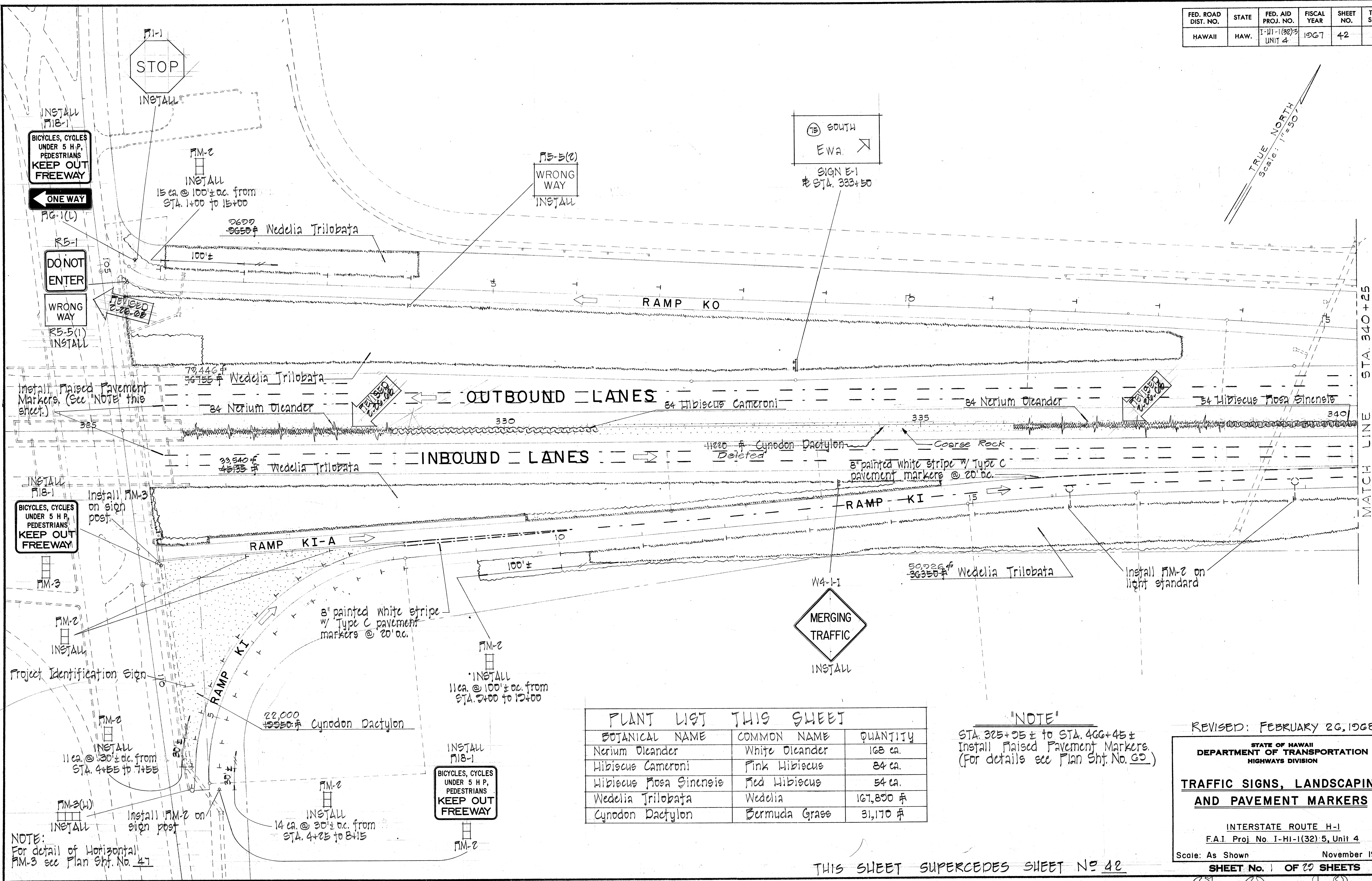
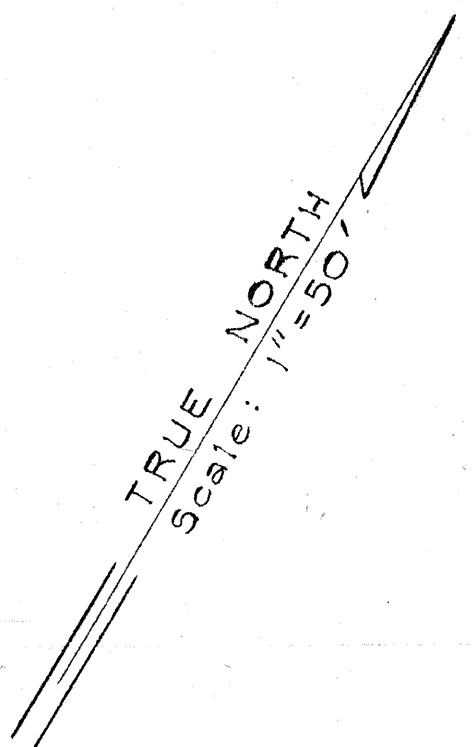


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-11-1(32)5 UNIT 4	1967	42	101



PLANT LIST THIS SHEET		
BOTANICAL NAME	COMMON NAME	QUANTITY
Nerium Oleander	White Oleander	168 ea.
Hibiscus Cameroni	Pink Hibiscus	84 ea.
Hibiscus Rosa Sinensis	Red Hibiscus	54 ea.
Wedelia Trilobata	Wedelia	167,800 #
Cynodon Dactylon	Bermuda Grass	31,170 #

"NOTE"
 STA. 325+25 ± to STA. 466+45 ±
 Install Raised Pavement Markers.
 (For details see Plan Sht. No. 42)

REVISED: FEBRUARY 26, 1968

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**TRAFFIC SIGNS, LANDSCAPING
 AND PAVEMENT MARKERS**

INTERSTATE ROUTE H-1
 F.A.I. Proj. No. I-11-1(32)5, Unit 4

Scale: As Shown November 1967

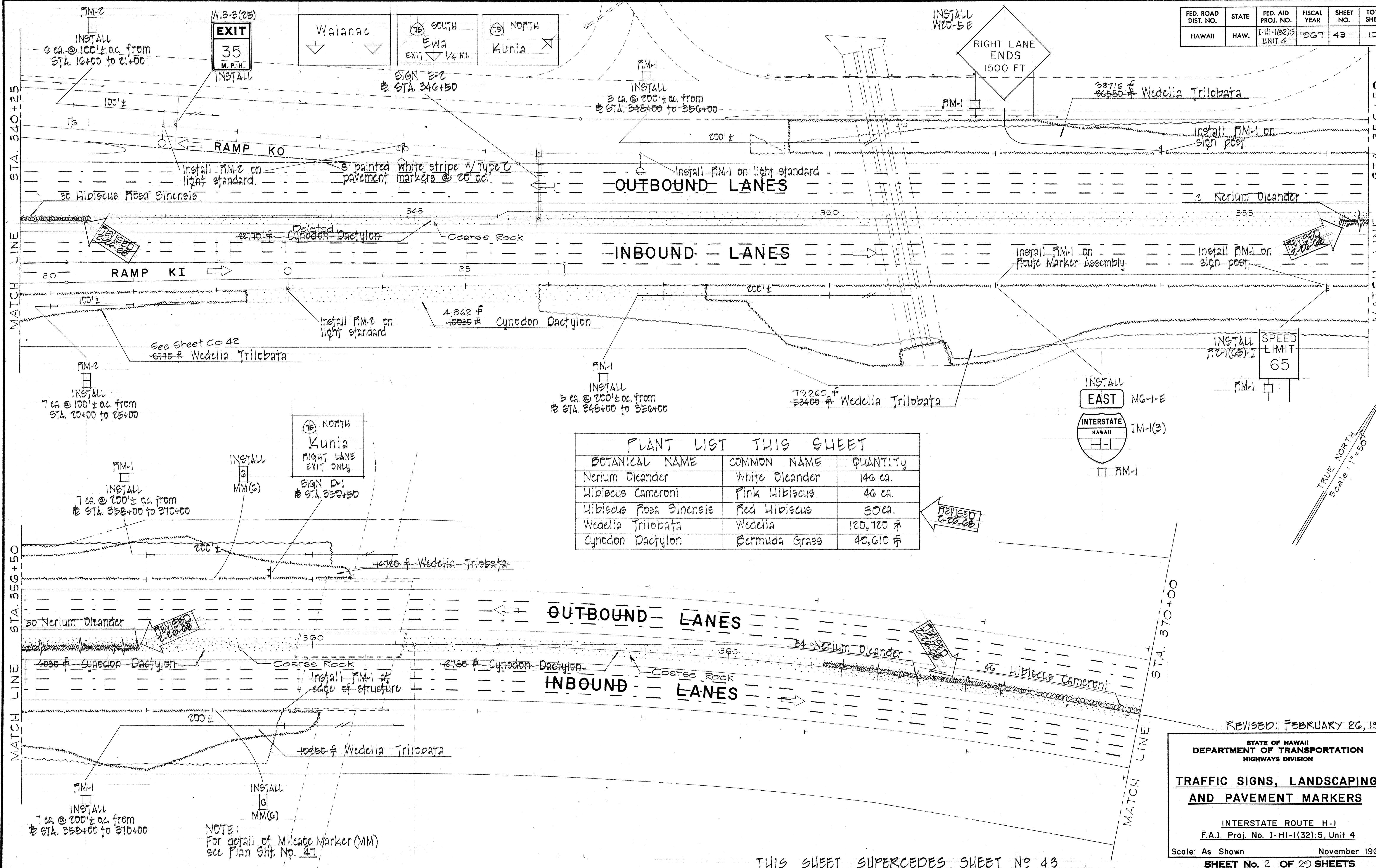
SHEET No. 1 OF 22 SHEETS

THIS SHEET SUPERCEDES SHEET NO 42

DATE	_____
DESIGNED BY	_____
DRAWN BY	_____
CHECKED BY	_____
NOTED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____

NOTE:
 For detail of Horizontal
 FM-3 see Plan Sht. No. 41

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-111-1(32)5 UNIT 4	1967	43	101



PLANT LIST THIS SHEET		
BOTANICAL NAME	COMMON NAME	QUANTITY
Nerium Oleander	White Oleander	146 ea.
Hibiscus Cameroni	Pink Hibiscus	46 ea.
Hibiscus Rosa Sinensis	Red Hibiscus	30 ea.
Wedelia Trilobata	Wedelia	120,720 #
Cynodon Dactylon	Bermuda Grass	40,610 #

DATE	
SURVEY PLANNED BY	
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	

REVISED: FEBRUARY 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TRAFFIC SIGNS, LANDSCAPING
AND PAVEMENT MARKERS**

INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32)5, Unit 4

Scale: As Shown November 1967

SHEET No. 2 OF 20 SHEETS

THIS SHEET SUPERCEDES SHEET No. 43

43

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(32)5 UNIT 4	1967	44	101

NOTE:
For detail of Reflector Marker mounted on bridge railing see Plan Sht. No. 47

TRUE NORTH
Scale 1"=50'

PLANT LIST THIS SHEET		
BOTANICAL NAME	COMMON NAME	QUANTITY
Nerium Oleander	White Oleander	174 ea.
Hibiscus Camerani	Pink Hibiscus	85 ea.
Hibiscus Rosa Sinensis	Red Hibiscus	84 ea.
Cynodon Dactylon	Bermuda Grass	23,525 #

75
Kunia
Ewa
EXIT 1 MILE

SIGN D-2
STA. 398+50

INSTALL
PB-4-I
EMERGENCY
PARKING
ONLY

TRUE NORTH
Scale 1"=50'

REVISED: FEBRUARY 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

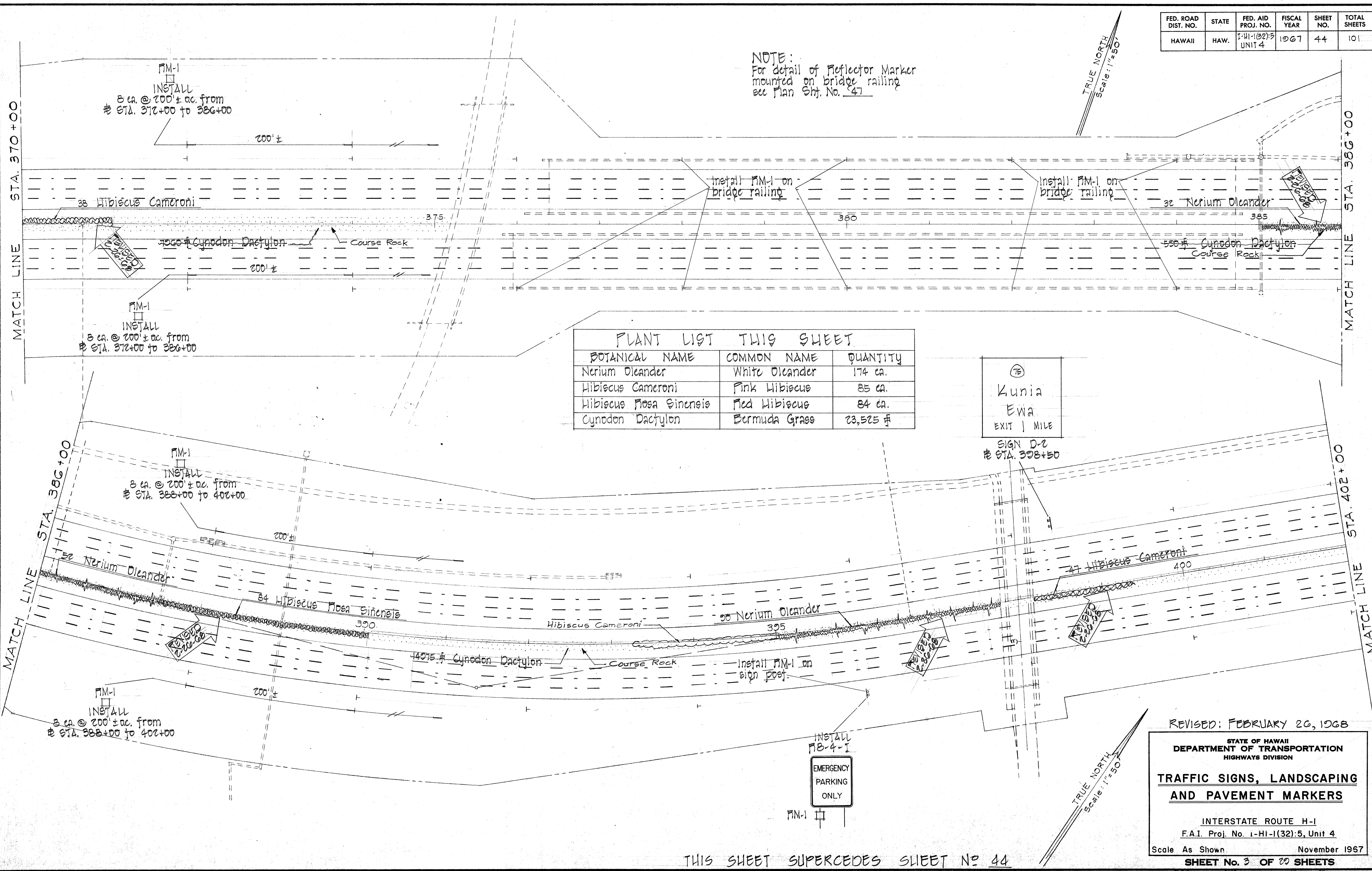
TRAFFIC SIGNS, LANDSCAPING
AND PAVEMENT MARKERS

INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32)5, Unit 4
Scale As Shown November 1967

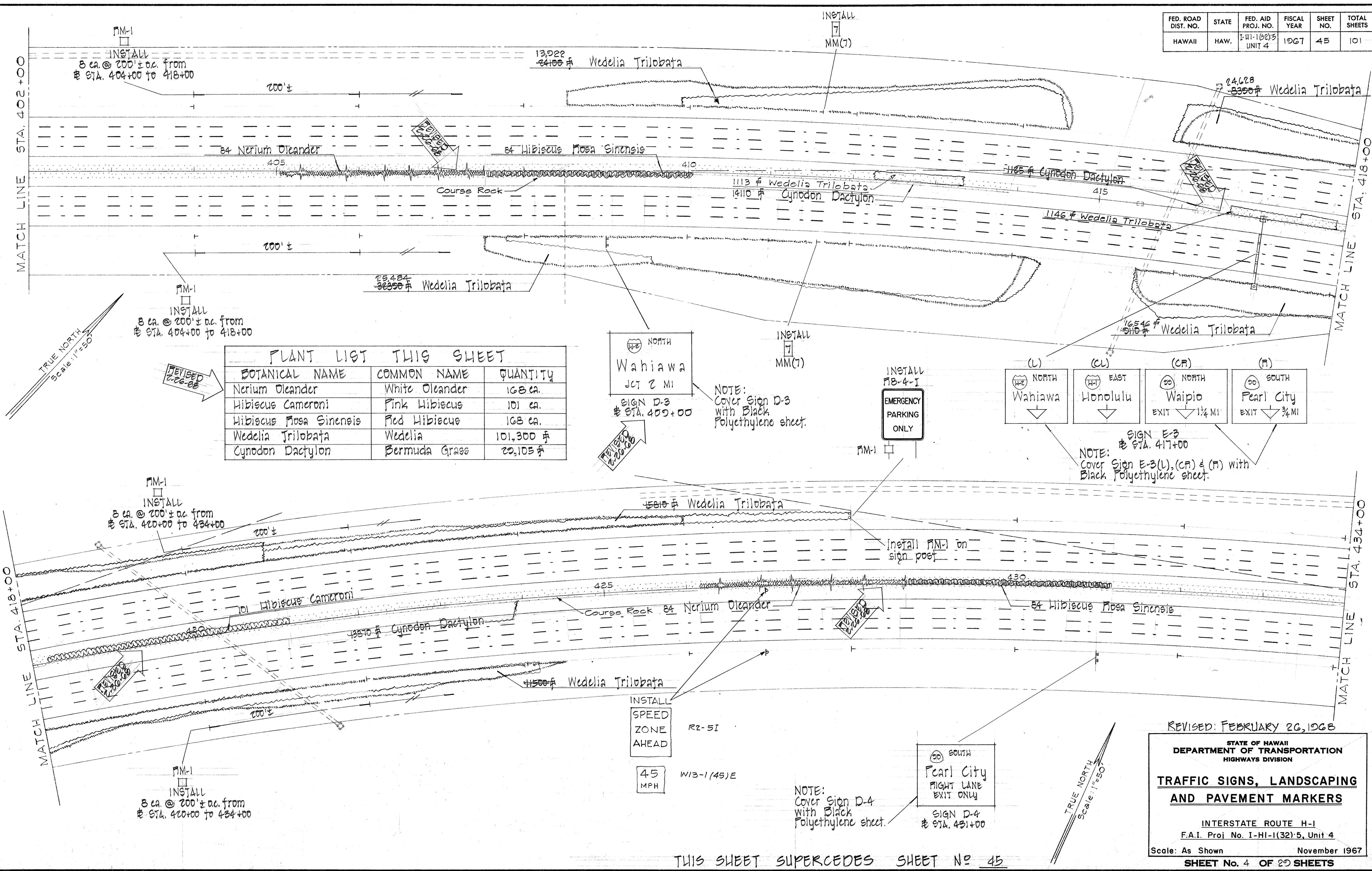
SHEET No. 3 OF 20 SHEETS

THIS SHEET SUPERCEDES SHEET No. 44

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
NOTED 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.	1-41-1(32)5 UNIT 4	1967	45	101



PLANT LIST THIS SHEET

BOTANICAL NAME	COMMON NAME	QUANTITY
Nerium Oleander	White Oleander	168 ea.
Hibiscus Cameroni	Pink Hibiscus	101 ea.
Hibiscus Rosa Sinensis	Red Hibiscus	168 ea.
Wedelia Trilobata	Wedelia	101,300 #
Cynodon Dactylon	Bermuda Grass	20,105 #

INSTALL
MM(7)

Wahiawa
JCT 2 MI

NOTE:
Cover Sign D-3
with Black
Polyethylene sheet.

INSTALL
PB-4-I

EMERGENCY
PARKING
ONLY

(L) NORTH
Wahiawa

(CL) EAST
Honolulu

(CR) NORTH
Waipio
EXIT 1 1/4 MI

(R) SOUTH
Pearl City
EXIT 3/4 MI

NOTE:
Cover Sign E-3(L),(CR) & (R) with
Black Polyethylene sheet.

INSTALL
SPEED
ZONE
AHEAD

R2-51

45
MPH

W13-1(45)E

INSTALL
MM(7)

PEARL CITY
RIGHT LANE
EXIT ONLY

NOTE:
Cover Sign D-4
with Black
Polyethylene sheet.

REVISED: FEBRUARY 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS, LANDSCAPING
AND PAVEMENT MARKERS

INTERSTATE ROUTE H-1
F.A.I. Proj No. I-HI-1(32)5, Unit 4

Scale: As Shown November 1967

SHEET No. 4 OF 20 SHEETS

THIS SHEET SUPERCEDES SHEET NO. 45

SURVEY PLANNED BY	DATE
DRAWN BY	
REVIEWED BY	
NOTED BY	
CHECKED BY	
APPROVED BY	

TRAFFIC SIGN SUMMARY

TYPE	DESCRIPTION	QUANTITY	
		W/ Post	N/Y Post
R1-1	STOP	1	
R2-1(65)-1	SPEED LIMIT 65	1	
R5-5(2)	WRONG WAY	1	
R6-1(L)	<ONE WAY		1
R8-4-1	EMERGENCY PARKING ONLY	2	
R18-1	KEEP OUT FREEWAY	2	1
W4-1-1	MERGING TRAFFIC	1	
W13-3(35)	EXIT SPEED 35 MPH	2	
W20-5E	RIGHT LANE ENDS 1500 FT	2	
RM-1	Reflector Marker	97	6
RM-1	" " - on bridge railing	2	
RM-2	" " "	73	7
RM-3	" " "		1
RM-3(H)	" " - Horizontal	1	
MM(6)	Mileage Marker - 6	2	
MM(7)	" " - 7	2	
MM(8)	" " - 8	2	
MG-1-E	EXIT		1
IM-1(3)	Interstate Shield - 36"	1	
W20-5a(R)	RIGHT LANE CLOSED - 1500 FT	1	
W20-5b(R)	" " " - 1000 FT		1
W20-6d	SINGLE LANE AHEAD	1	
W4-4	MERGE LEFT		1
R10-2	ROAD CLOSED		1
R2-5-1	SPEED ZONE AHEAD		1
R5-1	DO NOT ENTER	1	
R5-5(1)	WRONG WAY		1
W13-1(25)-E	25 M.P.H.		1

NOTE:
Exact location of signs to be determined in the field by the Engineer.

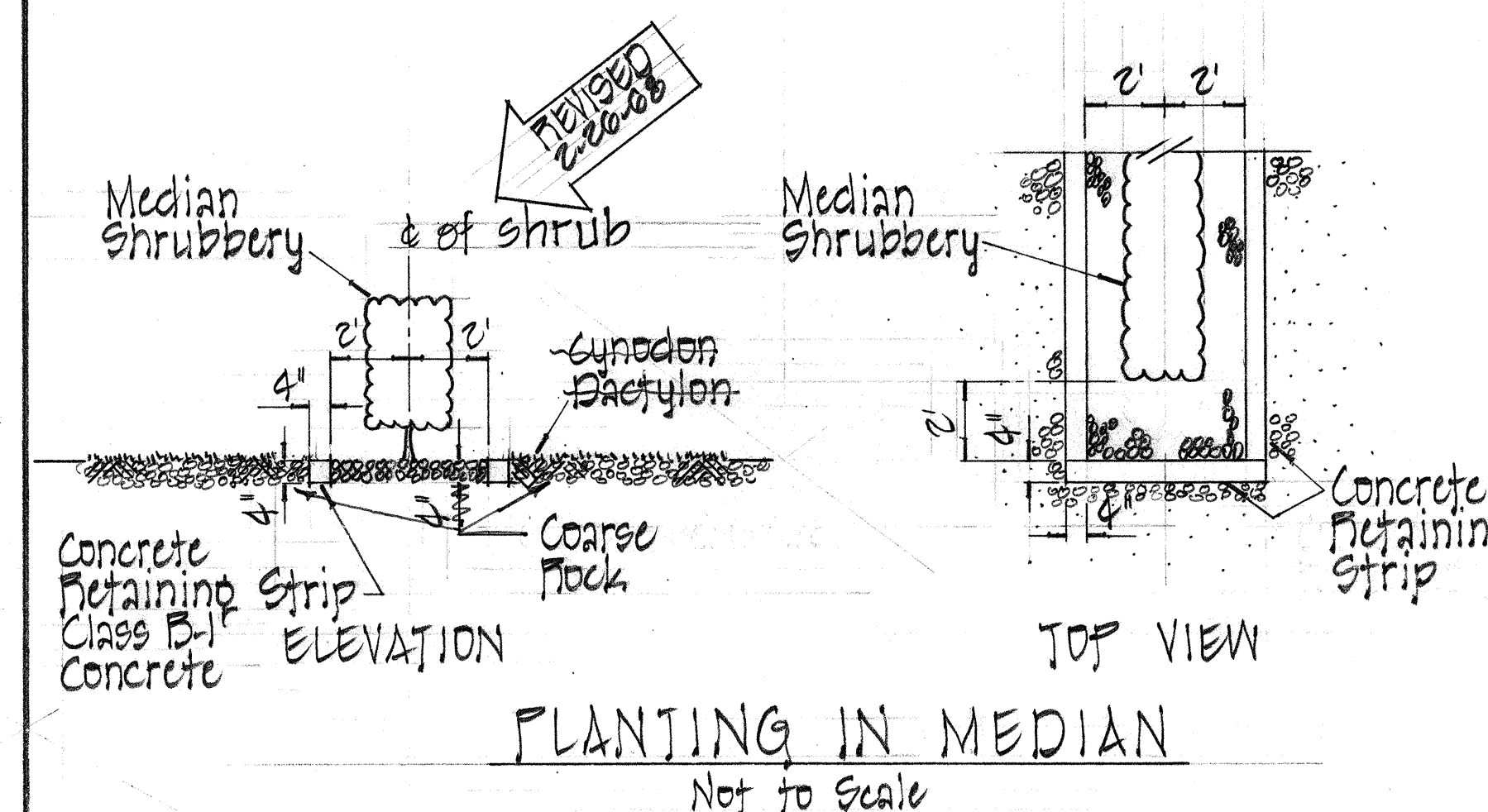
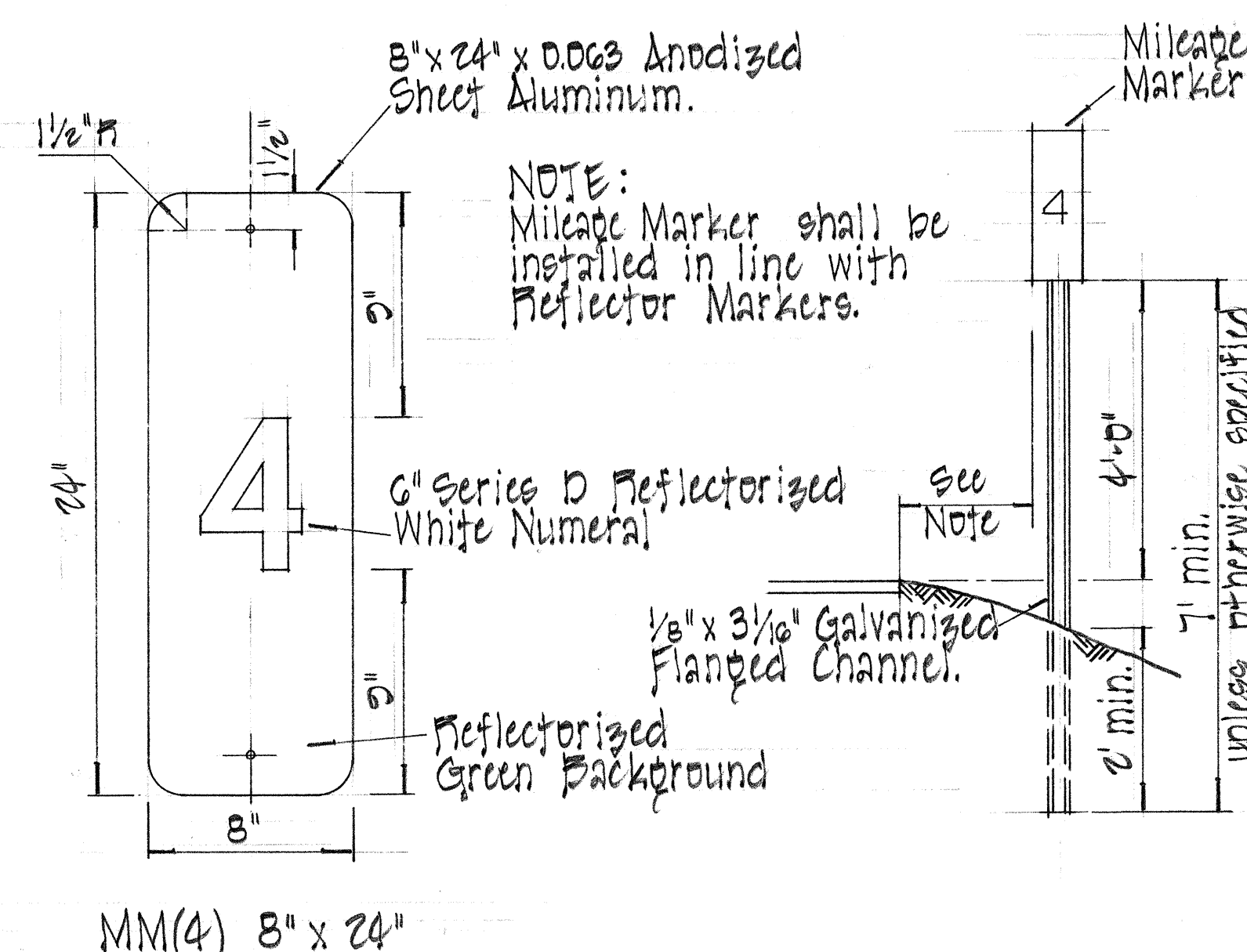
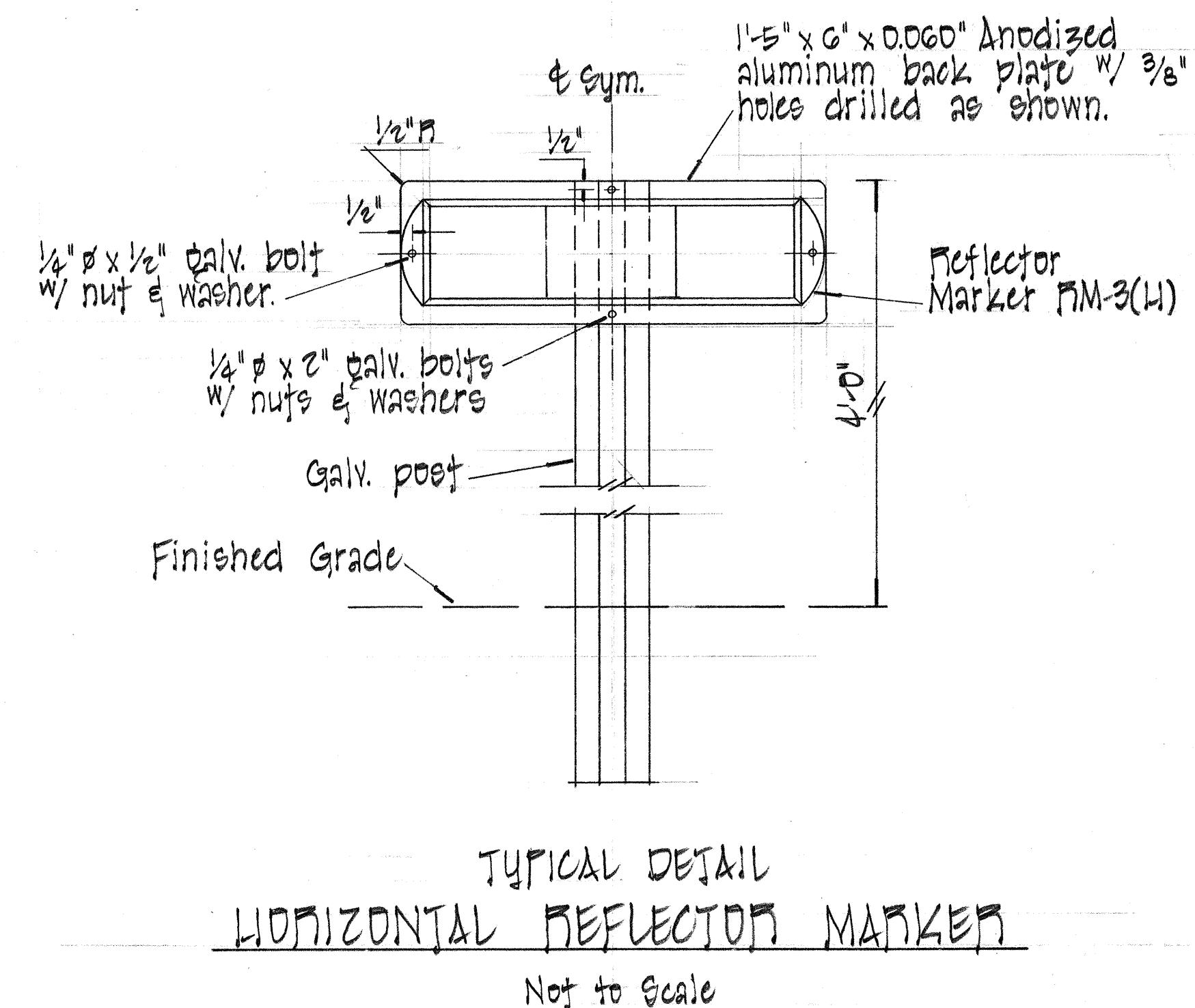
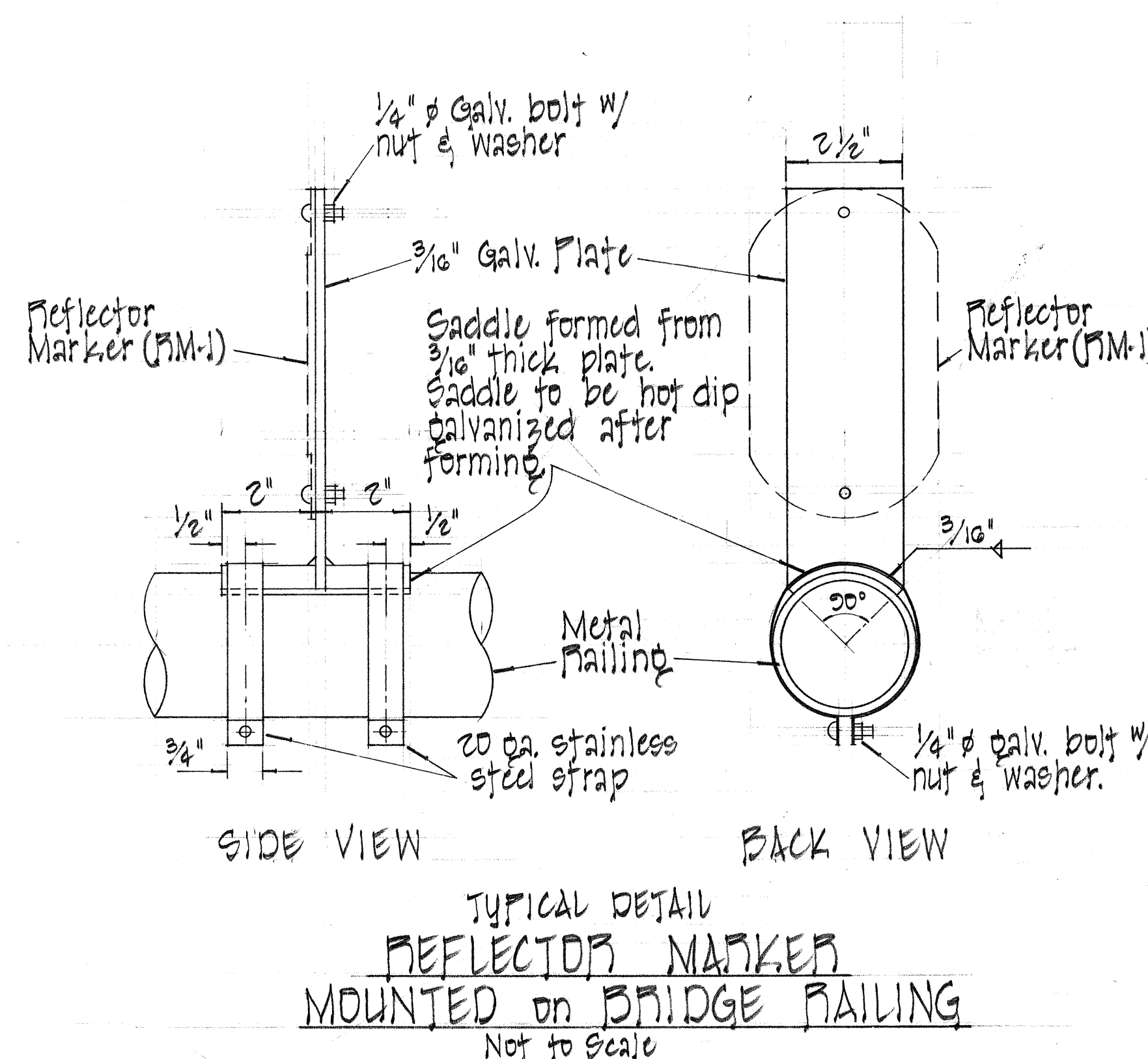
REVISED 2.28.68

TOTAL PLANT LIST

BOTANICAL NAME	COMMON NAME	QUANTITY	SPECIFICATIONS
Nerium Oleander	White Oleander	921 ea.	24" high, 1 gal. cans, plant 3' o.c.
Hibiscus Camerani	Pink Hibiscus	400 ea.	
Hibiscus Rosa Sinensis	Red Hibiscus	400 ea.	18" to 24" high, 1 gal. cans, plant 3' o.c.
Wedelia Trilobata	Wedelia	516,625 #	12" to 18" long runners
Cynodon Dactylon	Bermuda Grass	180,800 #	"See Standard Specifications"

LANDSCAPING NOTES

- Within the median, shrubs shall be planted as shown on the plans.
- Coarse rock shall be spread evenly on the ^{whole} enclosed median shrubbery areas. See detail this sheet.
- Concrete retaining strips shall be placed at the ends & along the sides of the shrubbery areas within the median. See detail this sheet.
- Top soil shall be placed at a minimum depth of 6" for all grassed areas.
- The removing of existing ground for the placement of 6" top soil & coarse rock shall be incidental to the various items.
- The exact location of shrubs within the median shall be determined in the field by the Engineer.



REVISED: FEBRUARY 28, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

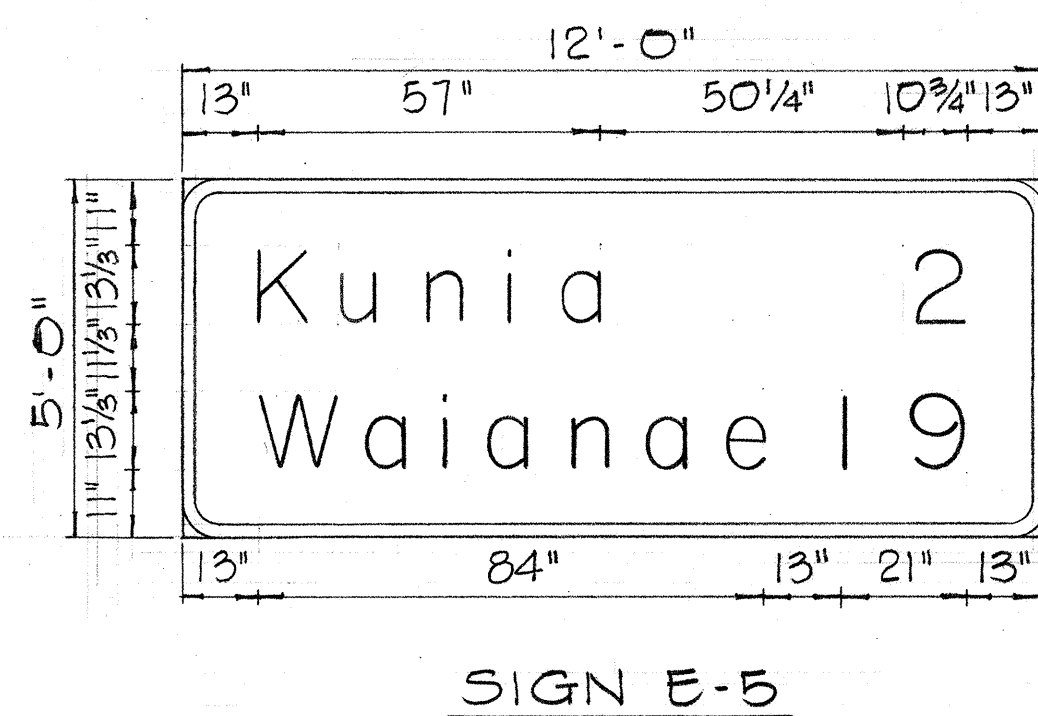
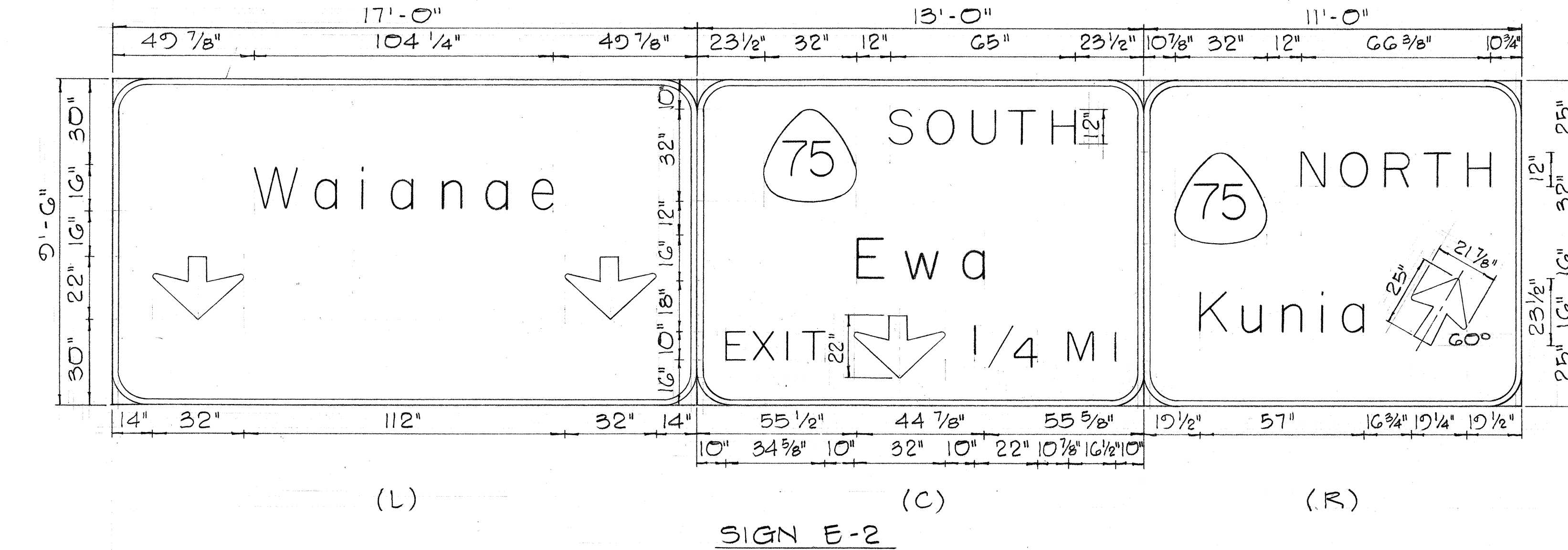
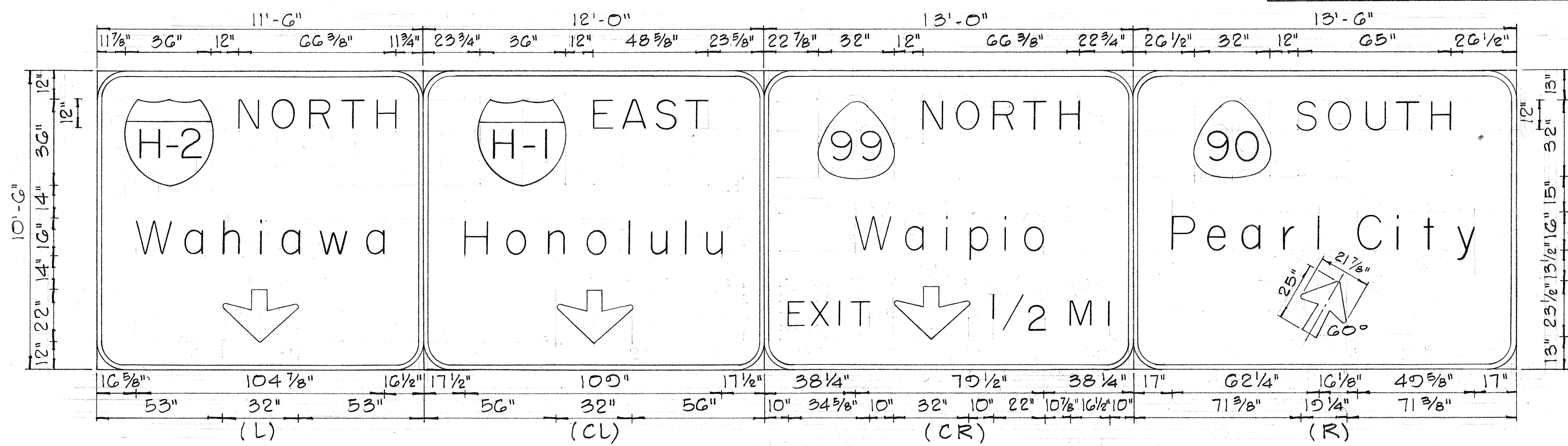
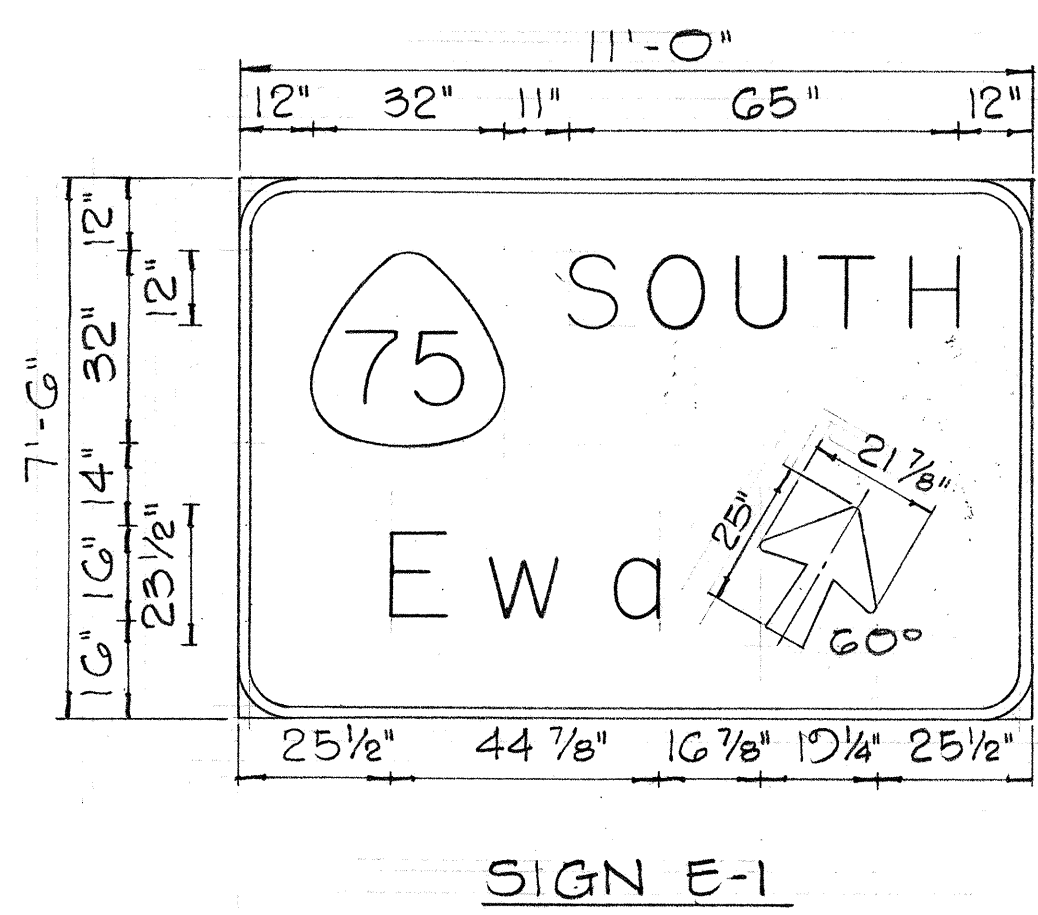
MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32):5, Unit 4
Scale: As Shown November 1967
SHEET No. 6 OF 20 SHEETS

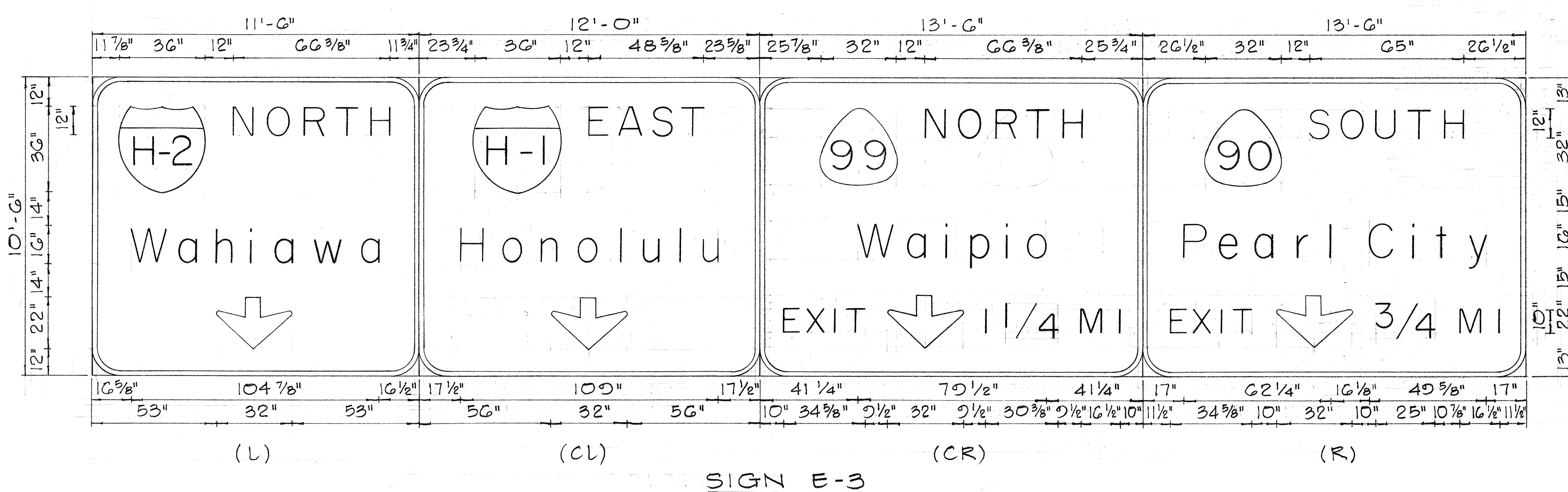
THIS SHEET SUPERCEDES SHEET NO 47

C. O. 418

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(32)5 Unit 4	1967	48	101



- GENERAL NOTES:**
1. Sign message shall be lettered in upper case according to "Standard Alphabets for Highway Signs," Bureau of Public Roads, 1966. Use Series "E" modified letters unless otherwise noted.
 2. Letters, arrows 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.
 3. Destination Signs (D) shall have white reflective sheeting on aluminum cut-outs on green reflective sheeting background.
 4. 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.



