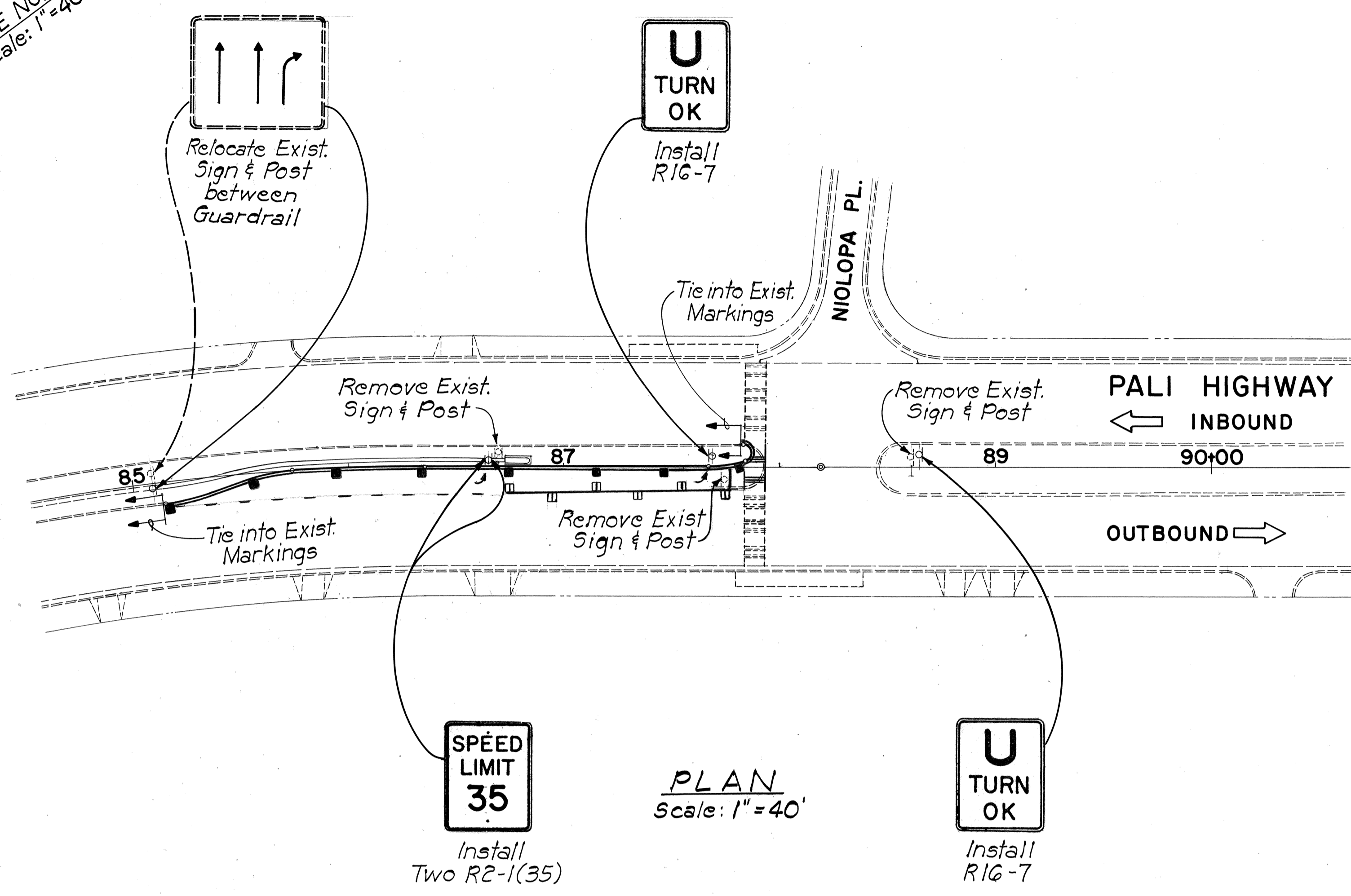
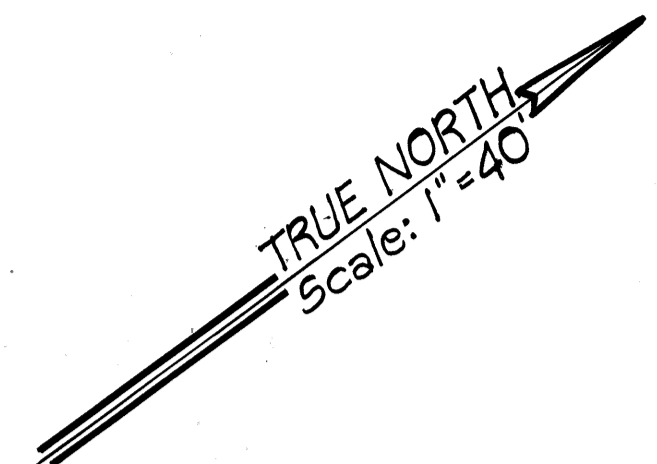


| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | GIA-01-85 | 1985        | 7         | 16           |



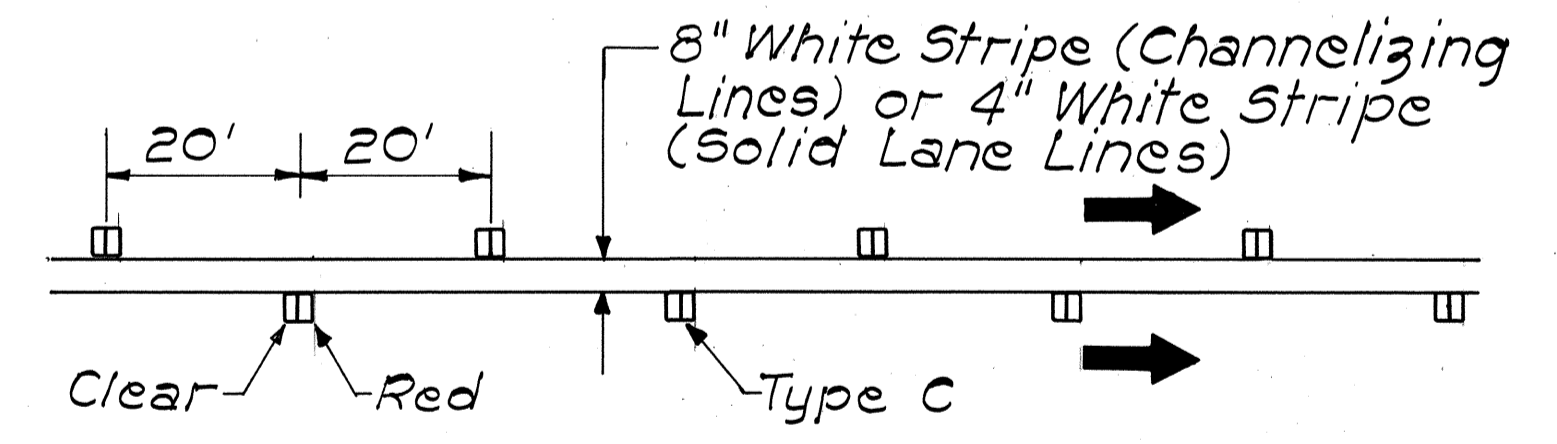
PLAN  
Scale: 1"=40'

**LEGEND**

- 4" Yellow Stripe (Paint) w/ Type "H" Pavement Markers 40' O.C.
- 8" White Stripes (Thermoplastic Extrusion) w/ Type "C" Markers 20' O.C.
- 4" White Guide Lines (Thermoplastic Extrusion)
- Pavement Arrow (Tape)
- Crosswalk & Stop Line (Thermoplastic Extrusion): Stop Lines shall be 10'-0" from Crosswalks.

**GENERAL NOTES**

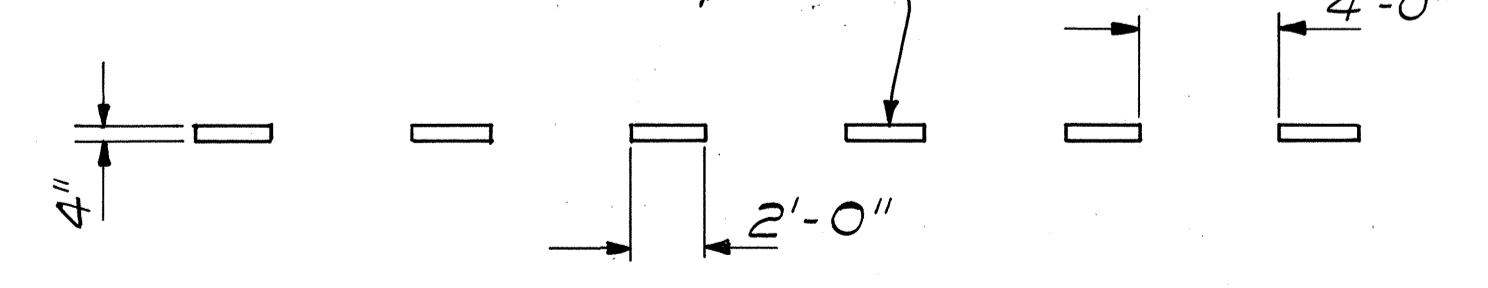
1. All existing signs shall remain in place unless otherwise noted on the plan or directed by the Engineer.
2. The final locations of all new signs shall be approved by the Engineer.
3. The removal of existing signs with posts and the relocation of existing signs with posts shall be considered incidental to new signs.
4. Locations of all new pavement markings shall be staked out by the Contractor for approval by the Engineer prior to installation.
5. Existing pavement markers, striping and markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer.



**CHANNELIZING LINES OR SOLID LANE LINES**

Not to Scale

Color as indicated on plans



**4" GUIDE LINES**

Not to Scale

|                   |       |
|-------------------|-------|
| DATE              | _____ |
| SURVEY PLOTTED BY | _____ |
| DESIGNED BY       | _____ |
| TRACED BY         | _____ |
| NOTE BOOK         | _____ |
| QUANTITIES BY     | _____ |
| CHECKED BY        | _____ |
| No.               | _____ |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAV'T. MARKINGS  
PLAN AND DETAILS**

PALI HIGHWAY  
PROJECT NO. GIA-01-85

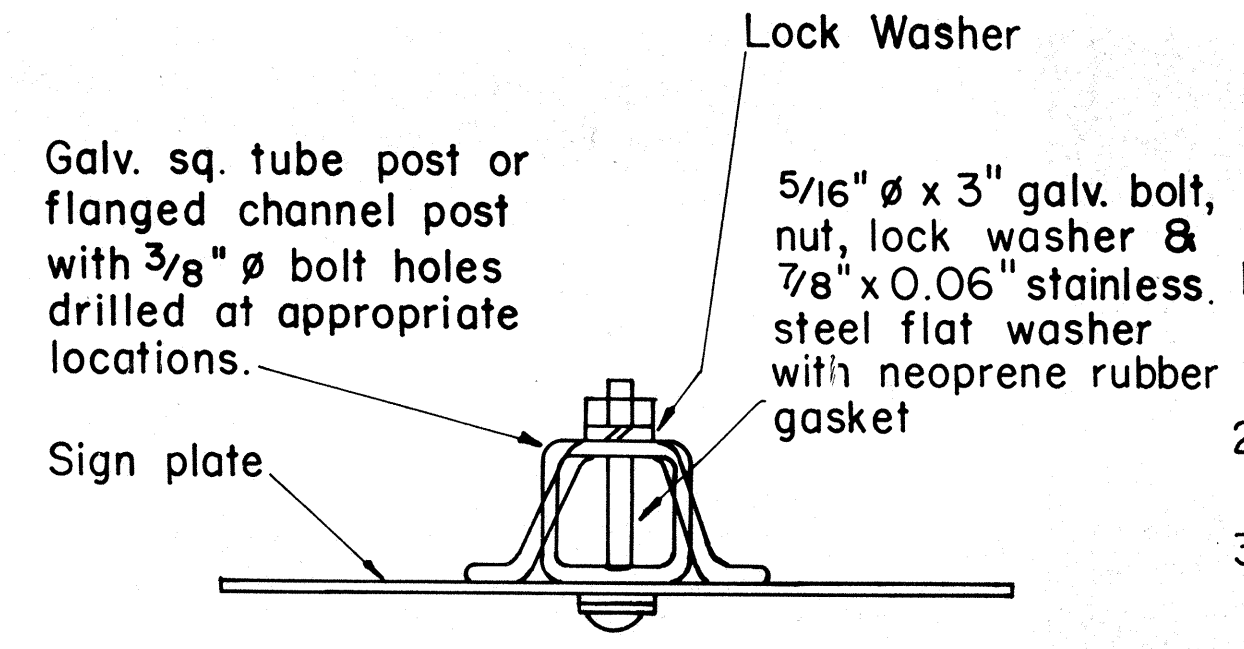
Scale: As Noted      Date: May, 1985

SHEET No. 1 OF 10 SHEETS

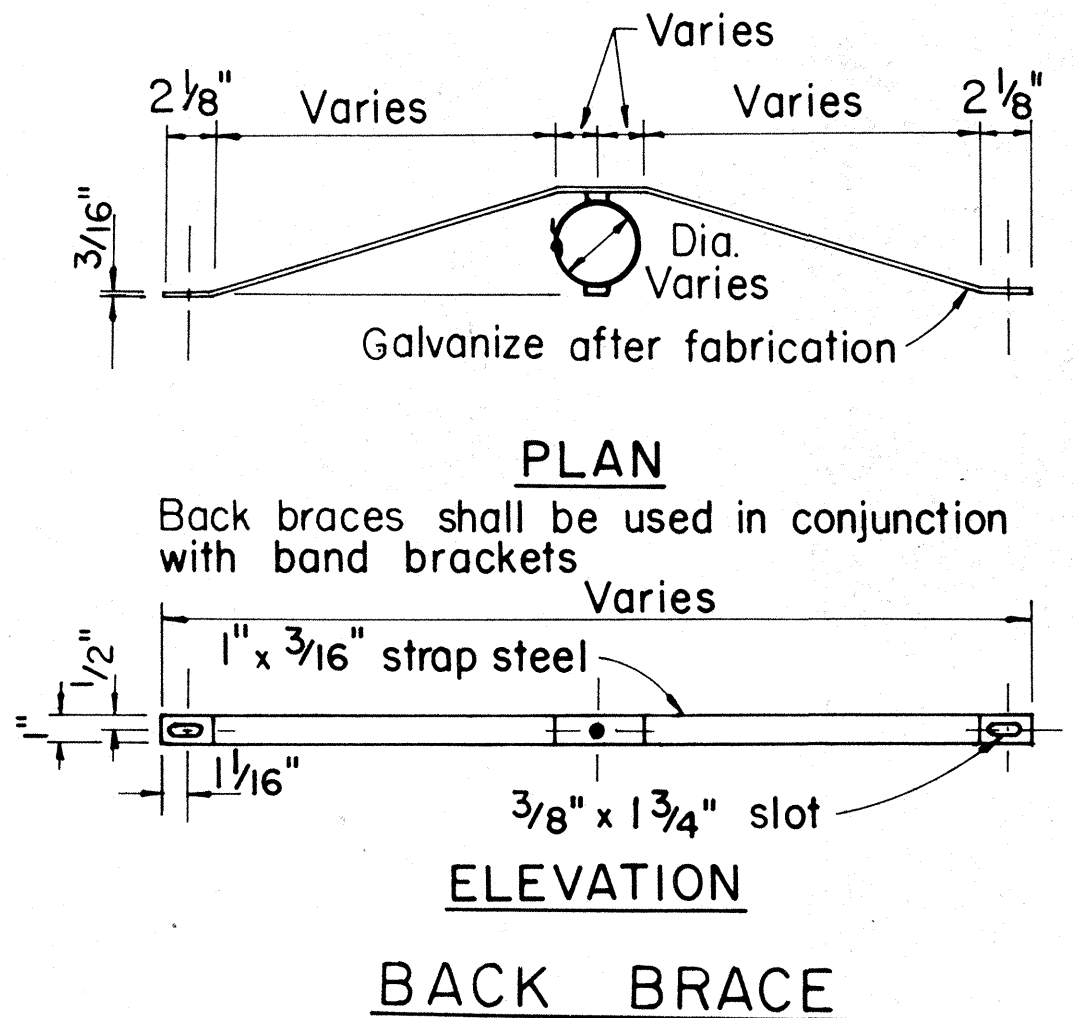
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 8         | 16           |

**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.
- Sign 48" and wider or larger than 10 sq. ft. in area shall be mounted on two or more sign posts except as noted below.
- Signs 48" and wider or larger than 10 sq. ft. in area may be mounted on objects other than sign posts (i.e. on highway lighting poles) as follows:
  - Signs 48" and wider but less than 10 sq. ft. in area shall be mounted with a minimum of two sets of band bracket and back braces.
  - 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 bracket 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 shown on the plans.
- See plans for special details of signs along bikeways.
- 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.
- Anchor bases shall be installed for all signpost installations, unless otherwise shown or directed. See sheets DT 100A and DT 100B.

