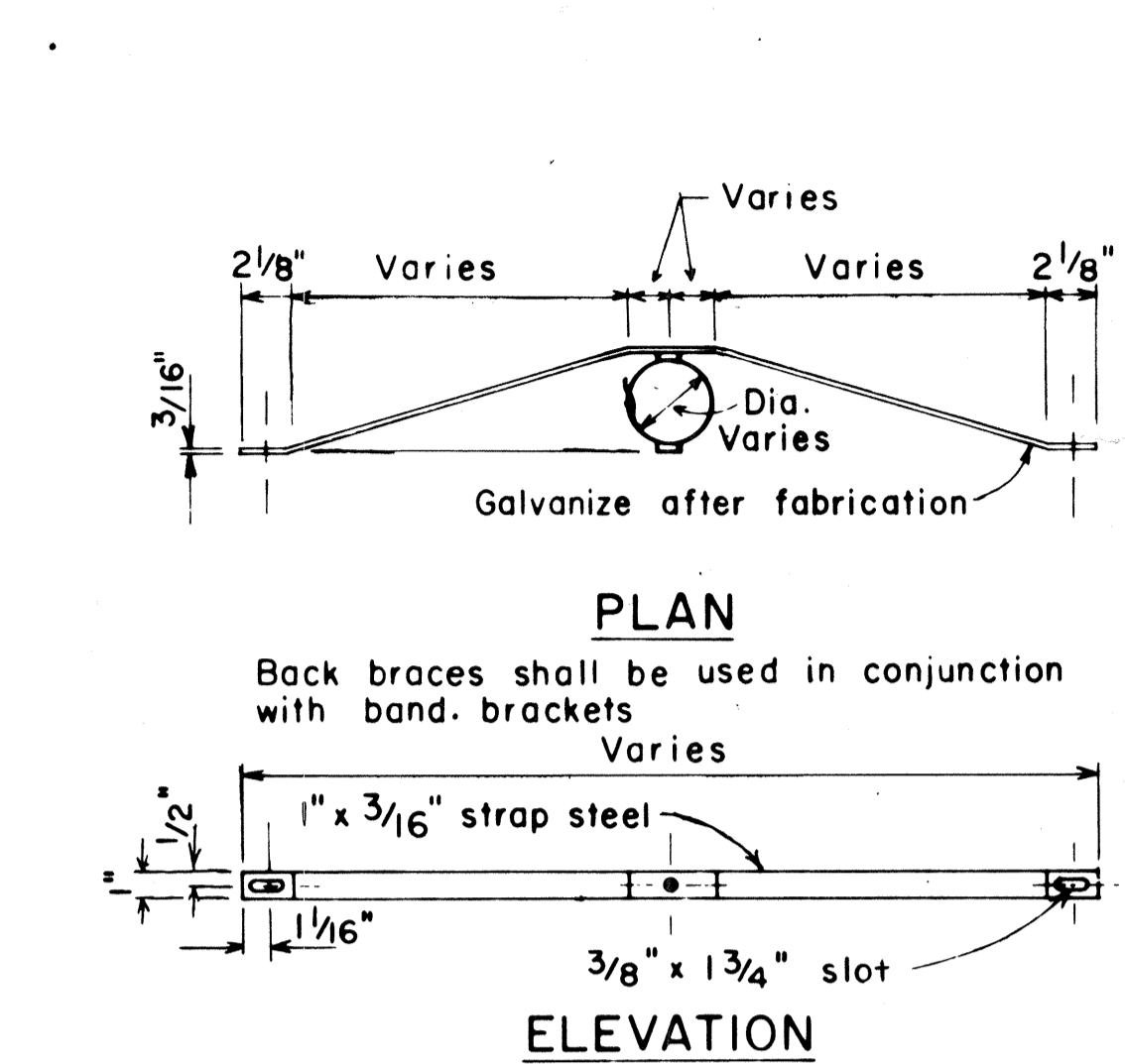


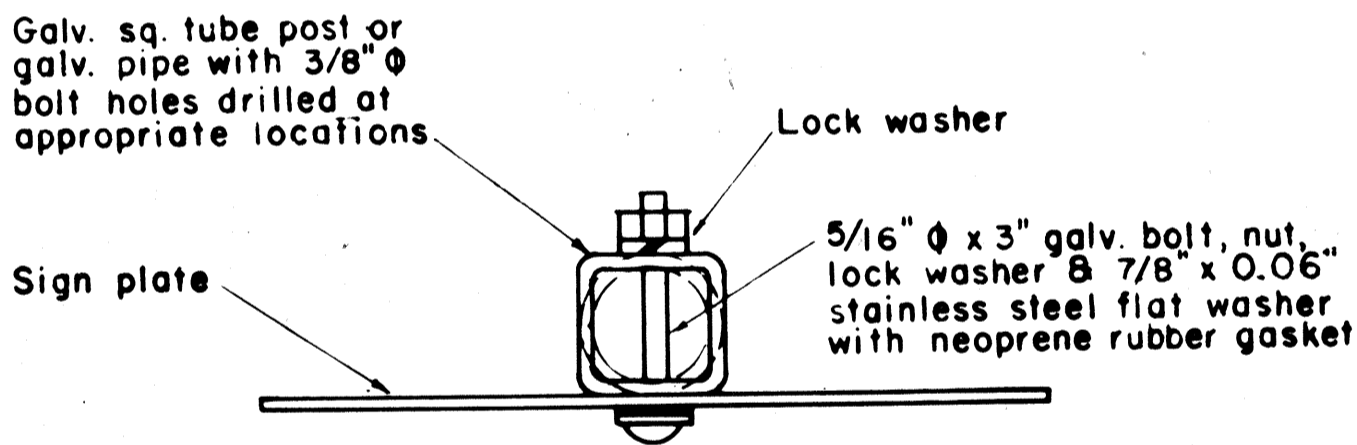
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0470(3)	1981	4	10

GENERAL NOTES

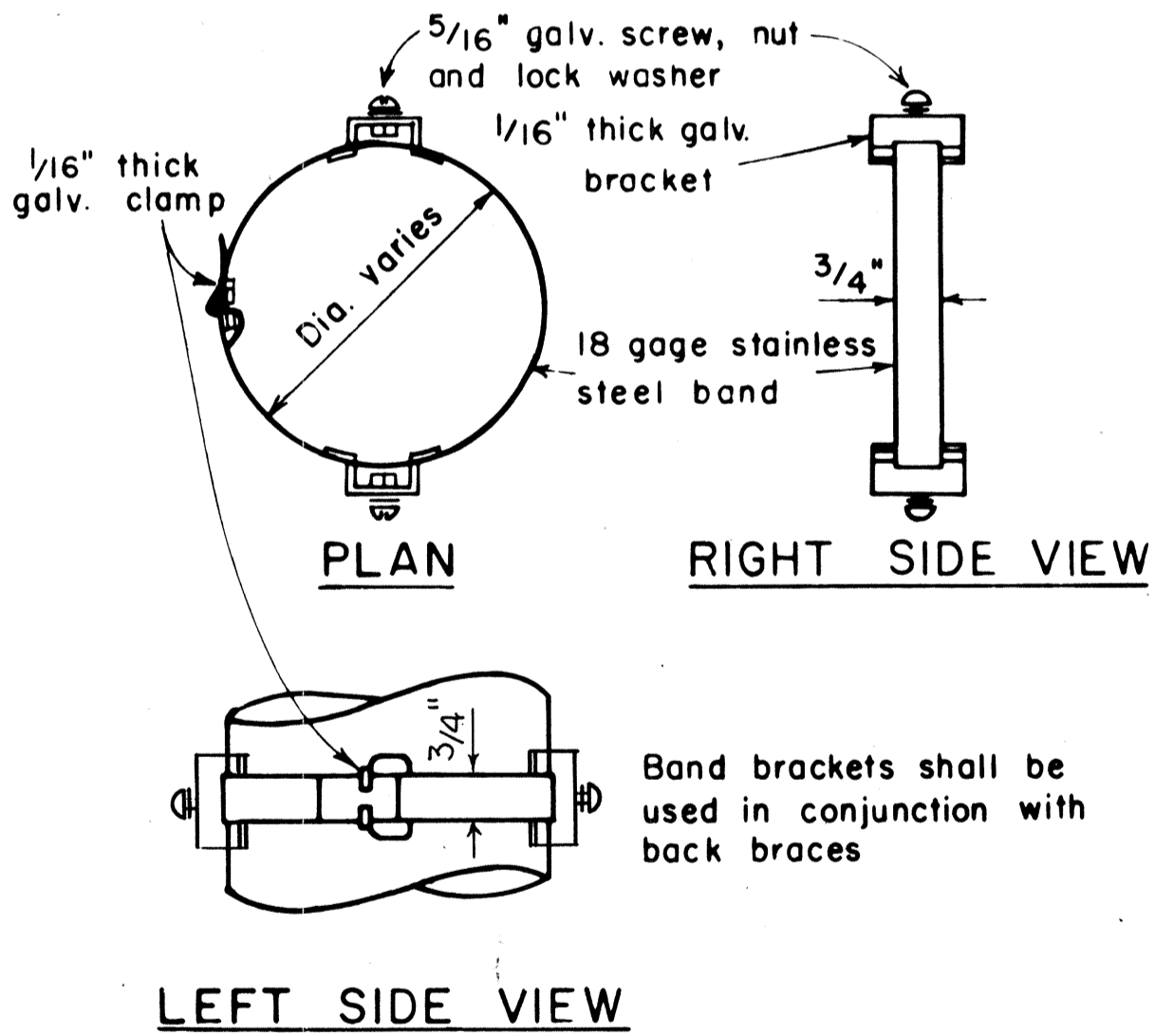
- Signs shall be placed in conformance with positions shown and described in the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1978, Part II, Section 2A-21, as amended, and as supplemented herein.
- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts except as noted below.
- Signs 48" and wider or larger than 10 sq. ft. in area may be mounted on other than two sign posts (i.e. on highway lighting poles)
  - Signs larger than 10 sq. ft. and less than 28 sq. ft. in area shall be mounted with a minimum of two sets of band brackets and back braces.
  - Signs larger than 28 sq. ft. in area shall be mounted with a minimum of three sets of band brackets and back braces.
- All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
- Sign posts shall extend 3 1/2" above each sign, where required, for attachment of City and County street name signs.
- (R) or (L) indicates right or left and shall be shown on the plans.
- See plans for special details.
- The minimum lateral distances shown are guidelines and shall be exceeded whenever possible. The Contractor shall place signs at the maximum practical lateral distance from the edge of the traveled way up to 30 feet and shall utilize protected locations whenever possible. Final locations of all signs shall be approved by the Engineer.
- Signs in medians shall be placed at midpoint of median up to a maximum distance of 30 feet from the edge of traveled way. When appropriate, signs for opposing directions shall be placed back to back.



