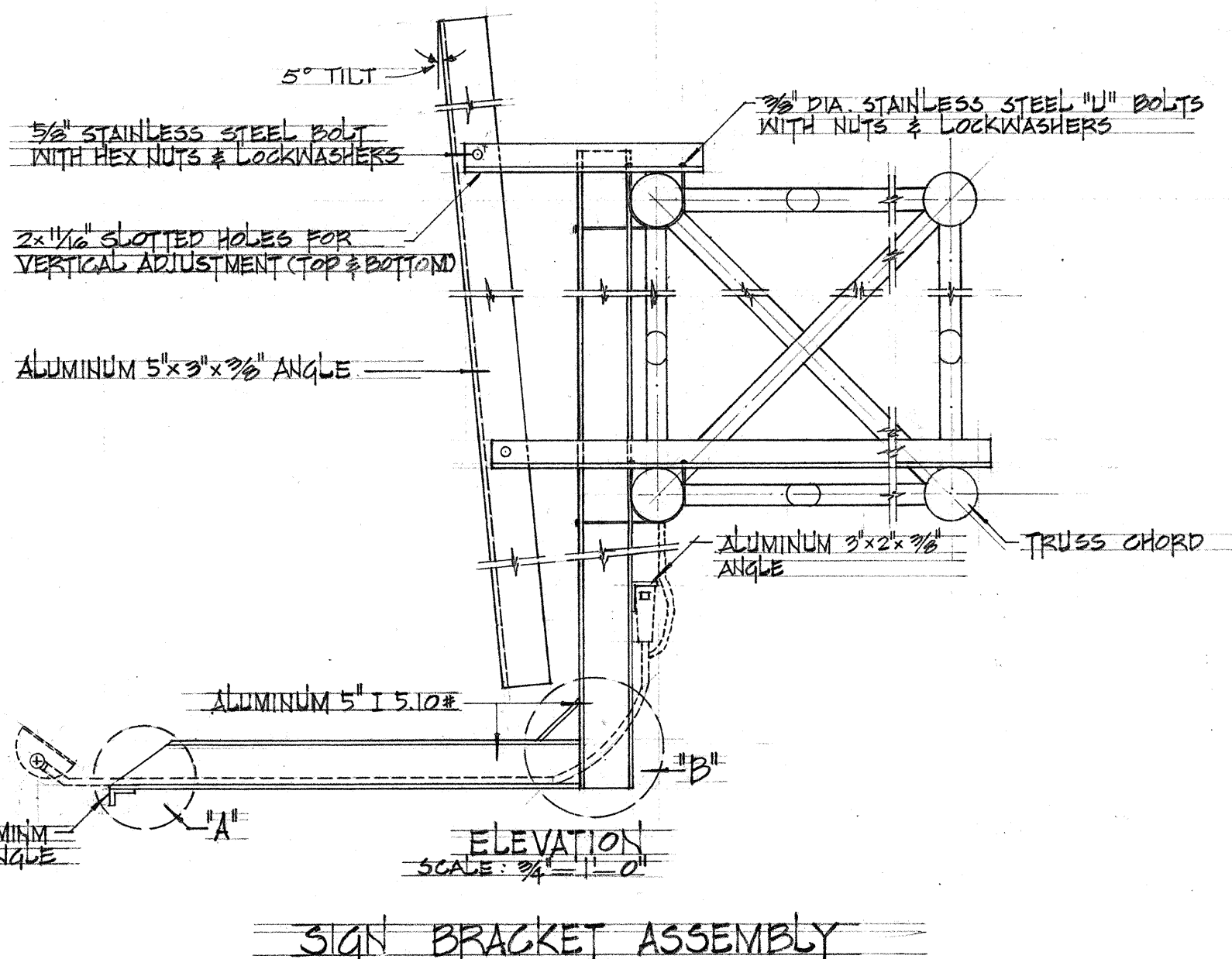
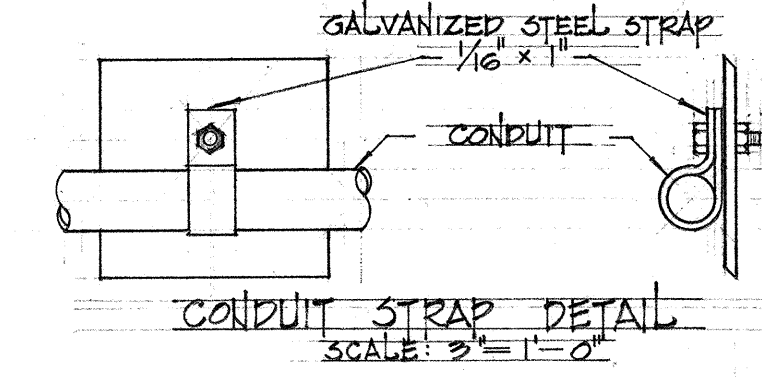
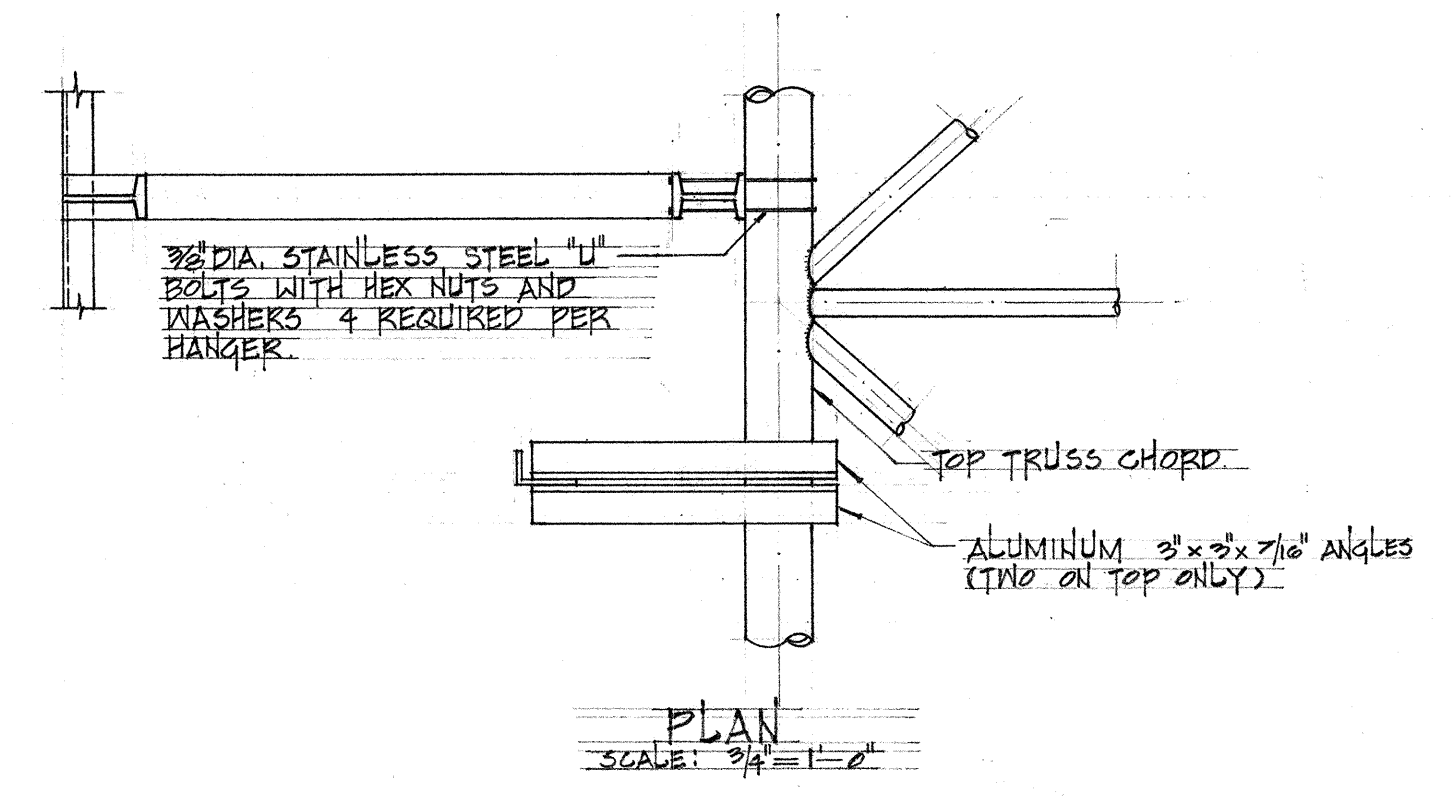
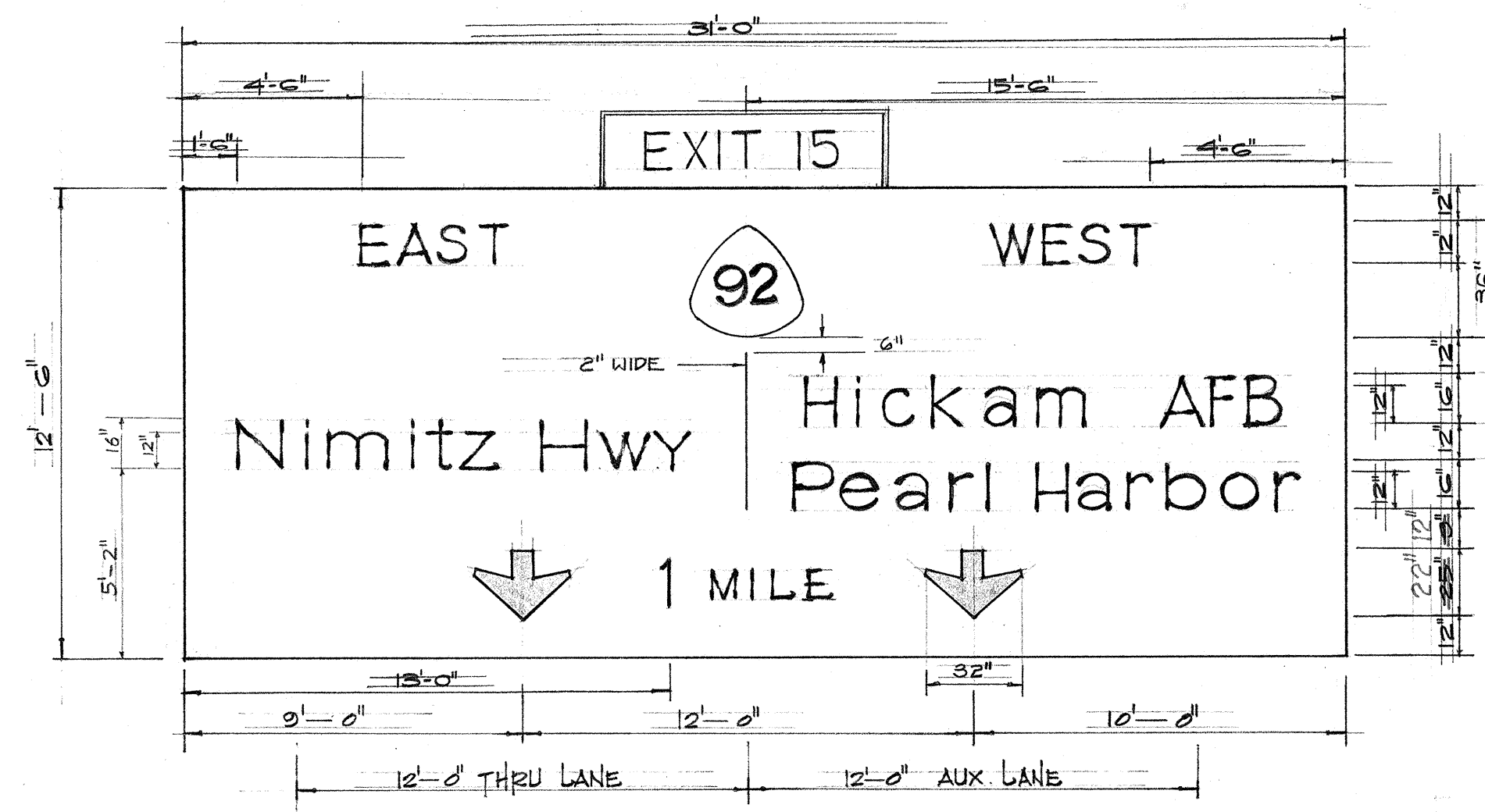
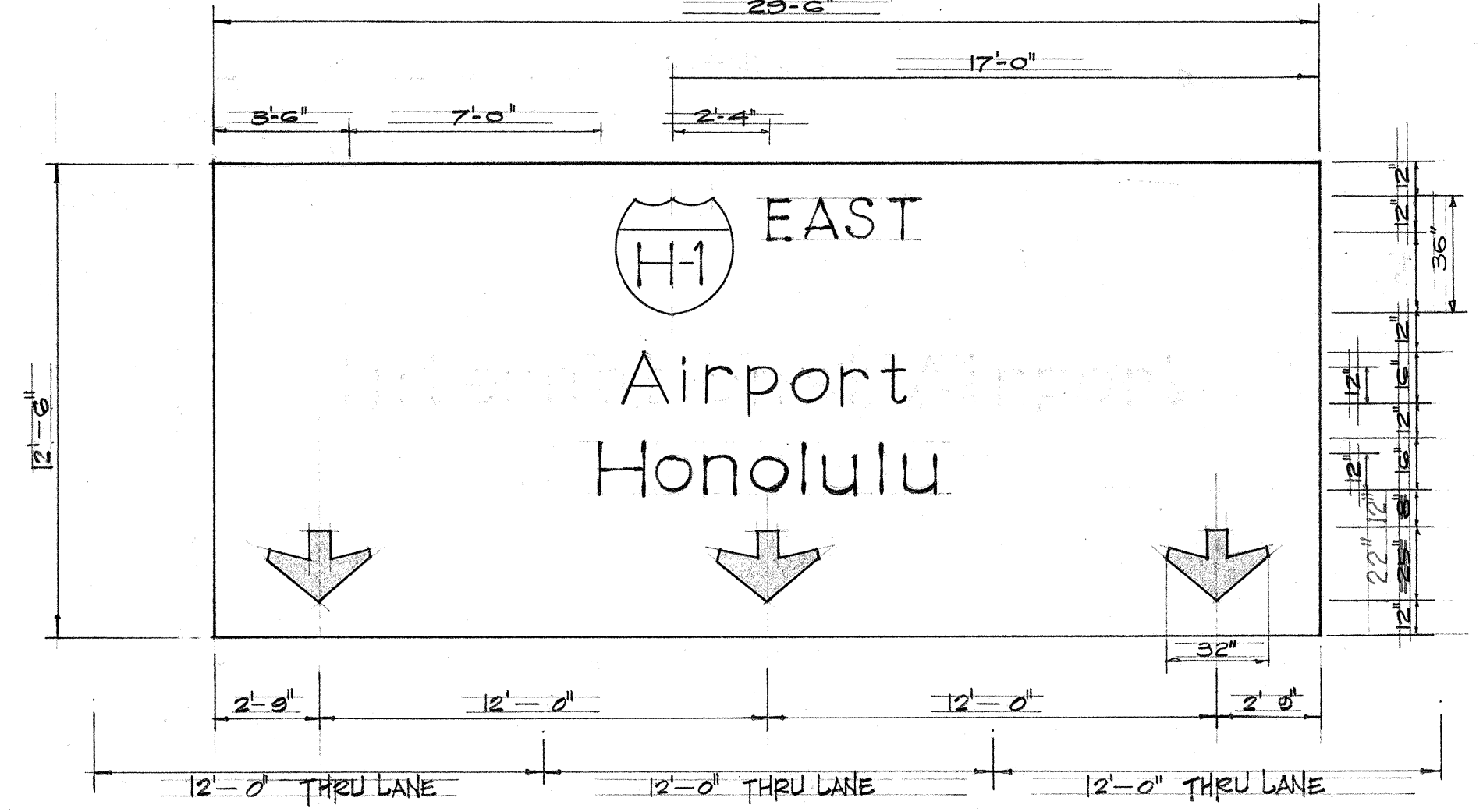


NOTE: MINIMUM OF ONE SIGN BRACKET REQUIRED FOR EACH 5 LINEAR FEET OF SIGN WIDTH FOR SIGNS OVER 7 FEET HIGH. MINIMUM OF ONE SIGN BRACKET FOR EACH 7 FEET (LINEAR) OF SIGN WIDTH FOR SIGNS UP TO 7 FEET HIGH.



NOTES  
1. MILEPOST EXIT NUMBER PANELS SHALL CONFORM TO ALL PLANS AND SPECIFICATIONS FOR EXPRESSWAY SIGN PANELS.  
2. PAYMENT FOR MILEPOST EXIT NUMBER PANELS SHALL BE CONSIDERED INCIDENTAL TO PANEL FOR EXPRESSWAY SIGNS.

MILEPOST EXIT NUMBER PANELS  
SCALE: 3/4" = 1'-0"



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DATE: 2/25/75  
REVISION: REVISED SIGN LIGHTING HANDHOLE & BALLAST POSITION, SIGN FOOTING ELEV.