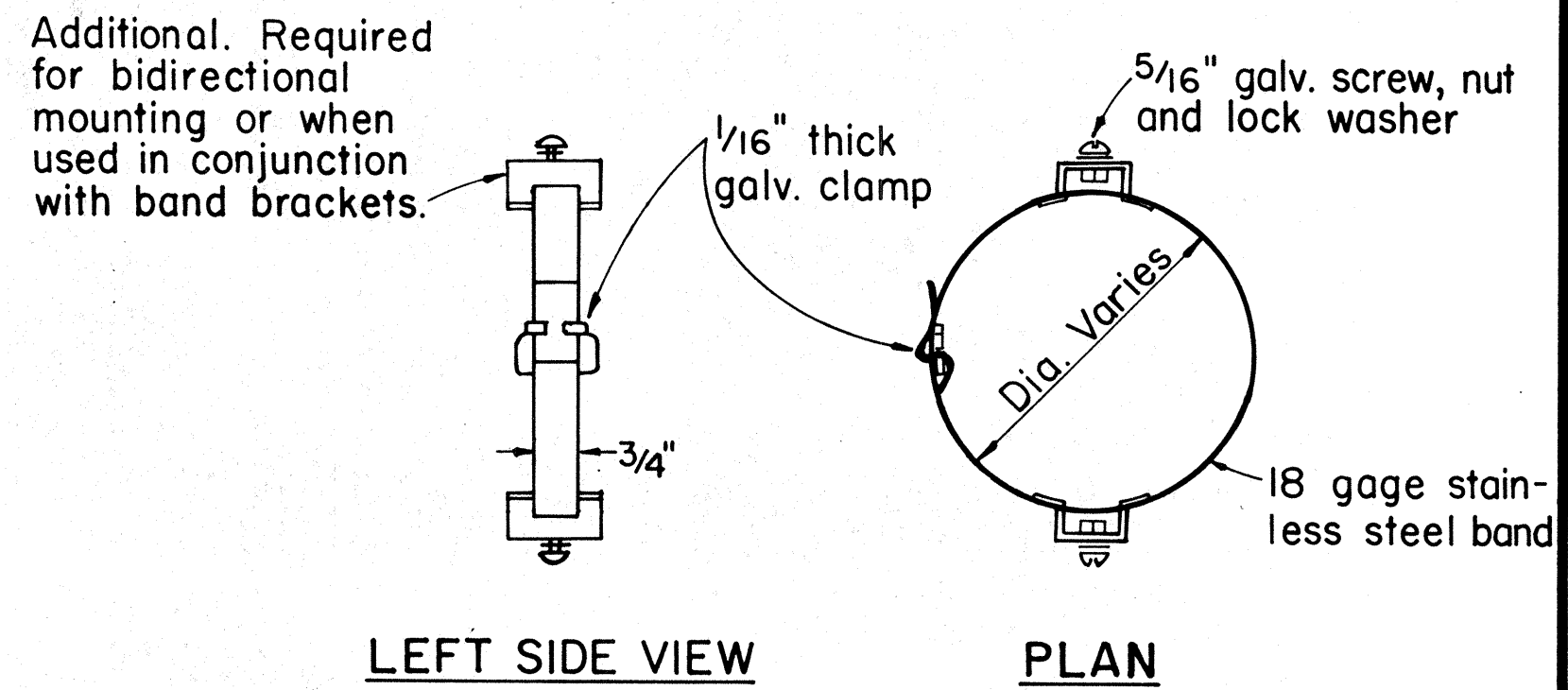


**GALVANIZED SQUARE TUBE OR FLANGED CHANNEL POST**



**TYPICAL MOUNTING DETAILS**

| NO. | REVISION                                 | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supercedes Sht. DT 100 approved 11/15/77 | [Signature] | 10-18-83 |



**BAND BRACKET**

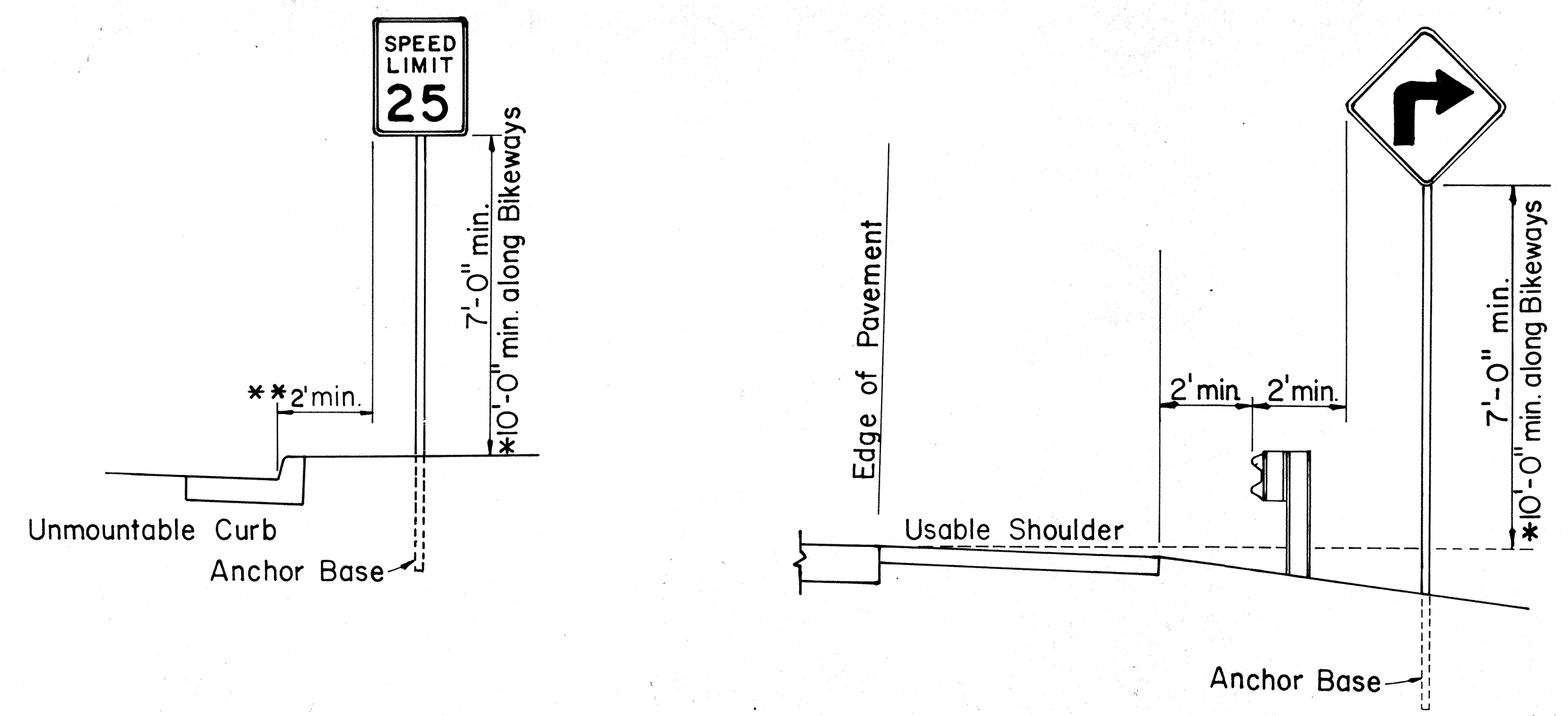
APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 10/14/83  
 TRAFFIC ENGINEER DATE

APPROVED:  
*[Signature]* 10-18-83  
 ASSISTANT CHIEF, ENGINEERING DATE

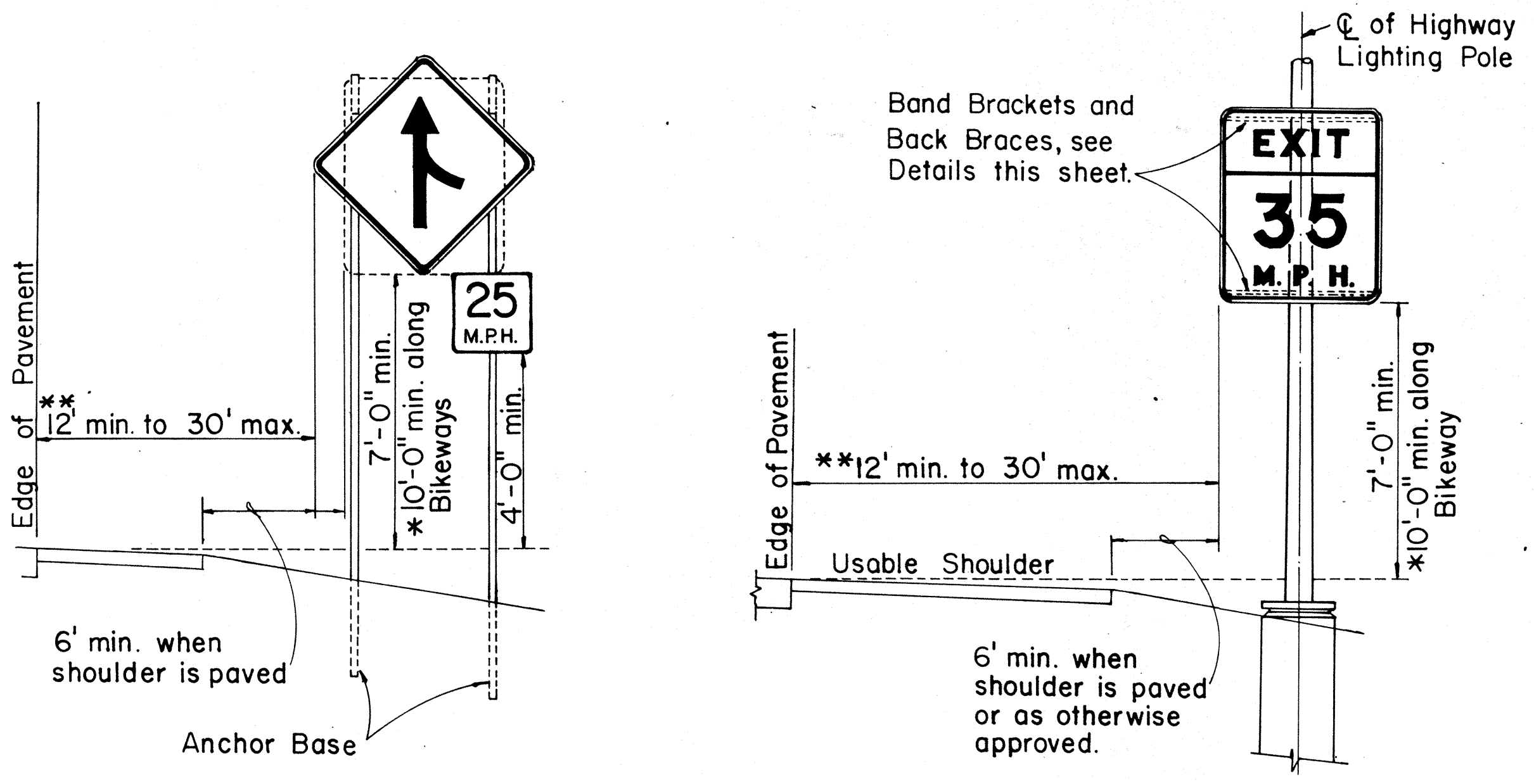
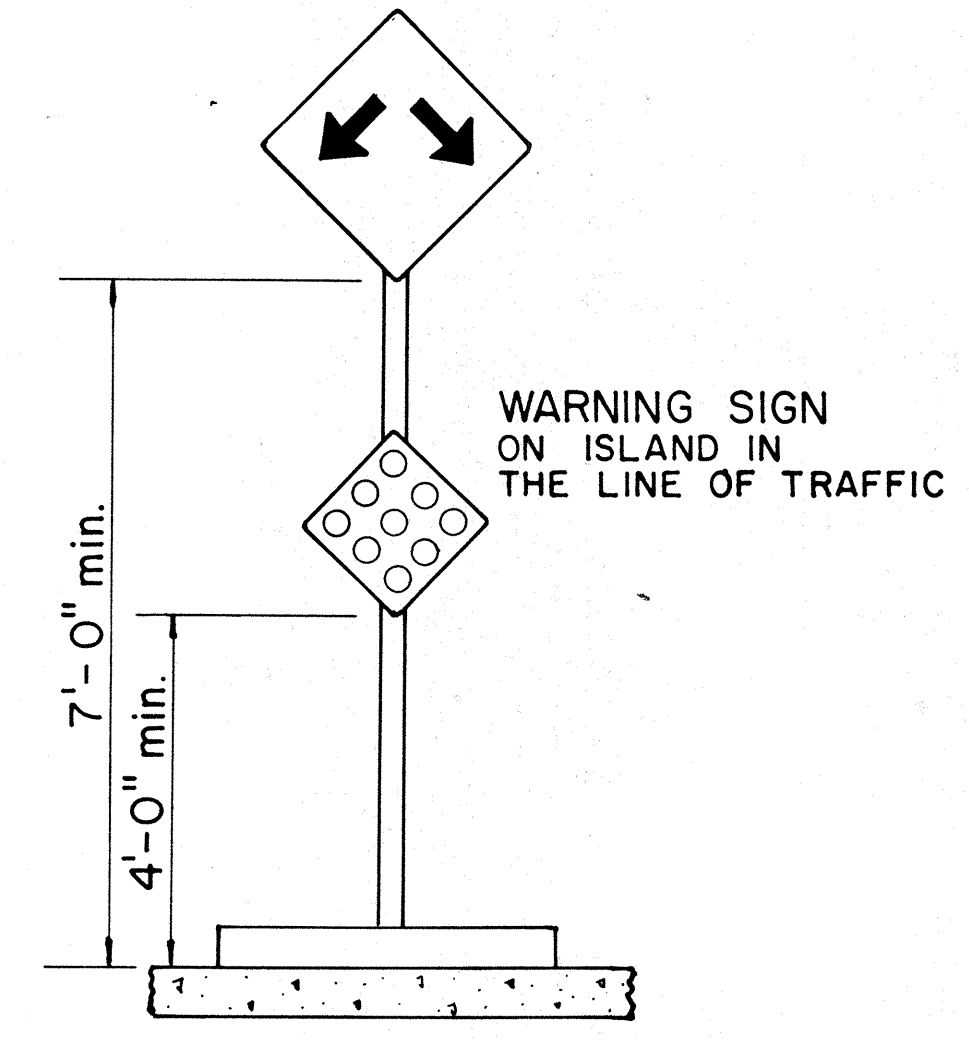
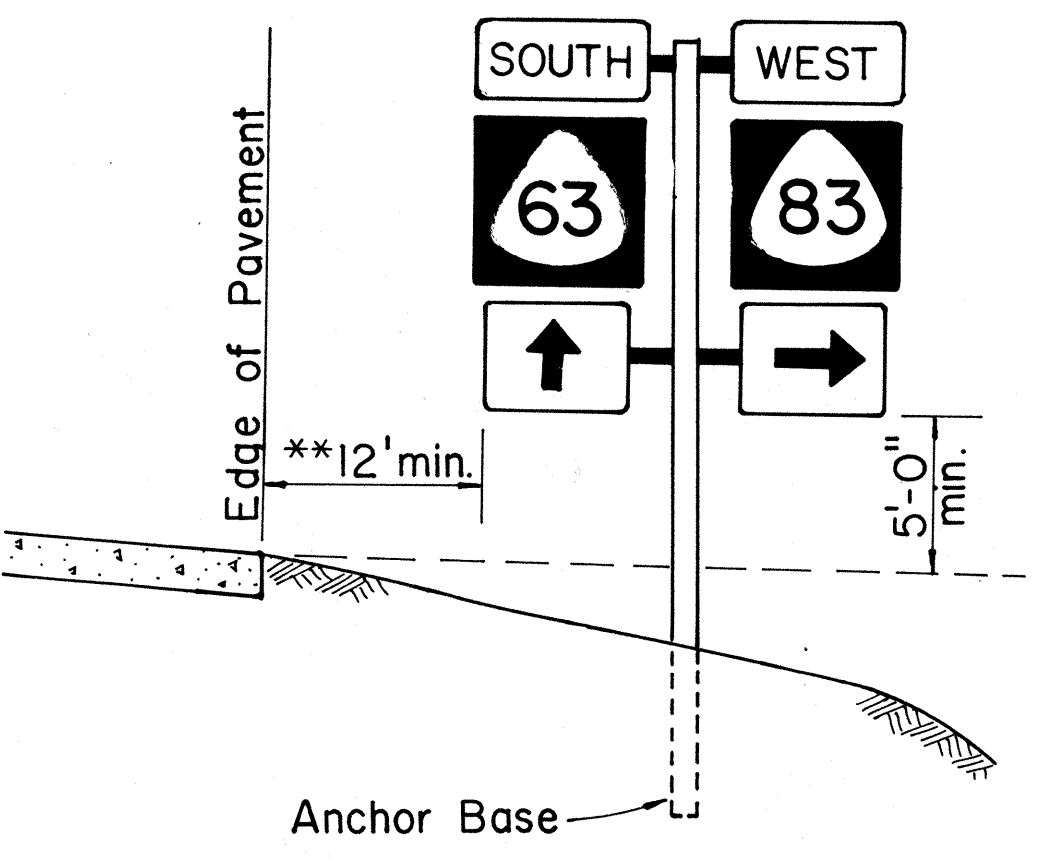
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

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

Not to Scale: 1" = 10' Oct. 1983  
 SHEET NO. 2 OF 10 SHEETS DT 100



**ROADSIDE ASSEMBLY RURAL DISTRICT**



**HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION**

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

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 9         | 16           |

|         |     |     |
|---------|-----|-----|
| A or A, | C   | C,  |
| 36"     | 6"  | -   |
| 48"     | 9"  | 19" |
| 60"     | 12" | 24" |

NOTE: Frame stiffeners are required when D is greater than 24". See Gen. Note 4.