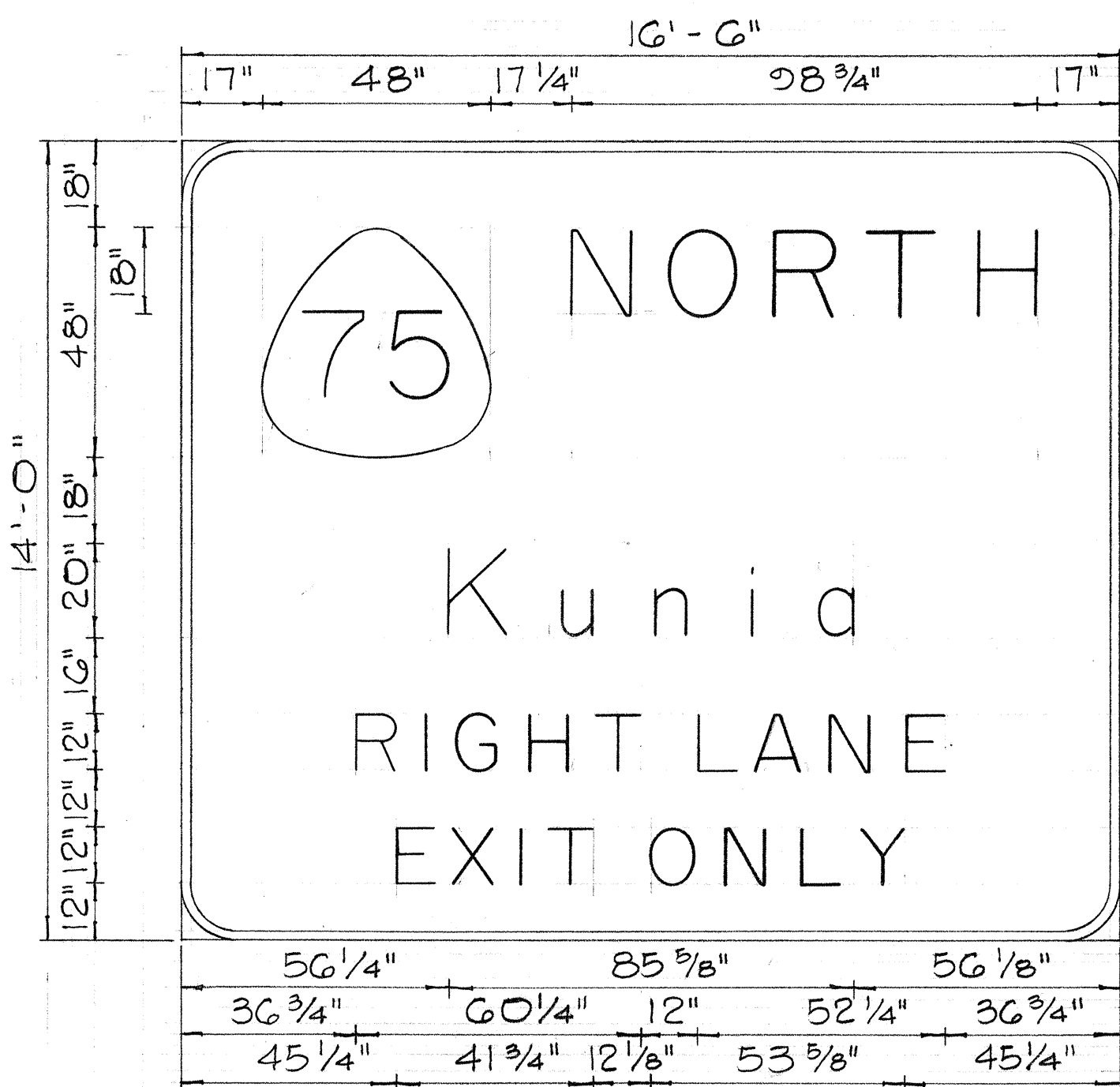
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PANEL LAYOUT

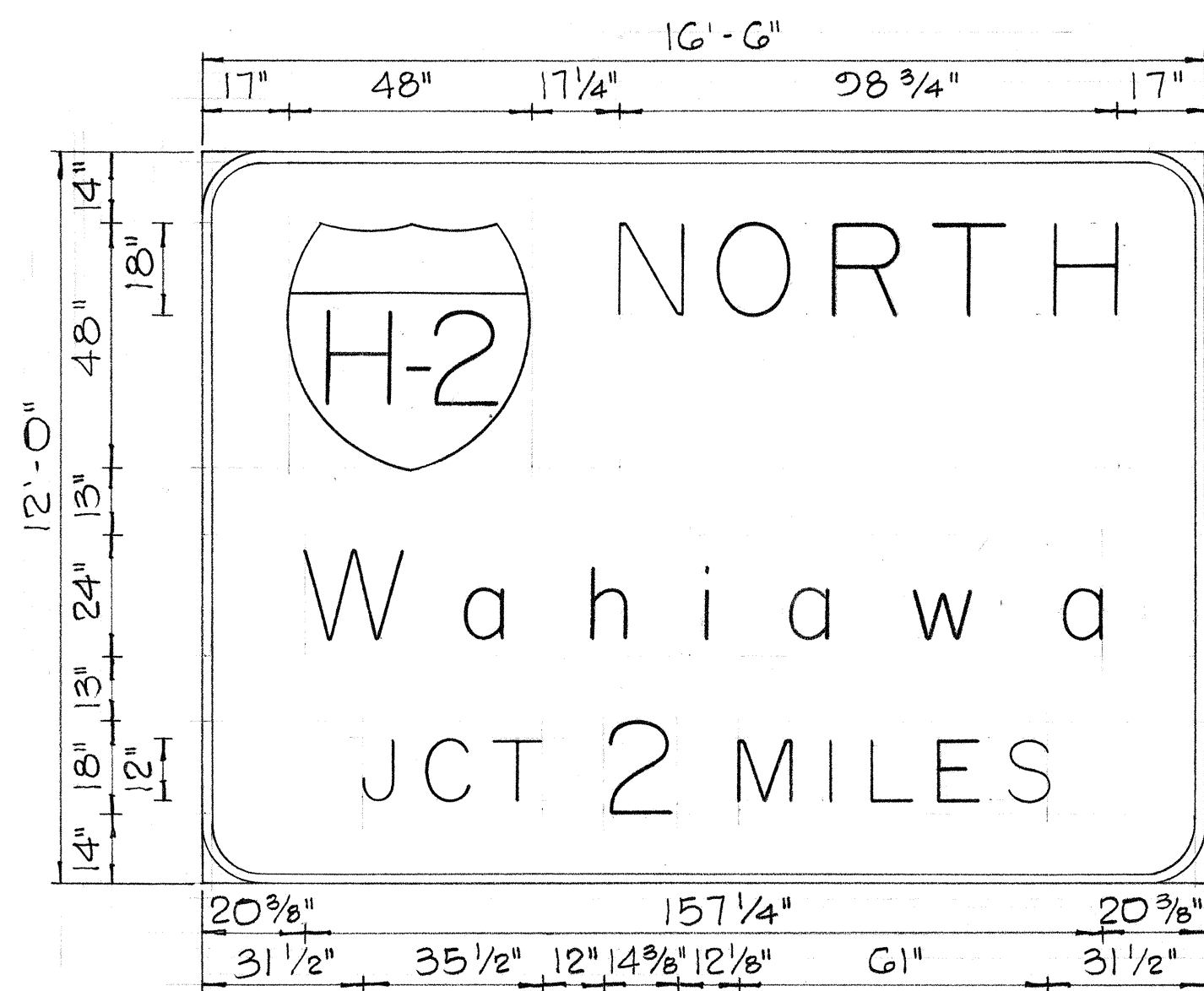
INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32)5, Unit 4
Scale: As Shown November 1967
SHEET No. 1 OF 20 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	

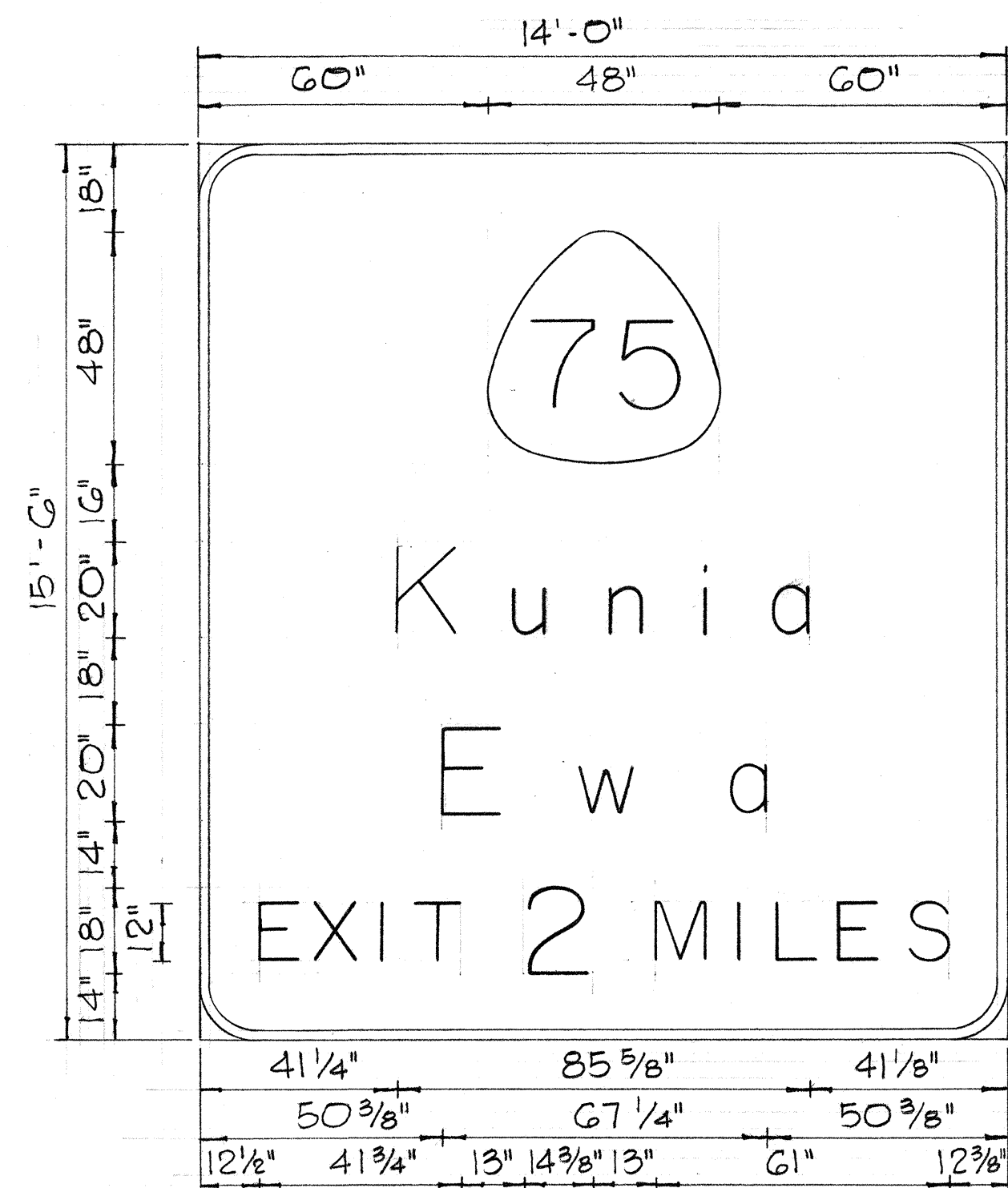
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(32):5 Unit 4	1967	49	101



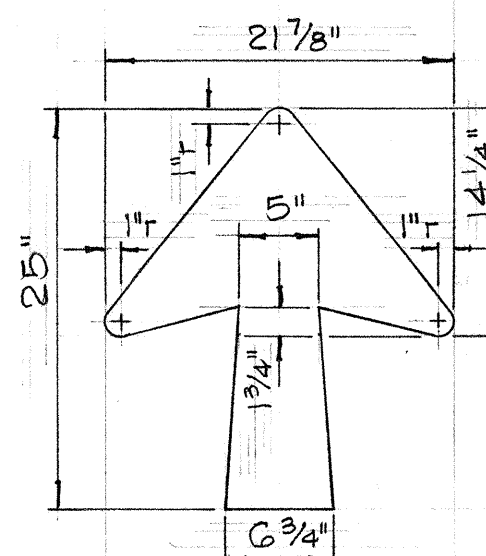
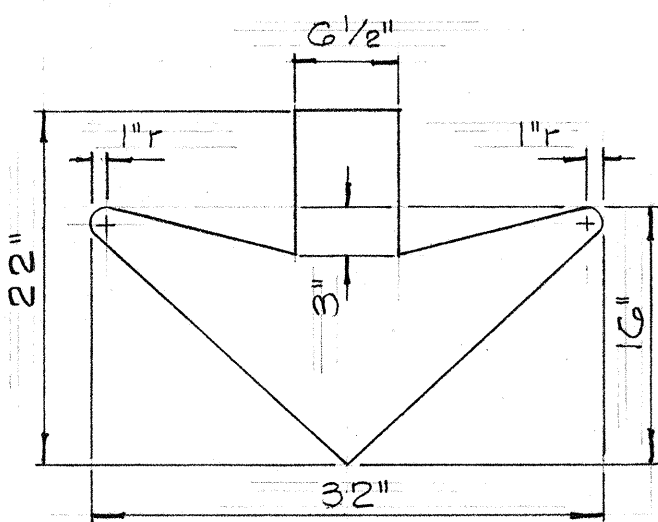
SIGN D-1



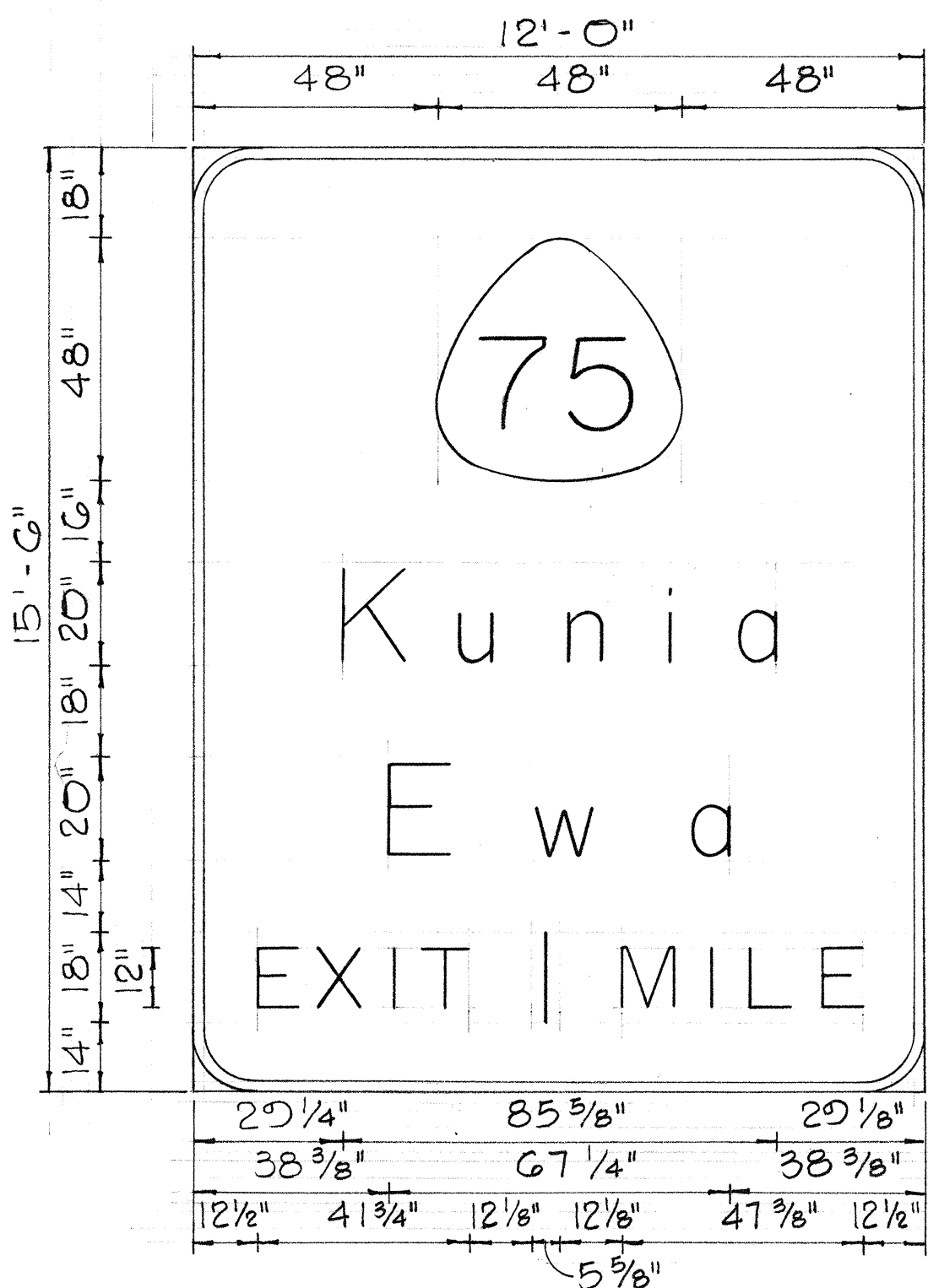
SIGN D-3



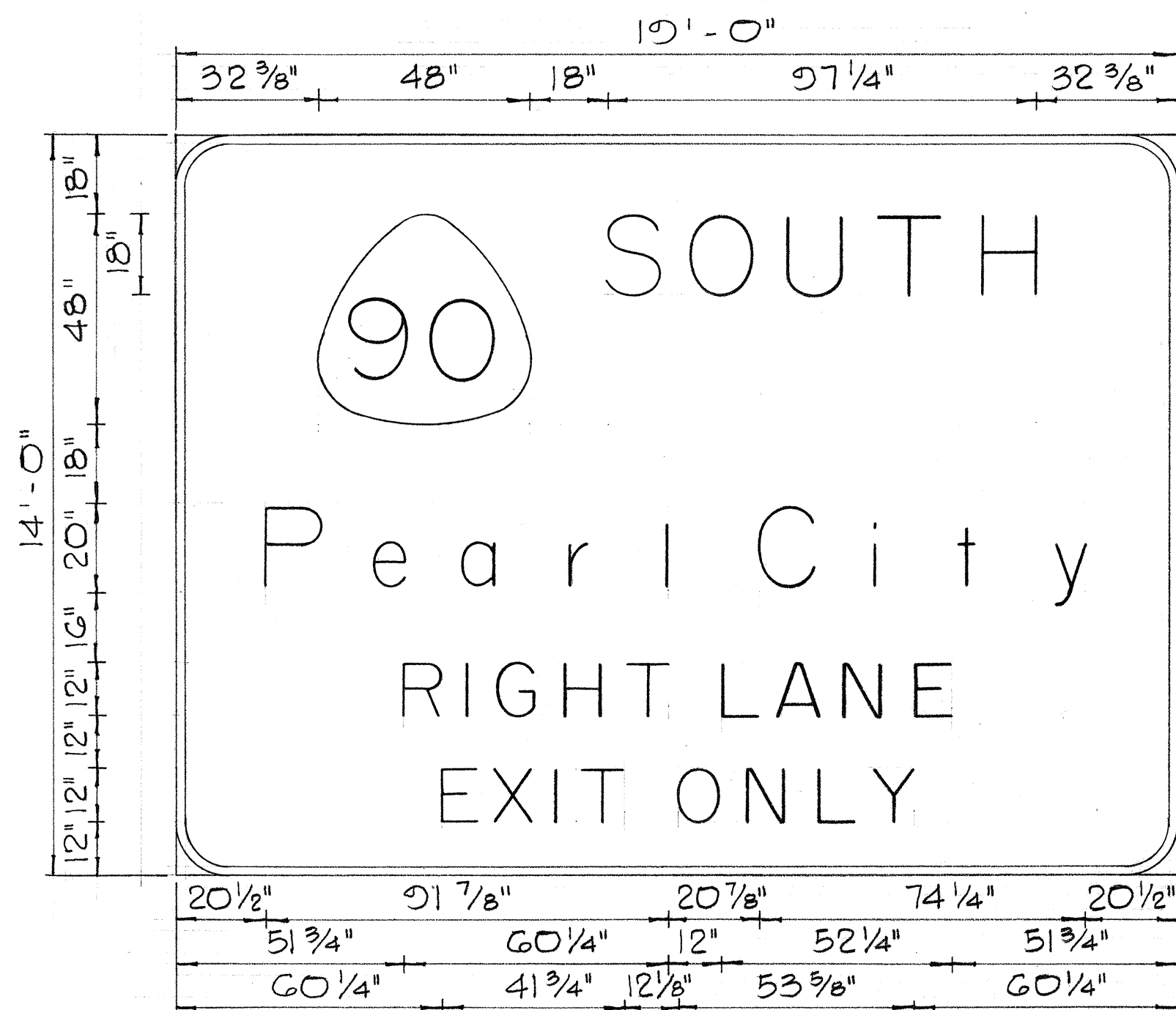
SIGN D-5



TYPICAL ARROW DETAILS



SIGN D-2



SIGN D-4

SUMMARY OF EXPRESSWAY SIGNS		
SIGN NO	MESSAGE	AREA (sq. ft.)
E-1	Ewa	82.50
E-2(L)	Waianae	161.50
E-2(C)	Ewa	123.50
E-2(R)	Kunia	104.50
E-3(L)	Wahiawa	120.75
E-3(CL)	Honolulu	126.00
E-3(CR)	Waipio	141.75
E-3(R)	Pearl City	141.75
E-4(L)	Wahiawa	120.75
E-4(CL)	Honolulu	126.00
E-4(CR)	Waipio	136.50
E-4(R)	Pearl City	141.75
E-5	Kunia, Waianae	60.00
TOTAL		1,587.25

SUMMARY OF DESTINATION SIGNS		
SIGN NO	MESSAGE	AREA (sq. ft.)
D-1	Kunia	231.00
D-2	Kunia, Ewa	186.00
D-3	Wahiawa	198.00
D-4	Pearl City	266.00
D-5	Kunia, Ewa	217.00
TOTAL		1,098.00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PANEL LAYOUT

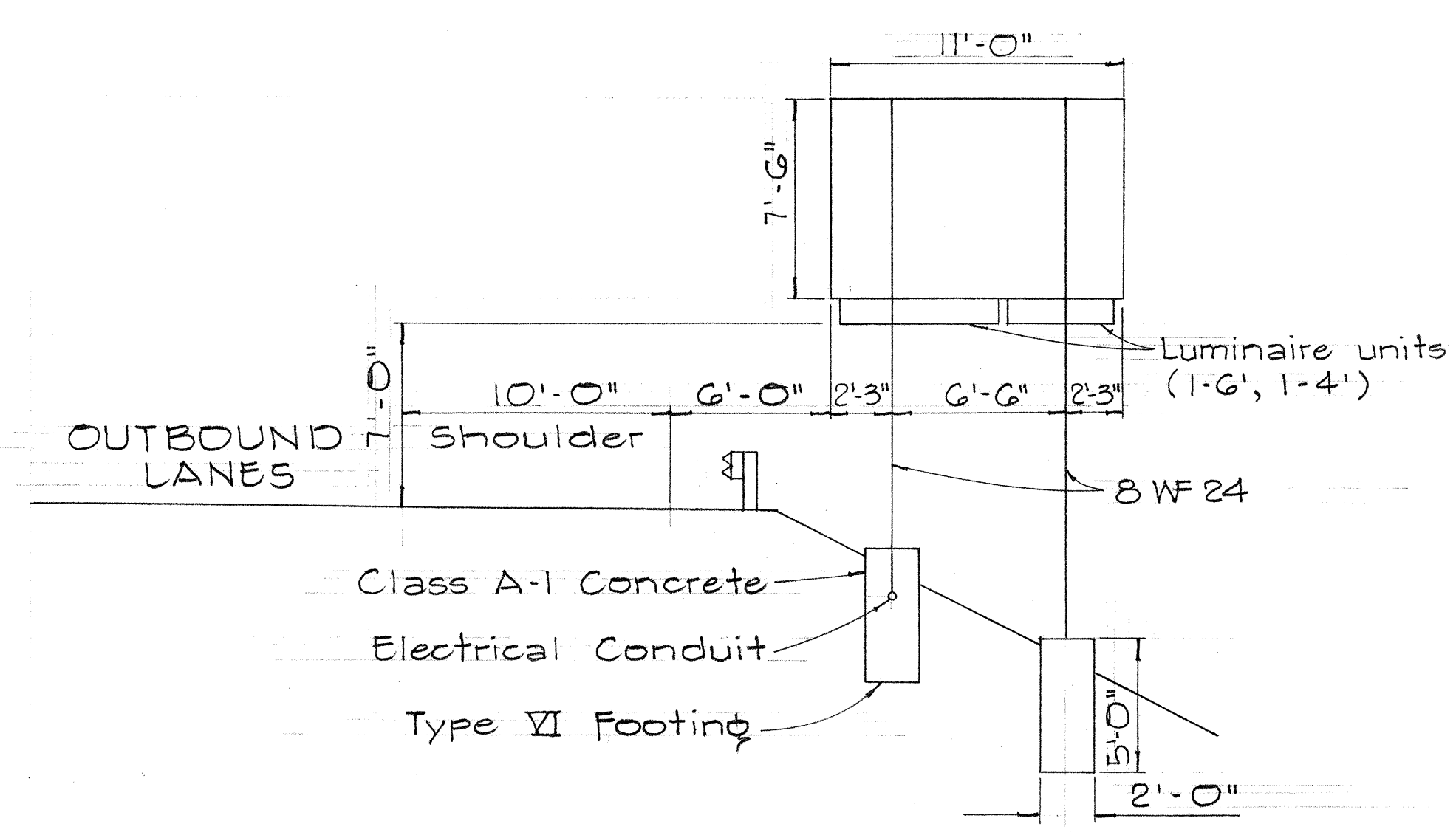
INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32):5, Unit 4

Scale: As Shown November 1967

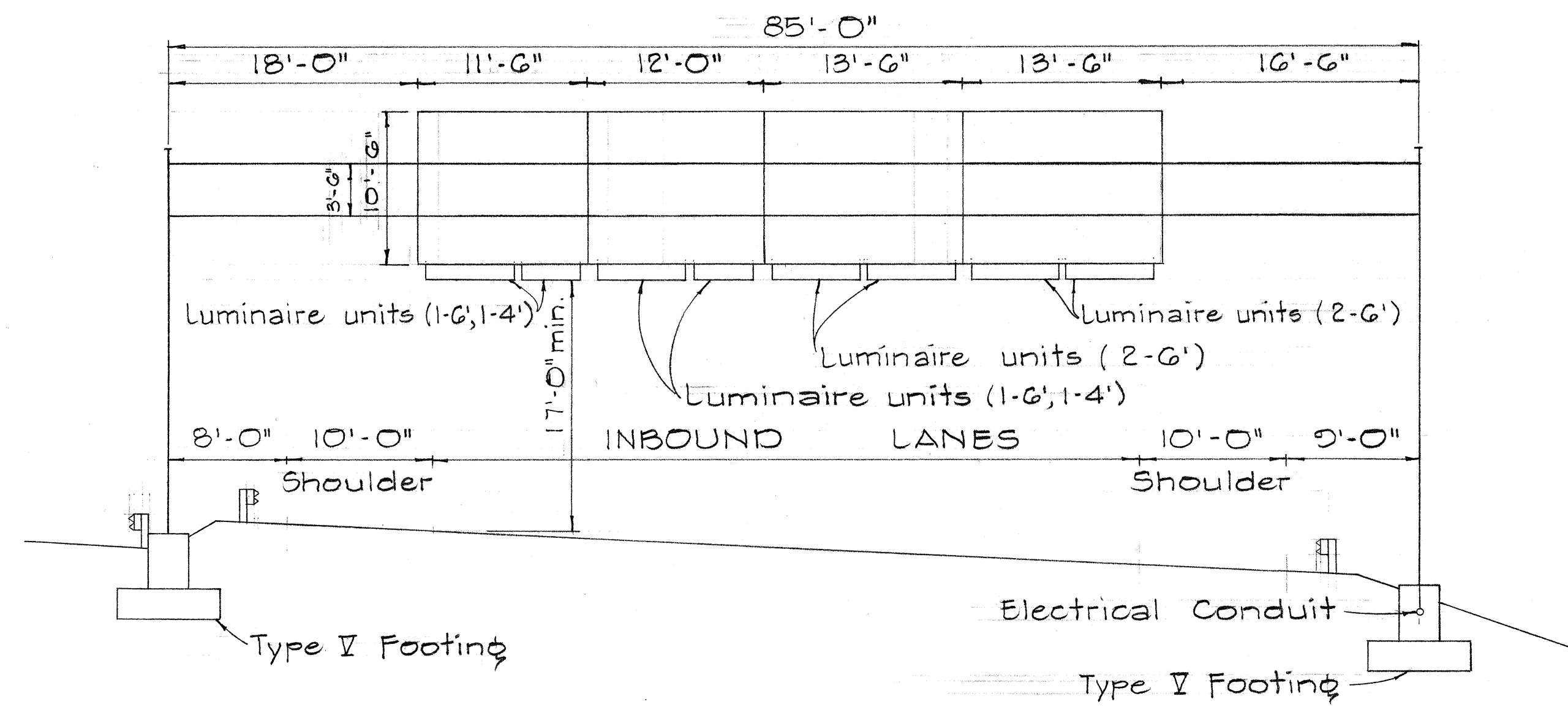
SHEET No. 8 OF 29 SHEETS

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

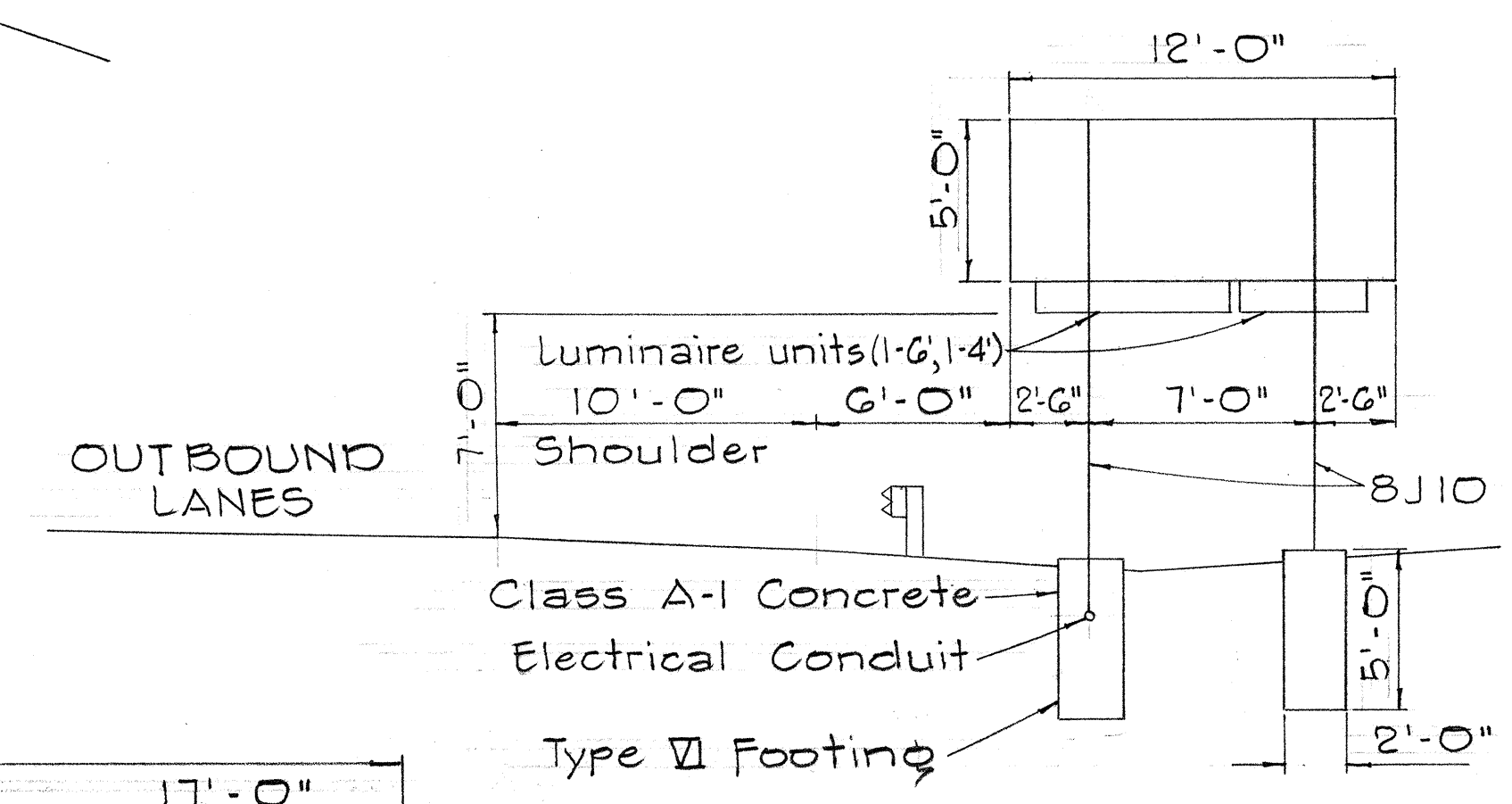
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(32)5 Unit 4	1967	50	101