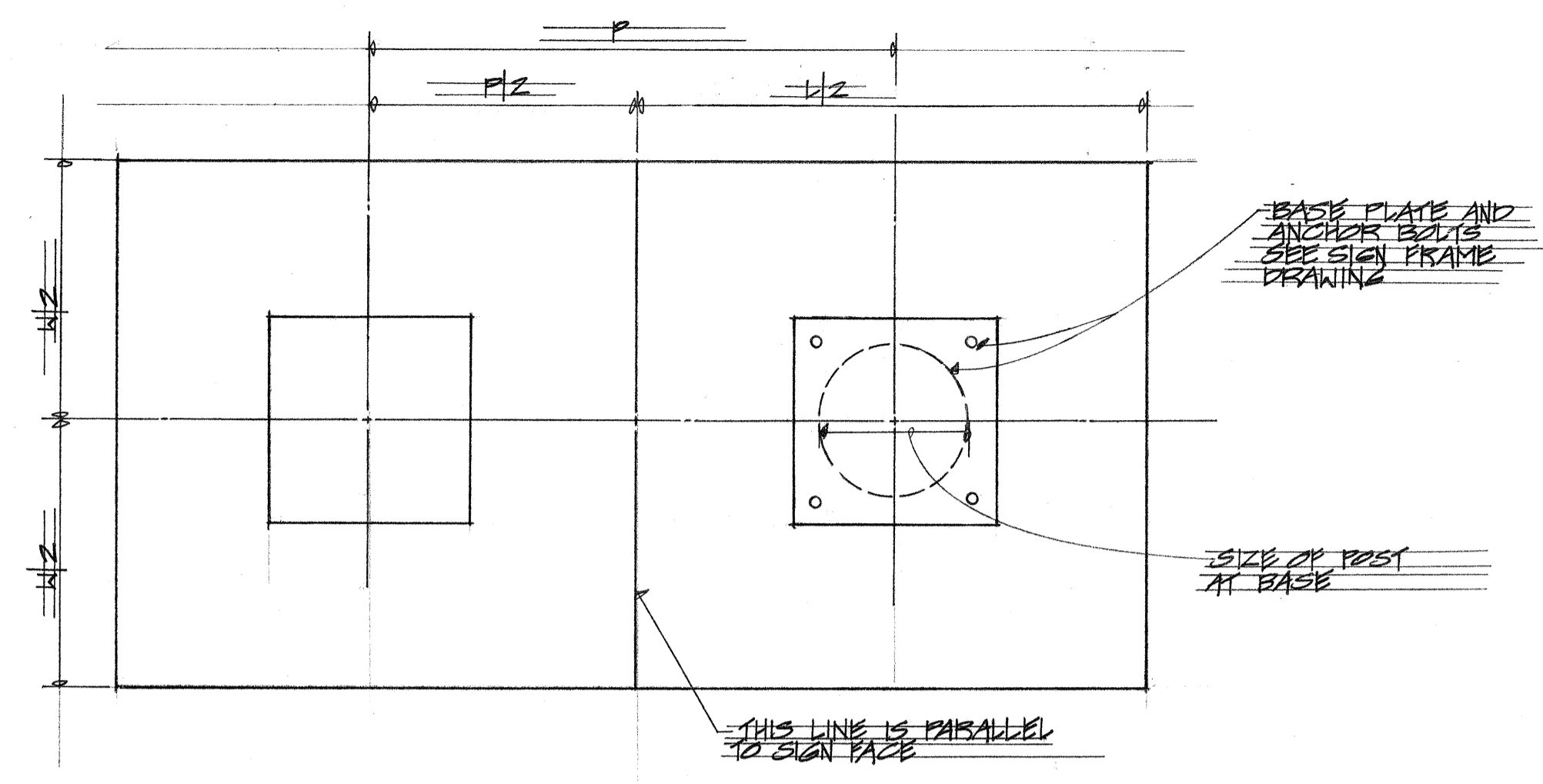
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**OVERHEAD SIGN SUPPORT  
BOX TRUSS TYPE F  
ALUMINUM**

INTERSTATE ROUTE H-1  
R.A.I. PROJECT NO. I-HI-1(71):14  
SCALE: AS SHOWN  
DATE: JUNE 5, 1974

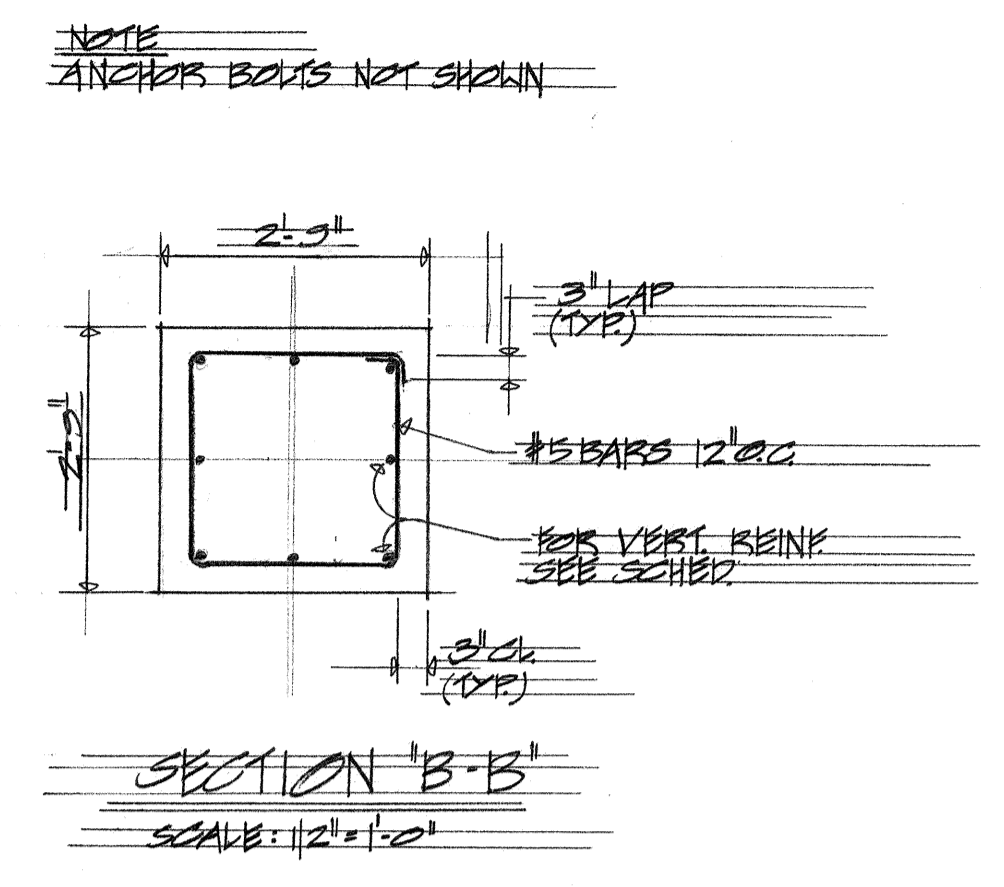
SIGN NO.	A	B	C <sub>1</sub>	C <sub>2</sub>	D	SPAN SECTIONS REAR.	CHORD SIZE	END FRAME SHAFT SIZE AND TAPER	VERTICAL DIAGONAL SIZE	HORIZONTAL DIAGONAL SIZE	INTERNAL DIAGONAL SIZE	END FRAME BRACE SIZE	BOLT CIRCLE DIA.	ANCHORAGE
E-1	102'	5'	27.75	20.80	7'-2"	3	5 1/2" O.P. 250 WALL	10" x 8" x 1.88 WALL	2 1/2" O.P. 1.88 WALL	2 1/2" O.P. 1.88 WALL	2 1/2" O.P. 1.88 WALL	3 1/2" O.P. 1.88 WALL	10"	1/2" DIA. x 48" LG

DATE	
SYNOPSIS PREPARED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

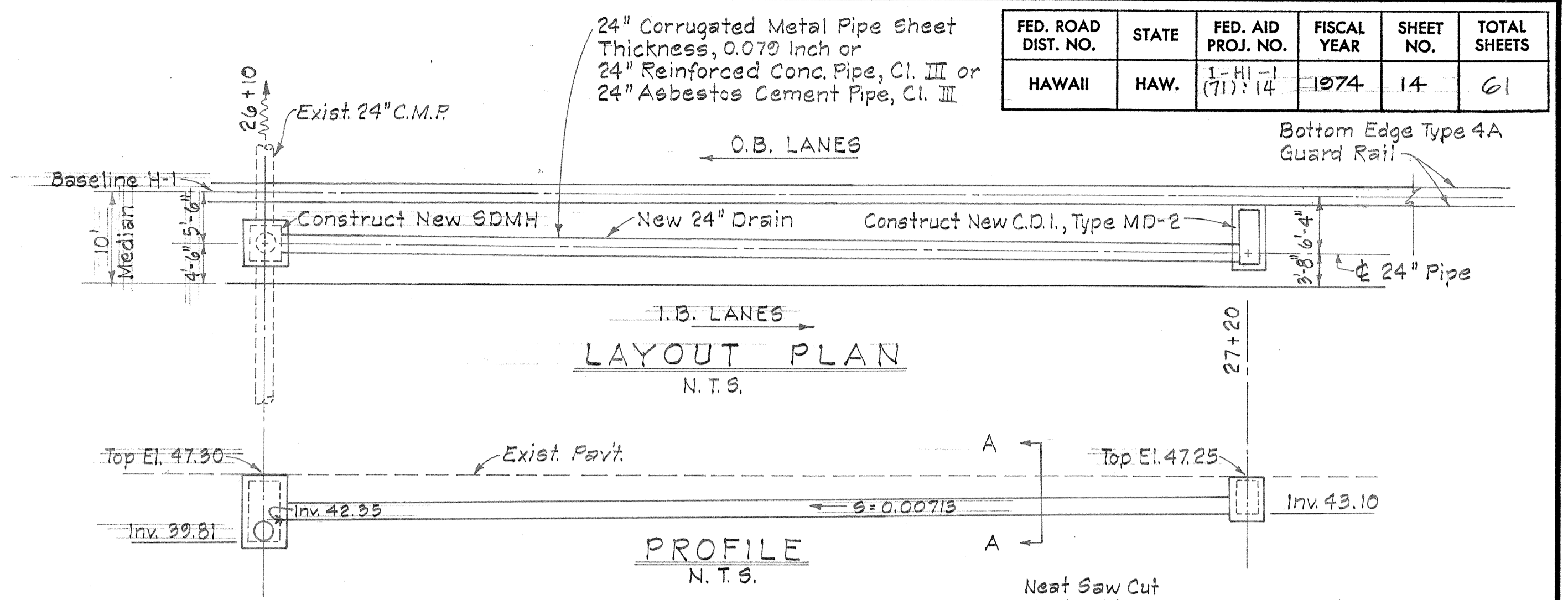
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1 (71) 14	1974	14	61



**PLAN**  
NOT TO SCALE



**SECTION 'B-B'**  
SCALE: 1/2" = 1'-0"

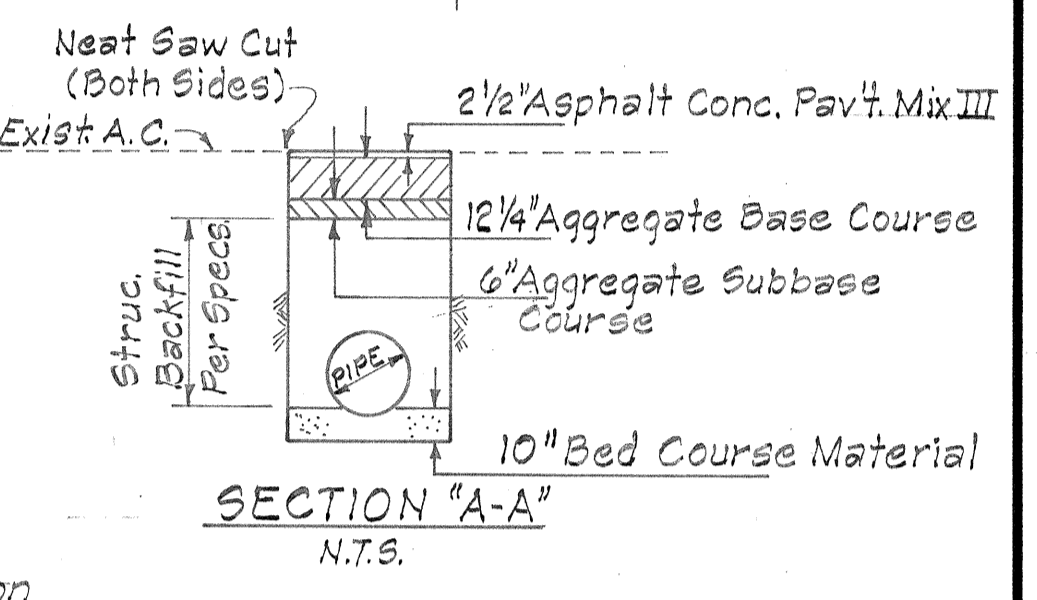


**LAYOUT PLAN**  
N.T.S.

**PROFILE**  
N.T.S.

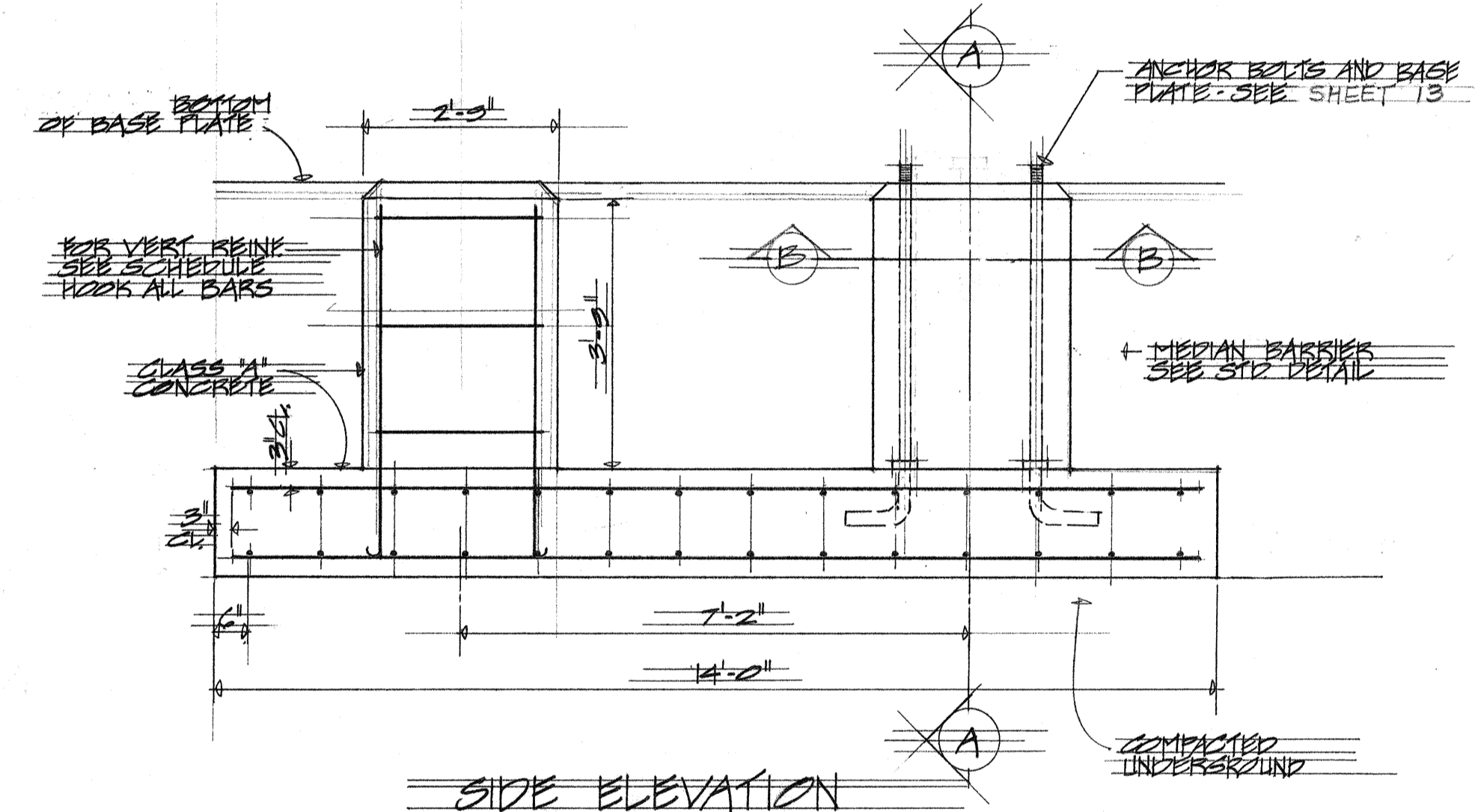
**NOTES:**

1. Cast Iron Frame & Cover shall conform to the requirements of ASTM A48, class no. 30. Shall be thoroughly cleaned and painted with one coat of high-grade Asphaltum at the shop and a second coat after installation. See Plan Sheet ADD.9 for details.
2. Storm Drain Manhole Rungs: Unless otherwise specified, shall be fabricated from 3/4" round wrought iron bars conforming to the requirements of ASTM A207. Rungs shall be cadmium plated or hot-dipped galvanized after fabrication. Rungs (12" o.c.) are required when "H" is greater than 4'-6". Only one rung (16" from the bottom) is required if "H" is 4'-6" or less. Manhole rungs may be placed at any location as ordered by the Engineer. See Plan Sht. Add. 9 for details.
3. All reinforcing steel shall be deformed bars and shall be either grade 40 or grade 60.
4. Type A-12 Frame and Grates: See Plan Sht. 8 for details and general notes.
5. Bed Course Material (Pipe Cushion): See Plan Sht. Add. 4 for details.
6. The existing asphalt pavement at the trench areas shall be neatly cut with sawing equipment. This work shall be paid on a force account basis.
7. Cutting and removing portion of exist. 24" CMP to connect to SDMH shall be paid on a force account basis.