**GENERAL NOTES**

- Sign posts and base posts shall be flanged channel type structural steel conforming to ASTM A 499 and galvanized in accordance with ASTM A 123.  
**NOMINAL DIMENSIONS:**  
2.50 lbs./ft. - 3.125" x 1.562"  
4.00 lbs./ft. - 3.500" x 1.750"
- Retainer - Spacer Strap shall be AISI 1020 steel and galvanized in accordance with ASTM A 123.
- Retainer and Connector Bolts shall be 5/16 - 18 UNC x 1.75" long hex. head, integral flange conforming to ASTM A 354 Grade BC. Nuts shall be 5/16 - 18 UNC hex. head, integral flange conforming to ASTM A 563 Grade D. All bolts and nuts shall be cadmium plated per Federal spec. QQP 416 B, Class 2, Type 2.
- All accessories, fittings and stiffener details (as required) shall be submitted to Engineer for approval 20 days prior to installation.
- For additional details see sht. DT 100.
- Basic formulas for use with the windload charts:  
Factor =  $A \times B \times H$   
Therefore, if sign area (A x B) is known,  
Maximum H =  $\frac{\text{Factor}}{\text{sign area}(A \times B)}$   
and if H is known,  
Maximum sign area (A x B) =  $\frac{\text{Factor}}{H}$

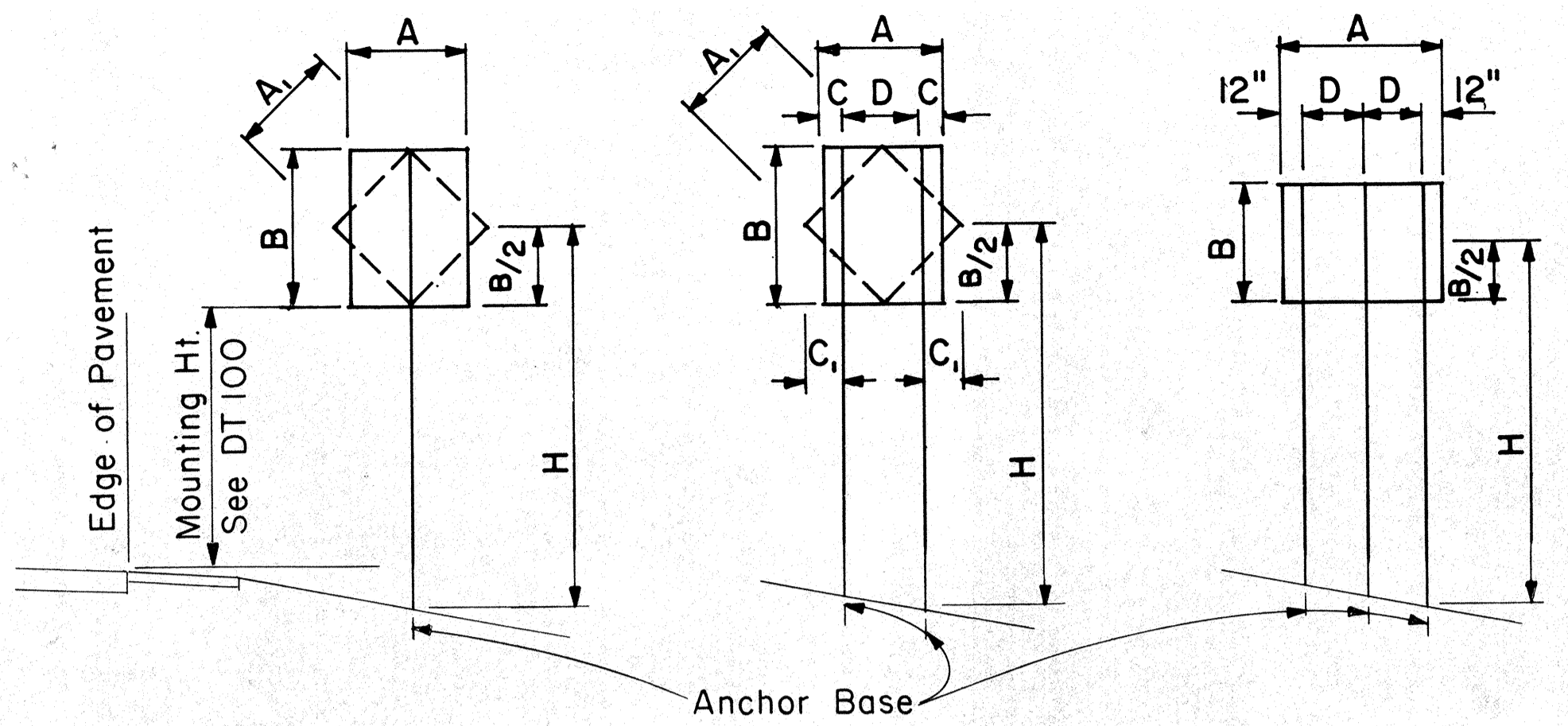
APPROVAL RECOMMENDED:  
*Eichi Tanaka* 9/2/82  
TRAFFIC ENGINEER DATE

APPROVED:  
*Hubert Salsichis* 9/2/82  
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

STANDARD DETAILS  
GALVANIZED FLANGED CHANNEL  
SIGN POST MOUNTING

Scale: As Shown Date: Sept. 1982  
SHEET No. 3 OF 10 SHEETS DT 100A



**1-POST** Sign area 10 sq. ft. and less  
**2-POST** Sign area greater than 10 sq. ft. or A=48"-60"  
**3-POST** A = greater than 60"

**TYPICAL INSTALLATION**  
Not to Scale

**FLANGED CHANNEL: 1-POST INSTALLATION**

| Post Size     | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |      |      |      |      |      | A x B (Area, sq. ft.) |
|---------------|--------------------|------------------------------------|------|------|------|------|------|-----------------------|
|               |                    | 7                                  | 8    | 9    | 10   | 11   | 12   |                       |
| 2.50 lbs./ft. | 57                 | 8.14                               | 7.13 | 6.33 | 5.70 | 5.18 | 4.75 | 9.33                  |
| 4.00 lbs./ft. | 112                | -                                  | -    | -    | -    | -    | -    |                       |

**FLANGED CHANNEL: 2-POST INSTALLATION**

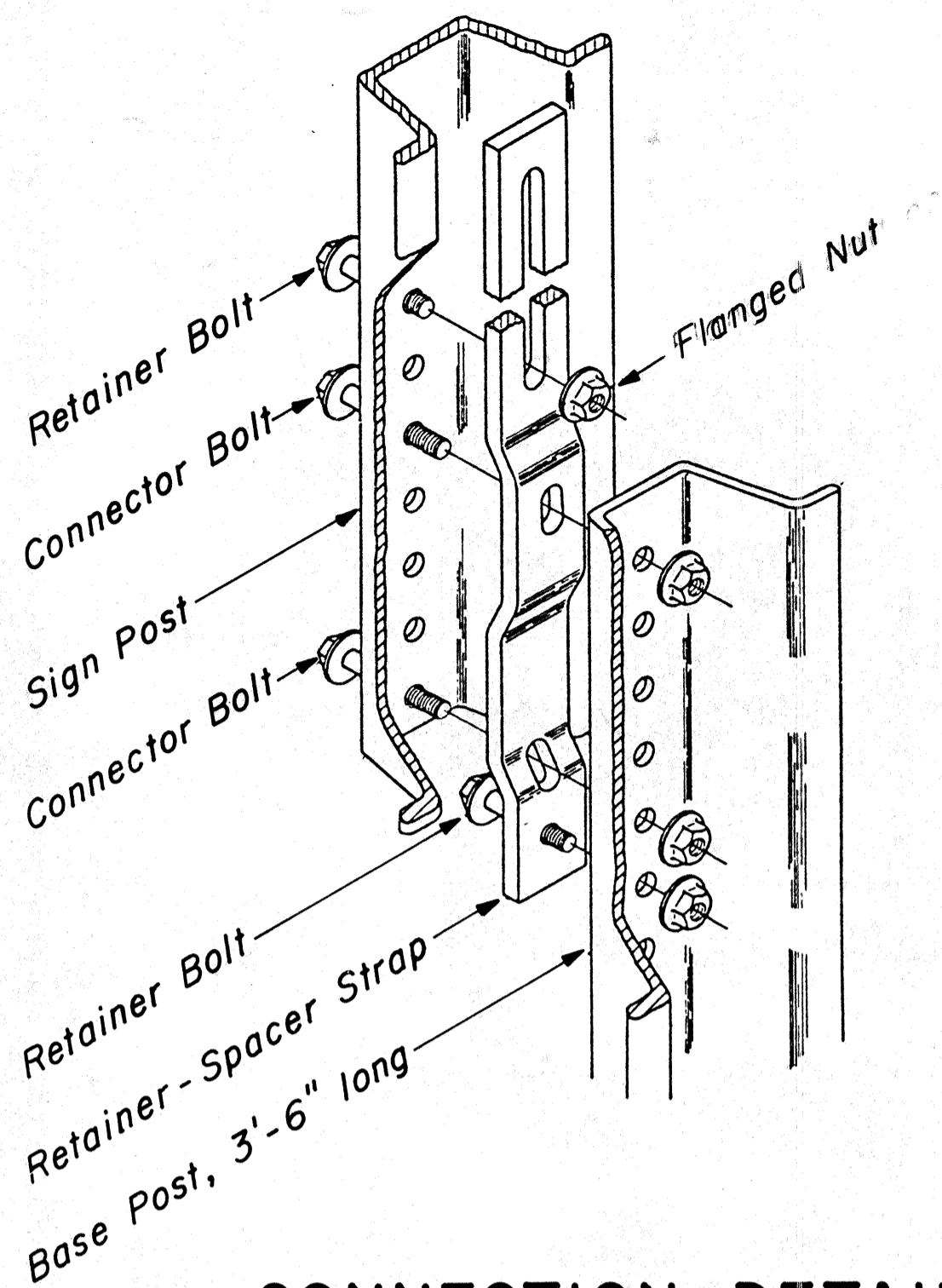
| Post Size     | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |       |       |       |       |       | A x B (Area, sq. ft.) |
|---------------|--------------------|------------------------------------|-------|-------|-------|-------|-------|-----------------------|
|               |                    | 7                                  | 8     | 9     | 10    | 11    | 12    |                       |
| 2.50 lbs./ft. | 124                | 17.71                              | 15.50 | 13.77 | 12.40 | 11.27 | 10.33 | 20.08                 |
| 4.00 lbs./ft. | 241                | 34.43                              | 30.13 | 26.78 | 24.10 | 21.91 | 20.08 |                       |

**FLANGED CHANNEL: 3-POST INSTALLATION**

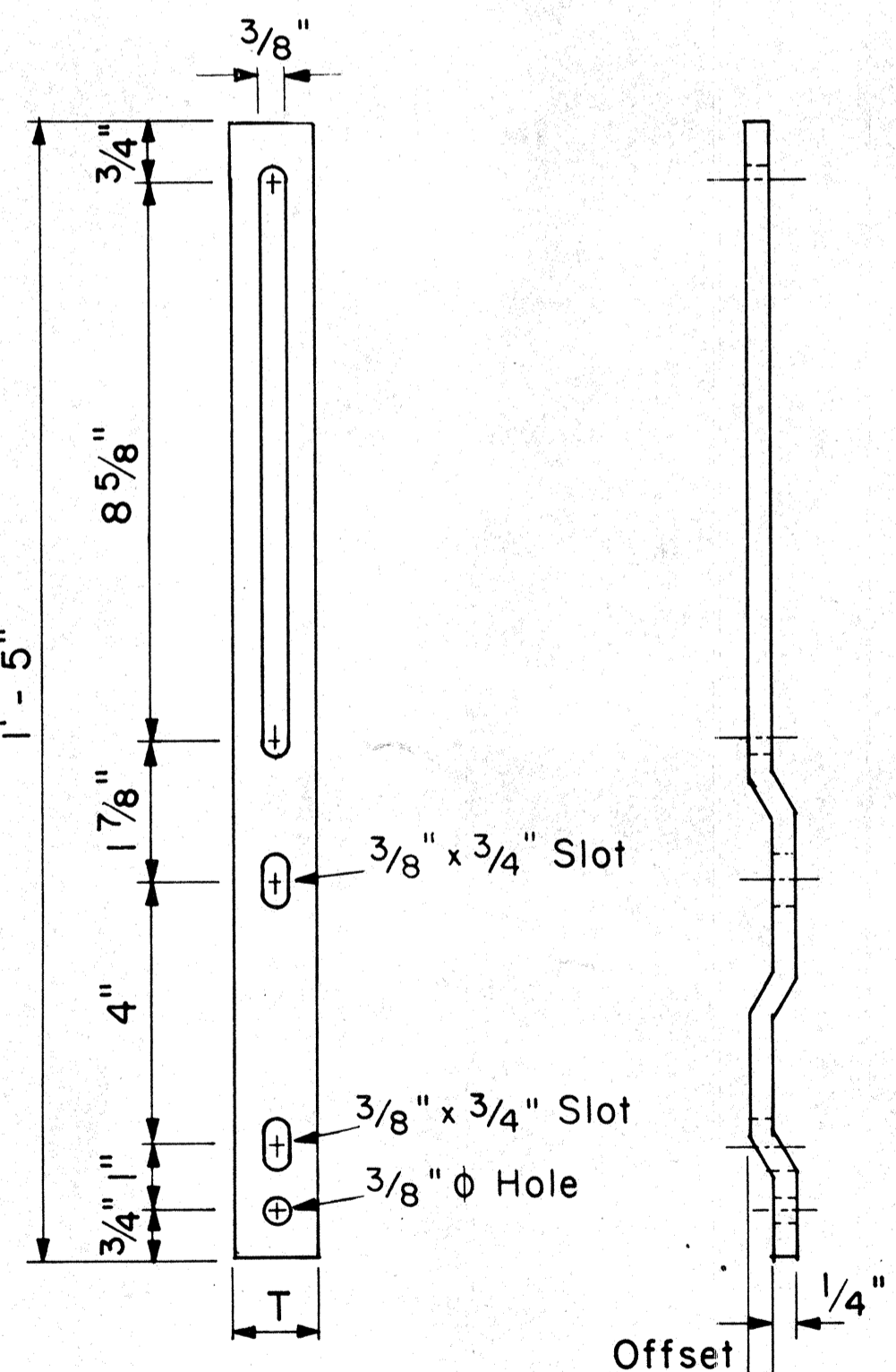
| Post Size     | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |       |       |       |       |       | A x B (Area, sq. ft.) |
|---------------|--------------------|------------------------------------|-------|-------|-------|-------|-------|-----------------------|
|               |                    | 7                                  | 8     | 9     | 10    | 11    | 12    |                       |
| 2.50 lbs./ft. | 187                | 26.71                              | 23.38 | 20.78 | 18.70 | 17.00 | 15.58 | 30.17                 |
| 4.00 lbs./ft. | 362                | 51.71                              | 45.25 | 40.22 | 36.20 | 32.91 | 30.17 |                       |

