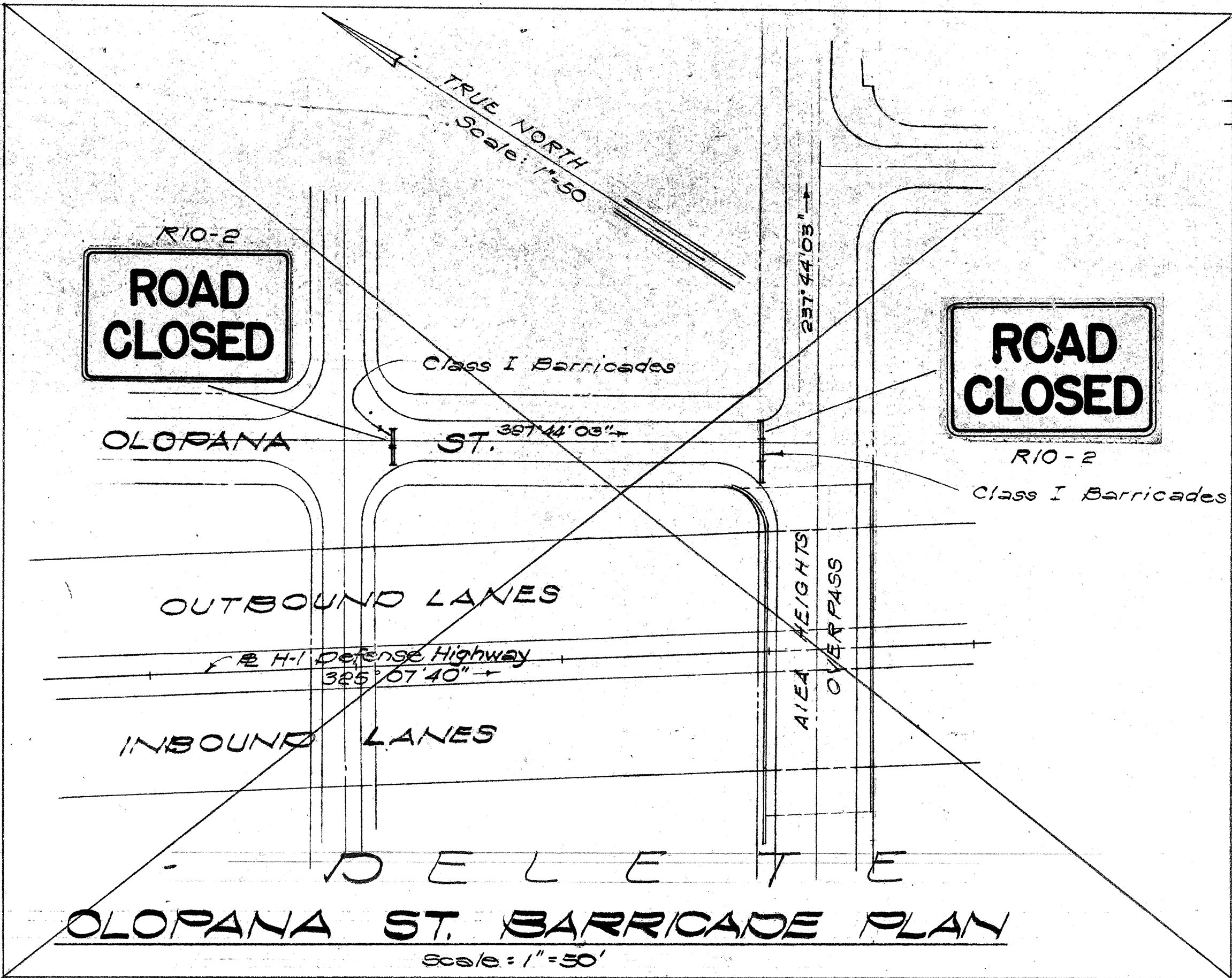
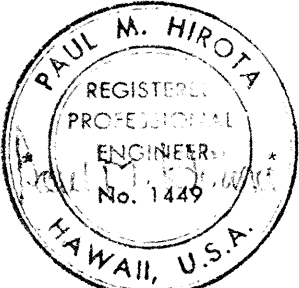
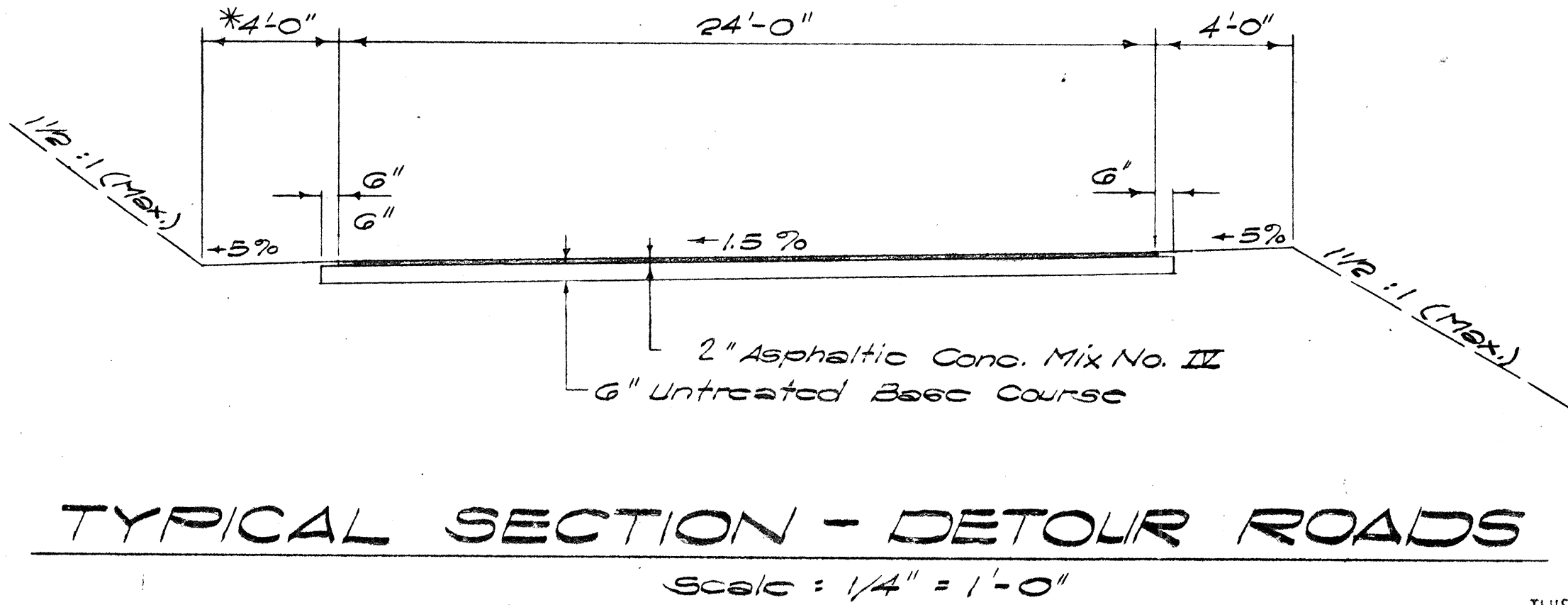
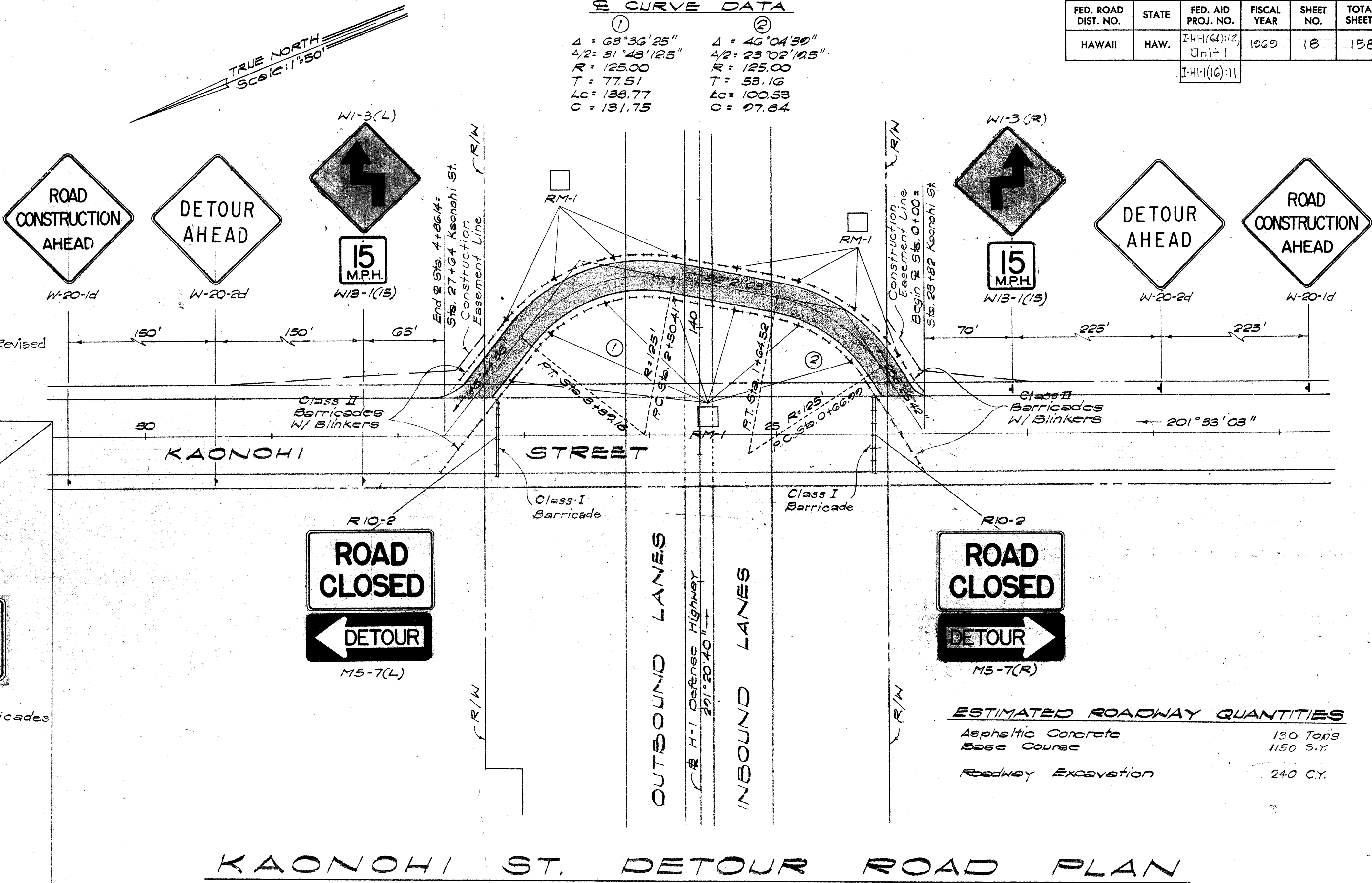


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(64):12 Unit 1	1969	18	158
I-H-1(64):11					

DETOUR SIGN SUMMARY		
TYPE	DESCRIPTION	AMOUNT
R10-2	ROAD CLOSED	4
W1-6(L)	←	1
W20-1d	ROAD CONSTRUCTION AHEAD	4
W20-2d	DETOUR AHEAD	4
W13-1(15)	15 M.P.H.	4
W1-3(L)	↙ ↘	2
W1-3(R)	↙ ↘	2
MS-7(L)	← DETOUR	2
MS-7(R)	DETOUR →	2
RM-1	REFLECTOR MARKER W/ POST	3430
	CLASS I BARRICADES	22
	CLASS II BARRICADES	167162



- NOTES:**
1. All Signs, Barricades, Guard Rails, for the purpose of Traffic Detours shall become the property of the State after completion of the project.
 2. Alternative A.C. traffic roll curb details (other than that shown on plan sht. 19) may be used on Approval by the Engineer.
 3. See shts. 42 & 43 for Guard Rail Details.



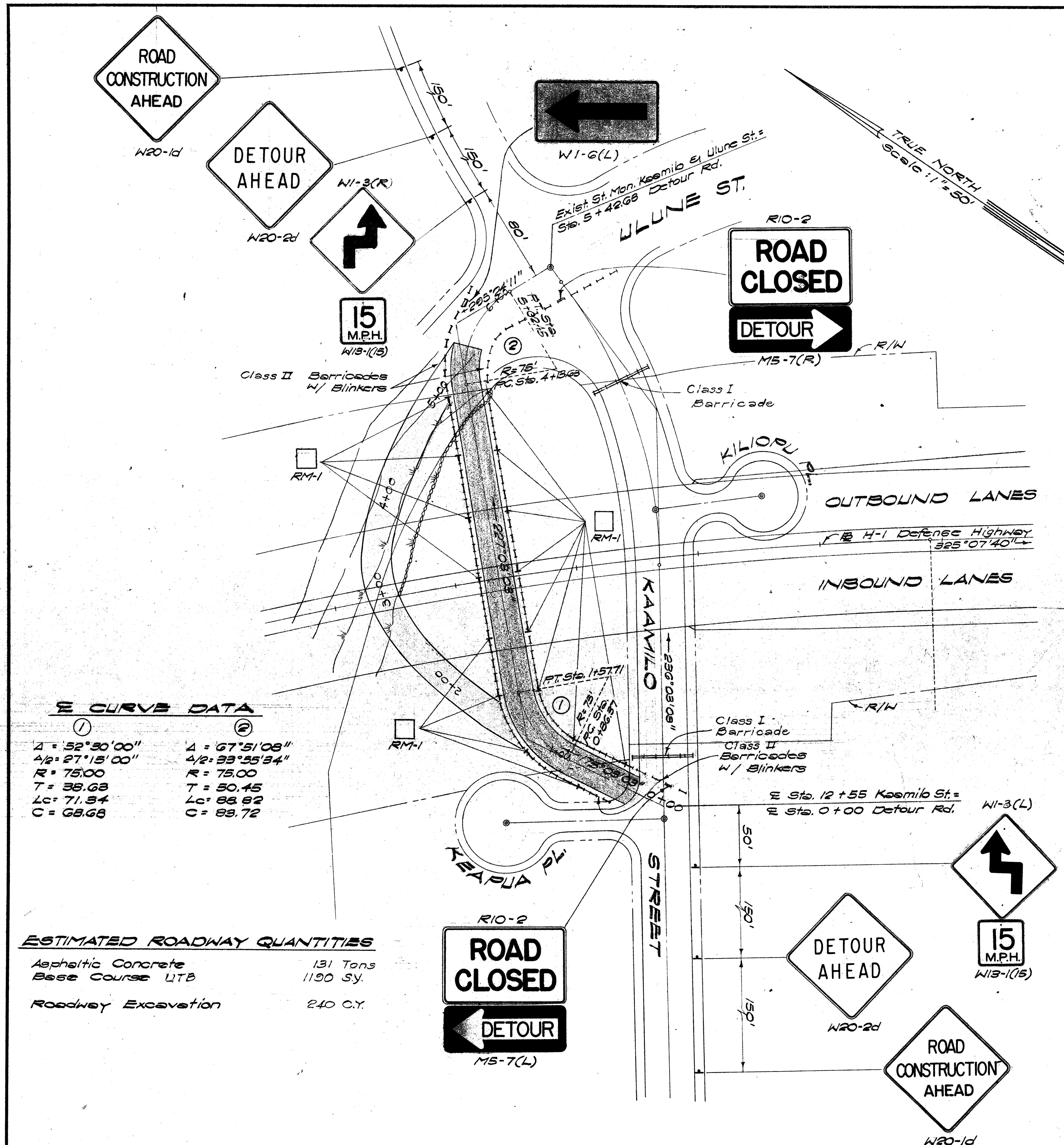
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**DETOUR ROAD PLAN
& ROAD BARRICADE PLAN**
INTERSTATE ROUTE H-1
PROJ. NO. I-H-1(64):12,
UNIT 1
Scale: 1" = 50' Date: 8/19/68

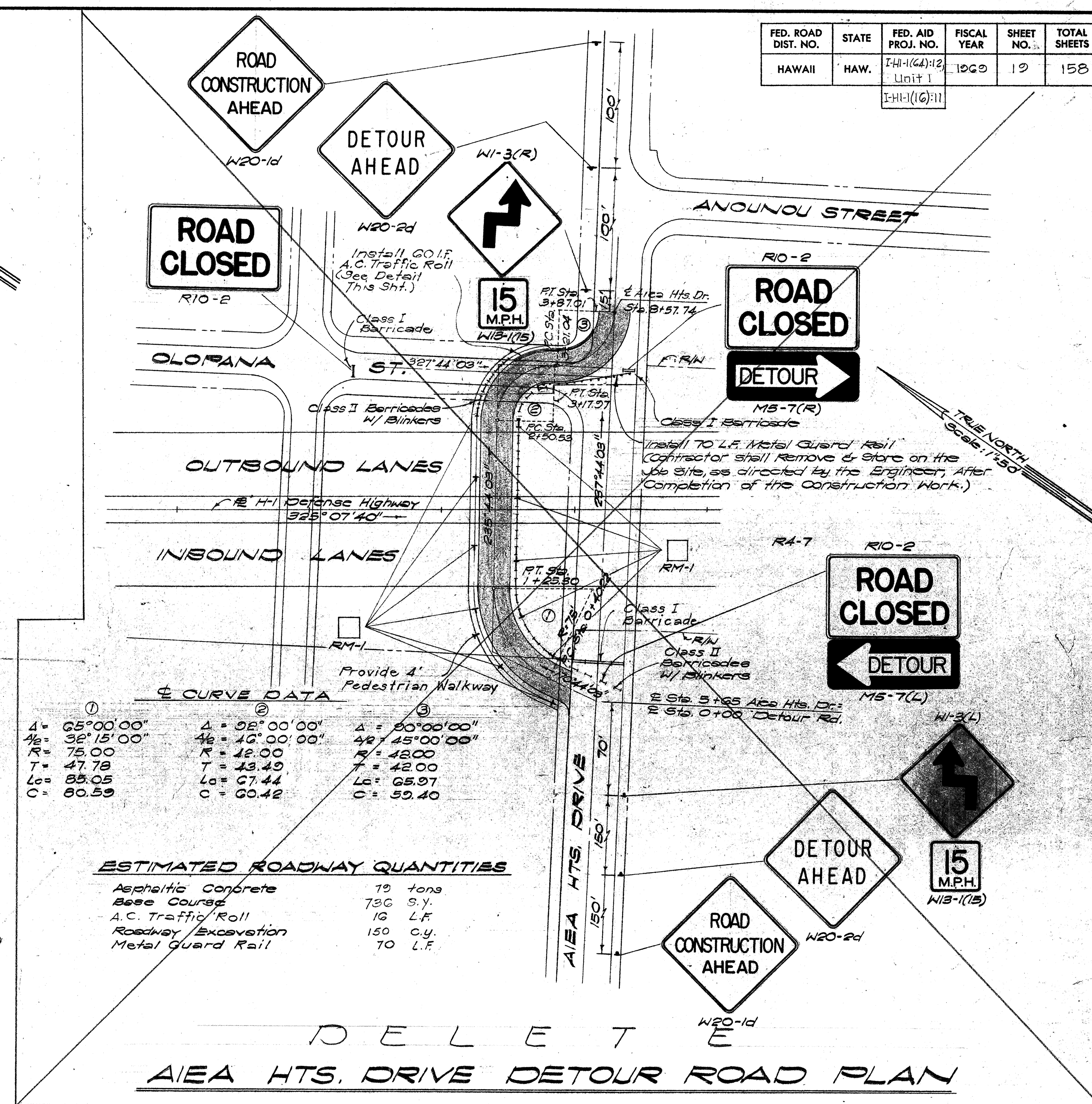
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

SHEET No. 1 OF 10 SHEETS

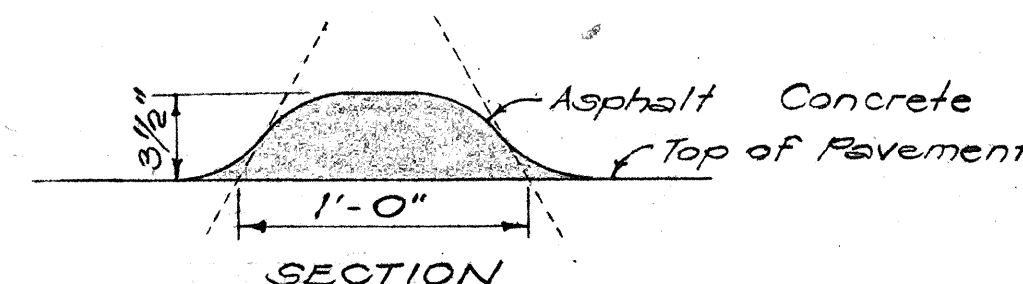
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(64)-12 Unit 1 I-H-1(16)-11	1969	19	158



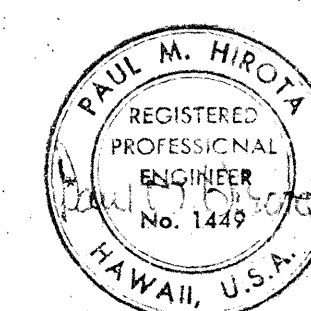
KAAMILO ST. DETOUR ROAD PLAN



AIEA HTS. DRIVE DETOUR ROAD PLAN



A.C. TRAFFIC ROLL
Not to Scale



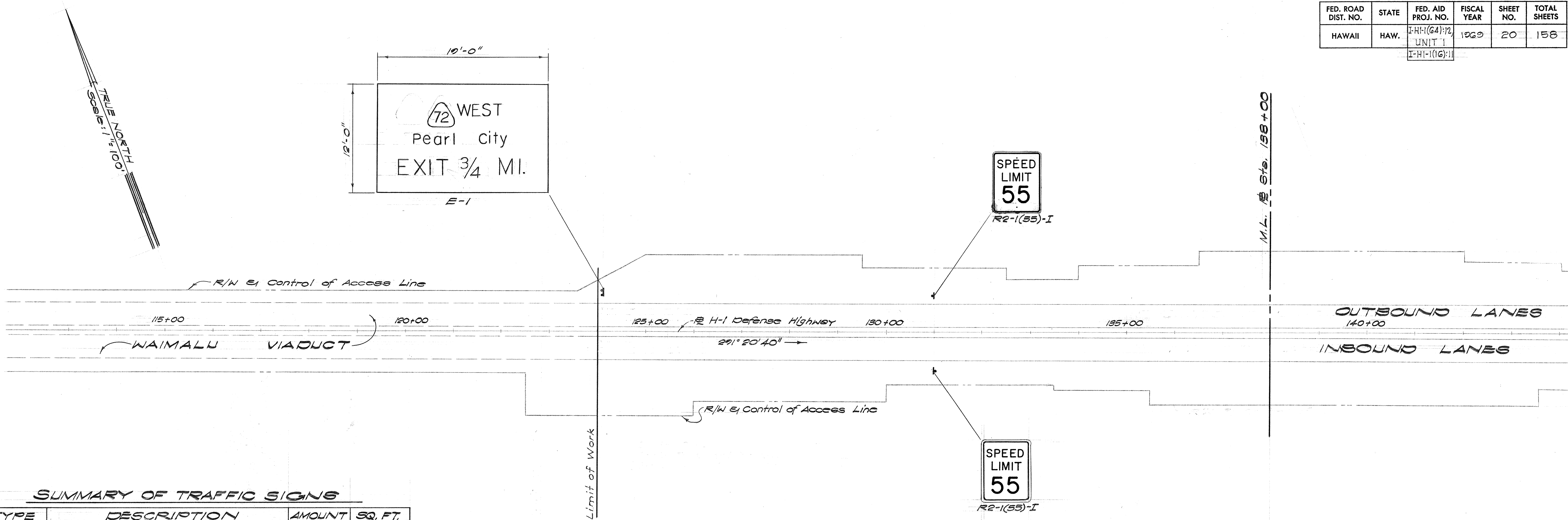
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR ROAD PLANS

INTERSTATE ROUTE H-1
PROJ. NO. I-H-1(64)-12,
UNIT 1
Scale: 1"=50' Date: 8/19/68
SHEET No. 2 OF 10 SHEETS

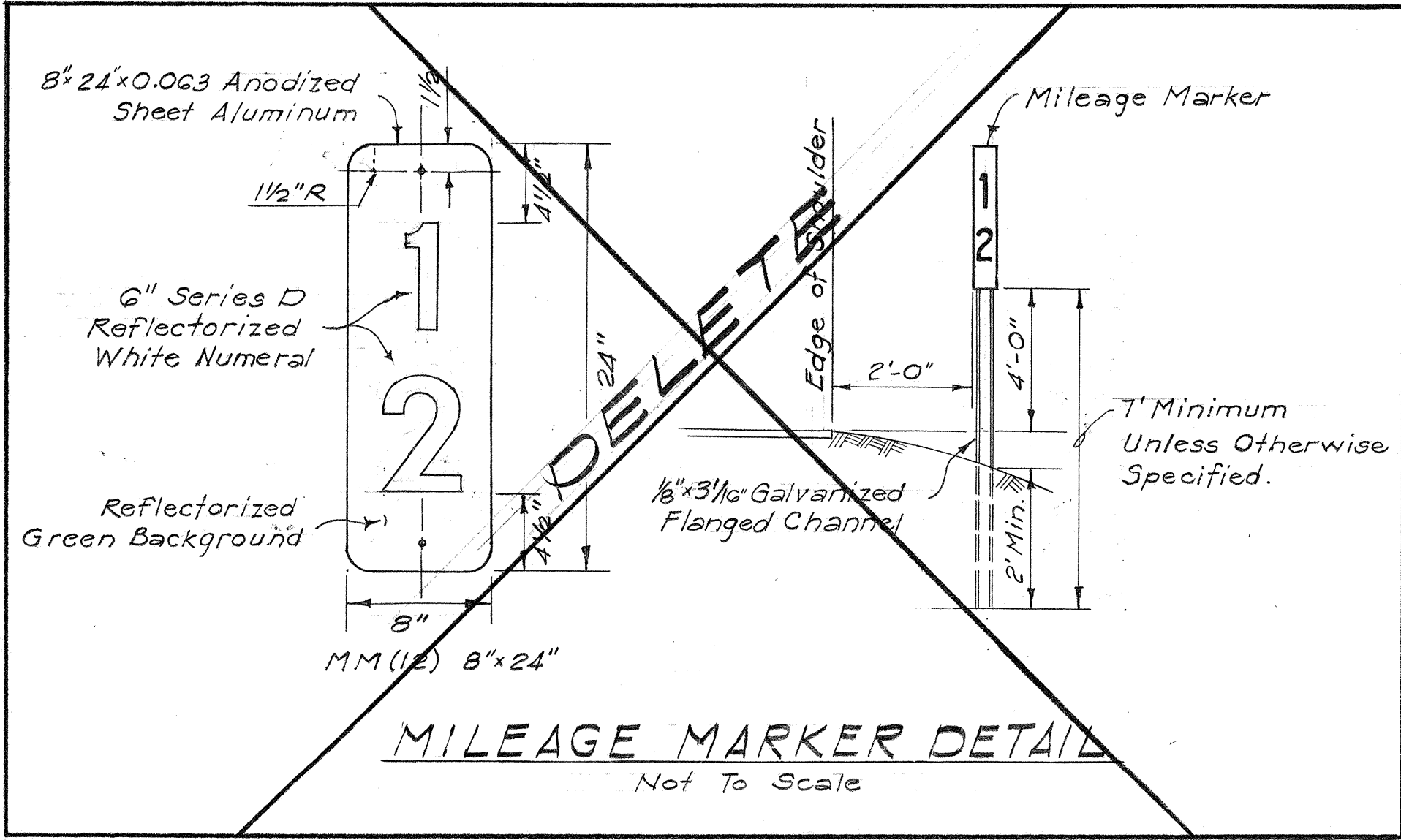
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1-(64)-12 UNIT 1 I-H-1-(16)-11	1969	20	158



SUMMARY OF TRAFFIC SIGNS

TYPE	DESCRIPTION	AMOUNT	SQ. FT.
R2-1(55)-1	SPEED LIMIT 55	2	
R1-1	STOP	1	
W13-4	NOT A THROUGH STREET	1	
MM (12)	MILEAGE MARKER (12)	2	
*E-1	WEST PEARL CITY EXIT 3/4 MILE	1	228
*E-2	EAST HONOLULU	1	309.75
*E-3 & *E-4	NORTH KANE OHE	2	2(120.75)
*E-4	NORTH KANE OHE RIGHT LANE	1	195
*E-5	WEST AIEA EXIT 1/2 MILE	1	136.5
TOTAL			537.75 +157.25