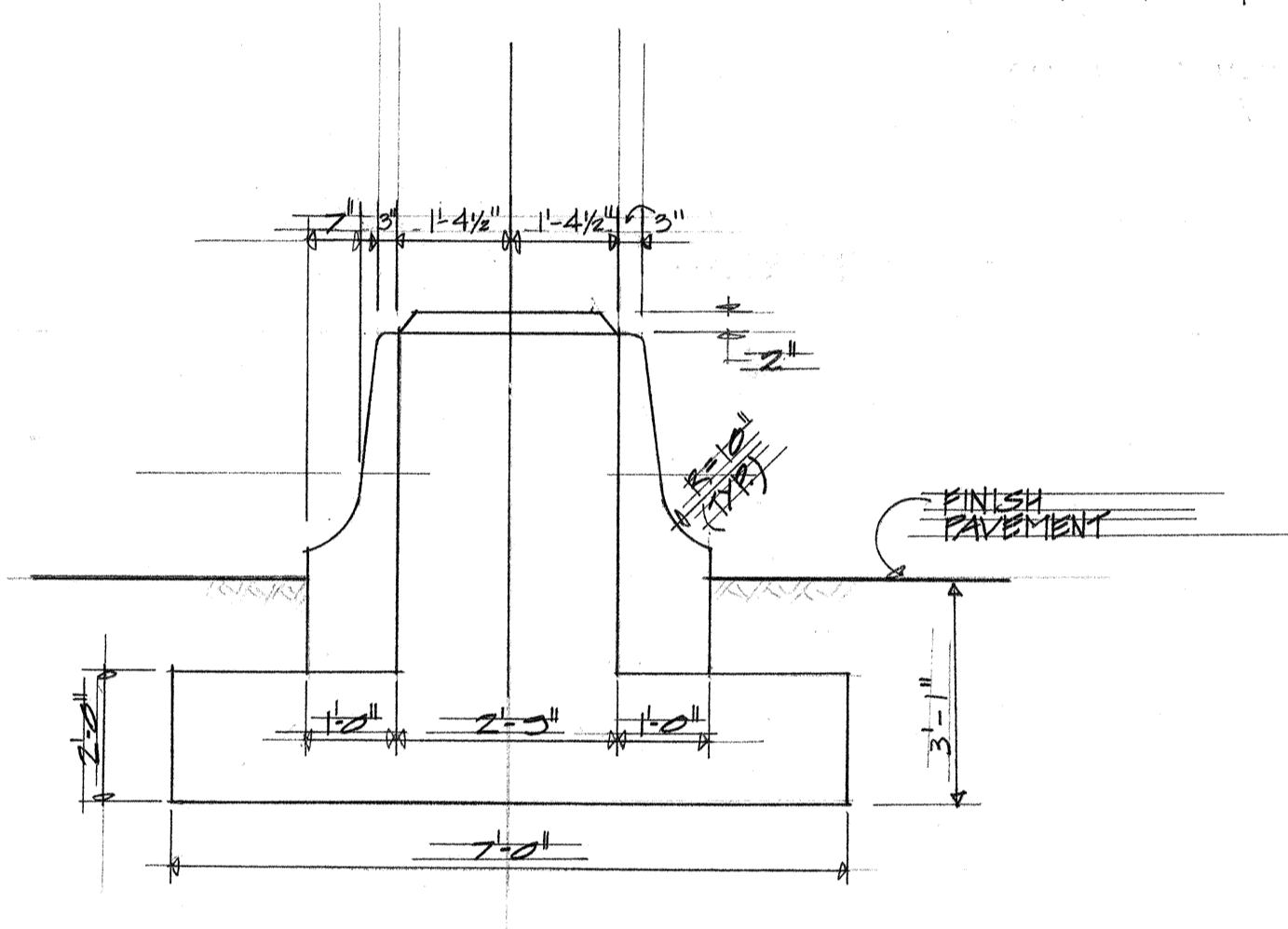


**SECTION 'A-A'**  
N.T.S.

**NOTE:**  
CONCRETE BARRIER TRANSITION SECTION  
SEE STANDARD DETAILS



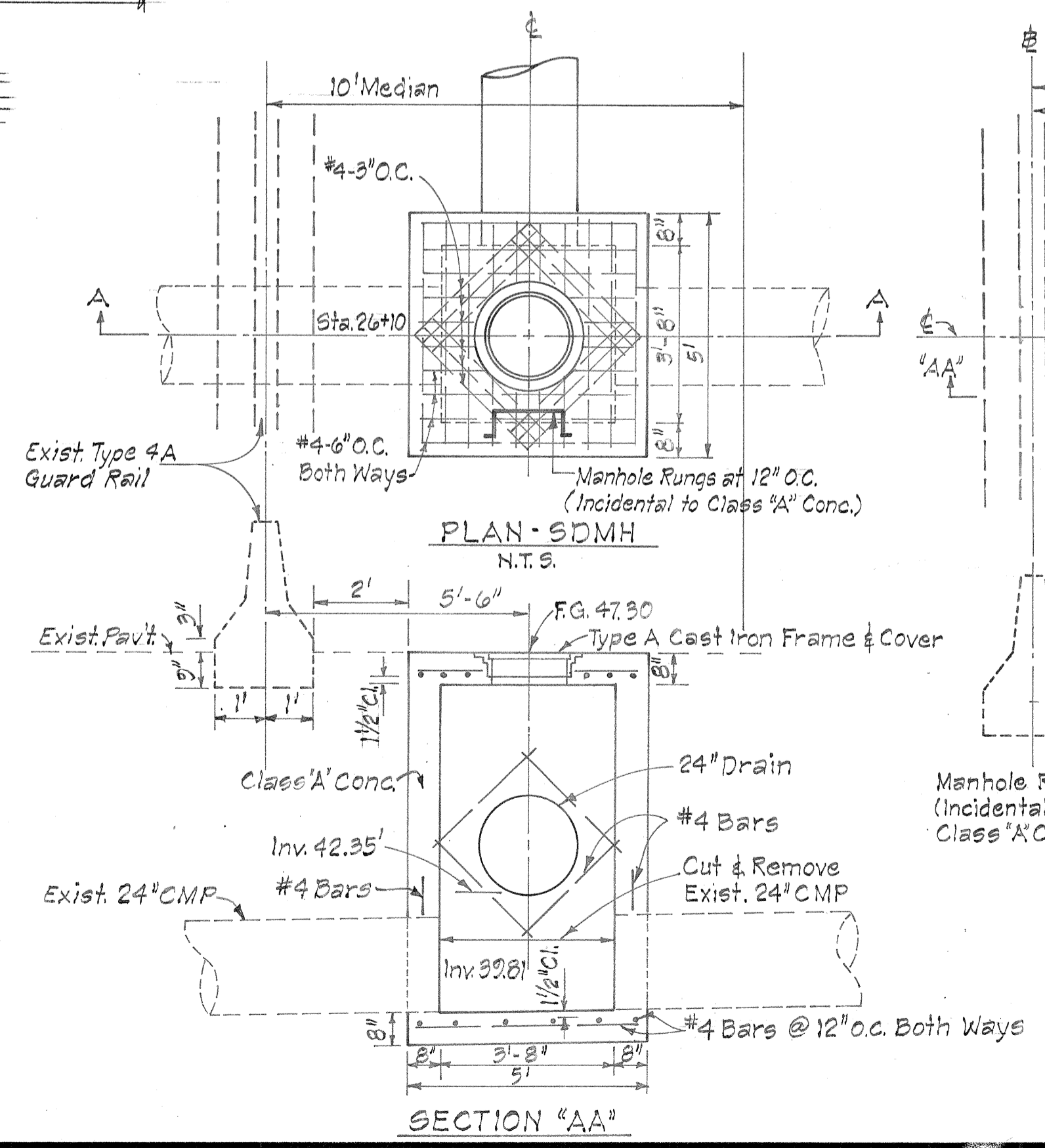
**SIDE ELEVATION**  
NOT TO SCALE



**SECTION 'A-A'**  
SCALE: 1/2" = 1'-0"

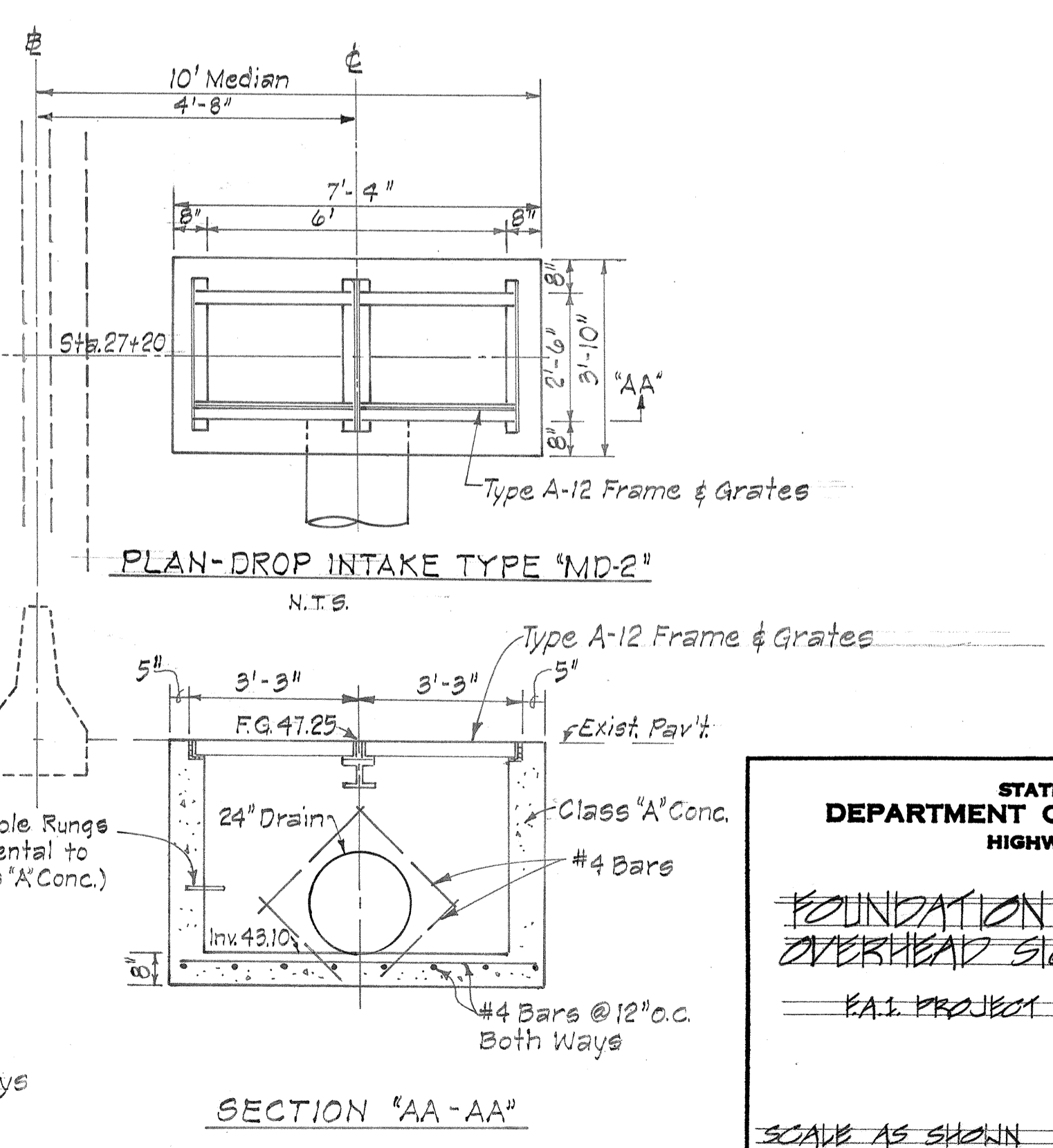
**RECTANGULAR FOOTING DETAIL**  
SCALE AS NOTED

FOUNDATION SCHEDULE						
SIGN NO.	RECTANGULAR FOOTING ON BARTH		PIEDestal VERTICAL REIN.	ELEV. A	ELEV. B	1" POST SPACING
	SIZE (W x L)	LONG REIN TOP & BOTTOM				
E-1	7'-0" x 2'-0" x 14'-0"	5-#5 BARS @ 12"	12-#5 BARS @ 8"			7'-2"