**WINDLOAD CHARTS**

| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |



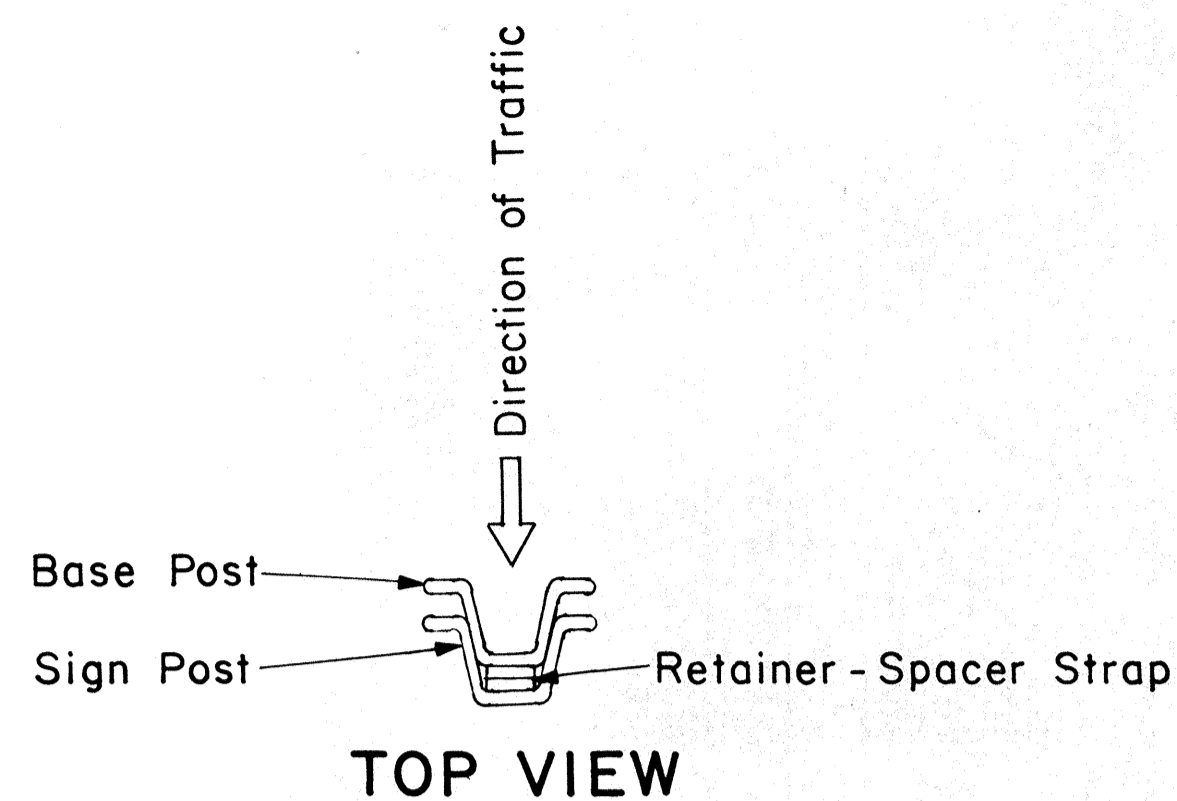
**CONNECTION DETAIL**  
Not to Scale



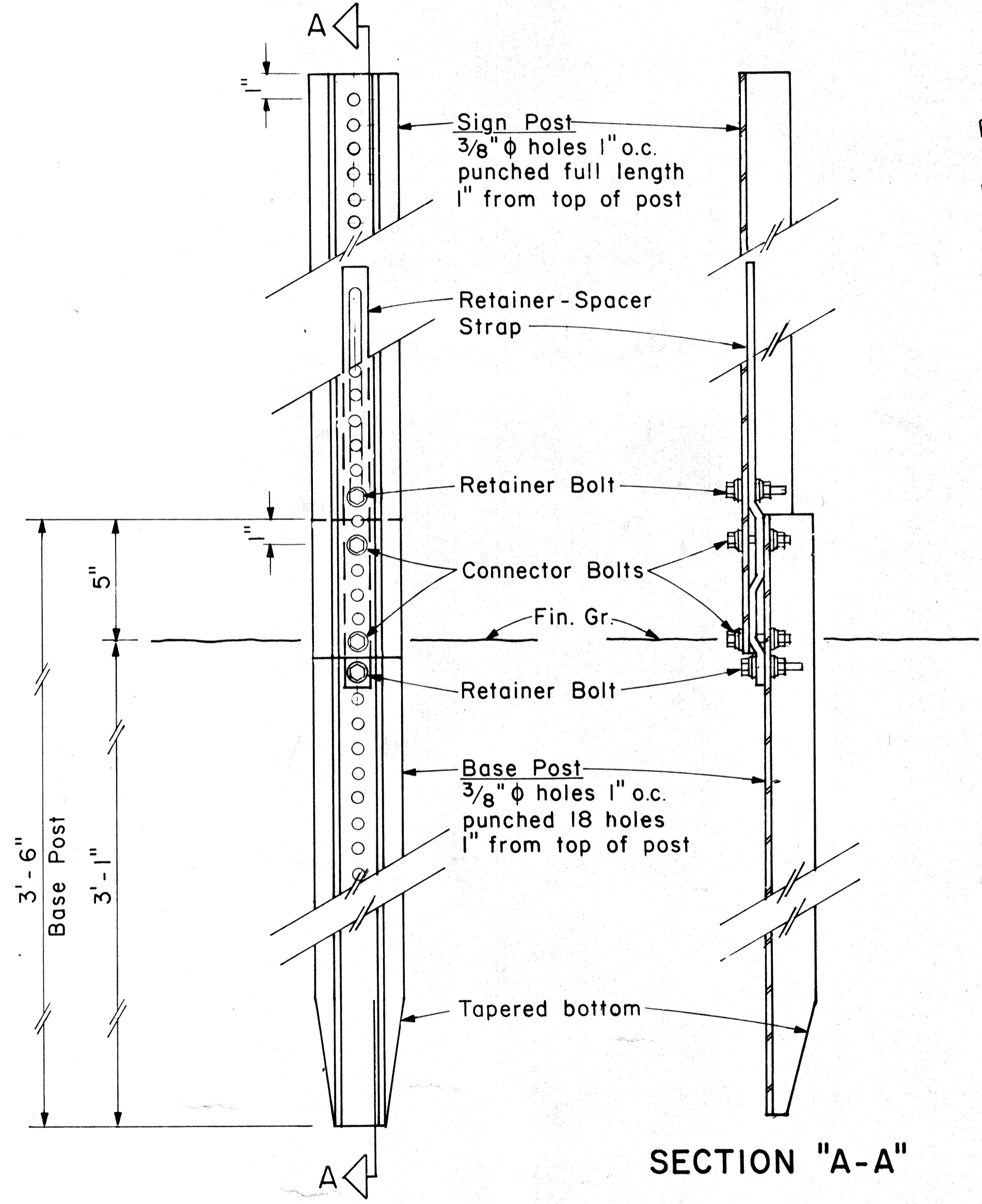
**RETAINER-SPACER STRAP**  
Not to Scale

**RETAINER-SPACER STRAP**

| Post Size     | T     | Offset |
|---------------|-------|--------|
| 2.50 lbs./ft. | 1.00" | 0.145" |
| 4.00 lbs./ft. | 1.12" | 0.280" |



**TOP VIEW**



**SECTION "A-A"**

**BACK VIEW**

**ANCHOR BASE DETAIL**

Scale: 3" = 1'-0"

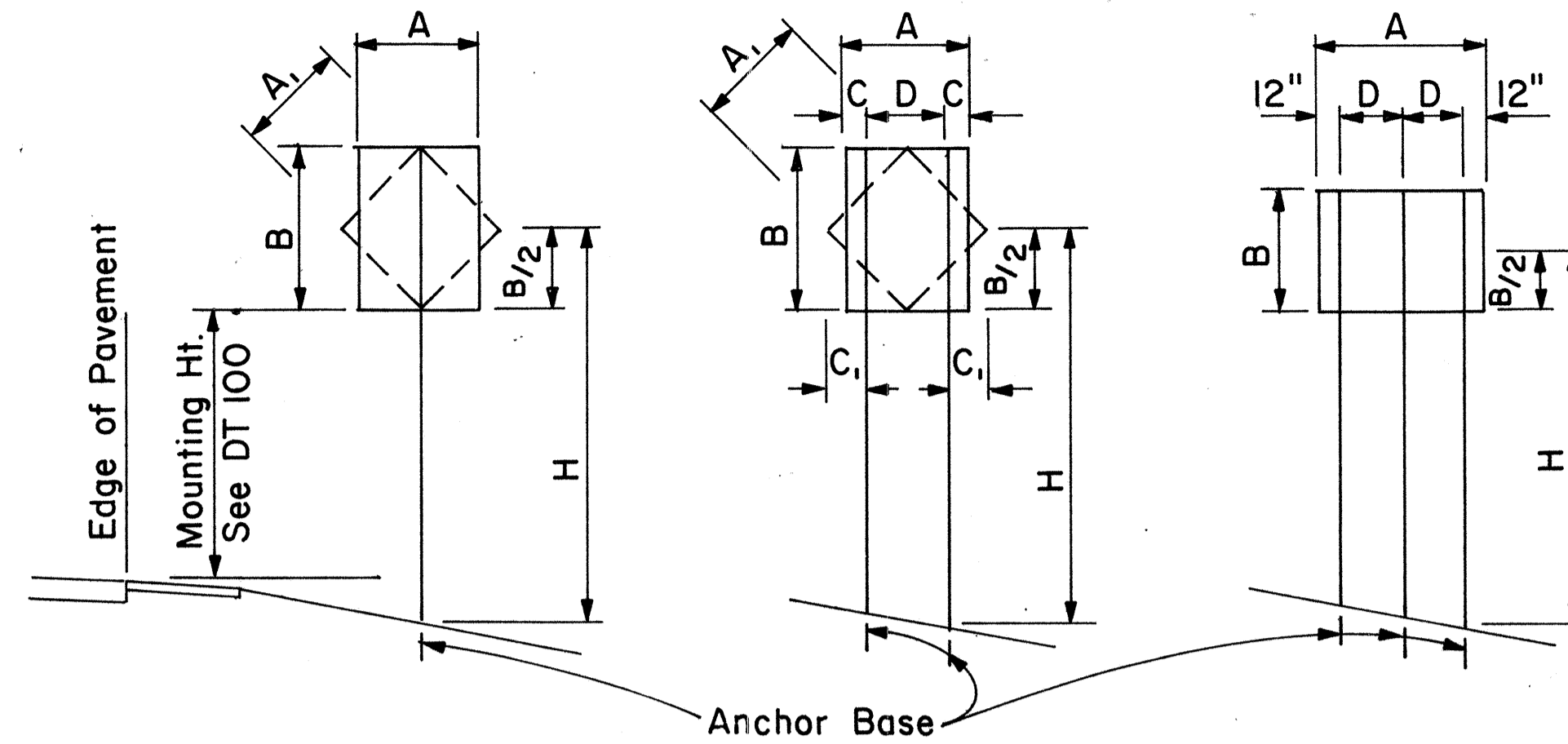
DATE: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
QUANTITIES BY: \_\_\_\_\_  
NOTE BOOK No. \_\_\_\_\_

### GENERAL NOTES

- Square tube sign posts shall conform to Subsection 713.11(C) Square Tube Posts of the Specifications.
- All accessories, fittings and stiffener details (as required) shall be submitted to Engineer for approval 20 days prior to installation.
- Square tube posts shall be perforated with  $\frac{7}{16}$ "  $\phi$  holes, 1" o.c., 4 sides, along entire length of post.
- All posts shall be 12 gage unless otherwise specified or shown on the plans.
- For additional details see sht. DT 100.
- Basic formulas for use with the windload charts:  
 $Factor = A \times B \times H$   
Therefore, if sign area (A x B) is known,  
 $Maximum\ H = \frac{Factor}{sign\ area\ (A \times B)}$   
and if H is known,  
 $Maximum\ sign\ area\ (A \times B) = \frac{Factor}{H}$

|                     |     |                |
|---------------------|-----|----------------|
| A or A <sub>1</sub> | C   | C <sub>1</sub> |
| 36"                 | 6"  | -              |
| 48"                 | 9"  | 19"            |
| 60"                 | 12" | 24"            |

NOTE: Frame stiffeners are required when D is greater than 24". See Gen. Note 2.



**1 - POST** Sign area 10 sq. ft. and less  
**2 - POST** Sign area greater than 10 sq. ft. or A = 48" - 60"  
**3 - POST** A = greater than 60"

### TYPICAL INSTALLATION

Not to Scale

#### SQUARE TUBE: 1- POST INSTALLATION

| Post Size | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |     |     |     |     |     | A x B (Area, sq. ft.) |
|-----------|--------------------|------------------------------------|-----|-----|-----|-----|-----|-----------------------|
|           |                    | 7                                  | 8   | 9   | 10  | 11  | 12  |                       |
| 2"        | 62                 | 8.8                                | 7.7 | 6.8 | 6.1 | 5.6 | 4.8 |                       |
| 2 1/2"    | 107                | -                                  | -   | -   | -   | 9.6 | 8.8 |                       |

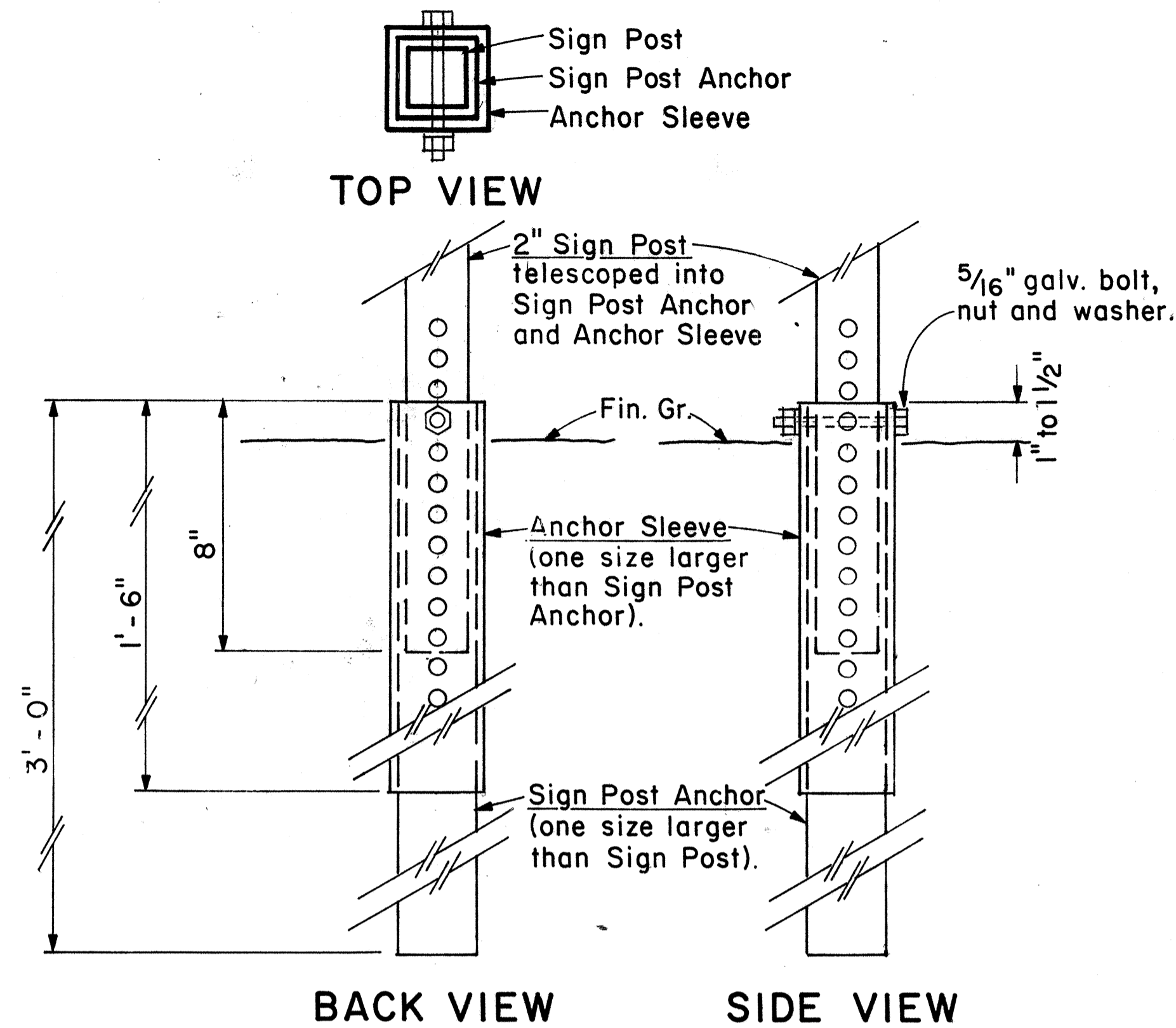
#### SQUARE TUBE: 2- POST INSTALLATION

| Post Size      | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |      |      |      |      |      | A x B (Area, sq. ft.) |
|----------------|--------------------|------------------------------------|------|------|------|------|------|-----------------------|
|                |                    | 7                                  | 8    | 9    | 10   | 11   | 12   |                       |
| 2"             | 122                | 17.4                               | 15.2 | 13.5 | 12.2 | 11.0 | 10.1 |                       |
| 2 1/2"         | 212                | 30.2                               | 26.5 | 23.5 | 21.1 | 19.2 | 17.6 |                       |
| 2 1/2", 10 ga. | 260                | 37.0                               | 32.0 | 28.6 | 26.0 | 23.5 | 21.5 |                       |

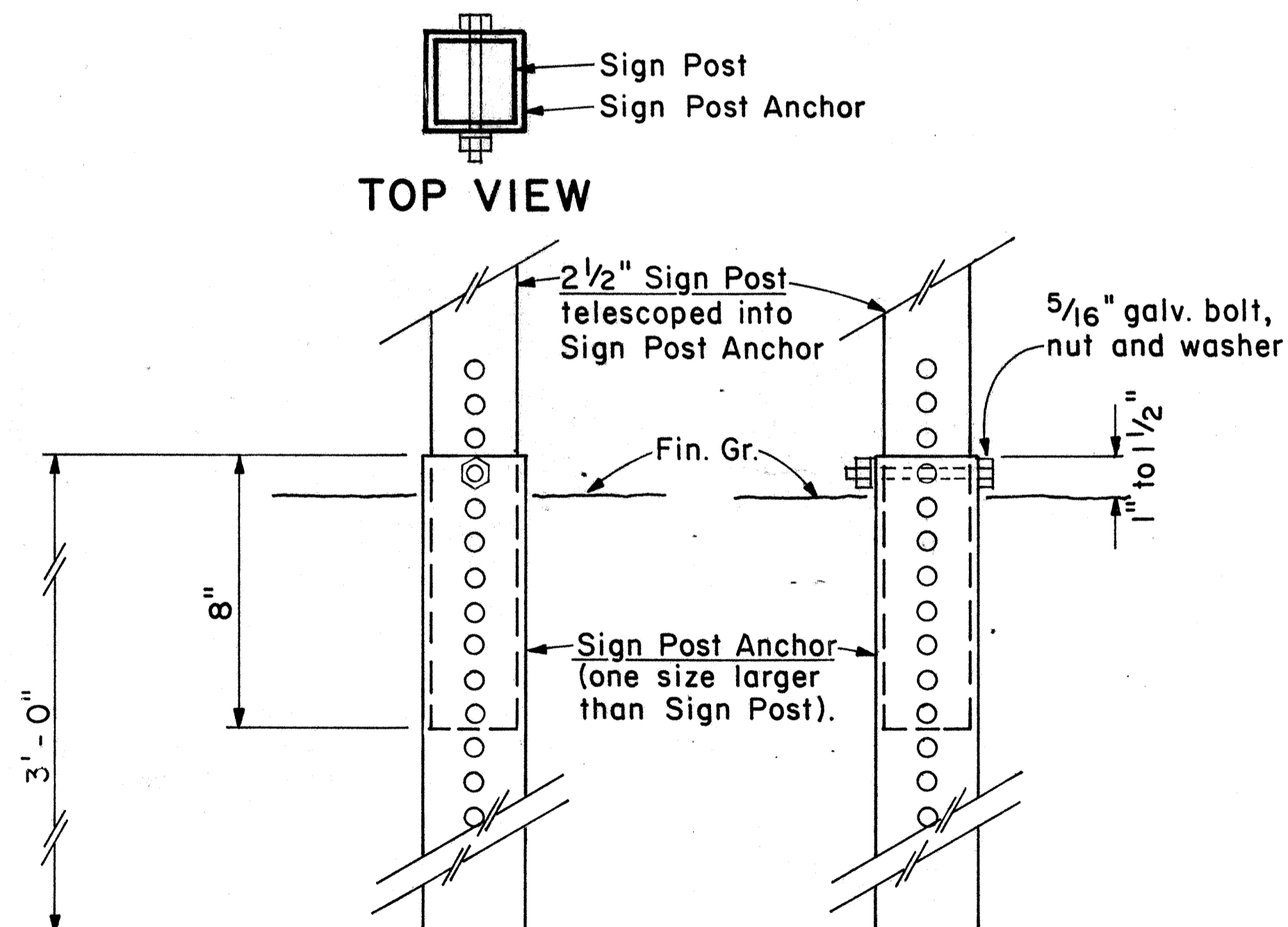
#### SQUARE TUBE: 3- POST INSTALLATION

| Post Size      | A x B x H (Factor) | H = Ground Level to Midpoint (ft.) |      |      |      |      |      | A x B (Area, sq. ft.) |
|----------------|--------------------|------------------------------------|------|------|------|------|------|-----------------------|
|                |                    | 7                                  | 8    | 9    | 10   | 11   | 12   |                       |
| 2"             | 183                | 26.0                               | 22.8 | 20.3 | 18.2 | 16.6 | 15.2 |                       |
| 2 1/2"         | 318                | 45.4                               | 39.5 | 35.2 | 31.5 | 28.8 | 26.5 |                       |
| 2 1/2", 10 ga. | 388                | 55.0                               | 48.5 | 43.0 | 38.5 | 35.0 | 32.0 |                       |