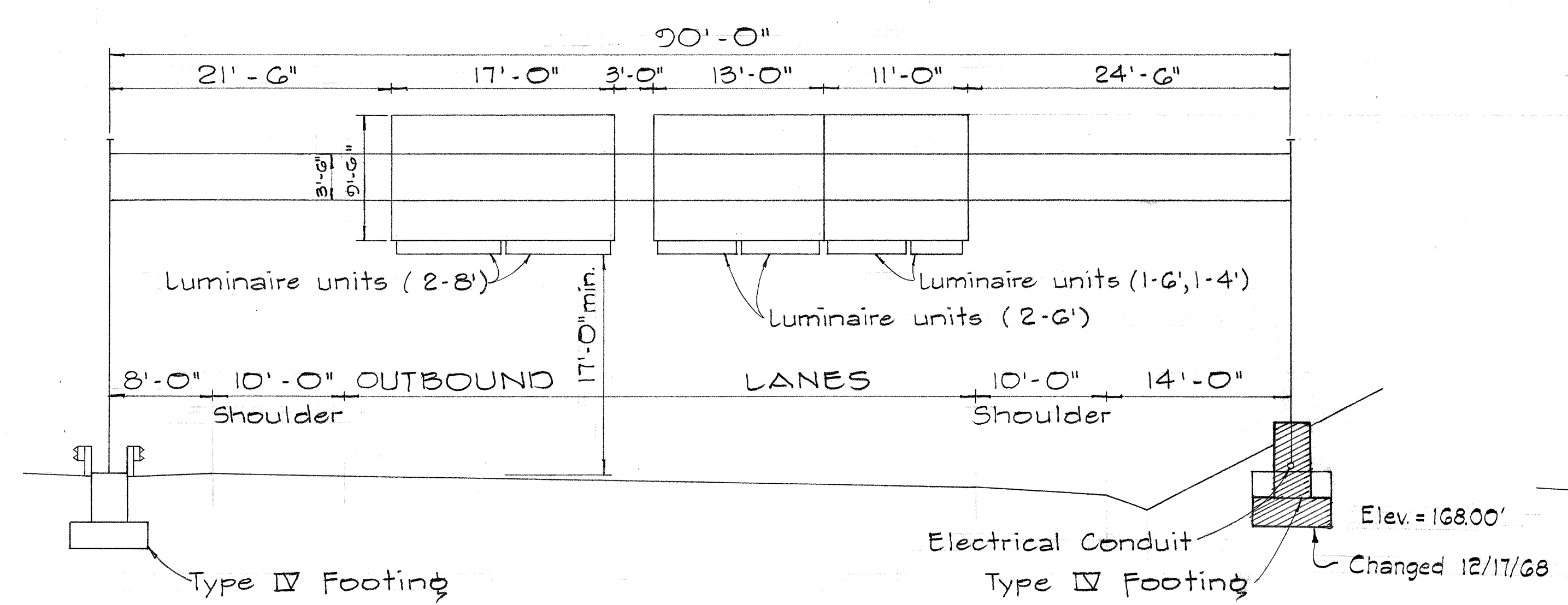
SIGN E-1
Sta. 333+50



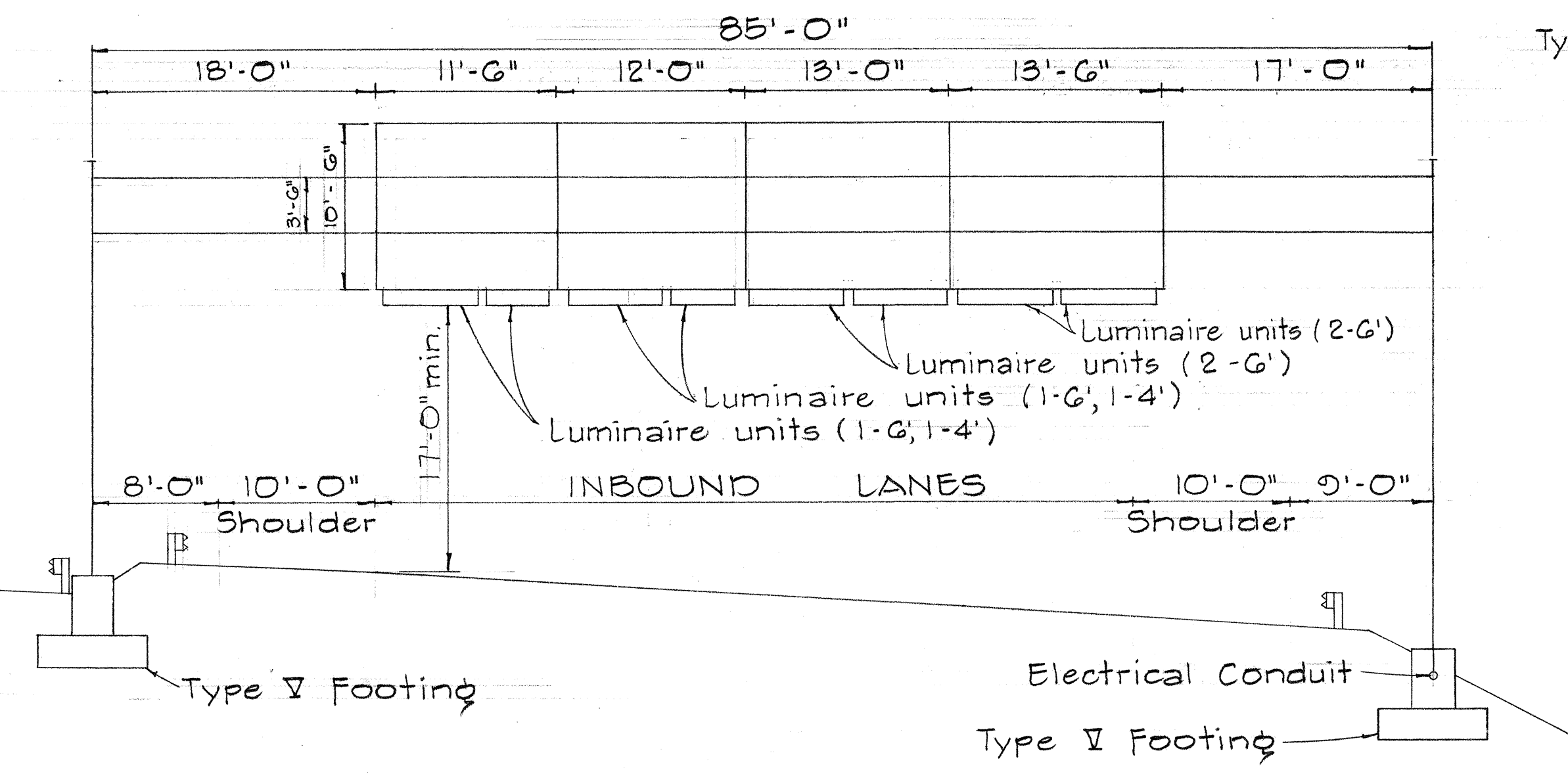
SIGN E-3
Sta. 417+00
416+50



SIGN E-5
Sta. 459+00



SIGN E-2
Sta. 346+50



SIGN E-4
Sta. 452+00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

FRAME LAYOUT

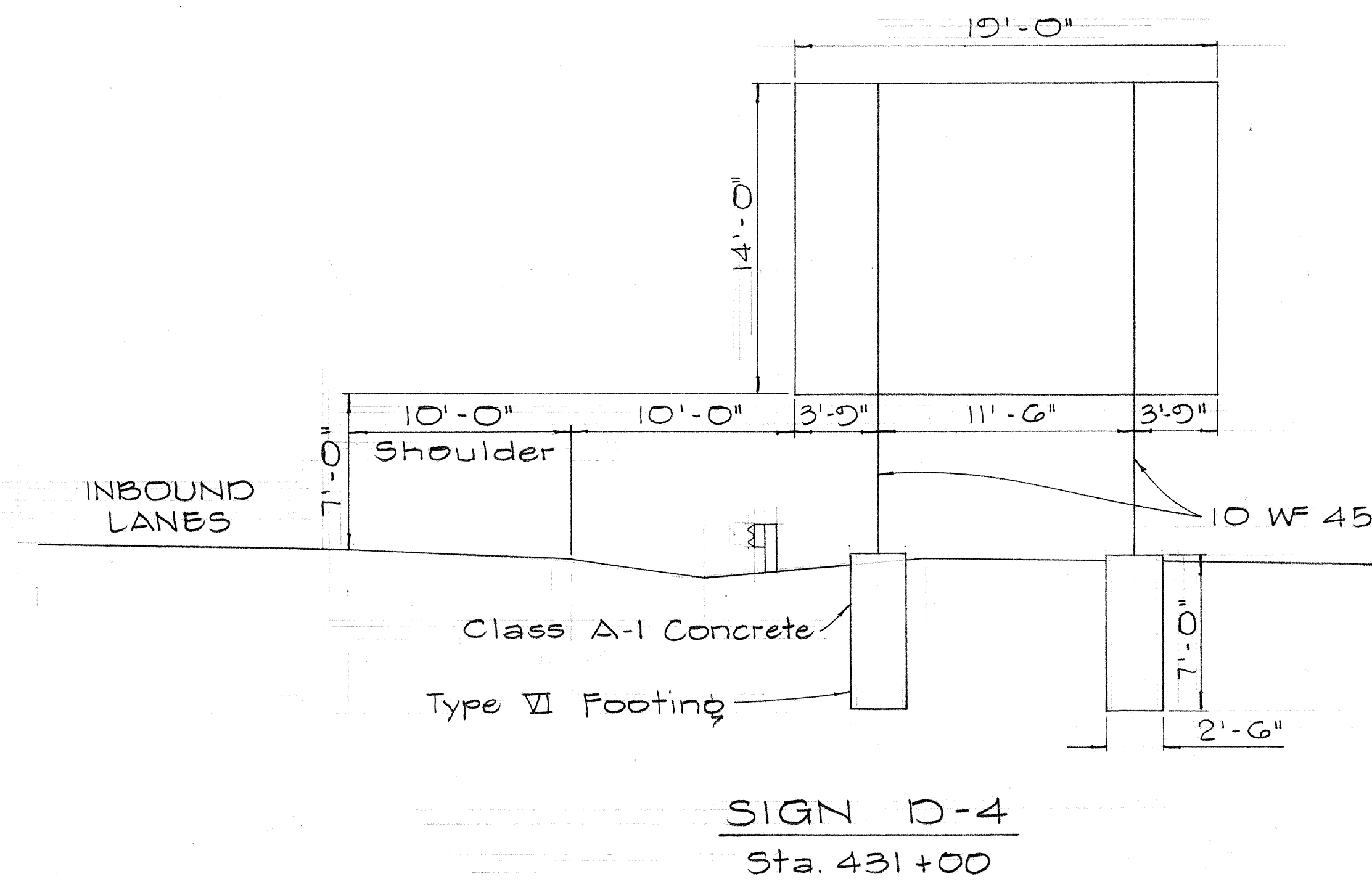
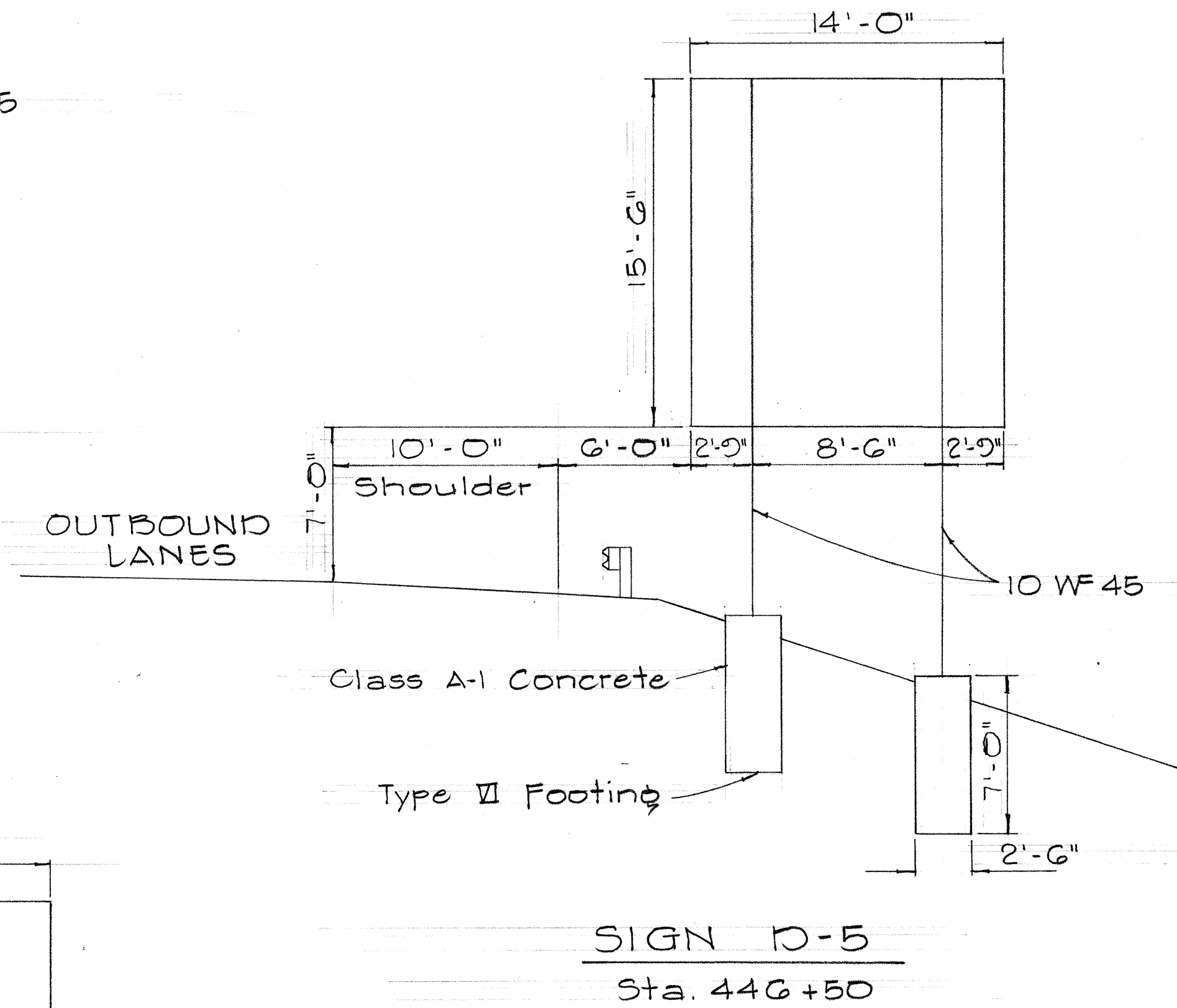
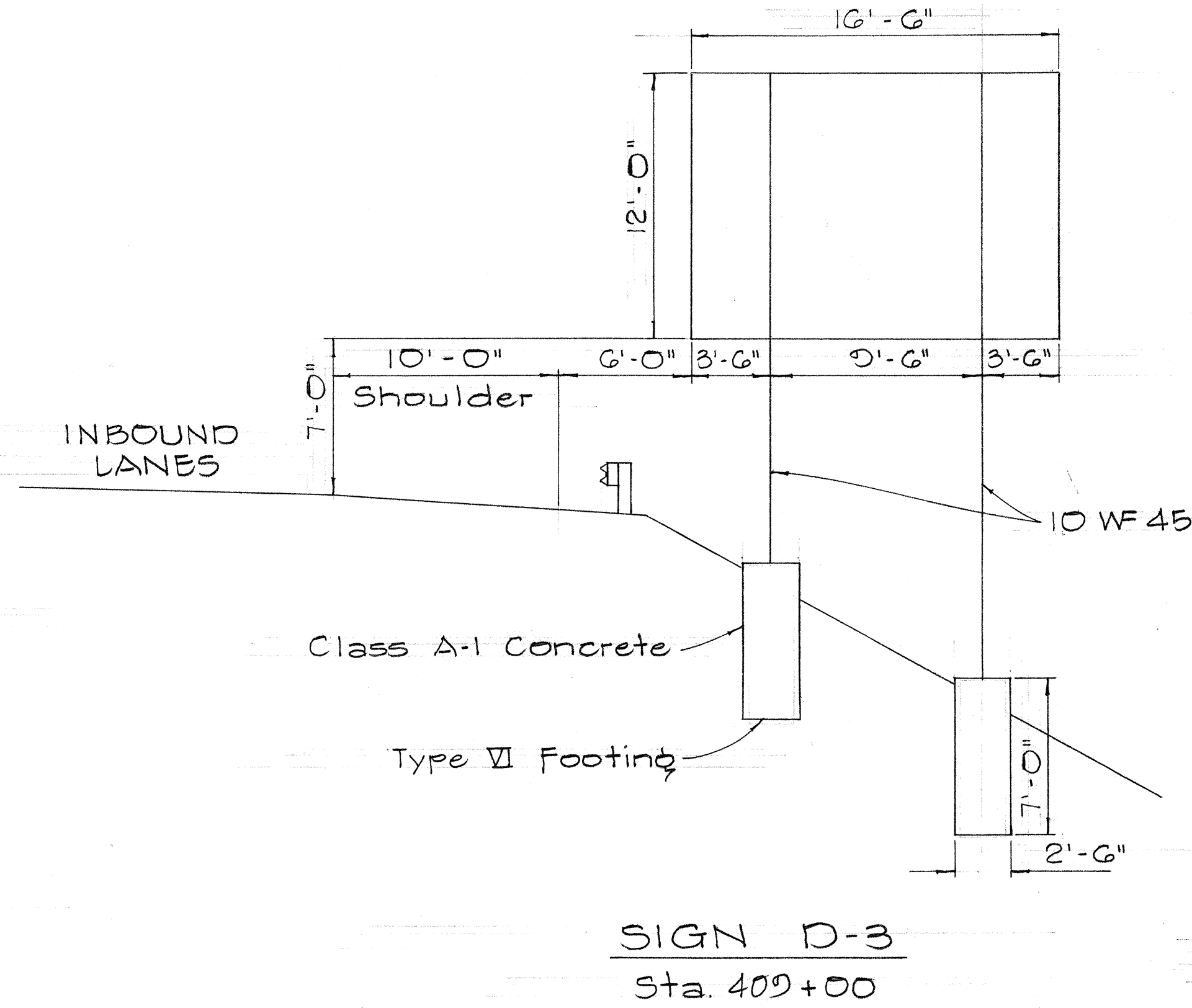
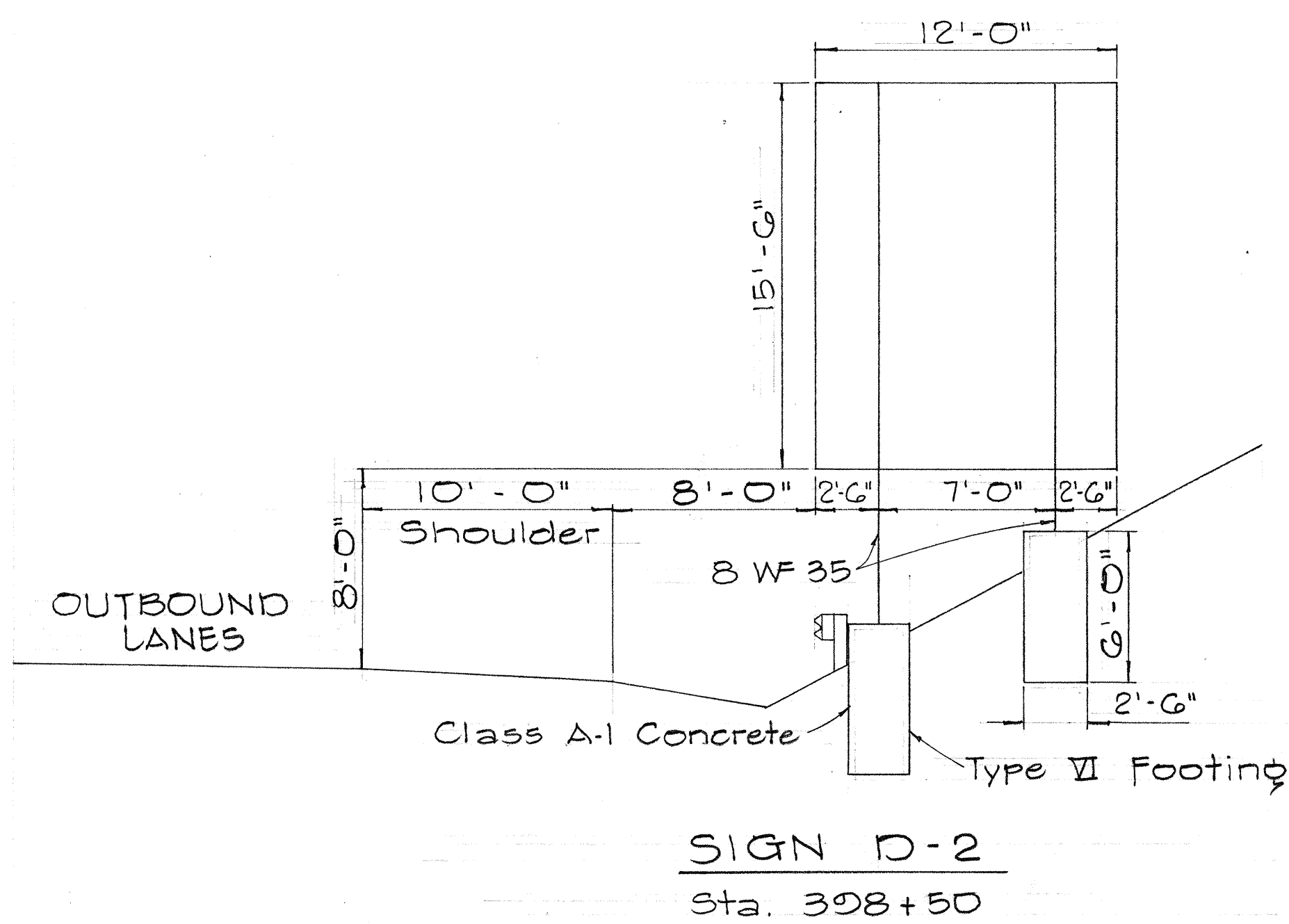
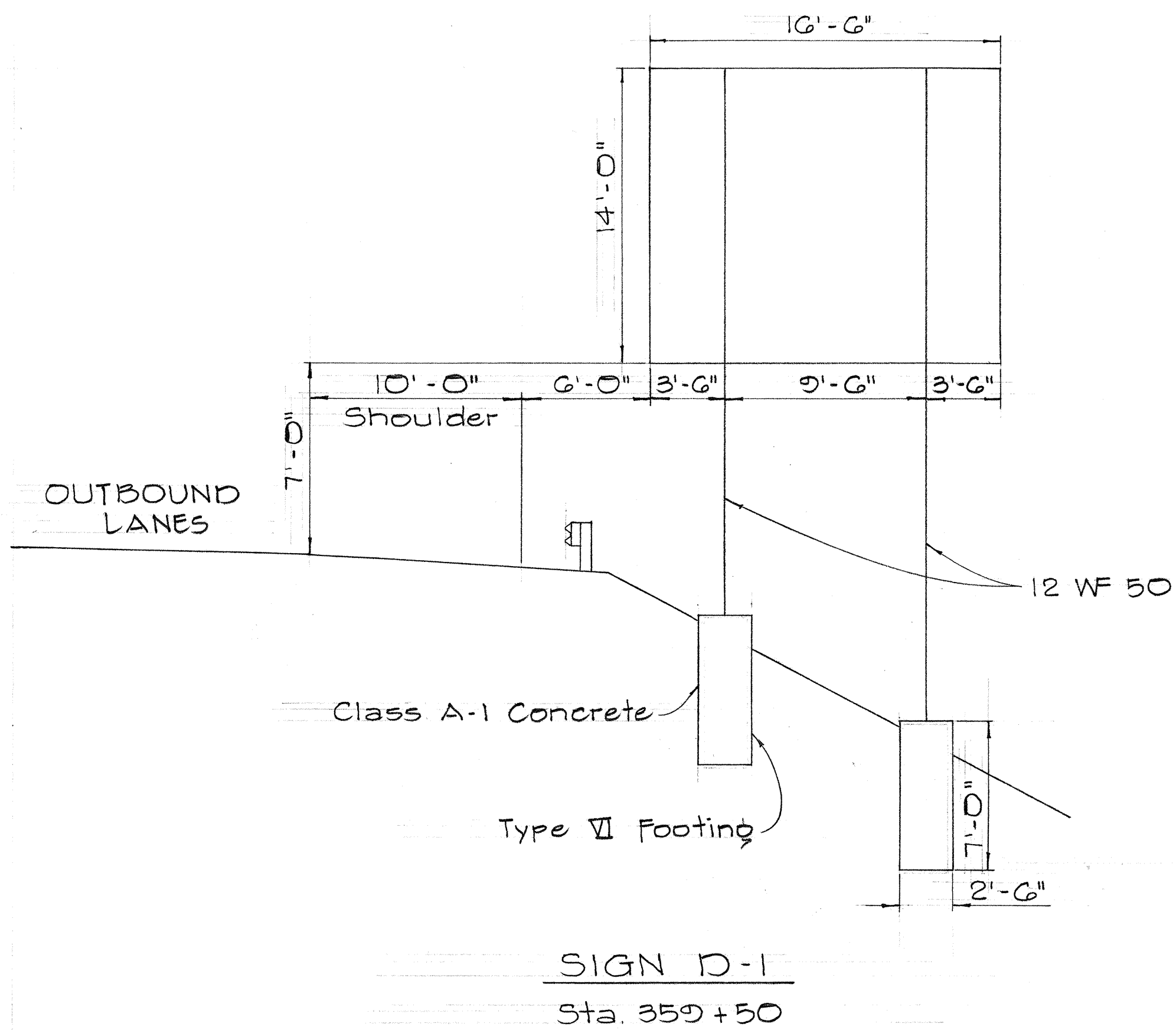
INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32)5, Unit 4

Scale: As Shown November 1967

SHEET No. 9 OF 20 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
NOTED 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.	I-HI-1(32)5 UNIT 4	1967	51	101



REVISED: FEBRUARY 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

FRAME LAYOUT

INTERSTATE ROUTE H-1
F.A.I. Proj. No. I-HI-1(32)5, Unit 4

Scale: As Shown November 1967

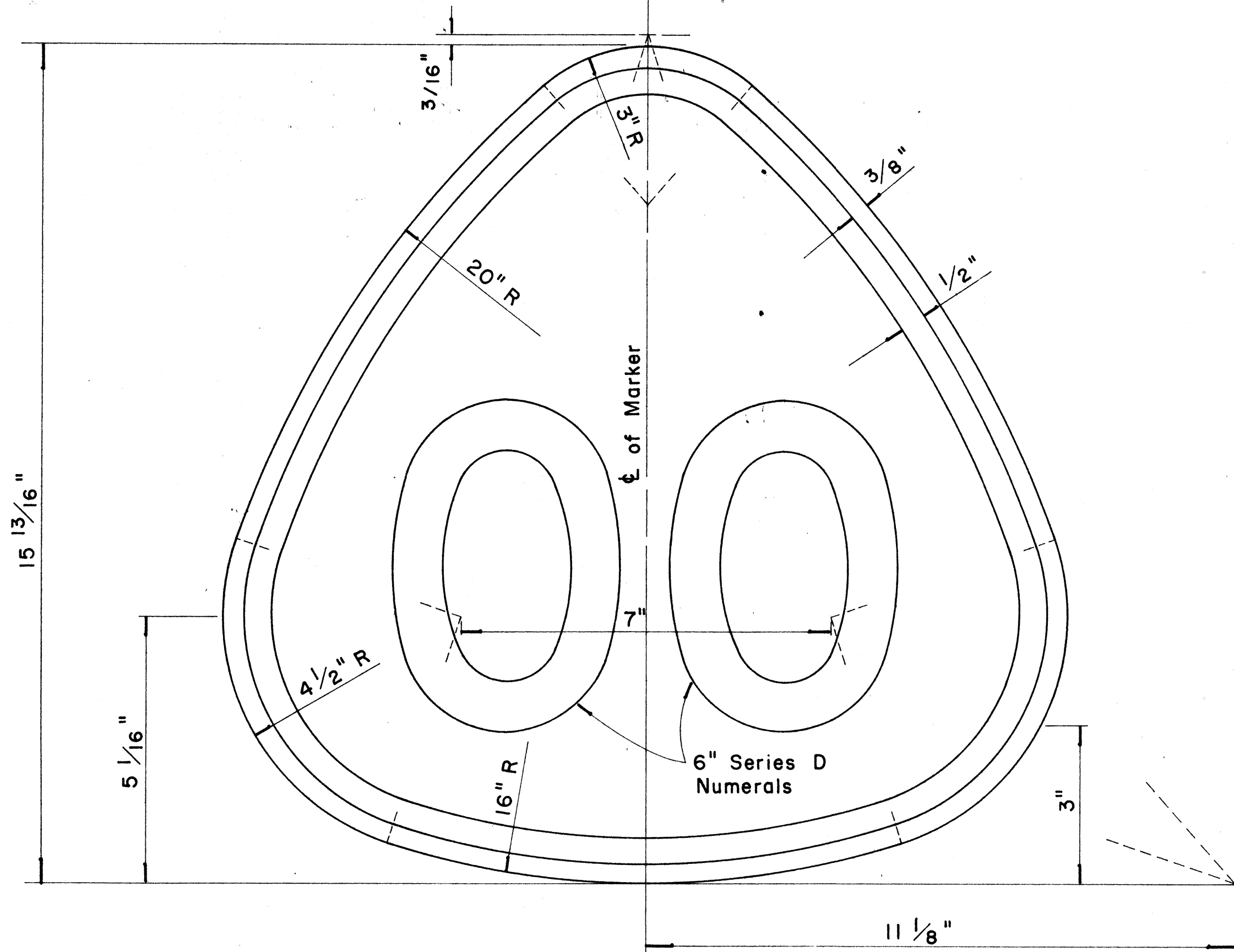
SHEET No. 10 OF 29 SHEETS

THIS SHEET SUPERCEDES SHEET No 51

C.O. 51

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	DATE
CHECKED BY	QUANTITIES BY	DATE
	CHECKED BY	DATE

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

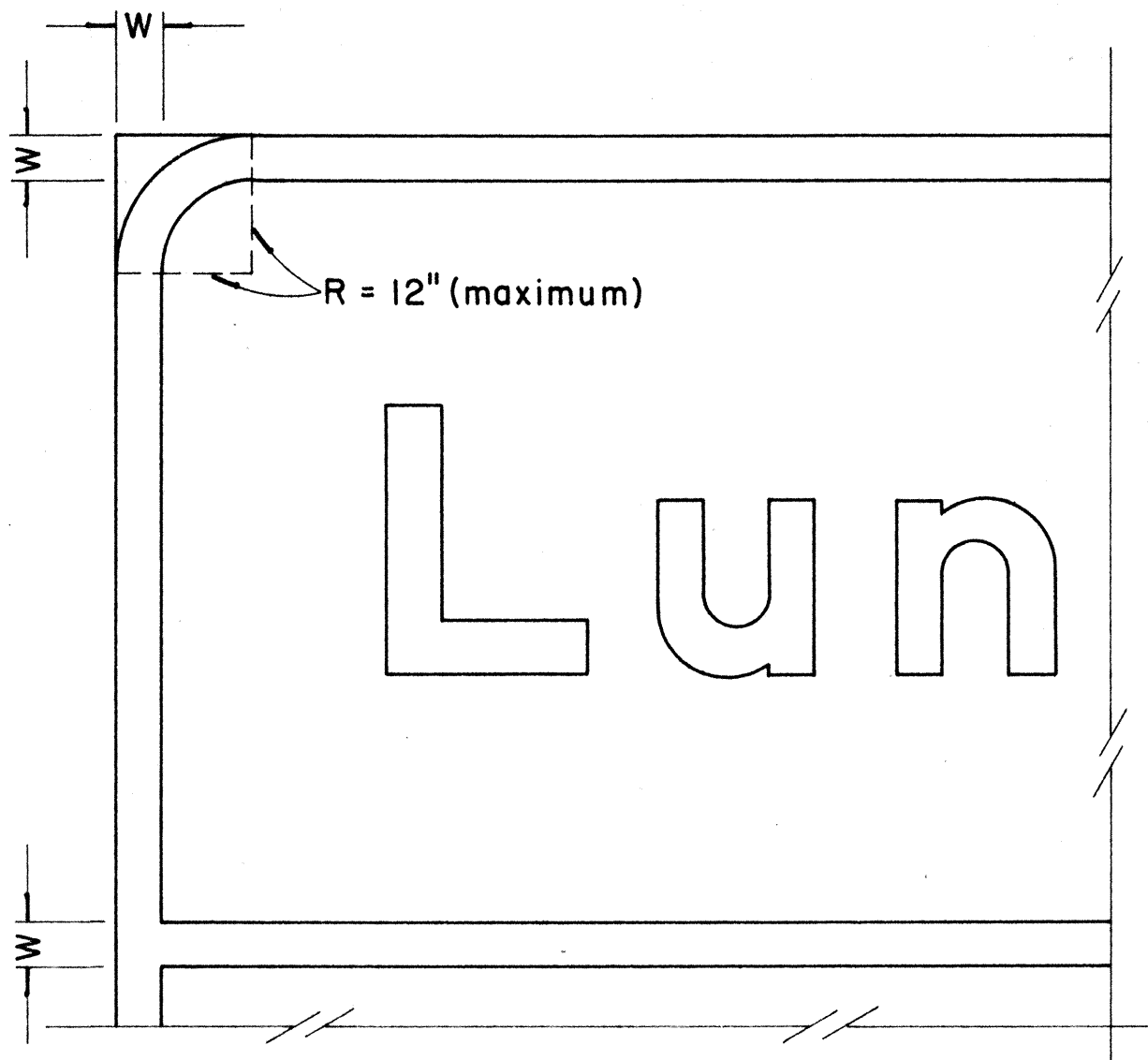


STATE ROUTE MARKER
FOR
DESTINATION & EXPRESSWAY SIGNS
Scale: Half Size

NOTE:

- 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 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"



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.

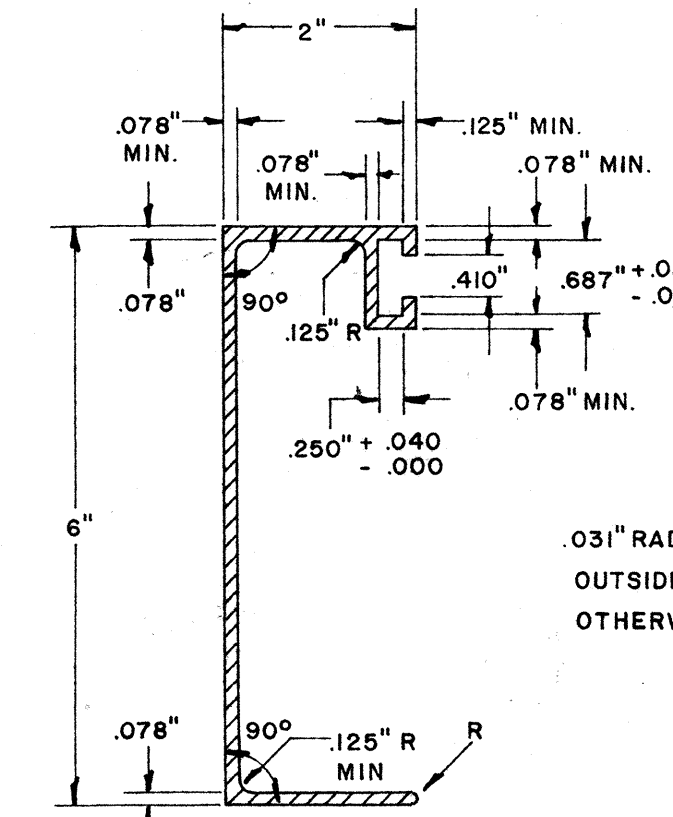
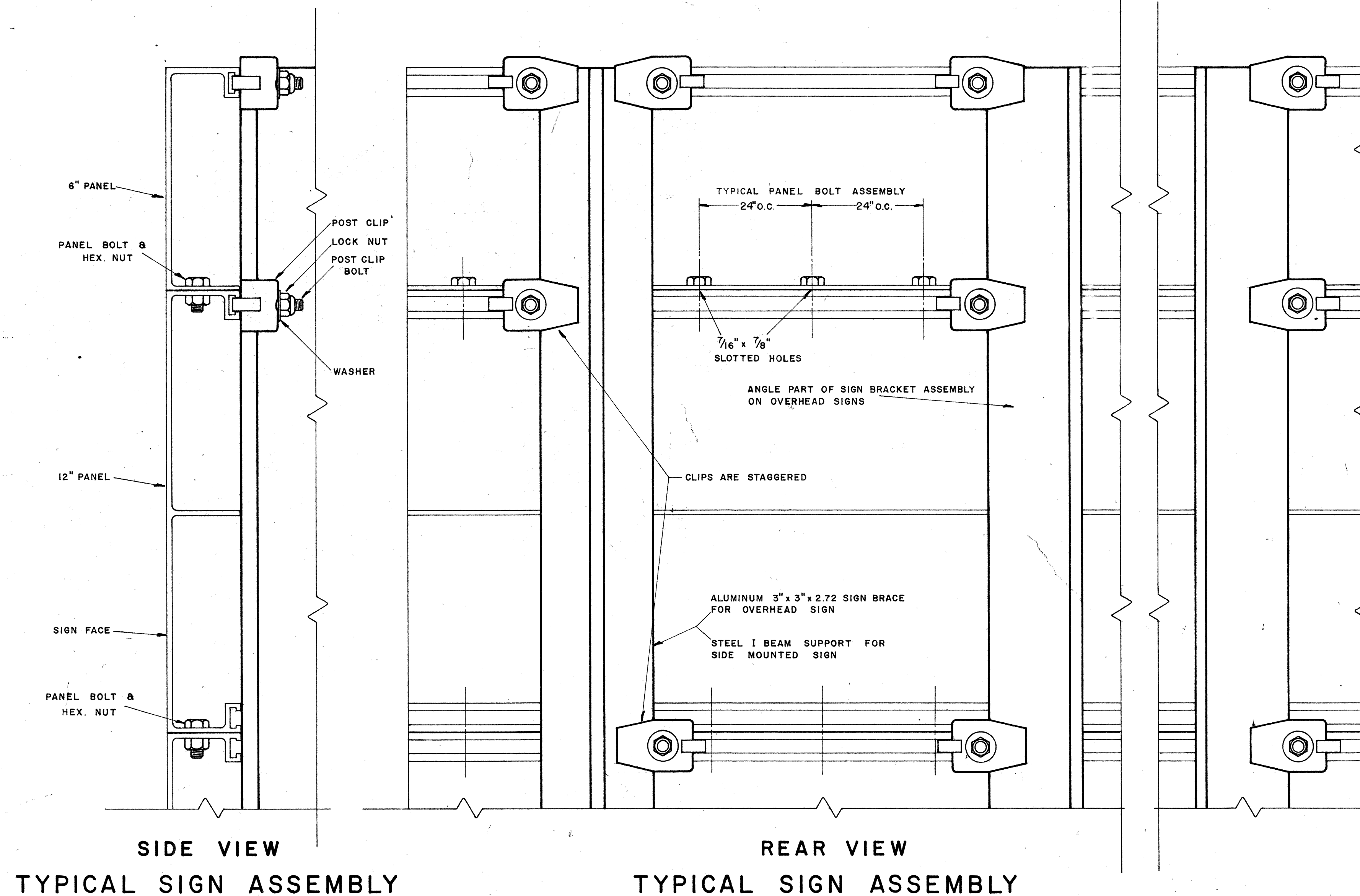
REVISED: November 15, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION & EXPRESSWAY SIGNS
STATE ROUTE MARKER
AND
BORDER DETAIL

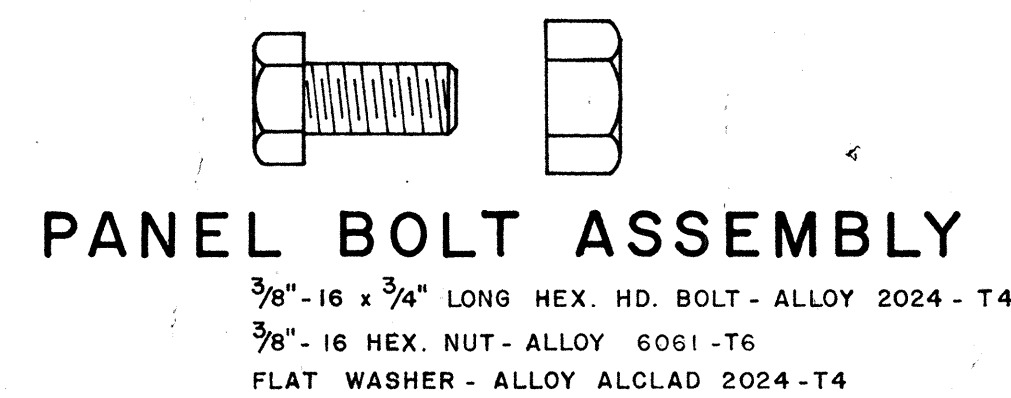
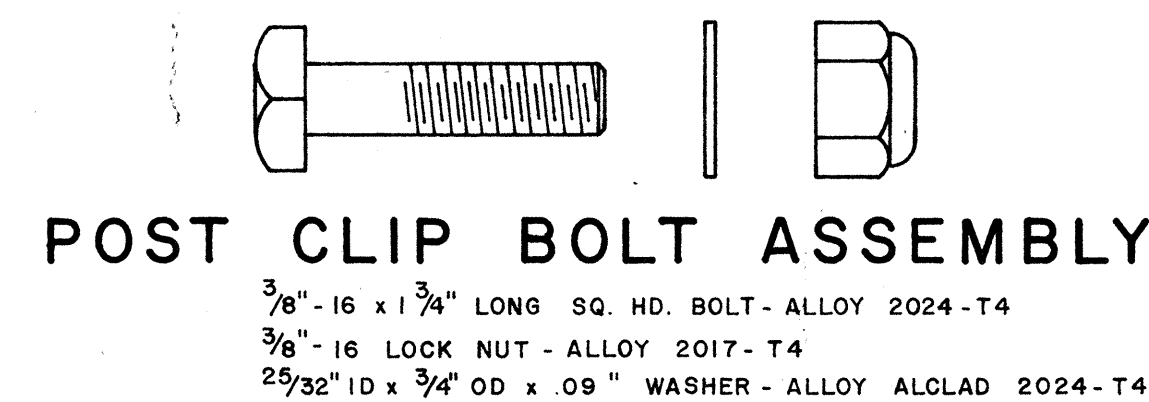
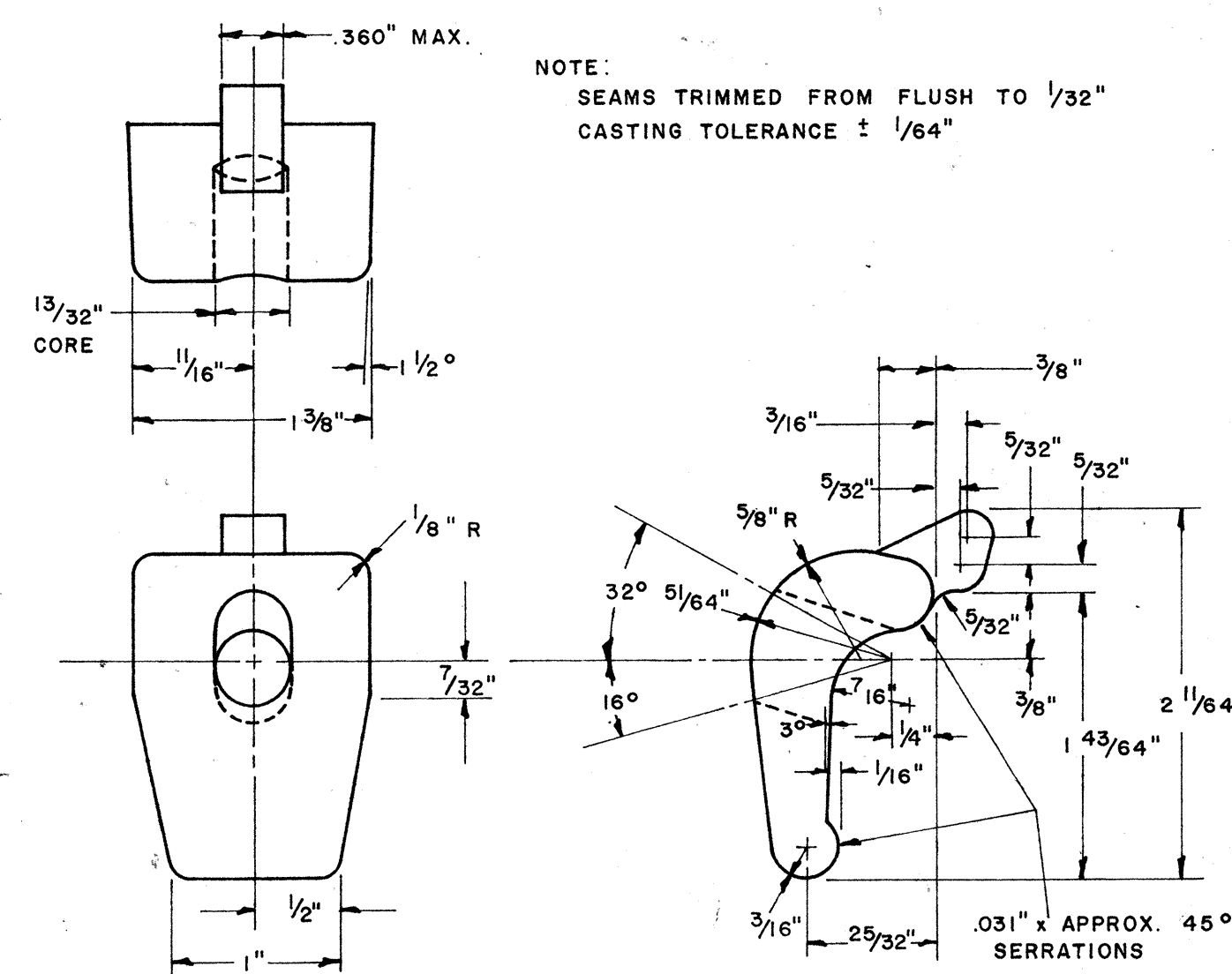
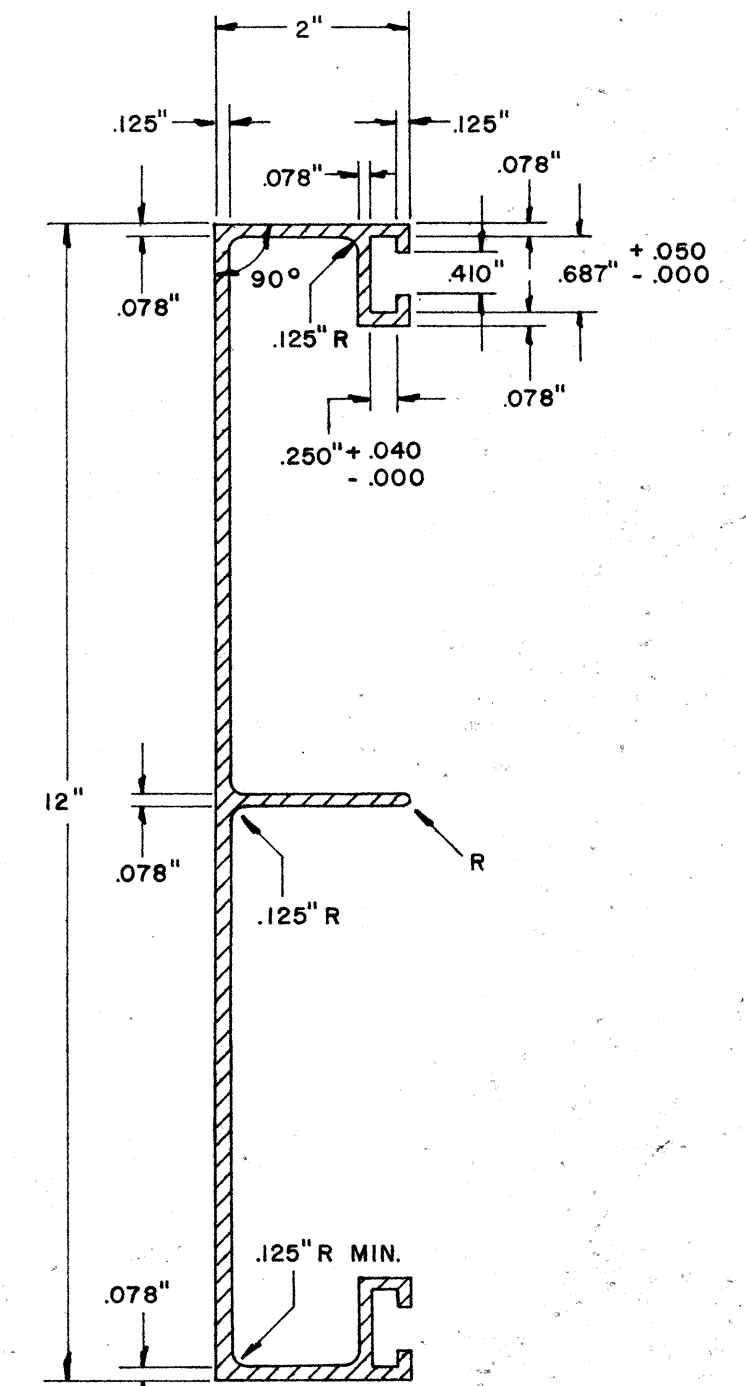
Scale: As Shown

SHEET No. 11 OF 20 SHEETS

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



SOLID EXTRUDED SIGN PANEL DETAILS



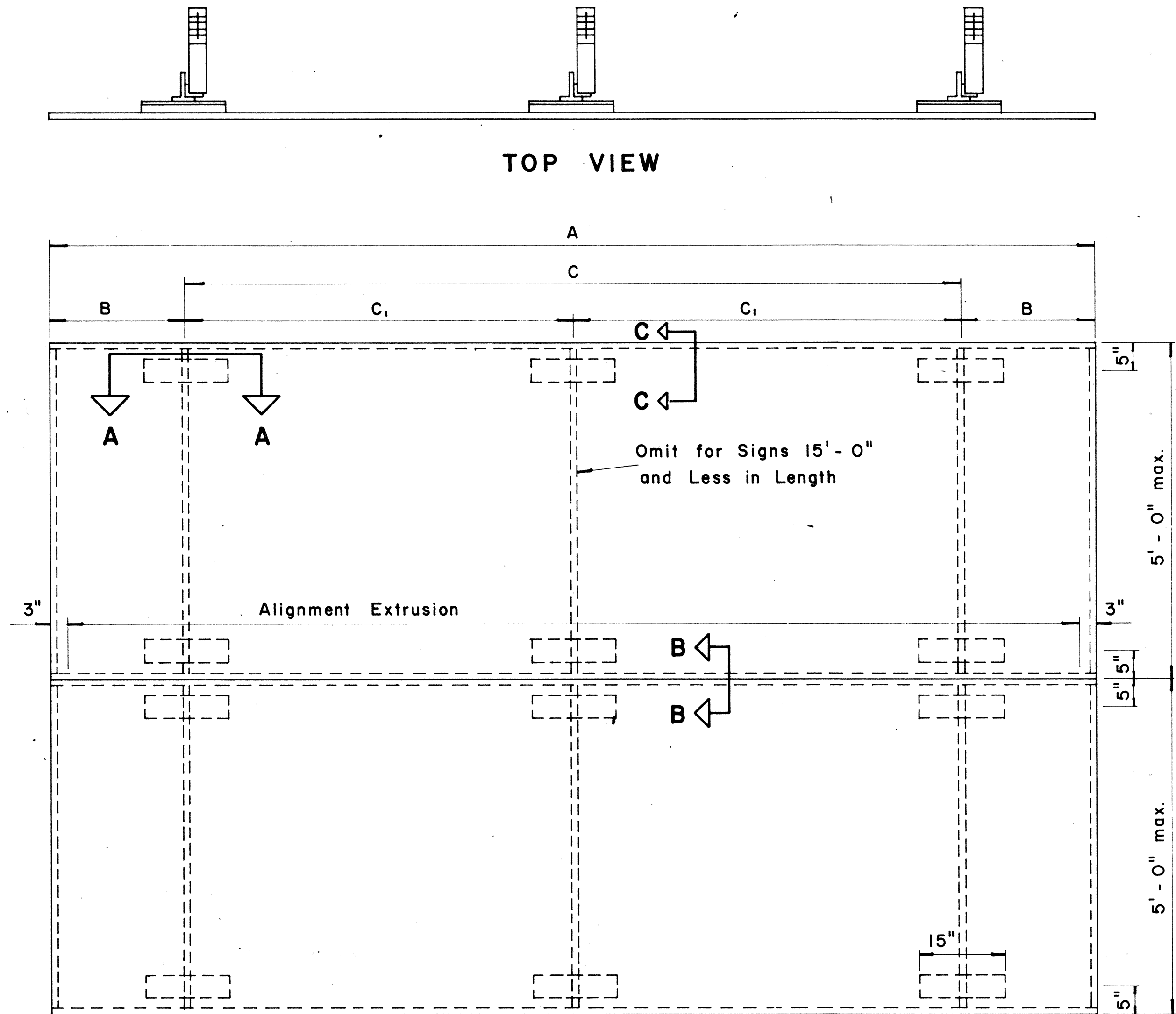
NOTE:
Extruded Aluminum Panels may be used for
Destination Signs with Reflective Sheeting Background.

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

SHEET NO. 12 OF 29 SHEETS

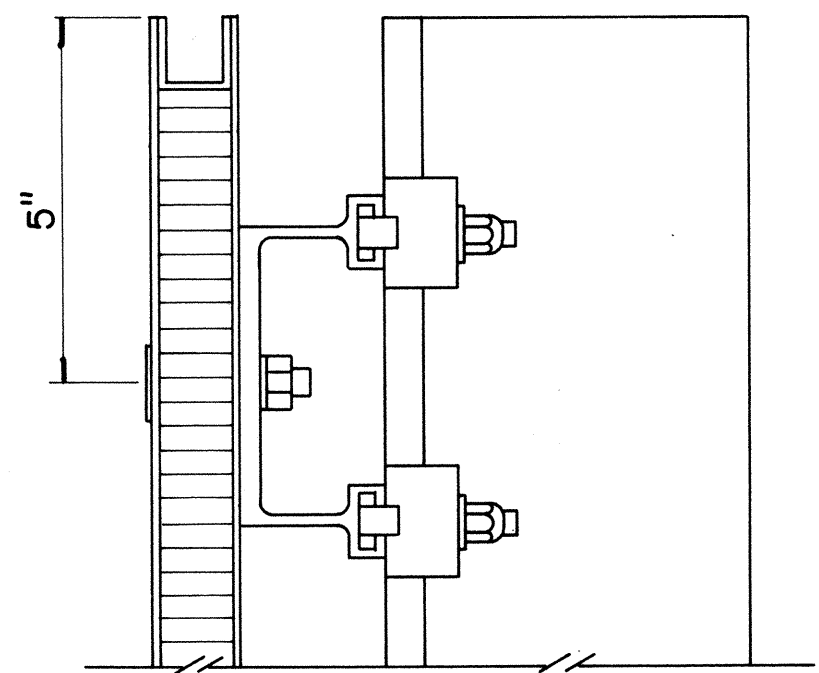
(OVERHEAD SIGNS)
SUPPORT SPACING TABLE

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"



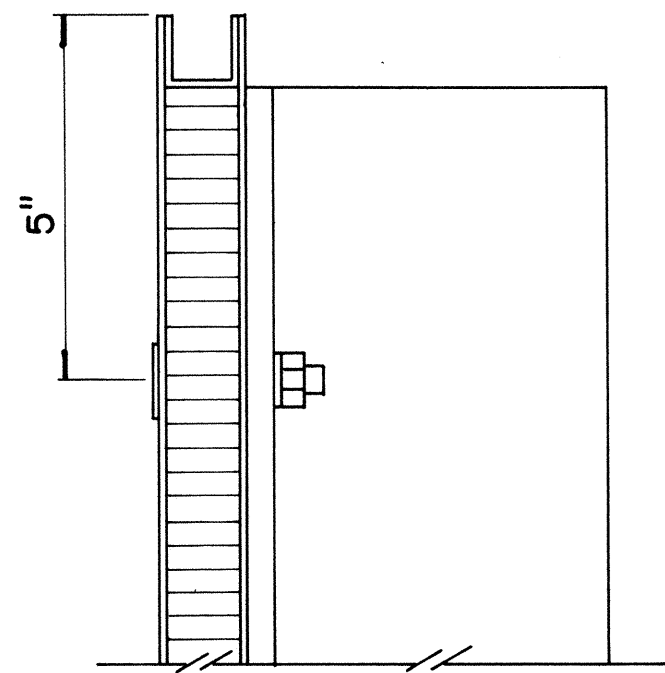
TYPICAL SIGN ASSEMBLY

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



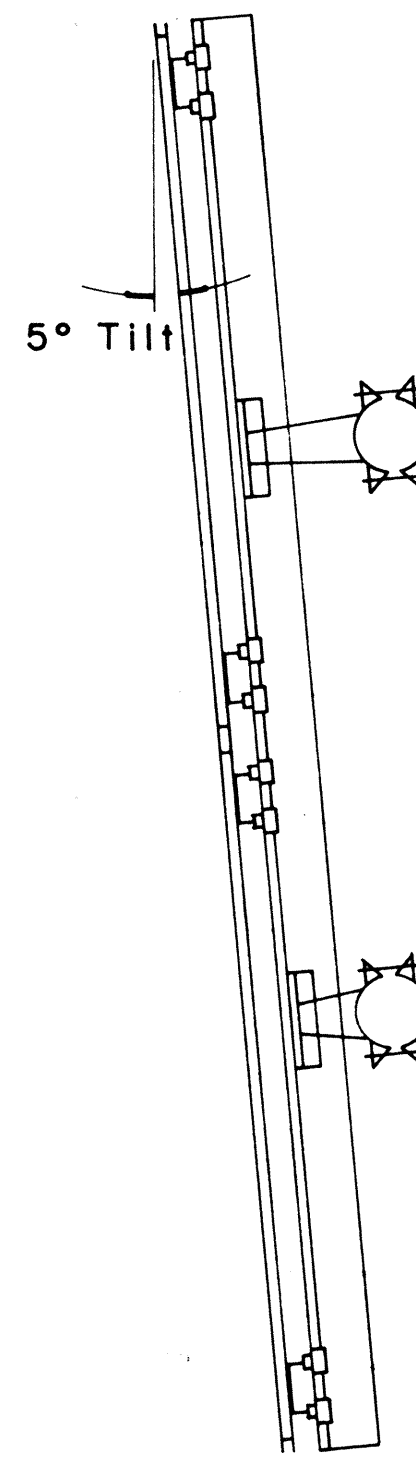
SECTION "C-C"

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

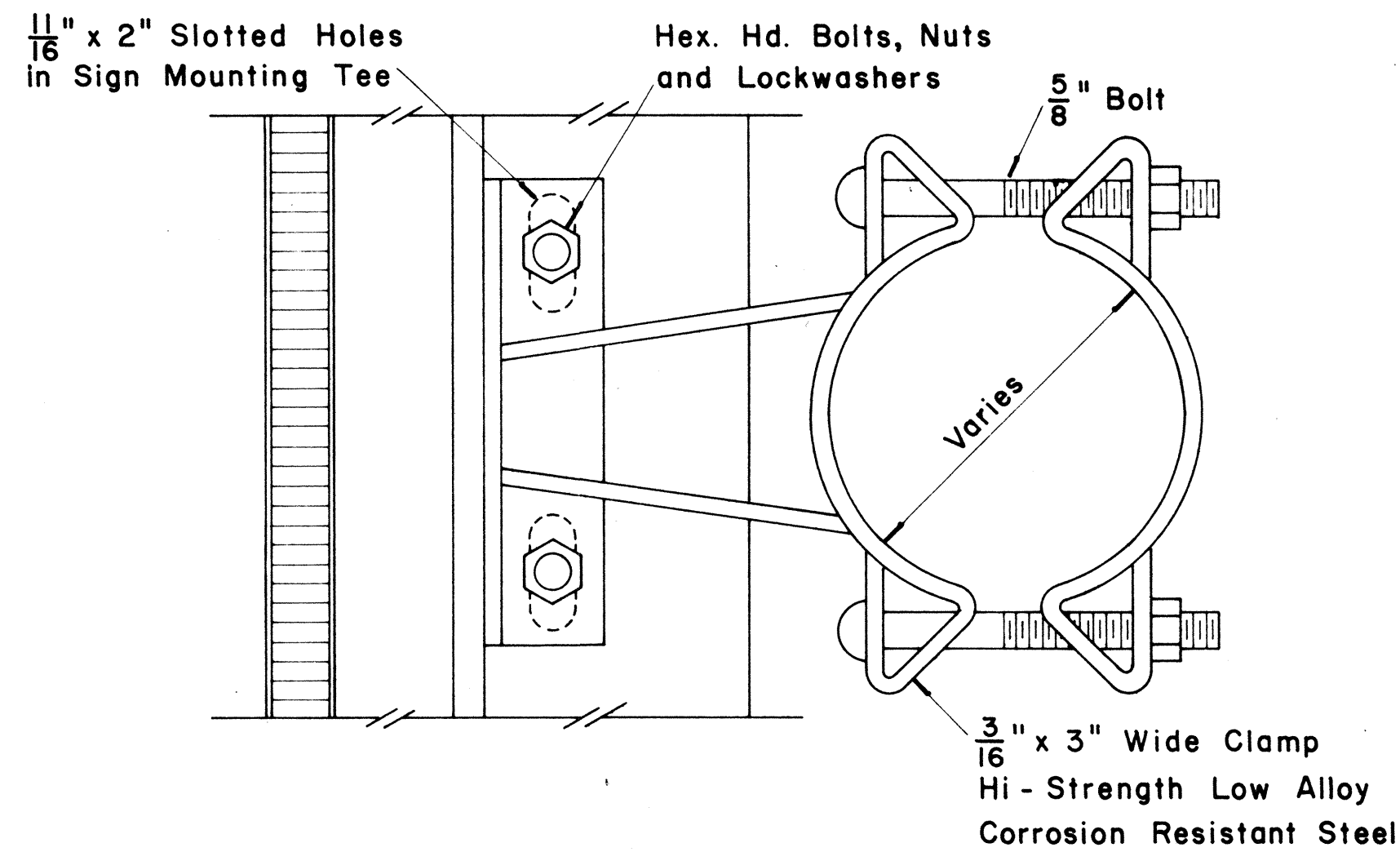


SECTION "C-C" (Alternate)