**PLAN-SDMH**  
N.T.S.

**SECTION 'AA'**



**PLAN-DROP INTAKE TYPE 'MD-2'**  
N.T.S.

**SECTION 'AA-AA'**

**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
**HIGHWAYS DIVISION**

**FOUNDATION DETAIL OF OVERHEAD SIGN SUPPORT**

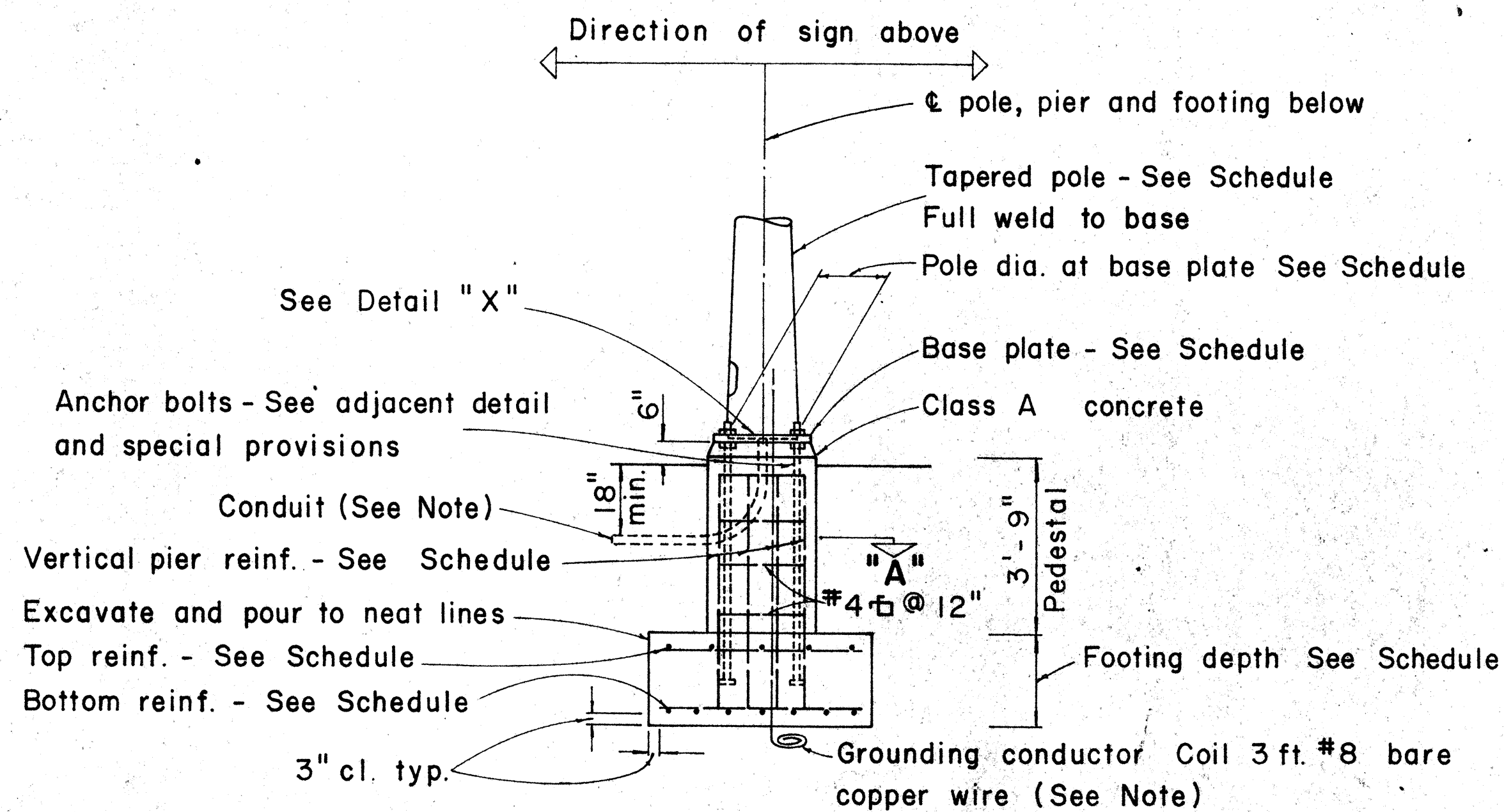
F&I PROJECT NO. 1-HI-1 (71) 14

SCALE AS SHOWN      DATE: JUNE 5, 1974

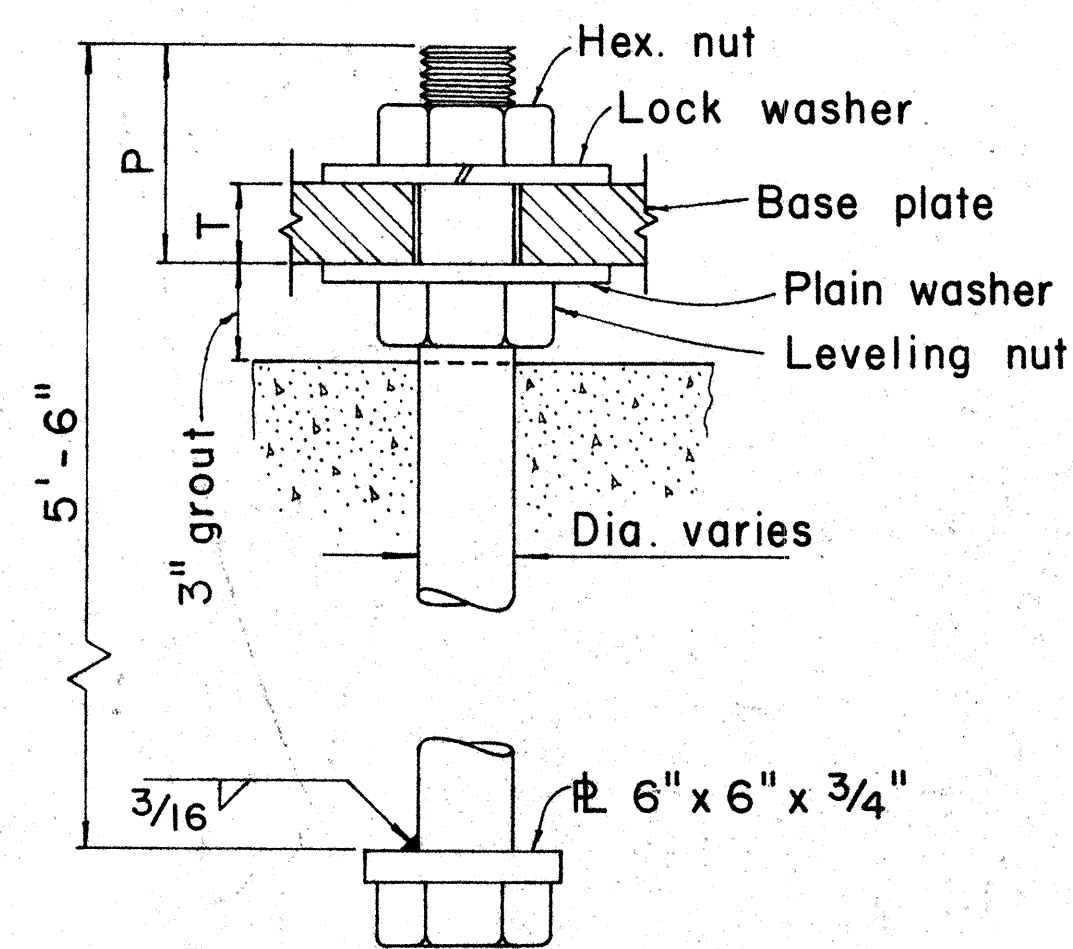
**SHEET No. 5 OF 11 SHEETS**

SURVEY PLATTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_

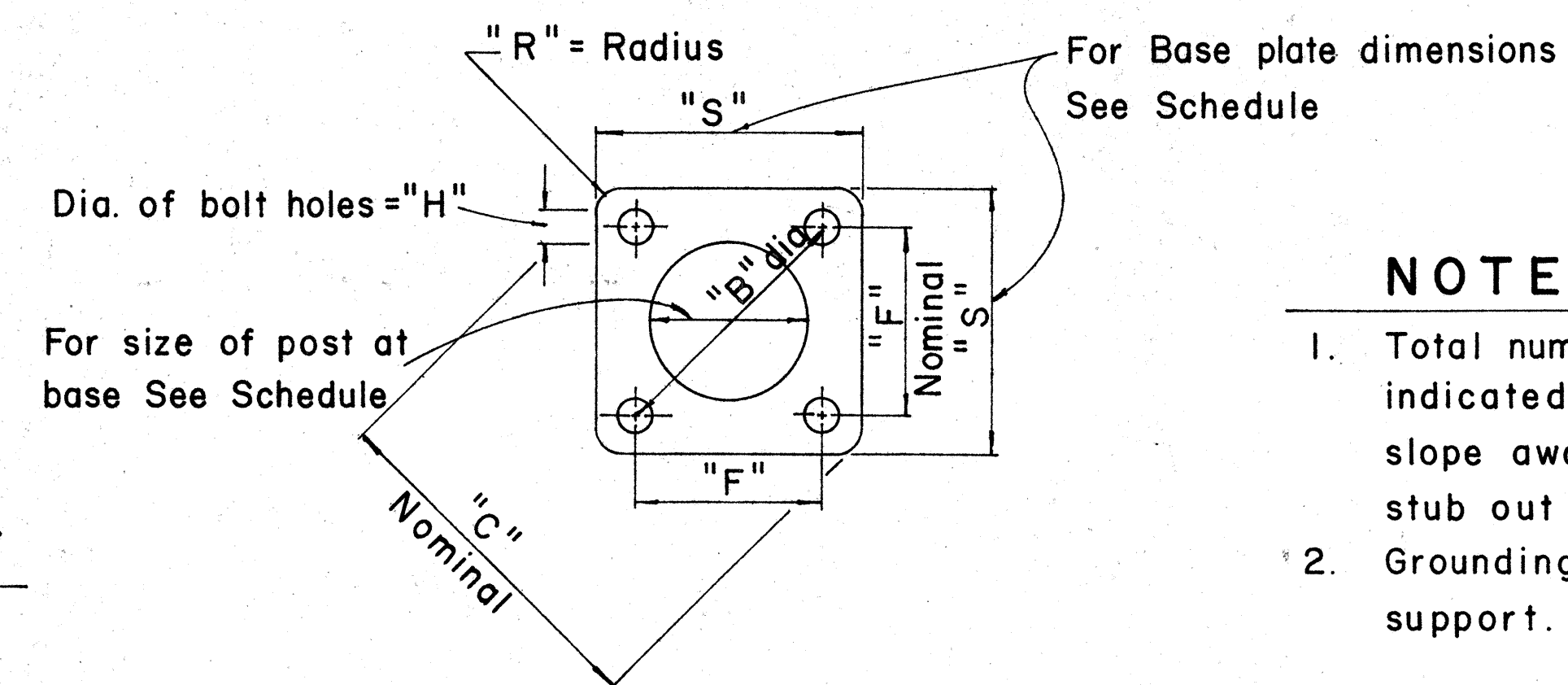
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11-1 (7) 14	1974	15	61



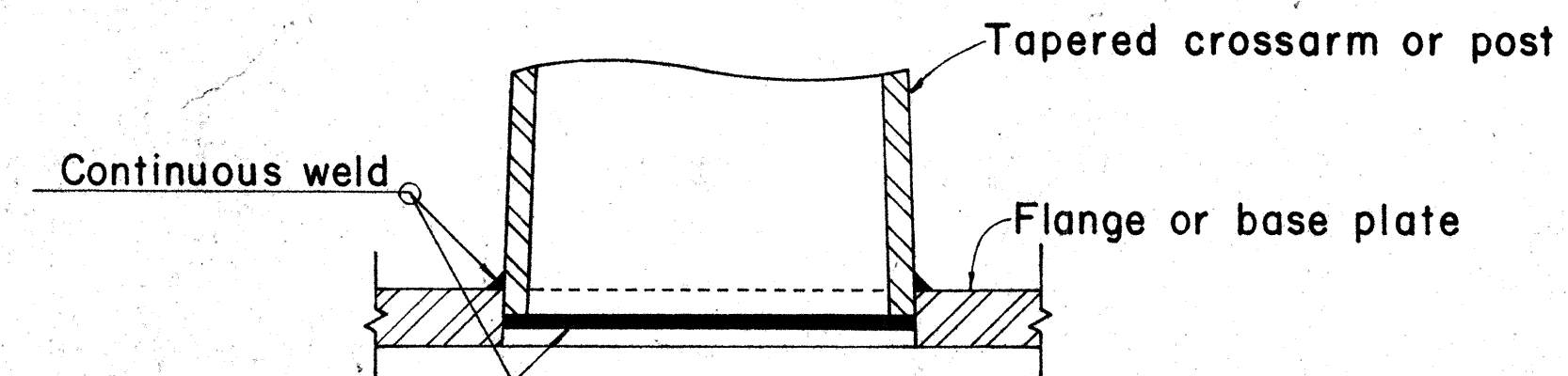
**TYPICAL POLE FOUNDATION DETAIL**



**TYPICAL ANCHOR BOLT 4 REQ'D**



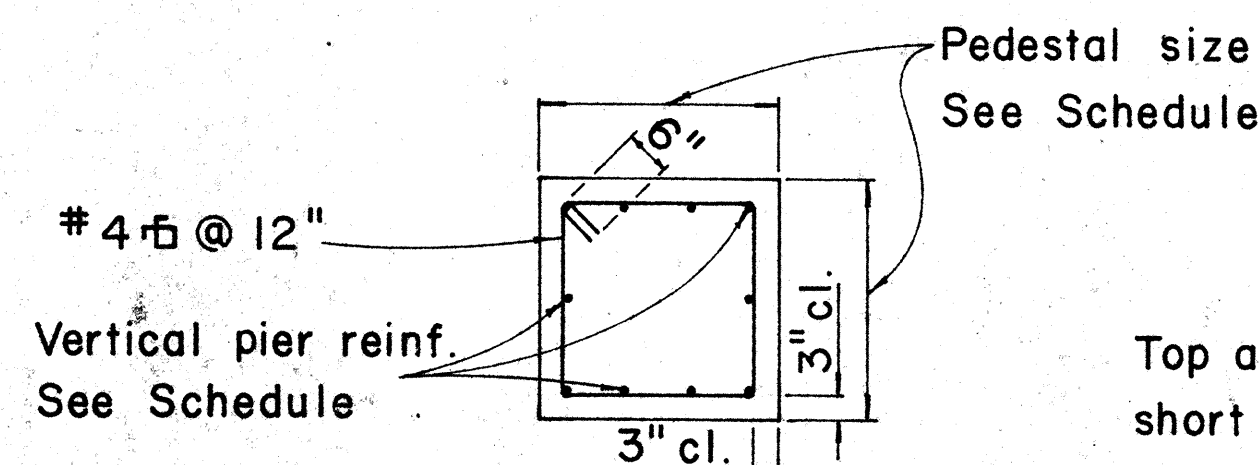
**TYPICAL BASE PLATE**



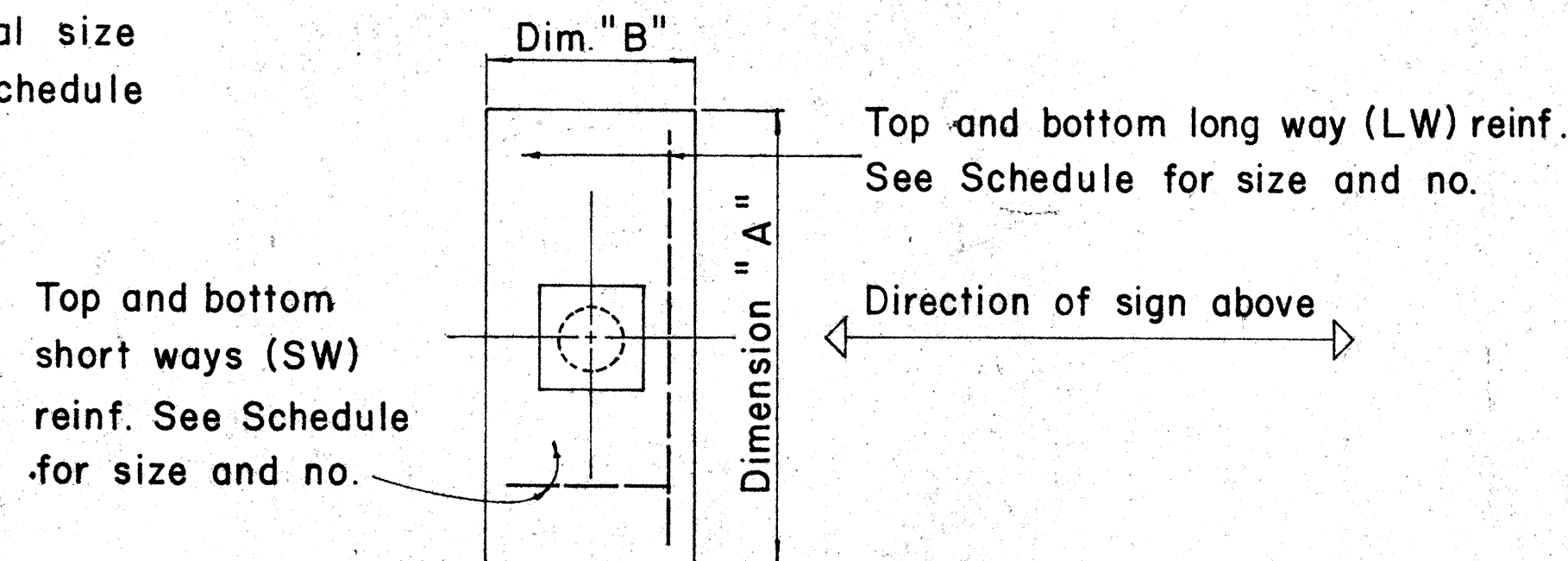
**DETAIL "X"**

**NOTE:**

- 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.
- Grounding conductor shall be bonded to sign support.



**SECTION "A"**



**TYPICAL FOOTING DETAIL**

**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-#6	8-#4	#4 @ 12 each way		1'-11"	10-#5
II	9'-0"	4'-6"	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	19-#4	Do.		2'-9"	10-#11

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 No. \_\_\_\_\_

APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 12/29/69  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Julius P. Sato* 12-30-69  
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Foundation Schedule	H.C.	8/14/70

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**DETAILS & SCHEDULES**

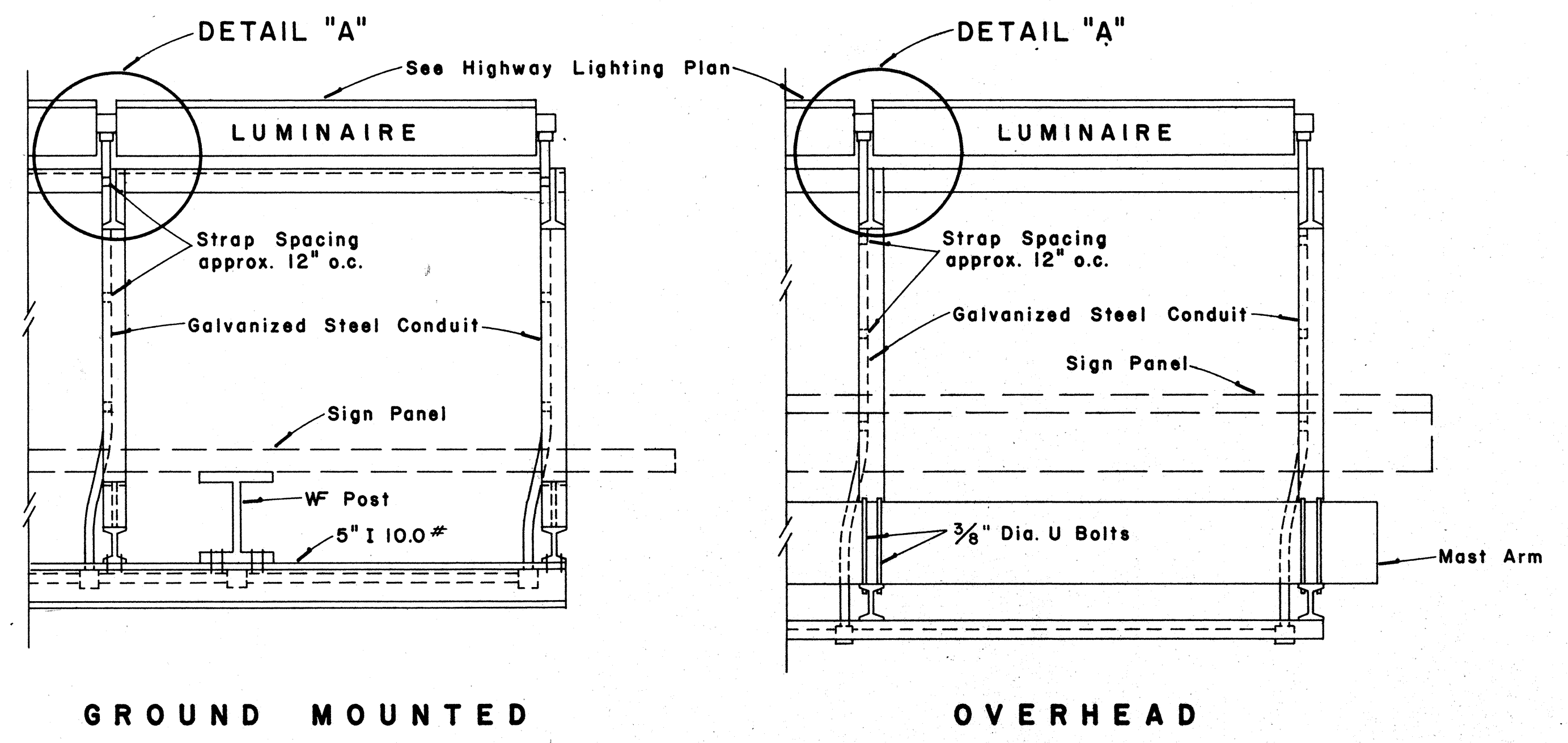
NOT TO SCALE DATE: JUNE 5, 1974

SHEET No. 6 OF 11 SHEETS DT 202

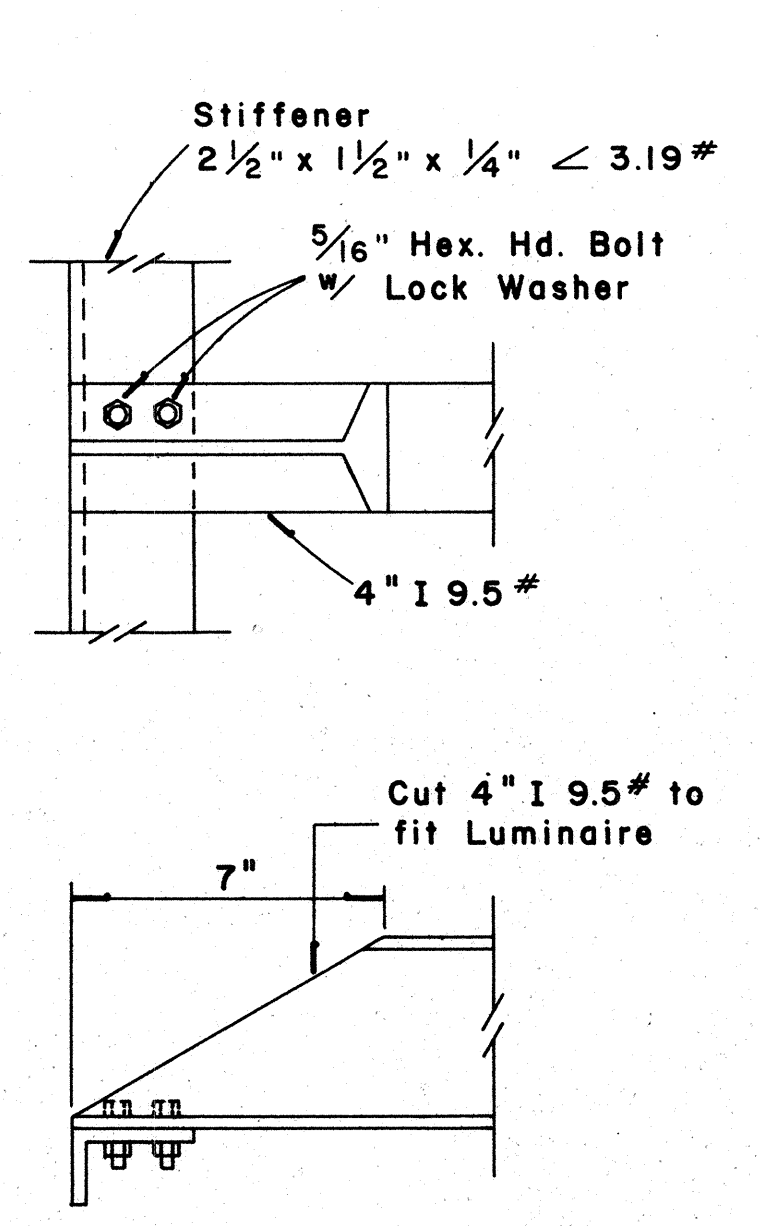
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11-1 (71):14	1974	16	61