### WINDLOAD CHARTS



**2" SIGN POST INSTALLATION**



**2 1/2" SIGN POST INSTALLATION**

### ANCHOR BASE DETAIL

Scale: 3" = 1'-0"

APPROVAL RECOMMENDED:

*Eishi Tanaka* 9/21/82  
TRAFFIC ENGINEER DATE

APPROVED:

*Robert Salaschi* 9/22/82  
ASSISTANT CHIEF, ENGINEERING DATE


| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

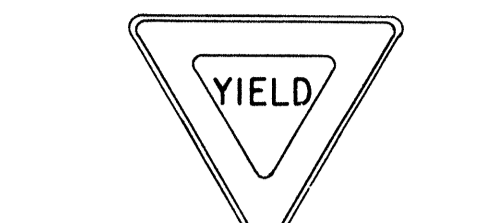
STANDARD DETAILS  
GALVANIZED SQUARE TUBE  
SIGN POST MOUNTING

Scale: As Shown Date: Sepi 1982  
SHEET NO. 4 OF 10 SHEETS DT100B

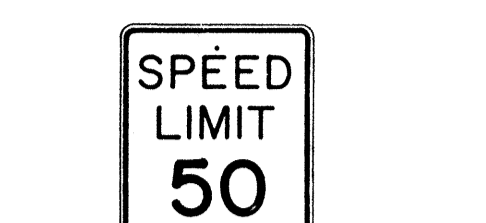
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 11        | 16           |



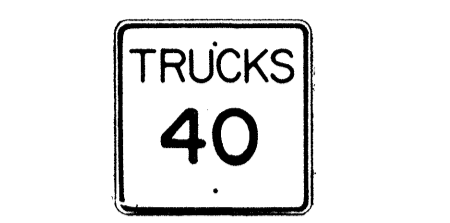
R1-1 30" x 30"  
R1-1-A 36" x 36"  
4-WAY  
R1-3 12" x 6"  
R1-3-A 18" x 9"



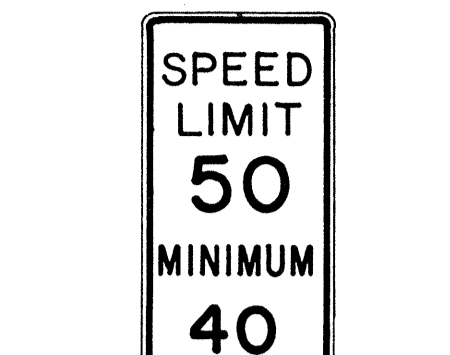
R1-2 36" x 36" x 36"  
R1-2-A 48" x 48" x 48"



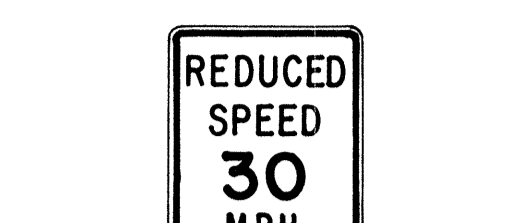
R2-1(50) 24" x 30"  
R2-1(50)-A 48" x 60"




R2-2(40) 24" x 24"  
R2-2(40)-A 48" x 48"




R2-4a(50/40) 24" x 48"  
R2-4a(50/40)-A 48" x 96"




R2-5b(30) 24" x 30"  
R2-5b(30)-A 48" x 60"




R3-1 24" x 24"  
24" x 18"  
R3-1-A 48" x 48"  
48" x 36"



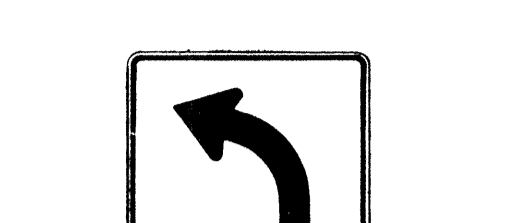
R3-2 24" x 24"  
24" x 18"  
R3-2-A 48" x 48"  
48" x 36"




R3-3 24" x 24"  
R3-3-A 48" x 48"




R3-4 24" x 24"  
24" x 18"  
R3-4-A 48" x 48"  
48" x 36"




R3-5(L) 30" x 36"  
R3-5(L)-A 48" x 60"



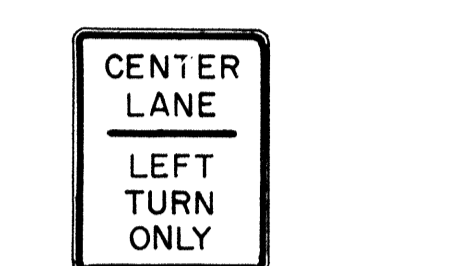
R3-6(L) 30" x 36"  
R3-6(L)-A 48" x 60"




R3-7(R) 30" x 30"  
R3-7(R)-A 48" x 48"




R3-8(L) 30" x 30"  
R3-8(L)-A 36" x 36"  
R3-8(L)-B 48" x 48"



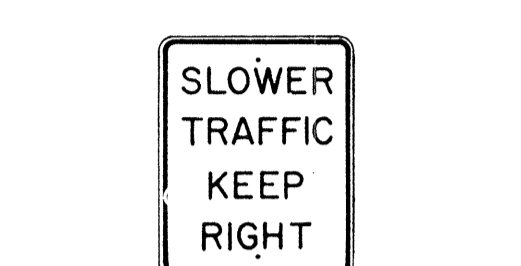
R3-9 24" x 30"



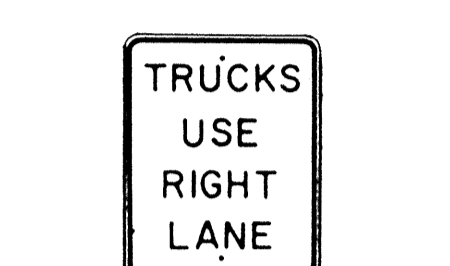
R4-1 24" x 30"



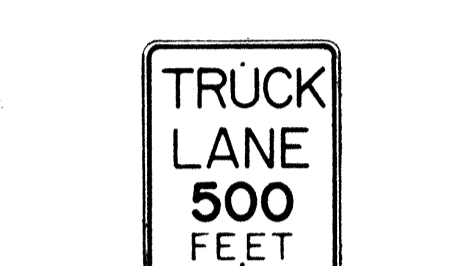
R4-2 24" x 30"




R4-3 24" x 30"  
R4-3-A 48" x 60"



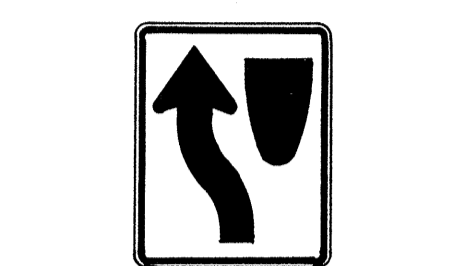
R4-5 24" x 30"



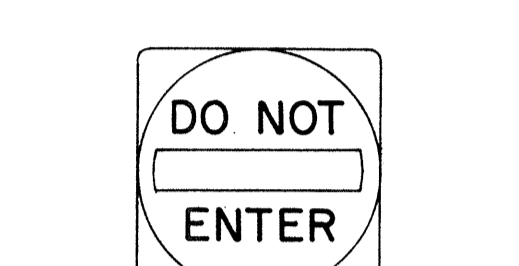
R4-6(500) 24" x 30"



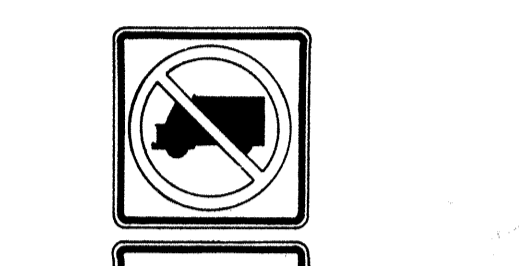
R4-7 24" x 30"  
24" x 18"



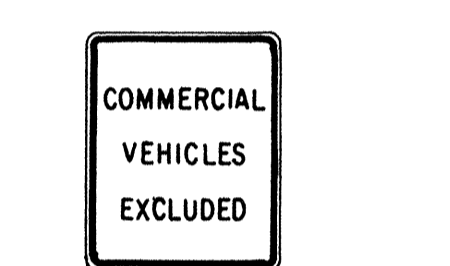
R4-8 24" x 30"  
24" x 18"




R5-1 30" x 30"  
R5-1-A 48" x 48"




R5-2 24" x 24"  
24" x 18"



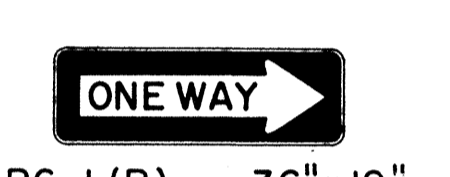
R5-4 24" x 30"




R5-6 24" x 24"  
24" x 18"




R5-9 36" x 24"




R6-1 (R) 36" x 12"




R6-2(R) 18" x 24"



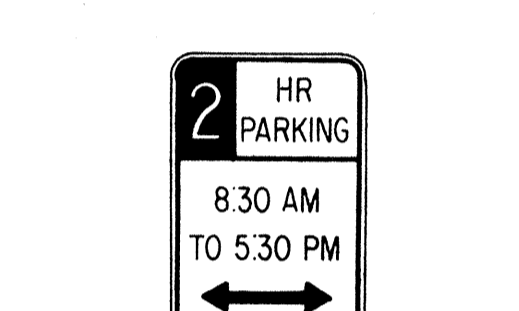
R7-1 12" x 18"  
R7-1-A 24" x 30"




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




R7-1,7(R) 12" x 18"




R7-108 12" x 18"




R7-201 12" x 6"  
R7-201-A 24" x 12"




R8-1 24" x 30"




R8-2 24" x 30"




R8-3 24" x 30"




R8-4 30" x 24"  
R8-4-A 48" x 36"




R8-5 24" x 30"



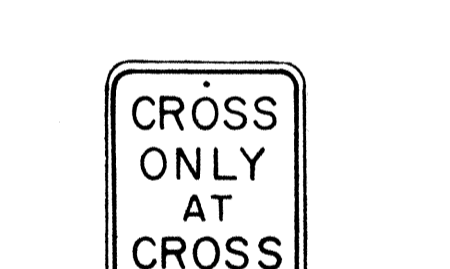
R8-6 24" x 30"




R8-7 30" x 24"  
R8-7-A 48" x 36"



R9-1 18" x 24"



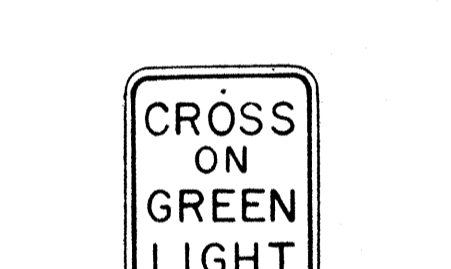
R9-2 12" x 18"




R9-3 12" x 18"




R9-4 18" x 24"



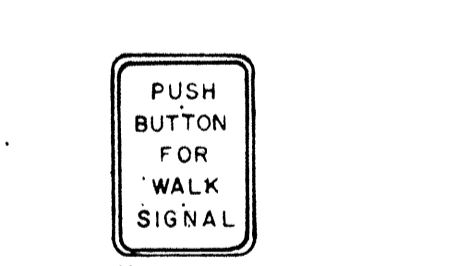
R10-1 12" x 18"



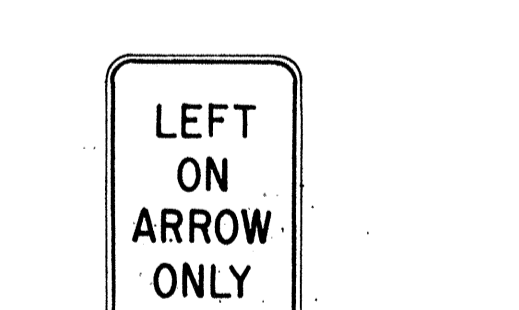
R10-2 12" x 18"



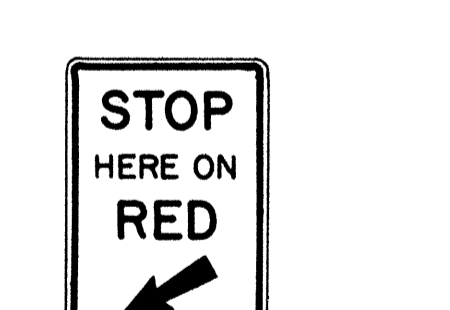
R10-3 9" x 12"



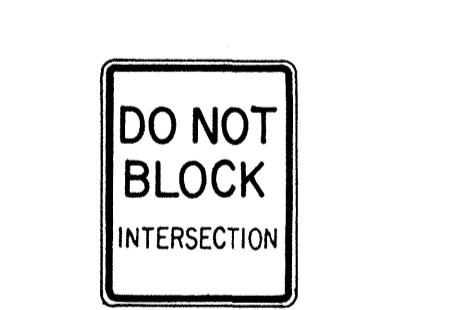
R10-4 9" x 12"




R10-5 24" x 30"



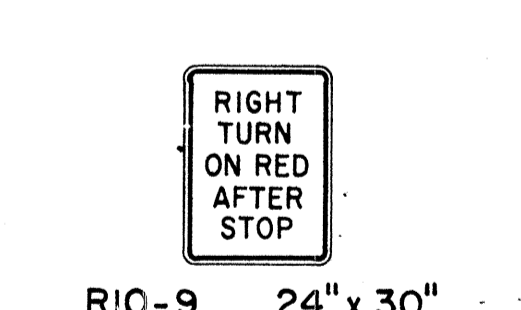
R10-6 24" x 36"



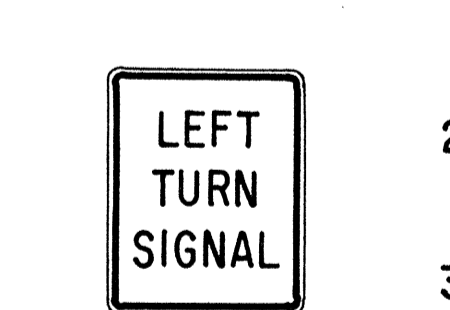
R10-7 24" x 30"



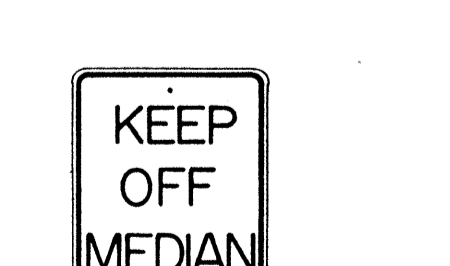
R10-8 24" x 30"



R10-9 24" x 30"



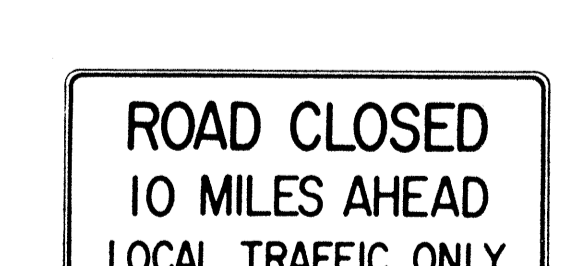
R10-10 24" x 30"



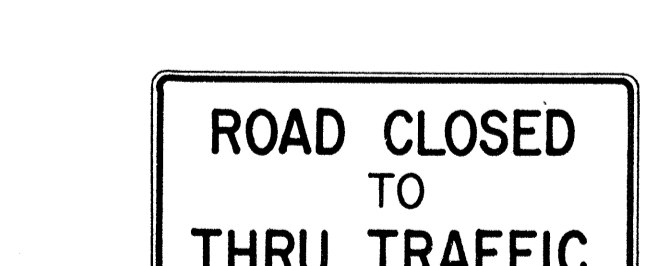
R11-1 24" x 30"



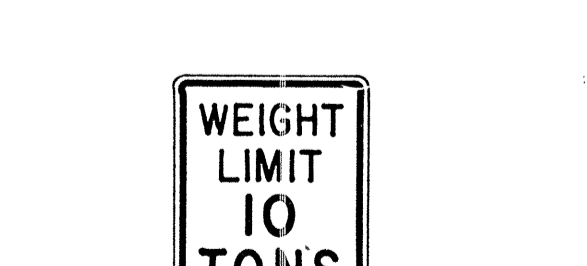
R11-2 48" x 30"



R11-3(10) 60" x 30"



R11-4 60" x 30"



R12-1(10) 24" x 30"

**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 regulatory signs shall be reflectorized unless otherwise specified.
- All regulatory 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.
- All signs shall be erected without educational plaques unless called for in the plans.