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

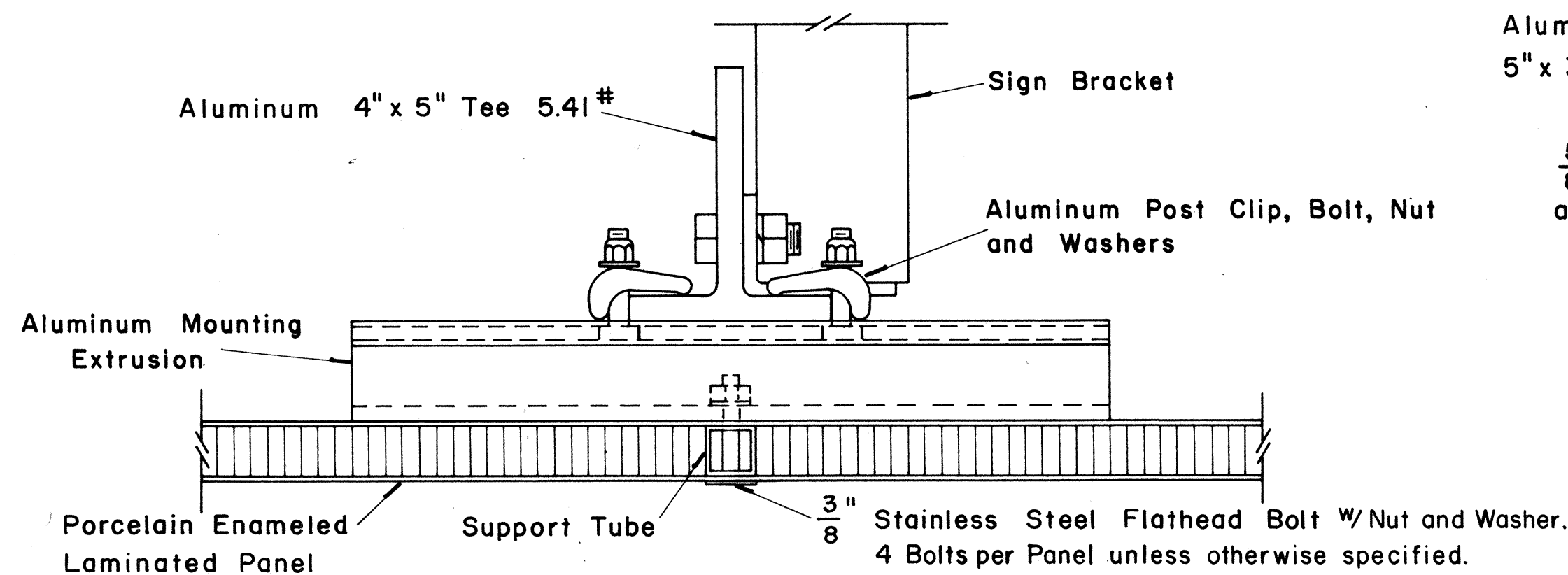


SIDE VIEW



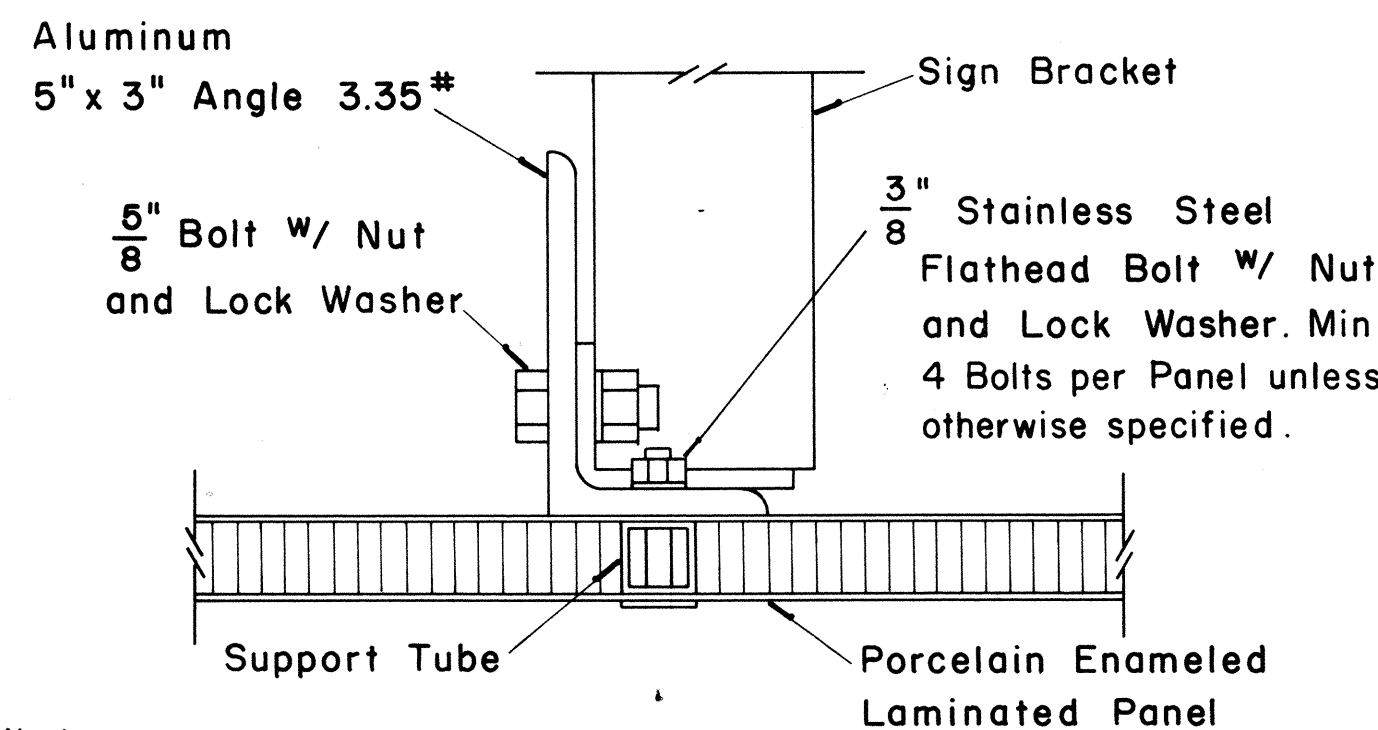
SIGN BRACKET ASSEMBLY

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



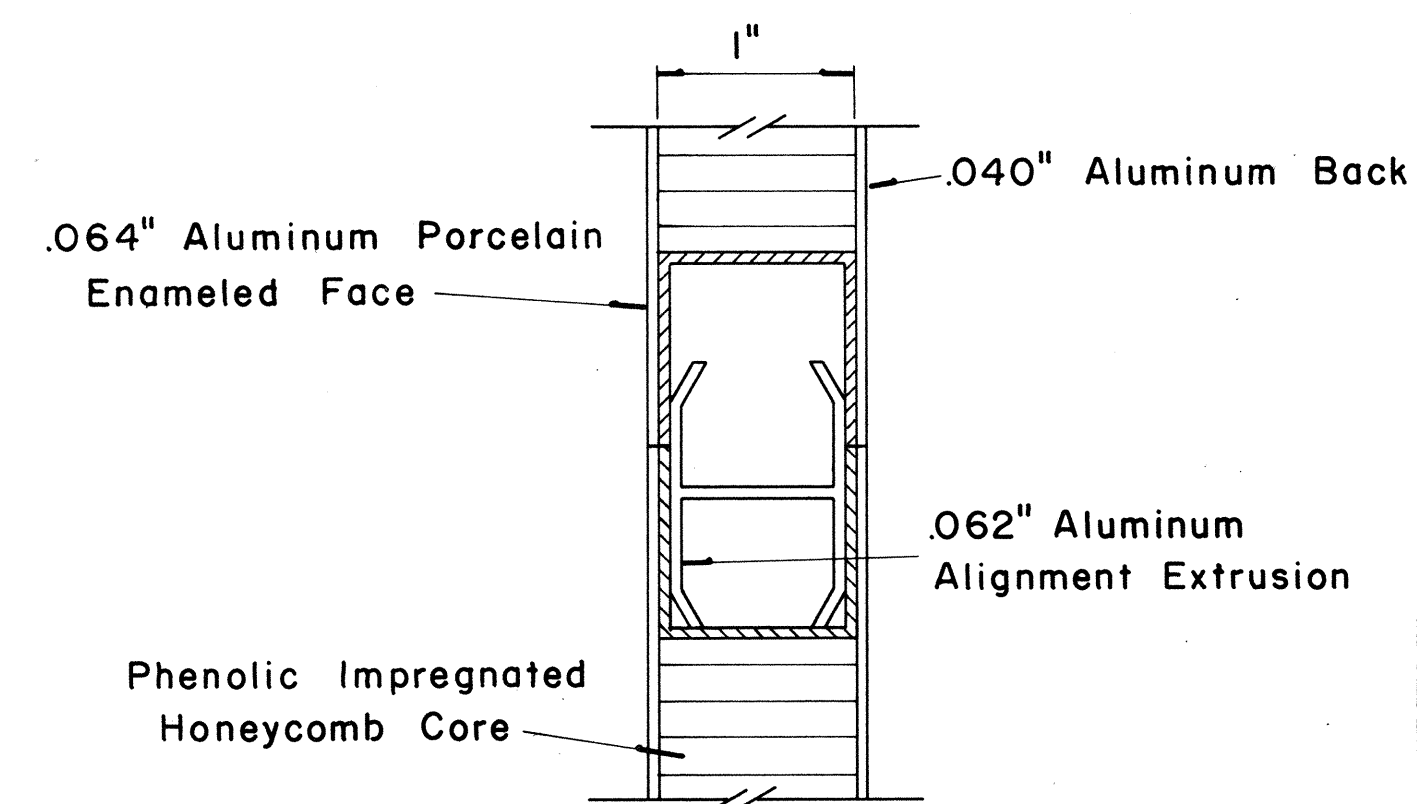
SECTION "A-A"

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)

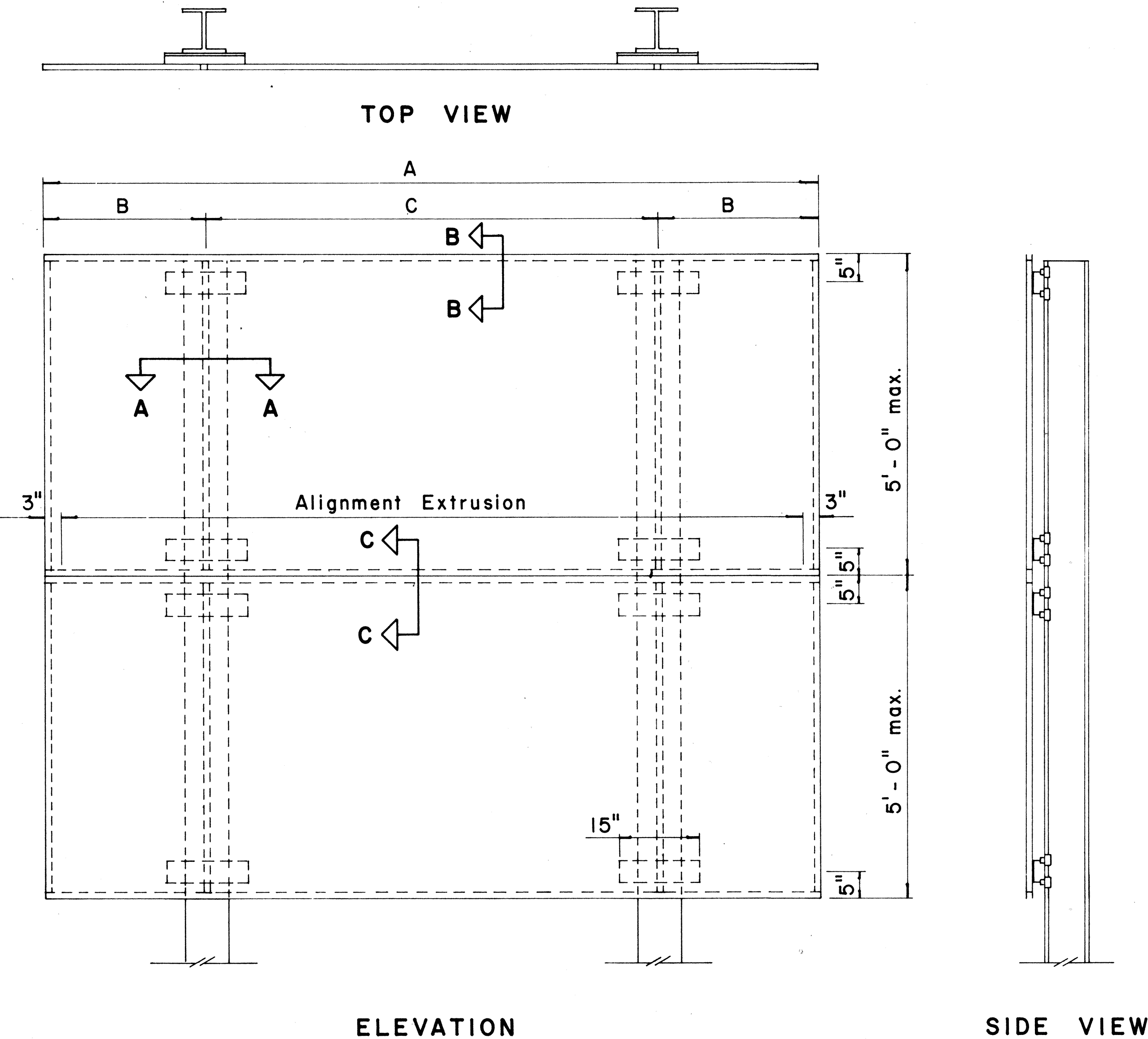
Scale: As Shown

SHEET No. 13 OF 20 SHEETS

541

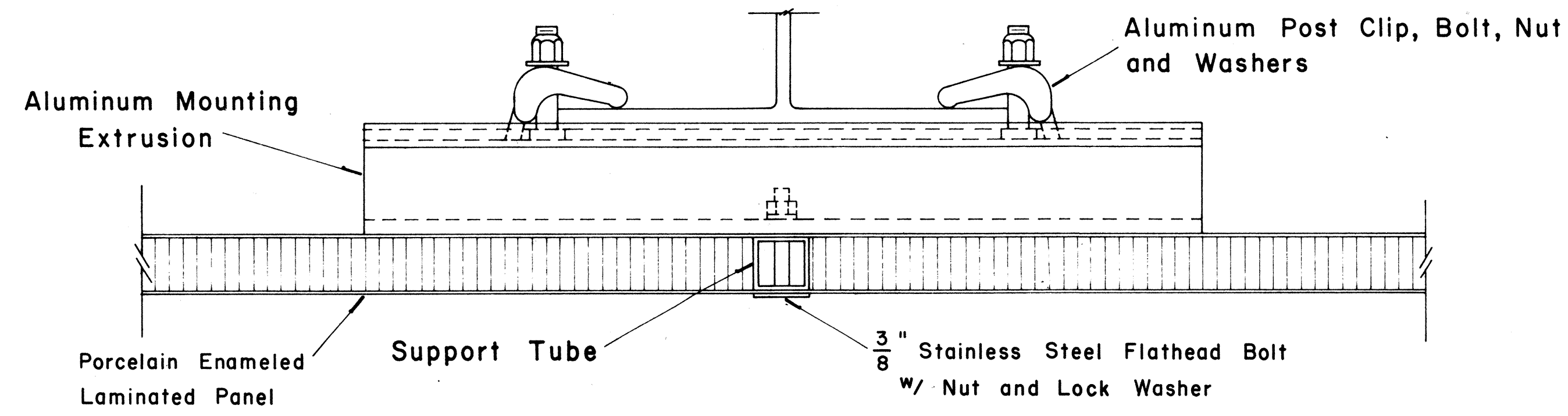
(GROUND MOUNTED SIGNS)
SUPPORT SPACING TABLE

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"



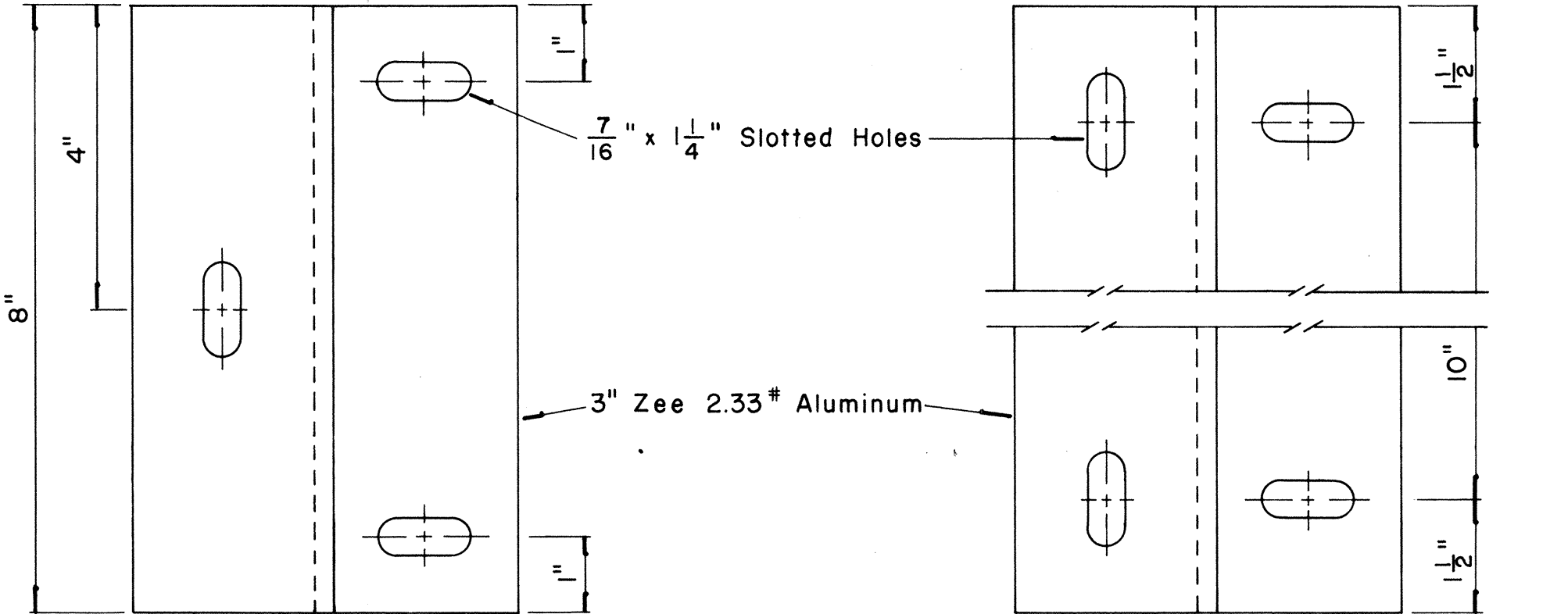
TYPICAL SIGN ASSEMBLY

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



SECTION "A-A"

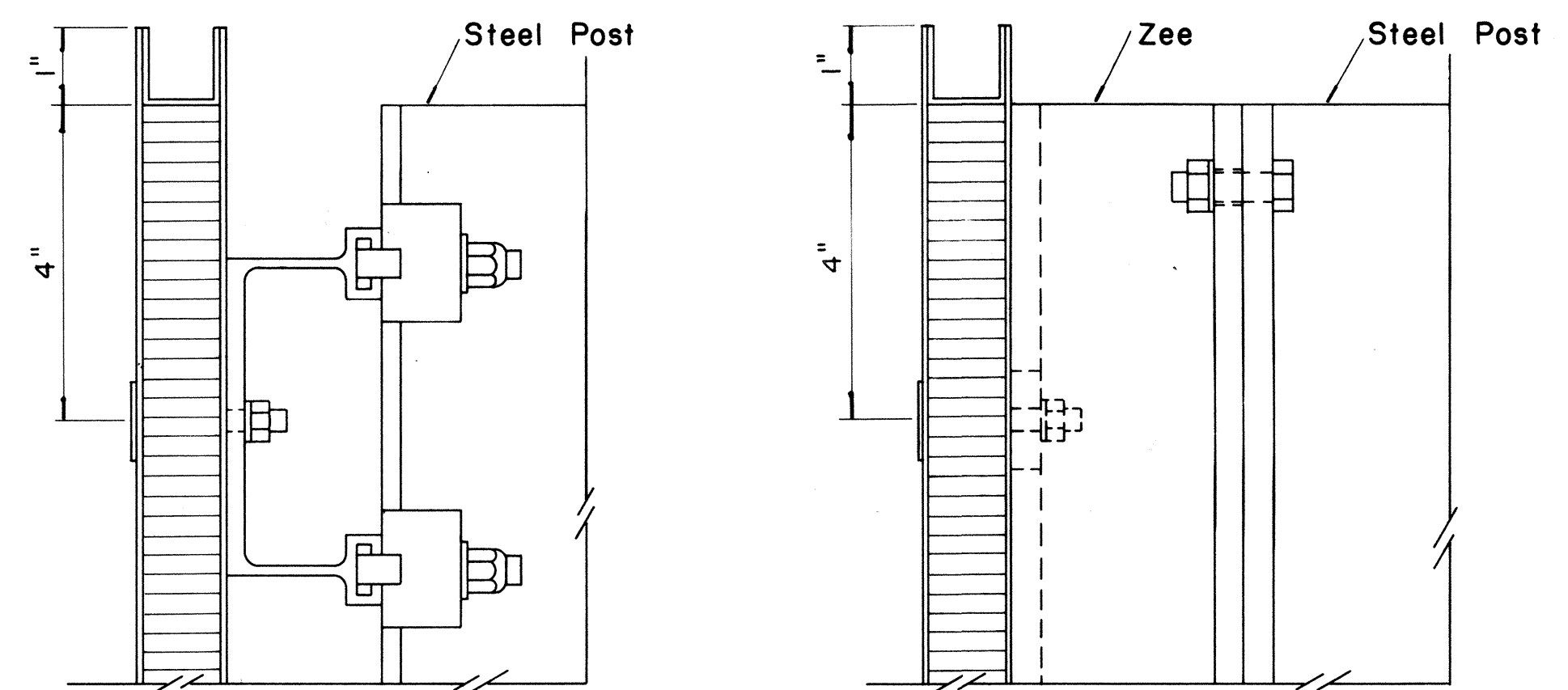
Scale: $\frac{1}{2}$ " = 1"



END MOUNTING INTERMEDIATE MOUNTING

ZEE MOUNTING DETAILS

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



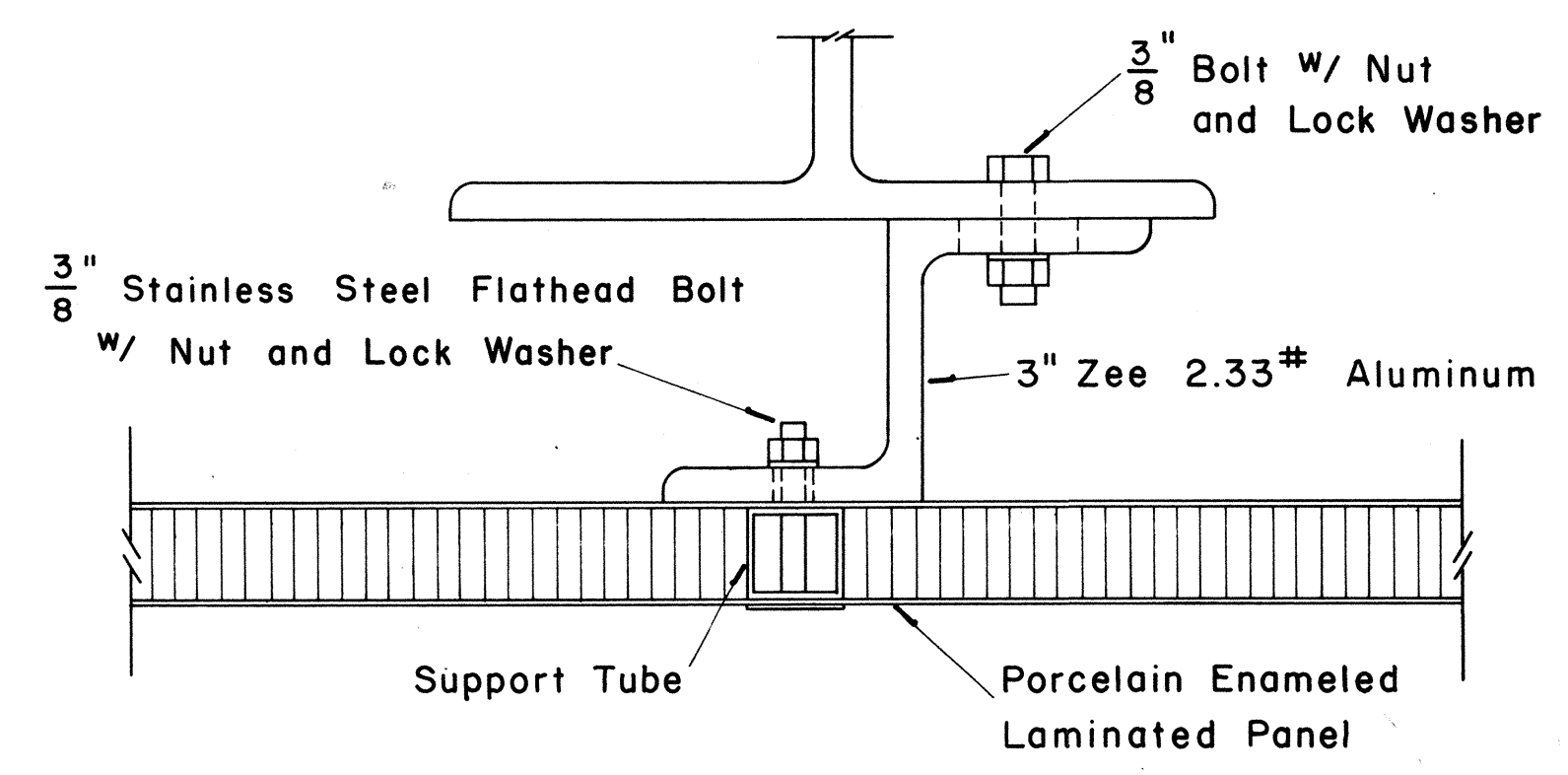
SECTION "B-B"

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

SECTION "B-B"

(Alternate)

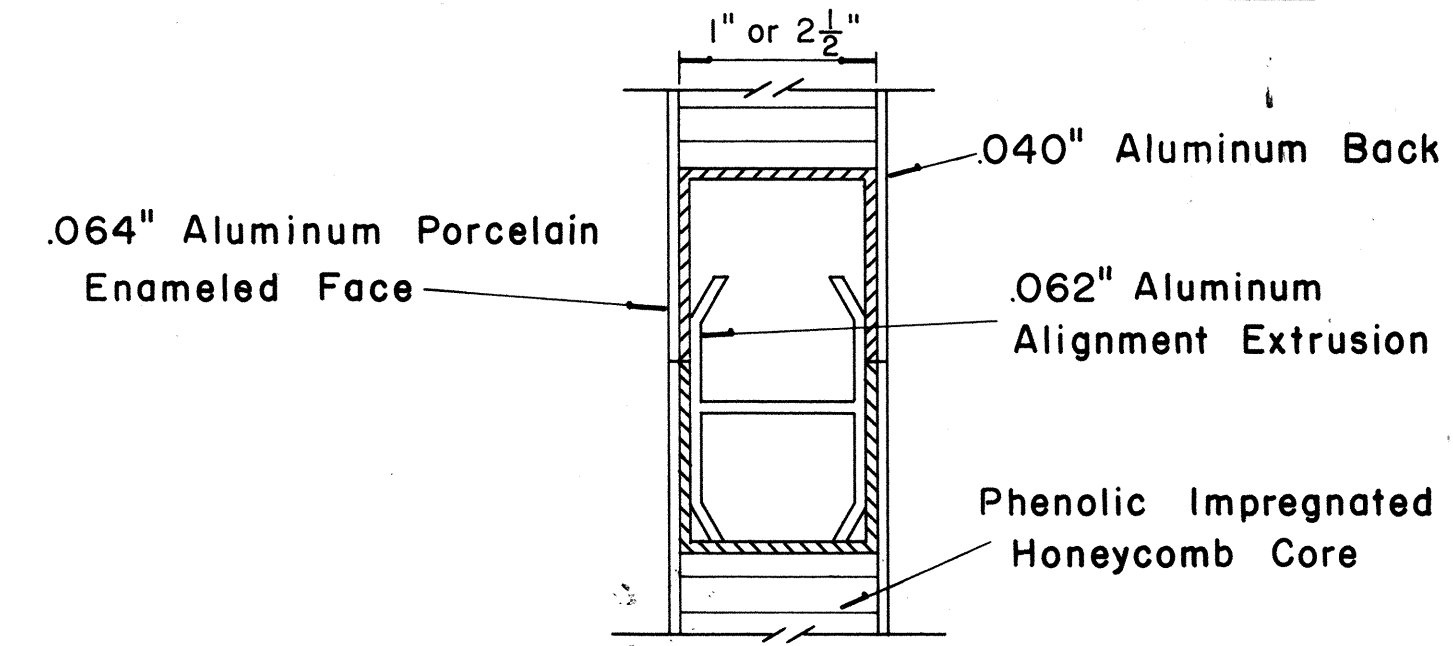
Scale: $\frac{1}{2}$ " = 1"



SECTION "A-A"

(Alternate)

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



CLOSURE DETAIL
SECTION "C-C"

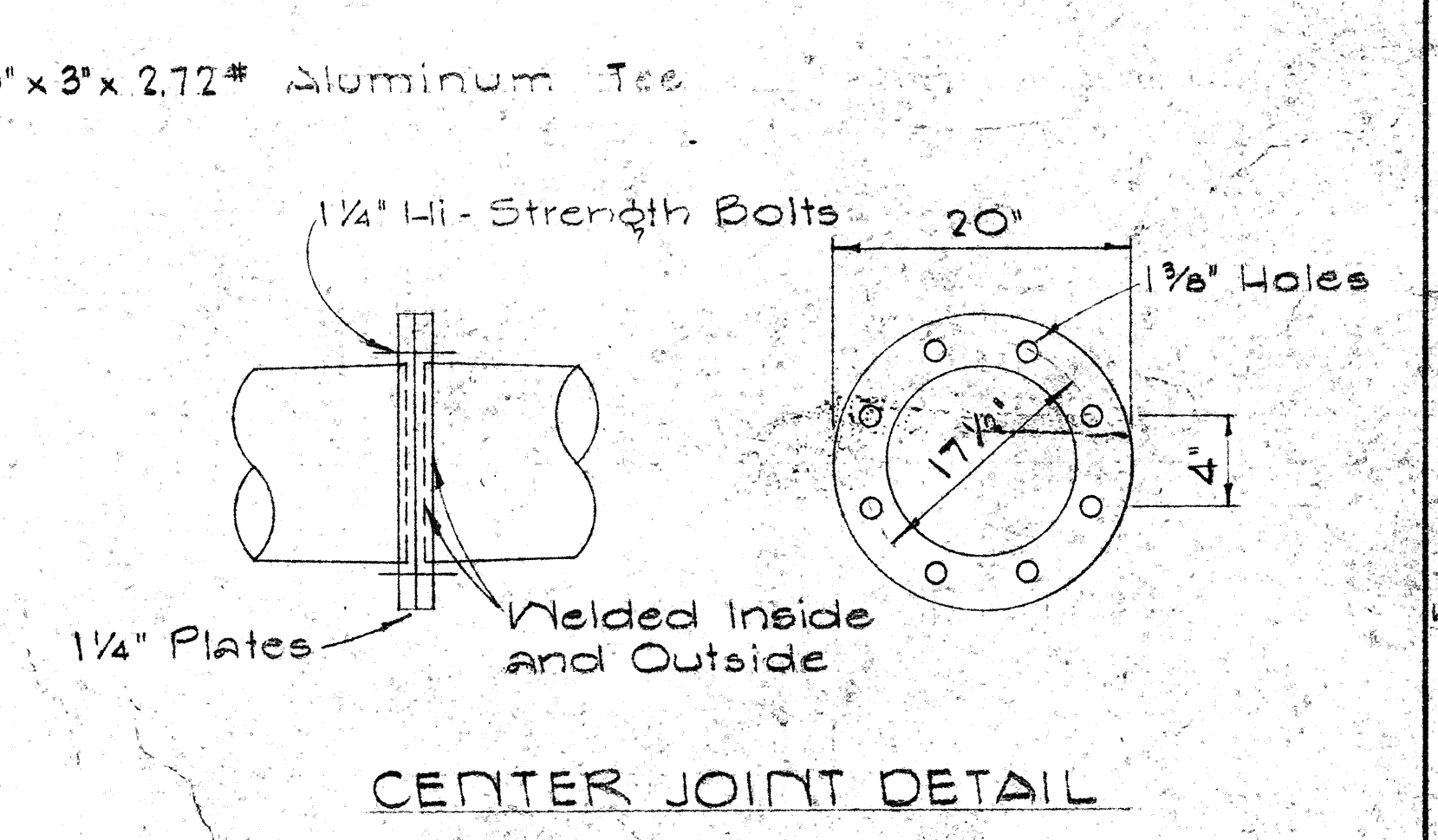
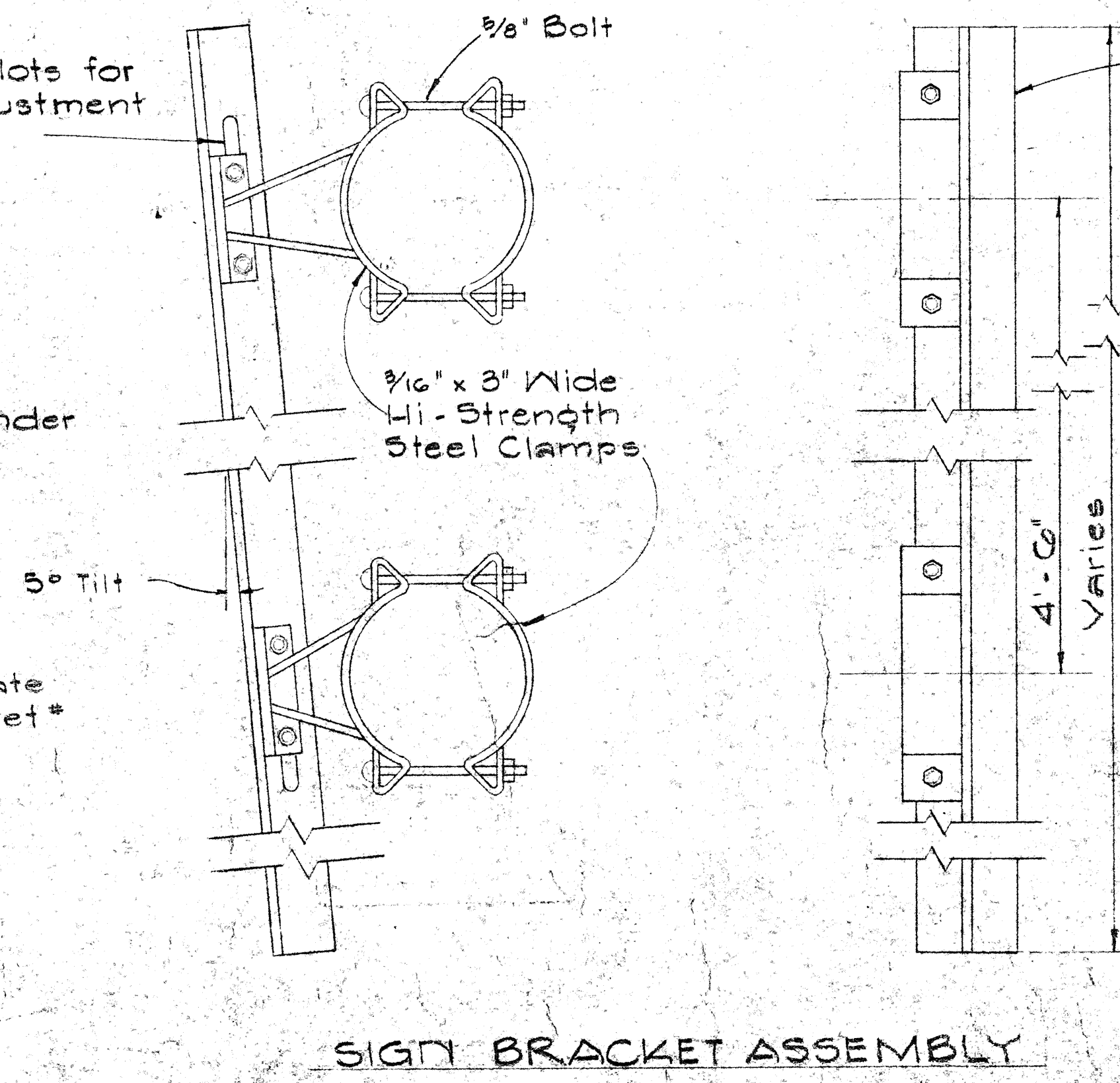
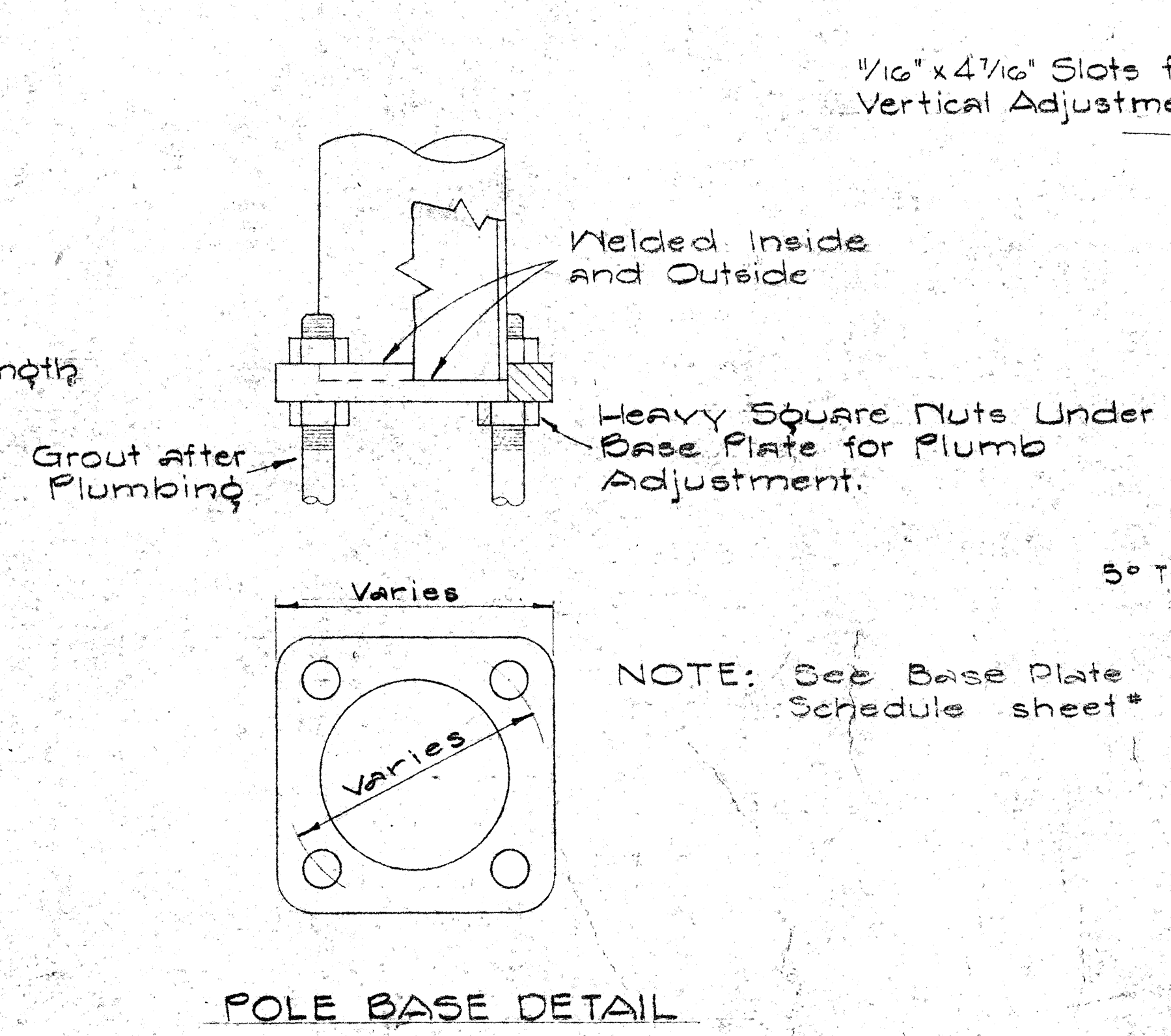
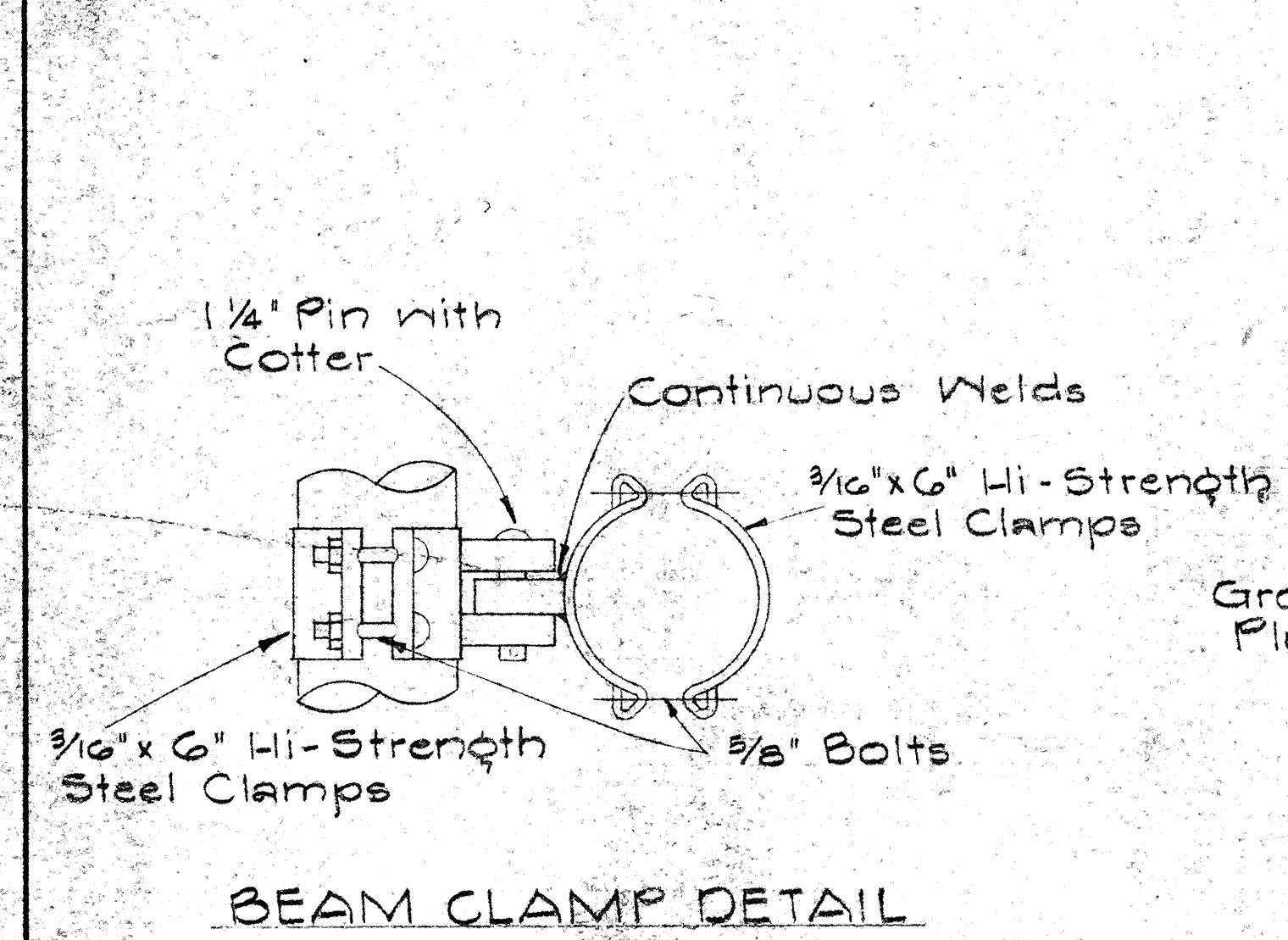
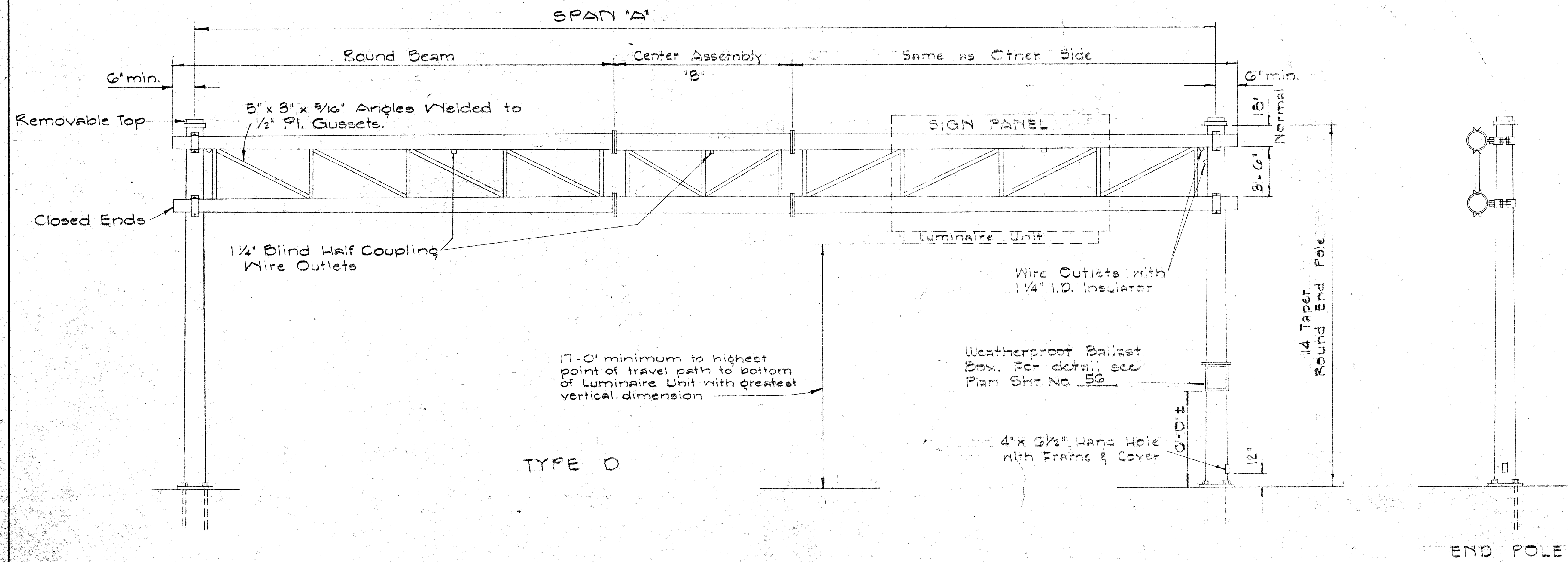
FULL SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
LAMINATED ALUMINUM
SIGN PANELS
(GROUND MOUNTED)