**GENERAL NOTES**

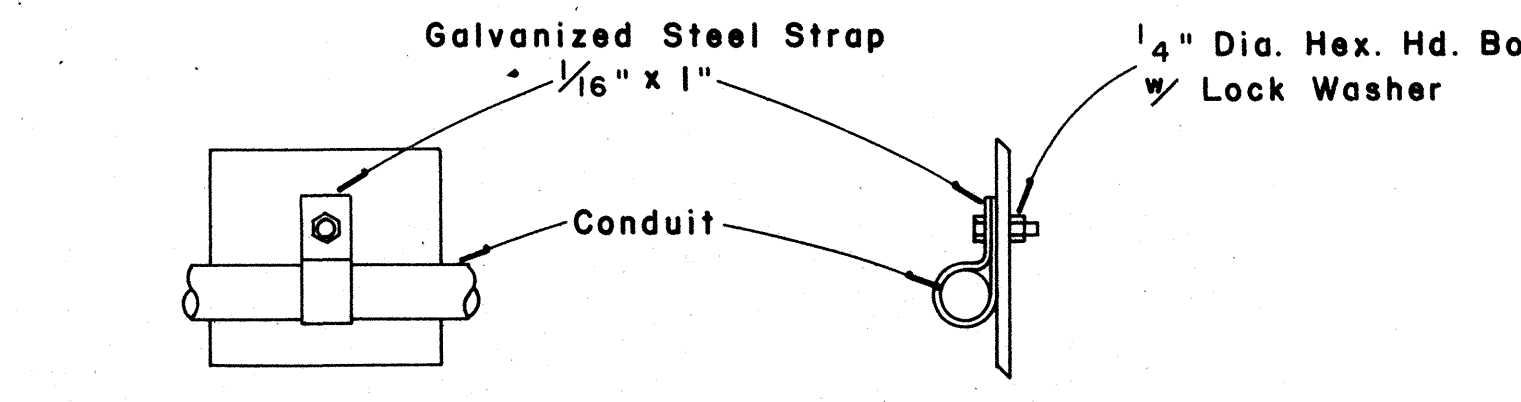
1. Conduit sizes: 3/4" diameter for one or two Luminaire Units, 1" diameter for three or more Luminaire Units.
2. Fluorescent Fixtures shall be installed as recommended by the manufacturer.
3. Luminaire brackets shall be spaced to fit 4'-0" to 6'-0" luminaires with fittings. Eight feet (8'-0") luminaires shall have an additional bracket at midpoint.
4. 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.



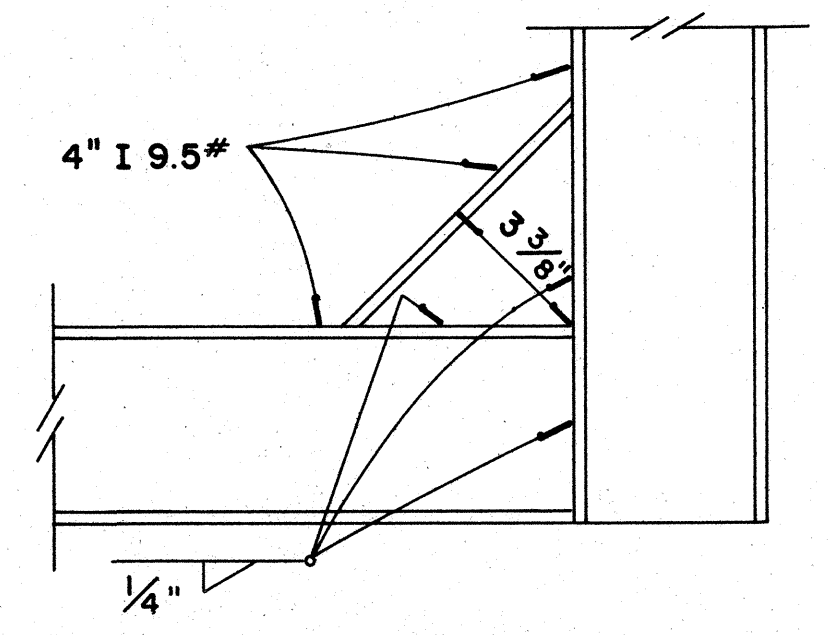
**TOP VIEW  
LUMINAIRE MOUNTING**  
Scale: 1" = 1'-0"



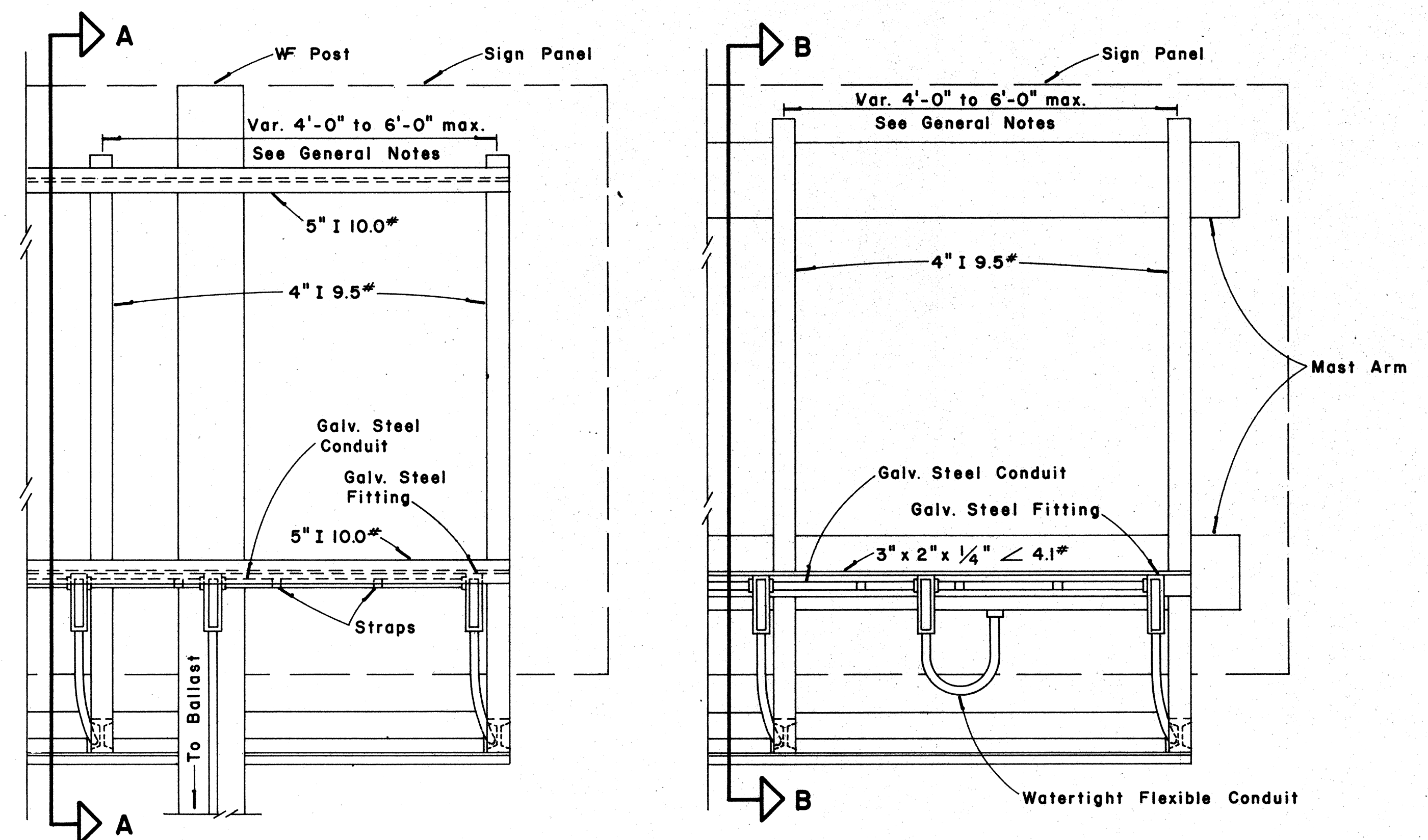
**DETAIL "A"**  
Scale: 3" = 1'-0"



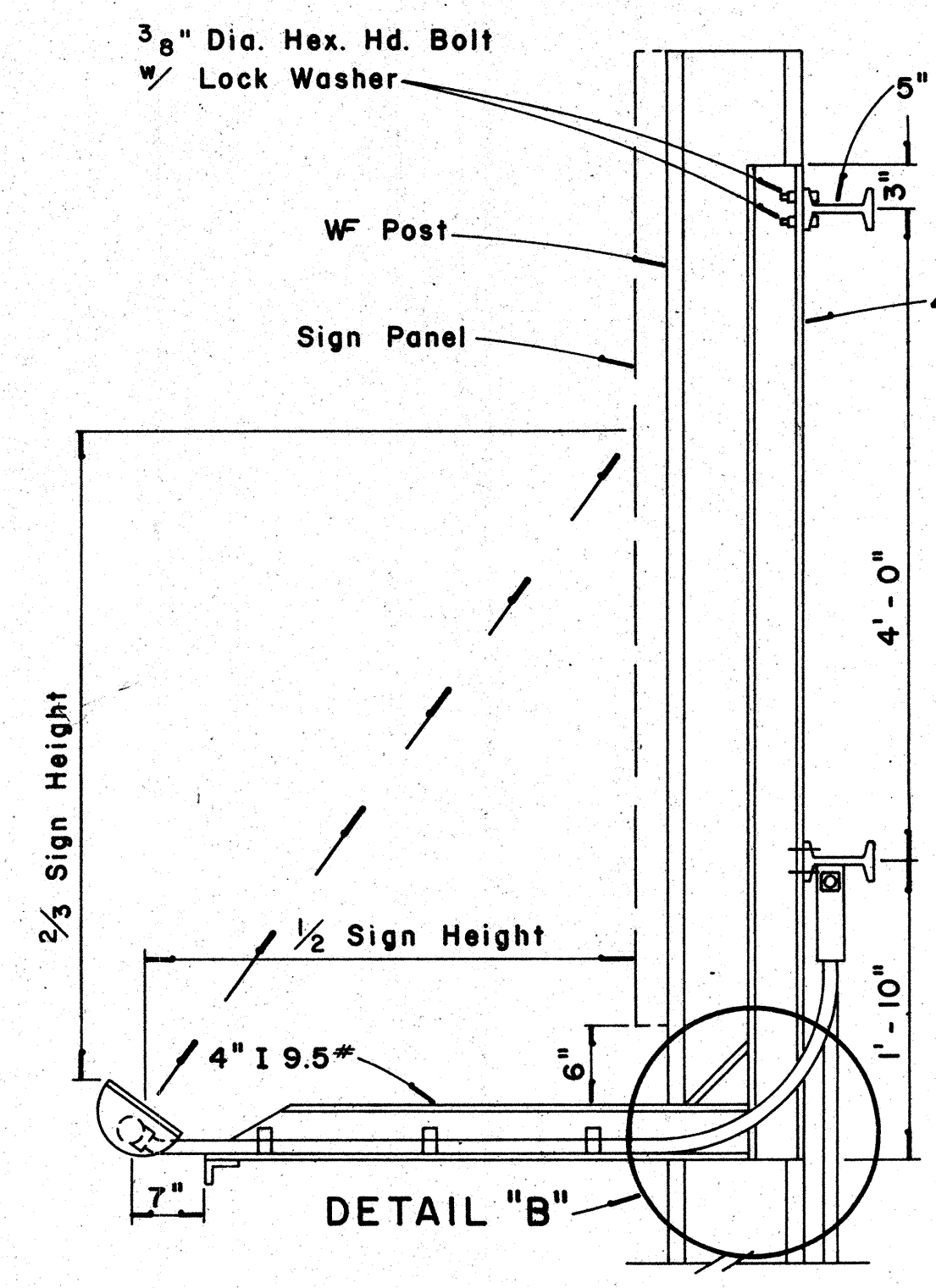
**CONDUIT STRAP DETAIL**  
Scale: 3" = 1'-0"



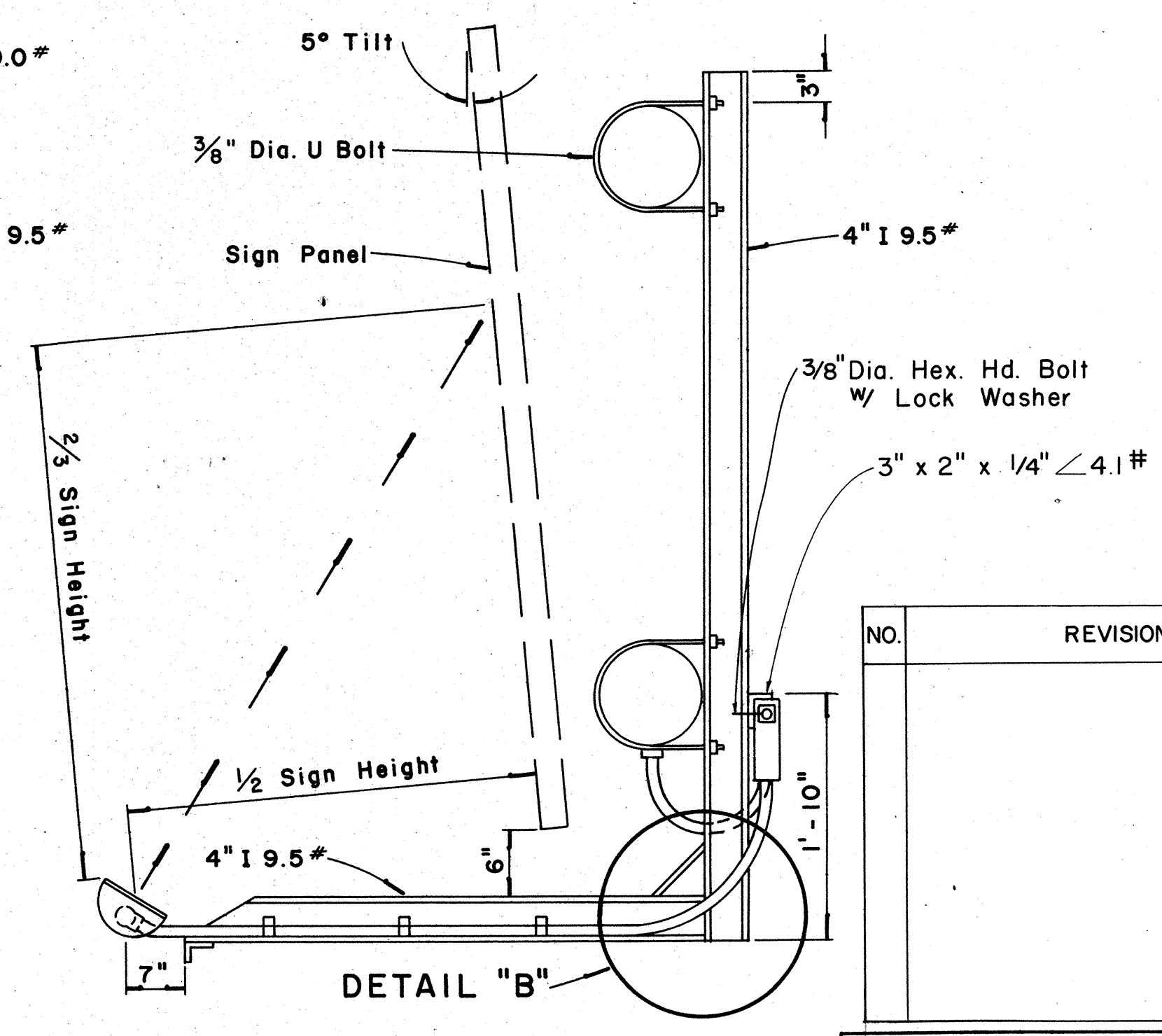
**DETAIL "B"**  
Scale: 3" = 1'-0"



**REAR VIEW  
LUMINAIRE MOUNTING**  
Scale: 1" = 1'-0"



**SECTION "A-A"**  
Scale: 1" = 1'-0"



**SECTION "B-B"**  
Scale: 1" = 1'-0"

APPROVAL RECOMMENDED:  
*Etsuki Tanaka* 12/29/69  
TRAFFIC ENGINEER DATE

APPROVED:  
*John J. ...* 12/30/69  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