- NOTE:
- *Signs to be covered with black polyethylene sheet.
 - Sign Panels for signs E-3 and E-4 are not a part of this contract. All other materials and labor necessary to complete the frame and mounting bracket assembly shall be done by the Contractor.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS

INTERSTATE ROUTE H-1
PROJ. NO. I-H-1-(64)-12,
UNIT 1

Scale: 1" = 100' Date: 8/10/68

SHEET No. 3 OF 19 SHEETS

SURVEYED BY	DATE
DRAWN BY	
DESIGNED 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.	1-11-1(64):12	1968	21	158

Mileage Marker (12) (By Others)

1
2

R/W & Control of Access Line

KAONOHI STREET

M.L. STA. 138+00

140+00

145+00

150+00

155+00

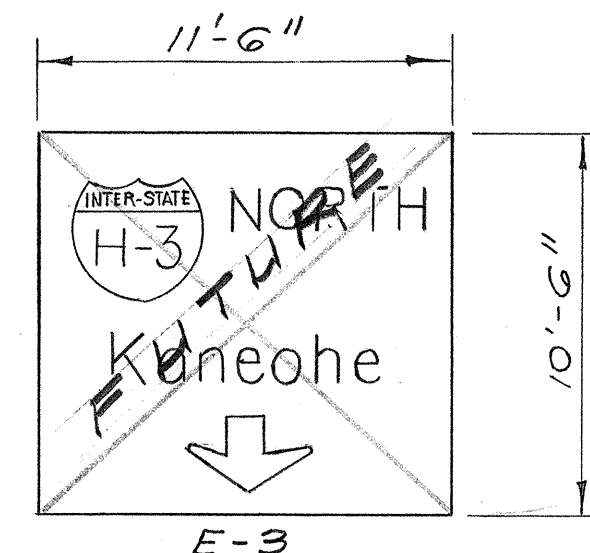
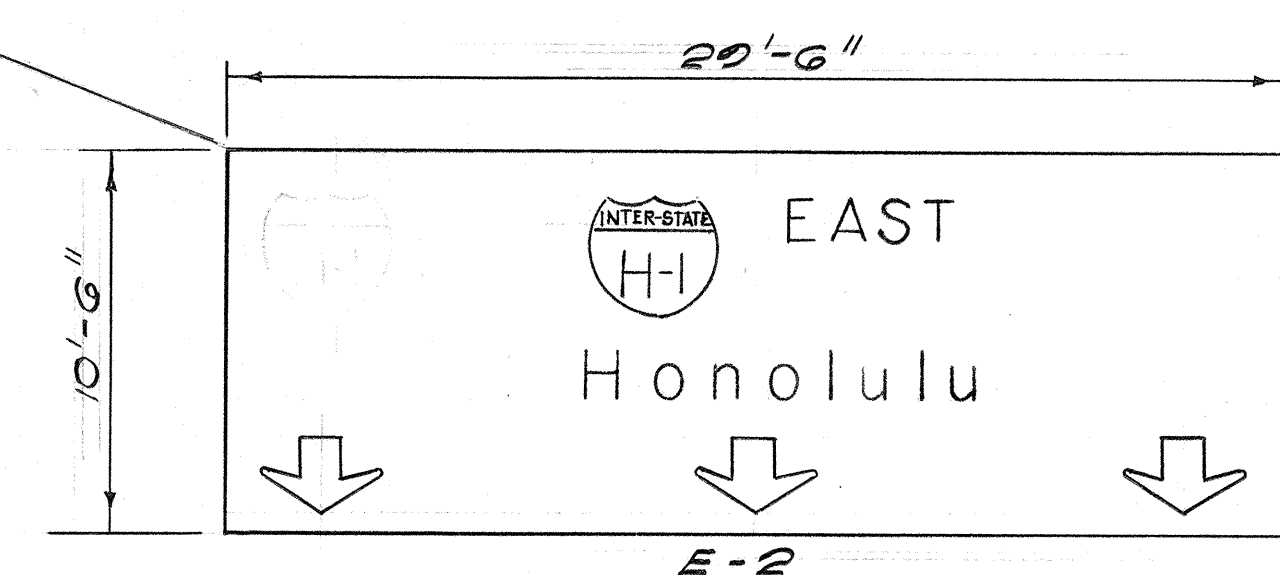
160+00

165+00

OUTBOUND LANES

INBOUND LANES

R/W & Control of Access Line



TRUE NORTH
Scale: 1"=100'

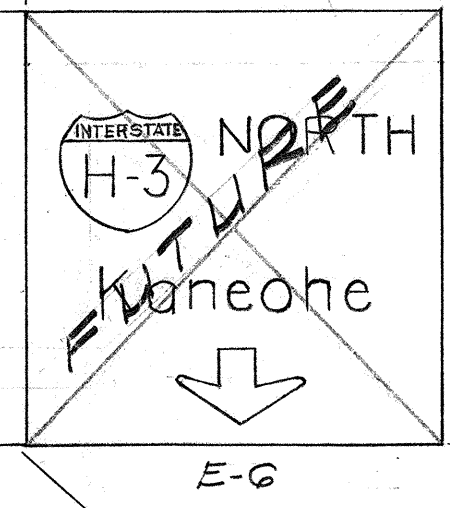
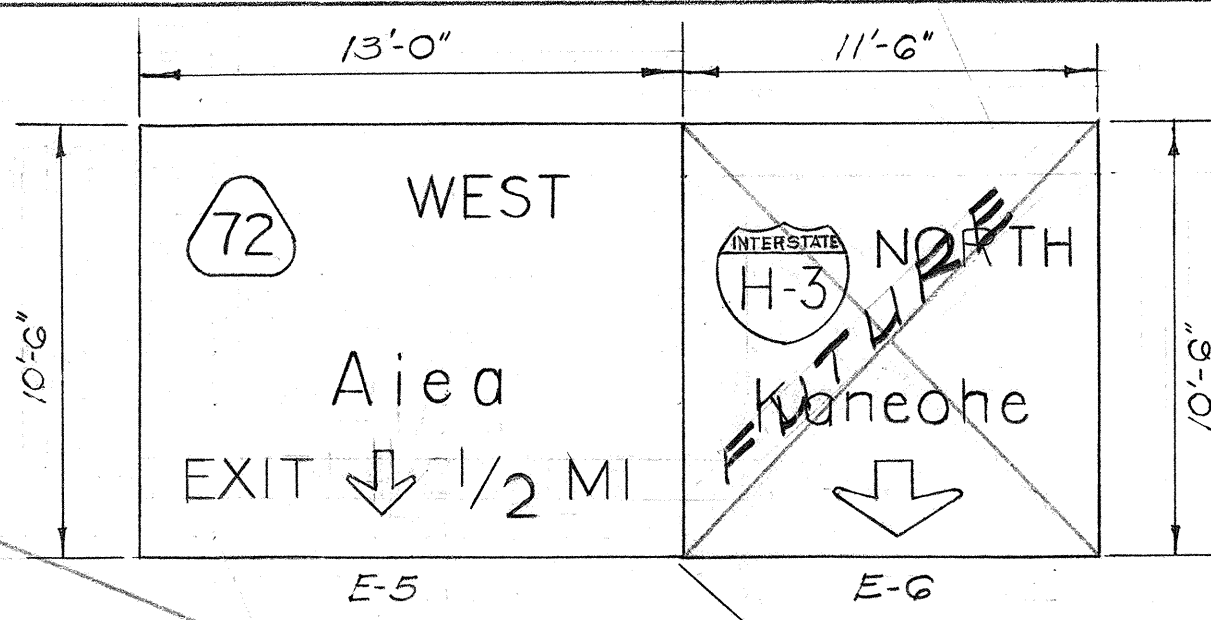
M.L. STA. 167+00

F.A.I. PROJ. NO. I-HI-1(64):12, UNIT 1

STA. 170+00

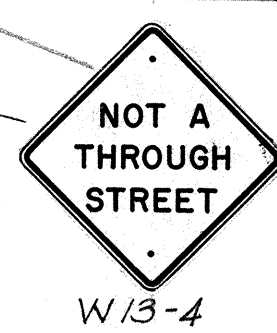


R2-1(55)-1



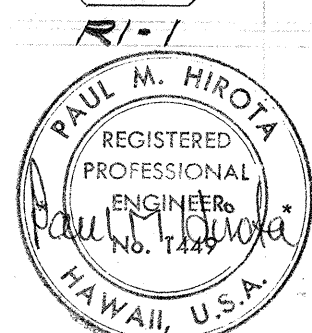
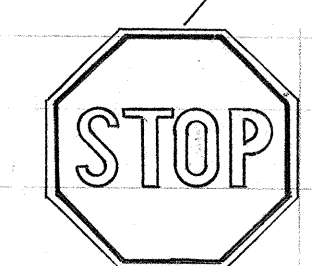
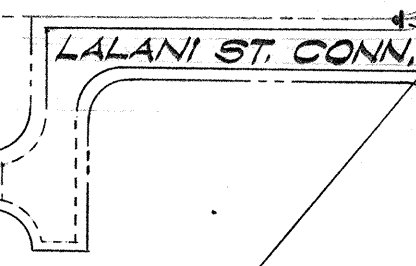
END OF PROJECT

STA. 195+00



W13-4

AIEA HTS. DRIVE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS

INTERSTATE ROUTE H-1
PROJ. NO. I-HI-1(64):12,
UNIT 1

Scale: 1"=100' Date: 8/10/68

SHEET No. 4 OF 13 SHEETS

DELETE

HELECONIA FRONTAGE ROAD

R/W & Control of Access Line

Auxiliary Lane

180+00

185+00

190+00

195+00

H-1 Defense Highway

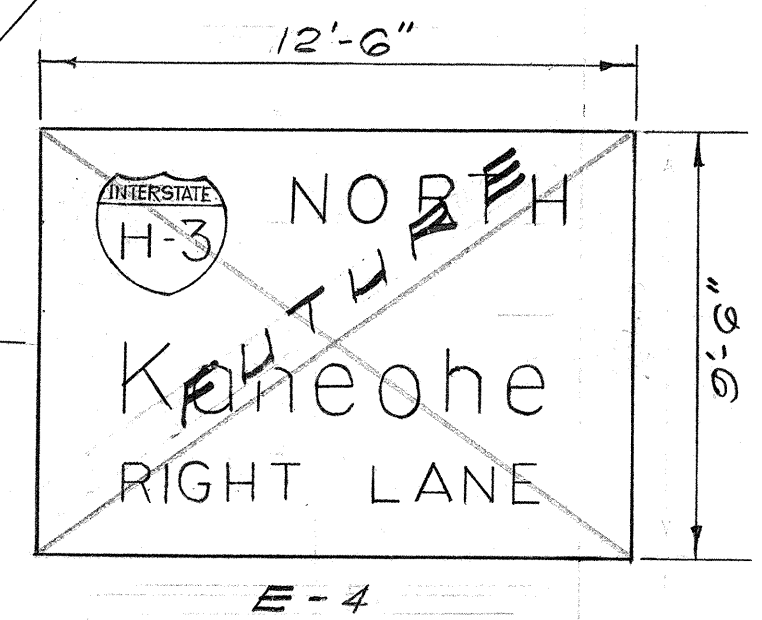
R/W & Control of Access Line

Auxiliary Lane

175+00

OUTBOUND LANES
INBOUND LANES

KAMILLO STREET

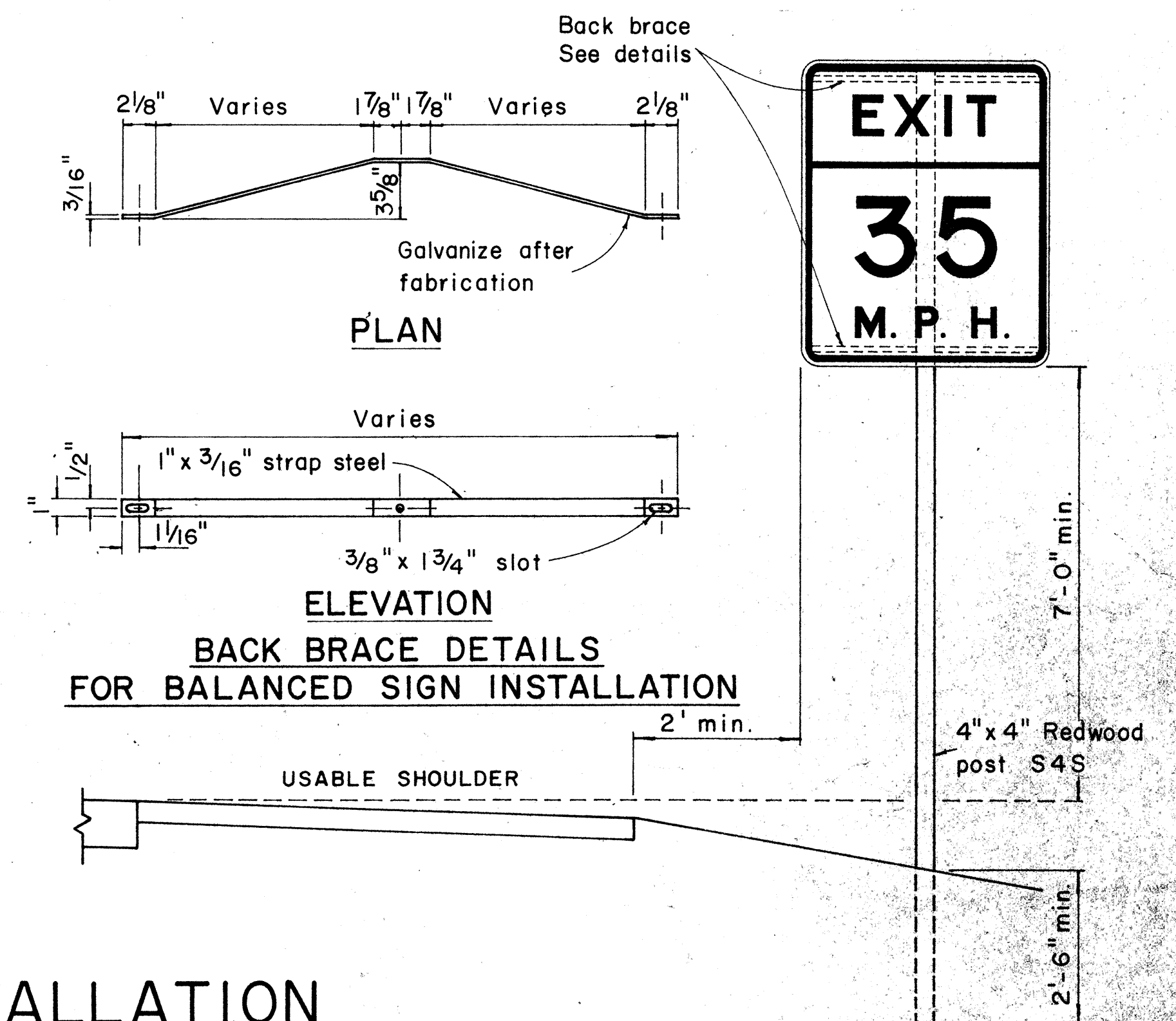
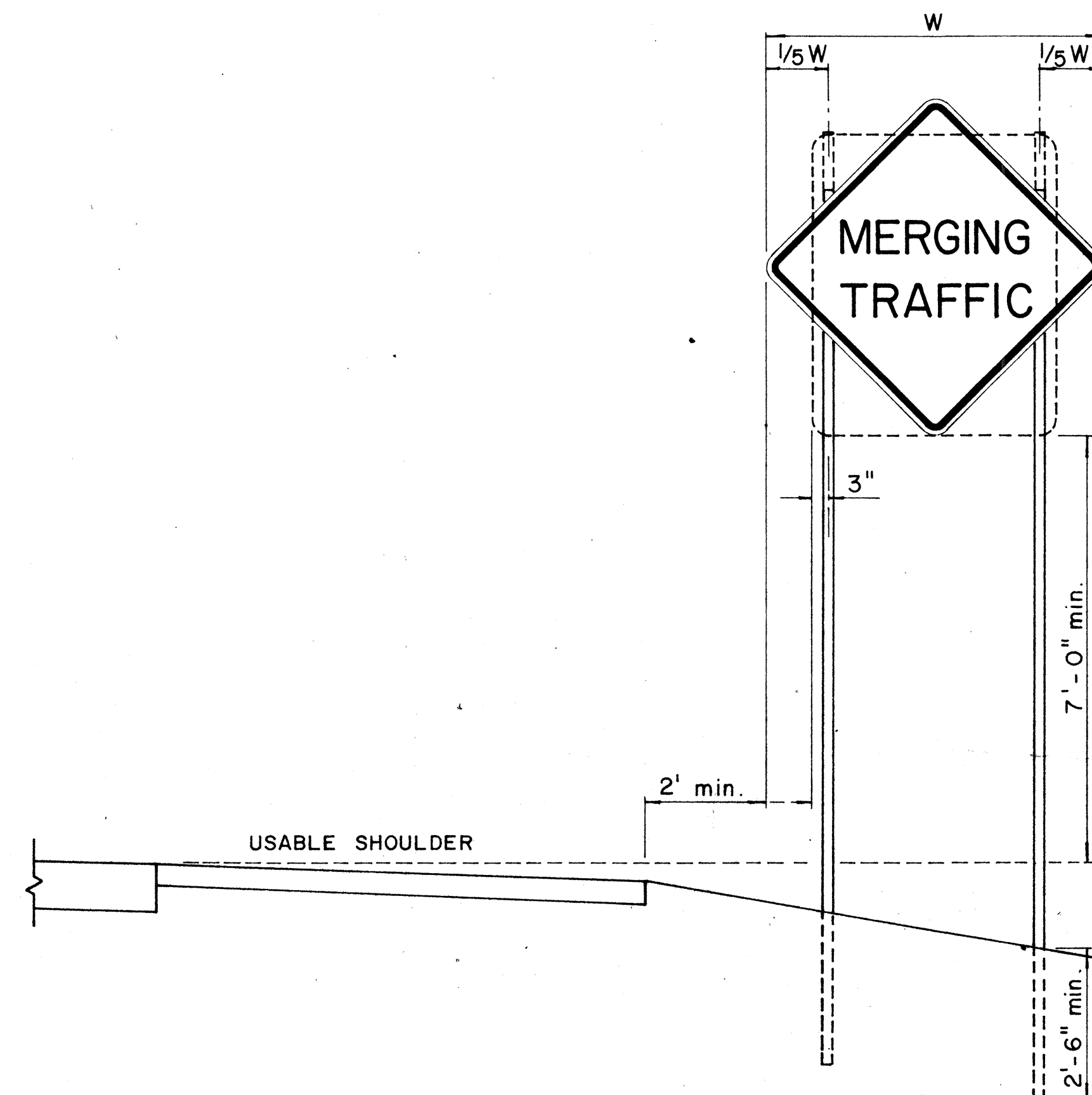
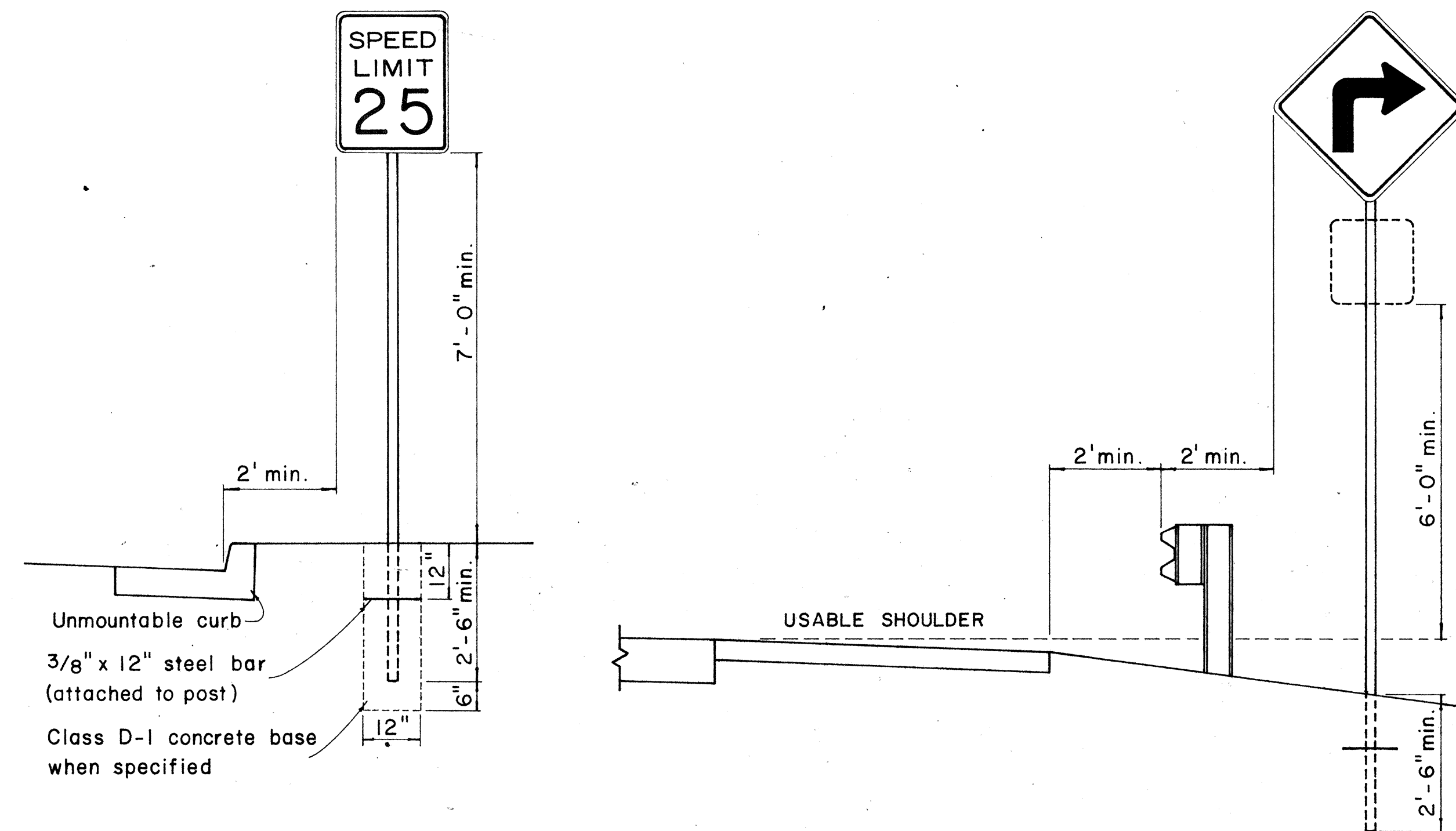


E-4

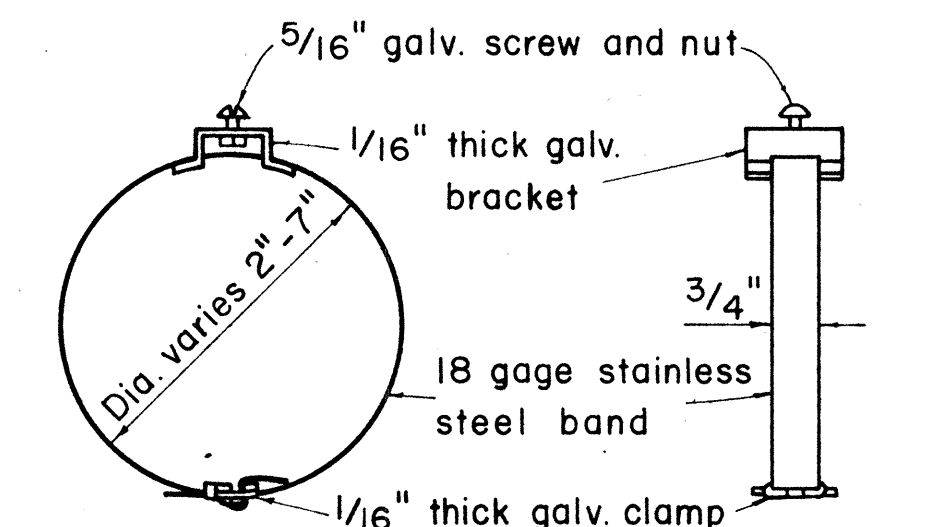
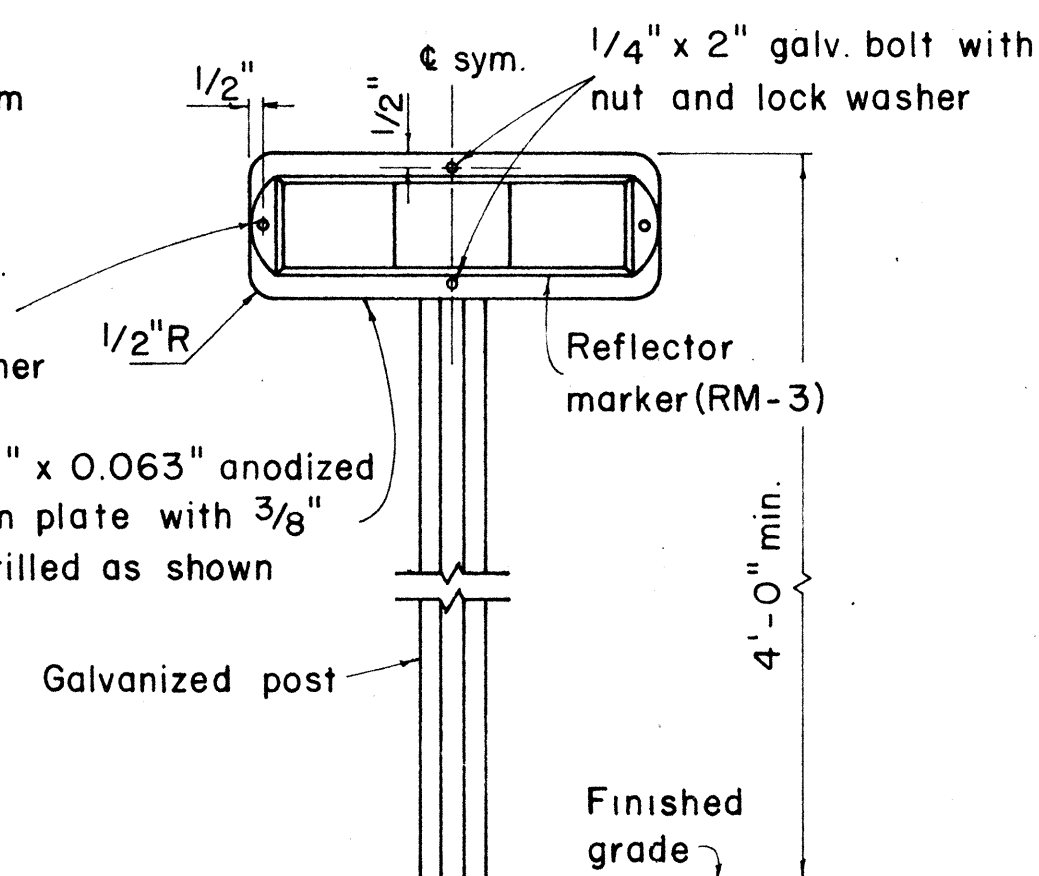
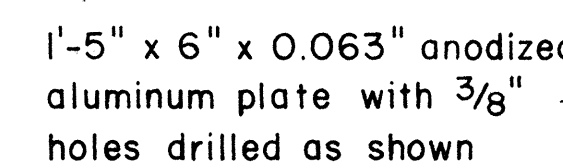
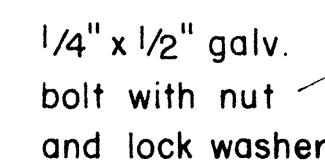
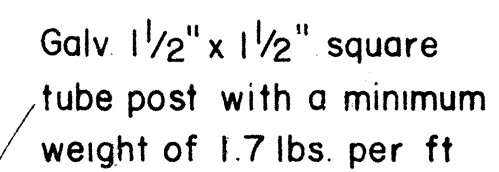
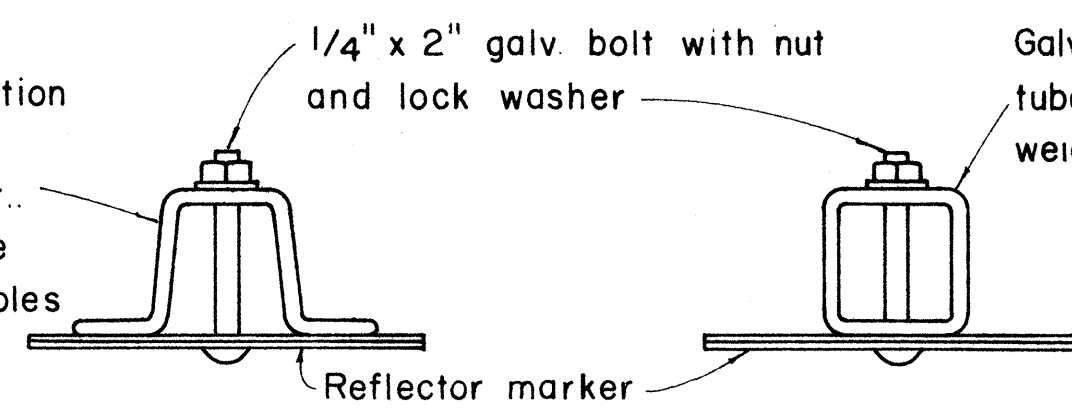
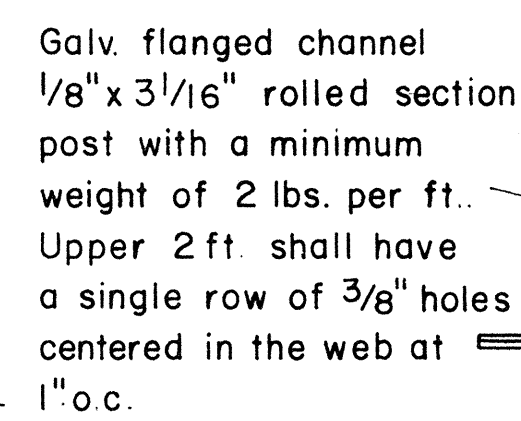
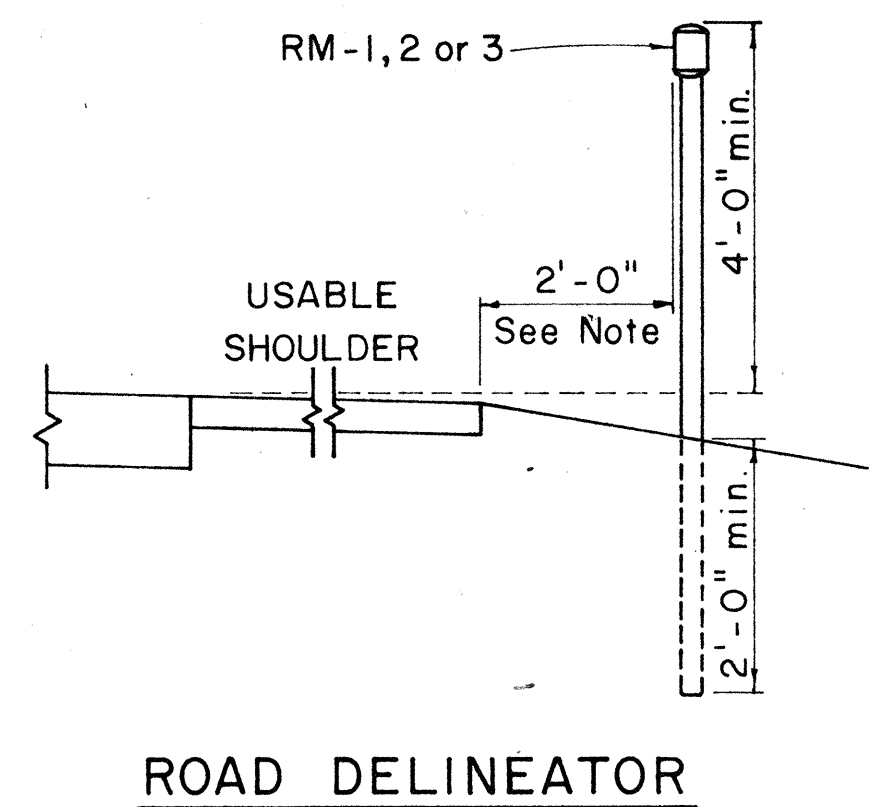
END OF PROJECT