APPROVAL RECOMMENDED:  
*Etsuki Tanaka* 3/11/72  
TRAFFIC ENGINEER DATE

APPROVED:  
*Robert Zabin* 3-20-72  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                                 | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supersedes Sht. DT 101 Approved 12-30-69 | H.I.        | 3/20/72  |
| 2   | Revised General Note 1.                  | H.I.        | 10/10/74 |
| 3   | Added General Note 5                     | H.I.        | 6/9/75   |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
**REGULATORY SIGNS**

NOT TO SCALE

SHEET No. 5 OF 10 SHEETS DT 101

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

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | G1A-01-85 | 1985        | 12        | 16           |

**General Notes**

- Sign details shall conform to the latest editions of the following FHWA publications:
  - "Standard Alphabets for Highway Signs," and as amended.
  - "Standard Highway Signs," and as amended.
  - "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- All signs shall be reflectorized with reflective sheeting, unless otherwise specified.
- All signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in ( ) indicate 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 with reflective sheeting.
- All signs shall be erected without educational plaques unless called for in the plans.

ALL WAY  
R1-4 18" x 6"

REDUCED SPEED AHEAD  
35  
R2-5d(35) 24" x 30"  
R2-5d(35)-A 48" x 60"

SPEED LIMIT ENFORCED BY VASCAR  
4" Series D  
- 4" Series C  
- 3" Series D  
- 5" Series C  
R2-10 24" x 30"

CENTER LANE ONLY  
R3-9b 24" x 36"

BUS STOP  
R7-107(R) 12" x 24"

RESERVED PARKING  
R7-8 12" x 18"  
R7-8-A 24" x 30"

NO PARKING ANY TIME  
4" Series C  
1 1/2"  
R8-3a 24" x 24"  
24" x 18"  
R8-3a-A 48" x 48"

NO PEDESTRIAN CROSSING  
R9-3a 18" x 18"  
18" x 12"  
R9-3a-A 24" x 24"  
24" x 18"

USE CROSSWALK  
R9-3b(R) 18" x 12"

USE CROSSWALK  
R9-3b(L) 18" x 12"

NO TURN ON RED  
R10-11a 24" x 30"

TURN RIGHT ANY TIME WITH CAUTION  
4" Series C  
R16-1 24" x 30"

NO LEFT TURN ON RED  
- 4" Series D  
- 3" Series D  
- 2" Series D  
- 3" Series D  
R16-3 18" x 24"

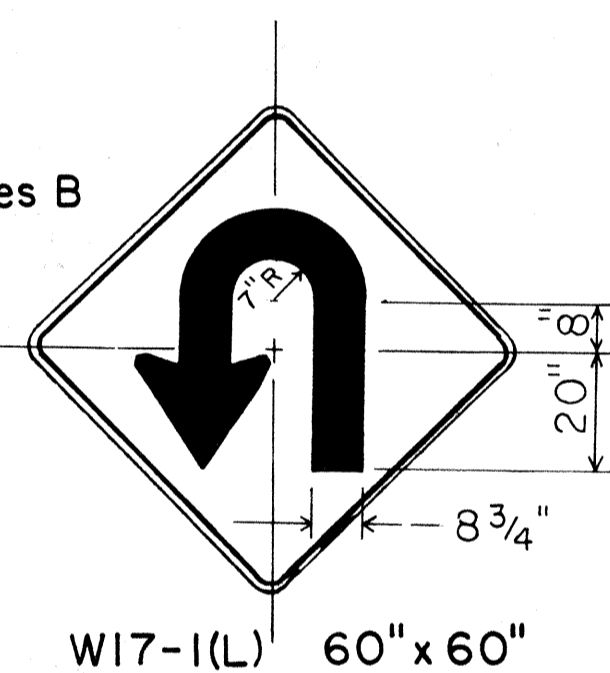
NO RIGHT TURN ON RED  
R16-4 18" x 24"

UNLICENSED VEHICLES BICYCLES, CYCLES UNDER 5 H.P., PEDESTRIANS KEEP OUT FREEWAY  
3" Series C  
4" Series E  
R16-5 36" x 42"

TURN AHEAD  
- 8" Series F  
- 5" Series D  
R16-6 24" x 30"

TURN OK  
8" Series F  
5" Series D  
R16-7 24" x 30"

MOTOR-DRIVEN CYCLES PROHIBITED  
4" Series B  
R5-8 30" x 24"



STOP AHEAD  
W3-1a 36" x 36"  
24" x 18"  
W3-1a-A 48" x 48"  
24" x 18"

YIELD AHEAD  
W3-2a 36" x 36"  
24" x 18"  
W3-2a-A 48" x 48"  
24" x 18"

STOP AHEAD WHEN FLASHING  
6" Series C  
W3-4 48" x 48"

TRUCK CROSSING  
W8-6 30" x 30"  
W8-6-A 36" x 36"

THRU TRAFFIC MERGE LEFT  
6" Series E  
W9-3(L) 48" x 48"

EQUESTRIAN XING  
W11-7 36" x 36"  
24" x 18"  
W11-7-A 48" x 48"  
24" x 18"

FIRE STATION  
W11-8 36" x 36"  
24" x 18"  
W11-8-A 48" x 48"  
24" x 18"

W11-9 36" x 36"  
W11-9-A 48" x 48"

LIMITED SIGHT DISTANCE  
W14-4 36" x 36"  
W14-4-A 48" x 48"

DELAYED GREEN  
4" Series C  
W15-1 24" x 24"

ADVANCE GREEN  
W15-2 24" x 24"

END FREEWAY 1/2 MI  
8" Series E  
CW16-1(1/2) 60" x 60"

RIGHT LANE EXIT ONLY  
8" Series E  
W18-1 48" x 60"

SCHOOL BUS STOP AHEAD  
SI-1 36" x 36"

S2-1 36" x 36"

S3-1 30" x 30"

8:00 AM TO 3:30 PM  
S4-1 24" x 10"  
WHEN CHILDREN ARE PRESENT  
S4-2 24" x 10"

SCHOOL  
S4-3 24" x 8"  
WHEN FLASHING  
S4-4 24" x 10"

SIDEWALK CLOSED  
7" Series D  
CW23-4 48" x 48"

USE SIDEWALK  
4" Series C  
R18-1 24" x 18"

| NO. | REVISION                                | APPROVED BY | DATE    |
|-----|---|-------------|---------|
| 1   | Supersedes Sht. DT 103 approved 3/20/72 | H.S.        | 5/5/78  |
| 2   | Added General Note 6                    | H.S.        | 11/9/79 |

APPROVAL RECOMMENDED:  
*Eishi Tanaka*  
TRAFFIC ENGINEER  
5/2/78  
DATE

APPROVED:  
*Robert Z. Zakeishi*  
ASSISTANT CHIEF, ENGINEERING  
5/3/78  
DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**

MISCELLANEOUS SIGNS

NOT TO SCALE  
DATE: MAY, 1978  
SHEET NO. 6 OF 10 SHEETS DT 103

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

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 13        | 16           |



CW20-1a 48" x 48"



CW20-2d 48" x 48"



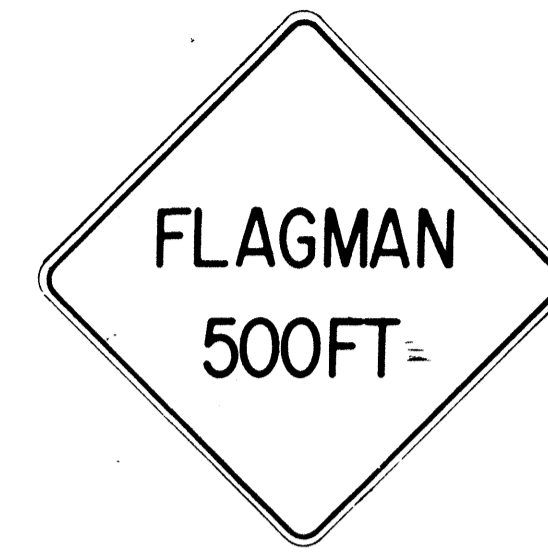
CW20-3b 48" x 48"



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"



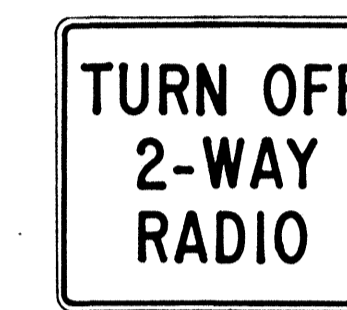
CW21-5 30" x 30"



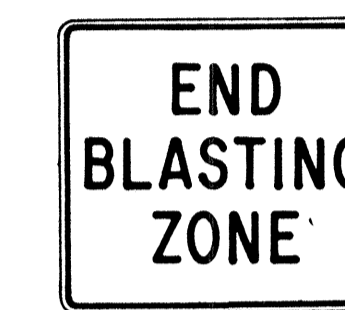
CW21-6 30" x 30"



CW22-1b 48" x 48"



CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



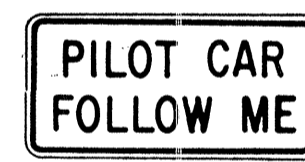
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



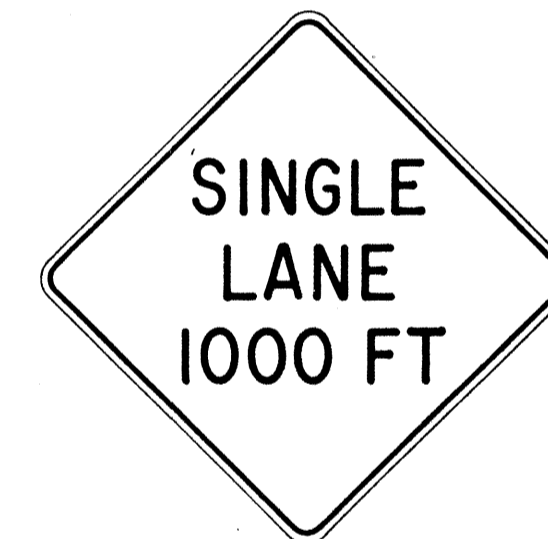
CM4-10(R) 48" x 18"



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 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.