Scale: As Shown

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



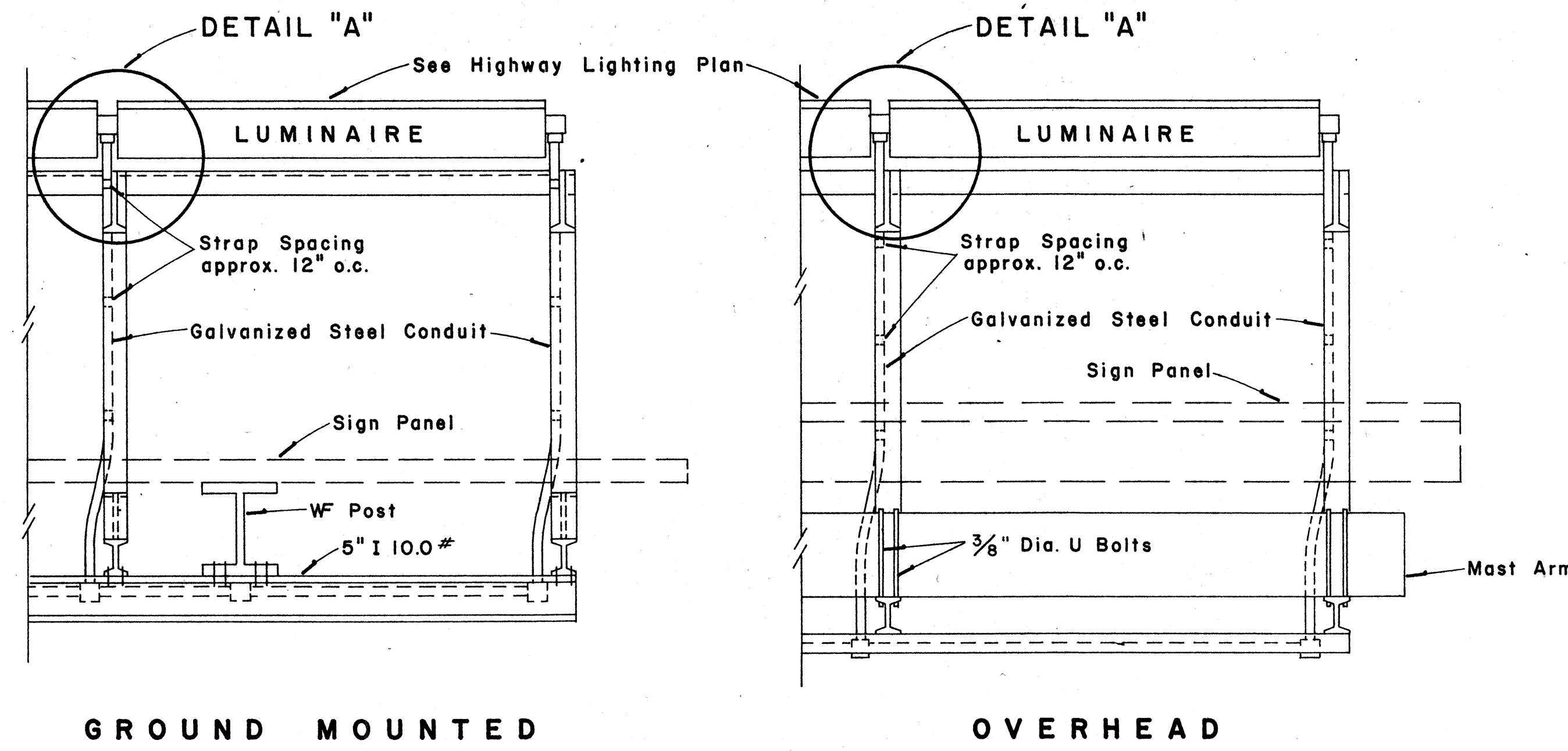
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPE D
OVERHEAD SIGN SUPPORT
TWO-TUBE TRUSS TYPE
STEEL

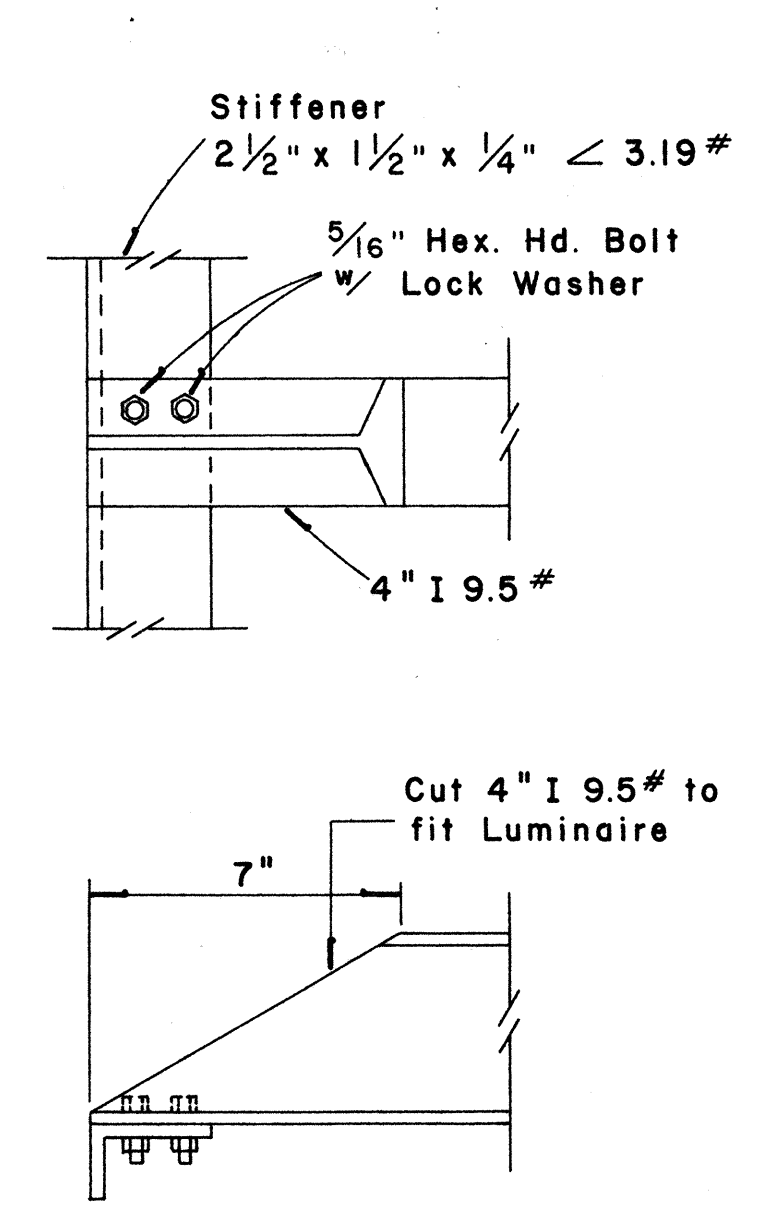
SHEET No. 16 OF 20 SHEETS

SURVEY PLOTTED BY: _____
DATE: _____
DRAWN BY: _____
DESIGNED BY: _____
NOTE BOOK: _____
QUANTITIES BY: _____
CHECKED BY: _____

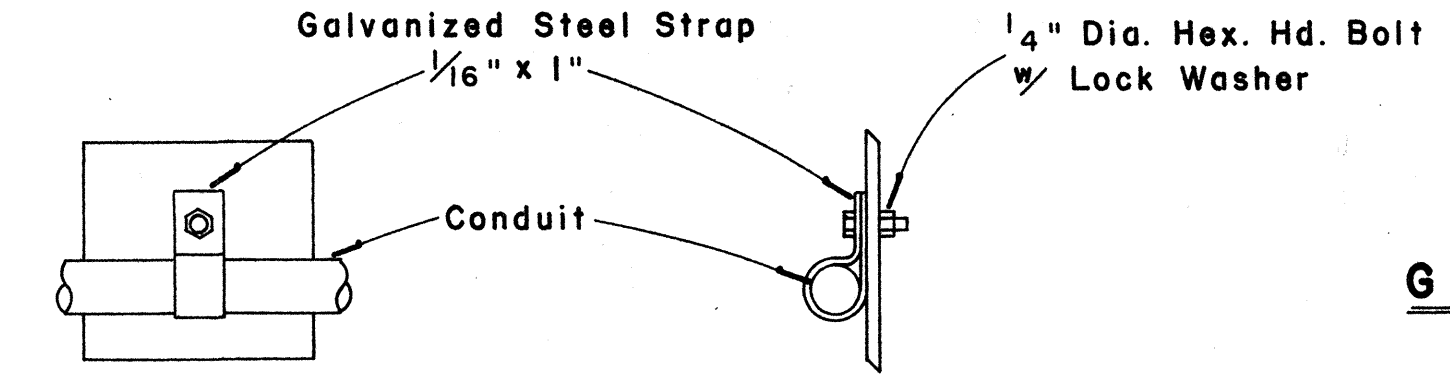
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-111(88)	1967	58	101



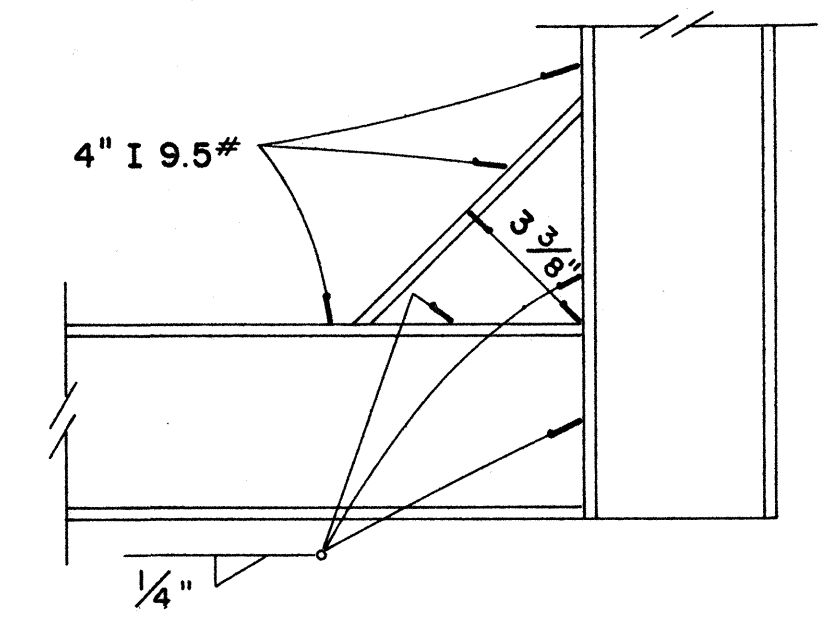
TOP VIEW
LUMINAIRE MOUNTING
Scale: 1" = 1' - 0"



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

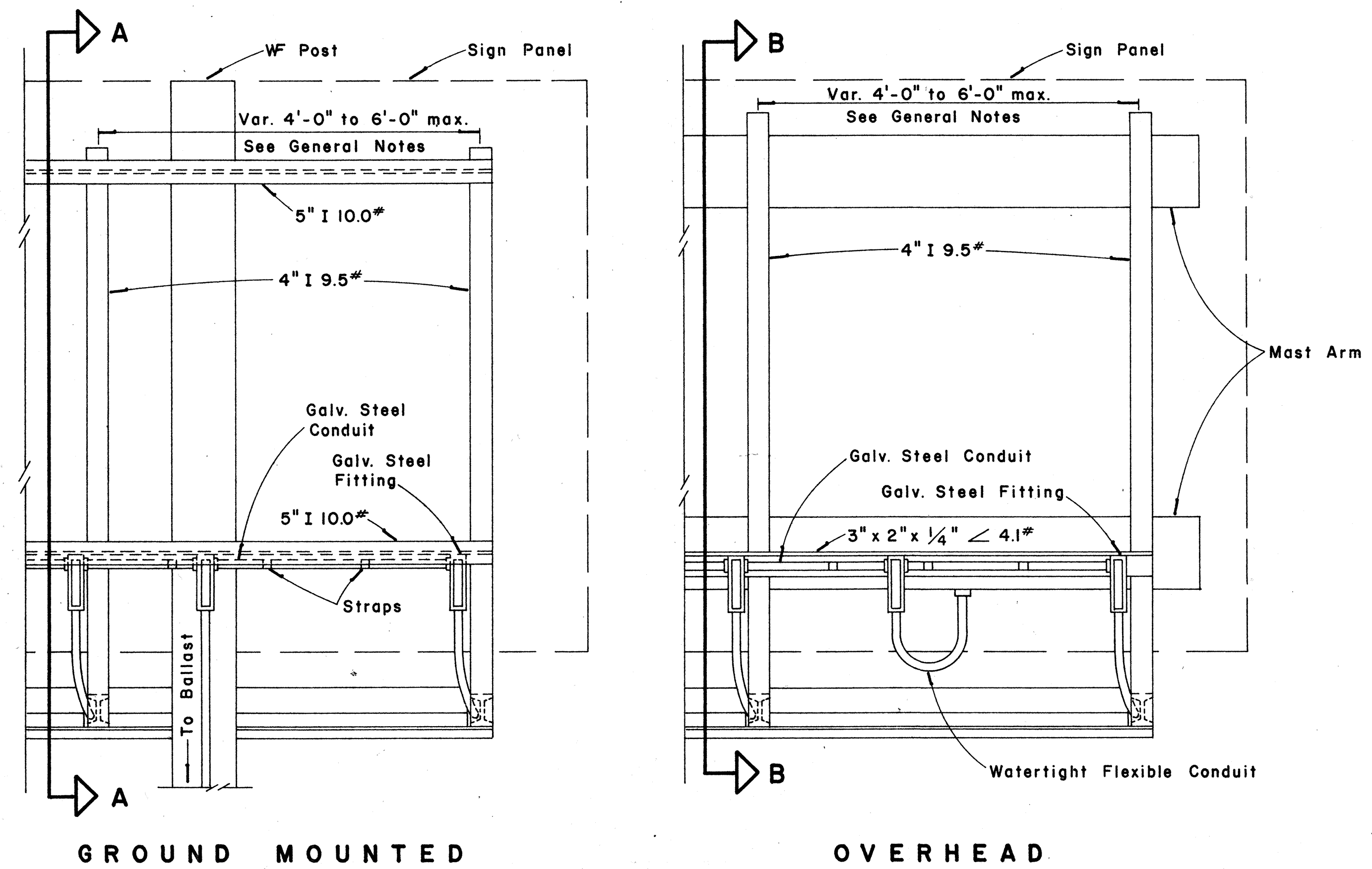


CONDUIT STRAP DETAIL
Scale: 3" = 1' - 0"

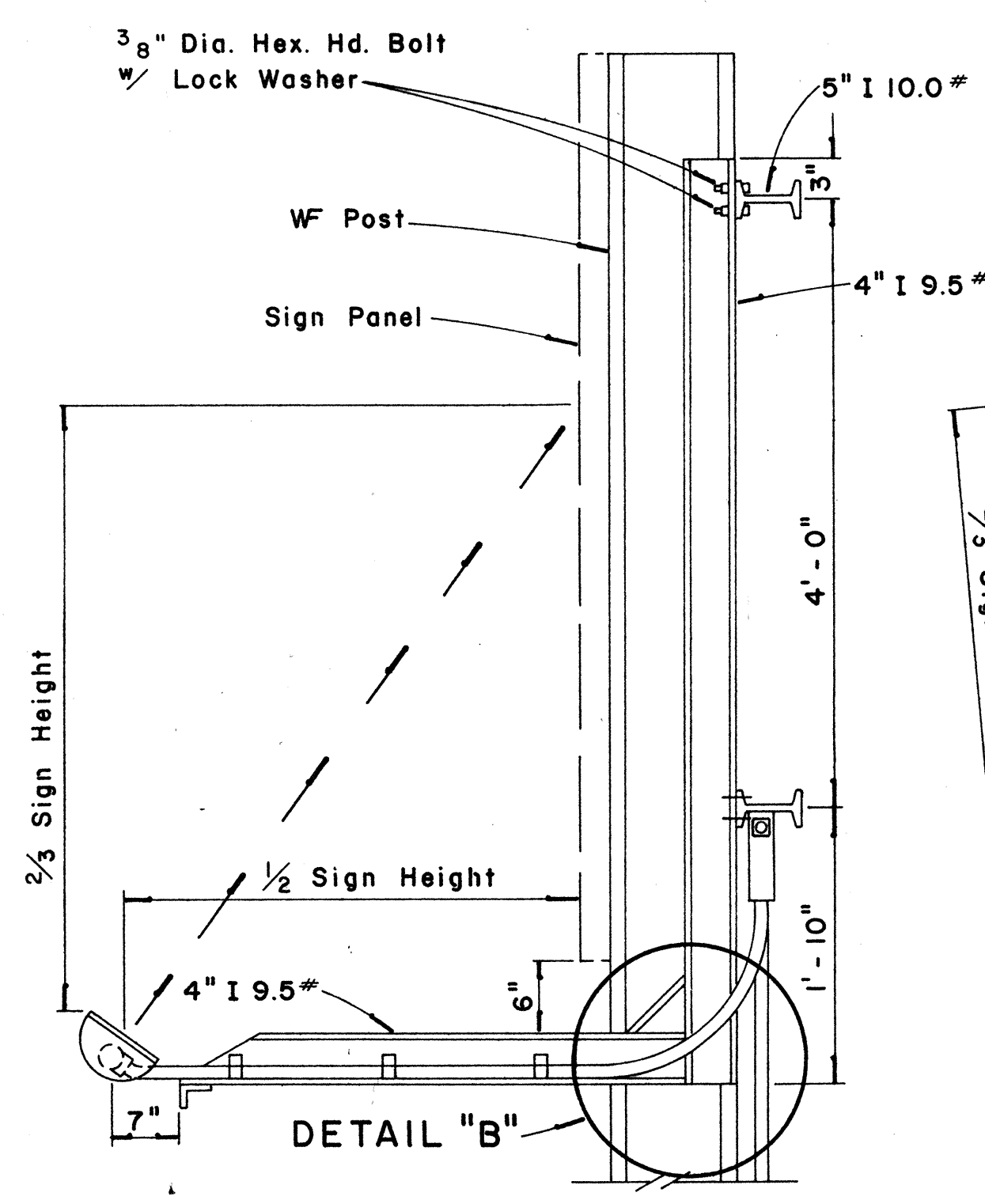


DETAIL "B"
Scale: 3" = 1' - 0"

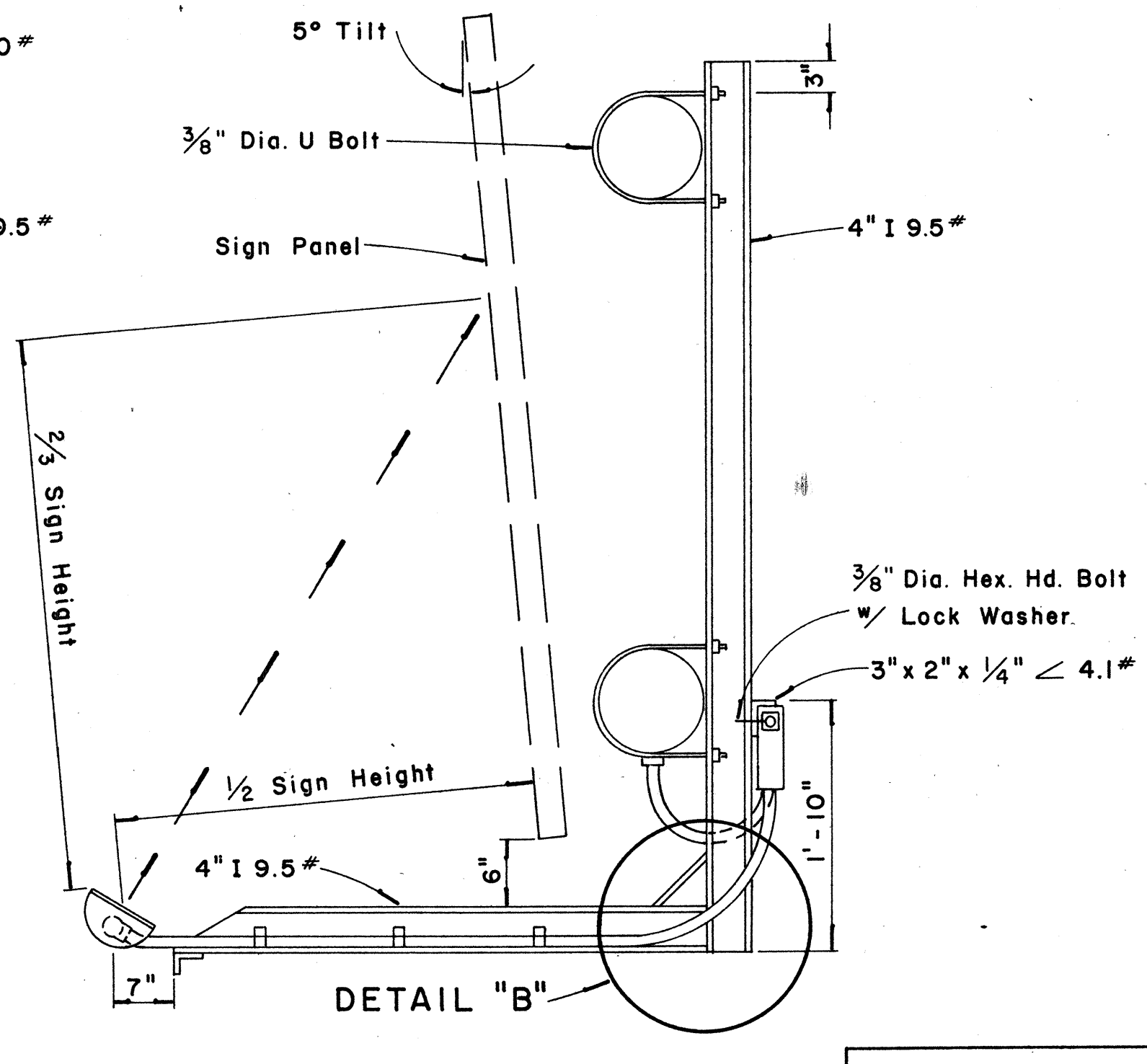
- GENERAL NOTES**
- Conduit sizes: 3/4" diameter for one or two Luminaire Units, 1" diameter for three or more Luminaire Units.
 - Fluorescent Fixtures shall be installed as recommended by the manufacturer.
 - Luminaire brackets shall be spaced to fit 4'-0" to 6'-0" luminaires with fittings. Eight feet (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.



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

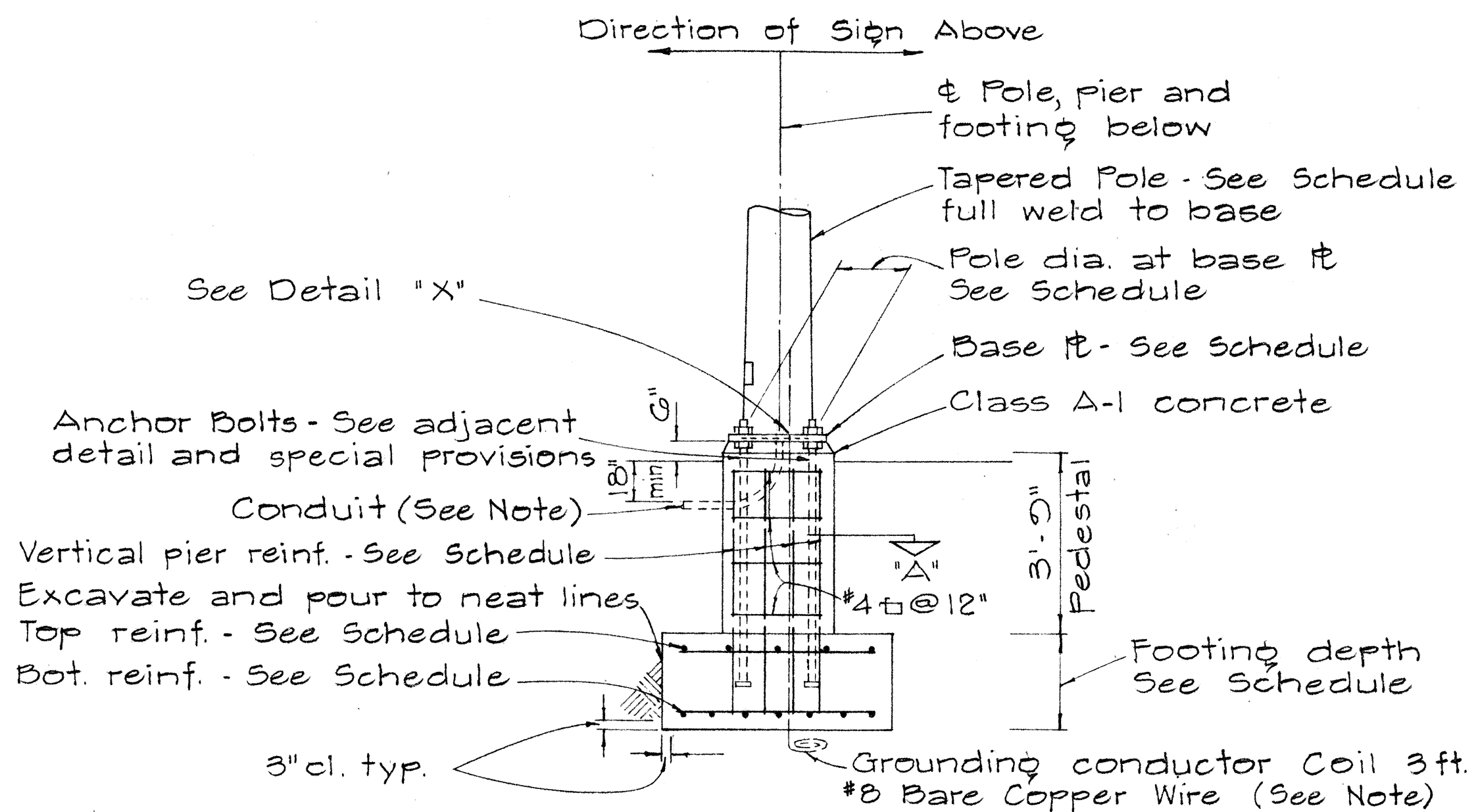
EXPRESSWAY SIGNS
LUMINAIRE MOUNTINGS

Scale: As Shown

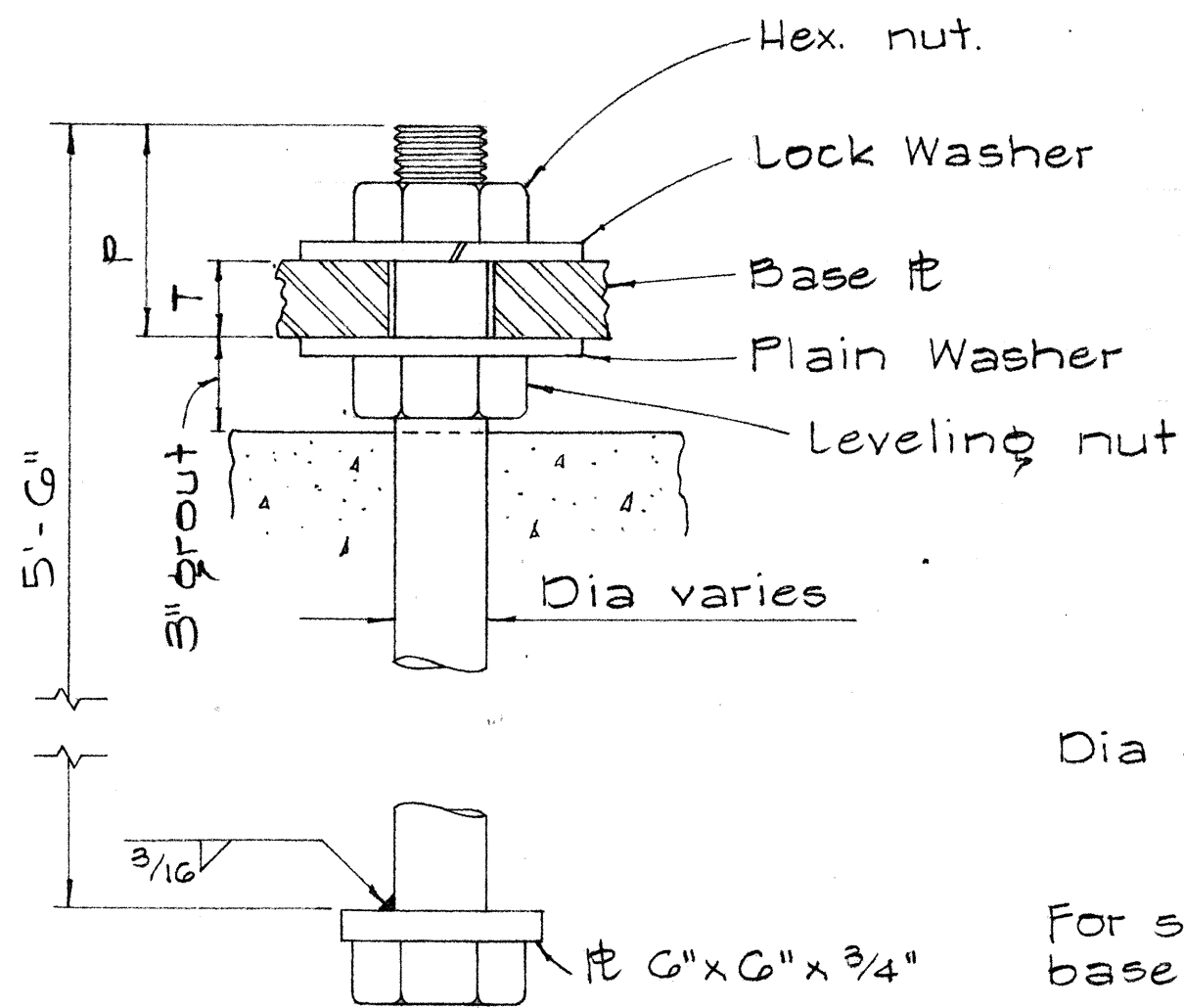
SHEET No. 17 OF 20 SHEETS

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.	I-41-1(32):5 UNIT 4	1967	59	101

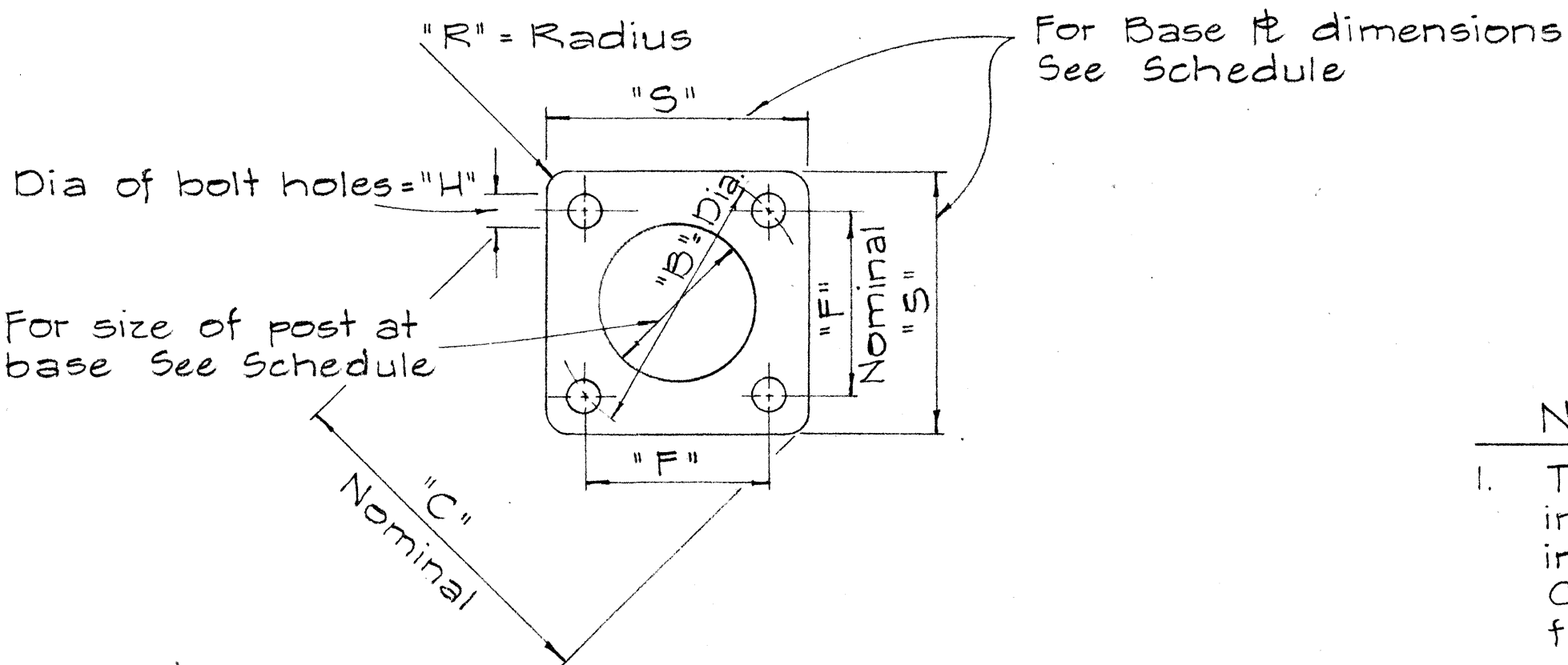


TYPICAL POLE FOUNDATION DETAIL



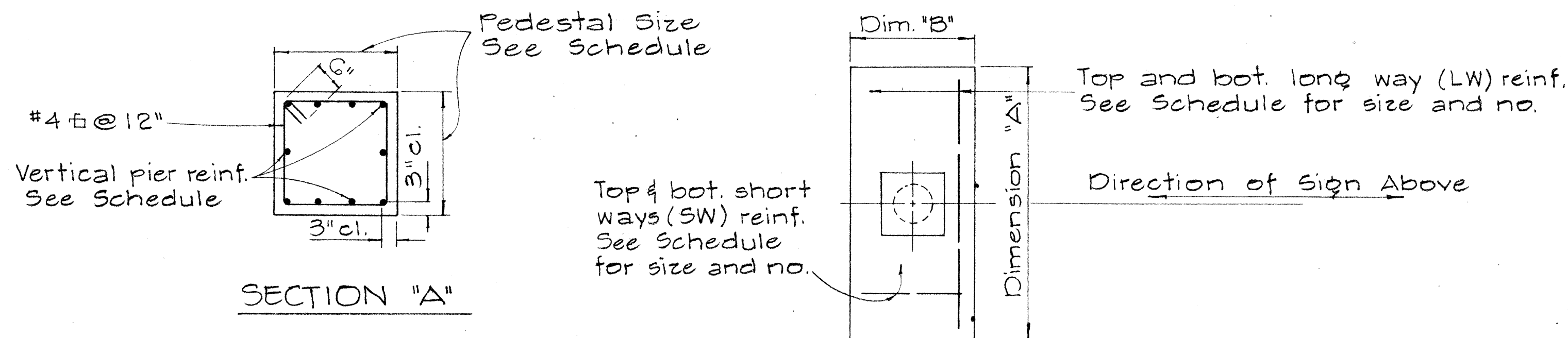
TYPICAL ANCHOR BOLT 4 REQ'D

BASE PLATE SCHEDULE										
Gage No	Post Dia.	B	C	F	H	P	R	S	T	Bolt Dia.
747	16	23 1/2	30 1/2	16 3/8	2 5/8	6 3/4	5	24 1/2	2 1/2	2 1/4
343	17	25 1/2	33	18	3 3/8	8	5 1/2	26 1/2	3	3

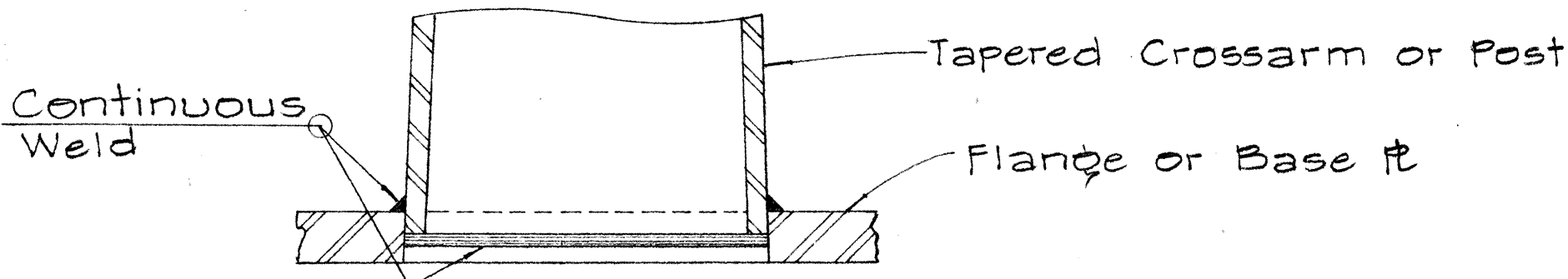


TYPICAL BASE PLATE

- 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.



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'-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	15-#4	Do.		2'-9"	10-#11

GROUND MOUNTED DESTINATION & EXPRESSWAY SIGNS						
Sign No	Station	Post Size		Base Plate	Footing	
		Left	Right		Left	Right
D-1	359+50 Lt.	12 WF 50		10" x 20" x 1"	VI	
D-2	398+50 Lt.	8 WF 35		10" x 20" x 1"	VI	
D-3	411+00 Rt.	10 WF 45		10" x 20" x 1"	VI	
D-4	431+00 Rt.	10 WF 45		10" x 20" x 1"	VI	
D-5	466+50 Lt.	10 WF 45		10" x 20" x 1"	VI	
E-1	333+50 Lt.	8 WF 24		10" x 17 1/4" x 1"	VI	
E-5	459+00 Lt.	8 J 10		10" x 17 1/4" x 1"	VI	

TYPE D TWO TUBE TRUSS SPAN									
Sign No	Station	Cross Beams	Center Section B	Post		Base Plate	Footing		
				Left	Right		Left	Right	Anchor Bolts
E-2	346+50 Lt.	3 ga. 14.25" x 30'-6"	312x14.238 o.d.x 30'-0"	747 ga 16" 22'-6"	747 ga 16" 21'-0"	24 1/2" x 24 1/2" x 2 1/2"	IV		8 @ 2 1/4" dia.
E-3	421+00 Rt.	3 ga. 14.25" x 30'-6"	312x14.238 o.d.x 25'-0"	343 ga 17" 27'-0"	343 ga 17" 30'-0"	26 1/2" x 26 1/2" x 3"	V		8 @ 3" dia.
E-4	452+00 Rt.	3 ga. 14.25" x 30'-6"	312x14.238 o.d.x 25'-0"	343 ga 17" 27'-0"	343 ga 17" 31'-0"	26 1/2" x 26 1/2" x 3"	V		8 @ 3" dia.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DETAILS AND SCHEDULES

INTERSTATE ROUTE H-1

F.A.I. Proj. No. I-HI-1(32):5, Unit 4

Scale: As Shown

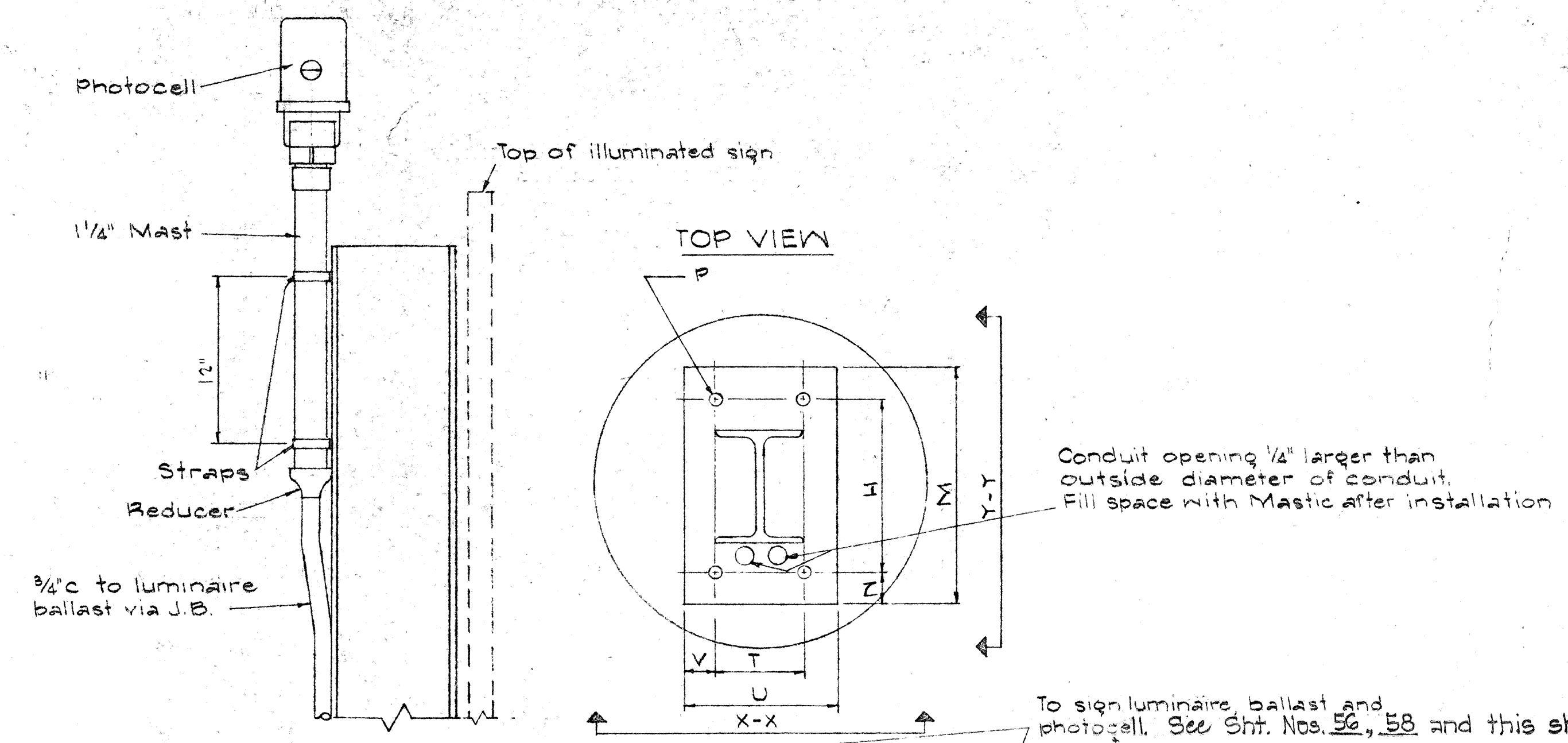
November 1967

NOTE:

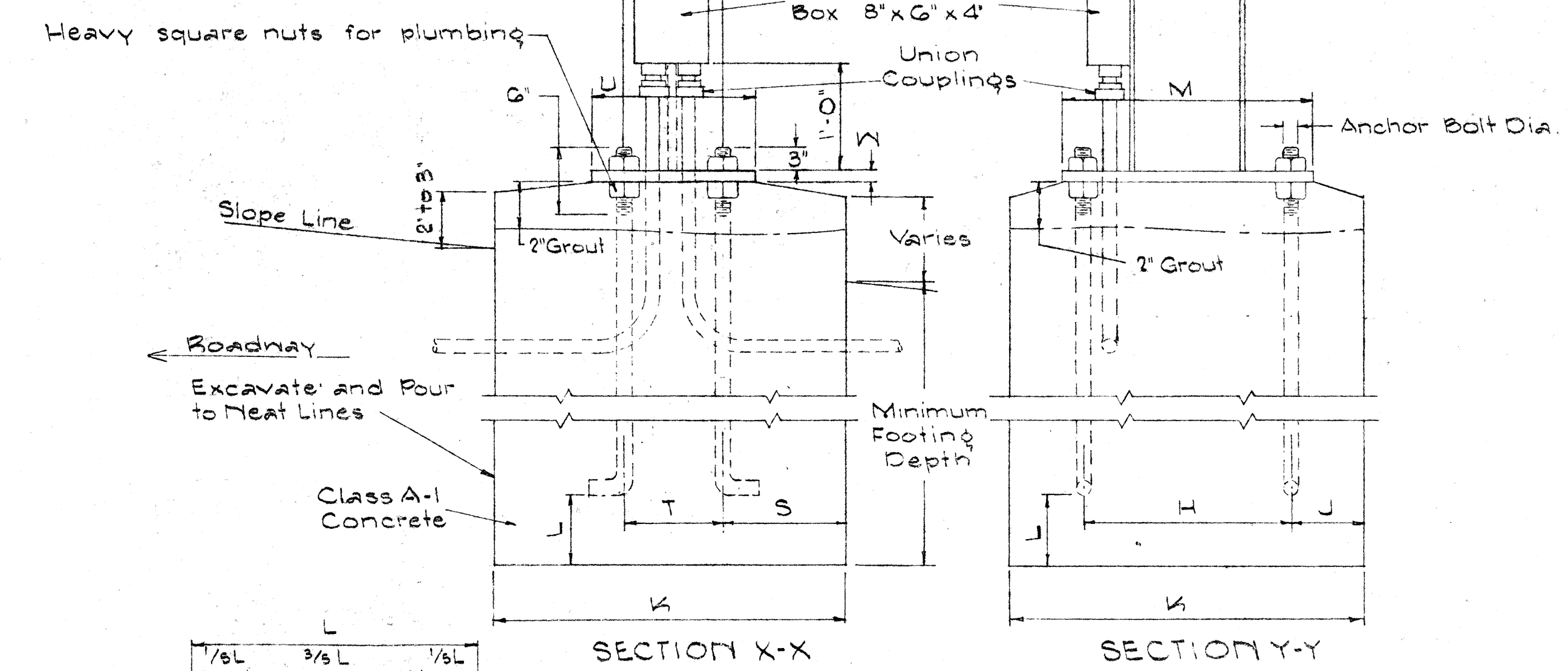
For signs with panel areas of less than 30 sq. ft. but greater than 16 sq. ft. use 3" I 5.7# steel I beam
* For moment calculations only. Post to be from top of foundation to top of sign
** For fills with side slopes flatter than 4:1, 4 1/2 feet

SUPPORT STRUCTURE DATA FOR GROUND MOUNTED SIGNS

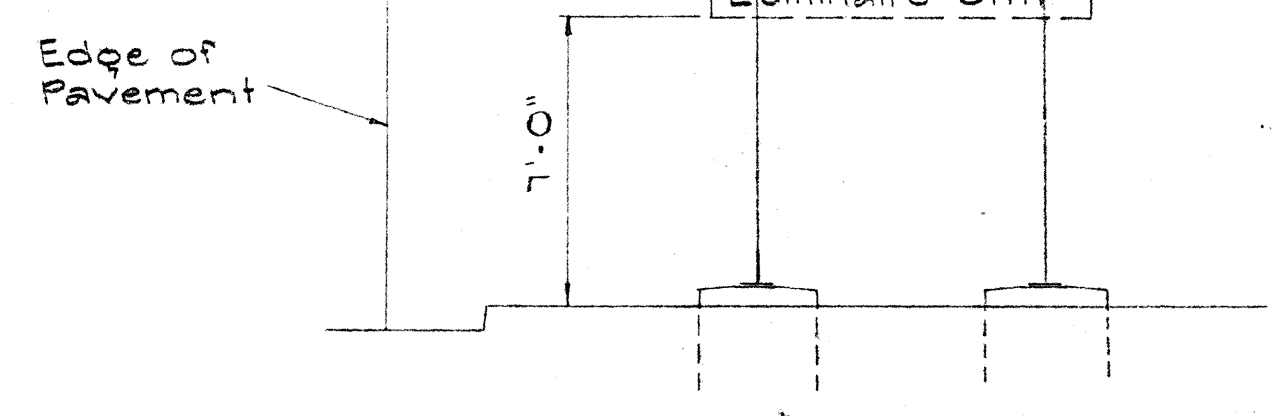
POST SIZE	MAXIMUM SIGN AREA	POST HGT. TOP OF FOUND. TO CENTER OF SIGN *	DIMENSIONS SEC. Y-Y							DIMENSIONS SEC. X-X							ANCHOR BOLT DIA.	MIN. FOOTING DEPTH (FEET)		TYPE OF WELD TO BASE PLATE
			H	J	K	L	M	N	O	P	S	T	U	V	W	CUT		FILL **		
8 J 10	50 sq. ft.	14'	14"	5"	24"	6"	17 1/4"	1 3/8"	1 1/4"	24"	1 1/2"	9"	6"	10"	2"	1"	1 1/8" d	4 1/2'	4 1/2'	3/8" 
8 WF 24	90 sq. ft.	21'	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	5'		
8 WF 35	190 sq. ft.	15'	16 1/4"	6 3/4"	30"	6"	20"	1 3/4"	1 3/8"	30"	1 3/8"	11 3/4"	6 1/2"	10"	1 3/4"	1"	1 1/4" φ	6"	7'	
10 WF 45	190 sq. ft.	25'	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
10 WF 45	200 sq. ft.	25'	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
12 WF 50	230 sq. ft.	25'	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	7'	↓	
12 WF 50	250 sq. ft.	23'	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓



PHOTOCELL INSTALLATION ON I-BEAM POST



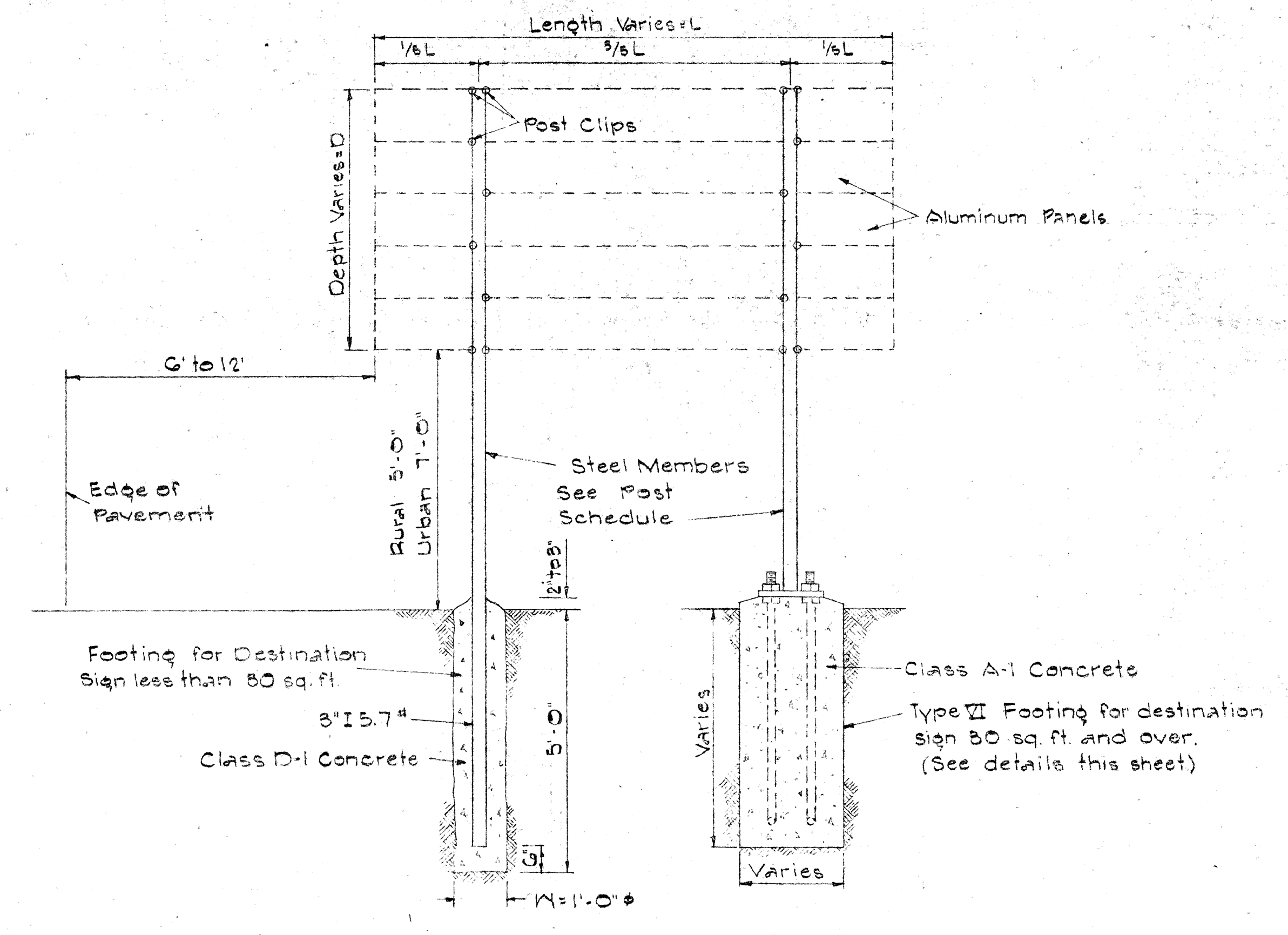
FOUNDATION DETAILS FOR GROUND MOUNTED EXPRESSWAY SIGN TYPE VI FOOTING



TYPICAL GROUND MOUNTED EXPRESSWAY SIGN TYPE A

NOTE:

Conduit and ballast details are shown only for ground mounted illuminated expressway signs.