DATE	BY
DESIGNED BY	PAUL M. HIROTA
DRAWN BY	PAUL M. HIROTA
CHECKED BY	PAUL M. HIROTA
NOTED BY	PAUL M. HIROTA
ORIGINAL PLAN	PAUL M. HIROTA

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(G4):12 Unit 1 I-HI-1(G6):11	1969	22	158

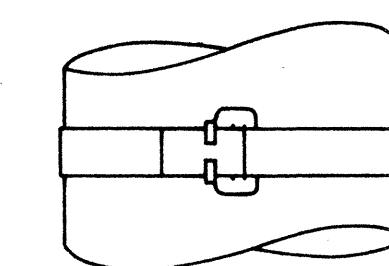


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION



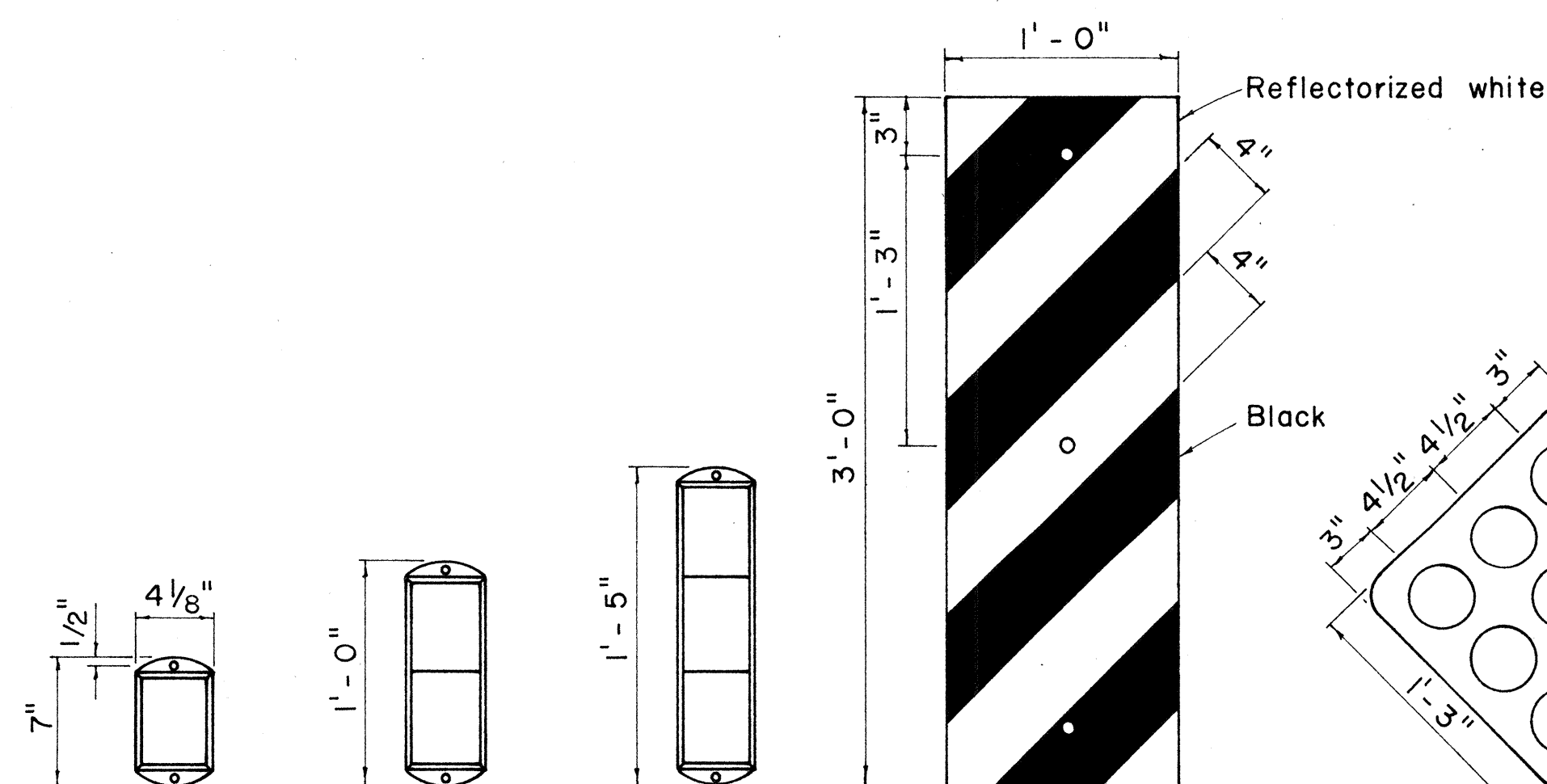
PLAN

SIDE VIEW



FRONT VIEW

TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM - 3H



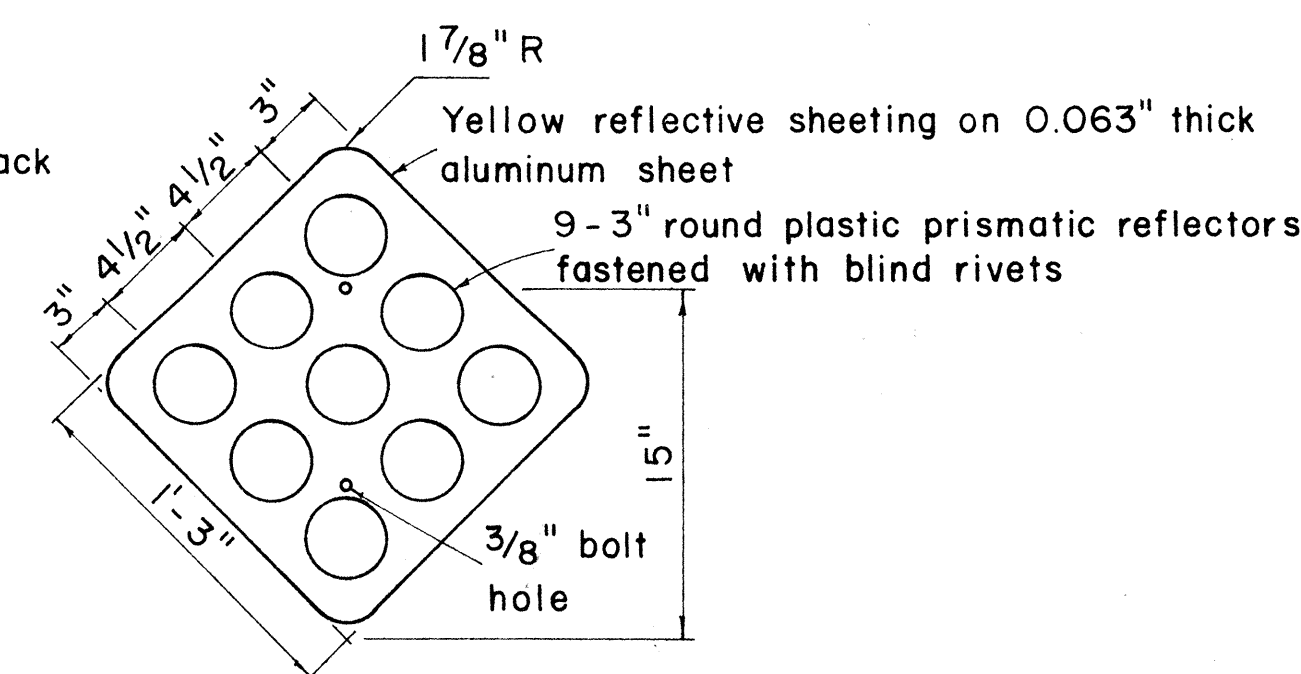
RM-1
(CLEAR)

RM - 2
(AMBER)

RM-3
(AMBER)

RM - 4 (R)

RM - 9



REFLECTOR MARKERS

- GENERAL NOTES:

1. Sign posts shall be 2" galv. standard pipe or 2"x 2" galv. sq. tube post.
2. 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.
3. 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.
4. Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
5. 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.
6. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
7. (R) or (L) indicates right or left and shall be as shown on the plans.

TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGN DETAILS

Not to scale

March, 1968

SHEET No. 5 OF 19 SHEETS DT 100

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

PRINTED ON NO. 100RH CLEARPRINT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	UNIT 1029	23	158	

I-H-1(6)H



W 7-2 48"x48"



W8-7 30"x30"



W14-1 30"x30"



W20-1a 48"x48"



W20-2d 48"x48"



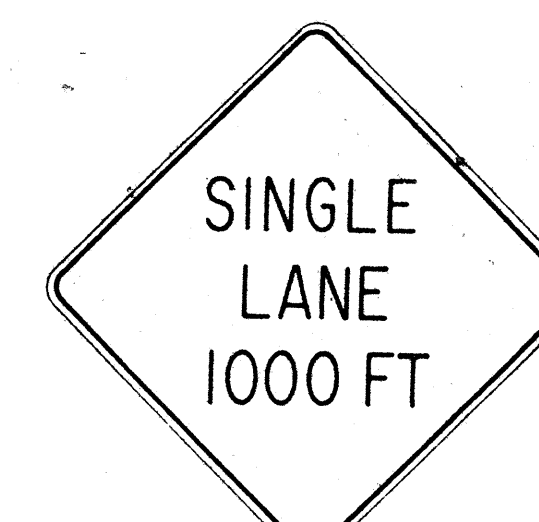
W20-3b 48"x48"



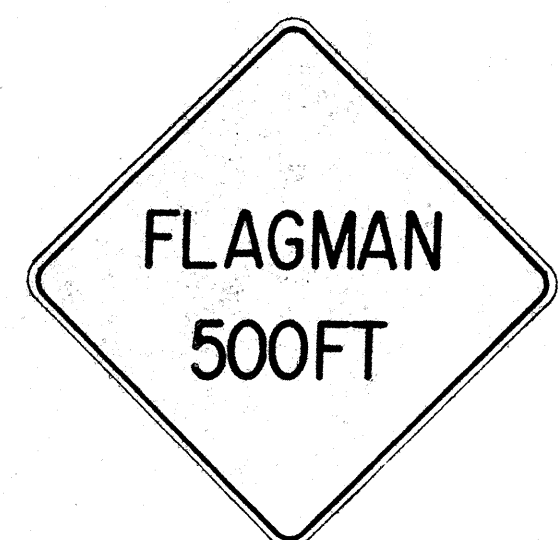
W20-4d 48"x48"



W20-5d(L) 48"x48"



W20-6b 48"x48"



W20-7c 48"x48"



W21-1 30"x30"



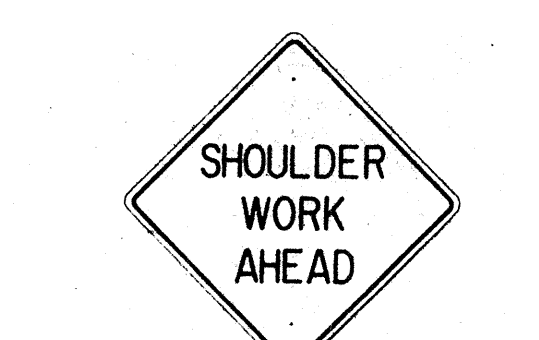
W21-2 24"x24"



W21-3 36"x36"



W21-4 30"x30"



W21-5 30"x30"



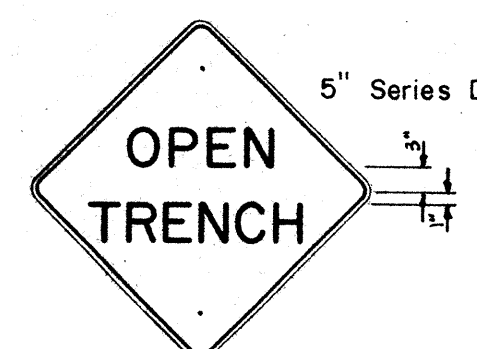
W21-6 30"x30"



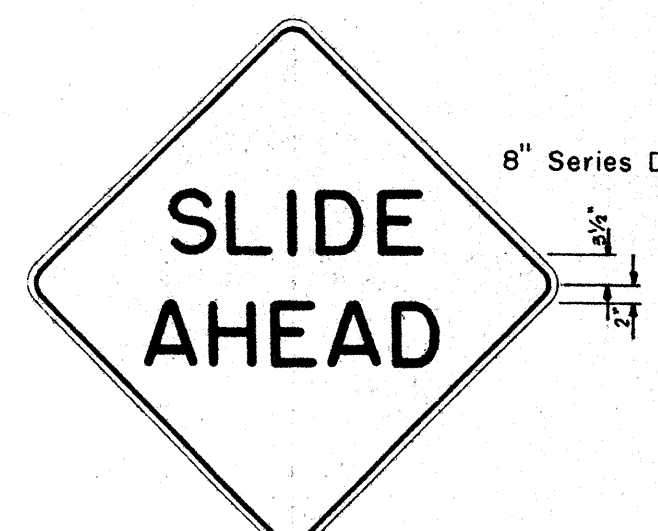
W22-1 30"x30"



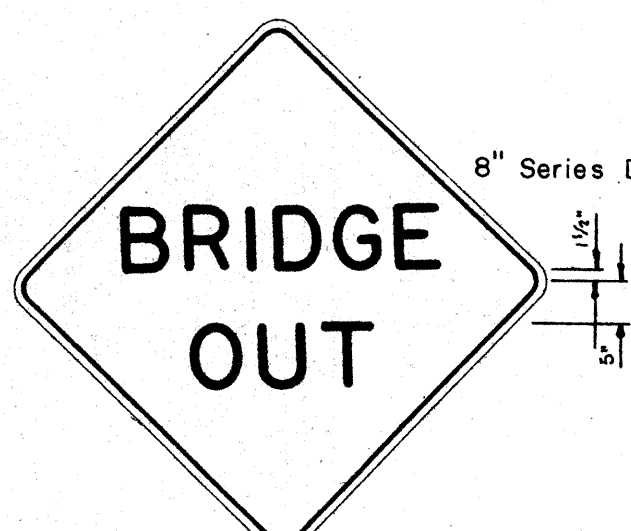
W22-2 30"x30"



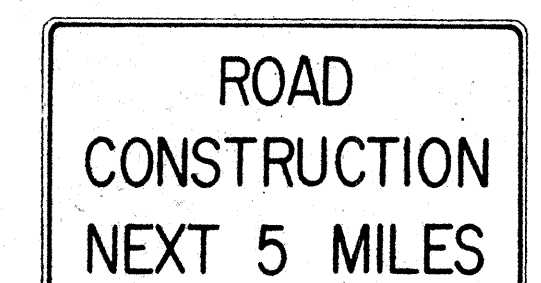
W22-3 30"x30"



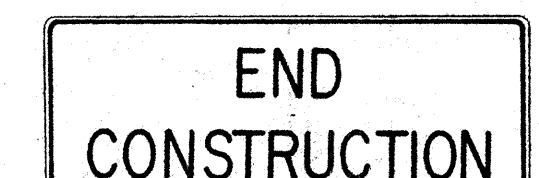
W22-4 48"x48"



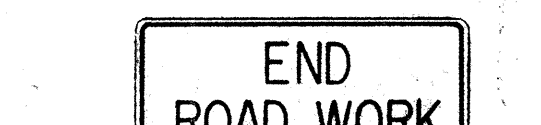
W22-5 48"x48"



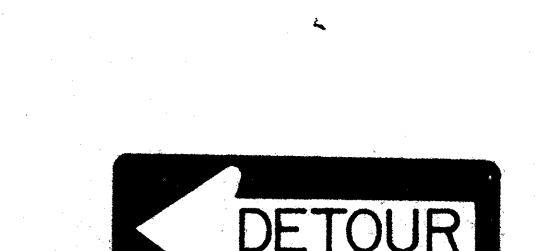
G20-1(5) 60"x36"



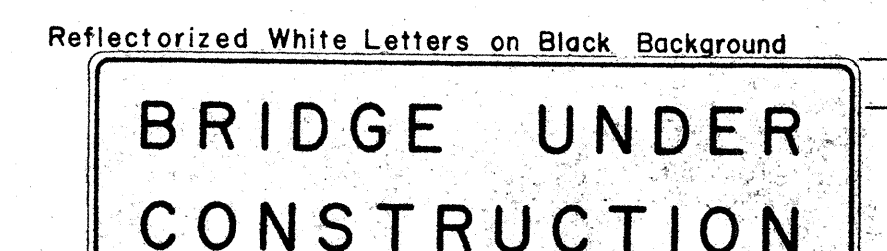
G20-2 60"x24"



G20-3 42"x18"



M5-7(L) 48"x18"



CW-1 96"x30"

NOTE:

- 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 signs shall be reflectorized unless otherwise specified.
- All signs shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise noted.
- 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.
- (R) or (L) indicates right or left and shall be as shown on the plans.
- Number in () indicates miles and shall be as shown on the plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

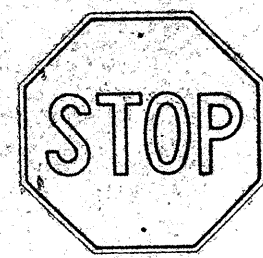
STANDARD DETAILS CONSTRUCTION SIGNS

NOT TO SCALE

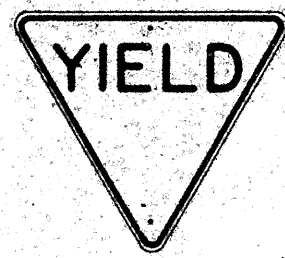
SHEET No. 6 OF 12 SHEETS

2 3

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



R1-1 30"x 30"



R1-2 36"x 36"x 36"
R1-2-E 48"x 48"x 48"
R1-2-I 60"x 60"x 60"



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



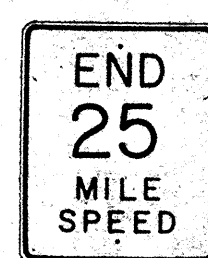
R2-2(40) 24"x 24"
R2-2(40)-E 36"x 36"
R2-2(40)-I 48"x 48"



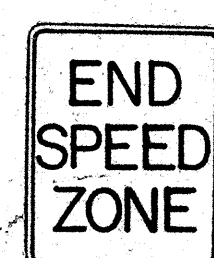
R2-4(40) 24"x 30"
R2-4(40)-E 36"x 48"
R2-4(40)-I 48"x 60"



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"



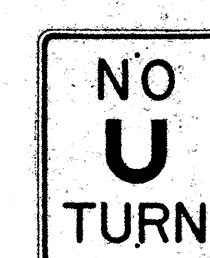
R3-1 24"x 30"
R3-1-E 36"x 48"



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



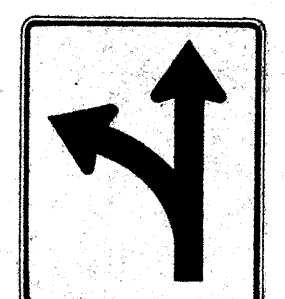
R3-3 24"x 24"



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



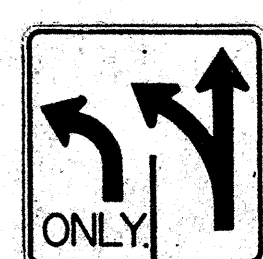
R3-5(L) 30"x 36"



R3-6(L) 30"x 36"



R3-7(R) 30"x 30"



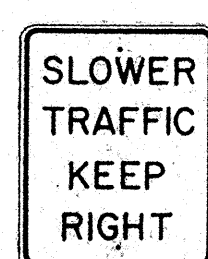
R3-8(L) 30"x 30"



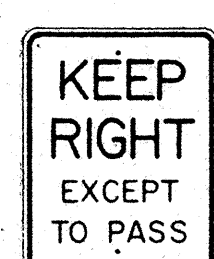
R4-1 24"x 30"



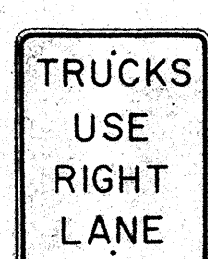
R4-2 24"x 30"



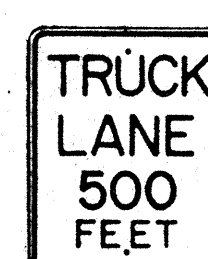
R4-3 24"x 30"
R4-3-E 36"x 48"
R4-3-I 48"x 60"



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



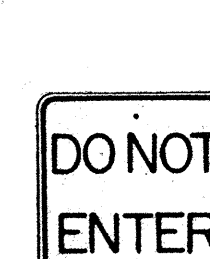
R4-5 24"x 30"
R4-5-E 36"x 48"



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



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



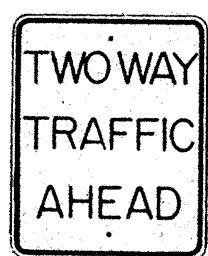
R5-1 24"x 24"



R6-1(R) 36"x 12"



R6-2(R) 18"x 24"



R6-3 24"x 30"



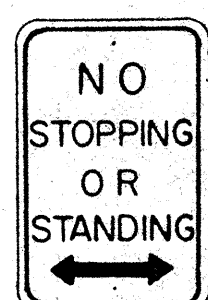
R6-4 24"x 30"



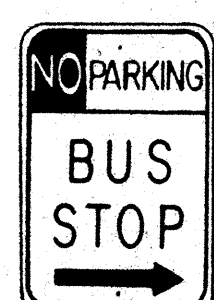
R6-5 24"x 30"



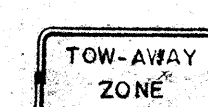
R7-1 12"x 18"



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



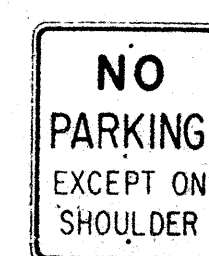
R7-107(R) 12"x 18"



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"



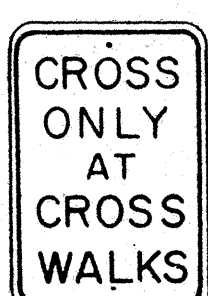
R9-1 18"x 24"



R9-2 12"x 18"



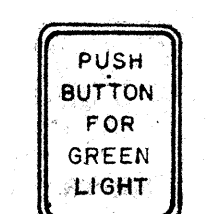
R9-3 12"x 18"



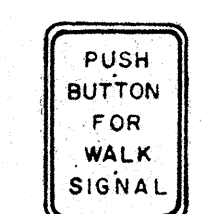
R9-4 12"x 18"



R9-5 12"x 18"



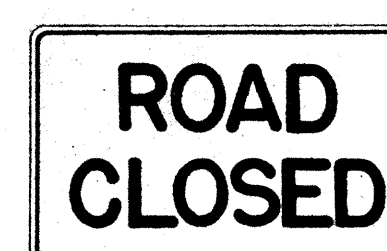
R9-6 9"x 12"



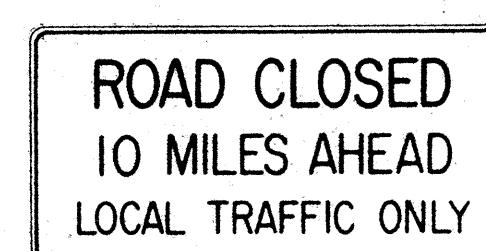
R9-7 9"x 12"



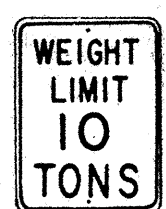
R10-1 24"x 30"
R10-1-E 36"x 48"
R10-1-I 48"x 60"



R10-2 48"x 30"



R10-3(10) 60"x 30"



R10-4(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 R10-4 sign, number in () indicates weight and shall be as shown on the plan.