BACK BRACE DETAILS  
FOR BALANCED SIGN INSTALLATION



GALVANIZED SQUARE TUBE POST  
(OR GALVANIZED PIPE)



BAND BRACKET

TYPICAL MOUNTING DETAILS  
NOT TO SCALE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT-100 approved 12/30/69	H.T.	11/15/11
2	Revised depth of signpost	H.T.	5/8/19
3	Added Notes No. 8 & No. 9	H.T.	5/18/19
4	Revised Gen. Note #4 & Mounting Details	H.T.	4/23/80
5	Revised General Notes, Lateral Sign Locations and Mounting Details	H.T.	5/15/81

APPROVAL RECOMMENDED:  
*Eugene Tanaka* 11/10/11  
 TRAFFIC ENGINEER DATE

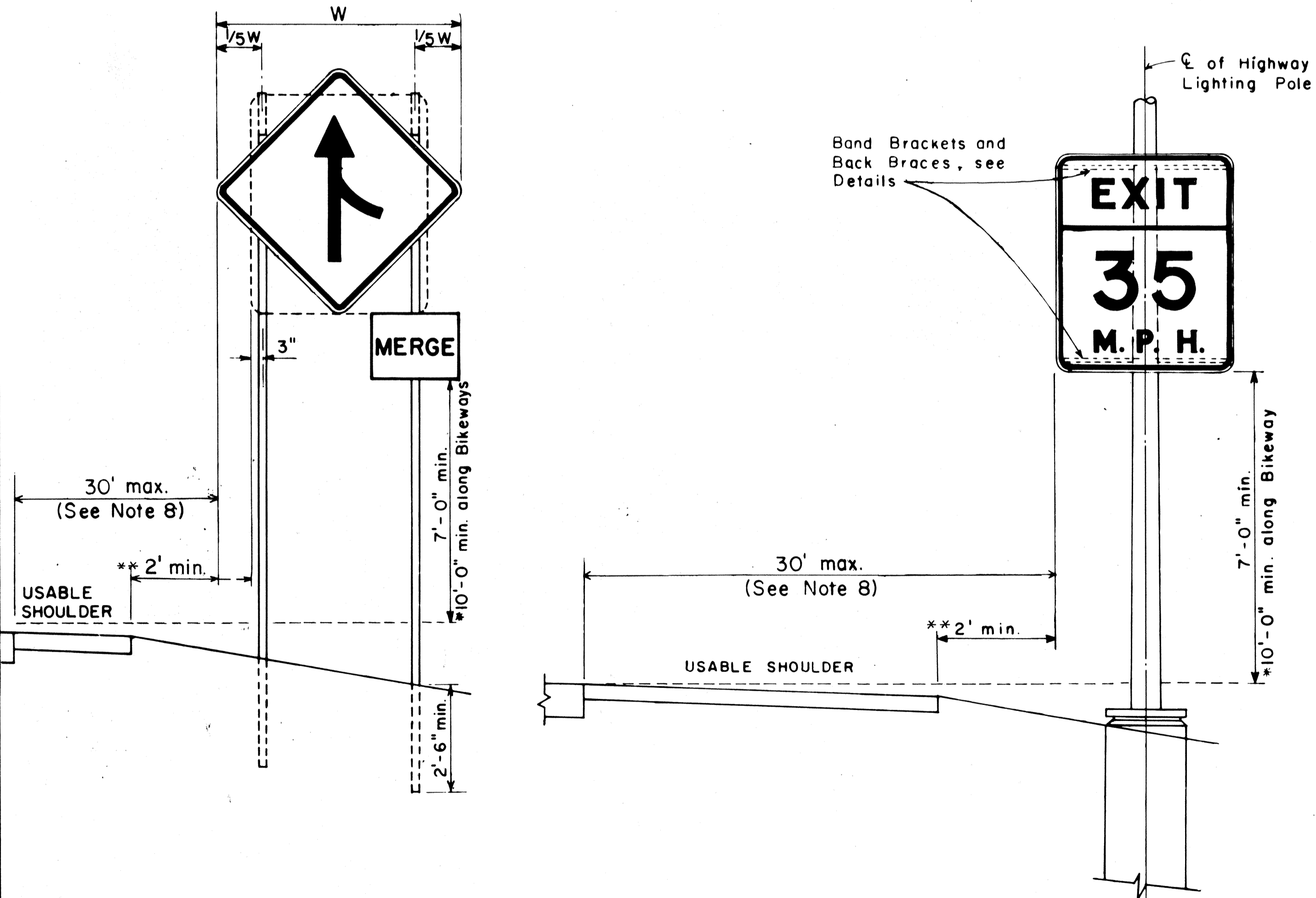
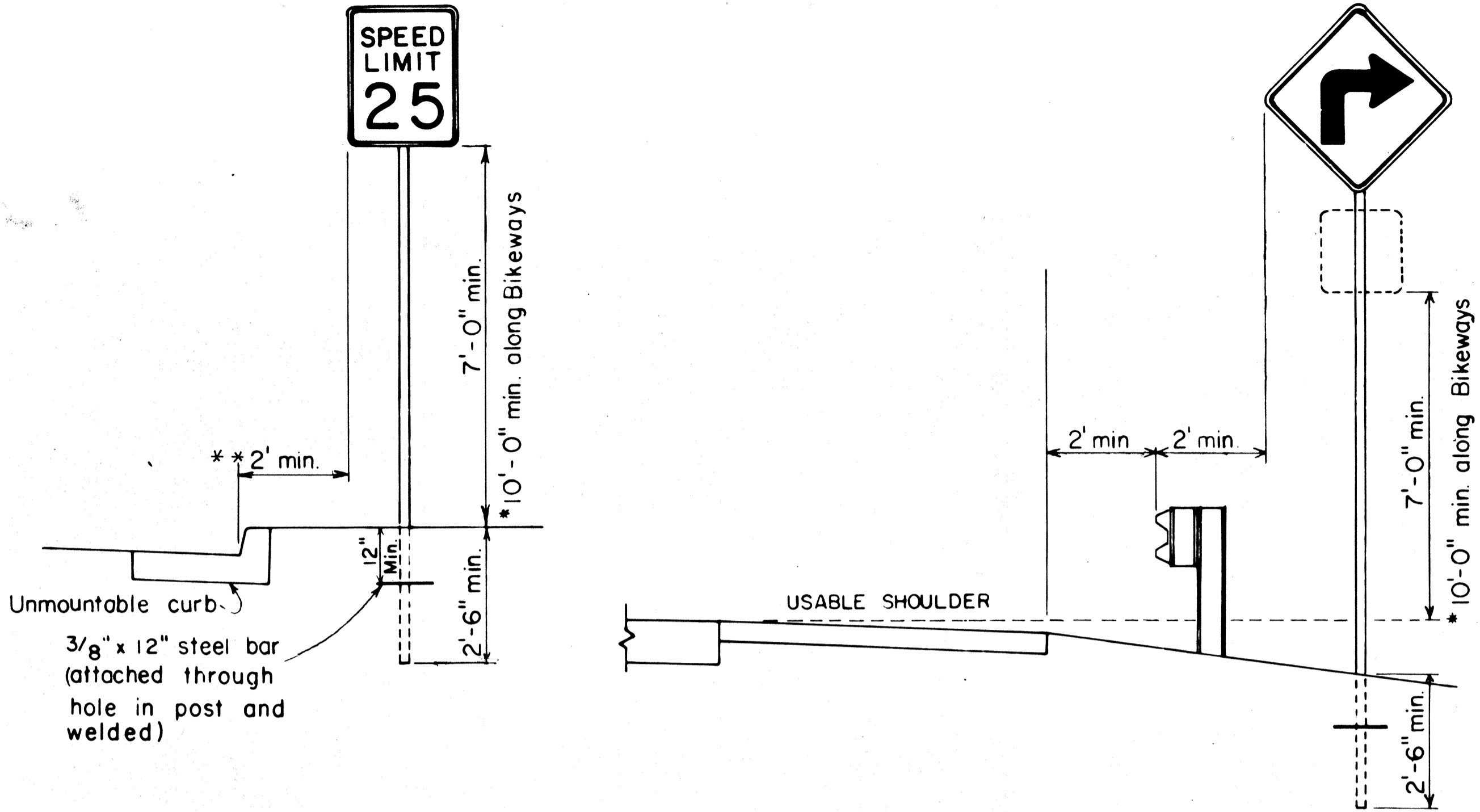
APPROVED:  
*Harbert S. Gabeisho* 11/15/11  
 ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