APPROVAL RECOMMENDED:  
*Erich Tanaka* 3/21/12  
TRAFFIC ENGINEER DATE

APPROVED:  
*Shuler Saleh* 3/23/12  
ASSISTANT CHIEF, ENGINEERING DATE

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

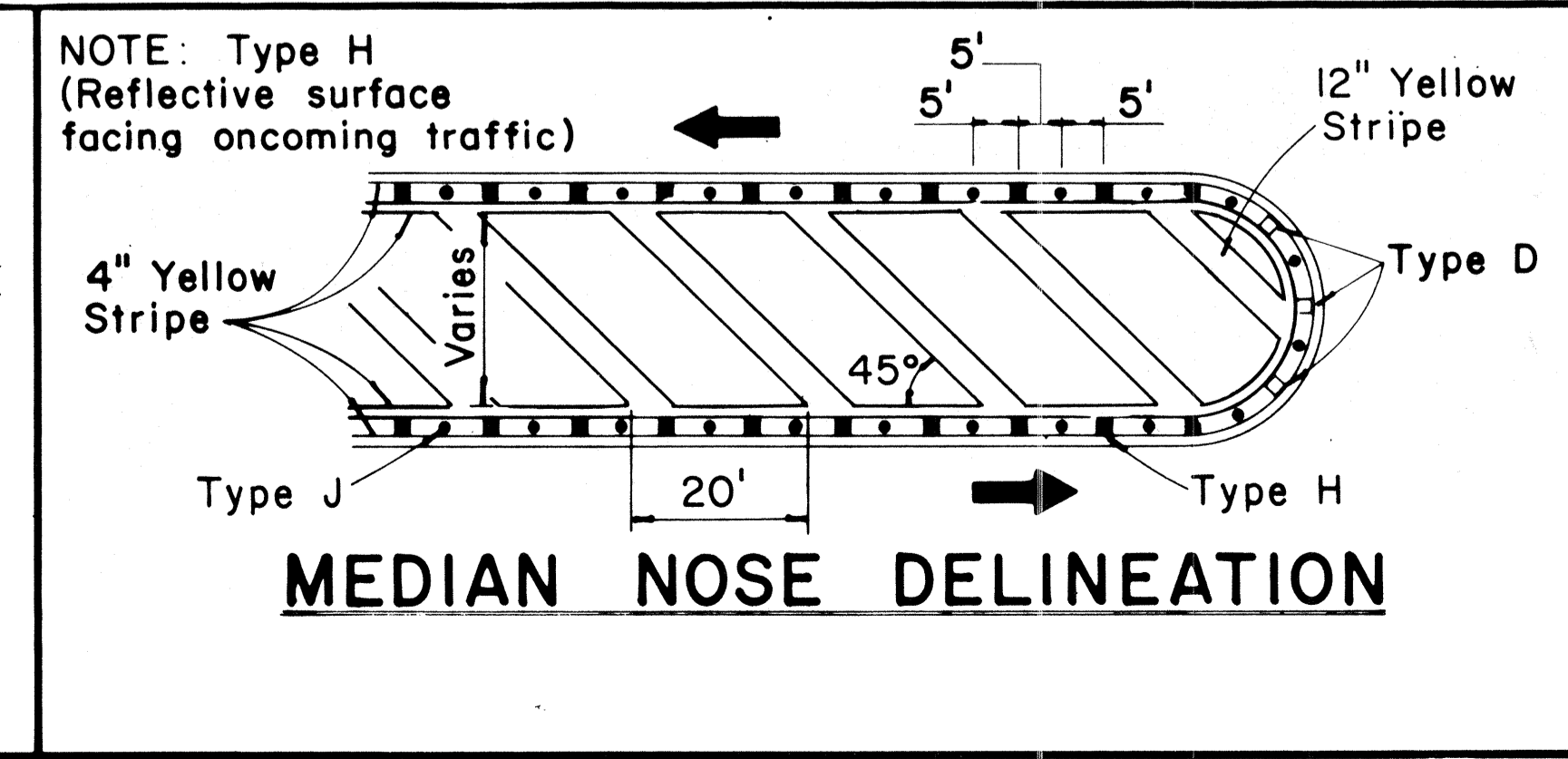
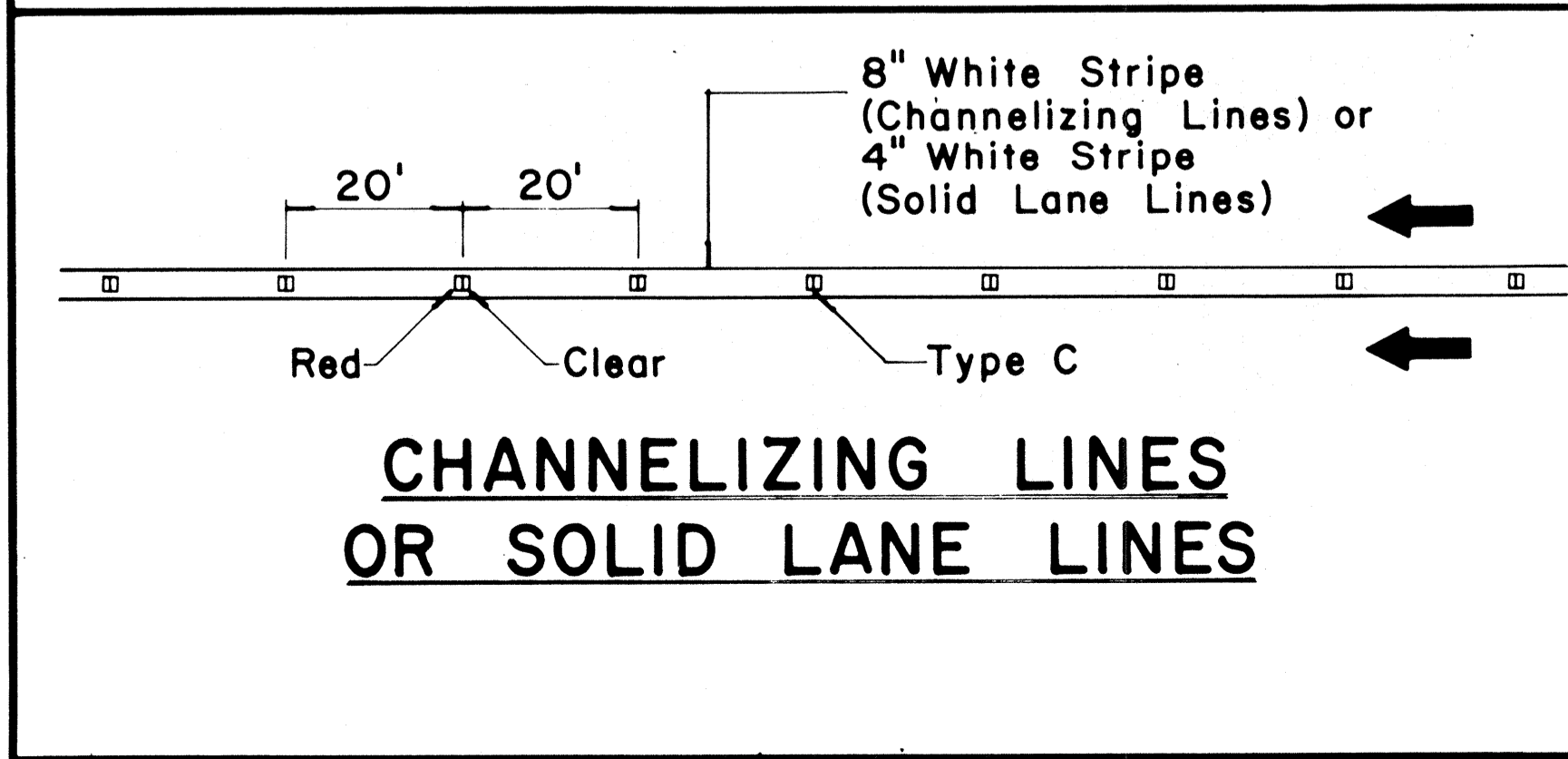
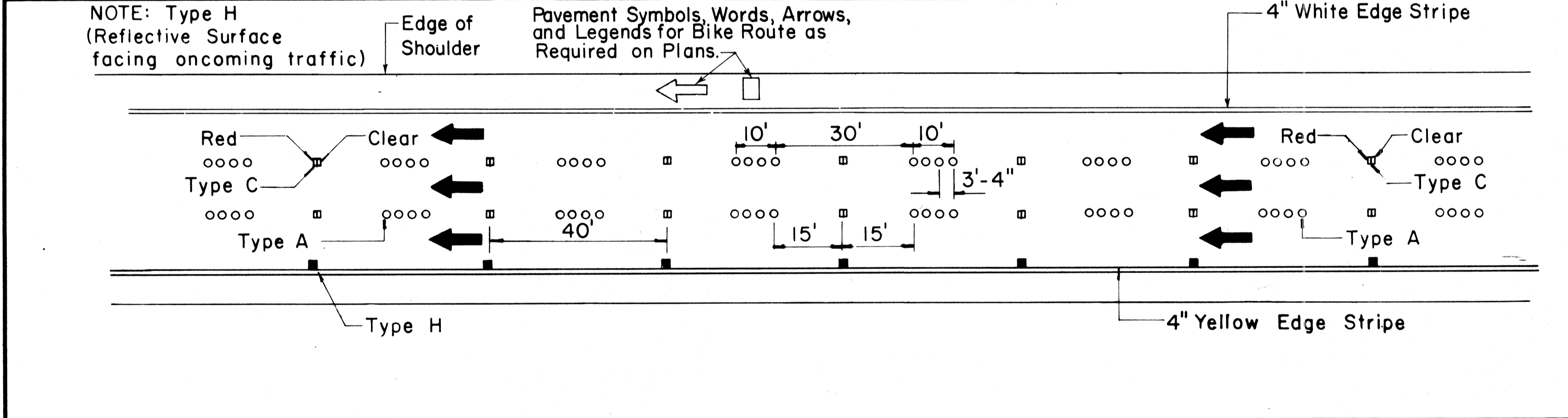
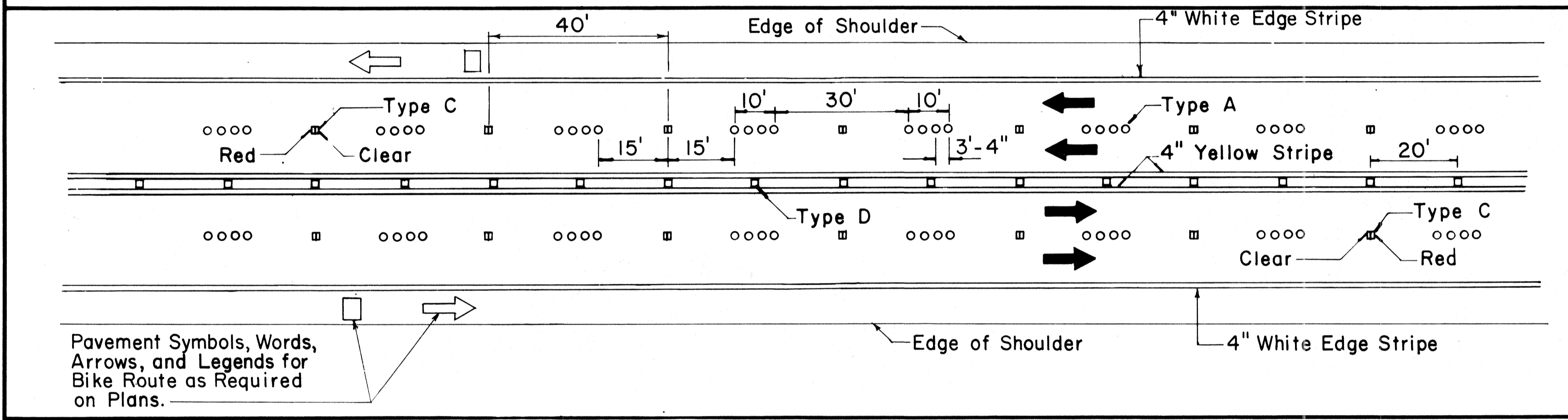
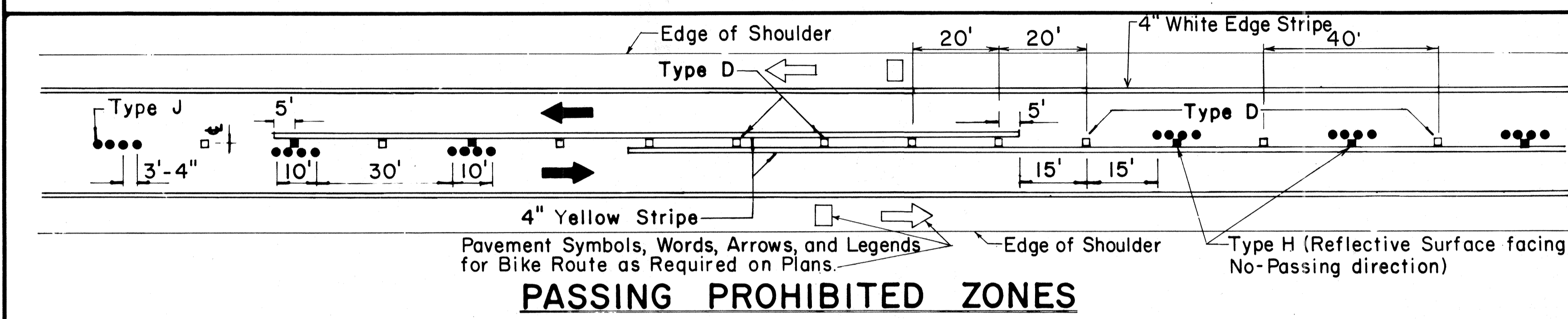
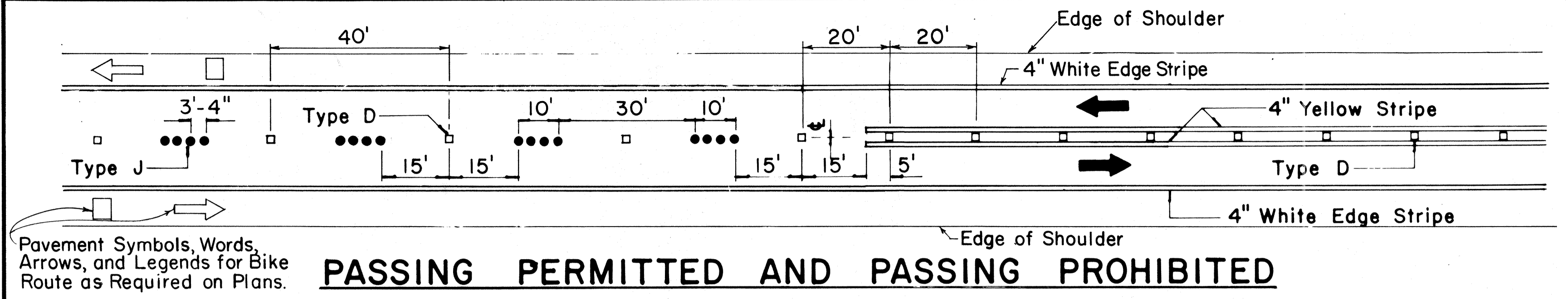
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
**CONSTRUCTION SIGNS**

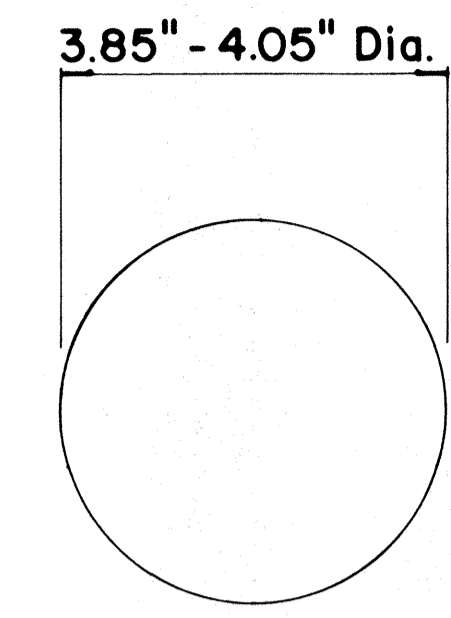
NOT TO SCALE

DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 DESIGNED BY \_\_\_\_\_  
 QUANTITIES BY \_\_\_\_\_  
 CONCURRED BY \_\_\_\_\_  
 ORIGINAL FILE NO. \_\_\_\_\_  
 NOTE BOOK No. \_\_\_\_\_

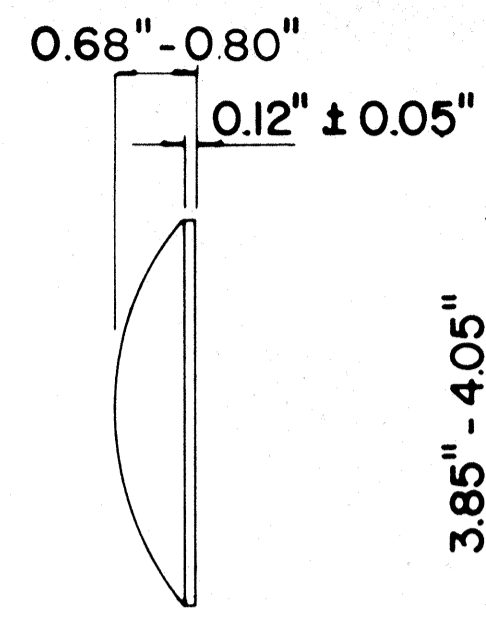
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 14        | 16           |



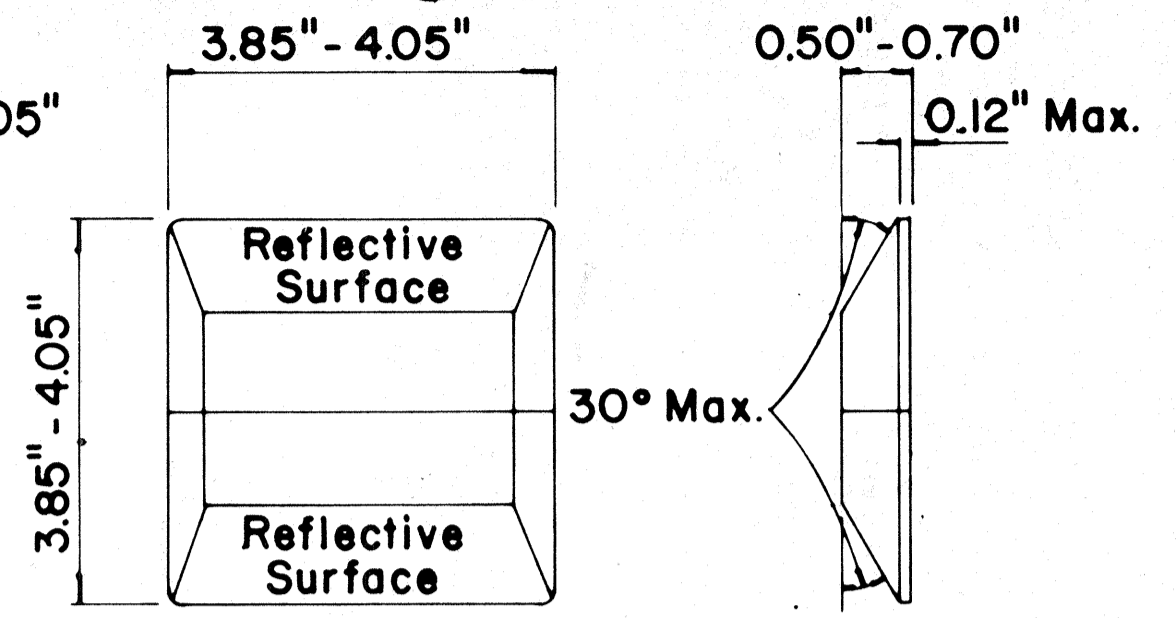
TWO - LANE  
MULTI - LANE  
DIVIDED HIGHWAY AND FREEWAY  
MISCELLANEOUS



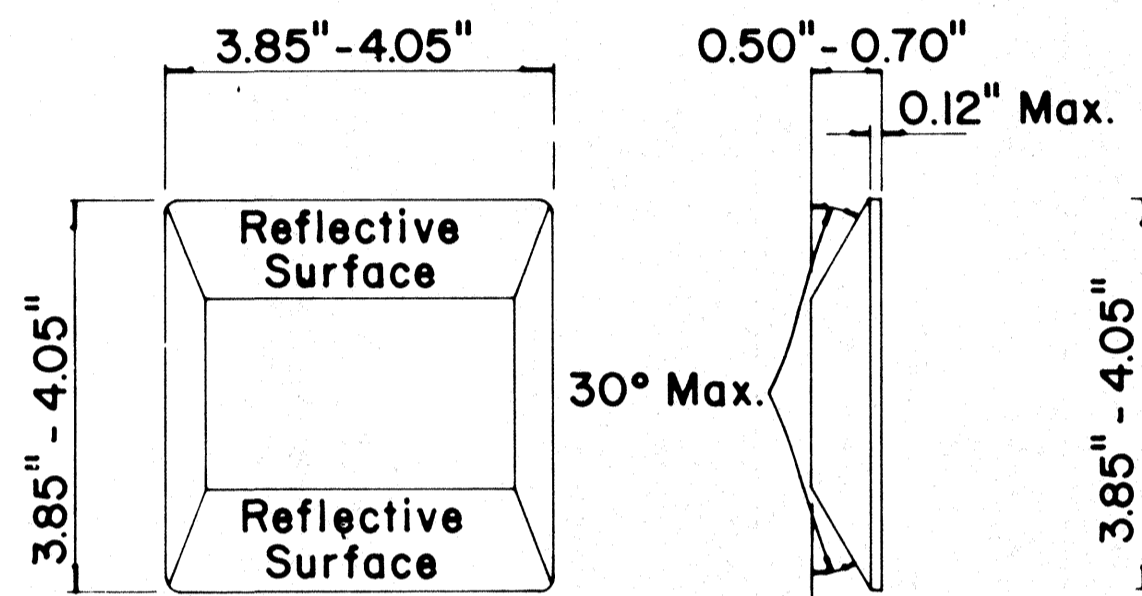
**TYPE A**  
NON-REFLECTIVE WHITE MARKER



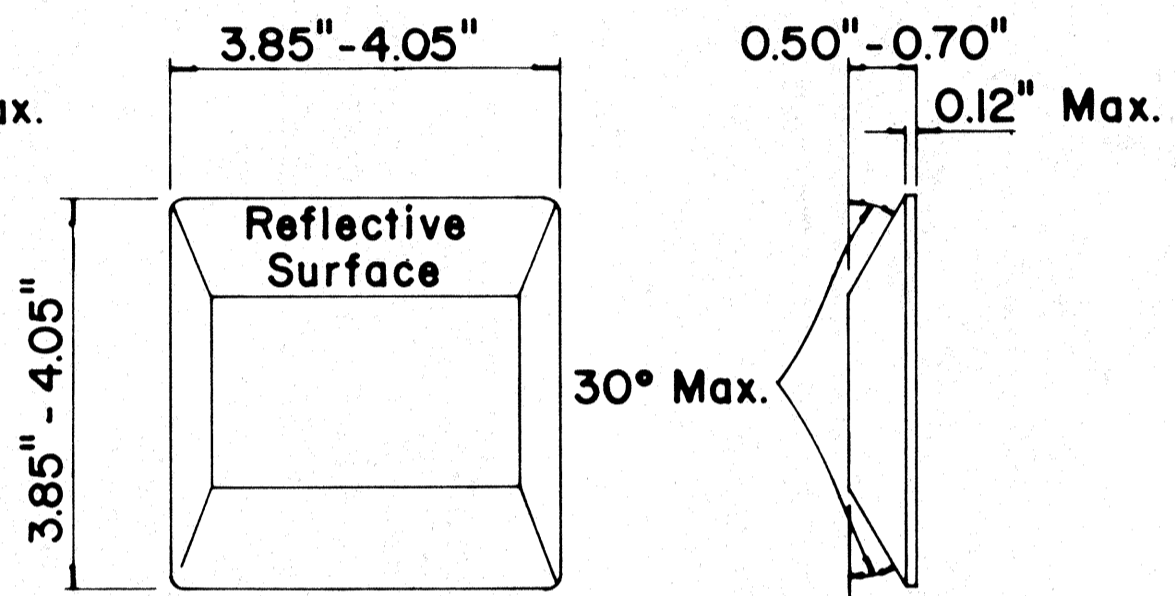
**TYPE J**  
NON-REFLECTIVE YELLOW MARKER



**TYPE C**  
RED-CLEAR REFLECTIVE MARKER



**TYPE 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.
- Edge lines shall not be continued through intersections and shall not be broken for driveways unless otherwise shown or directed.