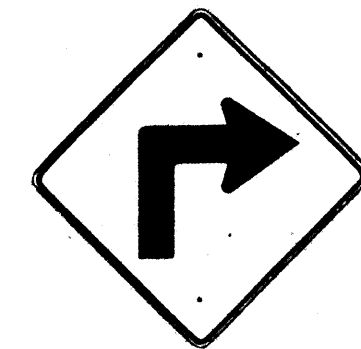
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
REGULATORY SIGNS

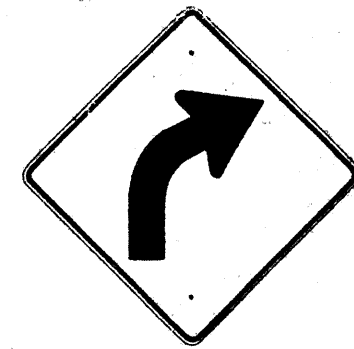
NOT TO SCALE

SHEET No. 7 OF 19 SHEETS

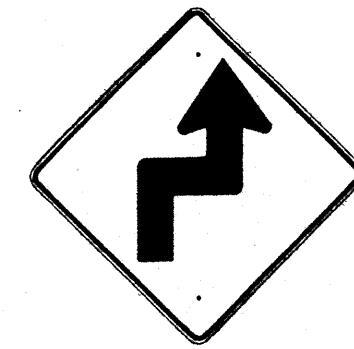
SURVEY PLOTTED BY: DATE: _____
DRAWN BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____
No. _____



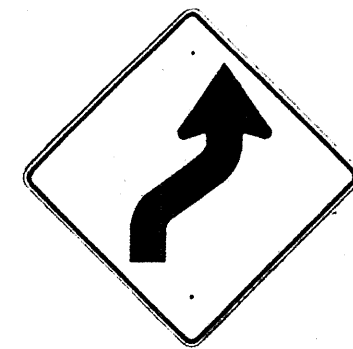
W1-1(R) 30" x 30"



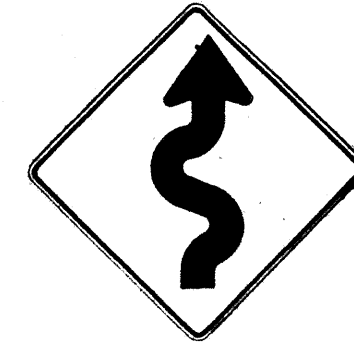
W1-2(R) 30" x 30"



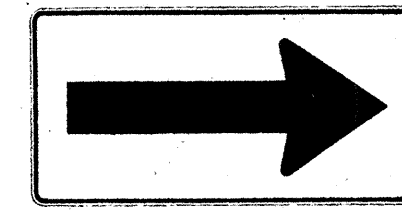
W1-3(R) 30" x 30"



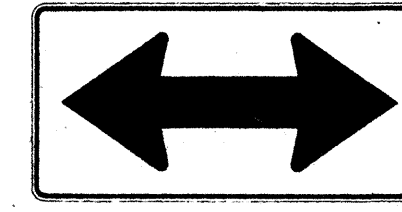
W1-4(R) 30" x 30"



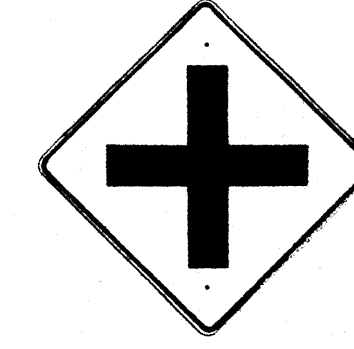
W1-5(R) 30" x 30"



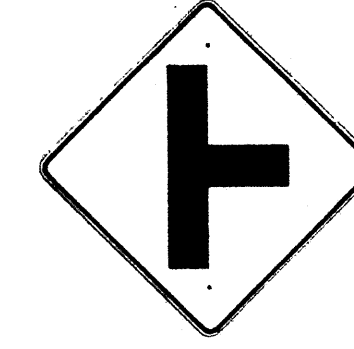
W1-6 48" x 24"



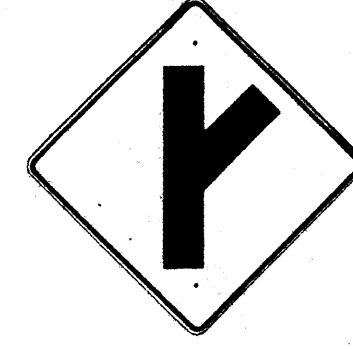
W1-7 48" x 24"



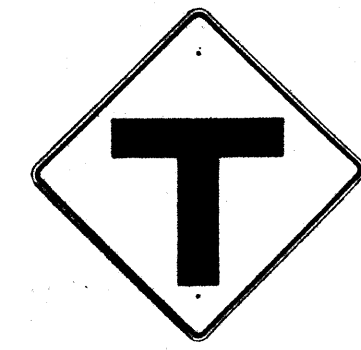
W2-1 30" x 30"



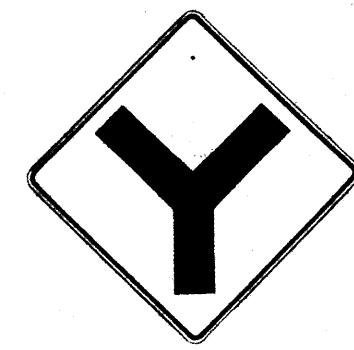
W2-2 30" x 30"



W2-3(R) 30" x 30"



W2-4 30" x 30"



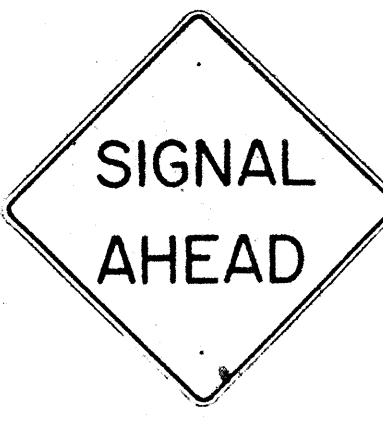
W2-5 30" x 30"



W3-1 30" x 30"



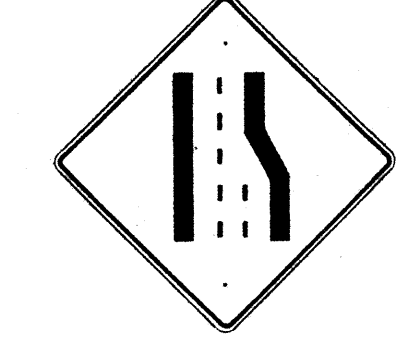
W3-2 30" x 30"



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"



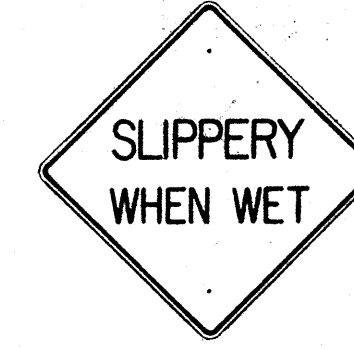
W8-2 30" x 30"



W8-3 30" x 30"



W8-4 30" x 30"



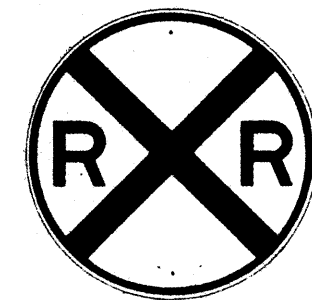
W8-5 30" x 30"



W9-1 30" x 30"



W9-2 30" x 30"



W10-1 36" DIAMETER



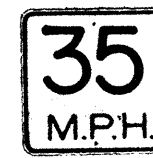
W11-1 30" x 30"



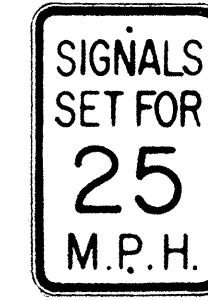
W11-5 30" x 30"



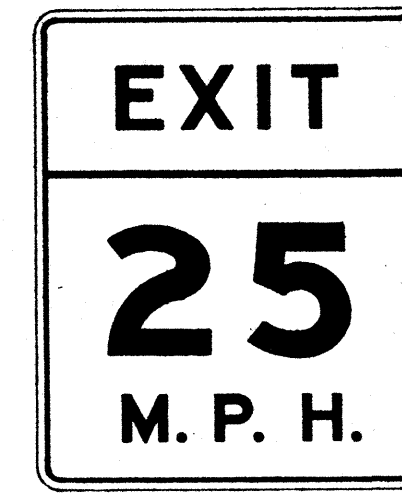
W12-2 36" x 36"



W13-1(35) 18" x 18"



W13-2(25) 12" x 18"



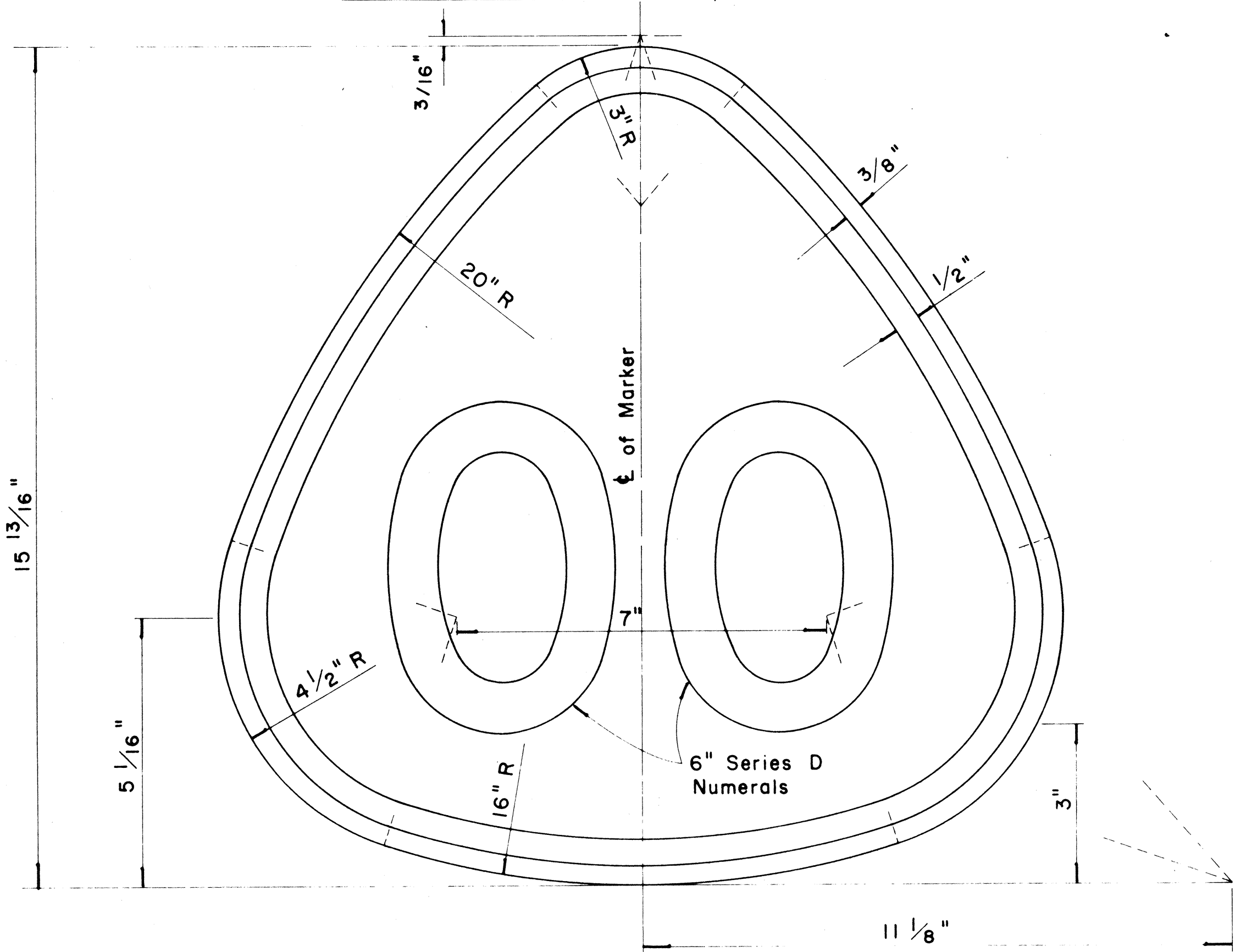
W13-3(25) 48" x 60"

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

Shield Size	Multiply Dimensions by	Numeral Size
16"	1	6" Series D
21"	1.3	8" Series D
32"	2.0	12" Series D
42"	2.63	15" Series D
48"	3	18" Series D



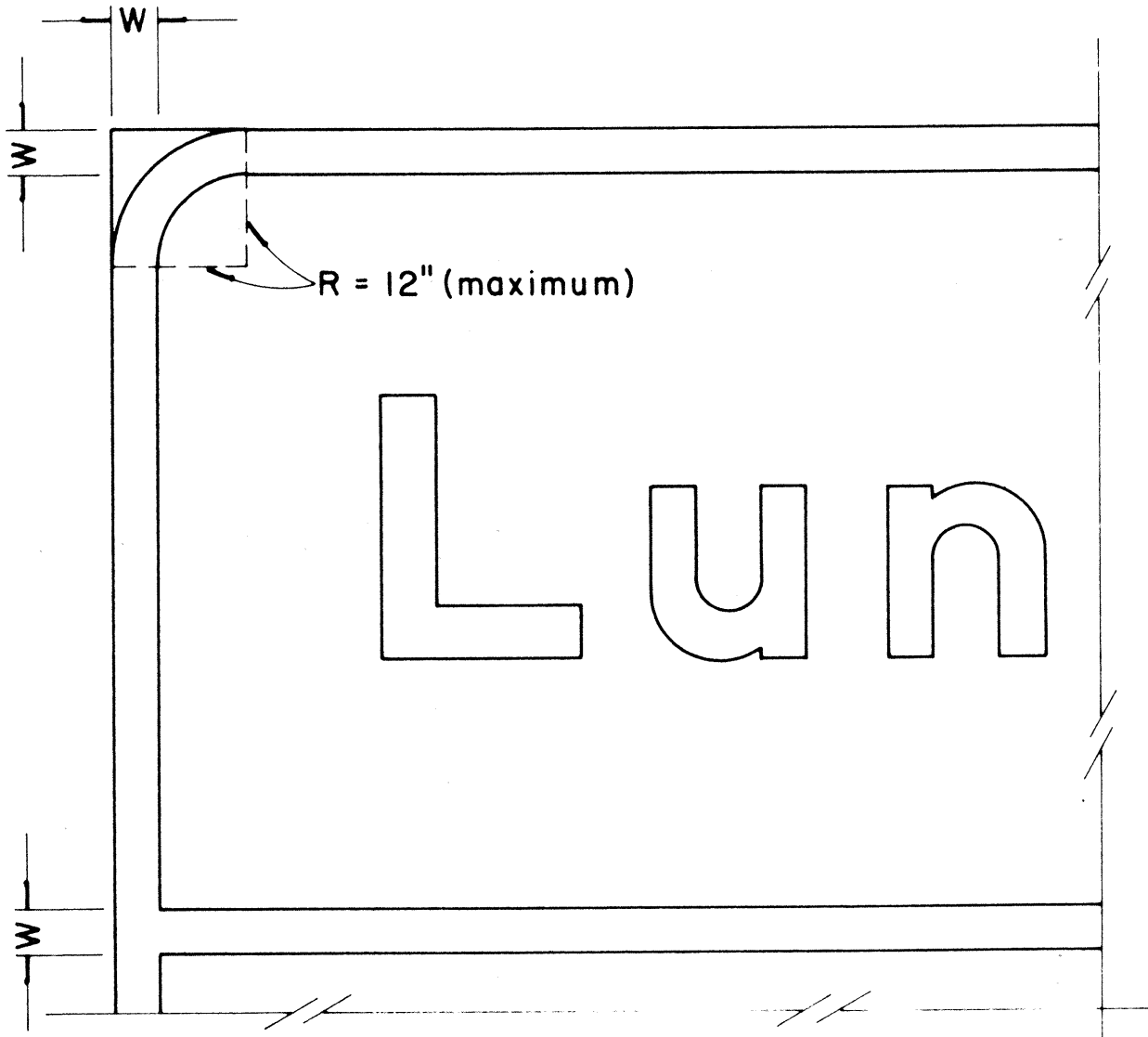
**STATE ROUTE MARKER
FOR
DESTINATION & EXPRESSWAY SIGNS**

Scale: Half Size

NOTE:

1. 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.
2. All numerals shall be Series "D" from the "Standard Alphabets for Highway Signs," Bureau of Public Roads, 1957.
3. All Cut-outs shall be fastened on sign panel with Aluminum blind rivets. See Special Provisions.

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
DESTINATION & EXPRESSWAY SIGNS**

No Scale

NOTE:

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

REVISED: Nov. 29, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

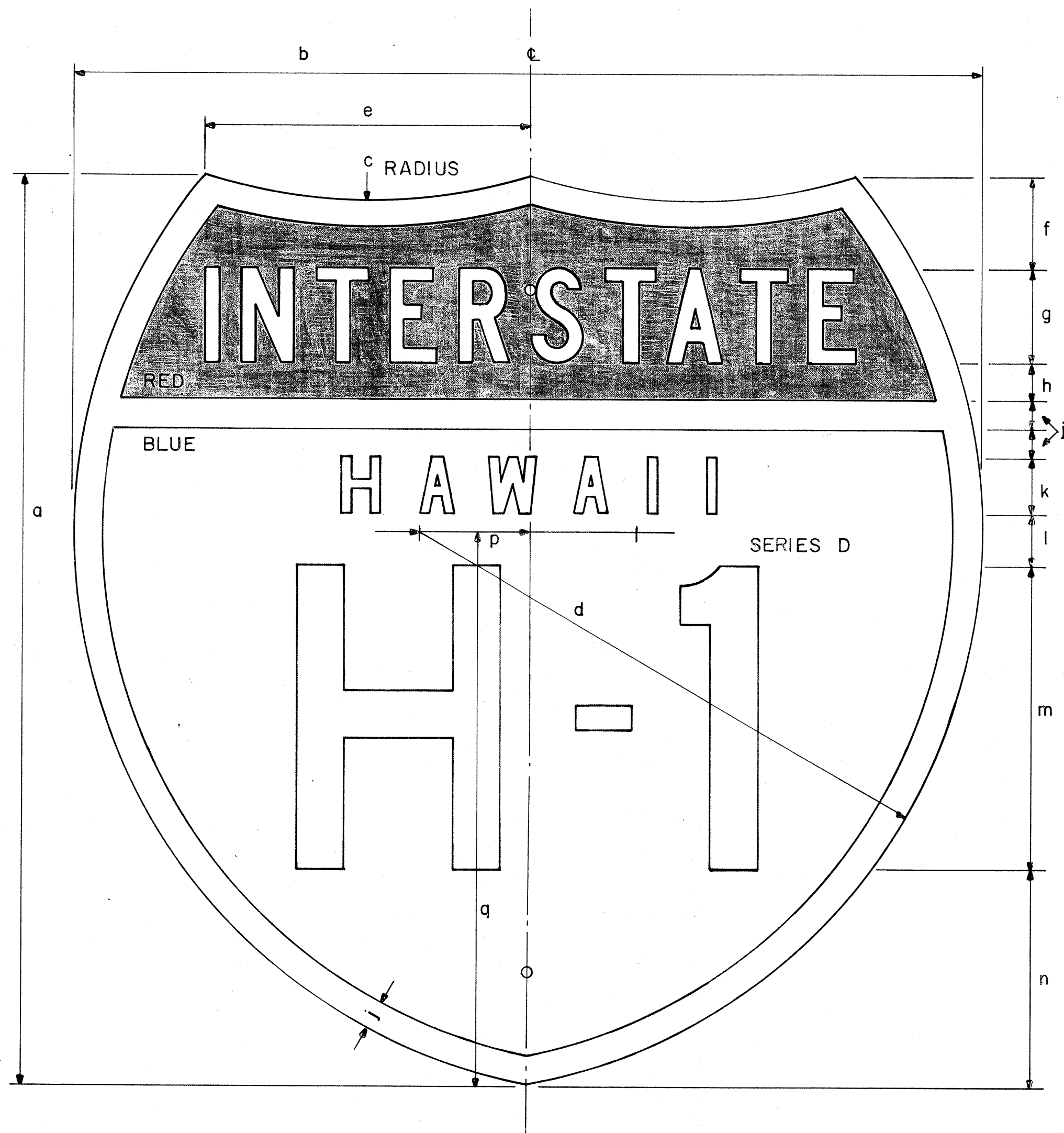
DESTINATION & EXPRESSWAY SIGNS

**STATE ROUTE MARKER
AND
BORDER DETAIL**

Scale: As Shown

SHEET No. 26 OF 158 SHEETS

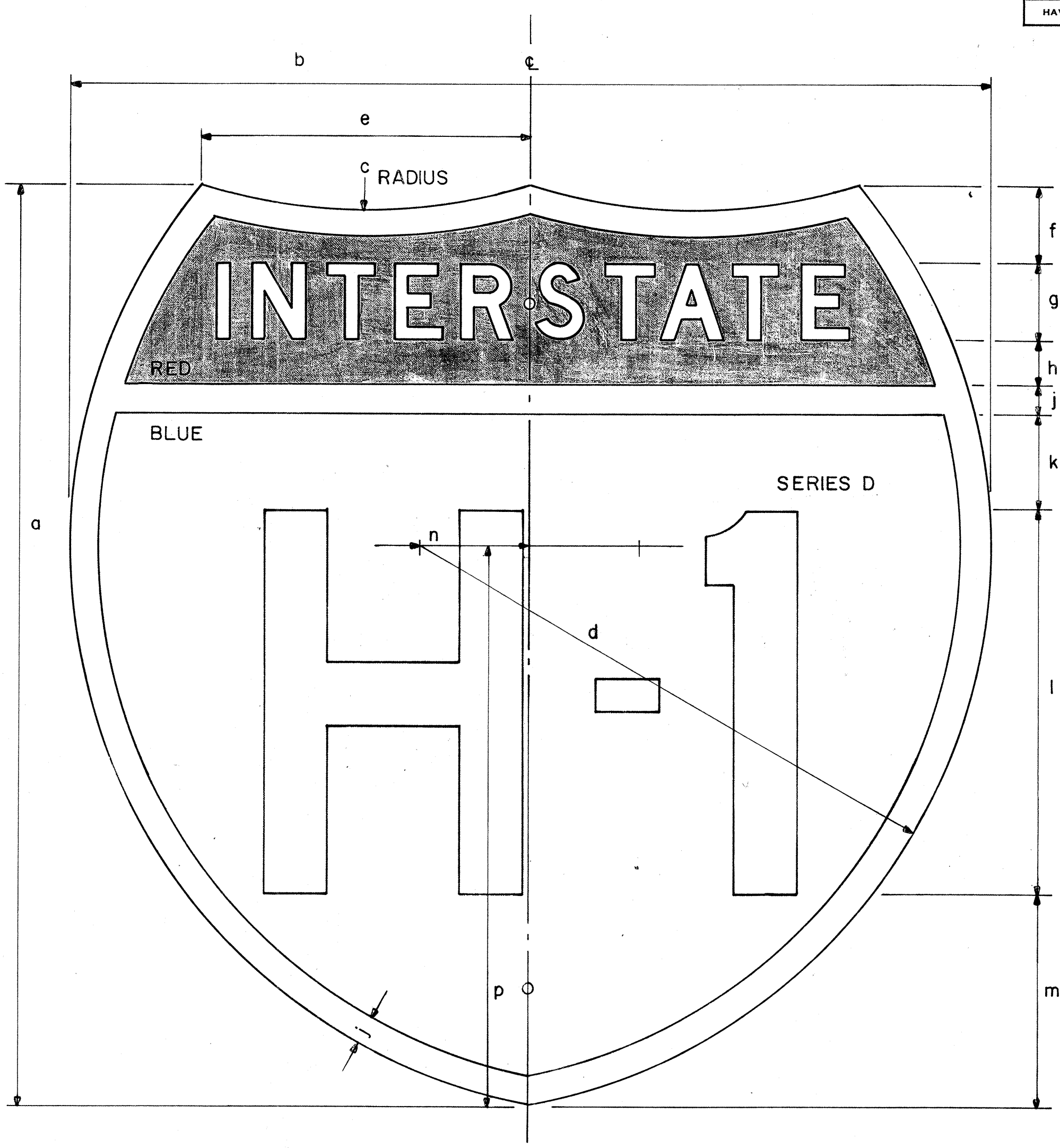
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
PLACED BY	
ORIGINAL PLAN	



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

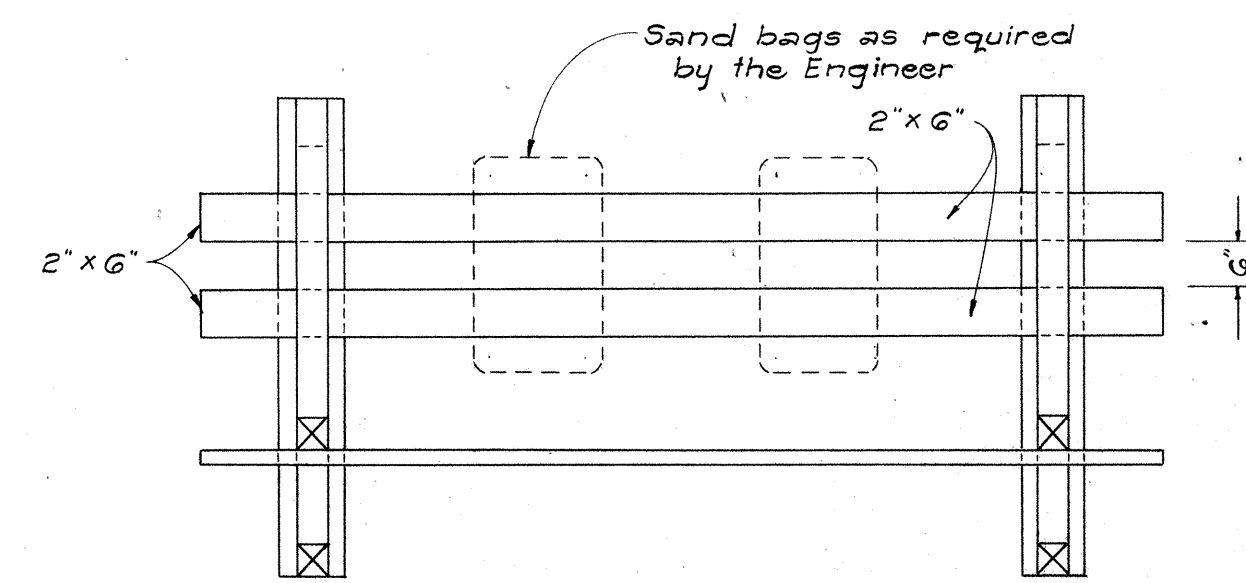
()	a	b	c	d	e	f	g	h	j	k	l	m	n	p
2	24	24	15	14 7/8	8 5/8	2	2 D	1 3/16	3/4	2 9/16	10	5 1/2	2 7/8	14 5/8
3	36	36	22 1/2	22 5/16	12 15/16	3 7/16	3 C	1 5/16	1 1/8	3 1/8	15	9	4 5/16	21 15/16
4	48	48	30	29 3/4	17 1/4	4 3/4	5 C	2	1 1/2	4	18	12 3/4	5 3/4	29 1/4

GENERAL NOTES

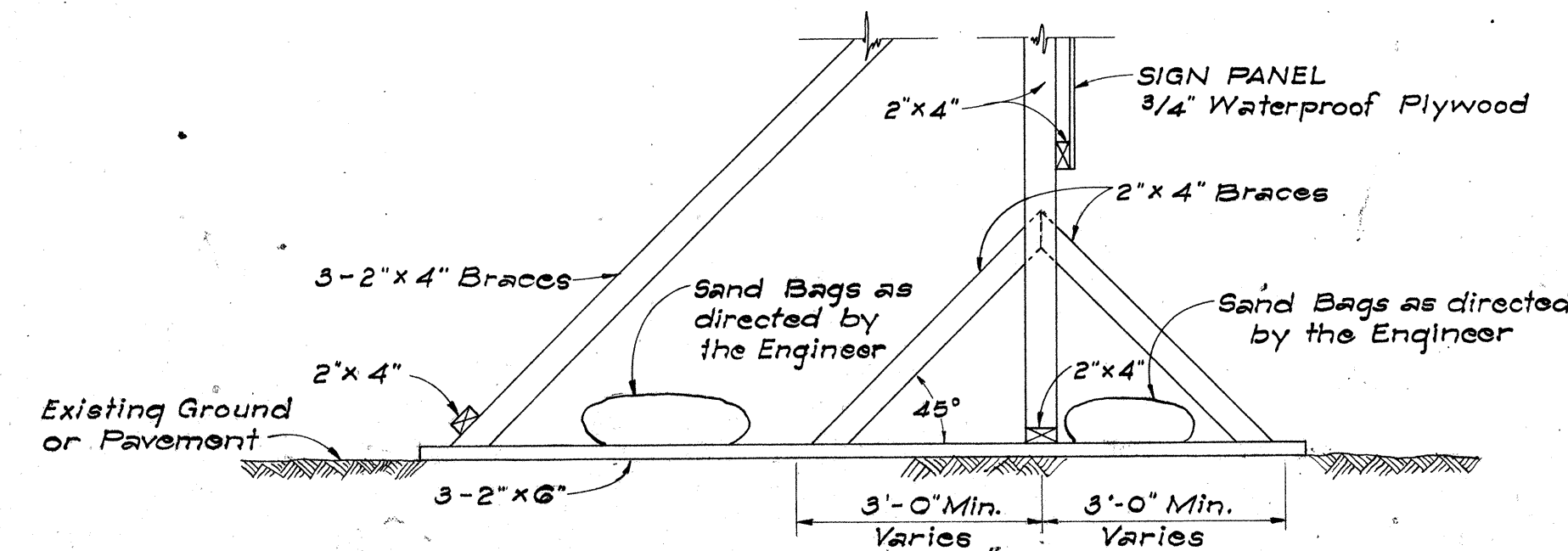
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs, dated September 1961, unless otherwise specified.
- 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 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