STANDARD DETAILS  
MISCELLANEOUS SIGN DETAILS

Not to scale June, 1977

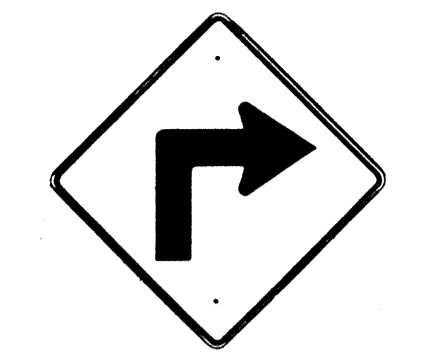
SHEET NO. 1 OF 7 SHEETS DT 100



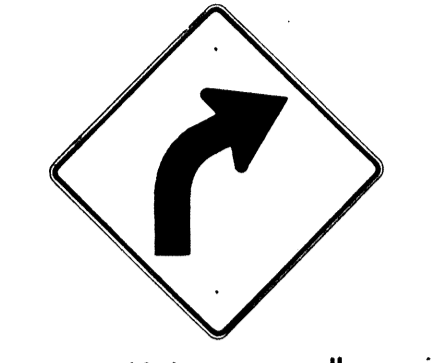
HEIGHT AND LATERAL LOCATION OF SIGNS  
TYPICAL INSTALLATION

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

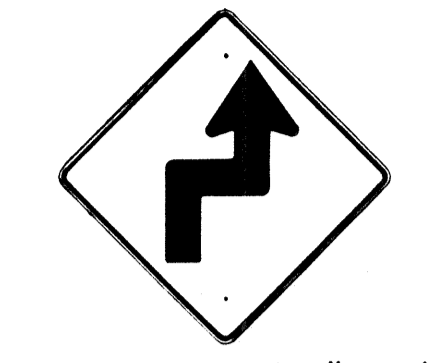
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII *	HAW.	RS-0470(3)	1981	5	10



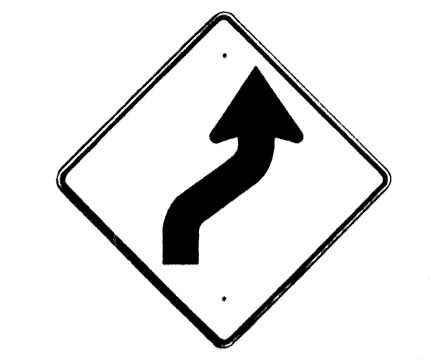
W1-1(R) 30"x 30"  
W1-1(R)-A 48"x 48"




W1-2(R) 30"x 30"  
W1-2(R)-A 48"x 48"



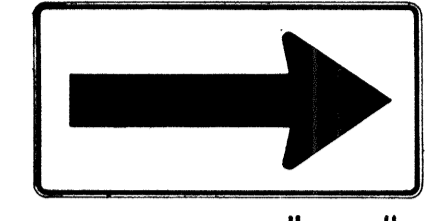
W1-3(R) 30"x 30"  
W1-3(R)-A 48"x 48"



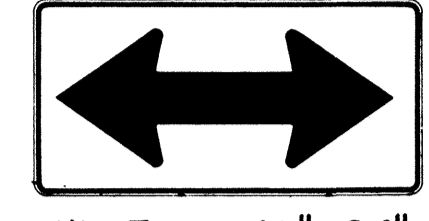
W1-4(R) 30"x 30"  
W1-4(R)-A 48"x 48"



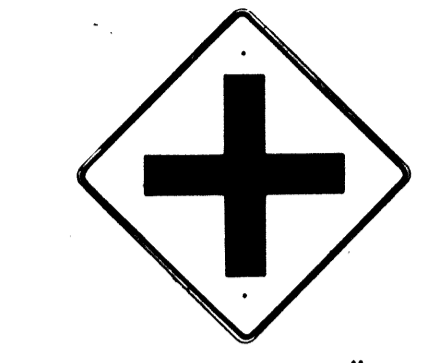
W1-5(R) 30"x 30"  
W1-5(R)-A 48"x 48"



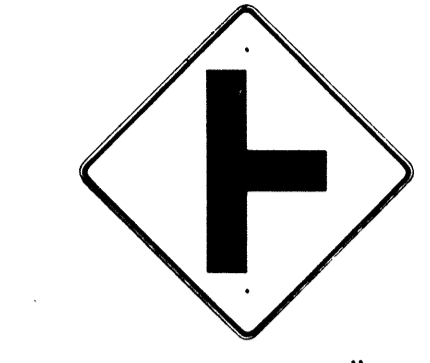
W1-6 48"x 24"



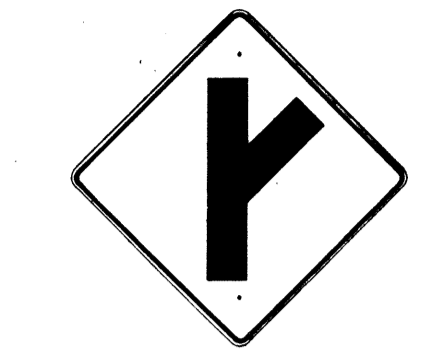
W1-7 48"x 24"



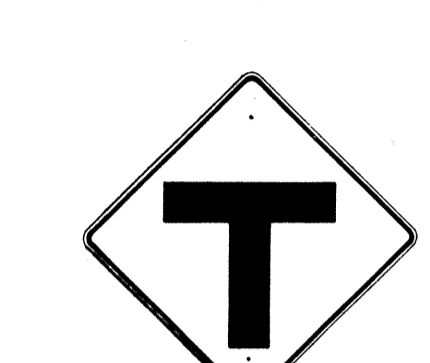
W2-1 30"x 30"  
W2-1-A 48"x 48"



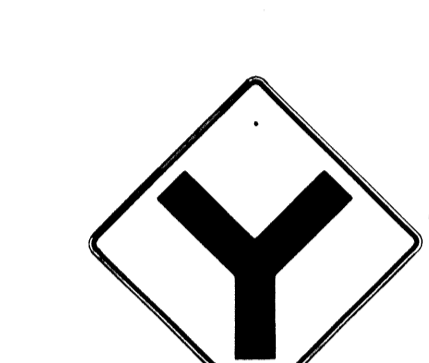
W2-2 30"x 30"  
W2-2-A 48"x 48"




W2-3(R) 30"x 30"  
W2-3(R)-A 48"x 48"




W2-4 30"x 30"  
W2-4-A 48"x 48"



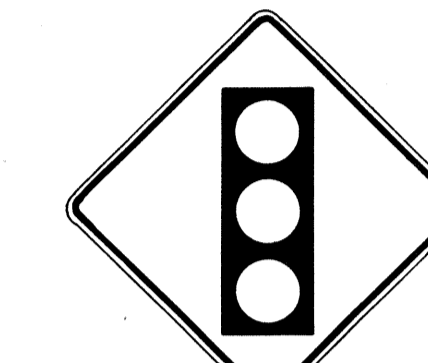
W2-5 30"x 30"  
W2-5-A 48"x 48"




W3-1 30"x 30"  
W3-1-A 36"x 36"



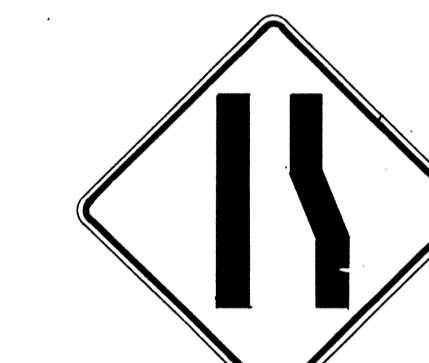
W3-2 30"x 30"  
W3-2-A 36"x 36"




W3-3 36"x 36"  
24"x 18"




W4-1(R) 30"x 30"  
24"x 18"  
W4-1(R)-A 48"x 48"  
24"x 18"




W4-2(R) 36"x 36"  
W4-2(R)-A 48"x 48"




W5-1 36"x 36"




W5-2 30"x 30"  
W5-2-A 36"x 36"




W5-3 36"x 36"




W6-1 36"x 36"  
24"x 18"




W6-2 36"x 36"  
24"x 18"




W6-3 30"x 30"  
24"x 18"  
W6-3-A 36"x 36"  
24"x 18"  
W6-3-B 48"x 48"  
24"x 18"




W7-1 30"x 30"  
24"x 18"  
W7-1-A 36"x 36"  
24"x 18"




W7-2 24"x 18"




W8-1 30"x 30"  
W8-1-A 36"x 36"




W8-2 30"x 30"  
W8-2-A 36"x 36"




W8-3 30"x 30"  
W8-3-A 36"x 36"




W8-4 30"x 30"  
W8-4-A 36"x 36"