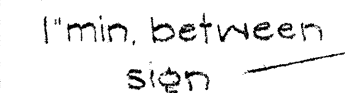


TYPICAL DESTINATION SIGN PANEL & POST

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION & EXPRESSWAY SIGNS
DETAILS & SCHEDULES
TYPE A SIGN SUPPORT
TYPE VI FOOTING

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

5, UNIT 4



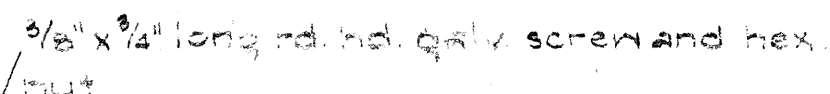
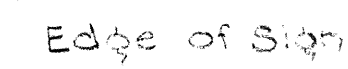
TYPE "B" ASSEMBLY
NOT TO SCALE

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

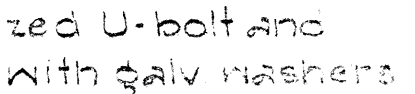


TYPE "A" ASSEMBLY
NOT TO SCALE

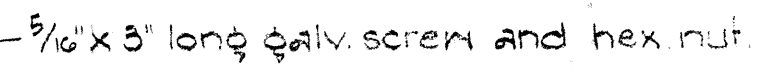
Use 2" Standard Pipe for
Type "A" assembly.
Use 3" Standard Pipe for
Type "B" assembly.



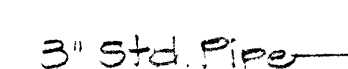
DETAIL "A"
FULL SCALE



DETAIL "B"
FULL SCALE



DETAIL "D"
FULL SCALE



DETAIL "C"
FULL SCALE



DETAIL "C"
FULL SCALE

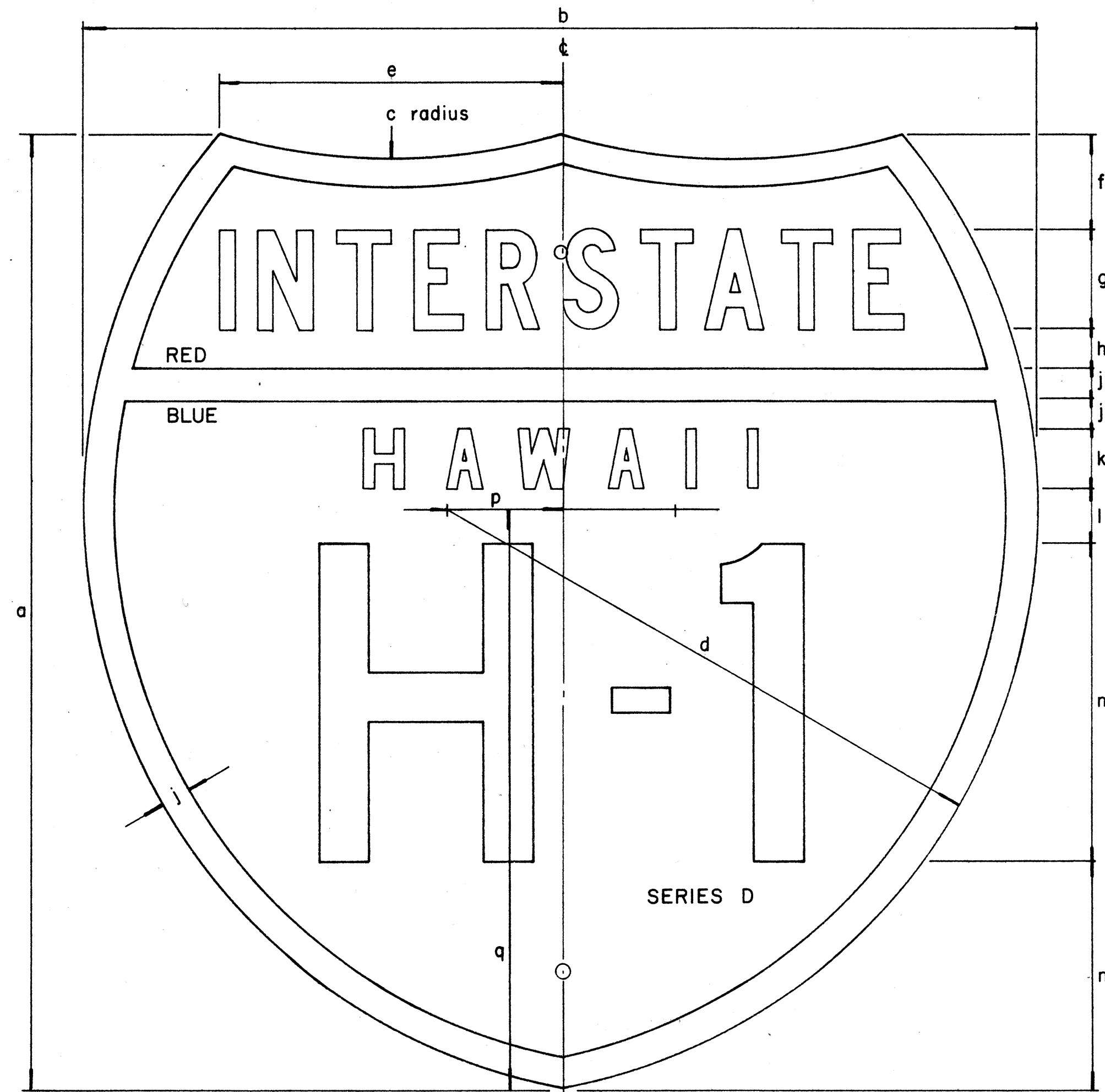
NOTE:
For height and lateral location of Route
Marker Assembly, see sheet No G4

DETAILS OF ROUTE MARKER ASSEMBLY

Scale: As Noted

SHEET No. 20 OF 29 SHEETS

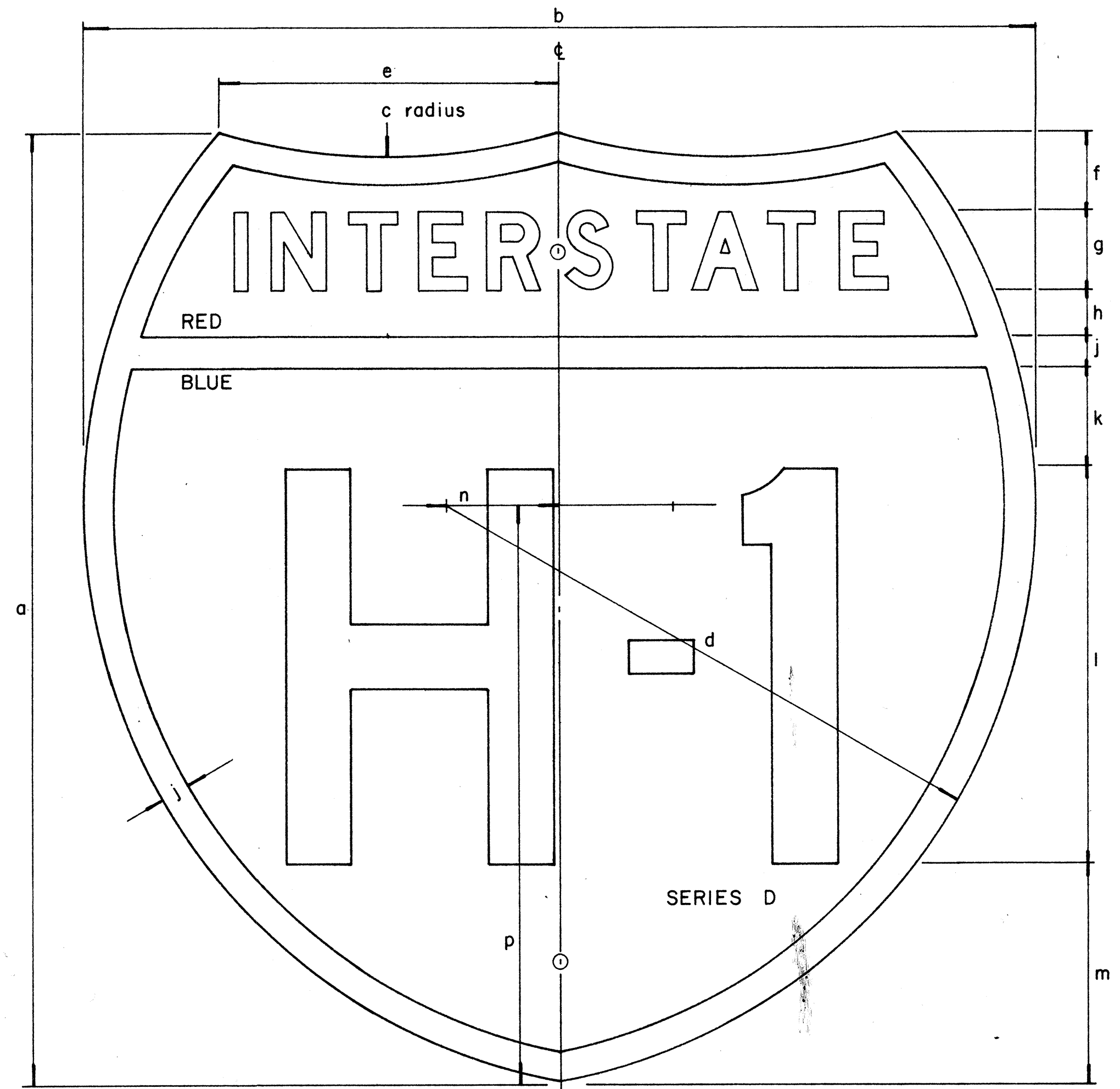
61



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	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

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.

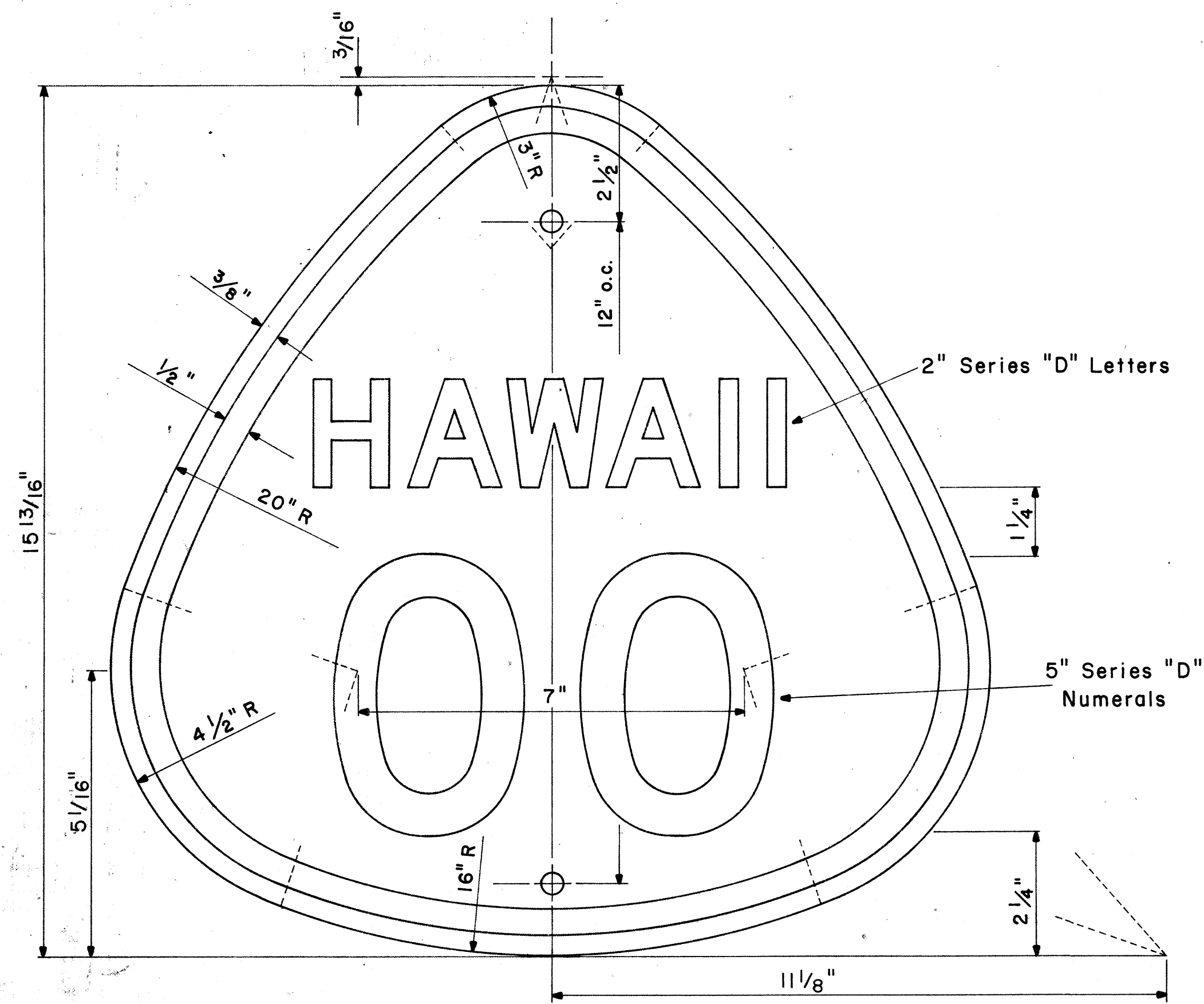
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
INTERSTATE ROUTE MARKERS

SHEET No. 21 OF 22 SHEETS

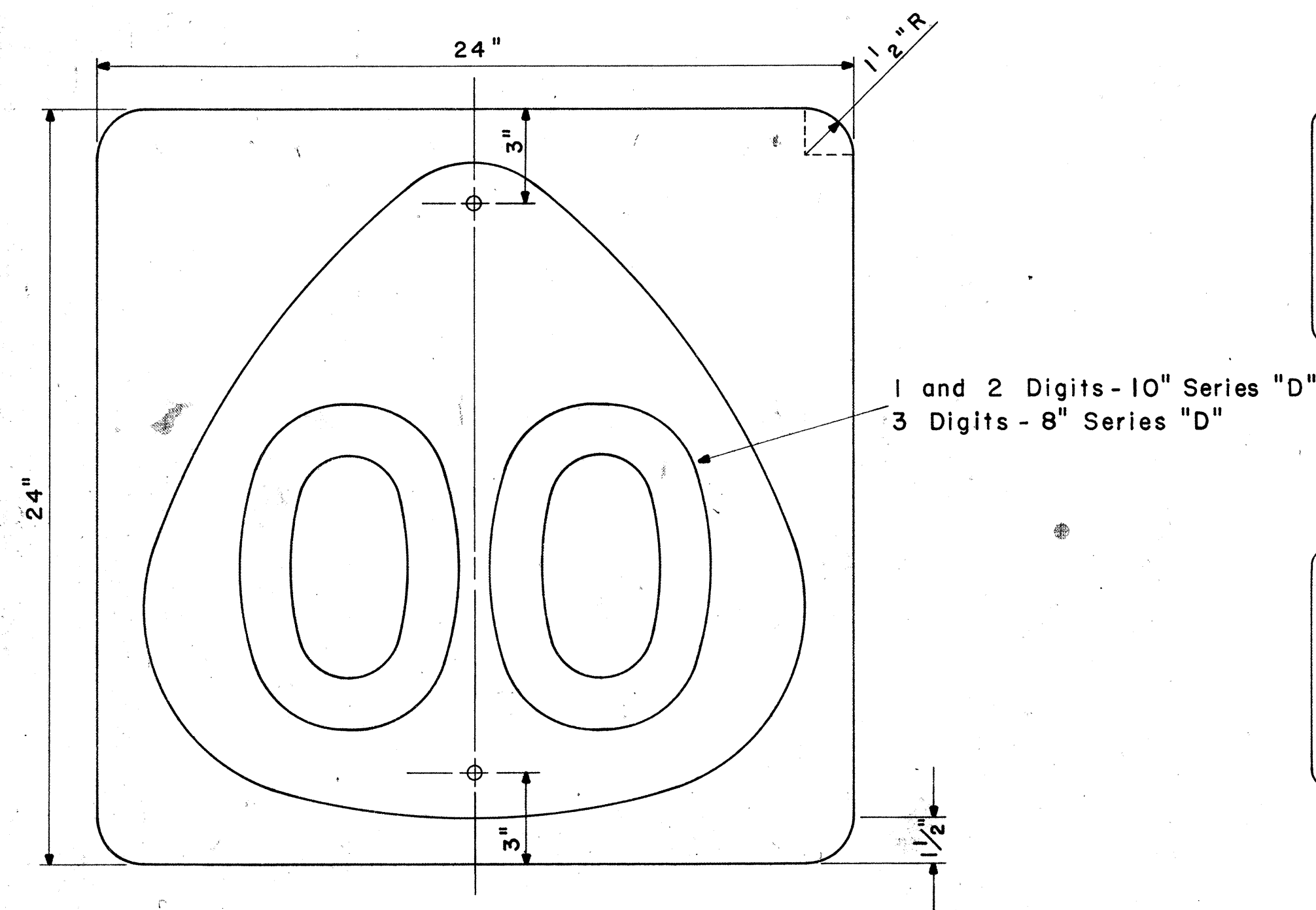
62

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



STATE ROUTE MARKER
M1-3(OO)

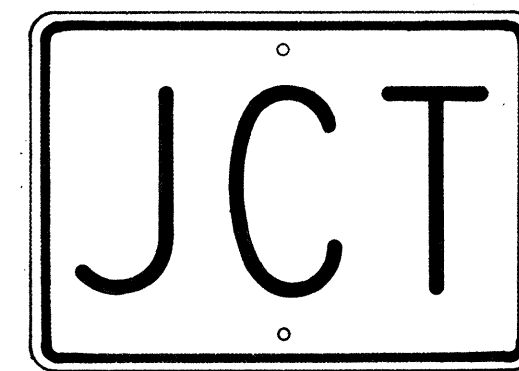
Scale: $\frac{1}{2}$ " = 1"



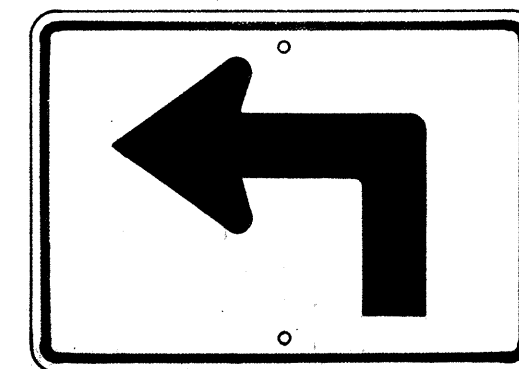
STATE ROUTE MARKER
M1-4(OO)

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

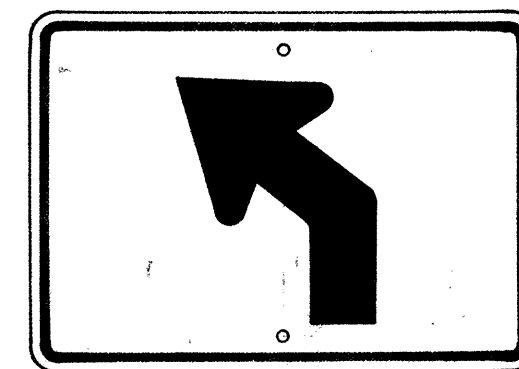
NOTE:
Multiply all dimensions of State Route Marker M1-3 by 1.3 for the dimensions of the shield for M1-4.



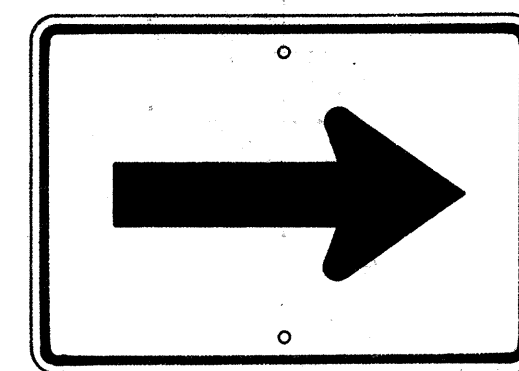
M2-1
21" x 15"



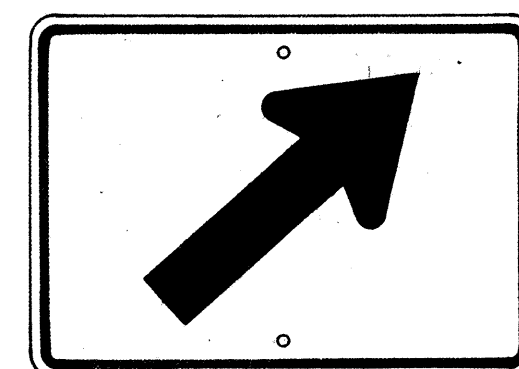
M3-1-L
* M3-1-R
21" x 15"



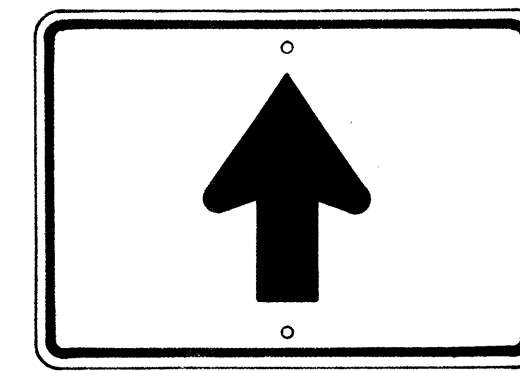
M3-2-L
* M3-2-R
21" x 15"



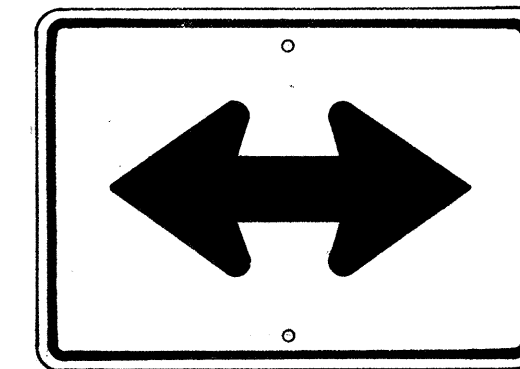
M4-1
21" x 15"



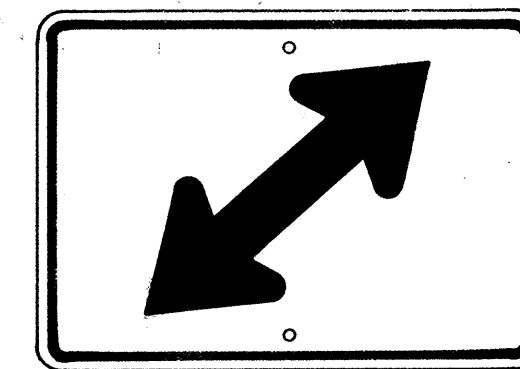
M4-2-R
* M4-2-L
21" x 15"



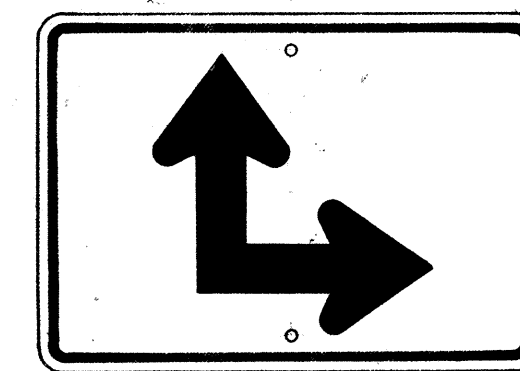
M4-3
21" x 15"



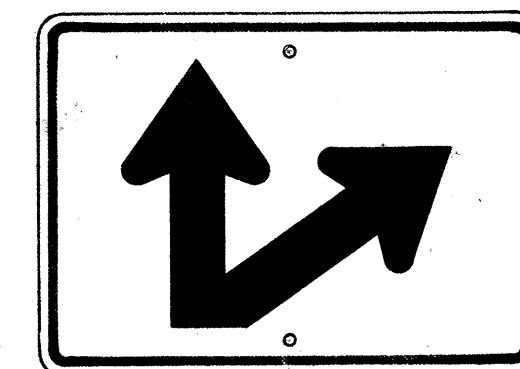
M4-4
21" x 15"



M4-5-R
* M4-5-L
21" x 15"



M4-6-R
* M4-6-L
21" x 15"

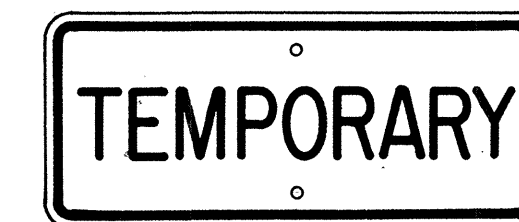


M4-7-R
* M4-7-L
21" x 15"

AUXILIARY MARKERS

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

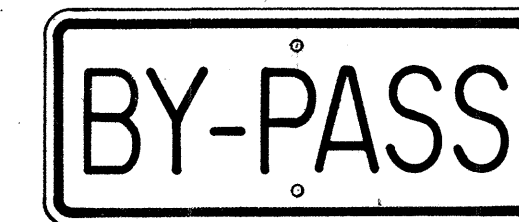
* NOTE:
Signs shall be similar but opposite in direction.



M5-1
21" x 9"



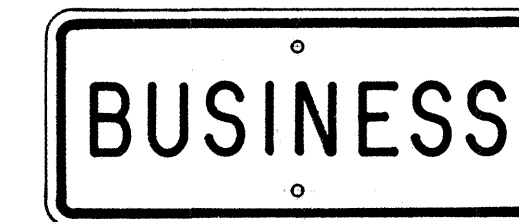
M5-2
21" x 9"



M5-3
21" x 9"



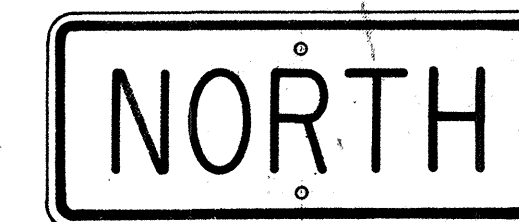
M5-4
21" x 9"



M5-5
21" x 9"



M5-6
21" x 9"



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



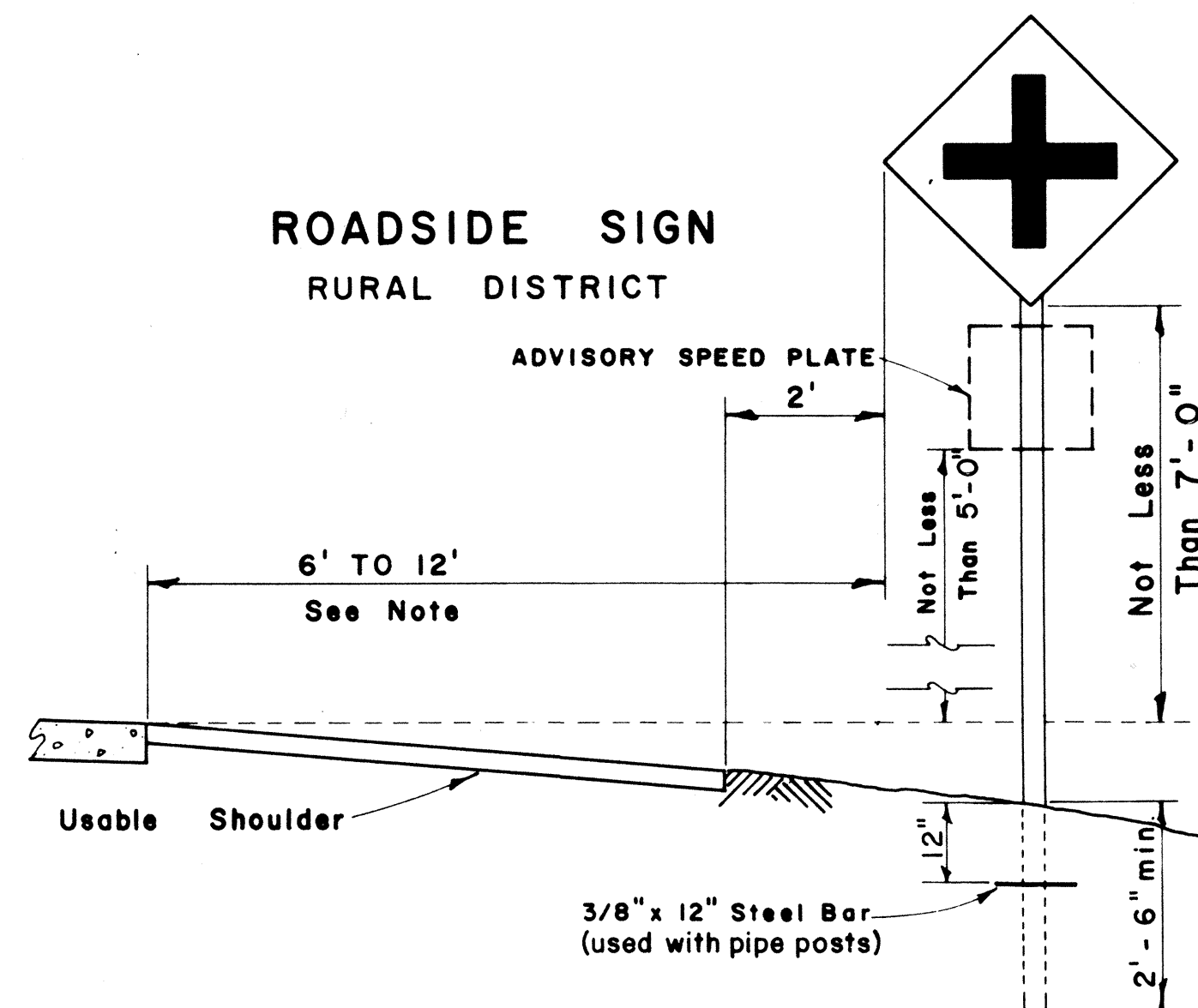
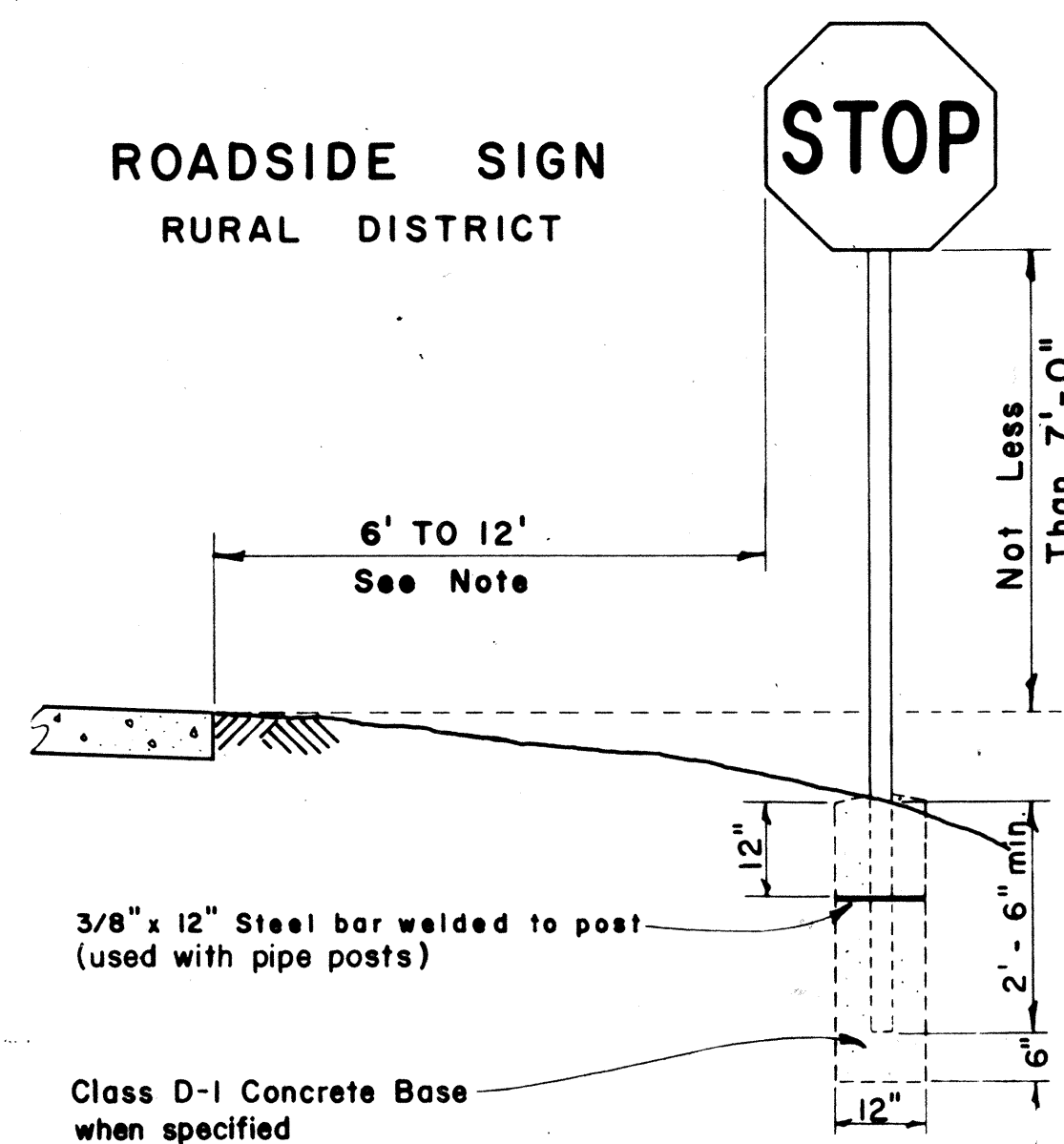
M7-1
18" x 12"

GENERAL NOTES

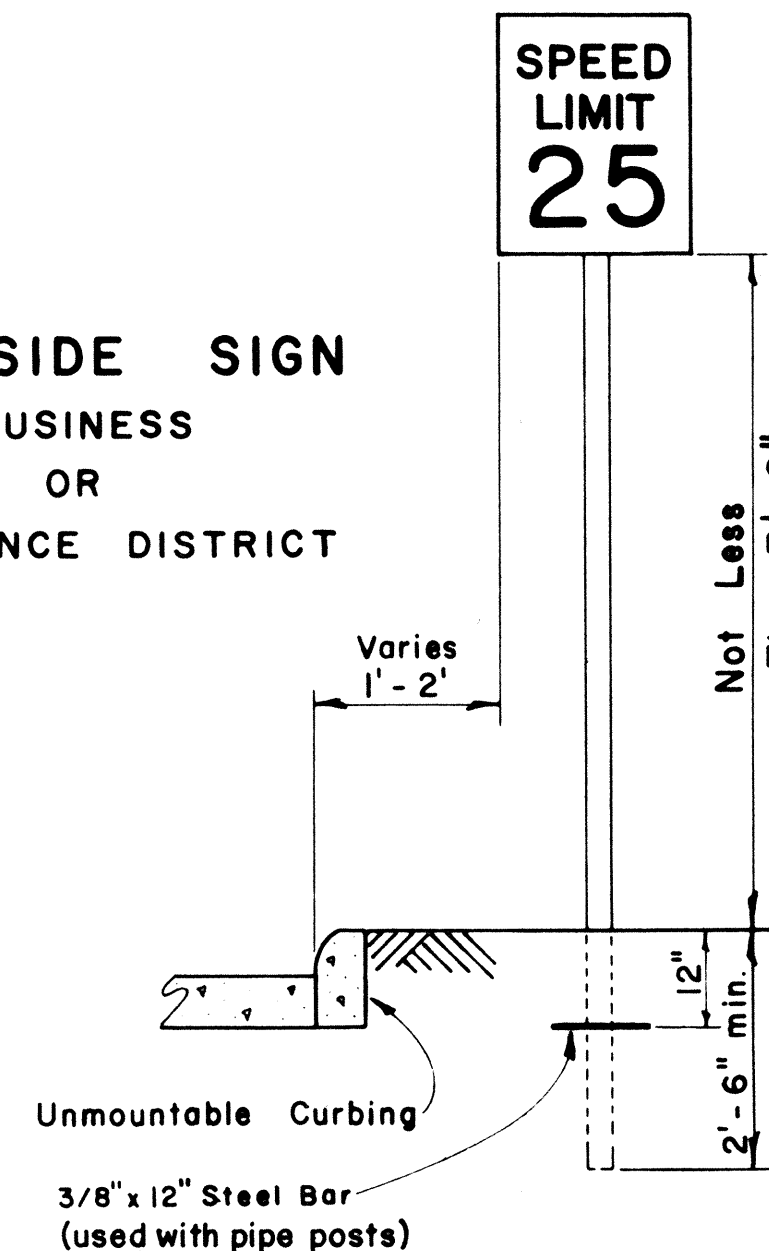
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
- 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 M1-3 and M1-4 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 22 OF 29 SHEETS

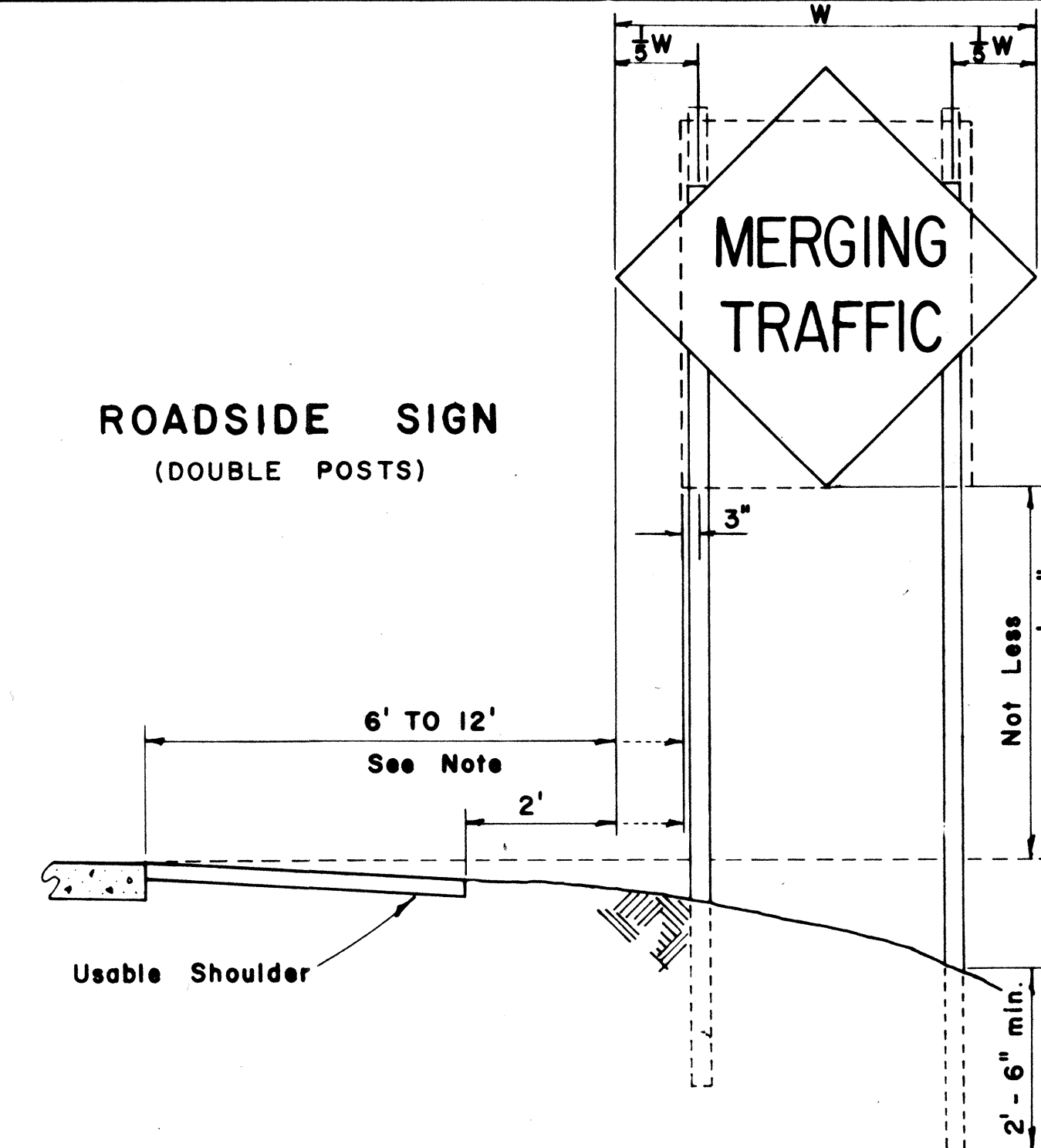
- NOTE:
1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 2. Except as noted below, sign posts shall be either 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts for signs larger 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.