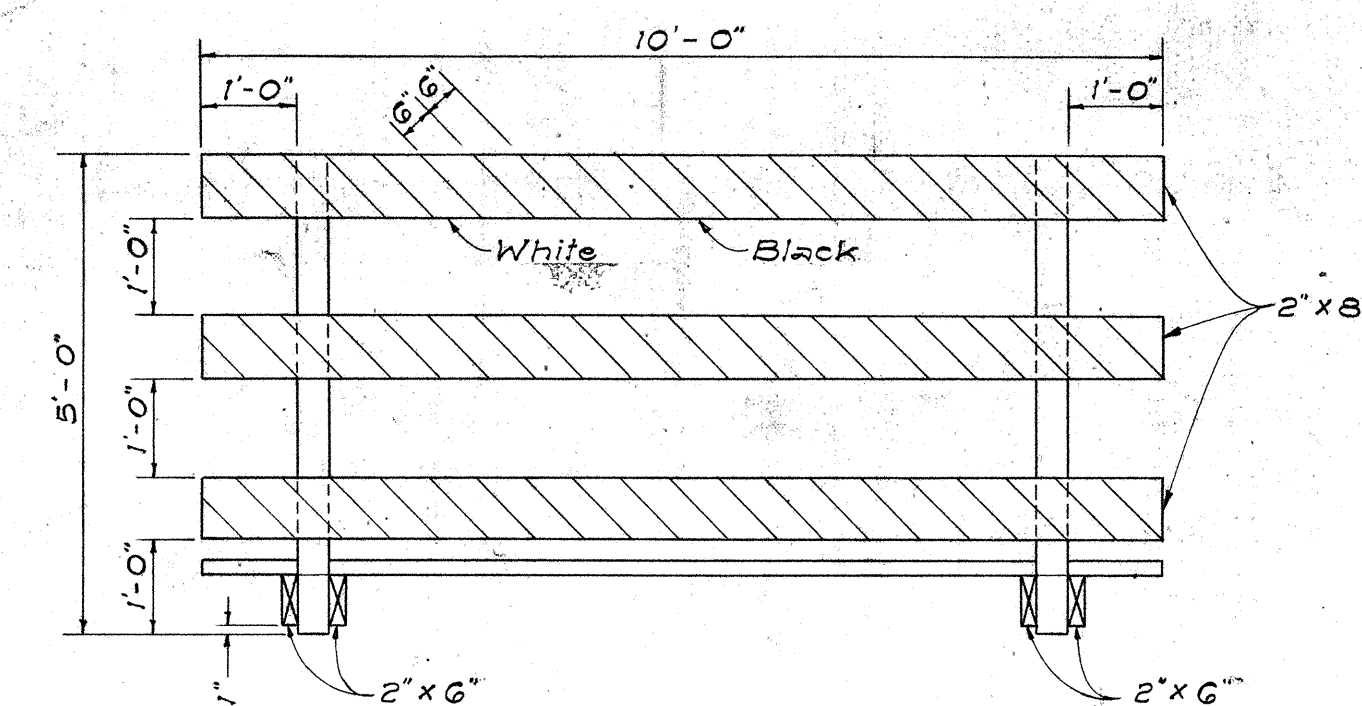
ORIGINAL PLAN
DATE
SERVEY PLOTTED BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY



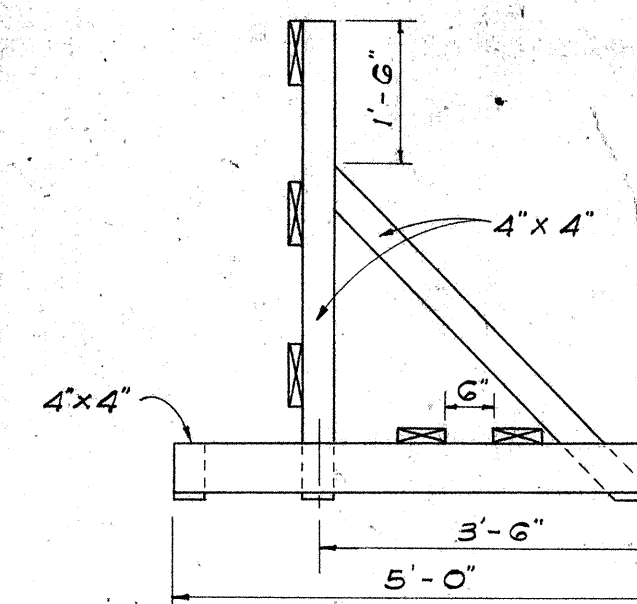
PLAN VIEW



SIDE VIEW
(SIGN FRAME WEIGHTED DOWN)

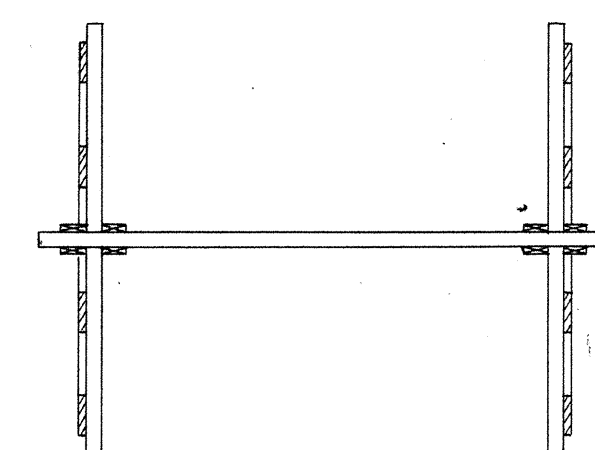


FRONT VIEW

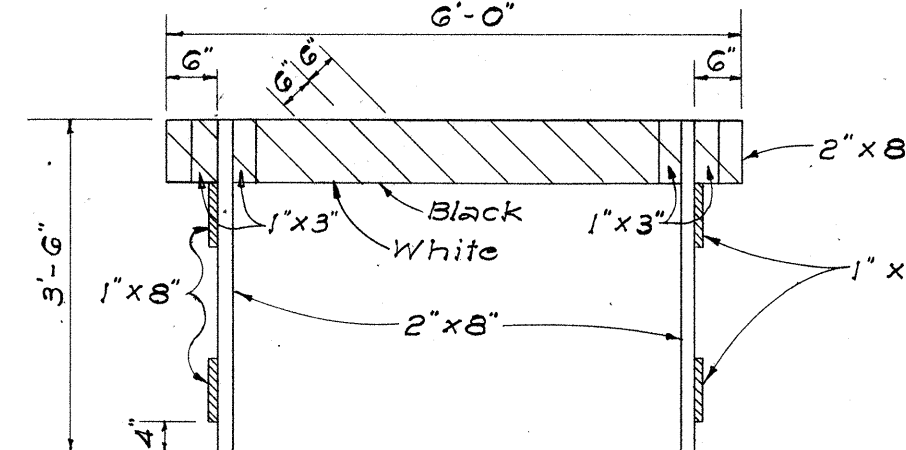


END VIEW

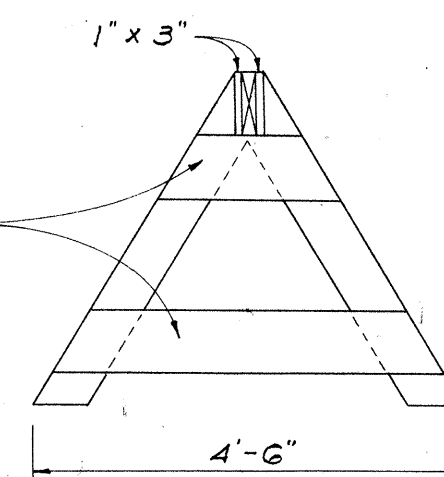
CLASS I BARRICADE



PLAN VIEW



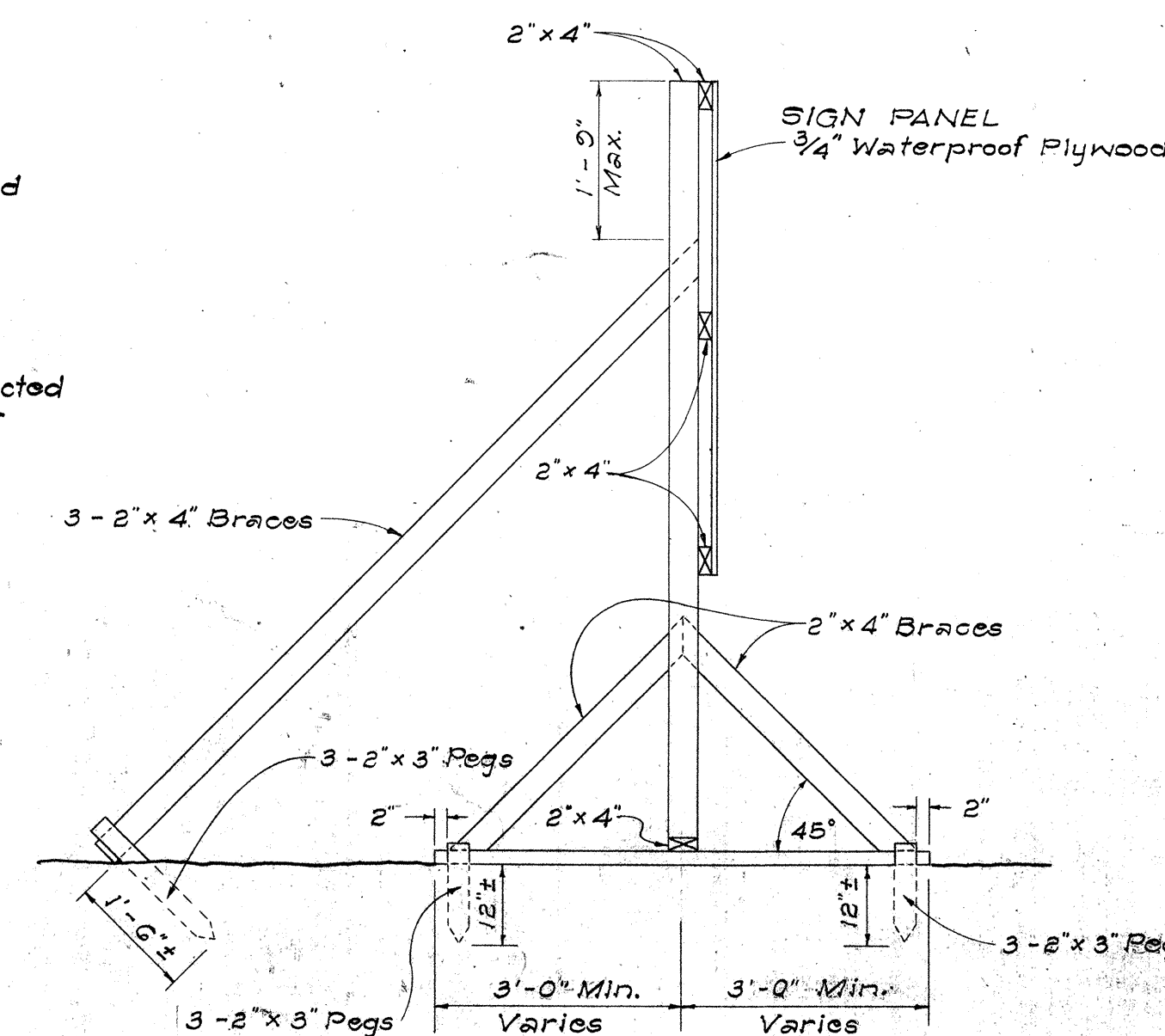
FRONT VIEW



END VIEW

CLASS II BARRICADE

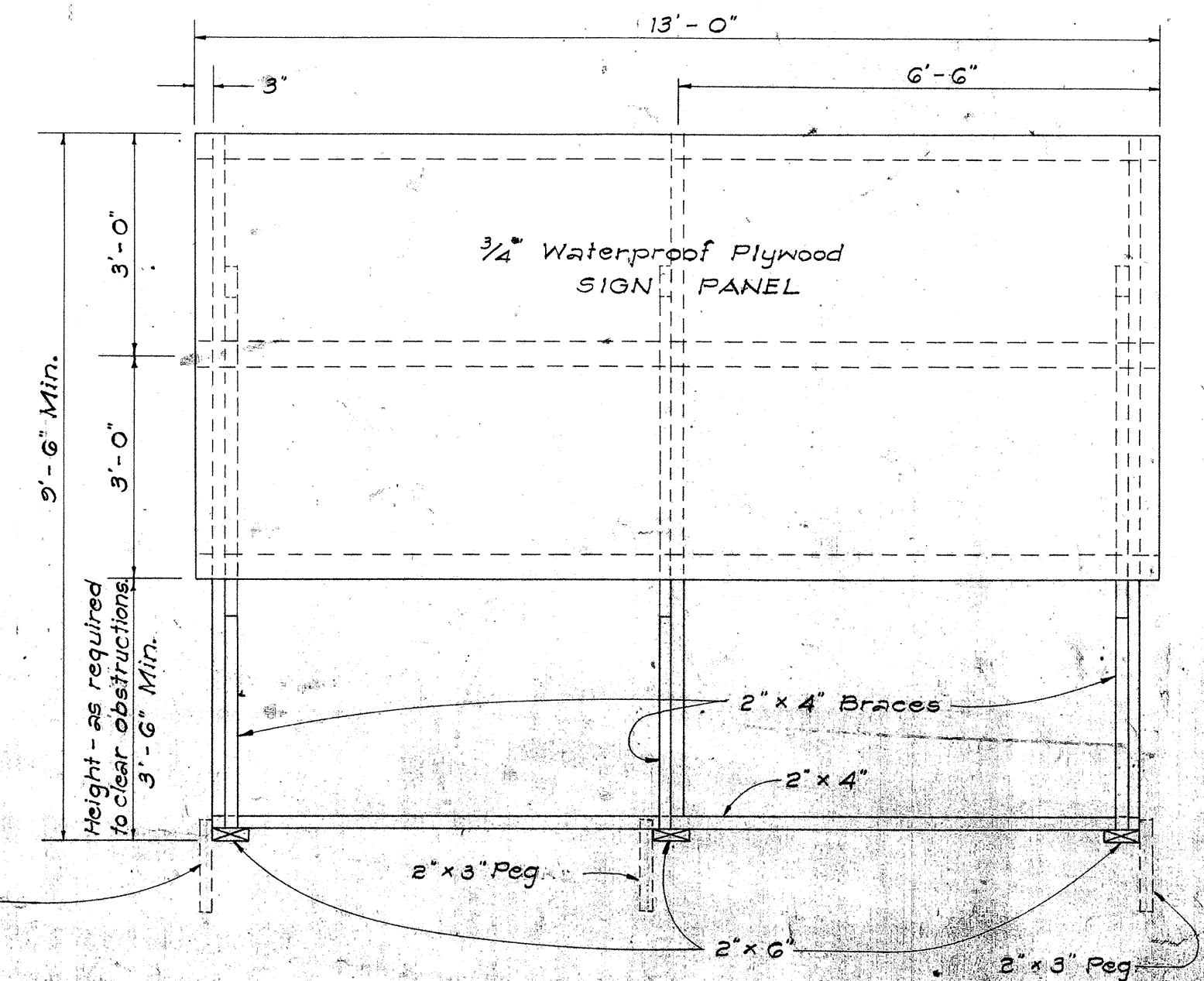
Scale: 1/2" = 1'-0"



SIDE VIEW
(SIGN FRAME ANCHORED IN GROUND)

ELEVATIONS

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



FRONT VIEW

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.
 - 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 ciphers 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.

REVISED: February 25, 1969
REVISED: October 2, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS
CONSTRUCTION IDENTIFICATION SIGN
AND
WOOD BARRICADES

SCALE: As Shown DATE:

SHEET No. 11 OF 12 SHEETS

YOUR HIGHWAY TAXES AT WORK

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

STATE HIGHWAY
FUNDS
\$ 000,000
HAWAII STATE
DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

SIGN PANEL

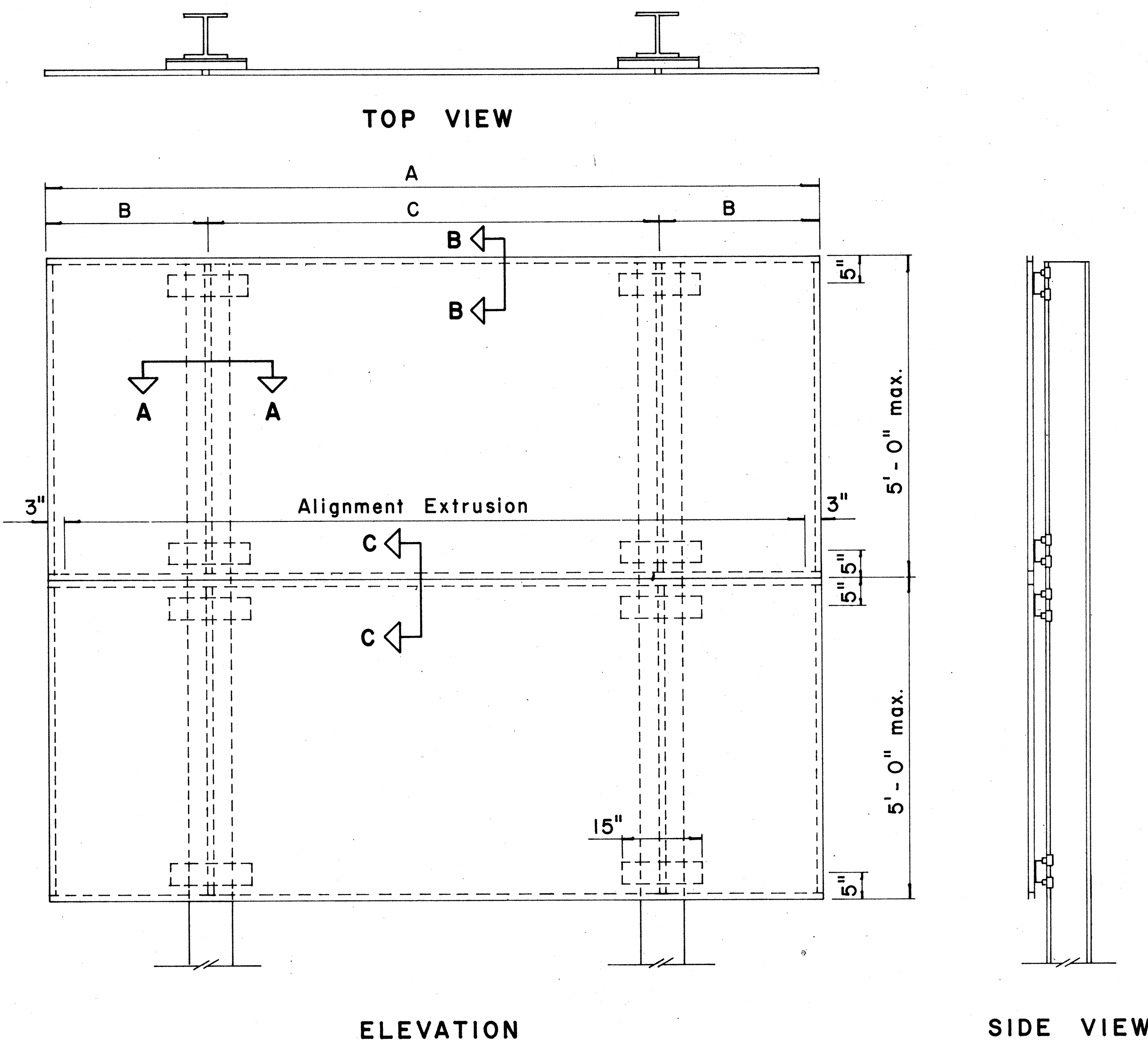
Scale: 3/4" = 1'-0"

INTERSTATE SYSTEM CONSTRUCTION IDENTIFICATION SIGN

Scale: As Shown

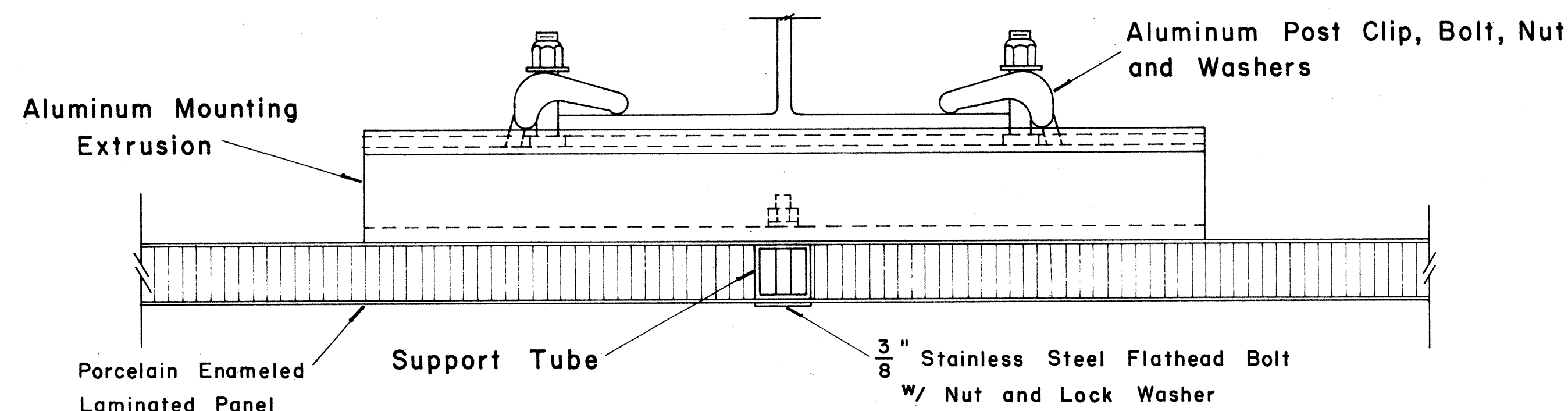
(GROUND MOUNTED SIGNS)
SUPPORT SPACING TABLE

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"



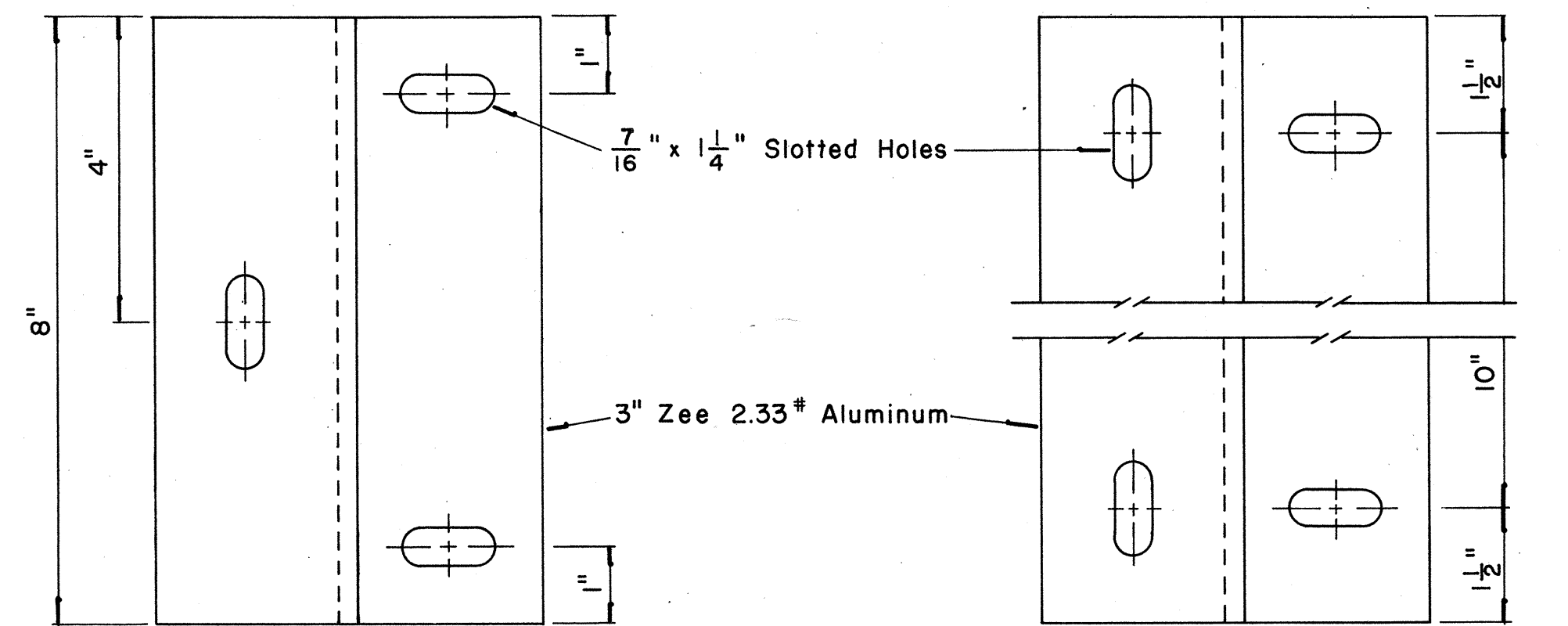
TYPICAL SIGN ASSEMBLY

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



SECTION "A-A"