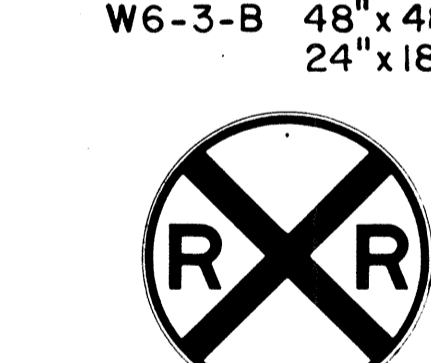
W8-5 30"x 30"  
24"x 18"  
W8-5-A 36"x 36"  
24"x 18"




W9-1(R) 30"x 30"  
W9-1(R)-A 36"x 36"  
W9-1(R)-B 48"x 48"




W9-2(L) 36"x 36"  
W9-2(L)-A 48"x 48"




W10-1 36" Diameter




W11-1 30"x 30"  
24"x 18"  
W11-1-A 36"x 36"  
24"x 18"



W11-2 30"x 30"  
24"x 18"  
W11-2-A 36"x 36"  
24"x 18"



W11-4 30"x 30"  
24"x 18"  
W11-4-A 36"x 36"  
24"x 18"



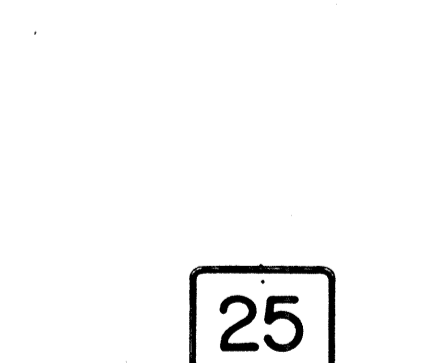
W11-5 30"x 30"  
24"x 18"  
W11-5-A 36"x 36"  
24"x 18"



W12-1 24"x 24"  
W12-1-A 36"x 36"  
W12-1-B 48"x 48"



W12-2(12'-6") 36"x 36"  
24"x 18"



W13-1(25) 18"x 18"  
W13-1(25)-A 24"x 24"



W13-2(25) 48"x 60"



W13-3(25) 48"x 60"



W14-1 30"x 30"



W14-3 36"x 48" x 48"

**GENERAL NOTES**

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All warning signs shall be reflectorized unless otherwise specified.
- All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:  
*E. J. Tanaka*  
 TRAFFIC ENGINEER 3/17/72  
 DATE

APPROVED:  
*W. J. Davis*  
 ASSISTANT CHIEF, ENGINEERING 3-20-72  
 DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1	H.T.	10/10/72
3	Revised General Note 5	M.H.	9-16-75
4	Revised General Note 5	H.T.	9-14-76
5	Added Note 1	H.T.	11-7-79

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

STANDARD DETAILS  
 WARNING SIGNS

NOT TO SCALE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0470(3)	1981	6	10



CW20-1a 48" x 48"



CW20-2d 48" x 48"



CW20-3b 48" x 48"



CW20-4d 48" x 48"



CW20-5d(L) 48" x 48"



CW20-7c 48" x 48"



CW21-1 30" x 30"



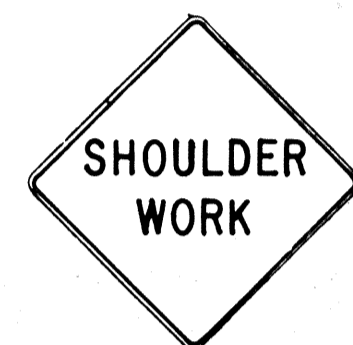
CW21-2 30" x 30"



CW21-3 36" x 36"



CW21-4 36" x 36"



CW21-5 30" x 30"



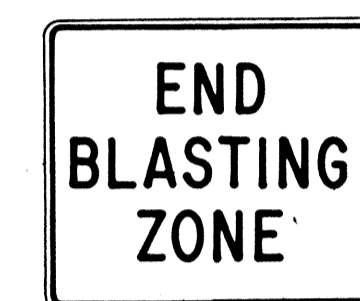
CW21-6 30" x 30"



CW22-1b 48" x 48"



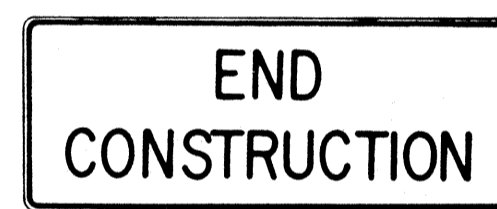
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



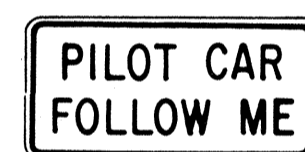
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



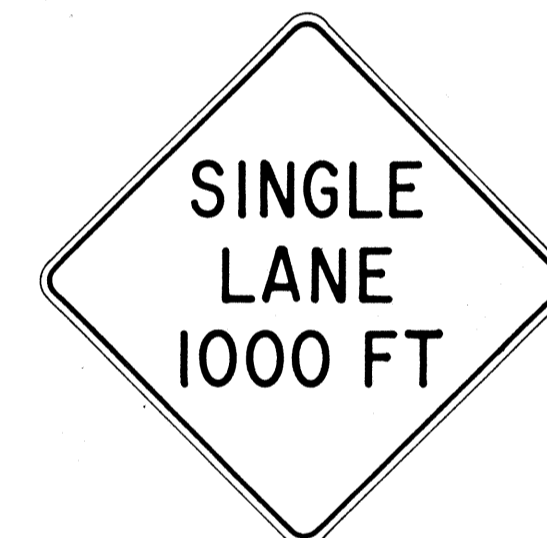
CM4-10(R) 48" x 18"



CG20-4 36" x 18"



CW23-1 36" x 36"



CW23-2b 48" x 48"



CW23-3(R) 48" x 48"

### GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All construction signs shall be reflectorized.
- All construction signs shall have  $\frac{3}{8}$ " bolt holes drilled at appropriate locations.
- Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- For "CW" series signs, suffixes a, b, c and d are as follows:  
a-1500 FT, b-1000 FT, c-500 FT and d-AHEAD.

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 104 Approved 12-30-69	H.T.	3/23/72
2	Revised General Note 1	H.T.	10/16/74
3	Revised General Note 2	MH	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	H.T.	9-14-76

APPROVAL RECOMMENDED:  
Erich Tanaka 3/21/72  
TRAFFIC ENGINEER DATE

APPROVED:  
Shirley Saleh 3/23/72  
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