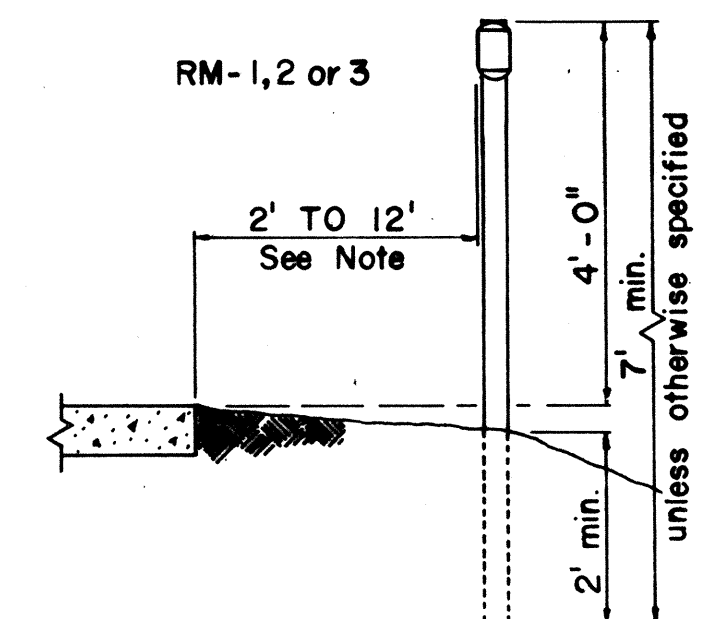
ROADSIDE SIGN
BUSINESS
OR
RESIDENCE DISTRICT



ROADSIDE SIGN
(DOUBLE POSTS)

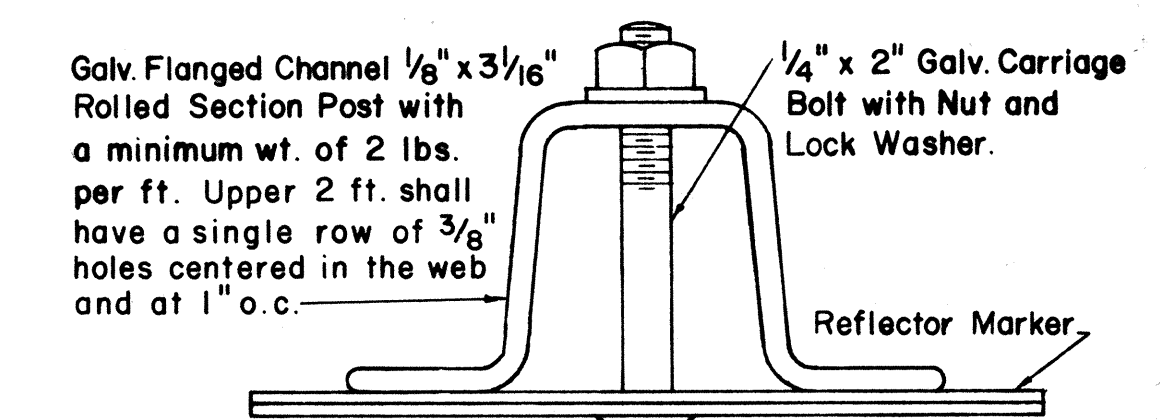


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	141-1015 UNIT 4	1967	64	101

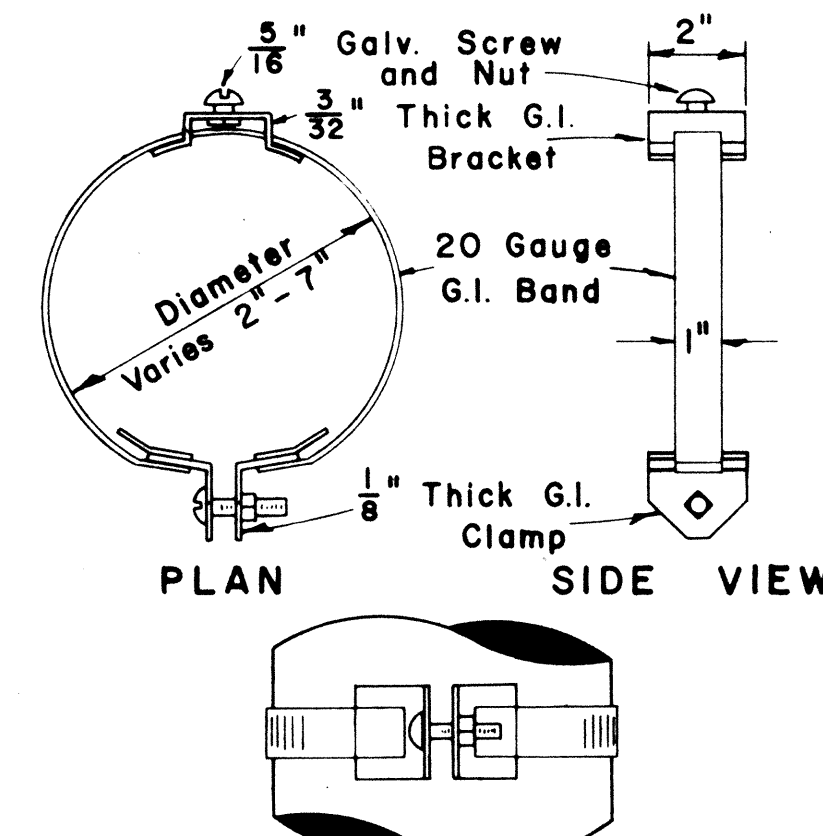
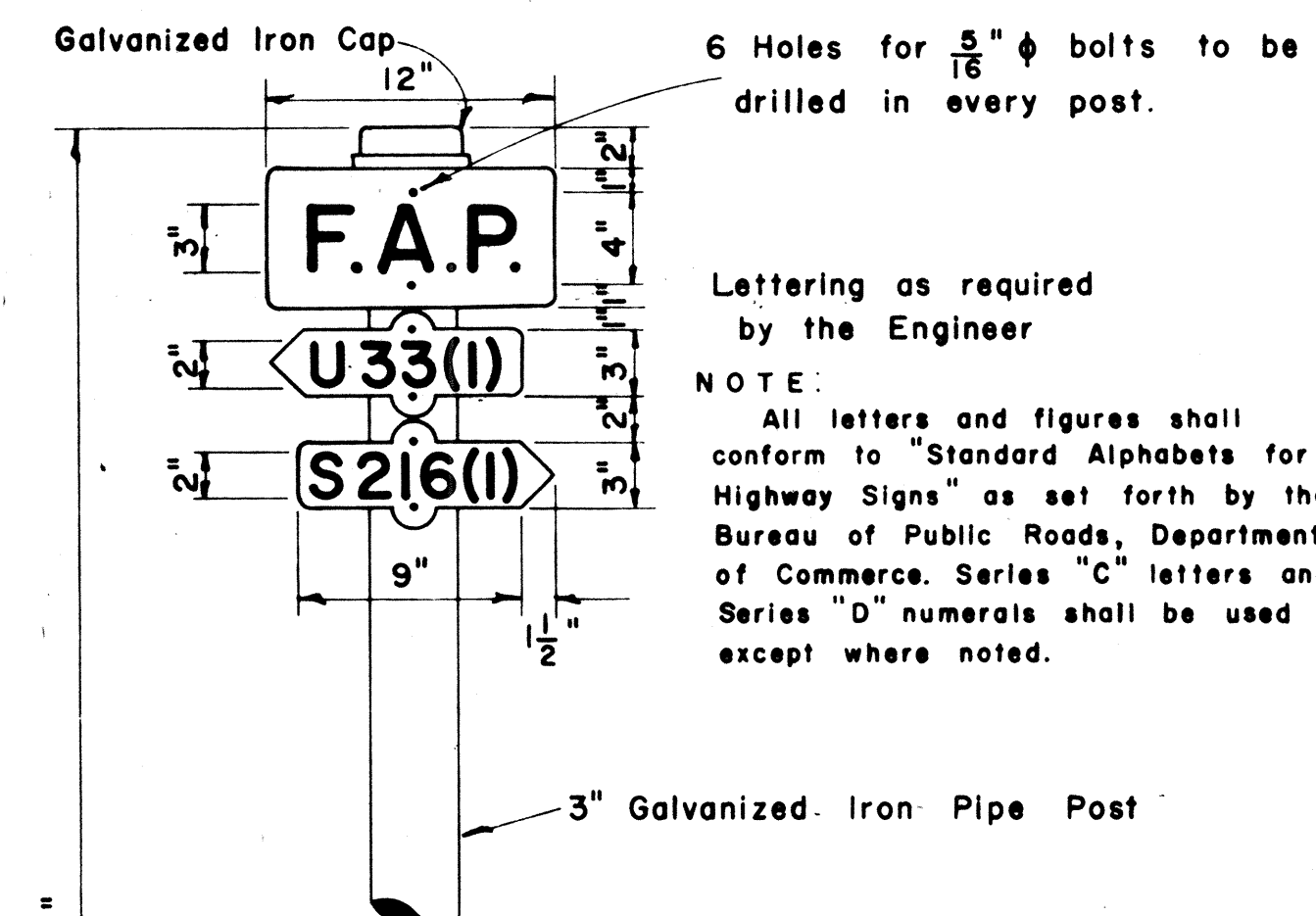


ROAD DELINEATOR

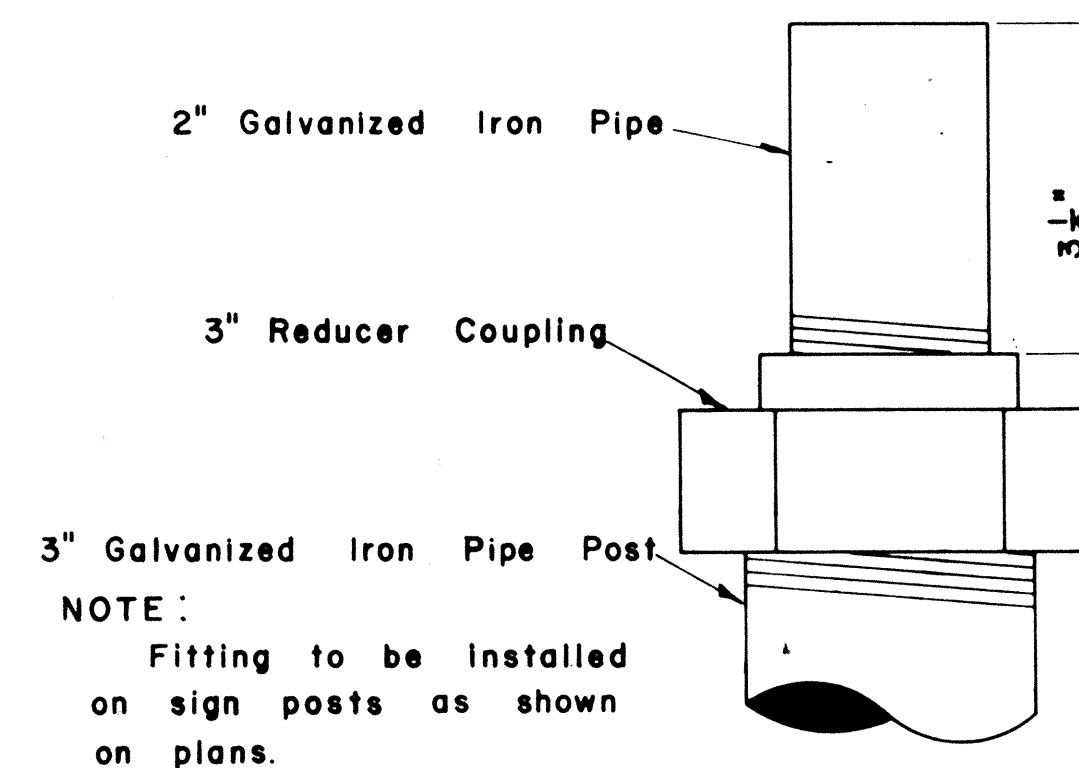
Scale: 1/2" = 1'-0"



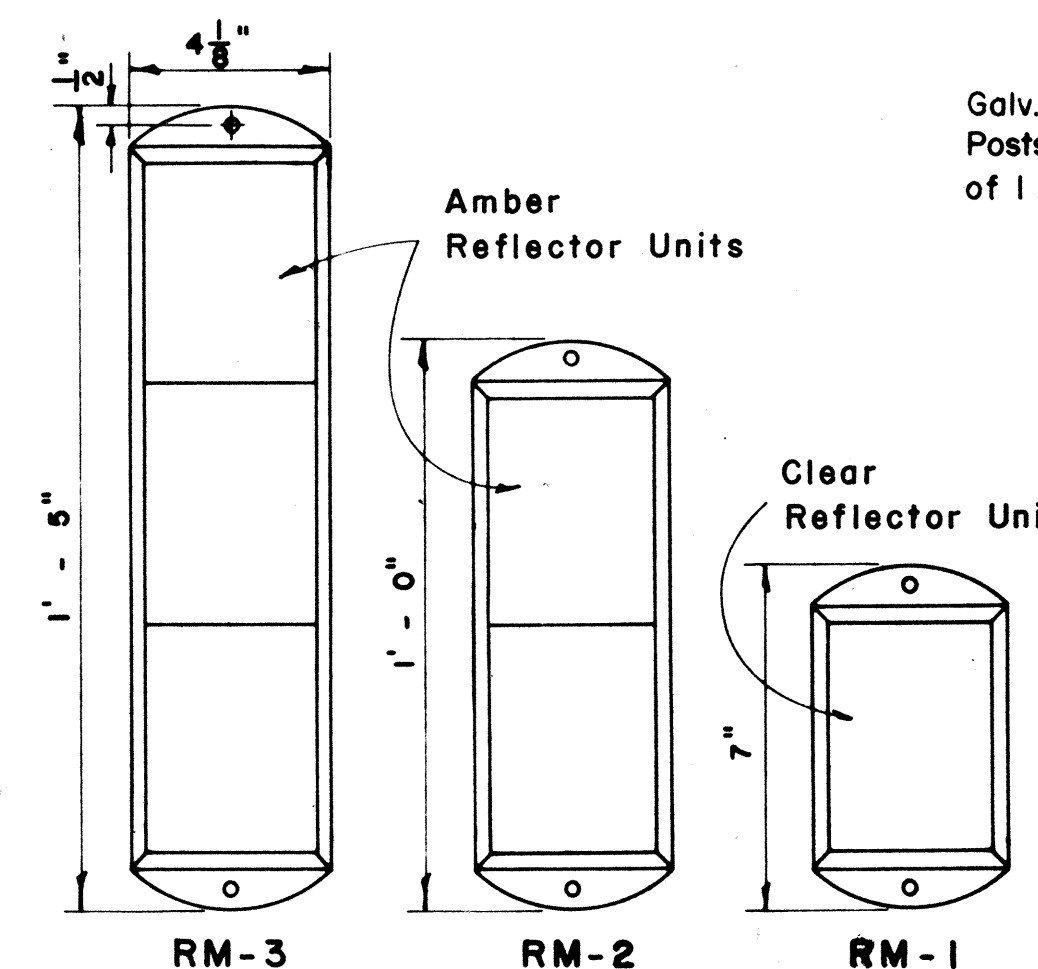
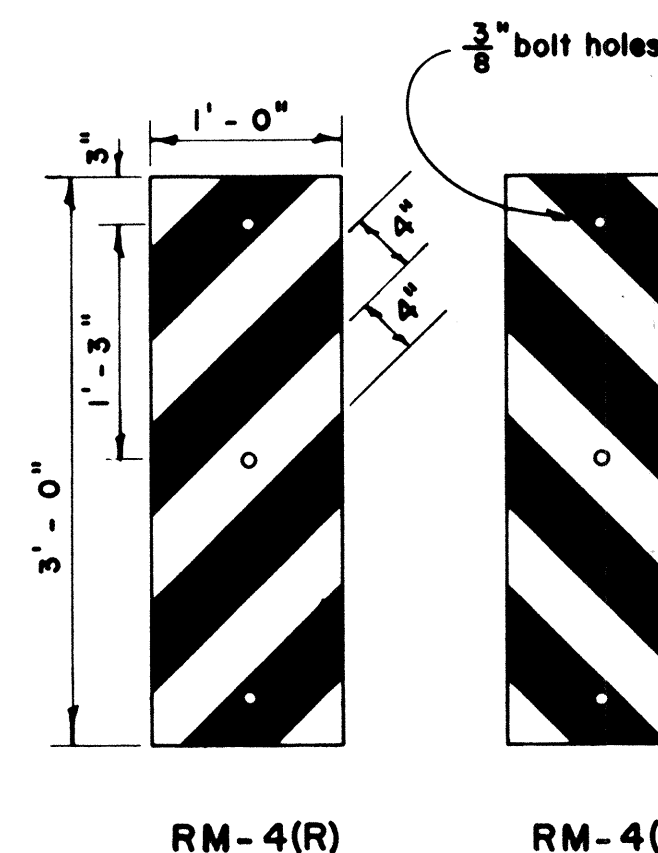
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS



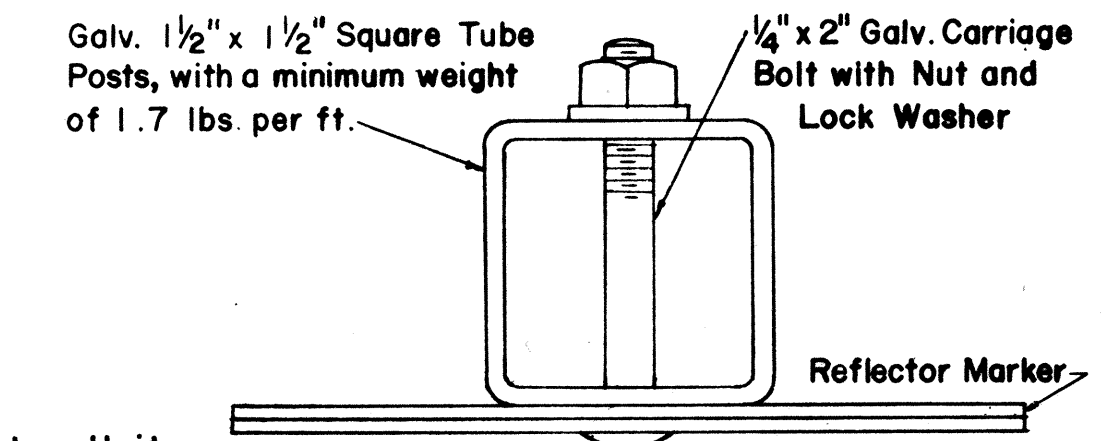
FRONT VIEW
TYPICAL BAND BRACKET
FOR MOUNTING TRAFFIC SIGNS
Scale: 3" = 1'-0"



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

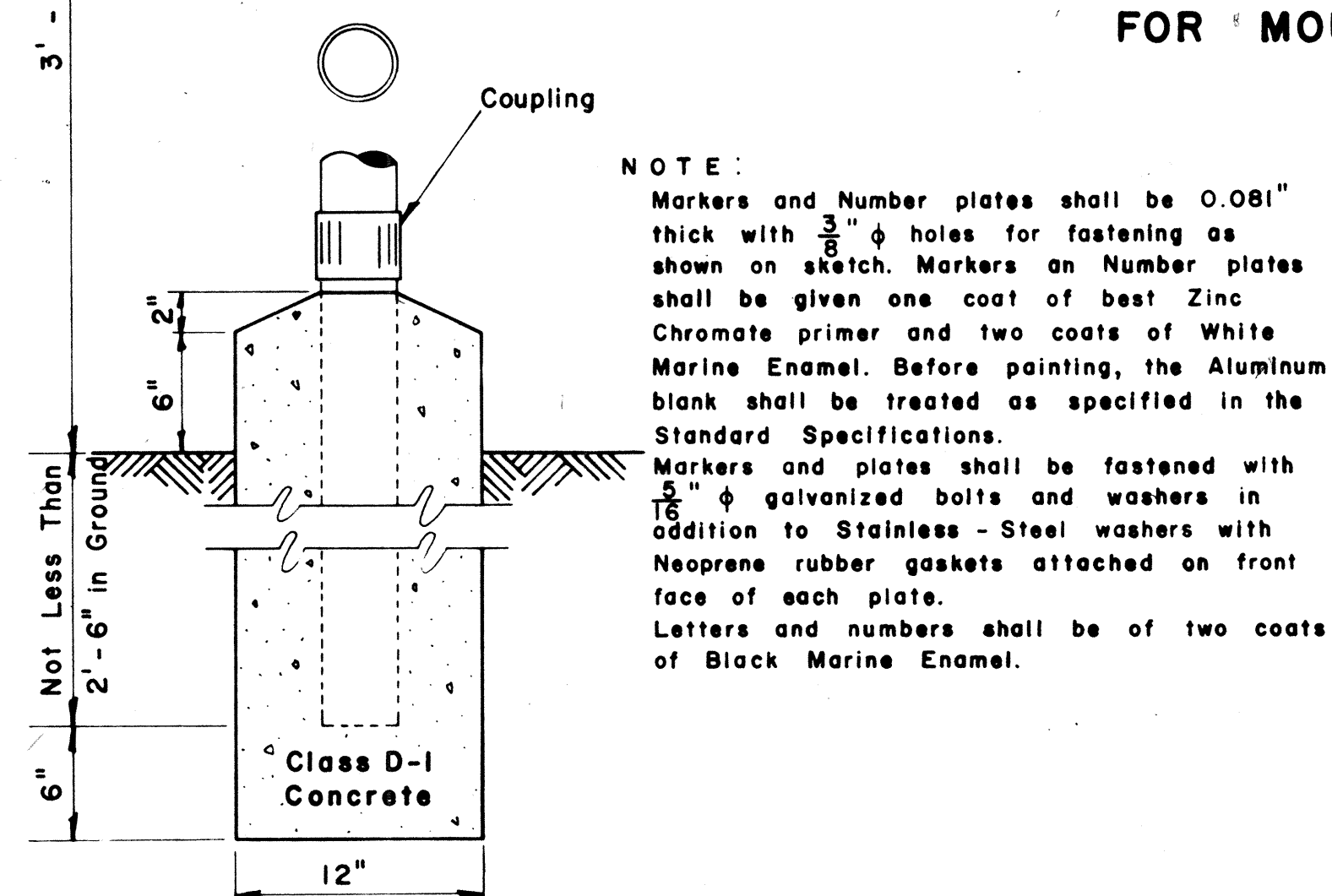


REFLECTOR MARKERS
Scale: As Shown

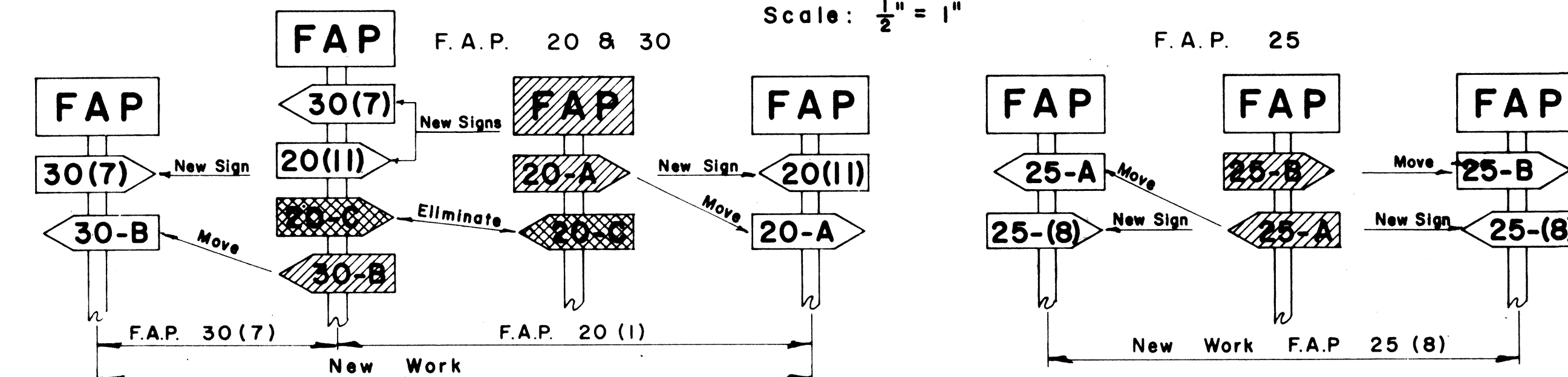


TYPICAL SECTION
OF ROAD DELINEATOR
Full Size

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.

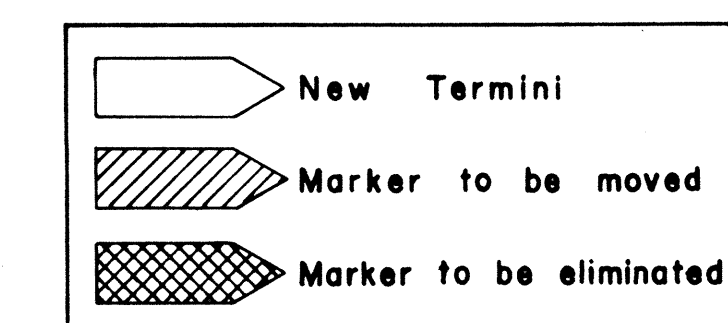


FEDERAL AID MARKER
Scale: 1/2" = 1'-0"



NOTE:
Federal Aid Markers should be placed at the terminl of suffix designated sections. Intermediate letter designated markers of adjacent sections located within the limits of new improvements should be moved to the terminl of the new work. The same procedure should be followed on each successive improvement until all markers for letter designated sections are eventually eliminated.

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

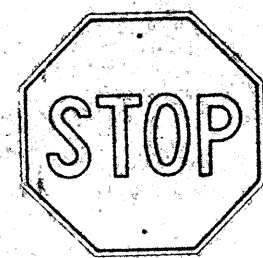


APPROVED: *[Signature]*
DIRECTOR OF TRANSPORTATION

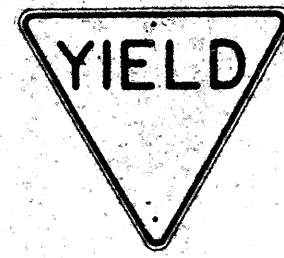
JANUARY 27, 1967
DECEMBER 8, 1964
REVISED: FEBRUARY 25, 1964

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

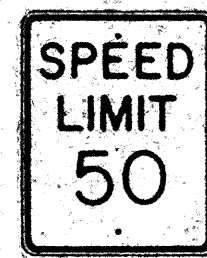
SHEET No. 23 OF 23 SHEETS



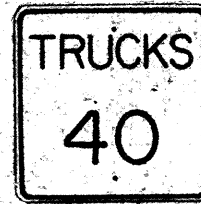
R1-1 30"x 30"



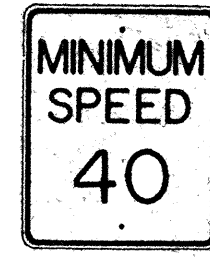
R1-2 36"x 36"x 36"
R1-2-E 48"x 48"x 48"
R1-2-I 60"x 60"x 60"



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



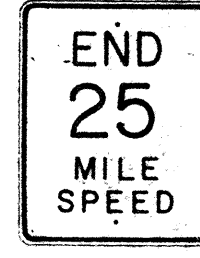
R2-2(40) 24"x 24"
R2-2(40)-E 36"x 36"
R2-2(40)-I 48"x 48"



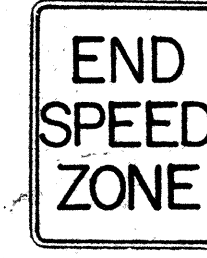
R2-4(40) 24"x 30"
R2-4(40)-E 36"x 48"
R2-4(40)-I 48"x 60"



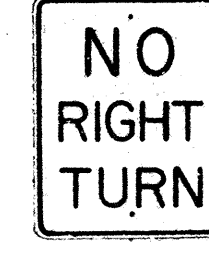
R2-5 24"x 30"
R2-5-E 36"x 48"
R2-5-I 48"x 60"



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"



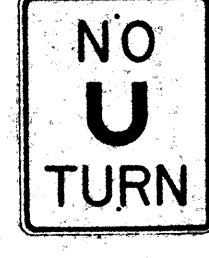
R3-1 24"x 30"
R3-1-E 36"x 48"



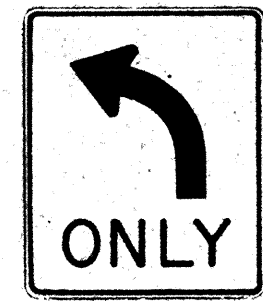
R3-2 24"x 30"
R3-2-E 36"x 48"



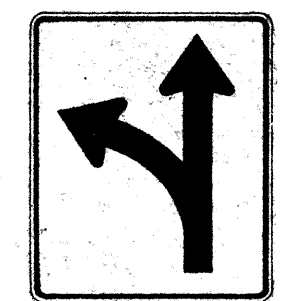
R3-3 24"x 24"



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



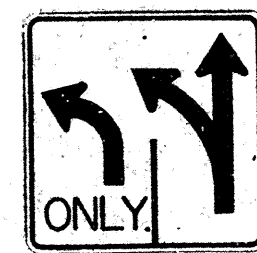
R3-5(L) 30"x 36"



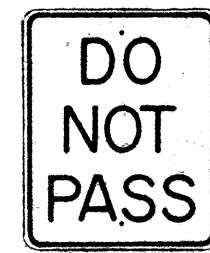
R3-6(L) 30"x 36"



R3-7(R) 30"x 30"



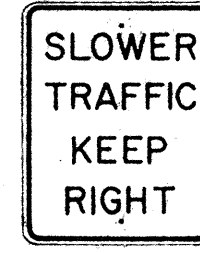
R3-8(L) 30"x 30"



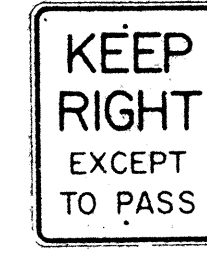
R4-1 24"x 30"



R4-2 24"x 30"



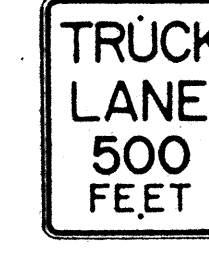
R4-3 24"x 30"
R4-3-E 36"x 48"
R4-3-I 48"x 60"



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"



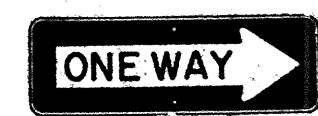
R4-6 24"x 30"
R4-6-E 36"x 48"



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



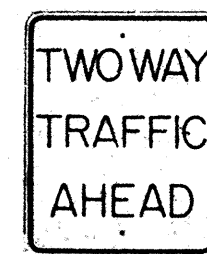
R5-1 24"x 24"



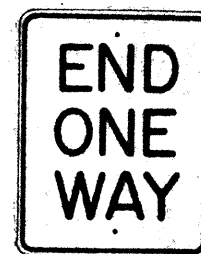
R6-1(R) 36"x 12"



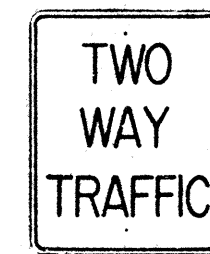
R6-2(R) 18"x 24"



R6-3 24"x 30"



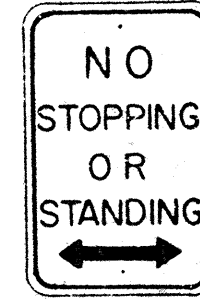
R6-4 24"x 30"



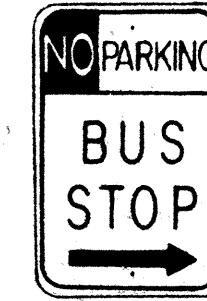
R6-5 24"x 30"



R7-1 12"x 18"



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



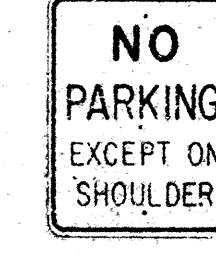
R7-107(R) 12"x 18"



R7-201 12"x 6"



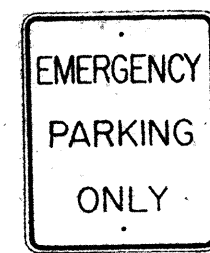
R8-1 24"x 30"
R8-1-E 36"x 48"
R8-1-I 48"x 60"



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



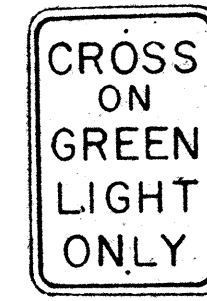
R8-3 24"x 30"
R8-3-E 36"x 48"



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



R9-1 18"x 24"



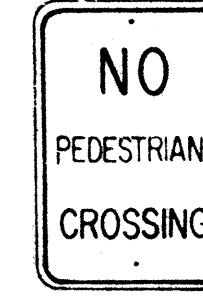
R9-2 12"x 18"



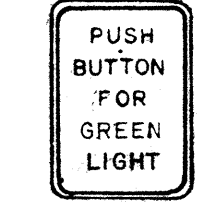
R9-3 12"x 18"



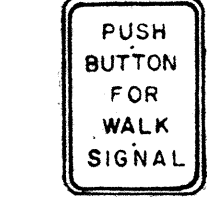
R9-4 12"x 18"



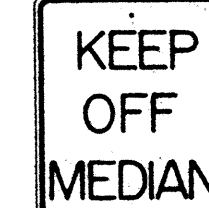
R9-5 12"x 18"



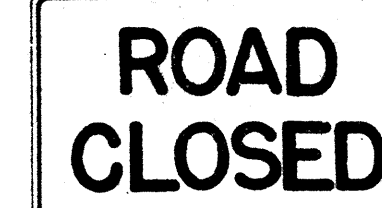
R9-6 9"x 12"



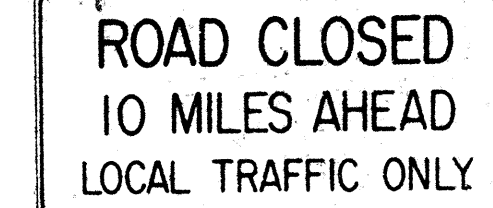
R9-7 9"x 12"



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.

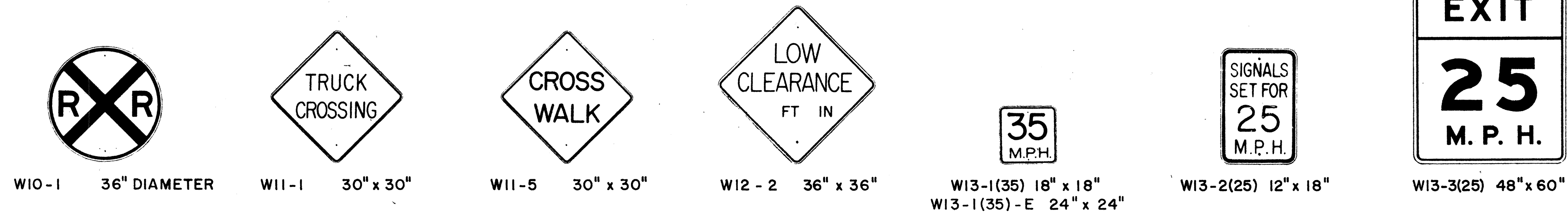
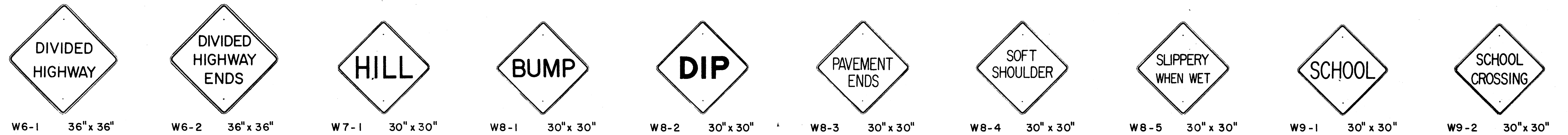
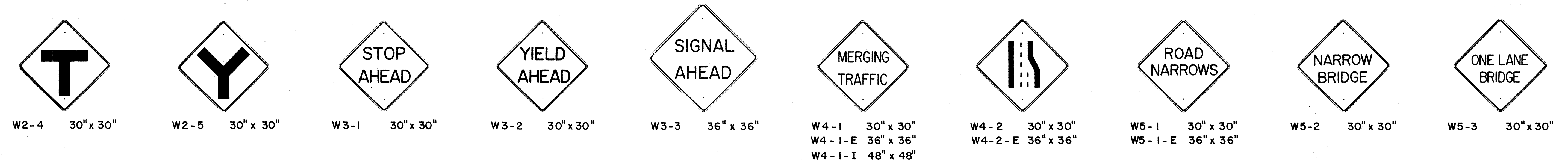
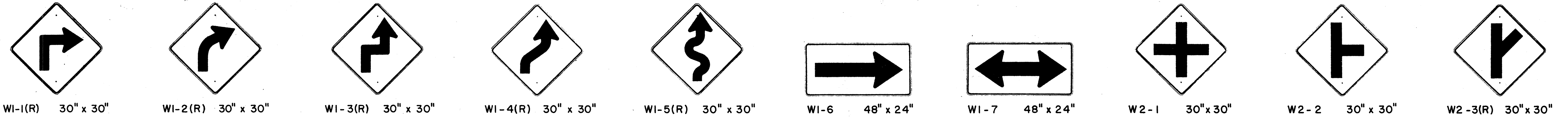
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
REGULATORY SIGNS

NOT TO SCALE

SHEET No. 24 OF 29 SHEETS

55



- 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 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.

REVISED: September 26, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

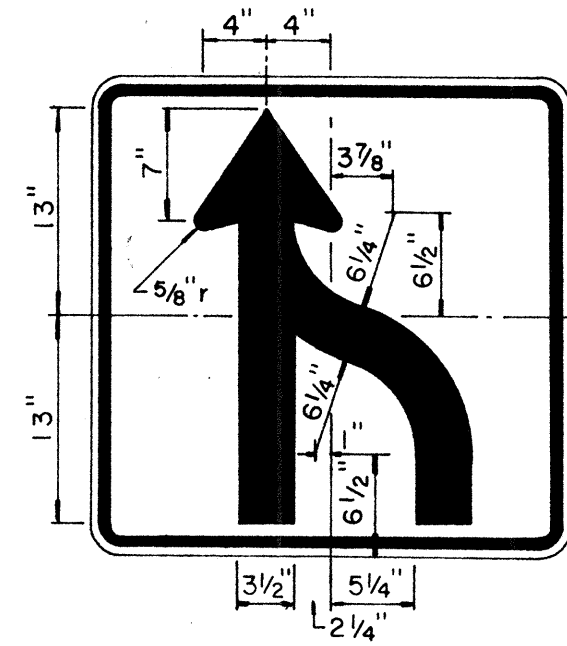
WARNING SIGNS

NOT TO SCALE

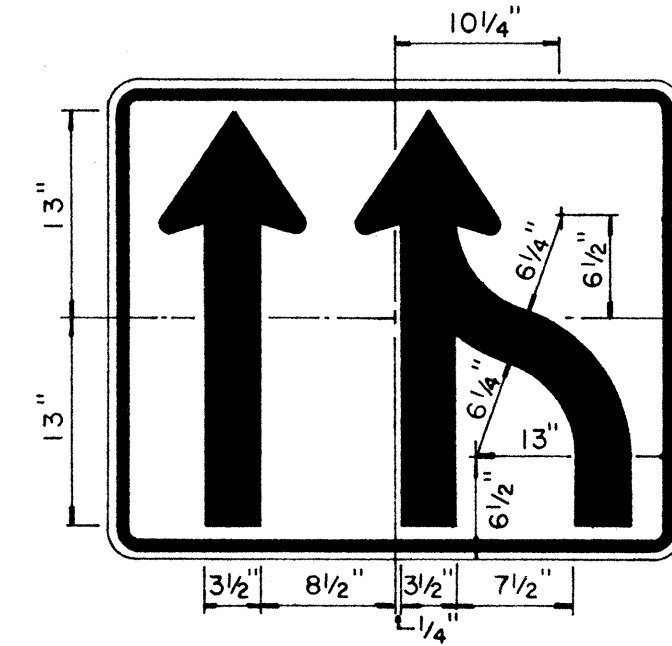
SHEET No. 66 OF 101 SHEETS

ORIGINAL PLAN
SURVEY PLOTTED BY
DATE
DRAWN BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY

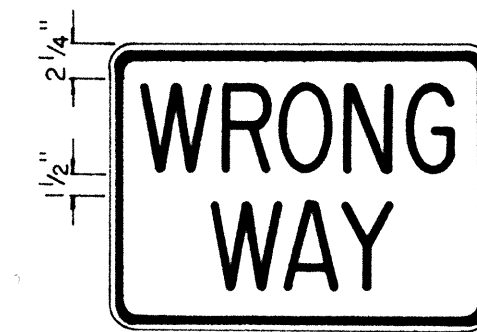
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11-1881	1967	67	101
5, UNIT 4					



R3-9 30" x 30"

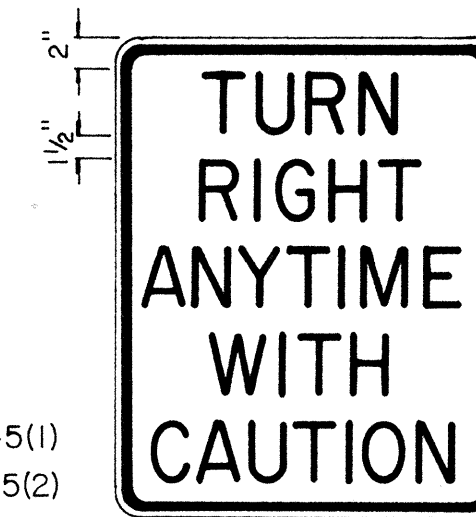


R3-10 36" x 30"

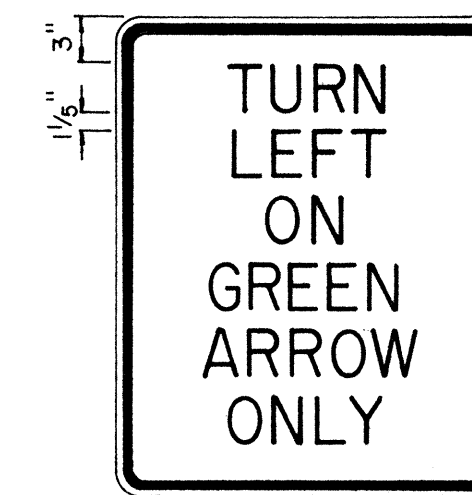


R5-5(1) 24" x 18"
R5-5(2) 36" x 24"

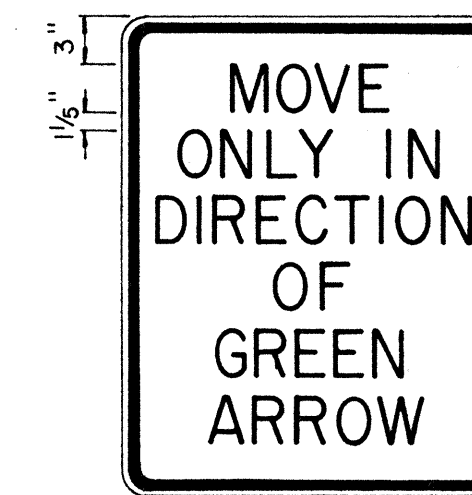
NOTE:
White legend and border
on Red background



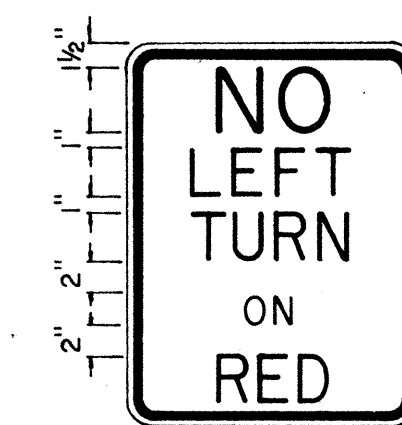
R15-1 24" x 30"



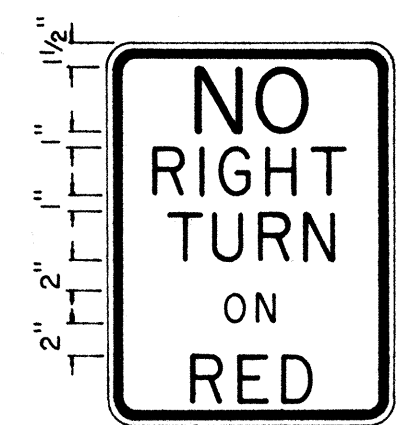
R16-1 24" x 30"



R16-2 24" x 30"



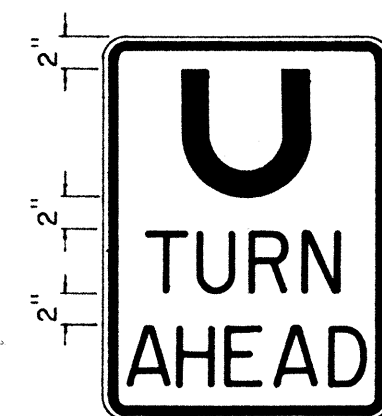
R17-1 18" x 24"



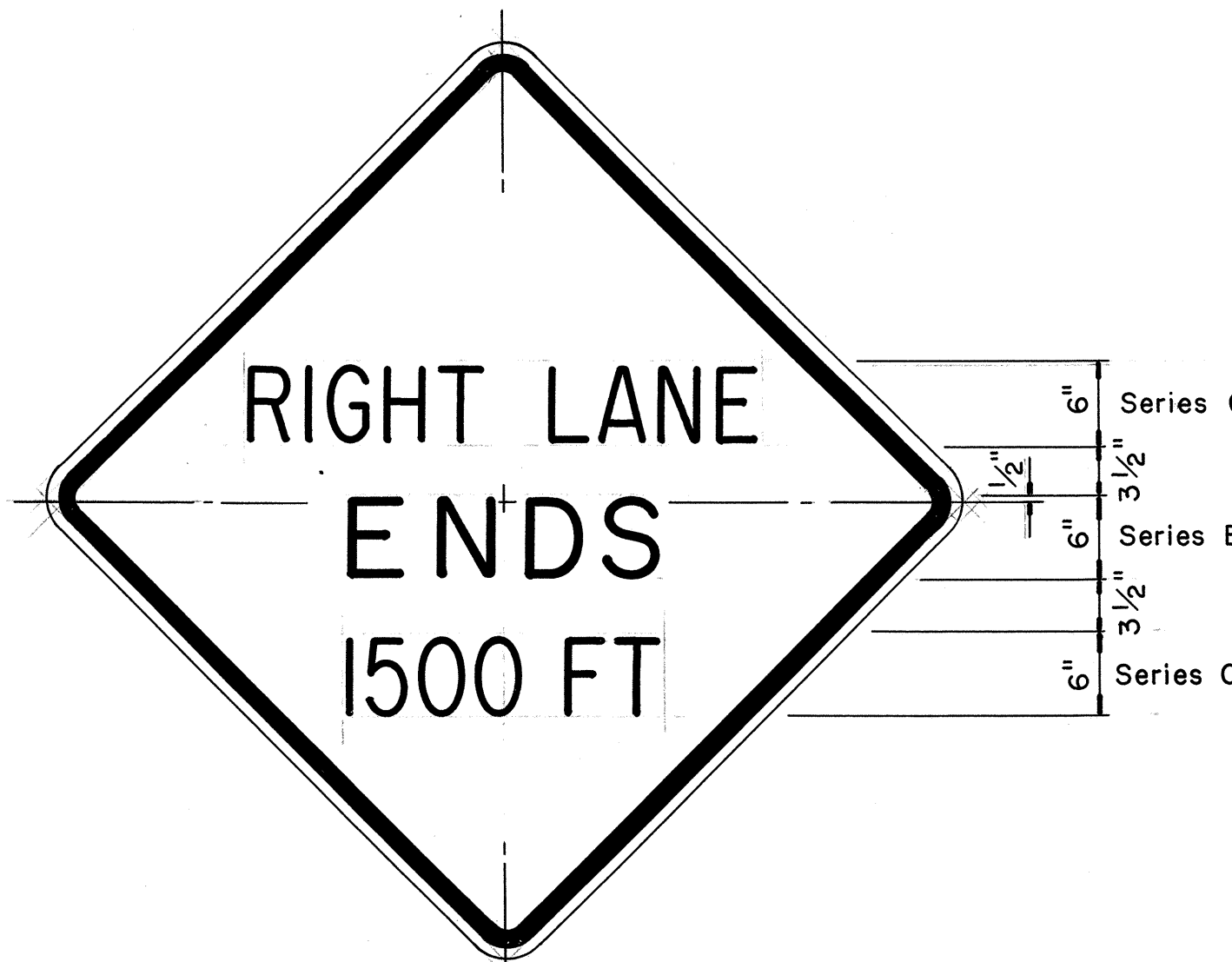
R17-2 18" x 24"



R18-1 36" x 30"



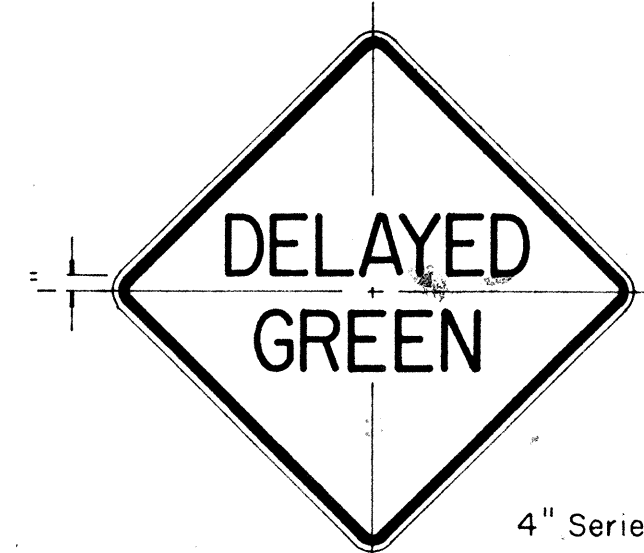
R19-1 18" x 24"



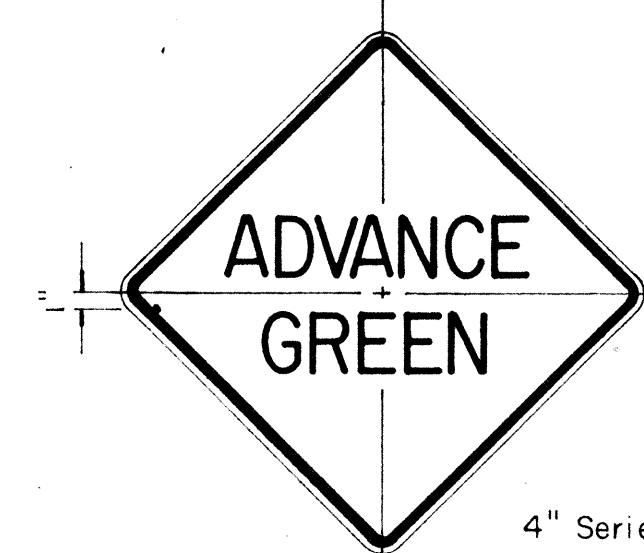
W20-5E 48" x 48"



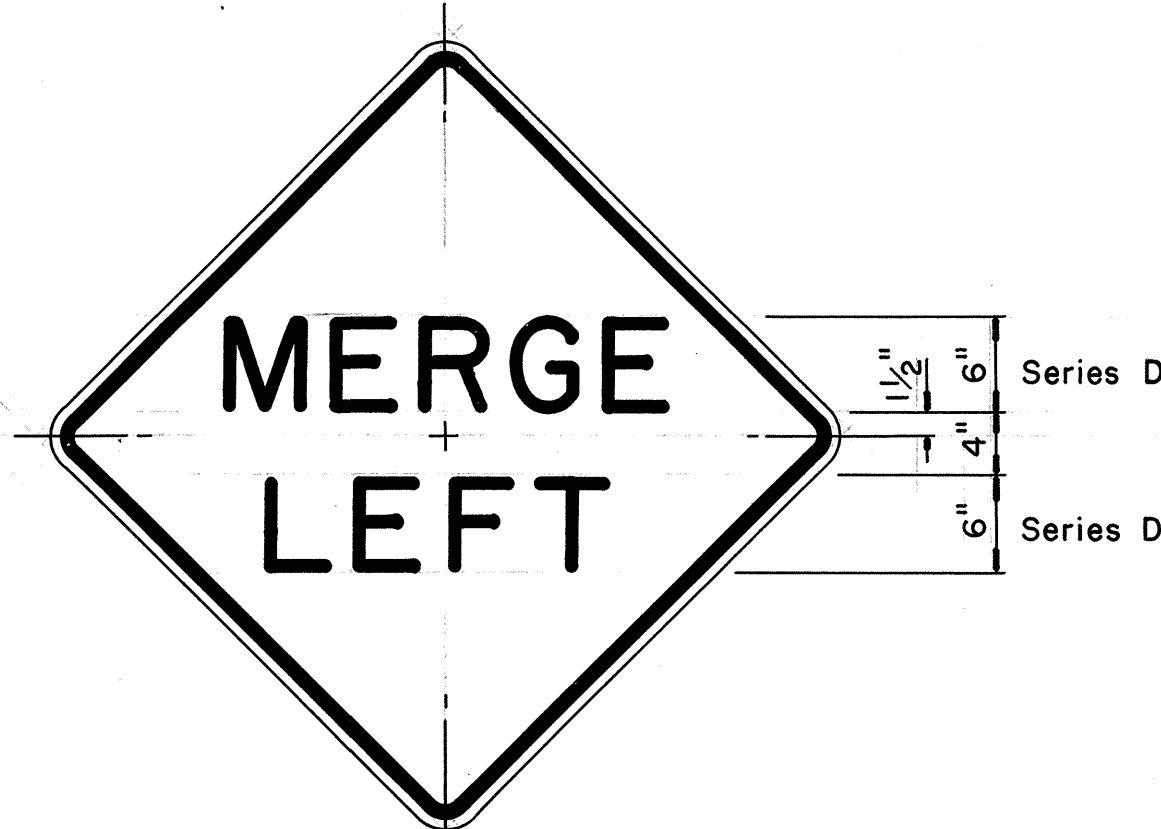
W13-4 24" x 24"



W15-1 24" x 24"



W15-2 24" x 24"



W4-4 36" x 36"

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 $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise specified.