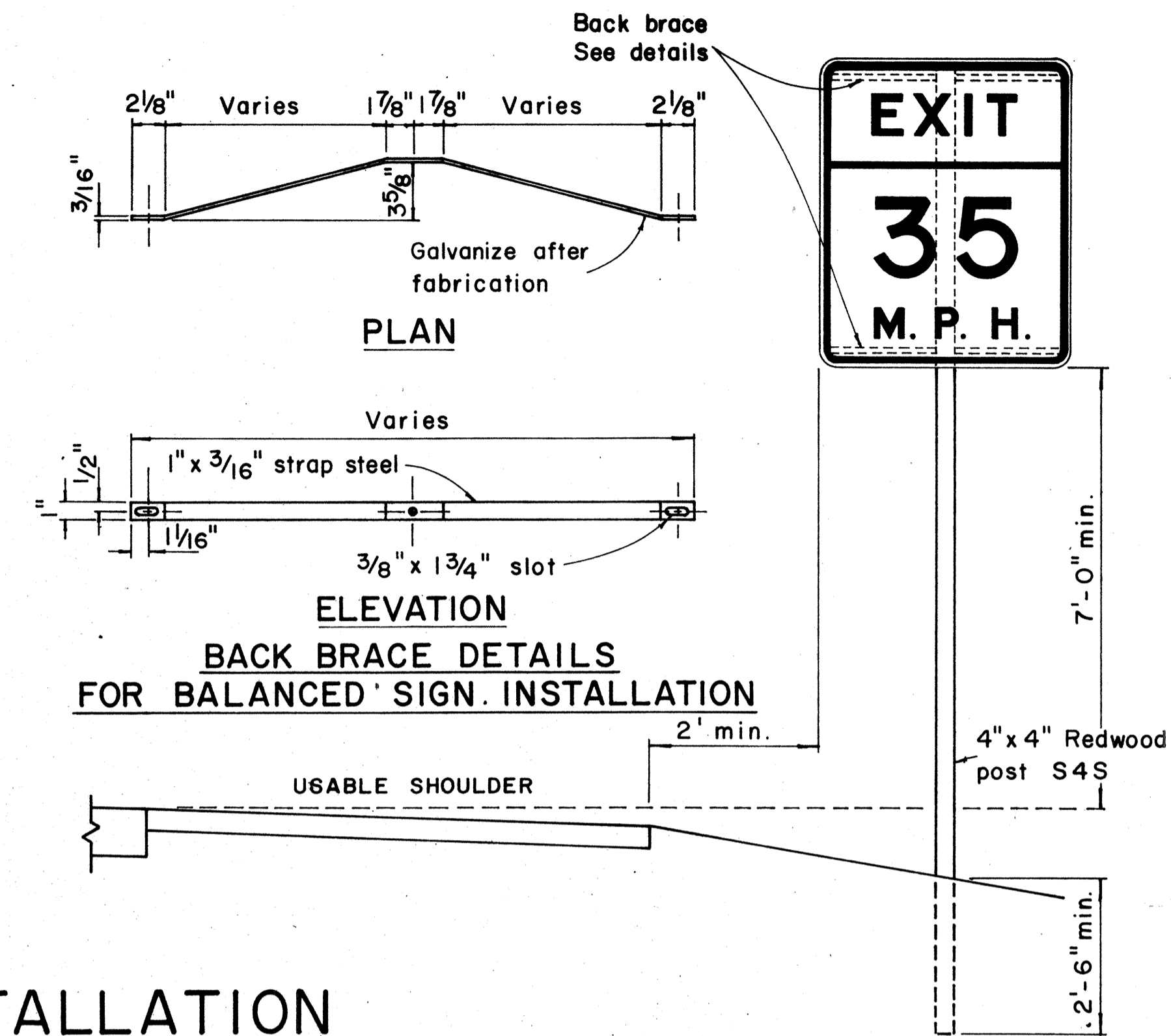
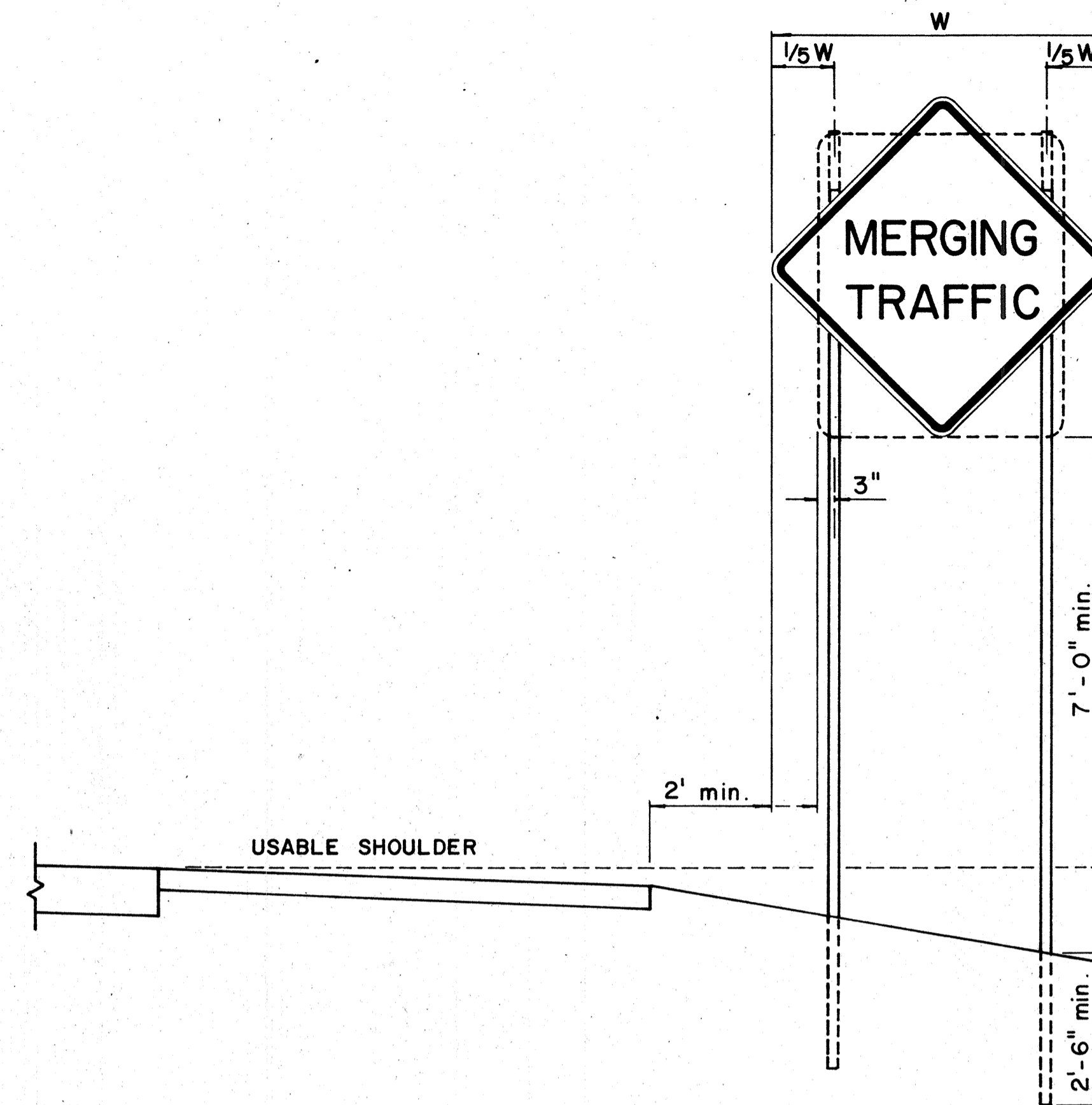
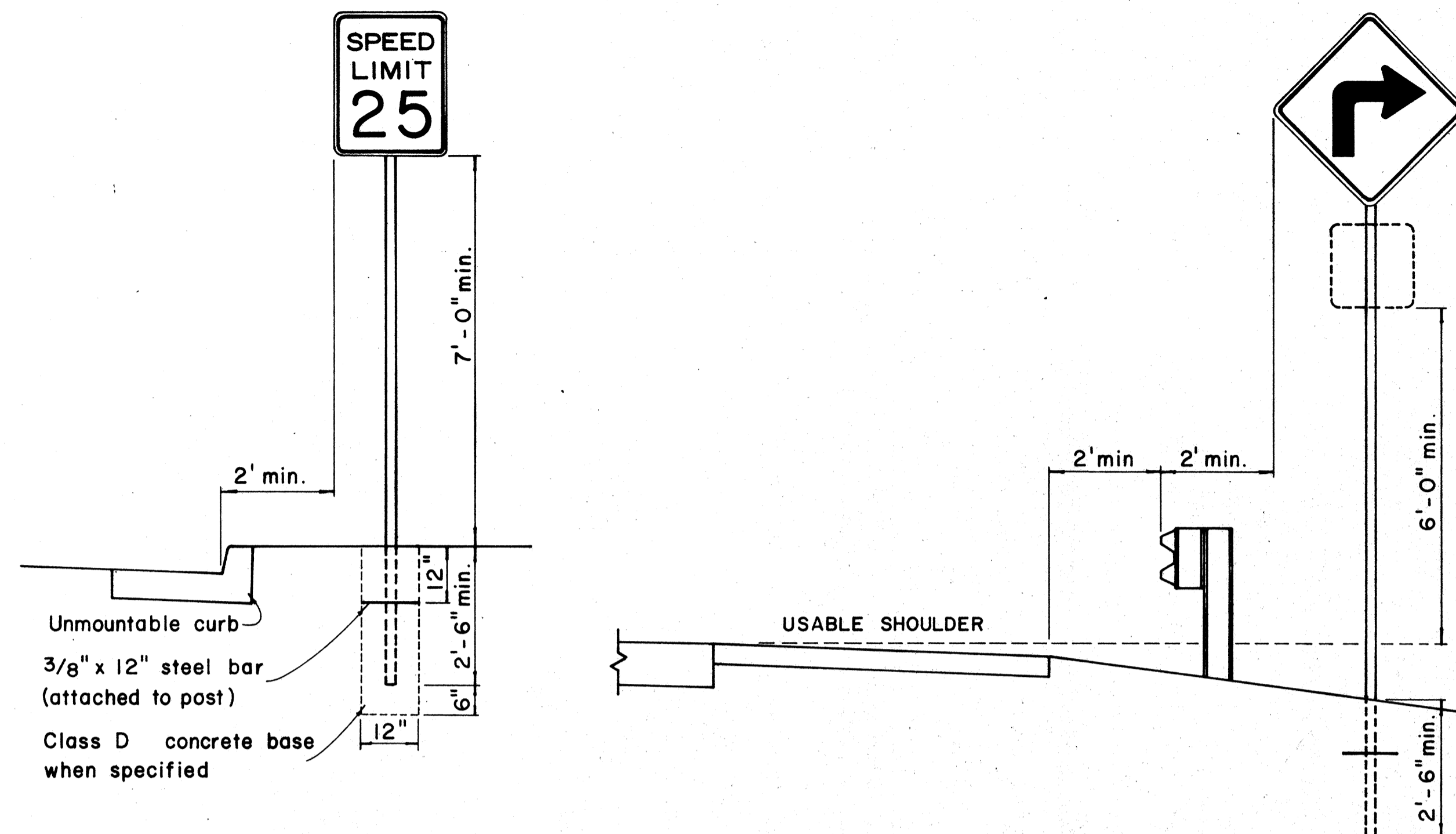
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**EXPRESSWAY SIGNS  
LUMINAIRE MOUNTINGS**

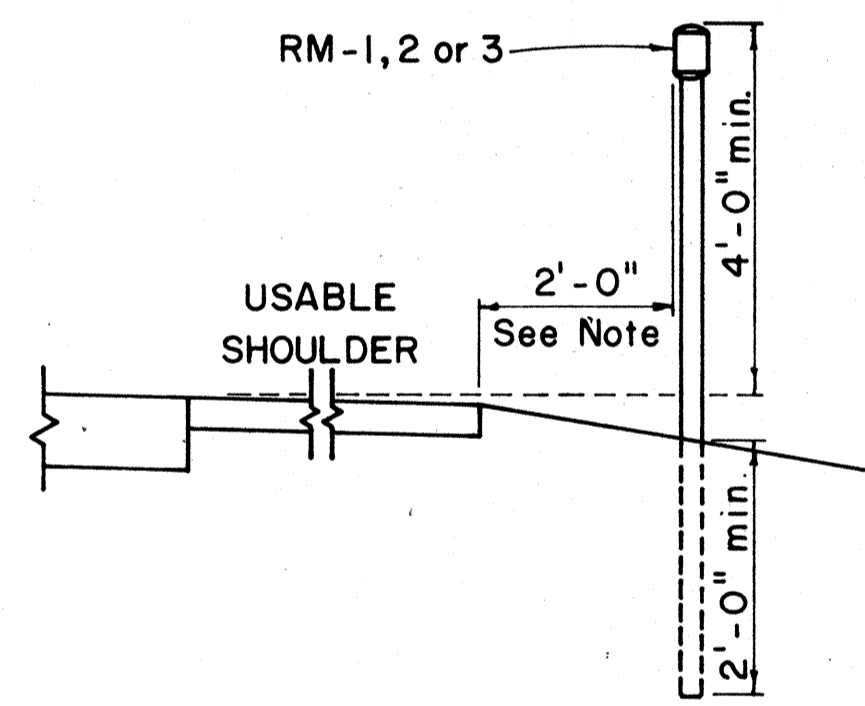
Scale: As Shown DATE: JUNE 5, 1974

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

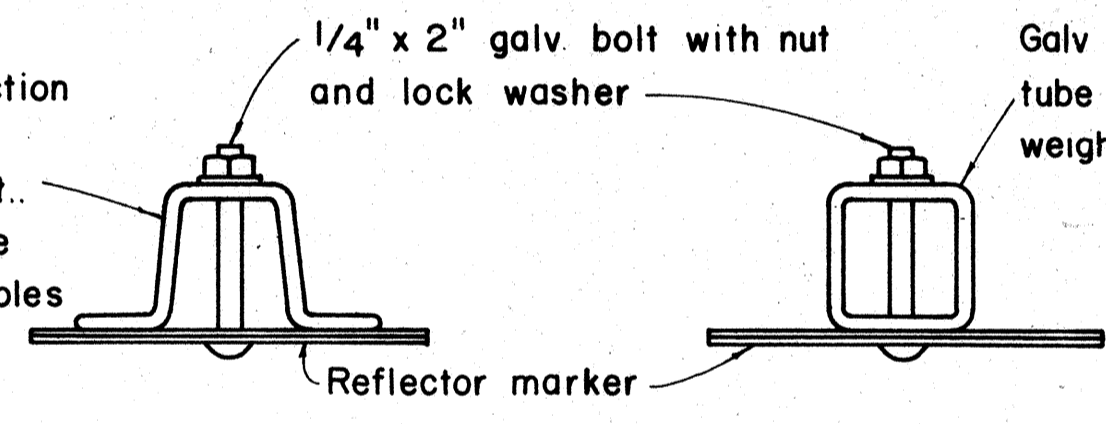
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	2-11-1 (2) 14	1974	17	61



## HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION



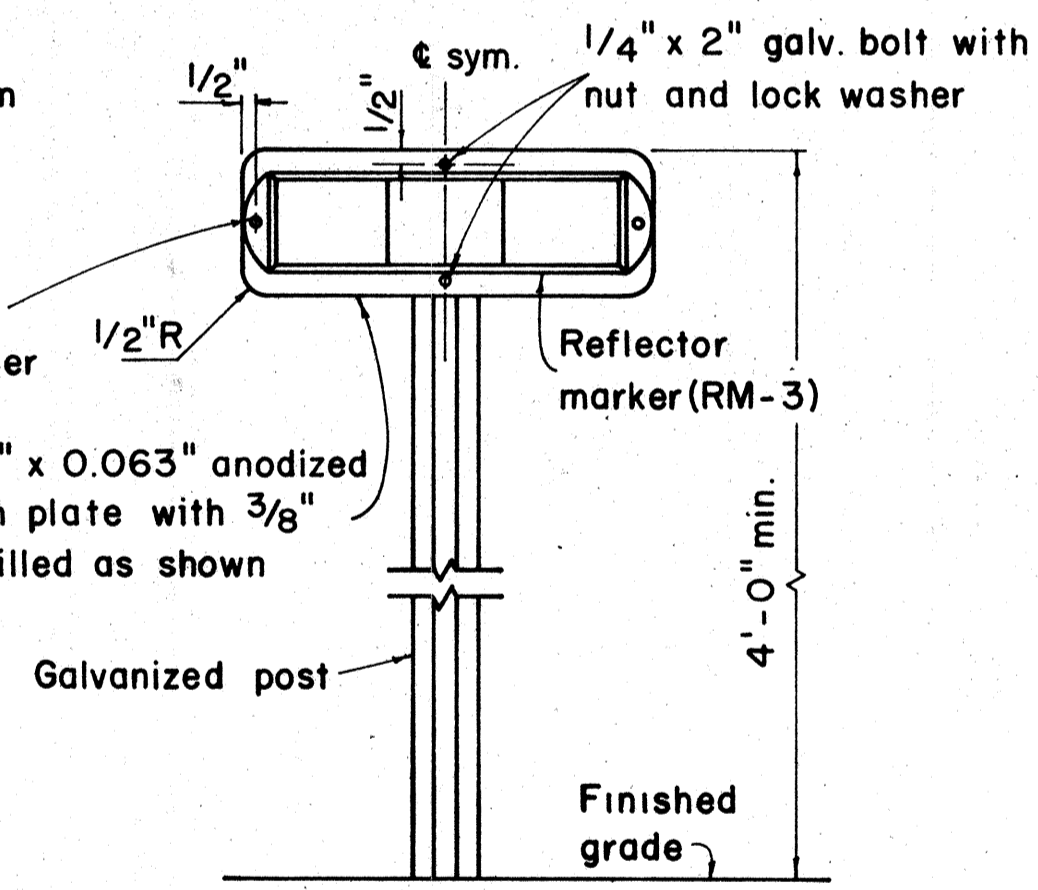
Galv. flanged channel 1/8" x 3/16" rolled section post with a minimum weight of 2 lbs. per ft. Upper 2 ft. shall have a single row of 3/8" holes centered in the web at 1" o.c.