### STANDARD DETAILS CONSTRUCTION SIGNS

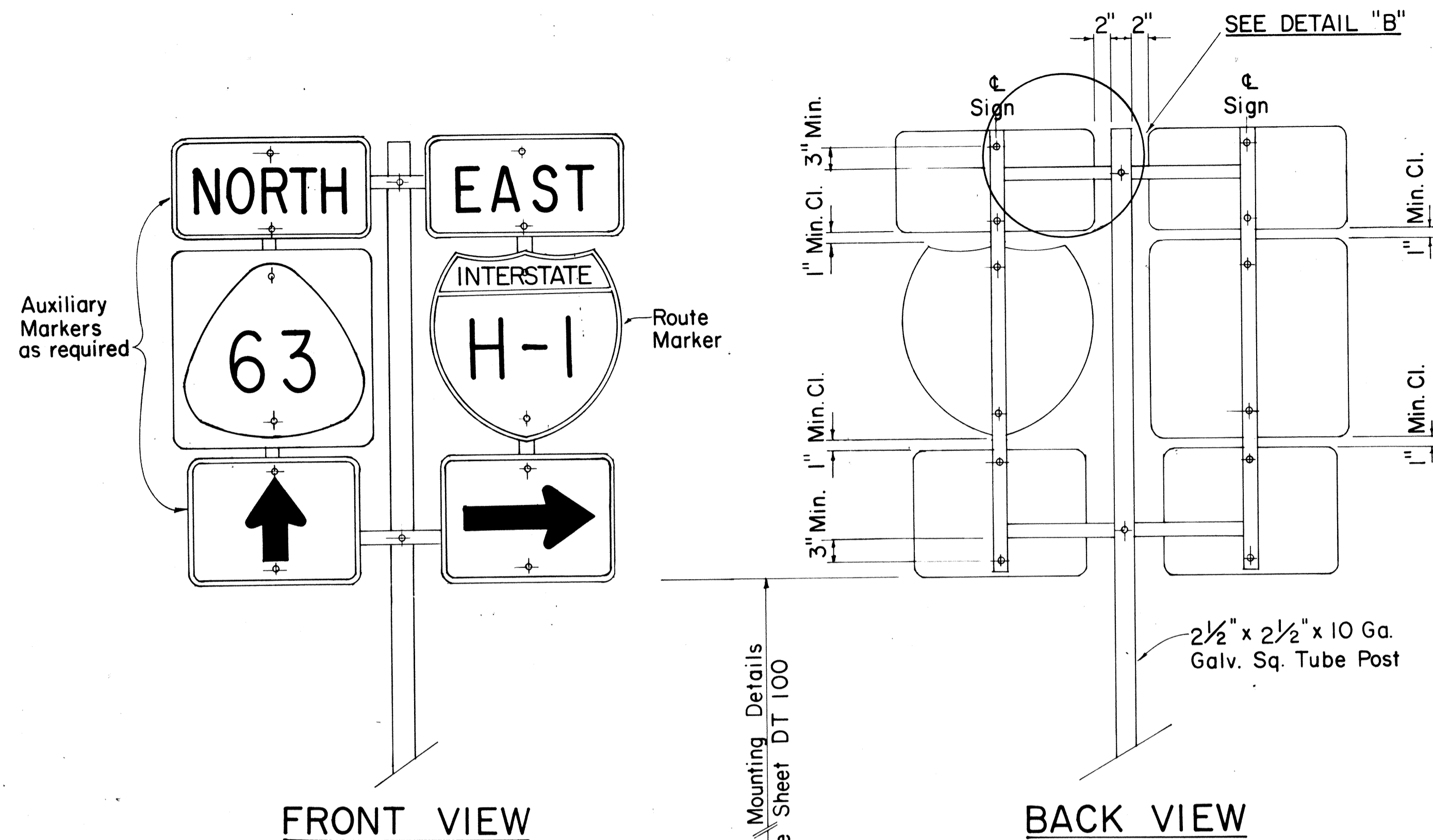
NOT TO SCALE

SHEET No. 3 OF 7 SHEETS DT 104

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

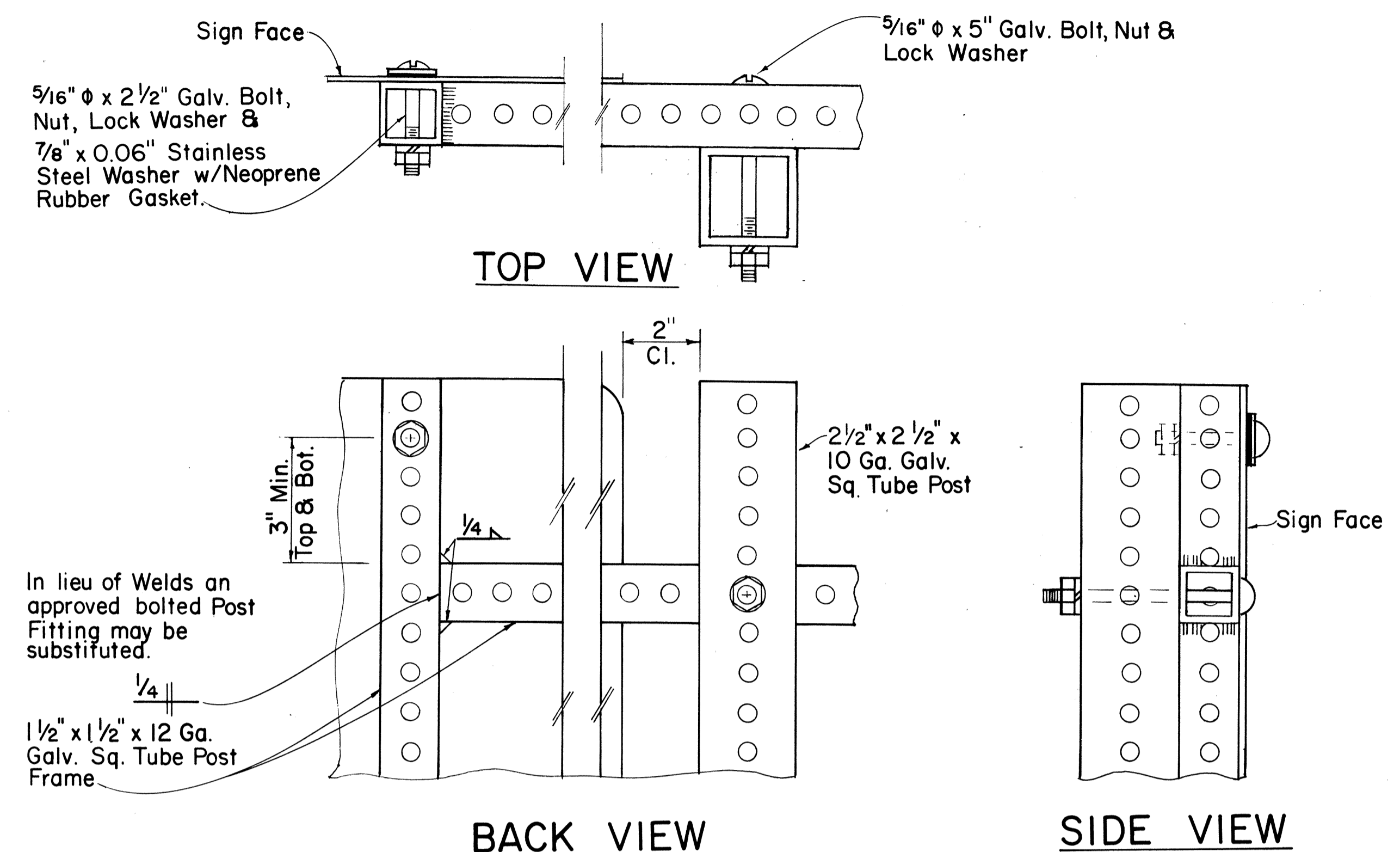


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0470(3)	1981	8	10

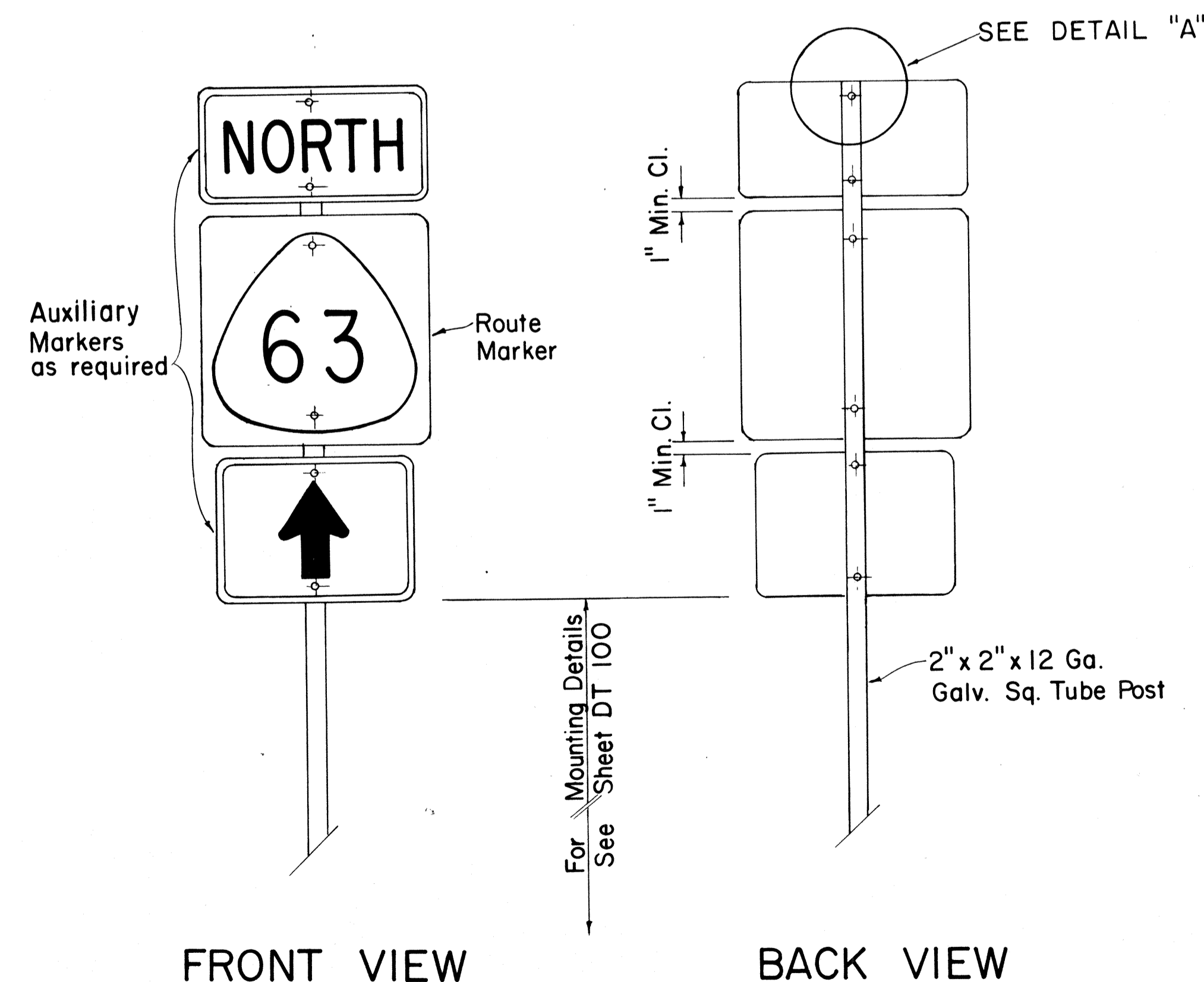


**TYPE "B" ASSEMBLY**

SCALE: 1" = 1'-0"