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
No.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS
REGULATORY & WARNING SIGNS

Scale: 1" = 1' - 0"

SHEET No. 26 OF 29 SHEETS



W 7-2 48"x48"



W8-7 30"x30"



W14-1 30"x30"



W20-1a 48"x48"



W20-2d 48"x48"



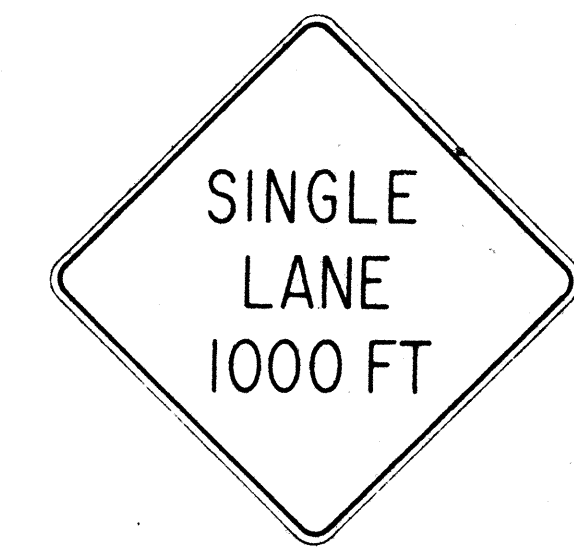
W20-3b 48"x48"



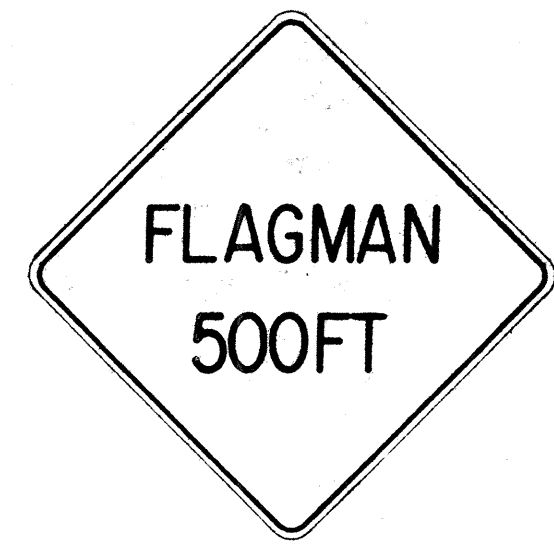
W20-4d 48"x48"



W20-5d(L) 48"x48"



W20-6b 48"x48"



W20-7c 48"x48"



W21-1 30"x30"



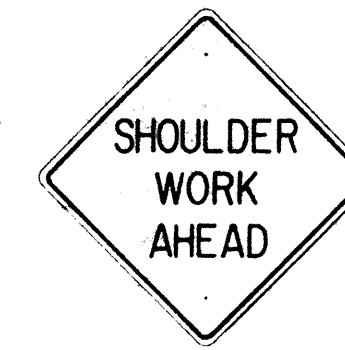
W21-2 24"x24"



W21-3 36"x36"



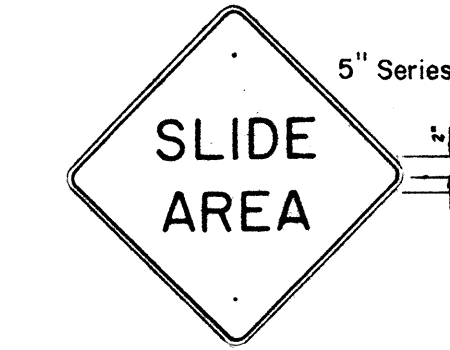
W21-4 30"x30"



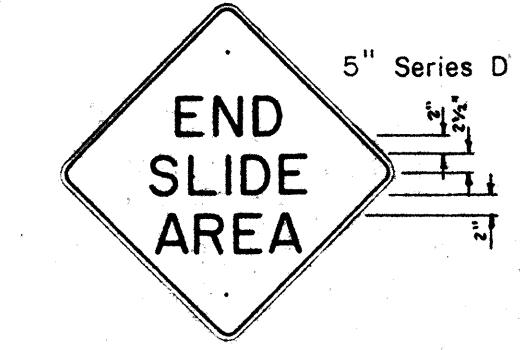
W21-5 30"x30"



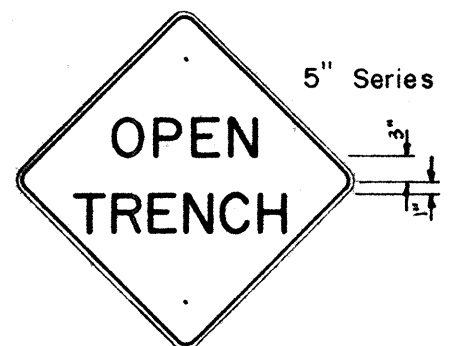
W21-6 30"x30"



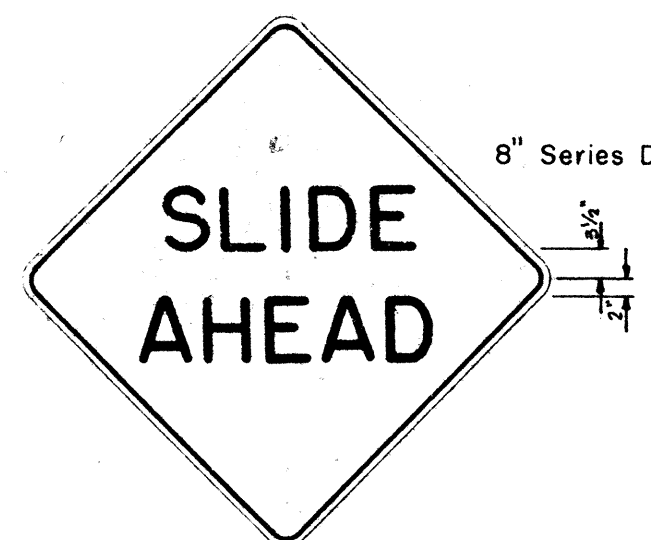
W22-1 30"x30"



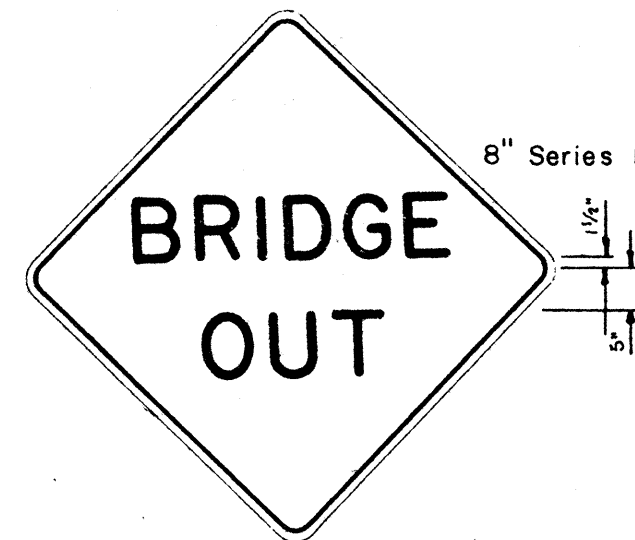
W22-2 30"x30"



W22-3 30"x30"



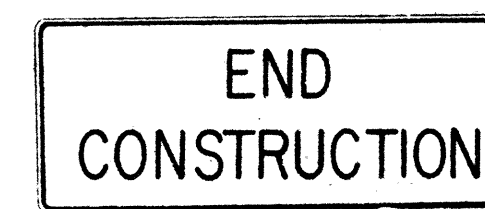
W22-4 48"x48"



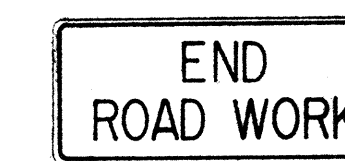
W22-5 48"x48"



G20-1(5) 60"x36"



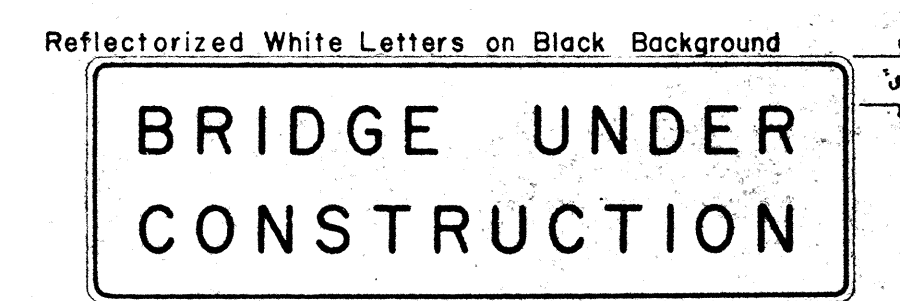
G20-2 60"x24"



G20-3 42"x18"



M5-7(L) 48"x18"



CW-1 96"x30"

- NOTE:
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

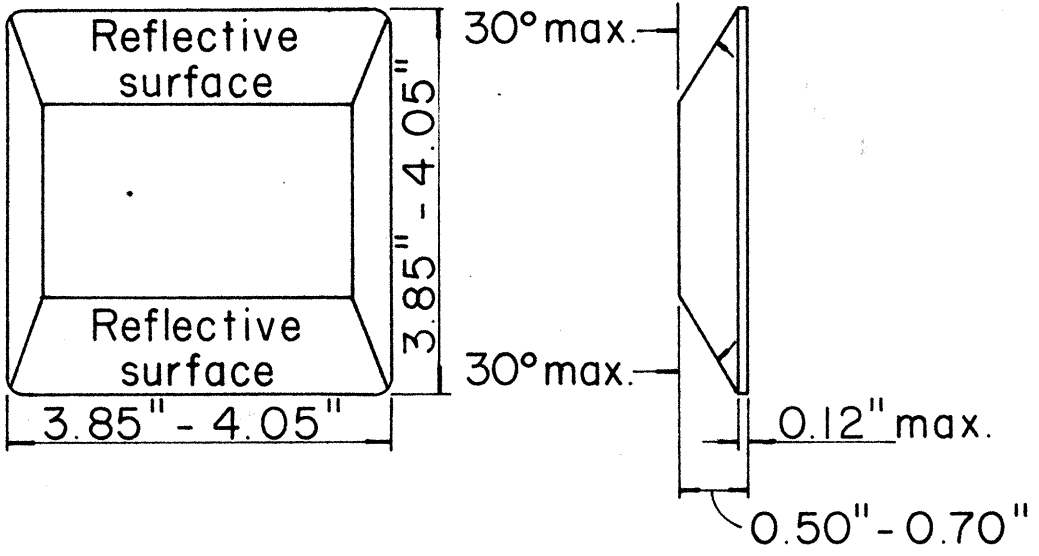
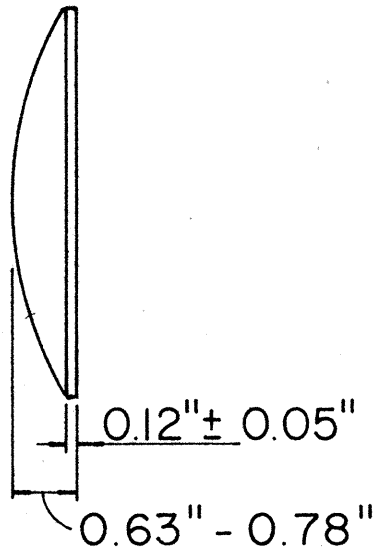
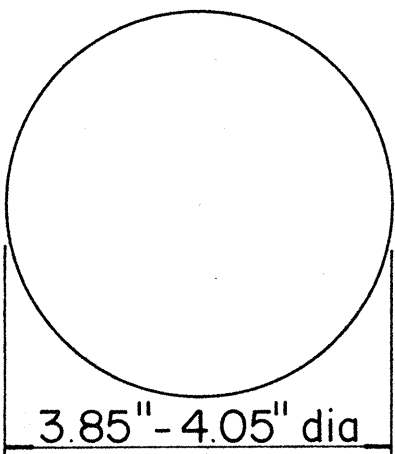
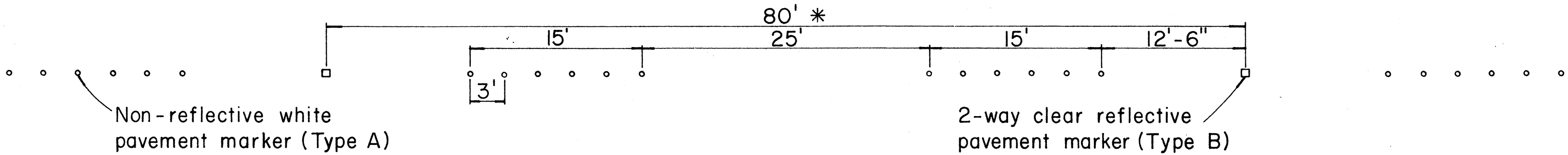
STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

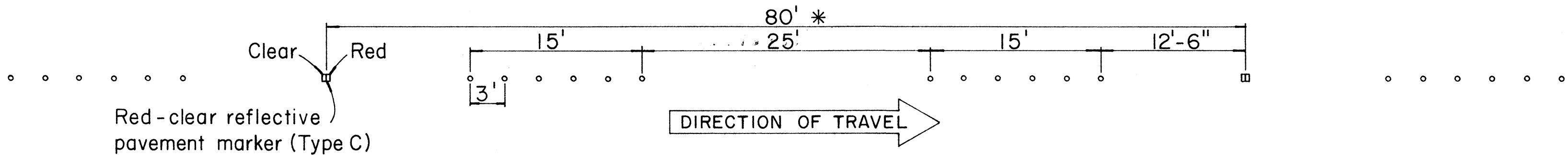
SHEET No. 27 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HA-1(3)-5 UNIT 4	1967	69	101

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



② LANE LINES

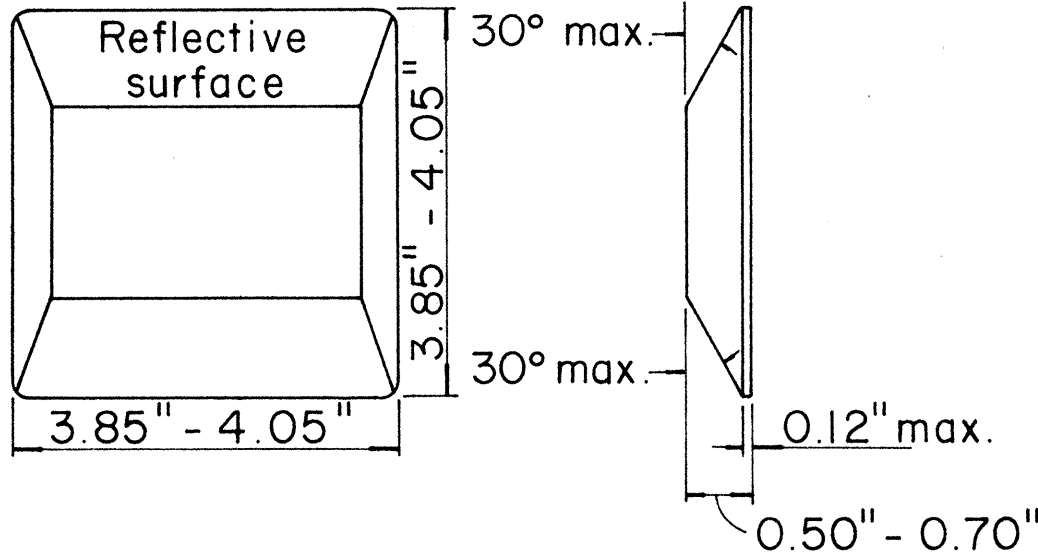
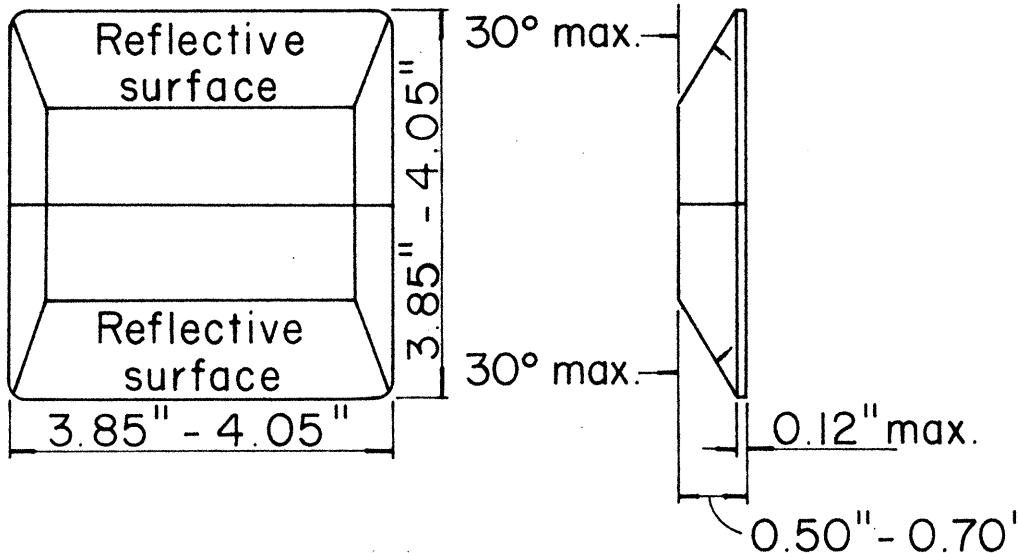
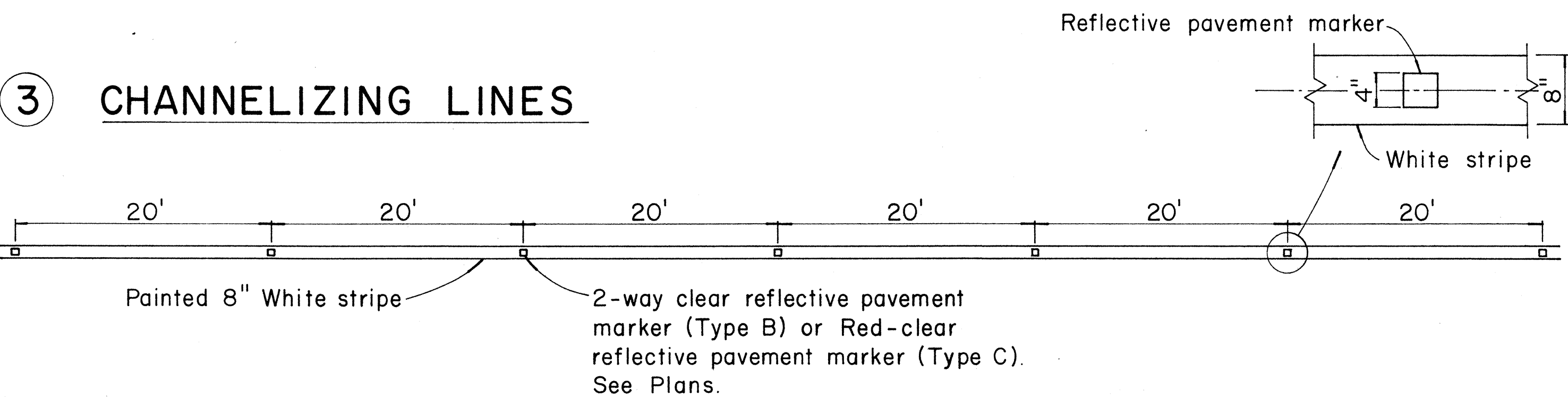


TYPE A
Non-reflective white marker

TYPE B
2-way clear reflective surface

TYPE D
2-way yellow reflective surface

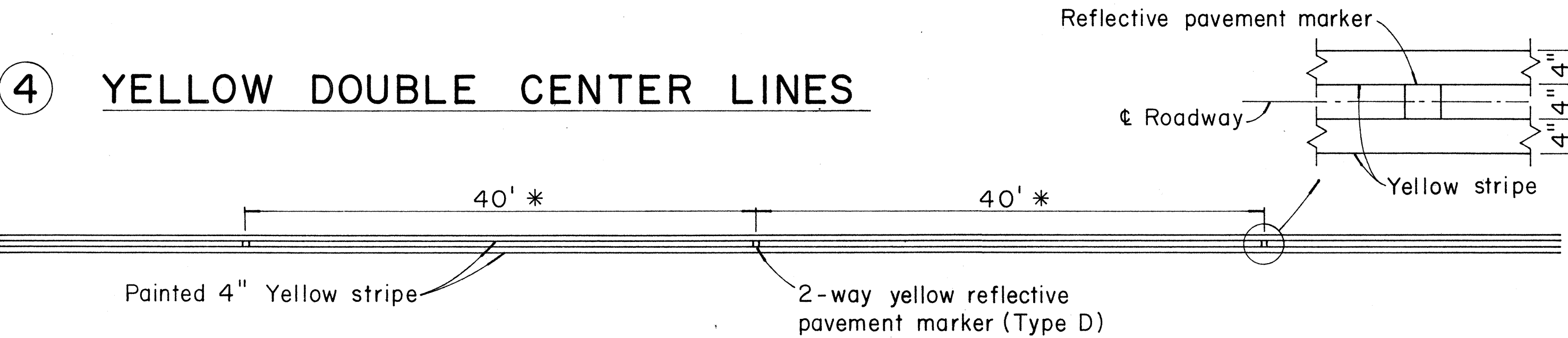
③ CHANNELIZING LINES



TYPE C
Red - clear reflective surface

TYPE H
One - way yellow reflective surface

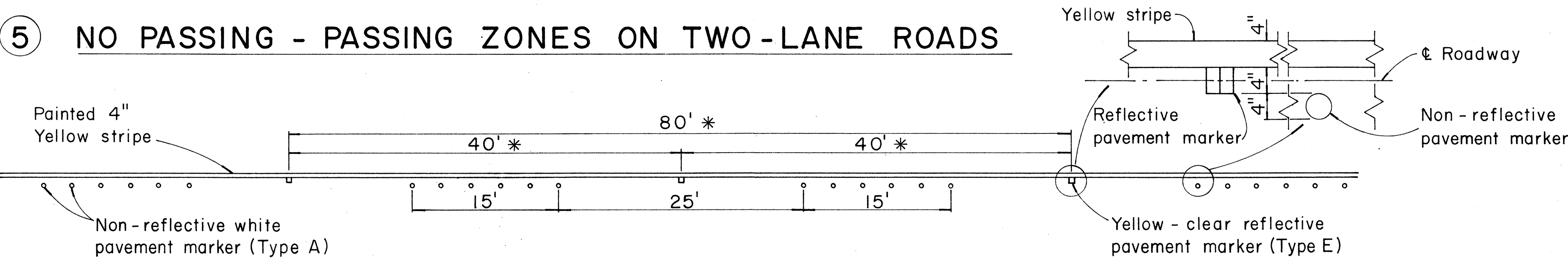
④ YELLOW DOUBLE CENTER LINES



TYPE E
Yellow - clear reflective surface

TYPE G
One - way clear reflective surface

⑤ NO PASSING - PASSING ZONES ON TWO-LANE ROADS



NOTE:
Painted stripes to be done by State forces

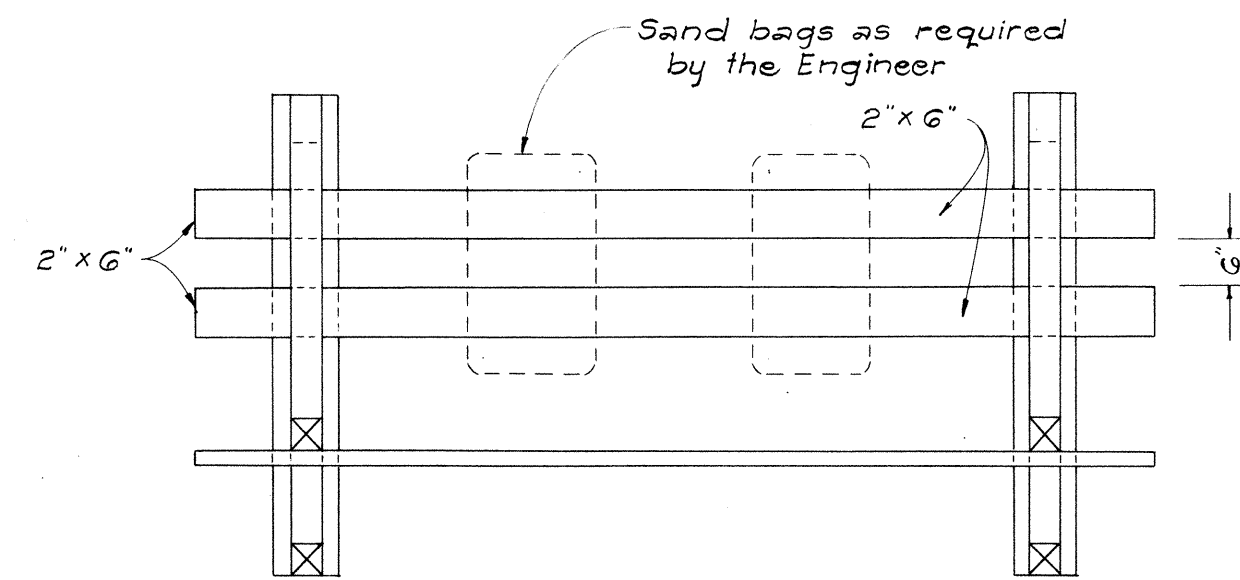
* For curves less than 1000' radius use one-half spacing

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

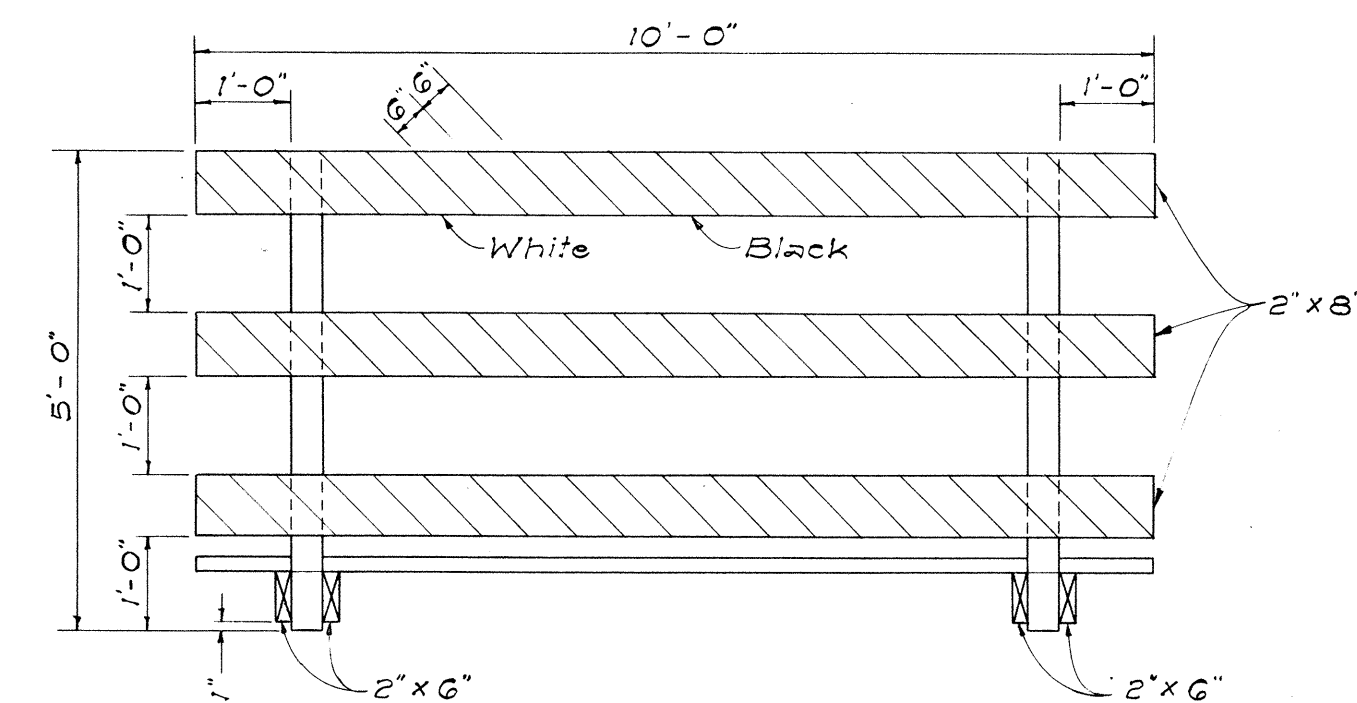
STANDARD DETAILS
RAISED PAVEMENT MARKERS

Not to Scale
Sept., 1967

SHEET No. 69 OF 101 SHEETS

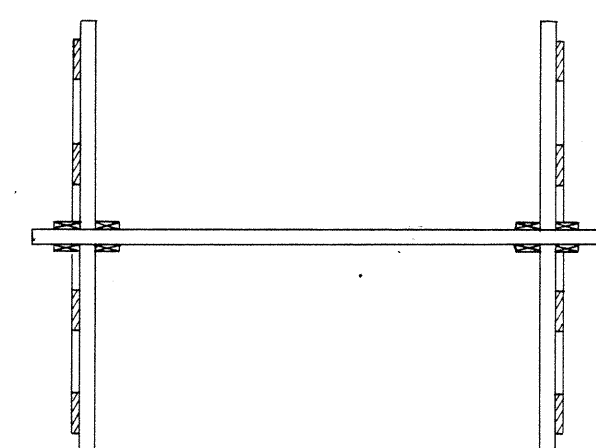


PLAN VIEW

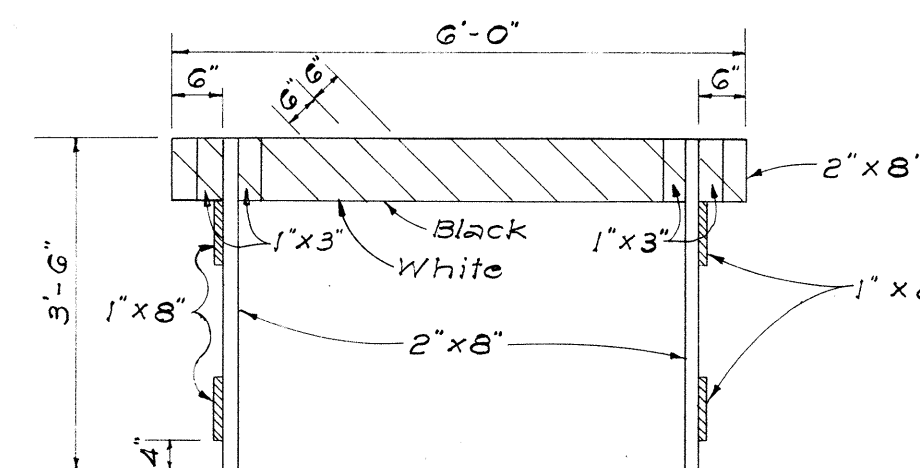


FRONT VIEW

CLASS I BARRICADE



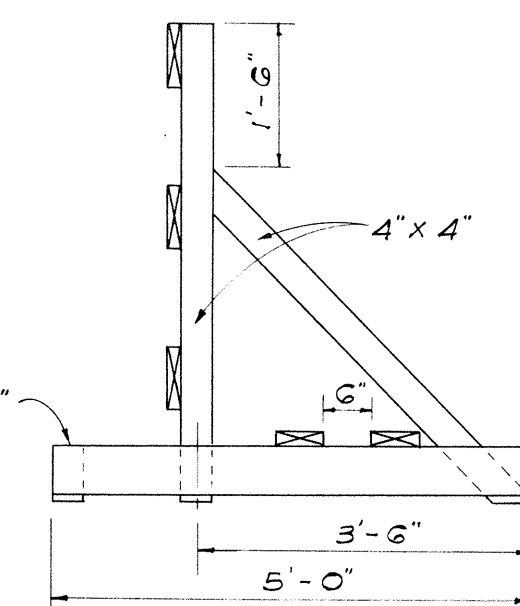
PLAN VIEW



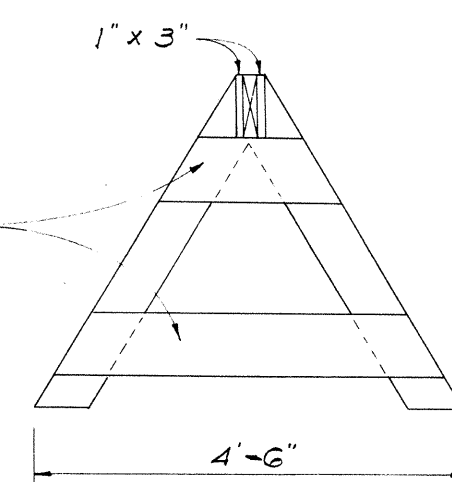
FRONT VIEW

CLASS II BARRICADE

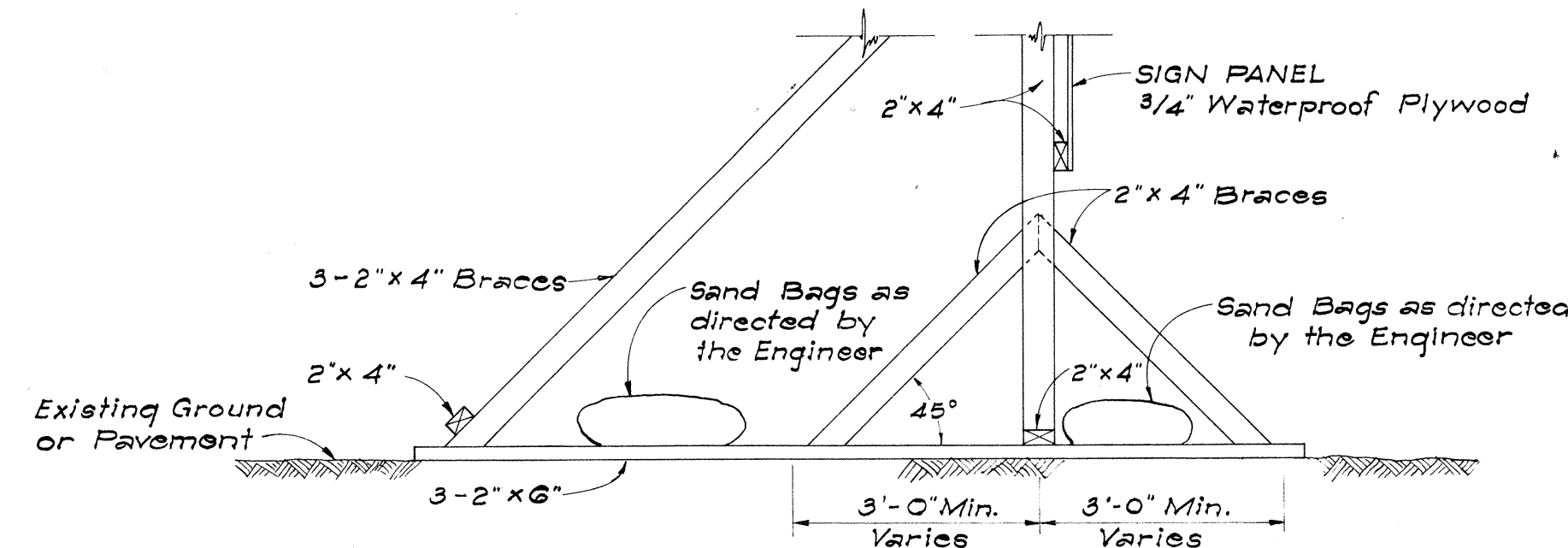
Scale: 1/2" = 1'-0"



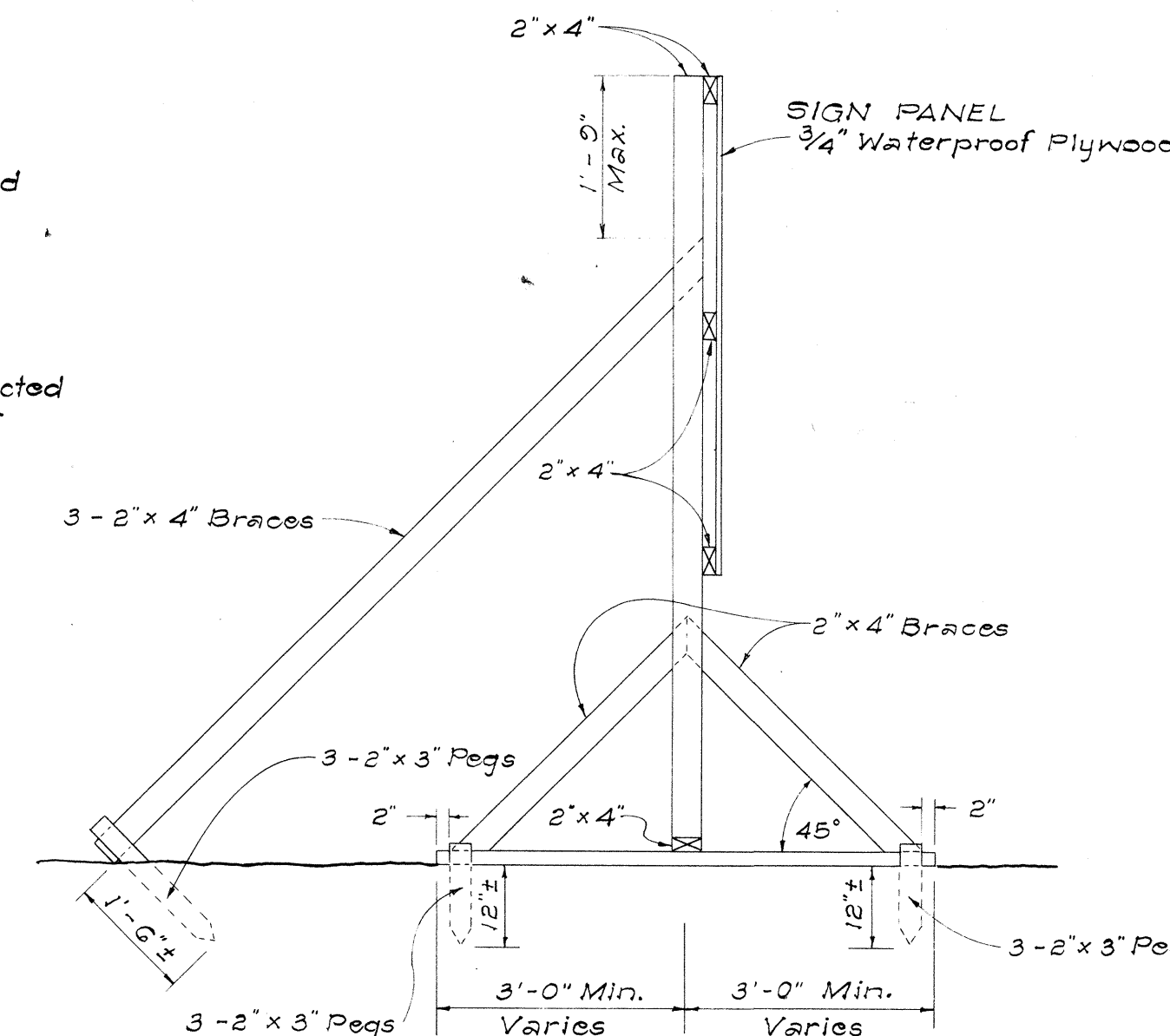
END VIEW



END VIEW



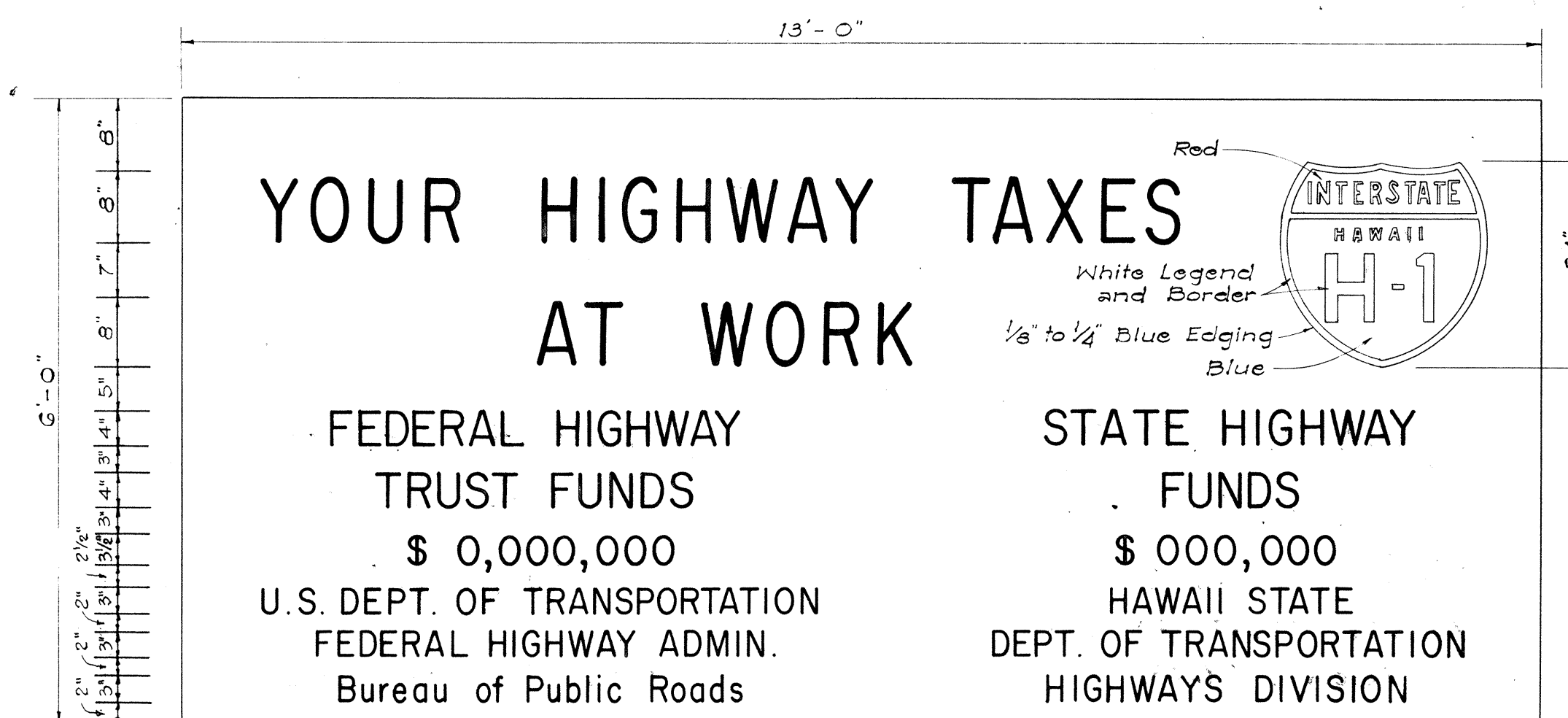
SIDE VIEW
(SIGN FRAME WEIGHTED DOWN)



SIDE VIEW
(SIGN FRAME ANCHORED IN GROUND)

ELEVATIONS

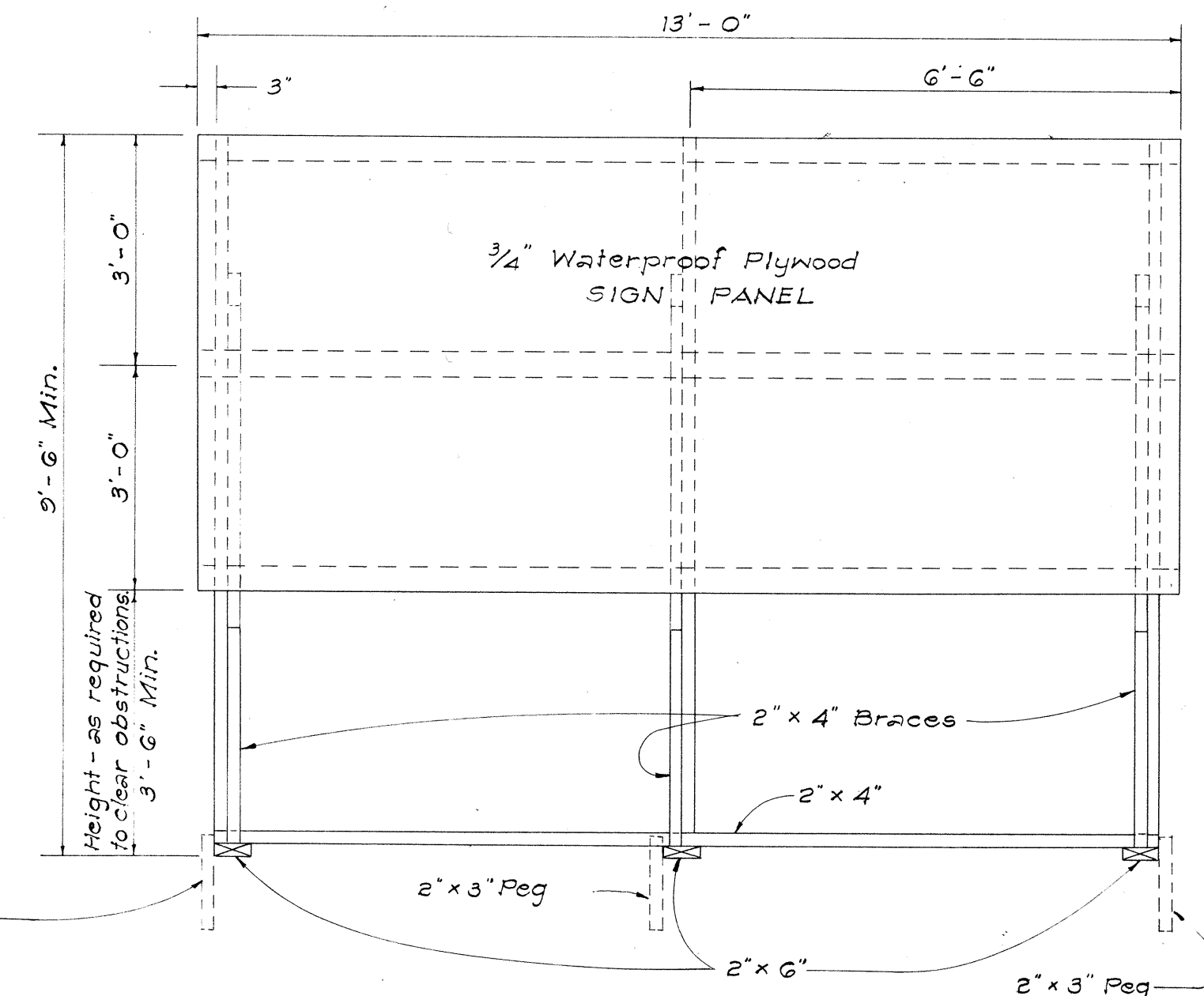
Scale: 1/2" = 1'-0"



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

INTERSTATE SYSTEM CONSTRUCTION IDENTIFICATION SIGN

Scale: As Shown



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.
 - 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 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: 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. 20 OF 20 SHEETS

50