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

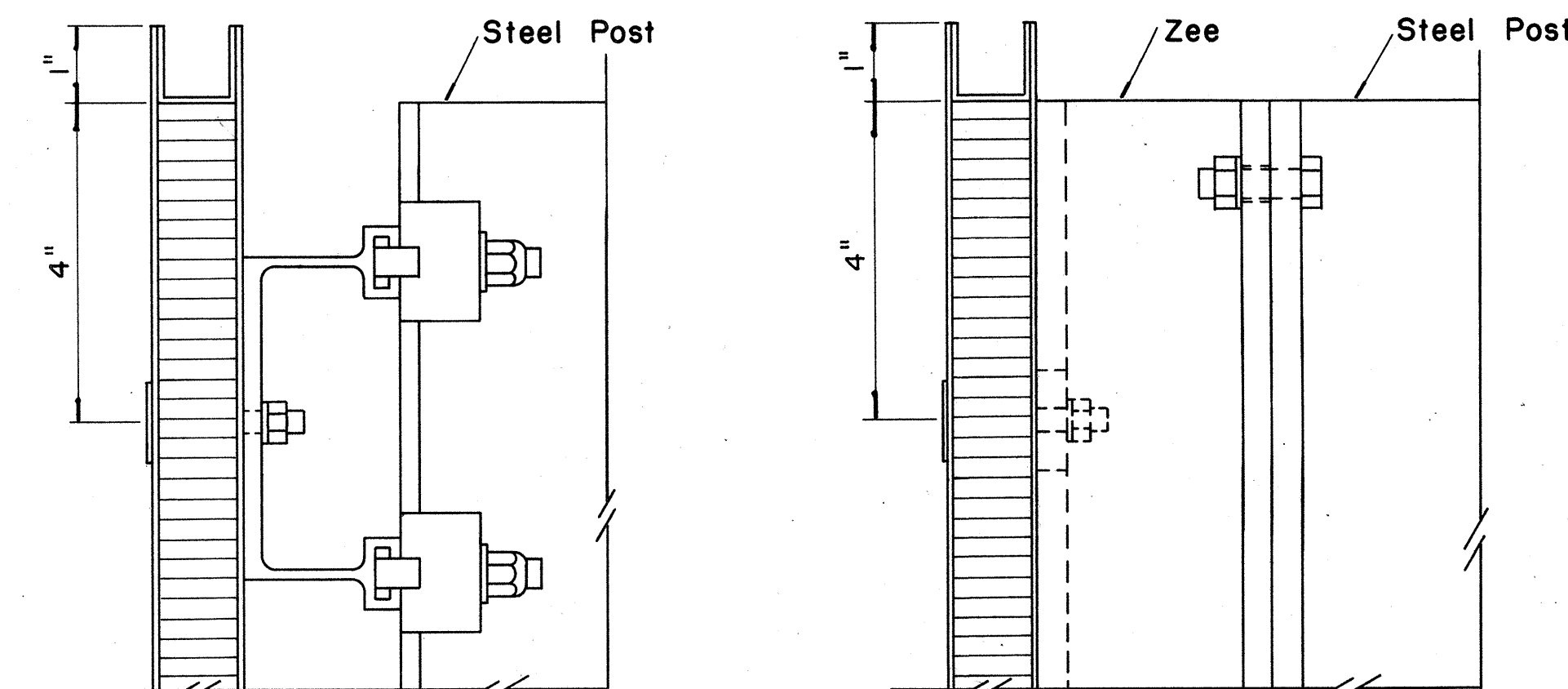


END MOUNTING

INTERMEDIATE MOUNTING

ZEE MOUNTING DETAILS

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



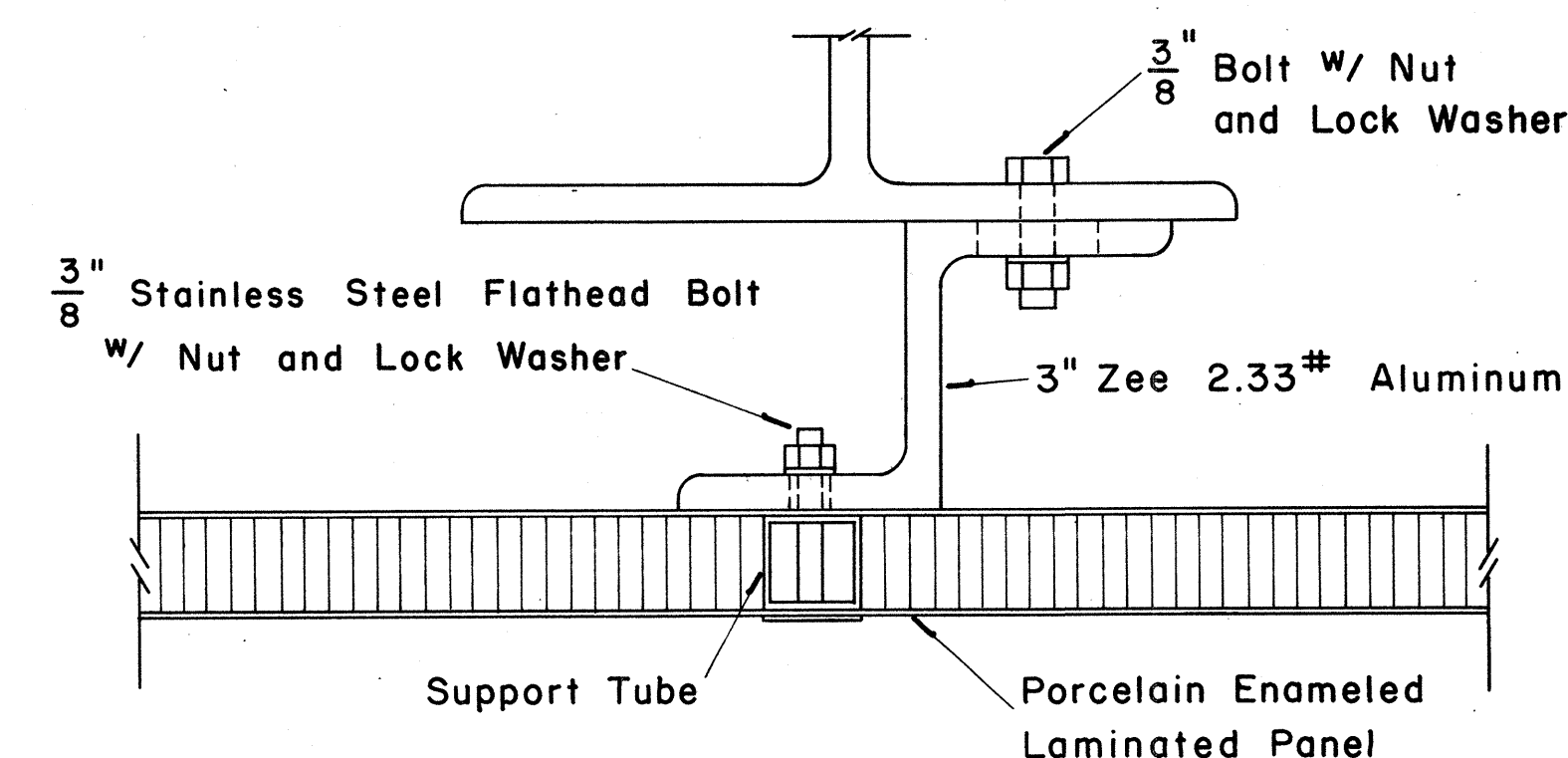
SECTION "B-B"

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

SECTION "B-B"

(Alternate)

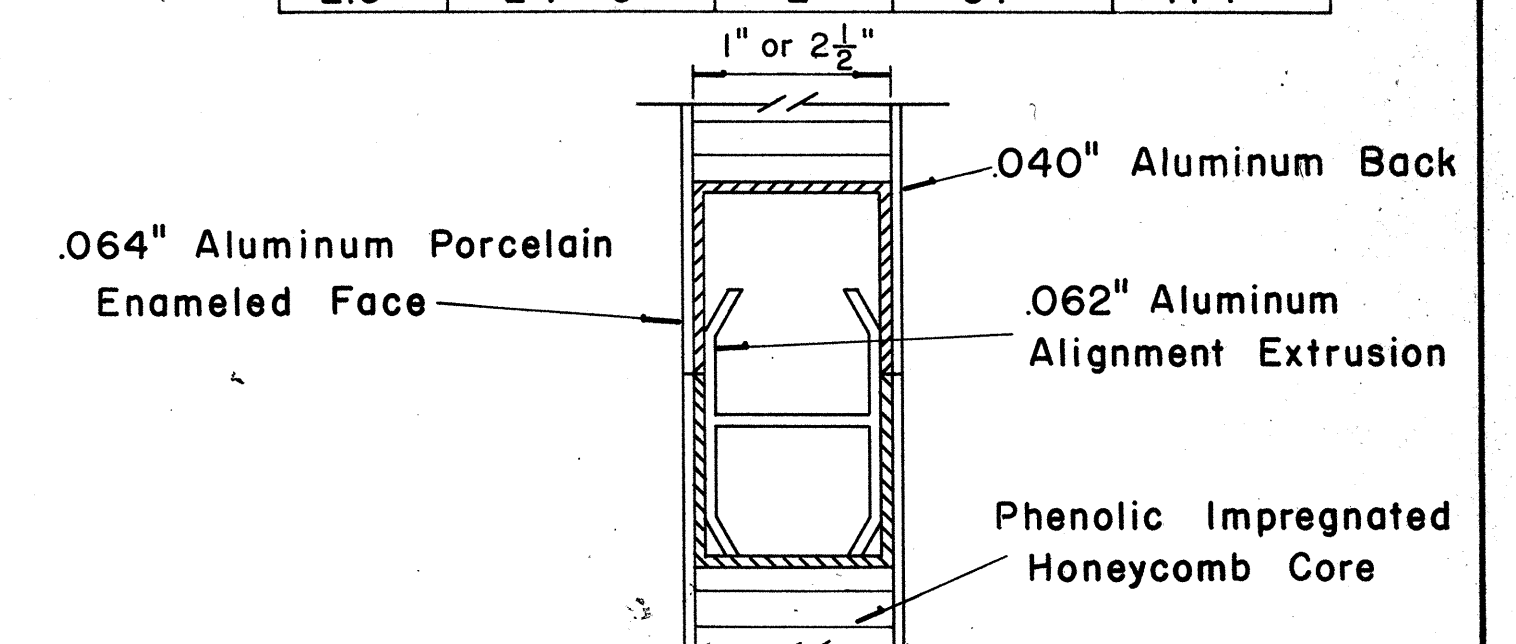
Scale: $\frac{1}{2}$ " = 1"



SECTION "A-A"

(Alternate)

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



CLOSURE DETAIL
SECTION "C-C"

FULL SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

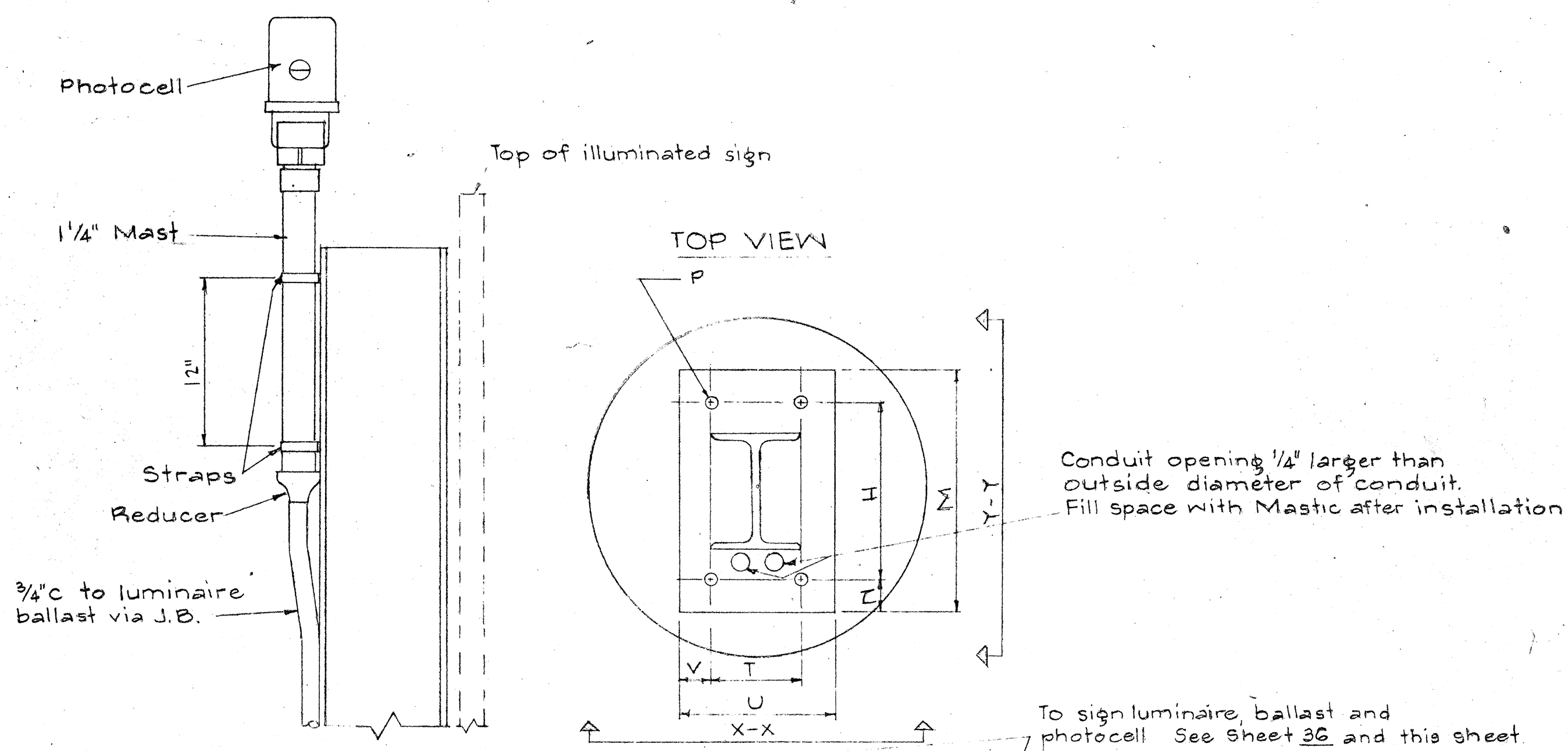
LAMINATED ALUMINUM

SIGN PANELS

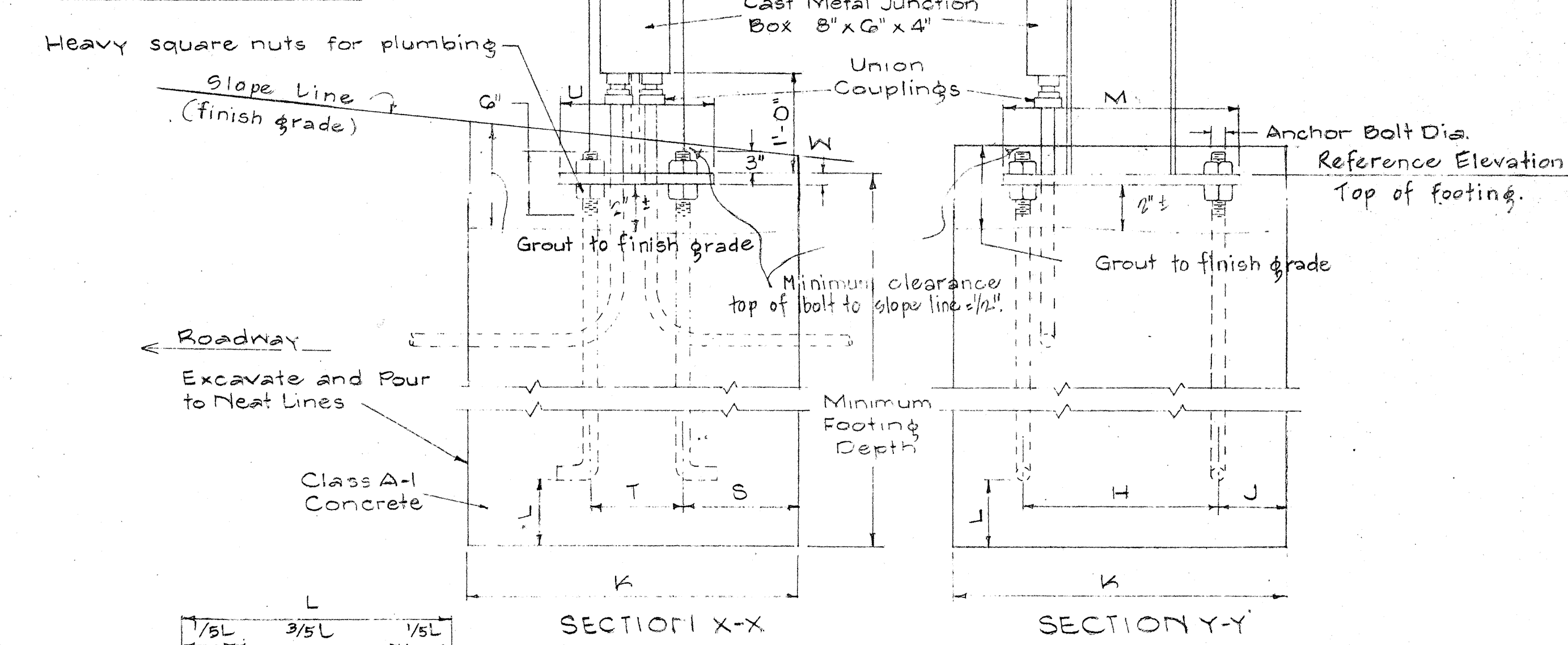
(GROUND MOUNTED)

Scale: As Shown

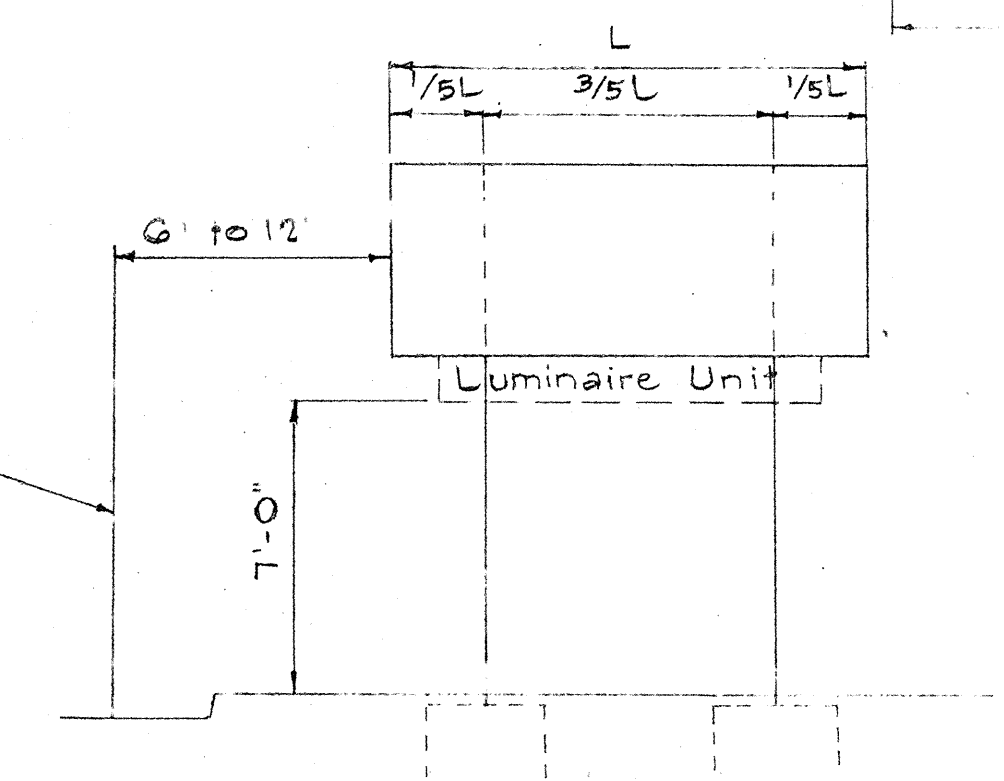
SHEET No. 14 OF 19 SHEETS



PHOTOCELL INSTALLATION ON WF-BEAM POST



FOUNDATION DETAILS FOR GROUND MOUNTED EXPRESSWAY SIGN LAMINATE ALUMINUM TYPE VI FOOTING

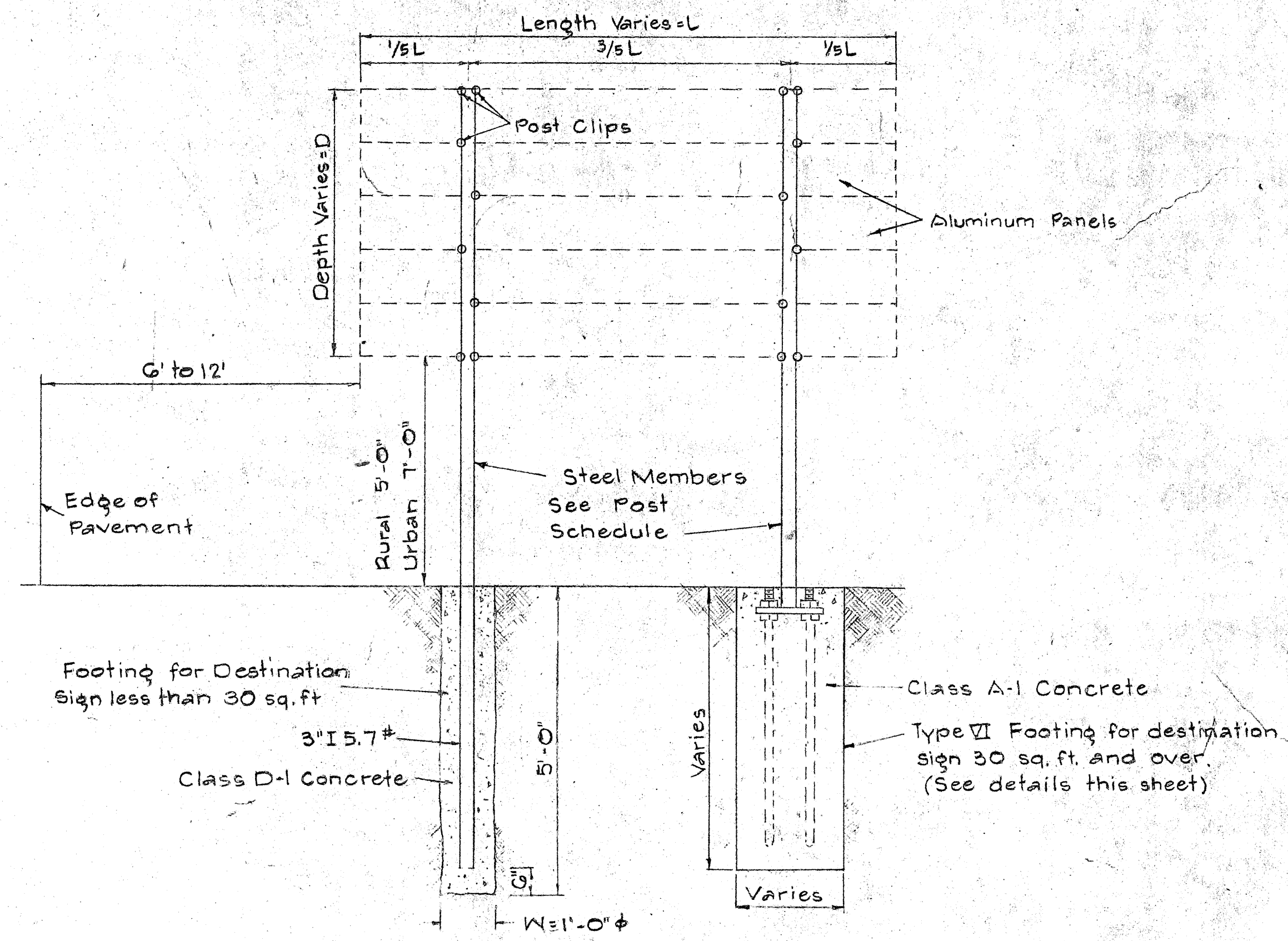


TYPICAL GROUND MOUNTED EXPRESSWAY SIGN TYPE A

NOTE:
Conduit and Junction box details are shown only for ground mounted illuminated Expressway signs.

SUPPORT STRUCTURE DATA FOR GROUND MOUNTED SIGNS																						
POST SIZE	MAXIMUM SIGN AREA	POST HGT. TOP OF FOUND. TO CENTER OF SIGN *	DIMENSIONS SEC. Y-Y						DIMENSIONS SEC. X-X						ANCHOR BOLT DIA	MIN. FOOTING DEPTH (FEET)		TYPE OF WELD TO BASE PLATE				
			H	J	K	L	M	N	O	P	Q	R	S	T		U	V		W	CUT	FILL**	
12 WF27	228 sq.ft.	16'	18"	6"	30"	6"	22 1/2"	2 1/4"	1 1/4"	30"	1 1/2"	1 1/2"	6 1/2"	11"	2 1/4"	1"	1 1/4"	1 1/4"	6'	4 1/2'	3/8"	
																			5'			

NOTE:
For signs with panel areas of less than 30 sq. ft. but greater than 16 sq. ft. use 3" I 5.7# steel I beam.
* For moment calculations only. Post to be from top of foundation to top of sign.
** For fills with side slopes flatter than 4:1, deduct 2 feet.



TYPICAL DESTINATION SIGN PANEL & POST

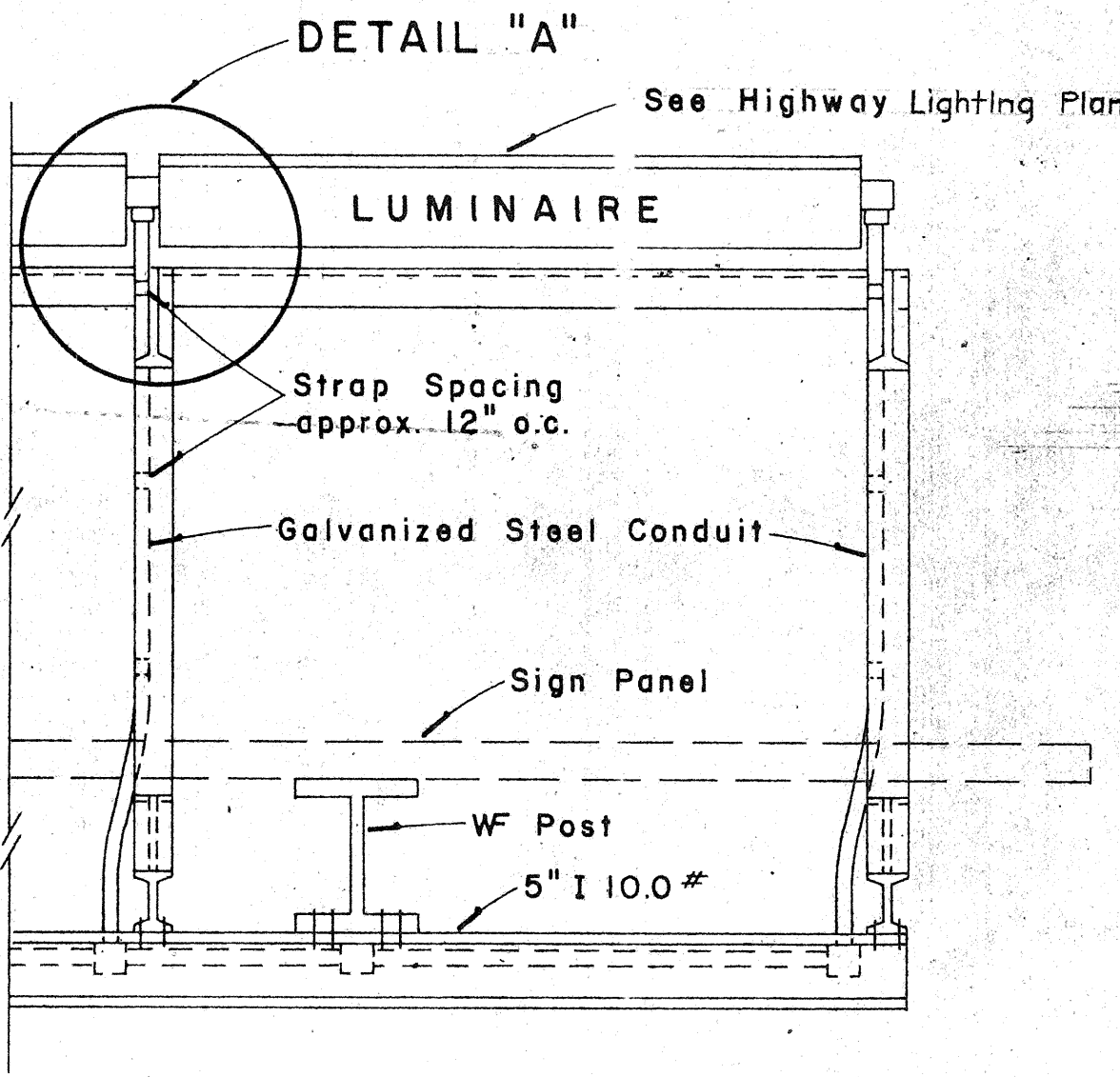
DATE:
SURVEY PLOTTED BY:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
NOTE BOOK:
NO.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION & EXPRESSWAY SIGNS
DETAILS & SCHEDULES
TYPE A SIGN SUPPORT
TYPE VI FOOTING
INTERSTATE ROUTE H-1
PROJ. NO. I-H-1(64)12, UNIT I
Scale: No to Scale Date: 8/10/68
SHEET No. 16 OF 19 SHEETS

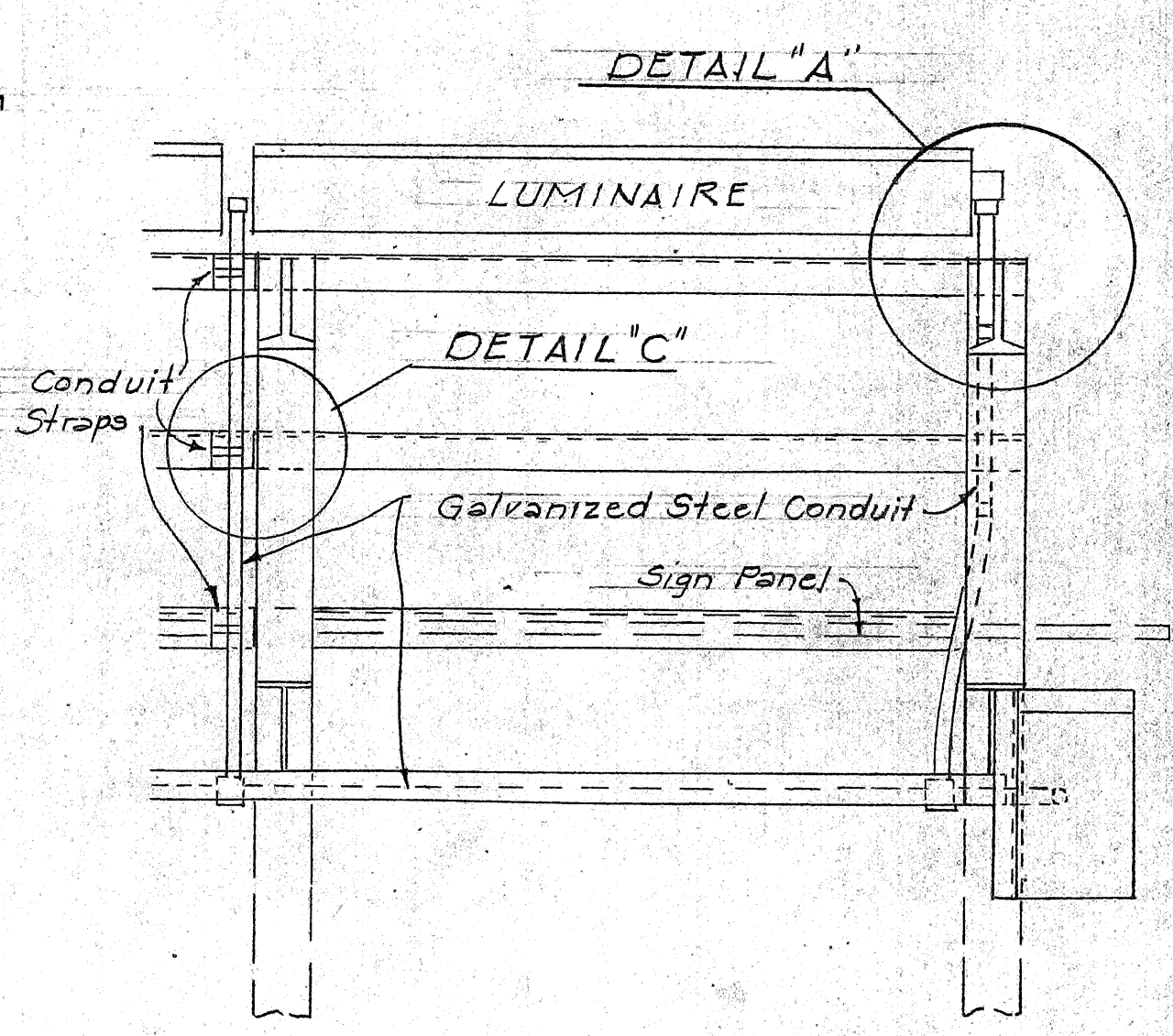
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	2-11-104-12	1969	34	158
2-11-104-11					

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.