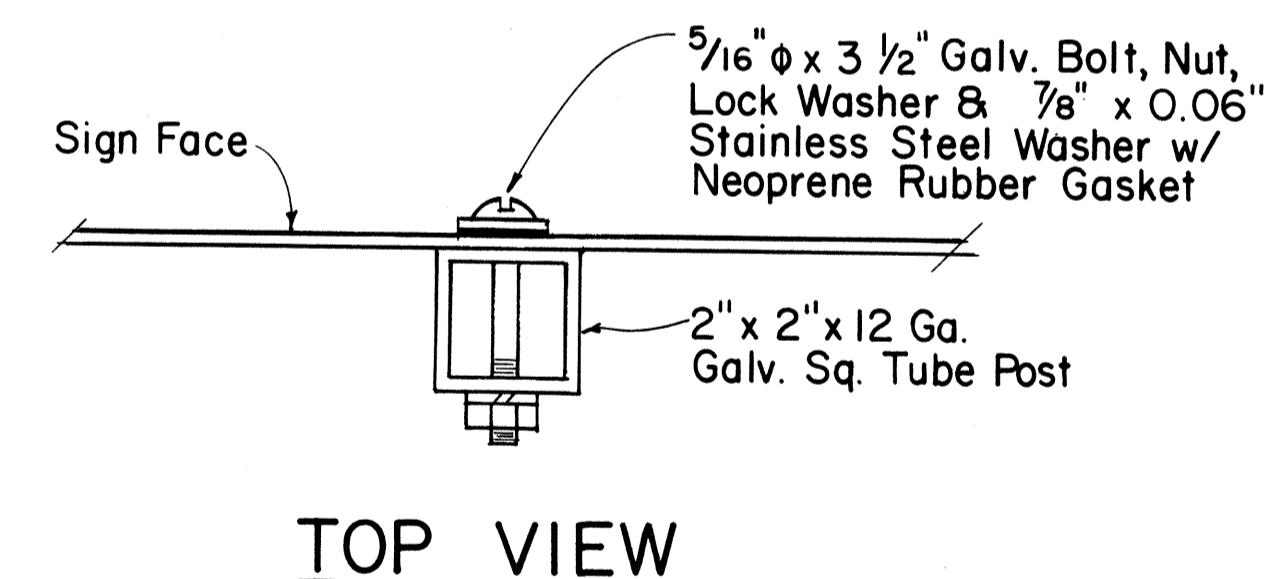


**DETAIL "B"**  
SCALE: 3/8" = 1"



**TYPE "A" ASSEMBLY**

SCALE: 1" = 1'-0"



**DETAIL "A"**  
SCALE: 3/8" = 1"

APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 7/31/80  
 TRAFFIC ENGINEER DATE  
 APPROVED:  
*Harbert Zaleishi* 7/31/80  
 ASSISTANT CHIEF, ENGINEERING DATE

NO	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 107 dated 12/30/69.	H.T.	7/31/80

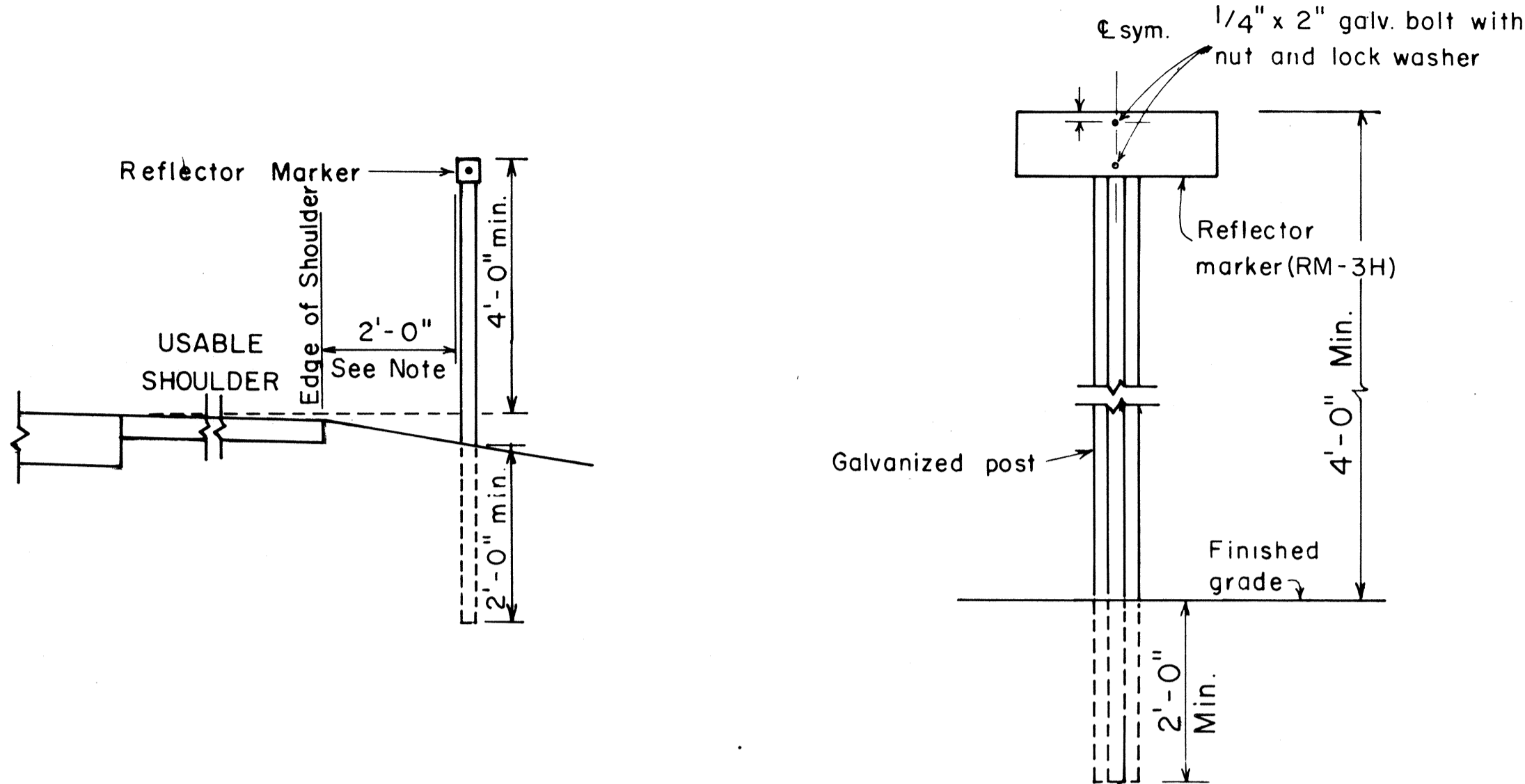
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**STANDARD DETAILS**  
**ROUTE MARKER**  
**ASSEMBLIES**  
 SCALE: AS SHOWN  
 SHEET NO. 5 OF 7 SHEETS DT 107

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

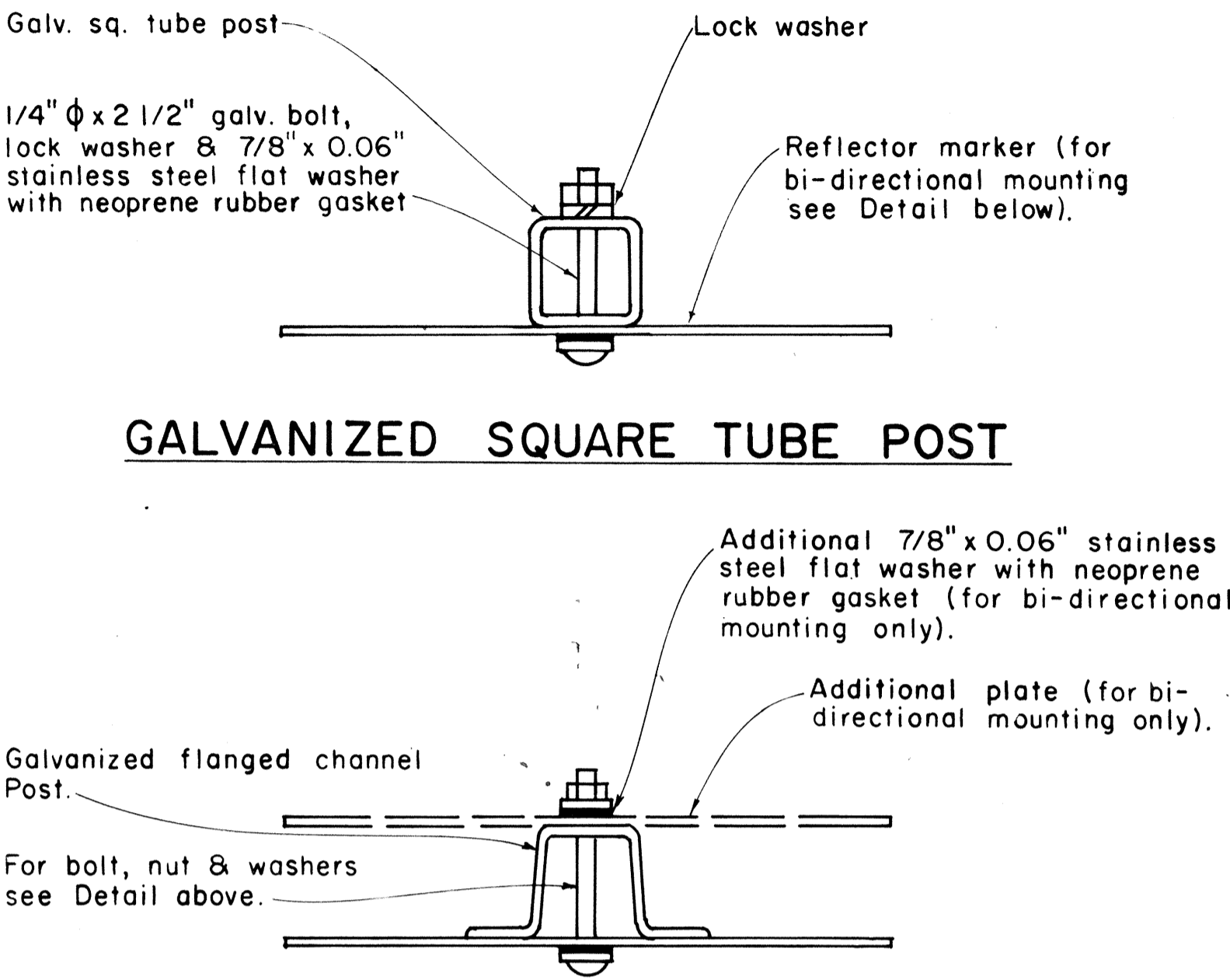
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0470(3)	1981	9	10

GENERAL NOTES:

1. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
2. (R) or (L) indicates right or left and shall be as shown on the plans.
3. Reflector markers RM-1 and RM-2 shall be:
  - a) Yellow if placed along the left edge of divided roadways, one-way roadways, and ramps in the direction of travel.
  - b) White if placed along the right edge of divided roadways, one-way roadways, and ramps in the direction of travel.
4. For reflector marker RM-9, reflective sheeting material may be used as an alternate.
5. For RM-4, the stripes shall slope downward at an angle of 45° in the direction of traffic.