Galv 1/2" x 1/2" square tube post with a minimum weight of 1.7 lbs per ft

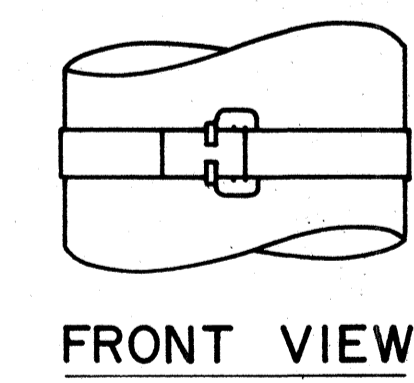
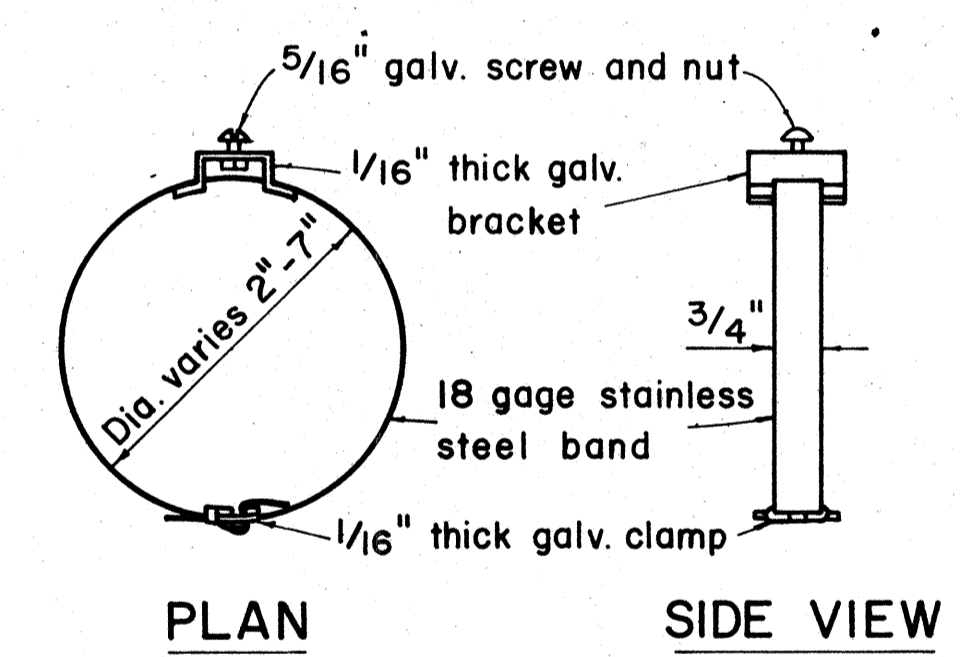
1/4" x 1/2" galv. bolt with nut and lock washer

1'-5" x 6" x 0.063" anodized aluminum plate with 3/8" holes drilled as shown



TYPICAL SECTION OF ROAD DELINEATOR

TYPICAL DETAIL HORIZONTAL REFLECTOR MARKER RM-3H

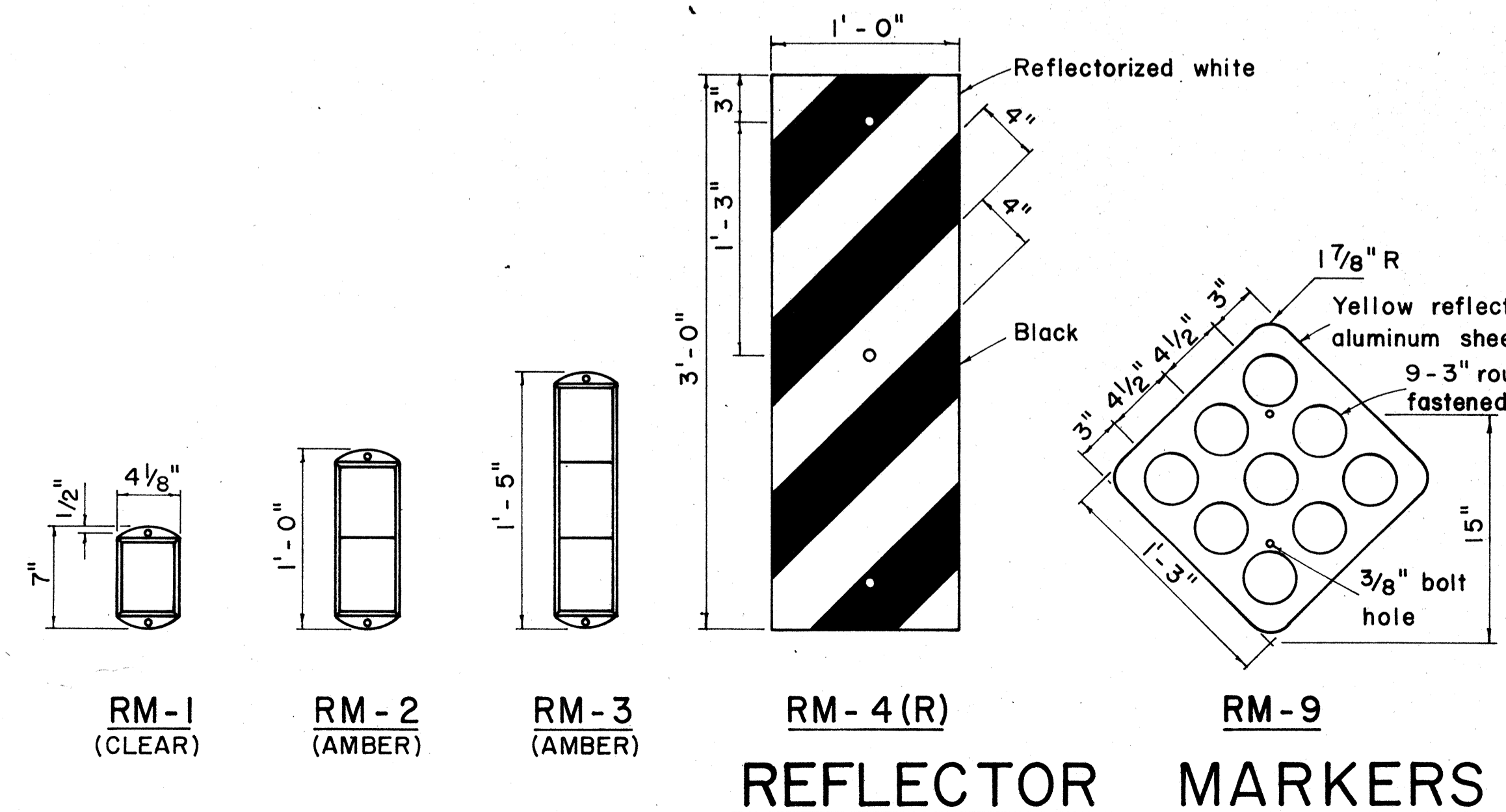


TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS

- GENERAL NOTES:**
- Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
  - Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 2" galv. standard pipe or two 2" x 2" galv. sq. tube post or 4" x 4" redwood post S4S.
  - Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06 stainless steel washers with neoprene rubber gasket.
  - Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
  - 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.
  - Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
  - (R) or (L) indicates right or left and shall be as shown on the plans.

APPROVAL RECOMMENDED:  
*E. M. Tanaka* 12/22/69  
 TRAFFIC ENGINEER DATE

APPROVED:  
*[Signature]* 12-20-69  
 ASSISTANT CHIEF, ENGINEERING DATE



REFLECTOR MARKERS

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**  
**MISCELLANEOUS SIGN DETAILS**

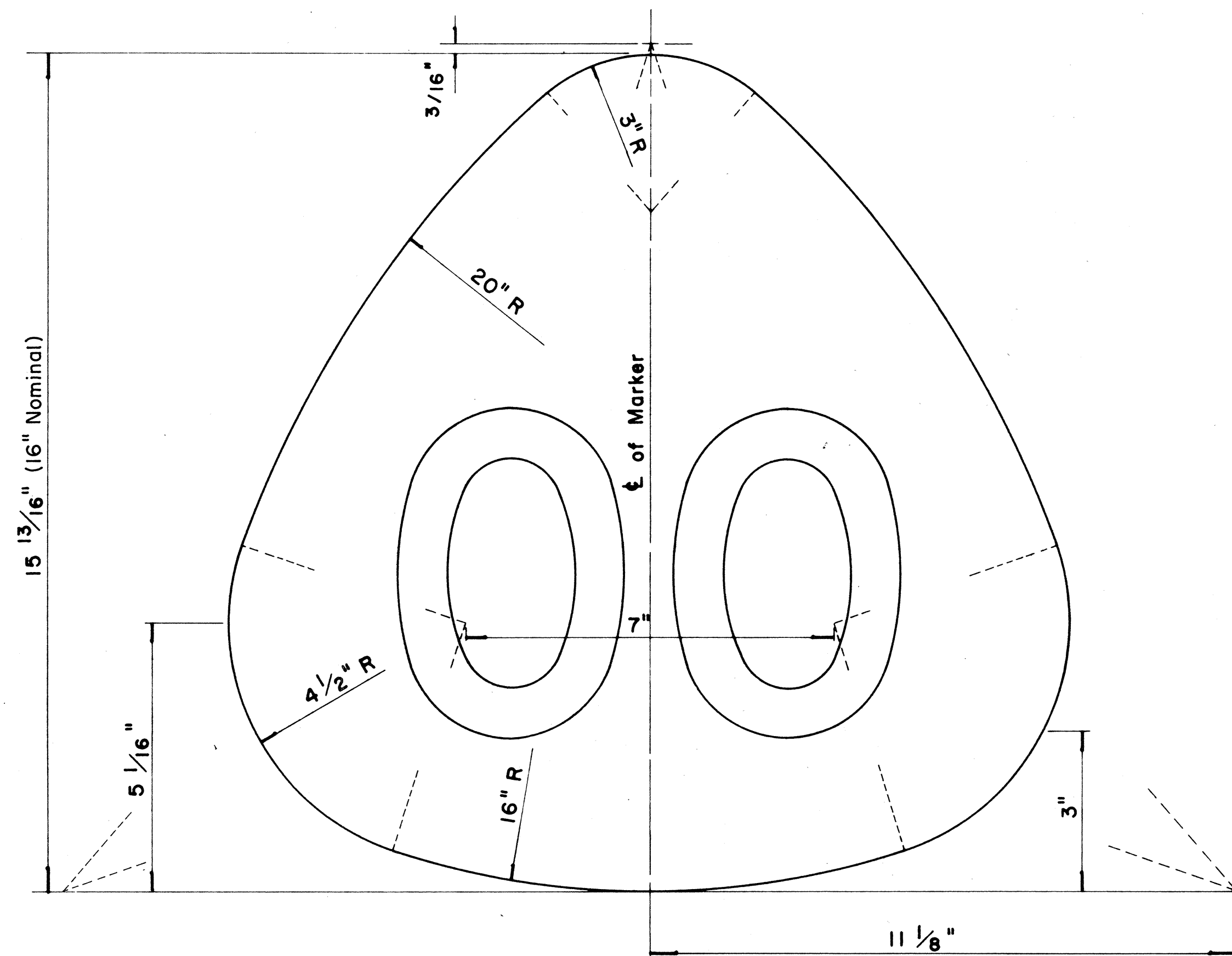
Not to scale March, 1968

SHEET No. 8 OF 11 SHEETS DT 100

DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN NO. \_\_\_\_\_  
 NOTE BOOK No. \_\_\_\_\_

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	77-14	1974	18	61

MARKER SIZE	MULTIPLY DIMENSIONS BY	NUMERAL SIZE
16"	1	6"
21"	1.3	8"
32"	2.0	12"
42"	2.63	16"



**STATE ROUTE MARKER  
FOR GUIDE SIGNS**

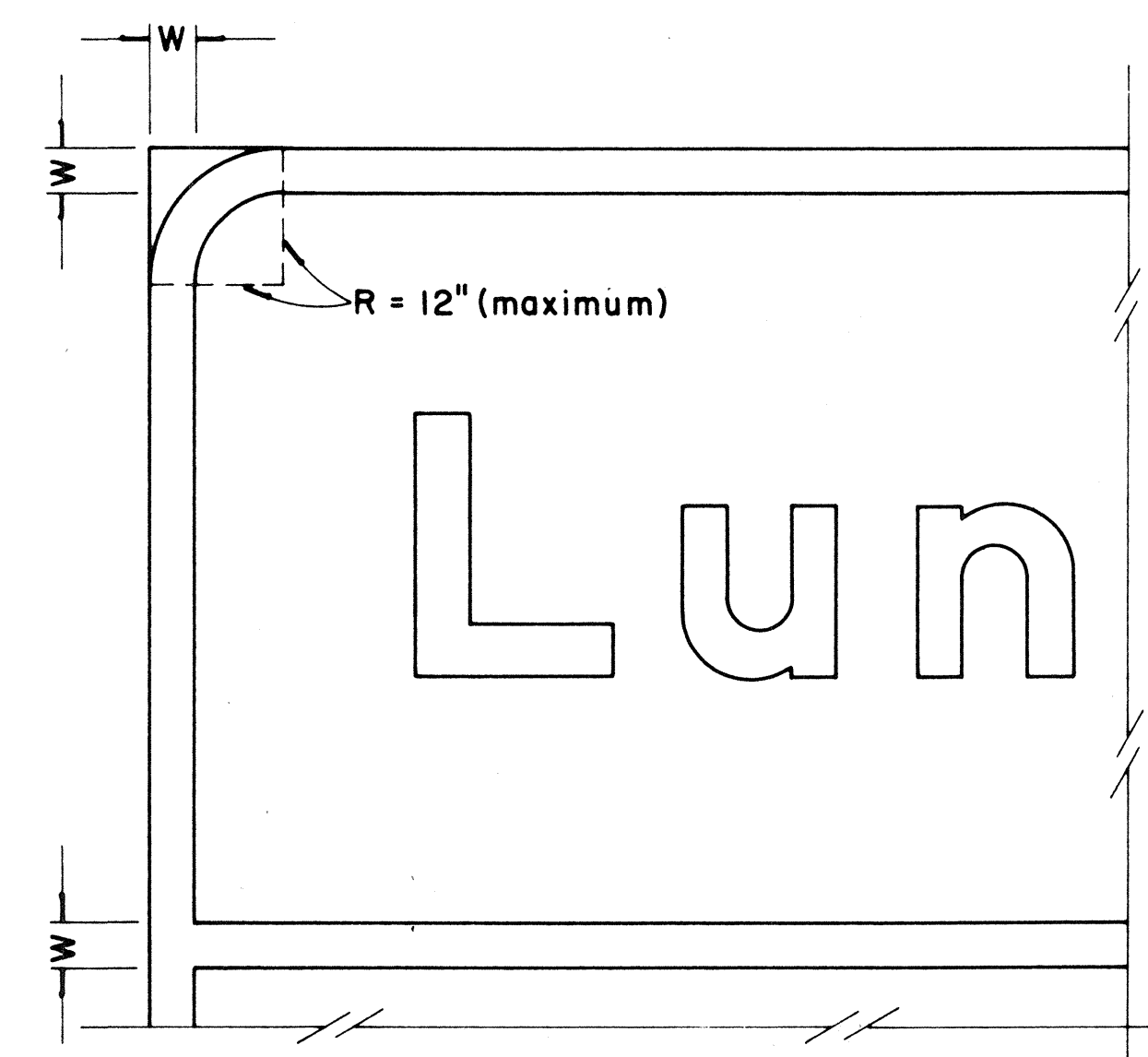
Scale: Half Size

**NOTE:**

- State Route Markers on Guide signs shall have black numerals on a white reflectorized background mounted on a flat aluminum cut-out.
- Numerals shall conform to the FHWA publication "Standard Alphabets for Highway Signs," 1966.
- Cut-outs shall be fastened on sign panel with aluminum blind rivets. See Standard Specifications.
- \* The 16" State Route Marker shall be used only with the Construction Identification sign.