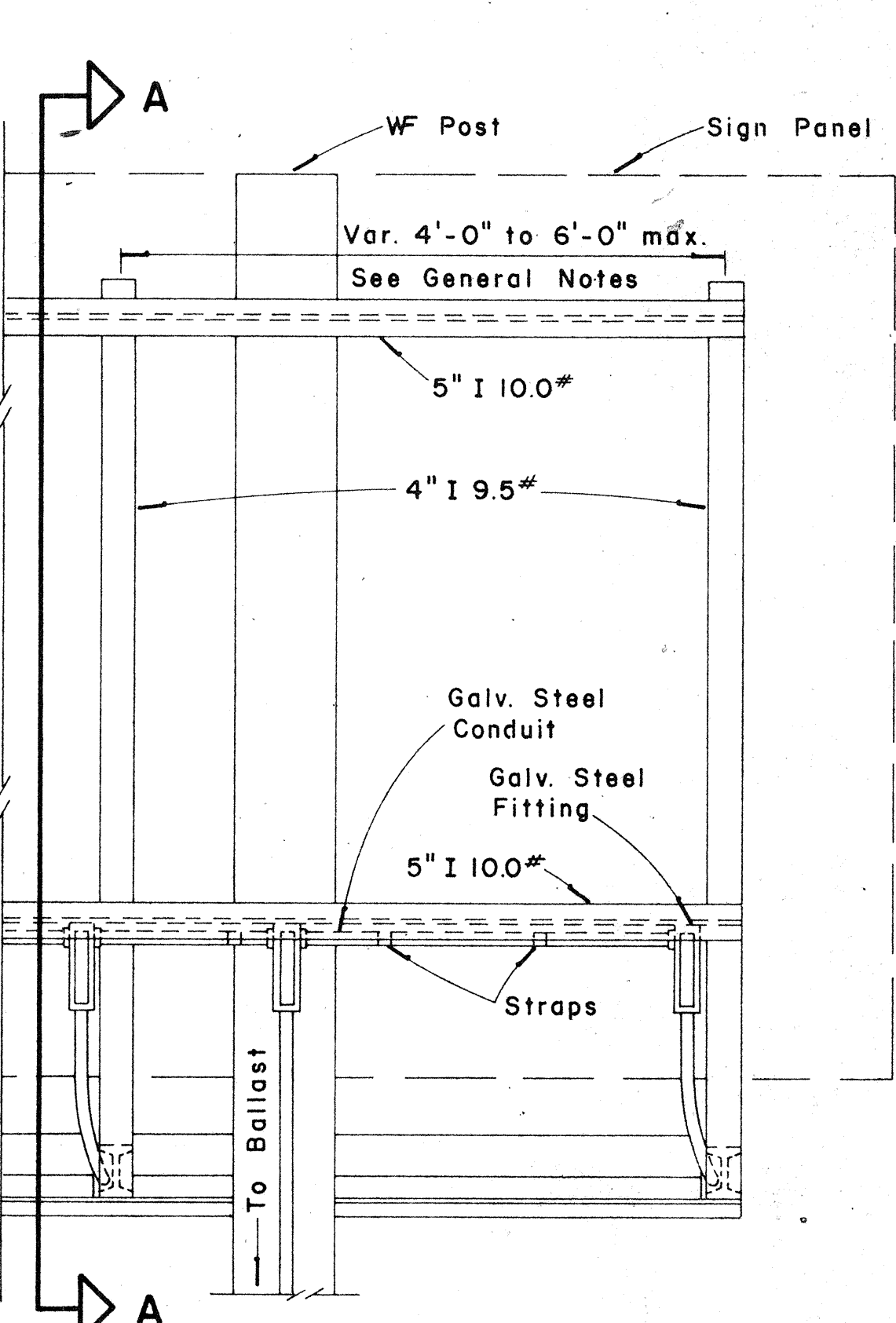
GROUND MOUNTED



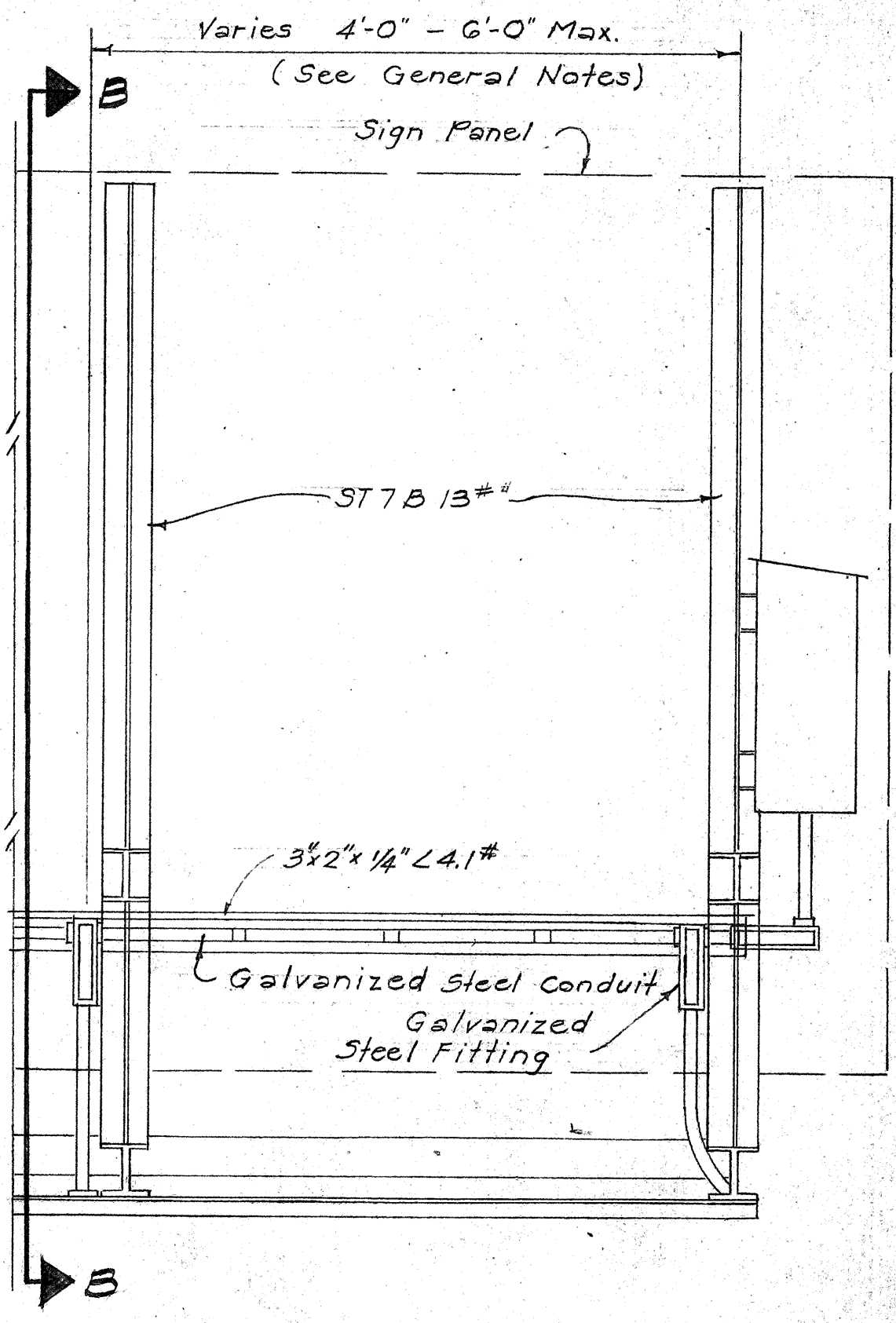
STRUCTURE MOUNTED

TOP VIEW LUMINAIRE MOUNTING

Scale: 1" = 1'-0"



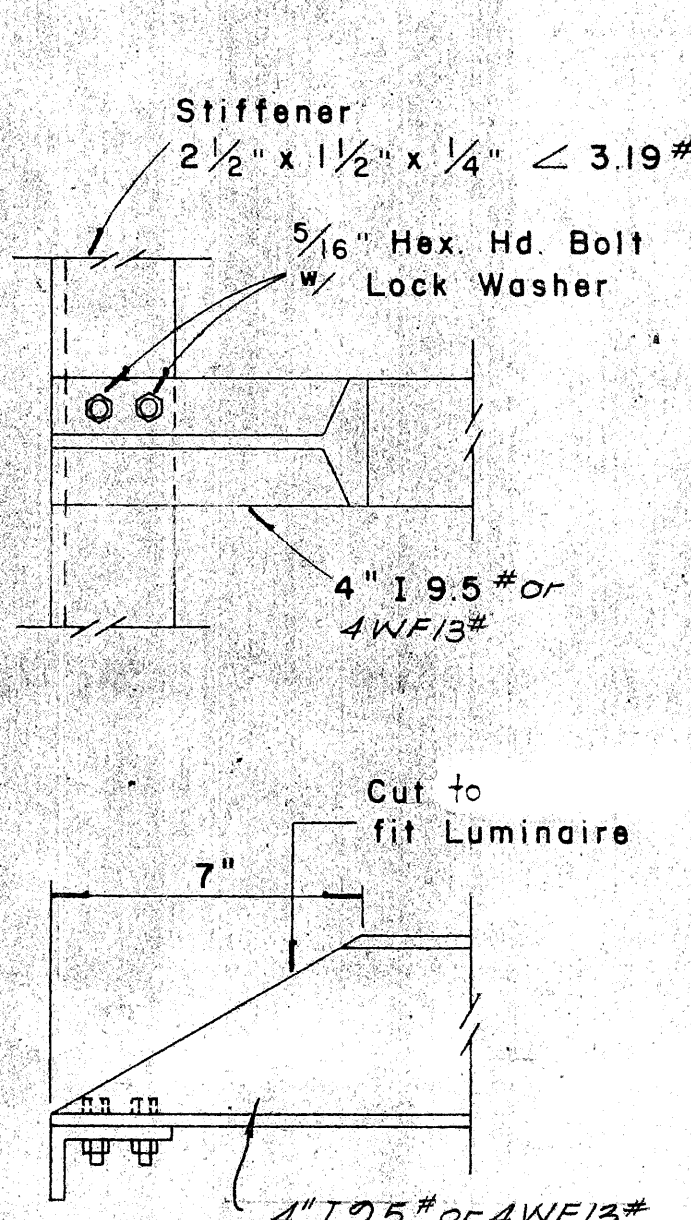
GROUND MOUNTED



STRUCTURE MOUNTED

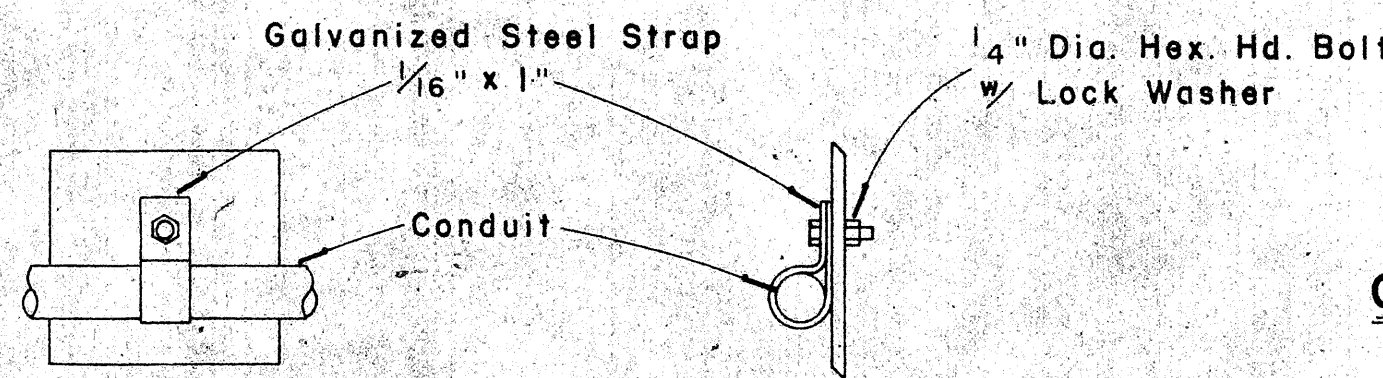
REAR VIEW LUMINAIRE MOUNTING

Scale: 1" = 1'-0"



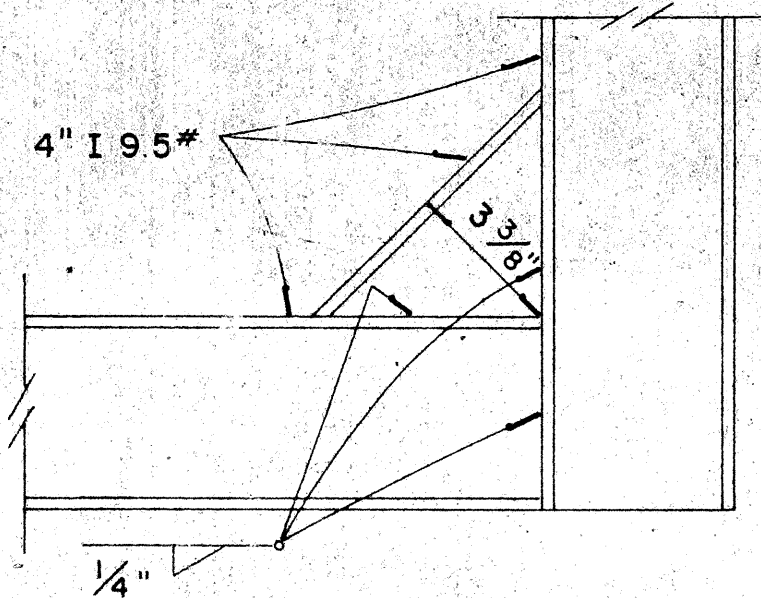
DETAIL "A"

Scale: 3" = 1'-0"



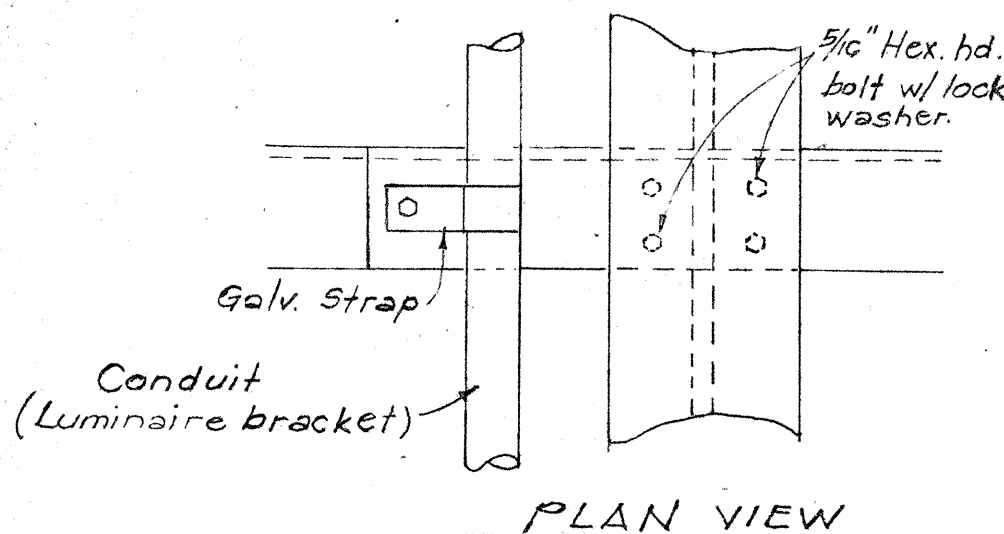
CONDUIT STRAP DETAIL

Scale: 3" = 1'-0"

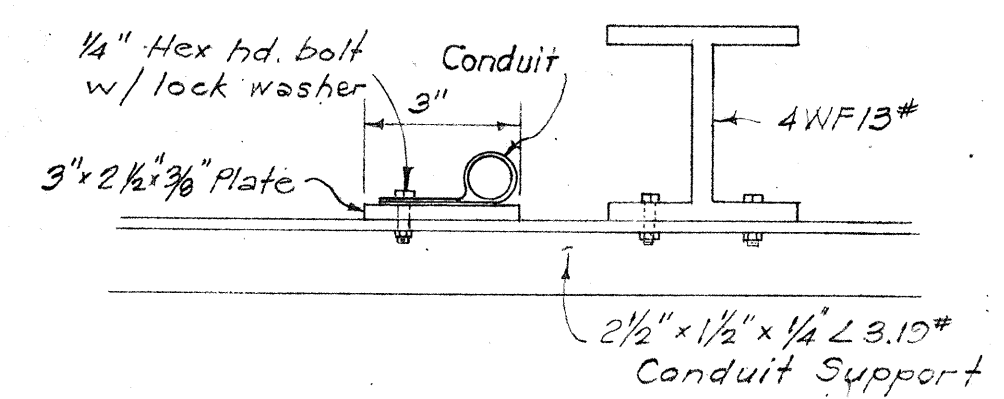


DETAIL "B"

Scale: 3" = 1'-0"

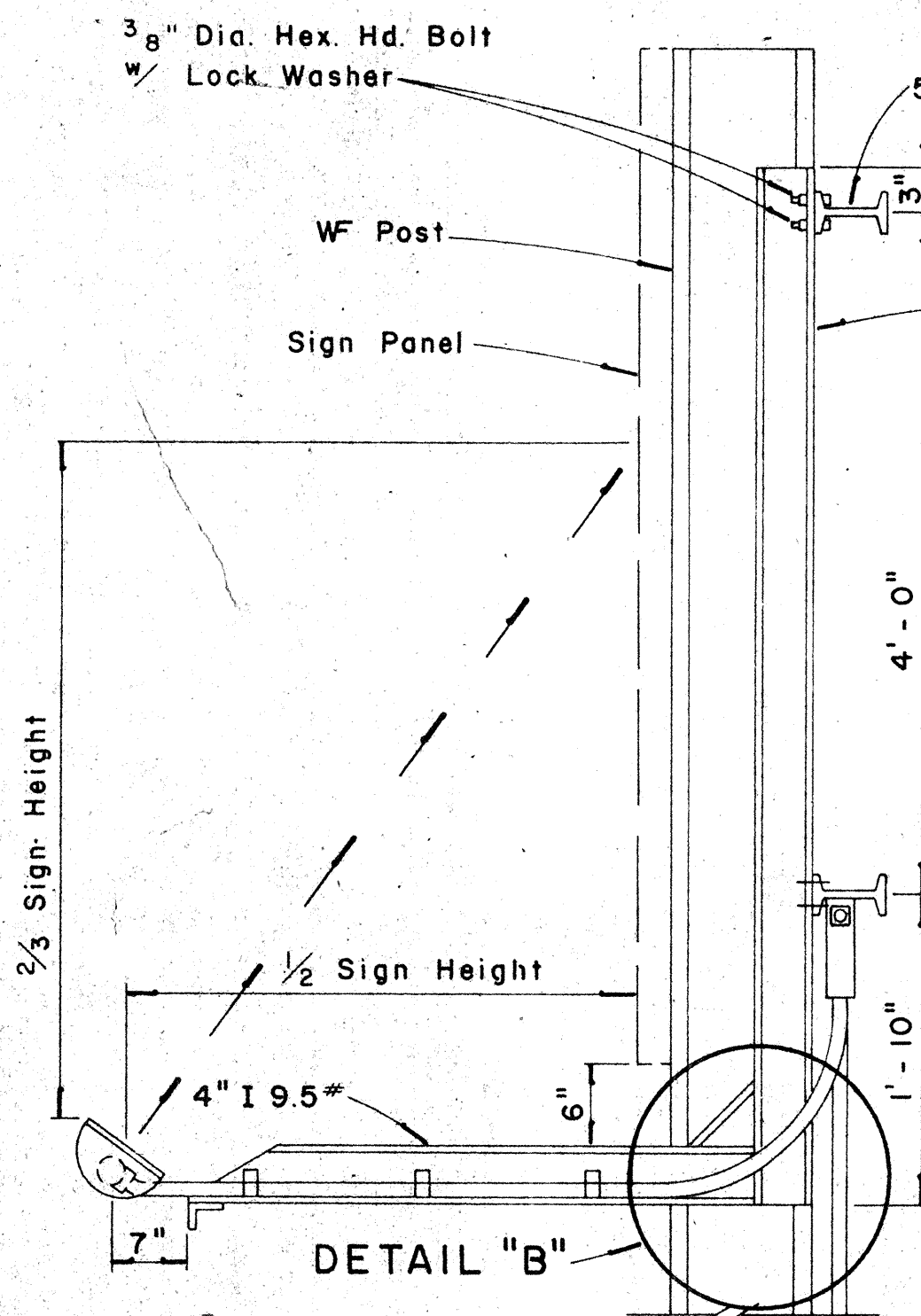


PLAN VIEW



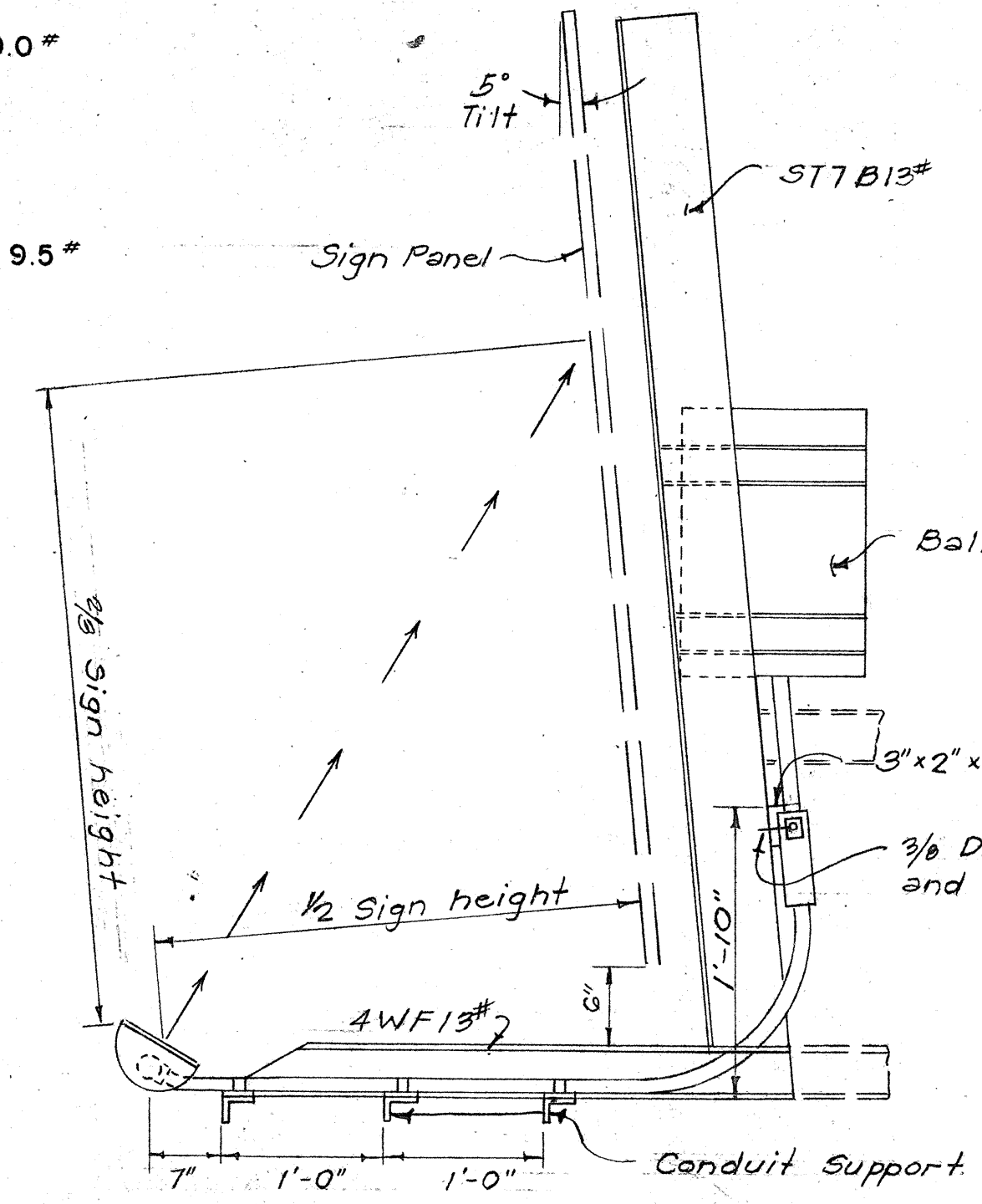
DETAIL "C"

Scale: 3" = 1'-0"



SECTION "A-A"

Scale: 1" = 1'-0"



SECTION "B-B"