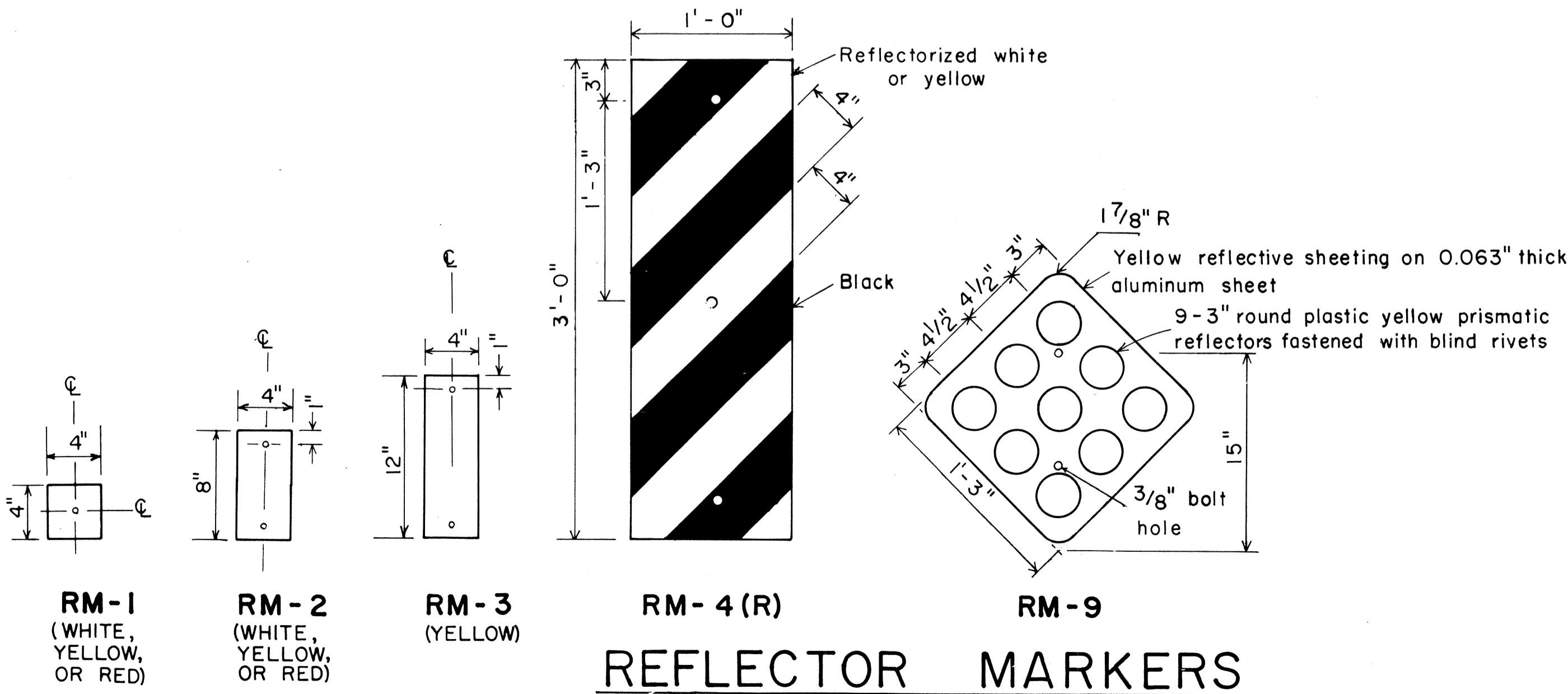


REFLECTOR MARKER MOUNTING DETAIL



GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS



REFLECTOR MARKERS

APPROVAL RECOMMENDED:  
*Enishi Tanaka* 11/7/77  
 TRAFFIC ENGINEER DATE  
 APPROVED:  
*Herbert R. Sakai* 11/15/77  
 ASSISTANT CHIEF, ENGINEERING DATE

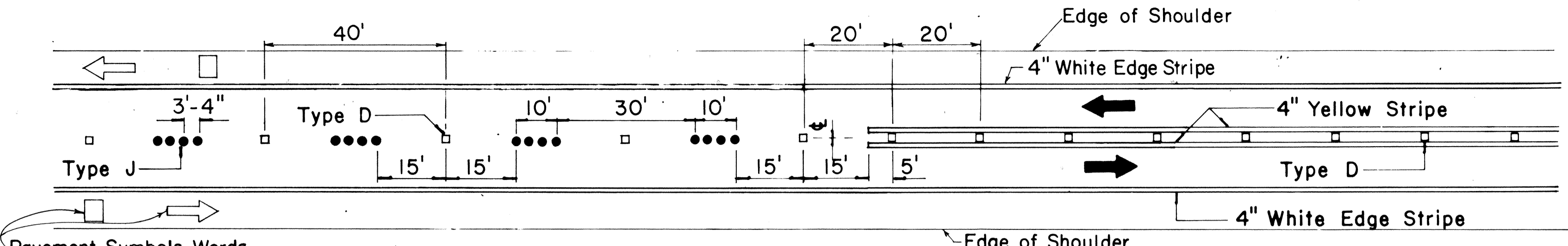
NO.	REVISION	APPROVED BY	DATE
1	Revised Mounting Details	H.T.	4/23/80

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

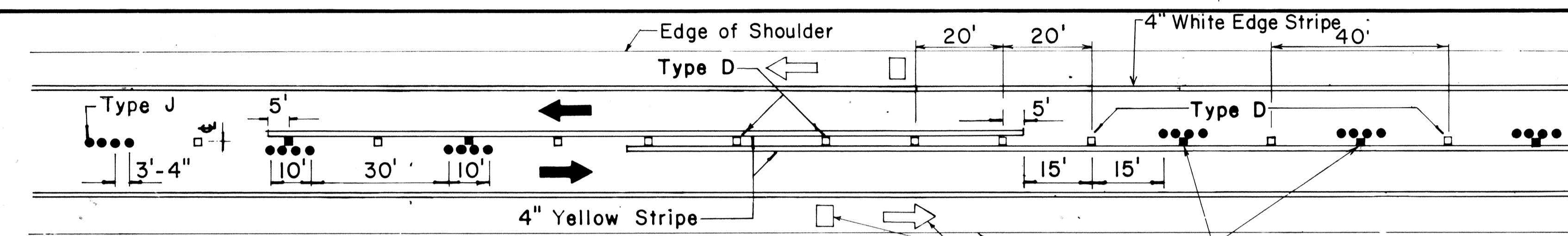
STANDARD DETAILS  
MISCELLANEOUS REFLECTOR MARKERS

Not to scale  
June, 1977

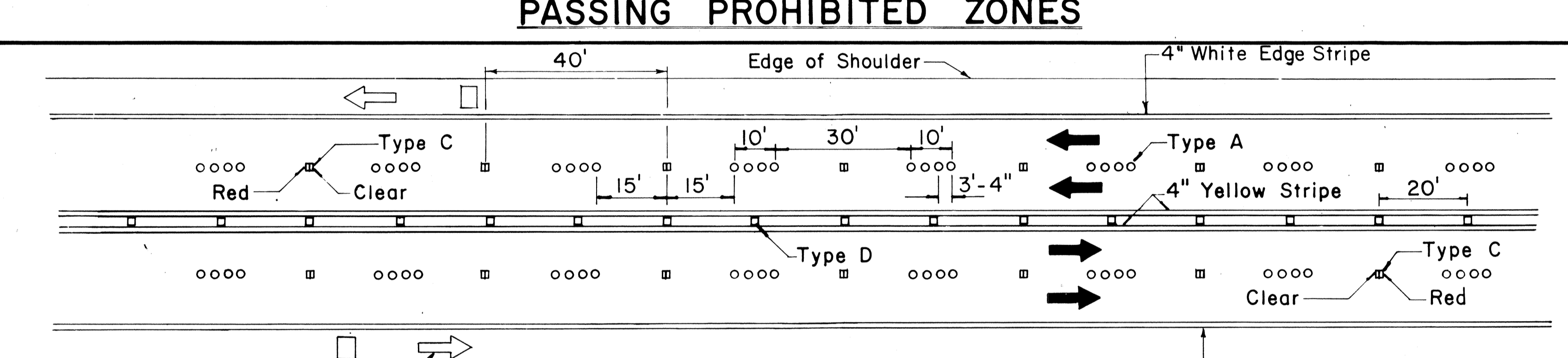
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0470(3)	1981	10	10