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

RADII FOR SIGNS		
Least Dimension of Sign	W	R
2'-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"



**BORDER DETAIL  
FOR GUIDE SIGNS**

Not to Scale

**NOTE:**

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

APPROVAL RECOMMENDED:  
*Etsuko Tanaka* 4/11/72  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Hubert S. Sakaiishi* 4/12/72  
 ASSISTANT CHIEF, ENGINEERING DATE

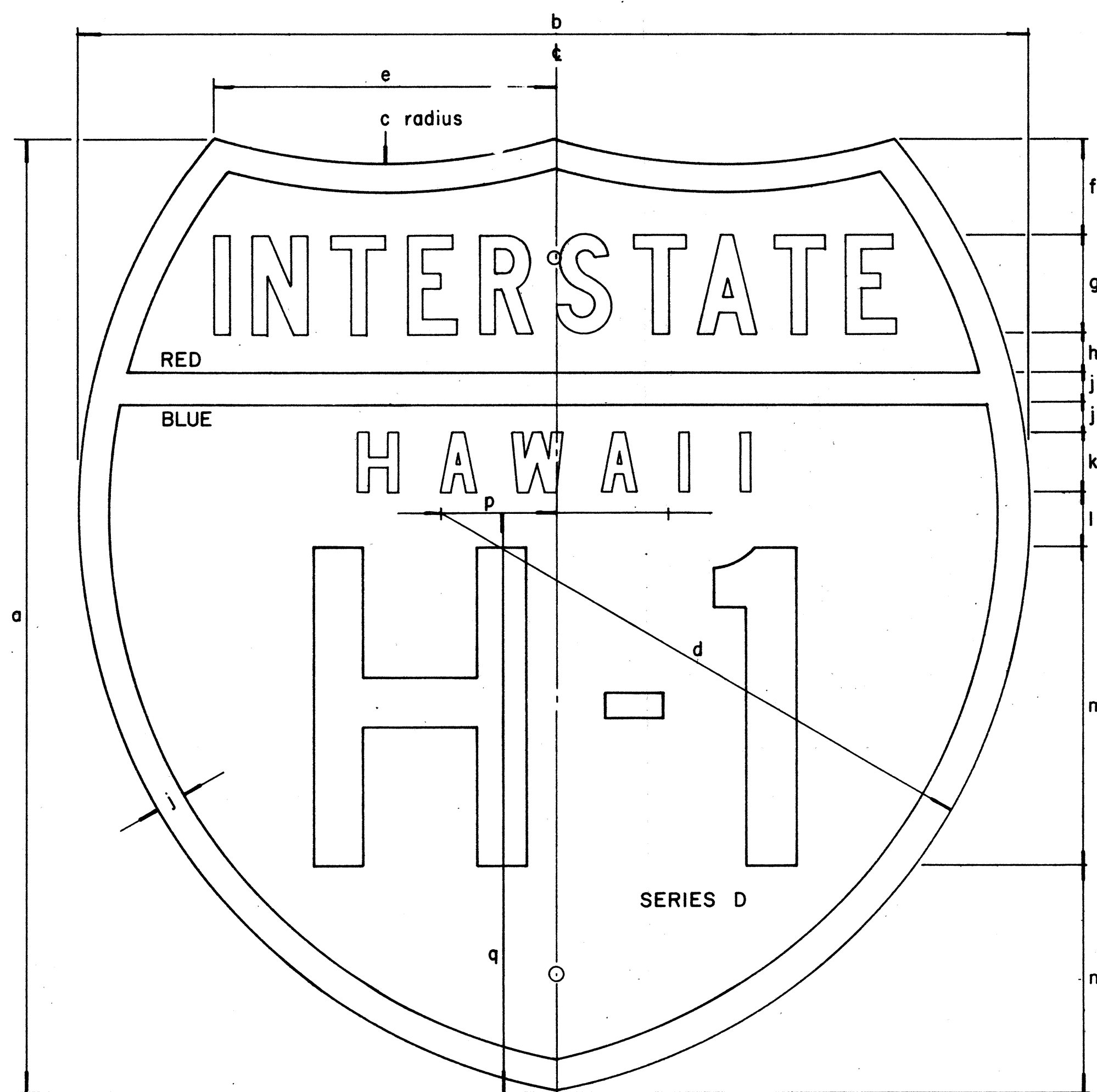
NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 209 Approved 12-30-69	H.T.	4/12/72

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS  
STATE ROUTE MARKER  
AND BORDER DETAIL  
FOR GUIDE SIGNS**

Scale: As Shown

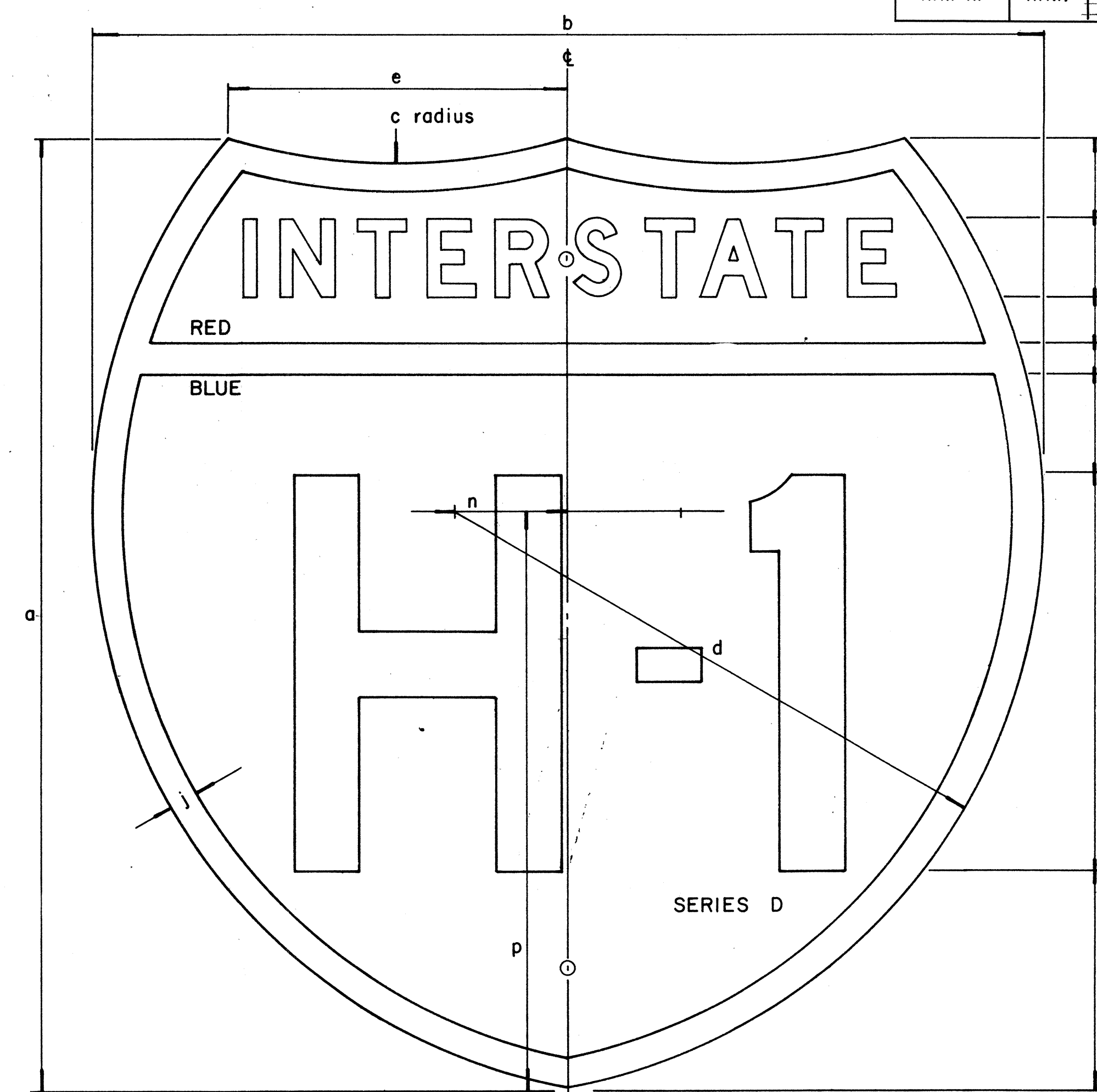
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	(2) 14	1974	19	61



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 1/8	12 9/16	9 3/16	1 25/32	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

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, 1966
- 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.

APPROVAL RECOMMENDED:

*Euchi Tanaka*  
TRAFFIC ENGINEER  
12/29/69  
DATE

APPROVED:

*John A. ...*  
ASSISTANT CHIEF, ENGINEERING  
12-29-69  
DATE

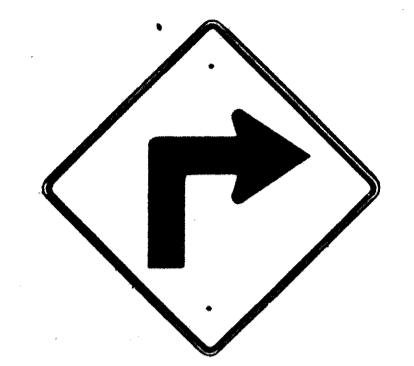
NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
INTERSTATE ROUTE MARKERS

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
NOTE BOOK: \_\_\_\_\_  
QUANTITIES BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
No. \_\_\_\_\_

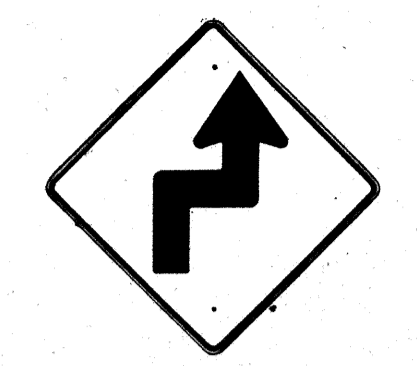
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11-1 (71) 14	1974	20	61



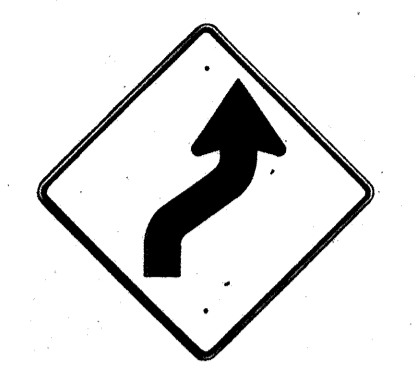
W1-1(R) 30"x30"  
W1-1(R)-A 48"x48"



W1-2(R) 30"x30"  
W1-2(R)-A 48"x48"



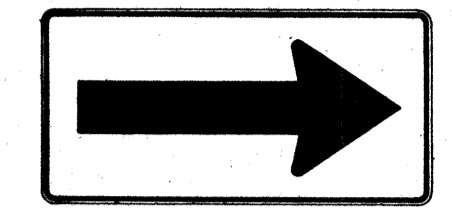
W1-3(R) 30"x30"  
W1-3(R)-A 48"x48"



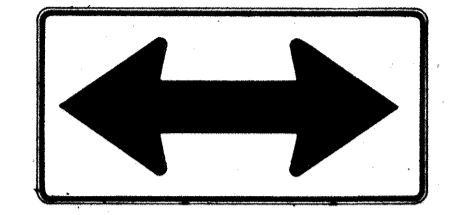
W1-4(R) 30"x30"  
W1-4(R)-A 48"x48"



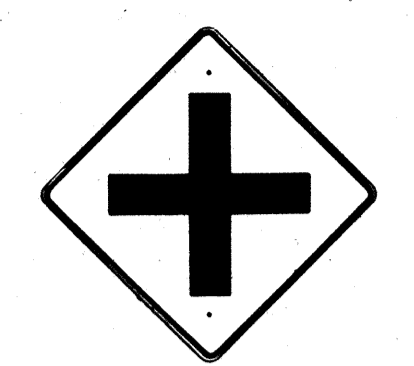
W1-5(R) 30"x30"  
W1-5(R)-A 48"x48"



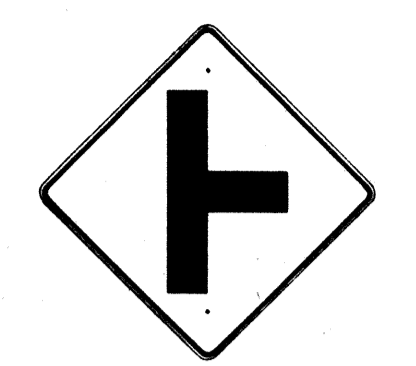
W1-6 48"x24"



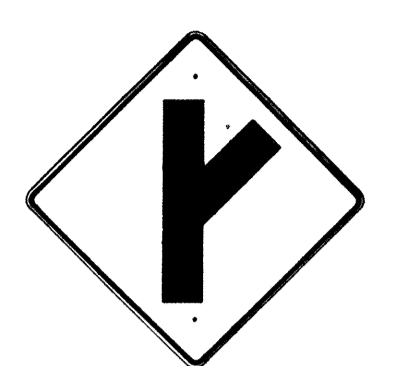
W1-7 48"x24"



W2-1 30"x30"  
W2-1-A 48"x48"



W2-2 30"x30"  
W2-2-A 48"x48"



W2-3(R) 30"x30"  
W2-3(R)-A 48"x48"



W2-4 30"x30"  
W2-4-A 48"x48"



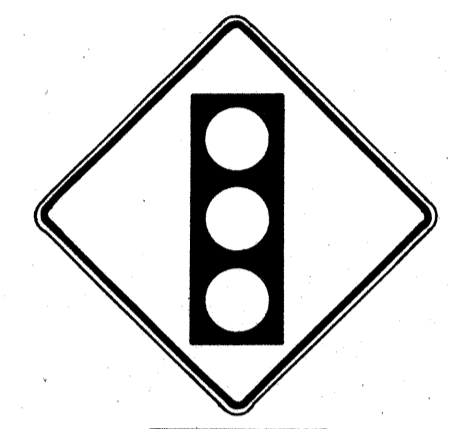
W2-5 30"x30"  
W2-5-A 48"x48"



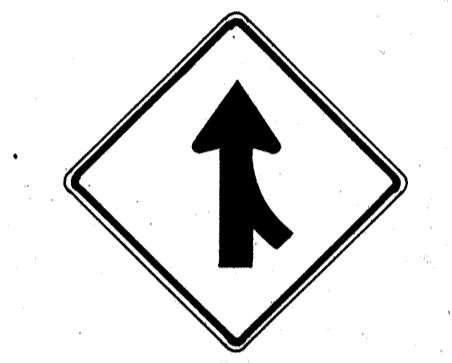
W3-1 30"x30"  
W3-1-A 36"x36"



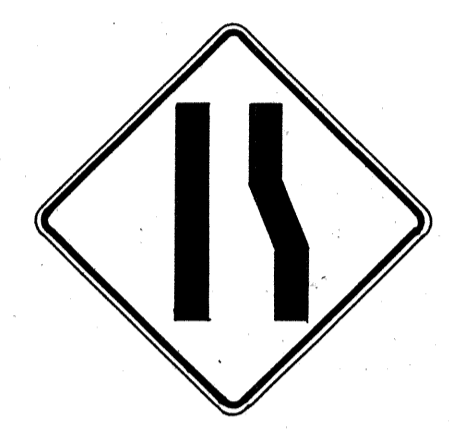
W3-2 30"x30"  
W3-2-A 36"x36"



W3-3 36"x36"  
24"x18"



W4-1(R) 30"x30"  
24"x18"  
W4-1(R)-A 48"x48"  
24"x18"



W4-2(R) 36"x36"  
W4-2(R)-A 48"x48"



W5-1 36"x36"



W5-2 30"x30"  
W5-2-A 36"x36"



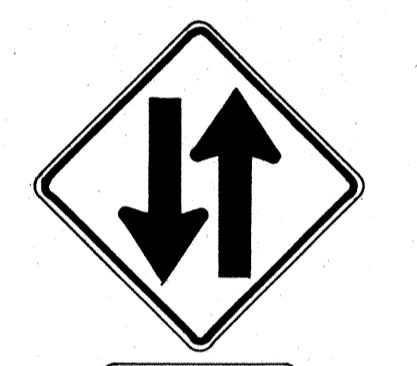
W5-3 36"x36"



W6-1 36"x36"  
24"x18"



W6-2 36"x36"  
24"x18"



W6-3 30"x30"  
24"x18"  
W6-3-A 36"x36"  
24"x18"  
W6-3-B 48"x48"  
24"x18"



W7-1 30"x30"  
24"x18"  
W7-1-A 36"x36"  
24"x18"



W7-2 24"x18"



W8-1 30"x30"  
W8-1-A 36"x36"



W8-2 30"x30"  
W8-2-A 36"x36"



W8-3 30"x30"  
W8-3-A 36"x36"



W8-4 30"x30"  
W8-4-A 36"x36"



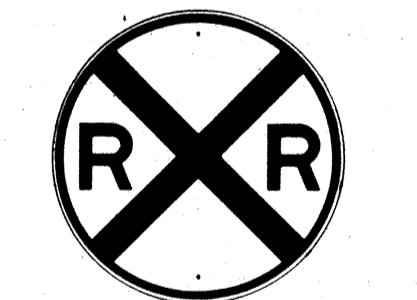
W8-5 30"x30"  
24"x18"  
W8-5-A 36"x36"  
24"x18"



W9-1(R) 30"x30"  
W9-1(R)-A 36"x36"  
W9-1(R)-B 48"x48"



W9-2(L) 36"x36"  
W9-2(L)-A 48"x48"



W10-1 36" Diameter



W11-1 30"x30"  
24"x18"  
W11-1-A 36"x36"  
24"x18"



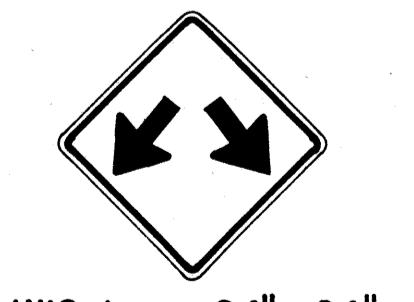
W11-2 30"x30"  
24"x18"  
W11-2-A 36"x36"  
24"x18"



W11-4 30"x30"  
24"x18"  
W11-4-A 36"x36"  
24"x18"



W11-5 30"x30"  
24"x18"  
W11-5-A 36"x36"  
24"x18"



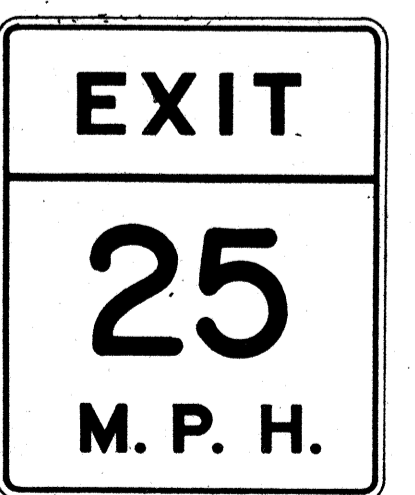
W12-1 24"x24"  
W12-1-A 36"x36"  
W12-1-B 48"x48"



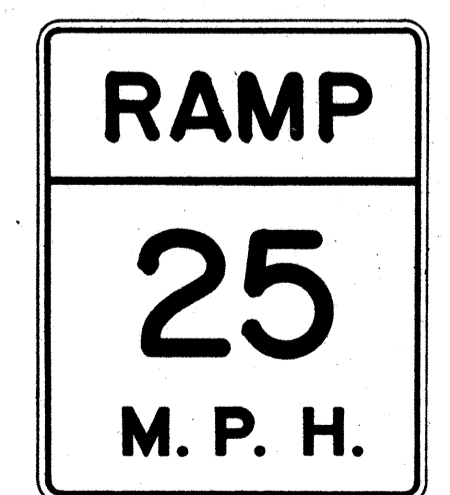
W12-2(12'-6") 36"x36"  
24"x18"



W13-1(25) 18"x18"  
W13-1(25)-A 24"x24"



W13-2(25) 48"x60"



W13-3(25) 48"x60"



W14-1 30"x30"



W14-3 36"x48"x48"

**GENERAL NOTES**

1. Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs."
2. All warning signs shall be reflectorized unless otherwise specified.
3. All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
4. Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
5. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs.

APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 3/17/72  
TRAFFIC ENGINEER DATE

APPROVED:  
*Walter D. Sisk* 3-20-72  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/72

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
**WARNING SIGNS**

NOT TO SCALE

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NO. \_\_\_\_\_