Scale: 1" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

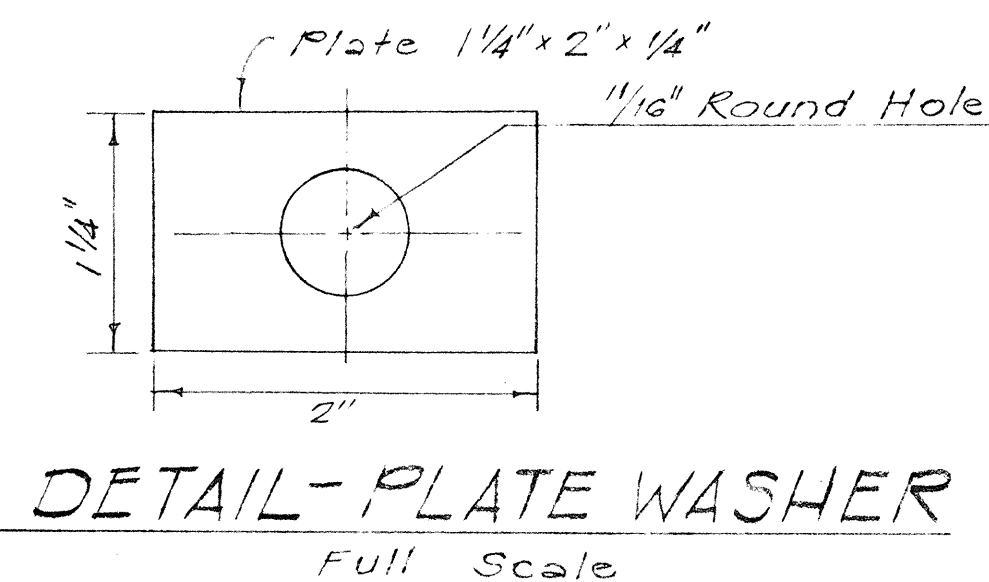
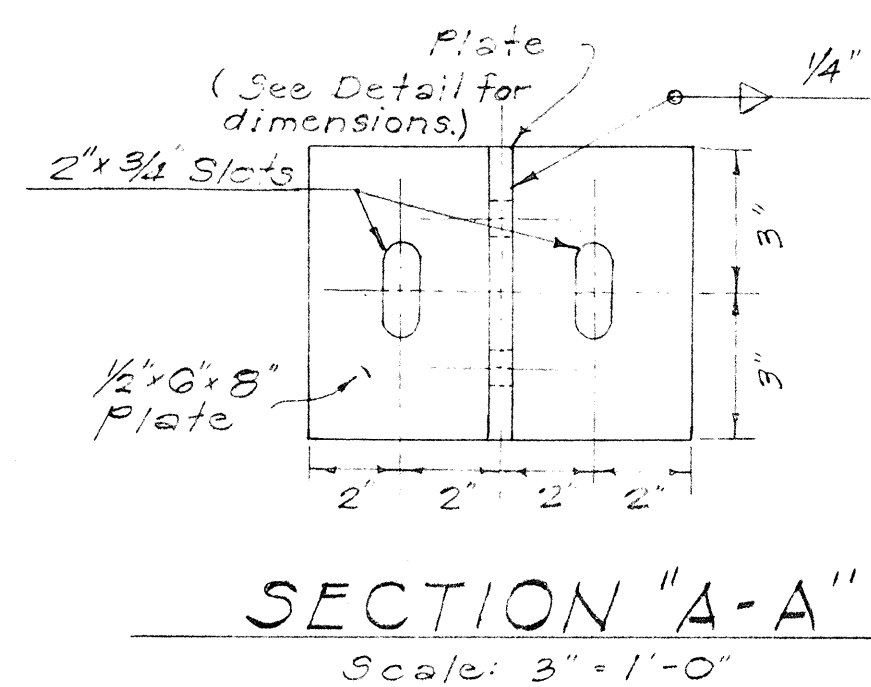
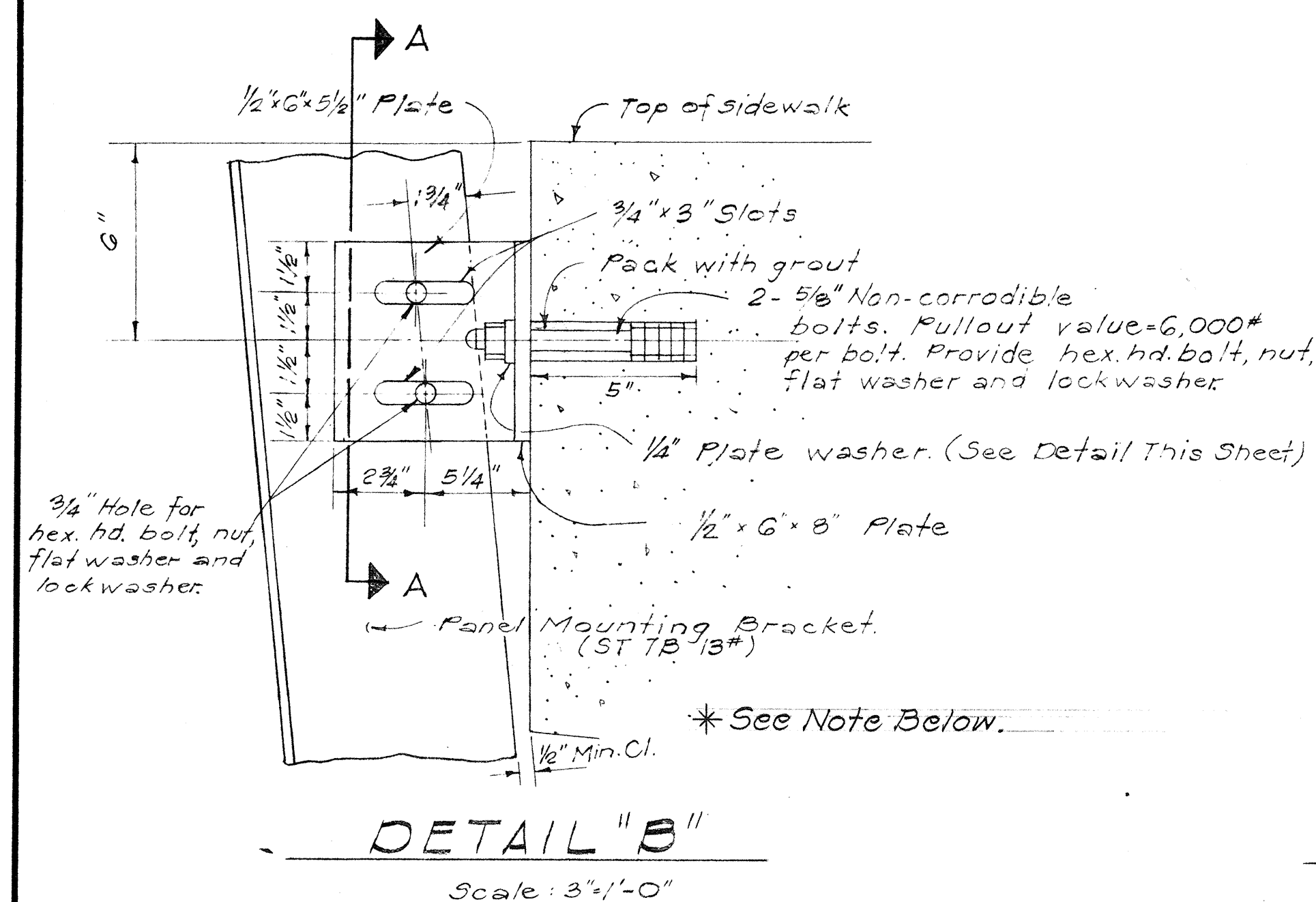
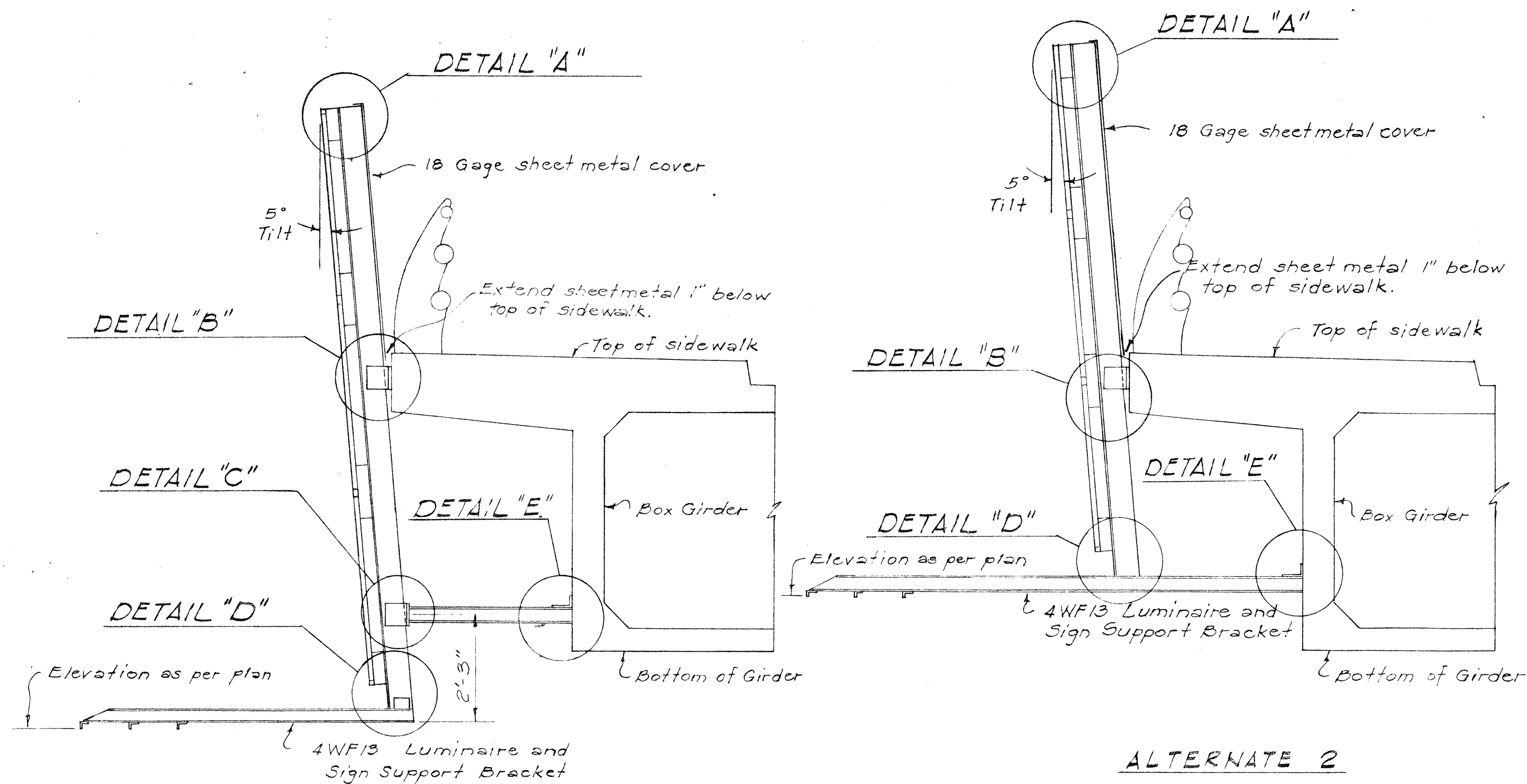
EXPRESSWAY SIGNS LUMINAIRE MOUNTINGS

Scale: As Shown

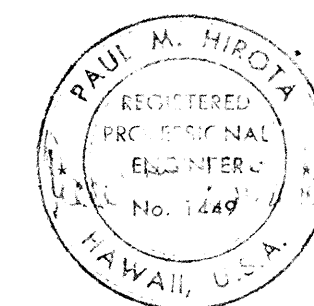
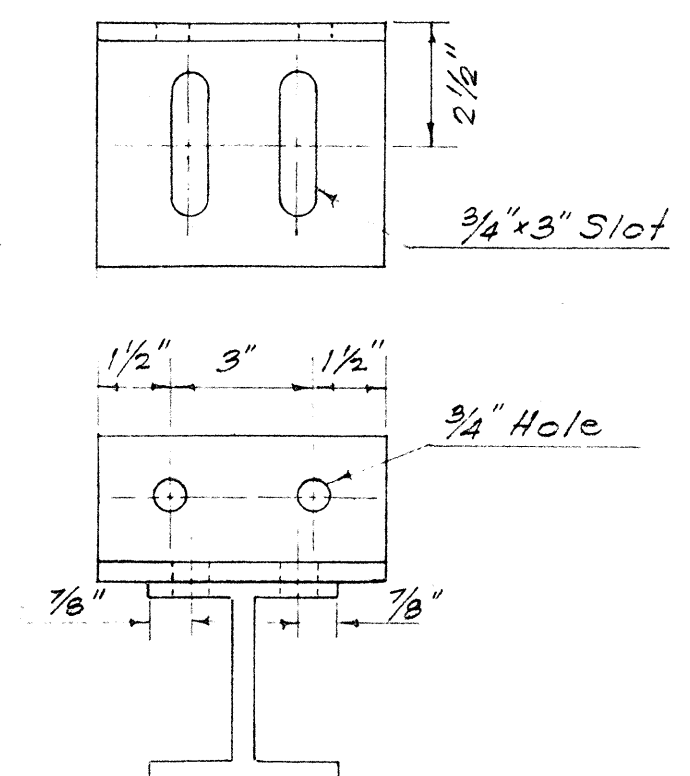
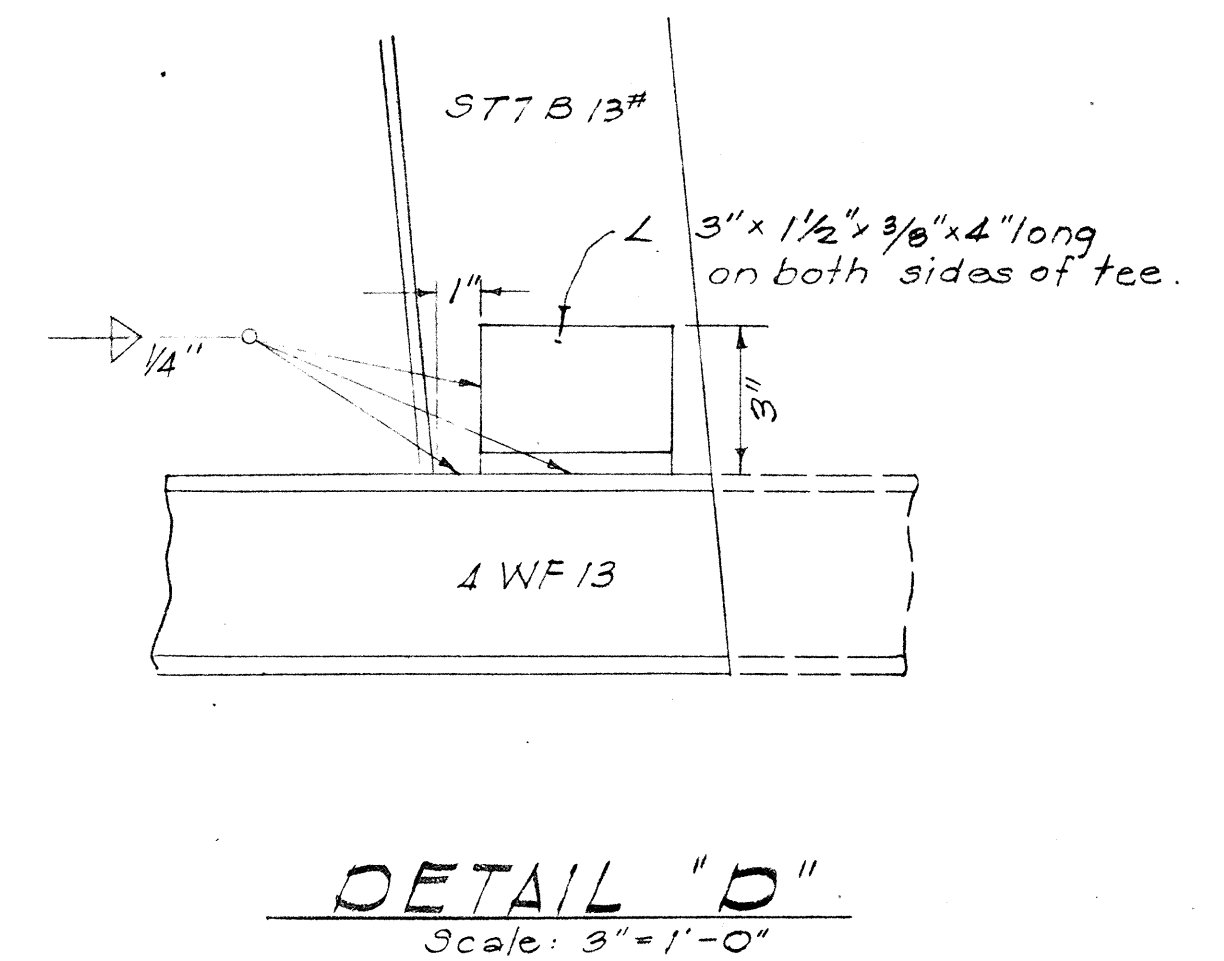
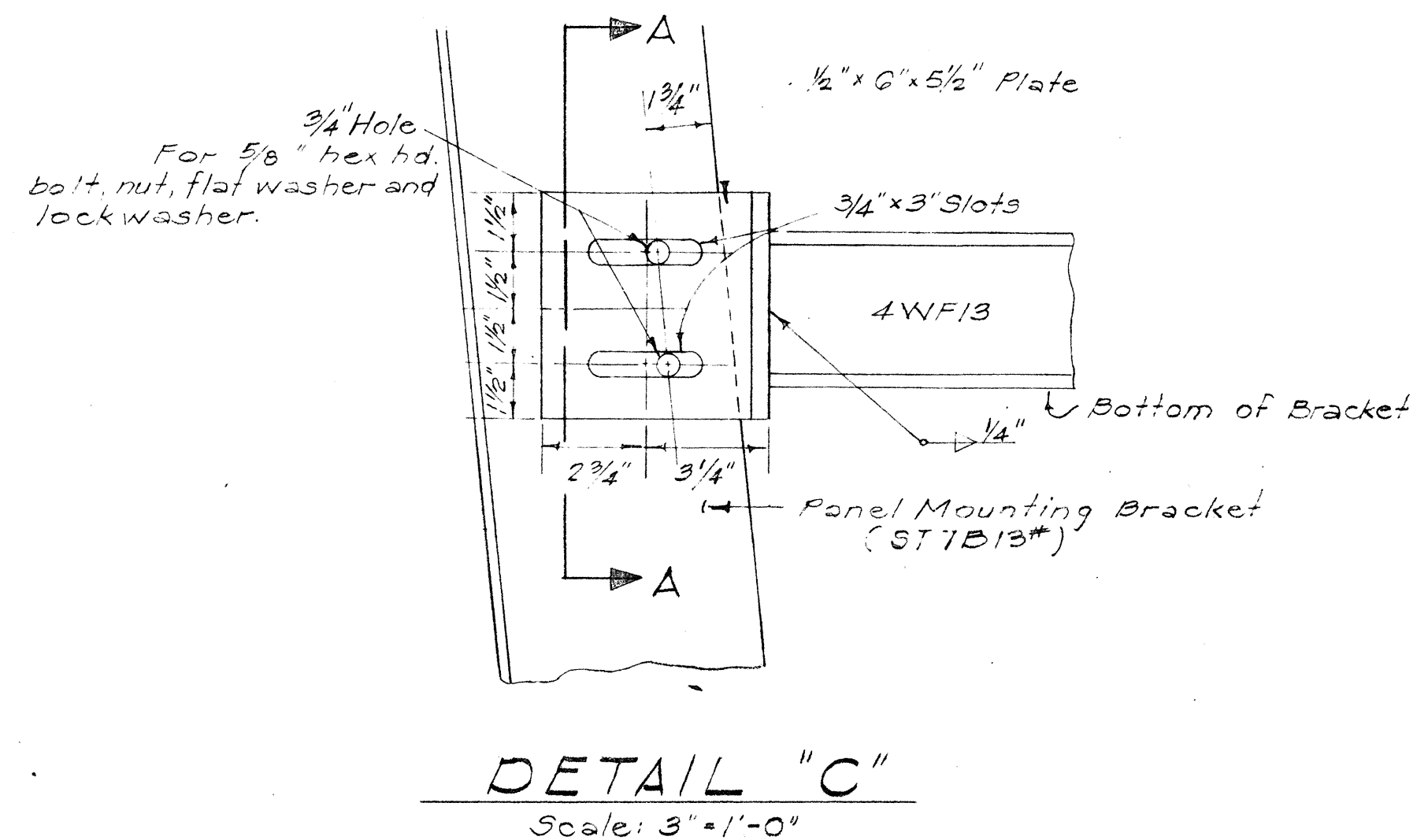
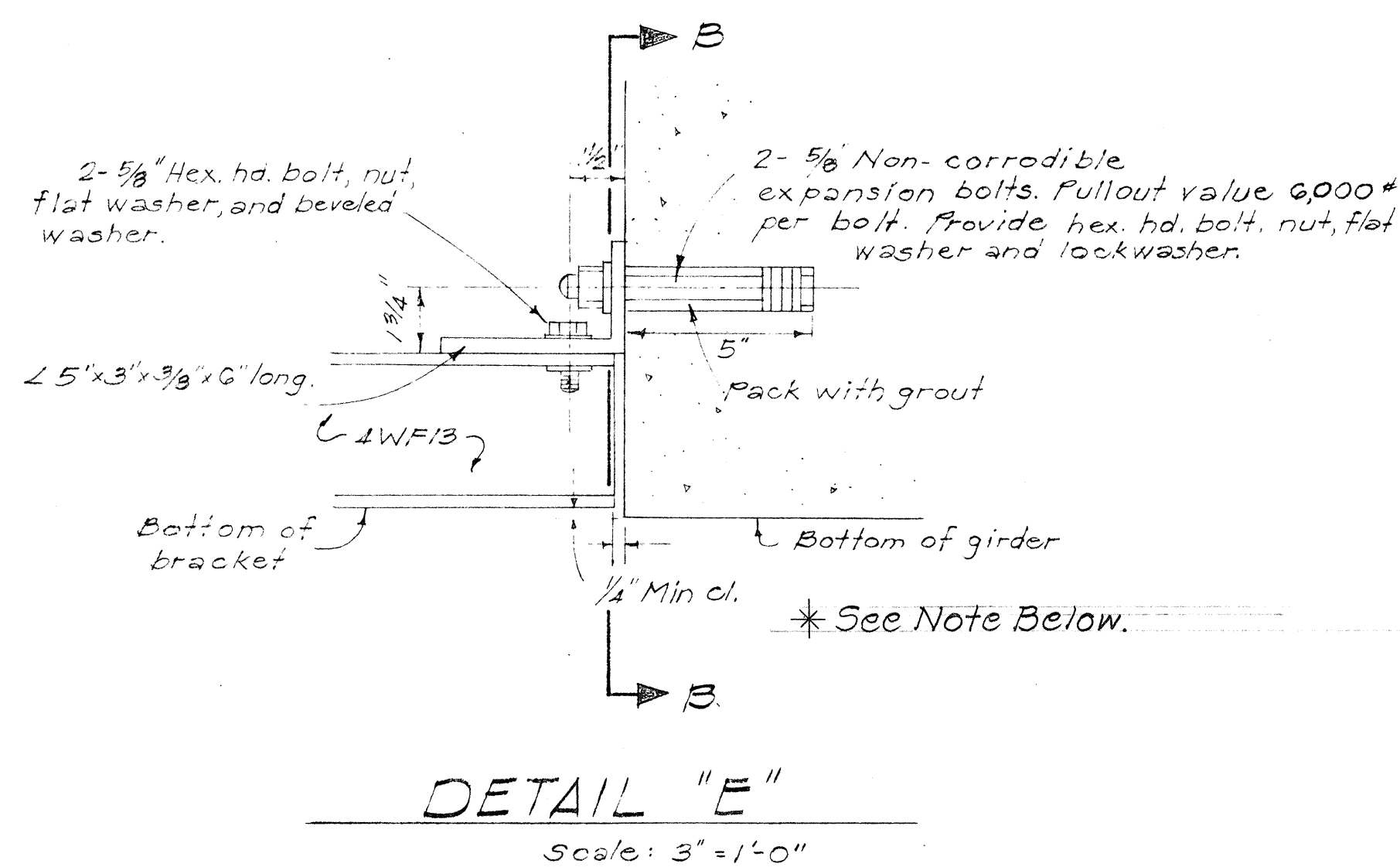
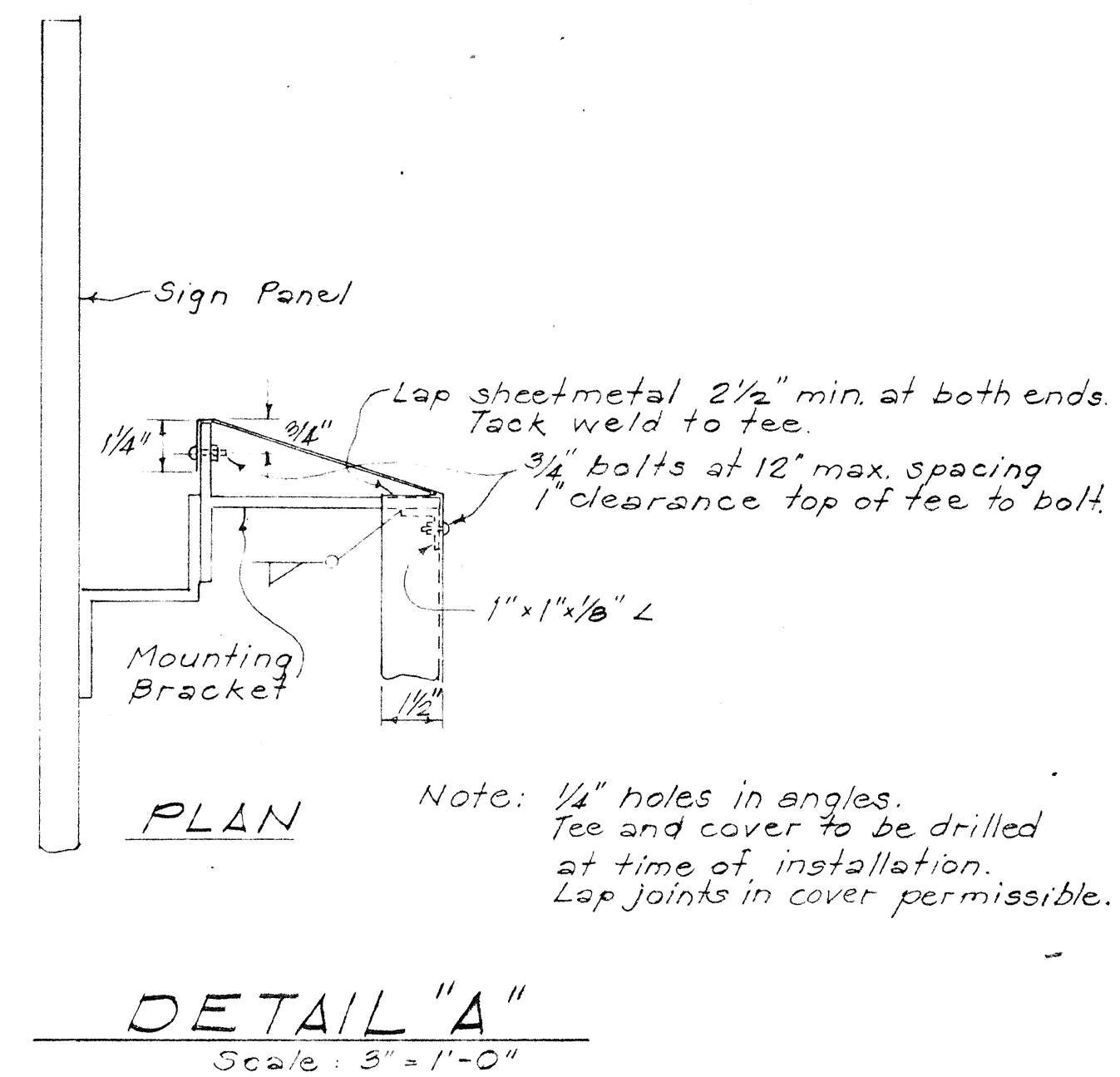
SHEET No. 17 OF 19 SHEETS

DESIGNED BY	DATE
CHECKED BY	
NOTED BY	
ORIGINAL FILED	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(64):12 Unit I	1969	35	158
		I-H-1(16):11			



*NOTE: Furnishing and installing expansion bolts and accessories for mounting sign incidental to Item 107.01
Panel for Expressway Sign - Applicable to Details "B" and "E."



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**EXPRESSWAY SIGN SUPPORT
(STRUCTURE MOUNTED)**

INTERSTATE ROUTE H-1
PROJ. NO. I-H-1(64):12,
UNIT I

Scale: As Noted Date: 8/10/68

SHEET No. 18 OF 19 SHEETS