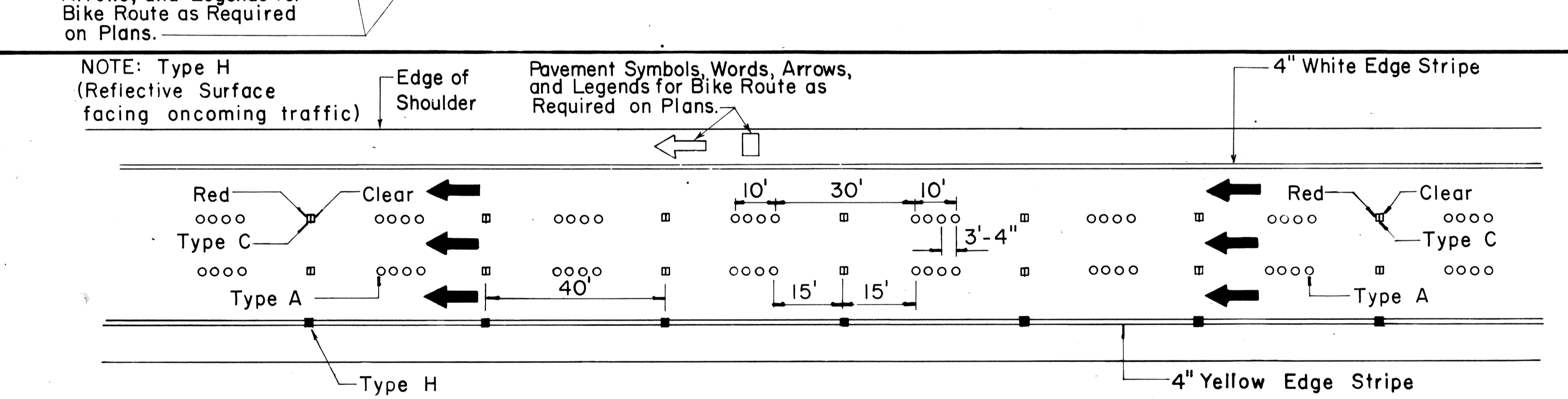
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.



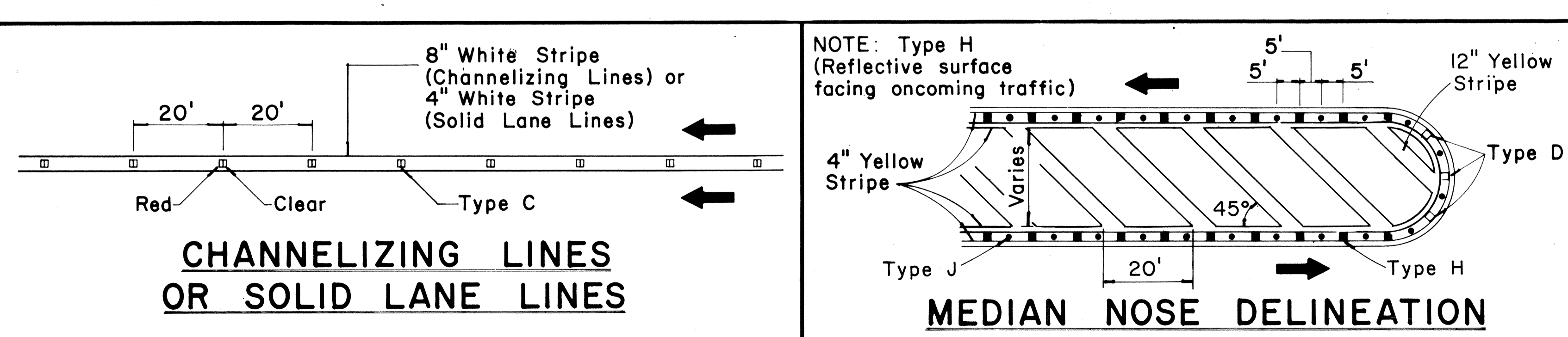
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.



Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.



NOTE: Type H (Reflective Surface facing oncoming traffic)



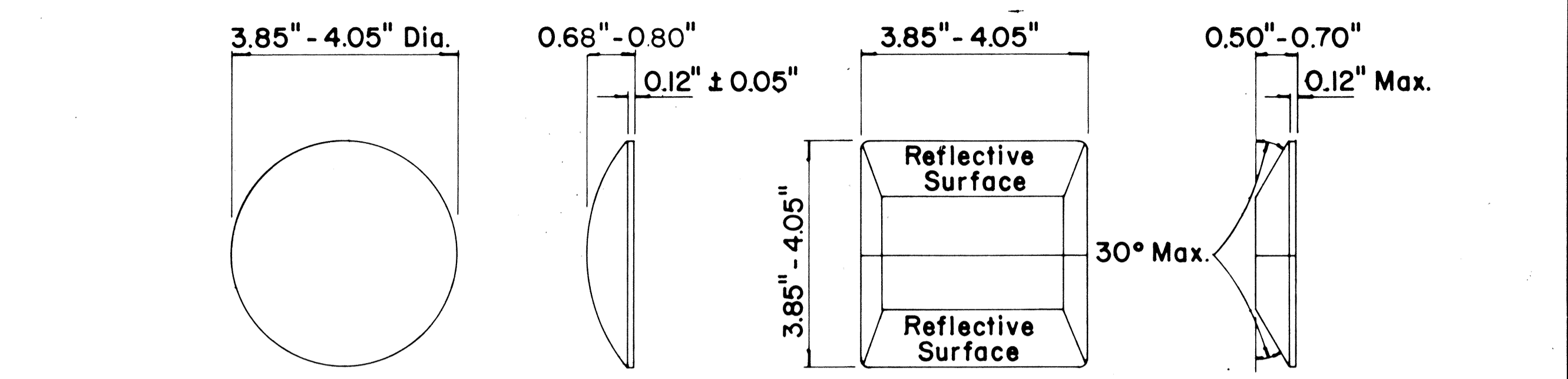
NOTE: Type H (Reflective surface facing oncoming traffic)

TWO - LANE

MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

MISCELLANEOUS

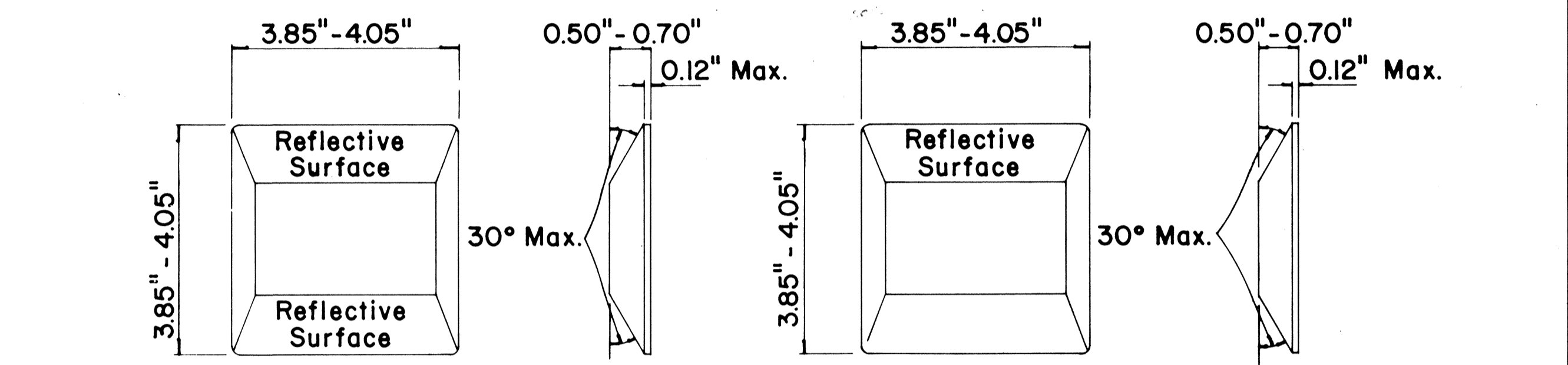


**TYPE A**  
NON-REFLECTIVE WHITE MARKER

**TYPE J**  
NON-REFLECTIVE YELLOW MARKER

**TYPE C**  
RED-CLEAR REFLECTIVE MARKER

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



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

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

### GENERAL NOTES

- Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- Layout and installation of pavement marking and striping shall be done by the Contractor. The Contractor shall check the layouts with the Engineer prior to performing work.

### LEGEND

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

APPROVAL RECOMMENDED:  
*Erick Tanaka*  
 TRAFFIC ENGINEER 7/21/78 DATE

APPROVED:  
*Herbert J. Delechia*  
 ASSISTANT CHIEF, ENGINEERING 1/24/78 DATE

No.	REVISION	APPROVED BY	DATE
1	Supersedes DT 300 approved 11/18/71.	H.L.	1/24/78
2	Delete Type A Markers from Bike Route Delineation.	H.L.	10/15/79

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**  
**RAISED PAVEMENT MARKERS AND STRIPING**

Not to Scale July 1978

SHEET No. 7 OF 7 SHEETS DT 300

DATE	DESIGNED BY	CHECKED BY
PLANNED BY	DESIGNED BY	CHECKED BY
NOTED BY	DESIGNED BY	CHECKED BY
QUANTITIES BY	DESIGNED BY	CHECKED BY
ORIGINAL PLAN	DESIGNED BY	CHECKED BY