**LEGEND**

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

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

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

| No. | REVISION   | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supercedes DT 300 approved 11/18/71.               | H.T.        | 1/24/78  |
| 2   | Delete Type A Markers from Bike Route Delineation. | H.T.        | 10/15/79 |
| 3   | Added General Note 3. Revised left edge stripe.    | H.T.        | 9-28-83  |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

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

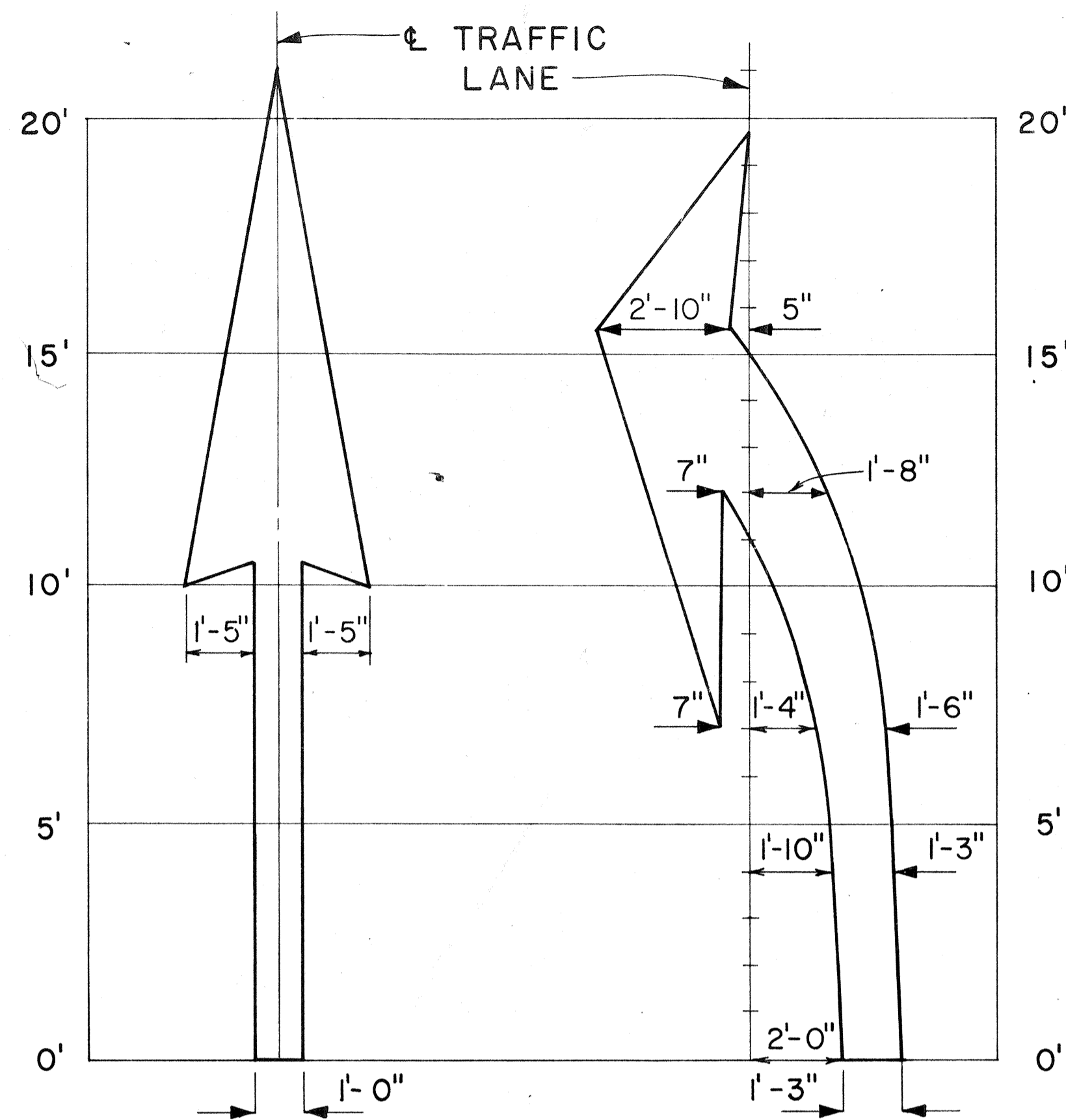
Not to Scale July 1978  
SHEET No. 8 OF 10 SHEETS DT 300

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

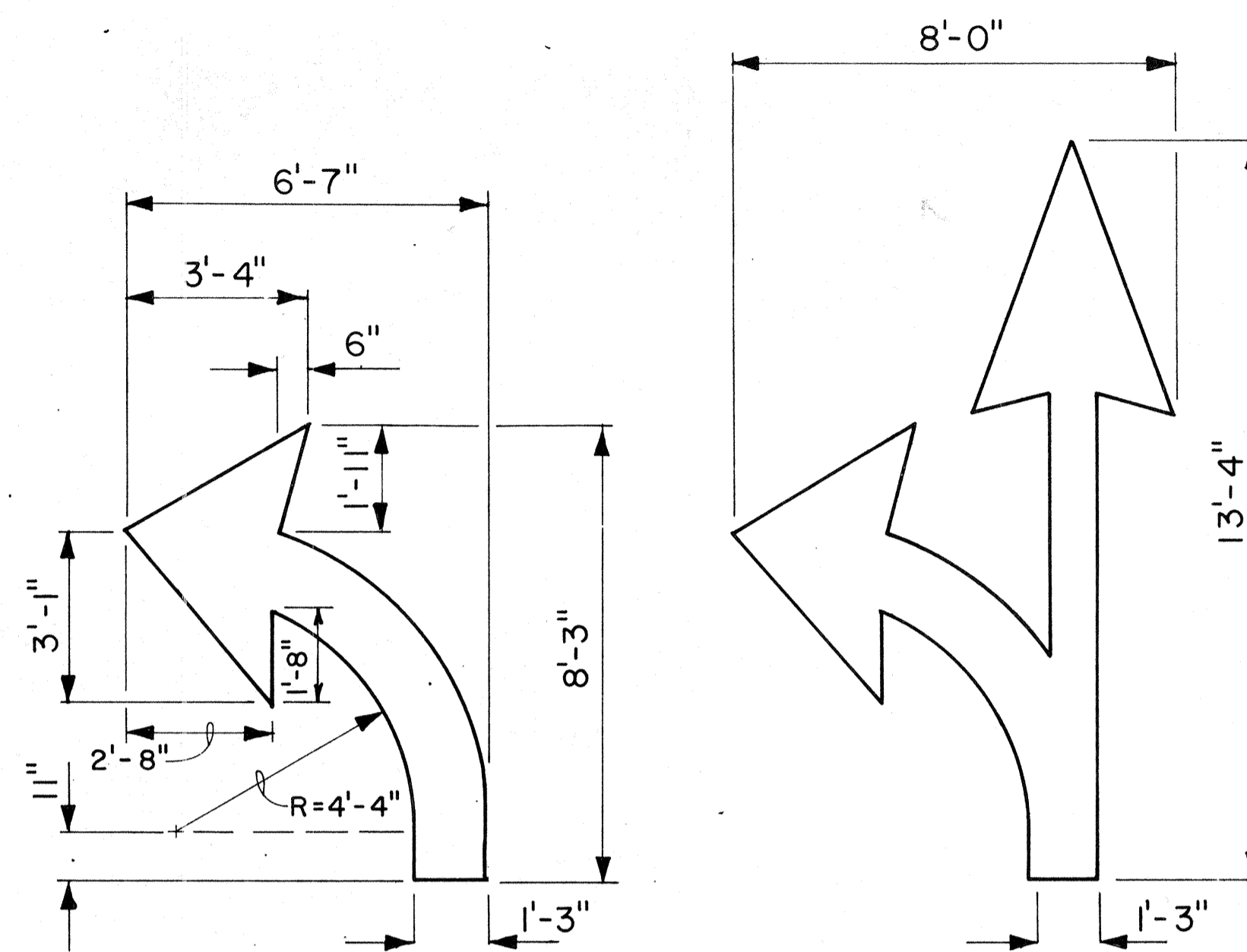
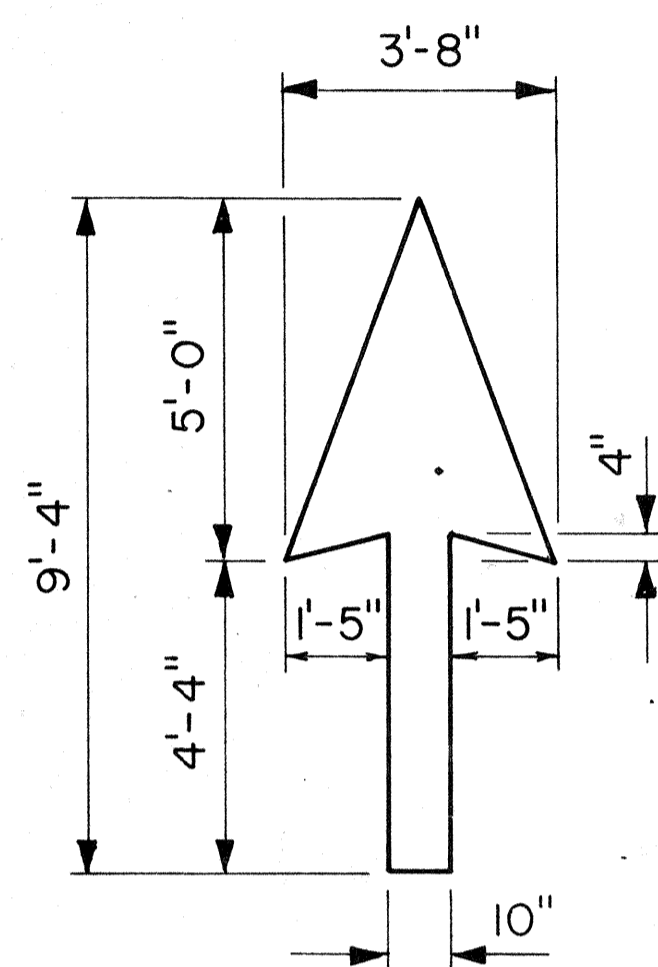
|                     |       |           |             |           |              |
|---------------------|-------|-----------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 15        | 16           |

**GENERAL NOTES:**

1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and striping with the Engineer prior to performing work.
3. For additional pavement marking details, see sheet DT 300.



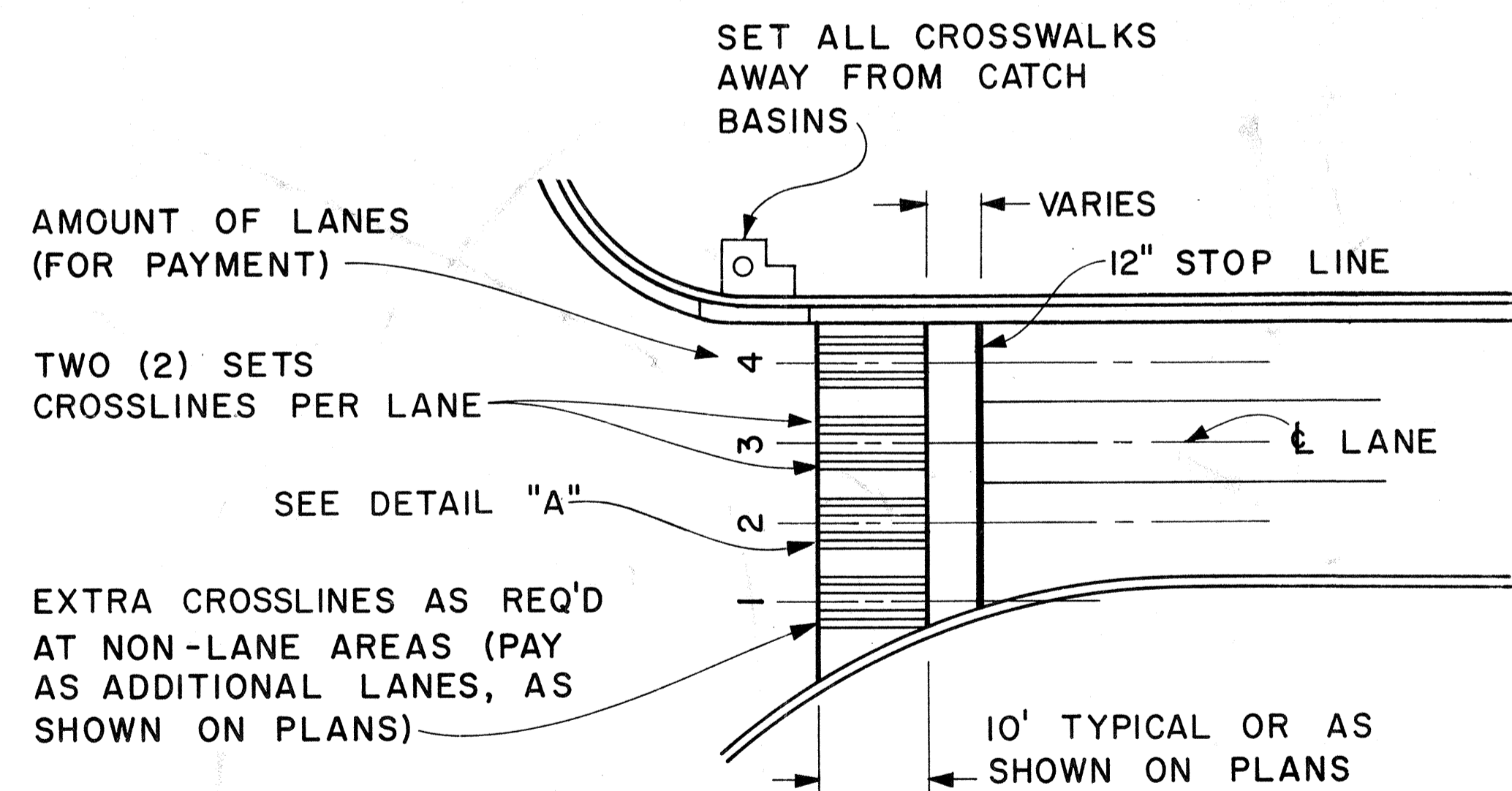
**ELONGATED**



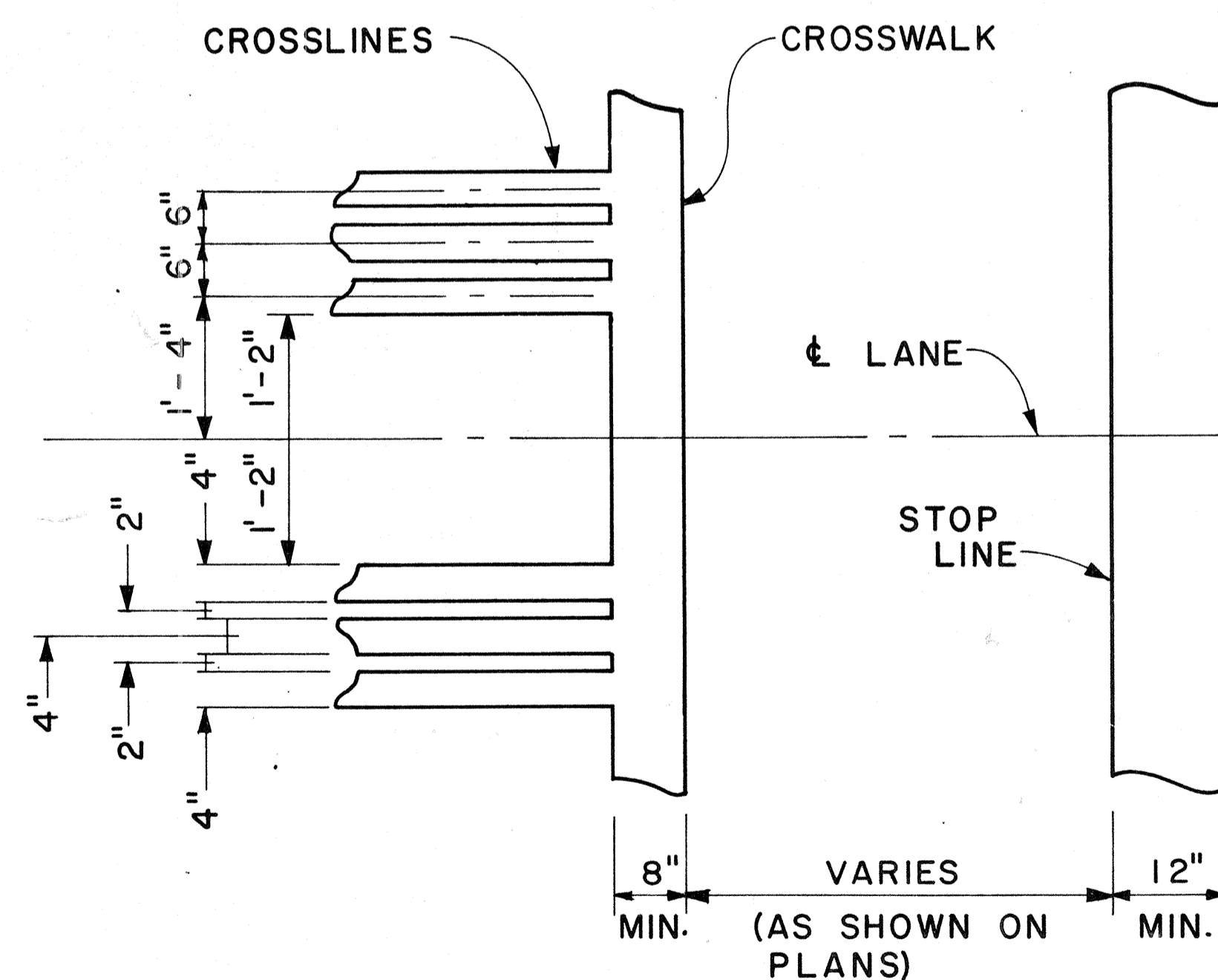
**STANDARD**

**PAVEMENT ARROWS**

Scale: 3/8" = 1'



**PLAN**



**DETAIL "A"**

**CROSSWALK & STOP LINE**

Scale: Not to Scale

APPROVAL RECOMMENDED:  
*Erich Tanaka* 5/2/78  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Robert S. Sakai* 5/2/78  
 ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION

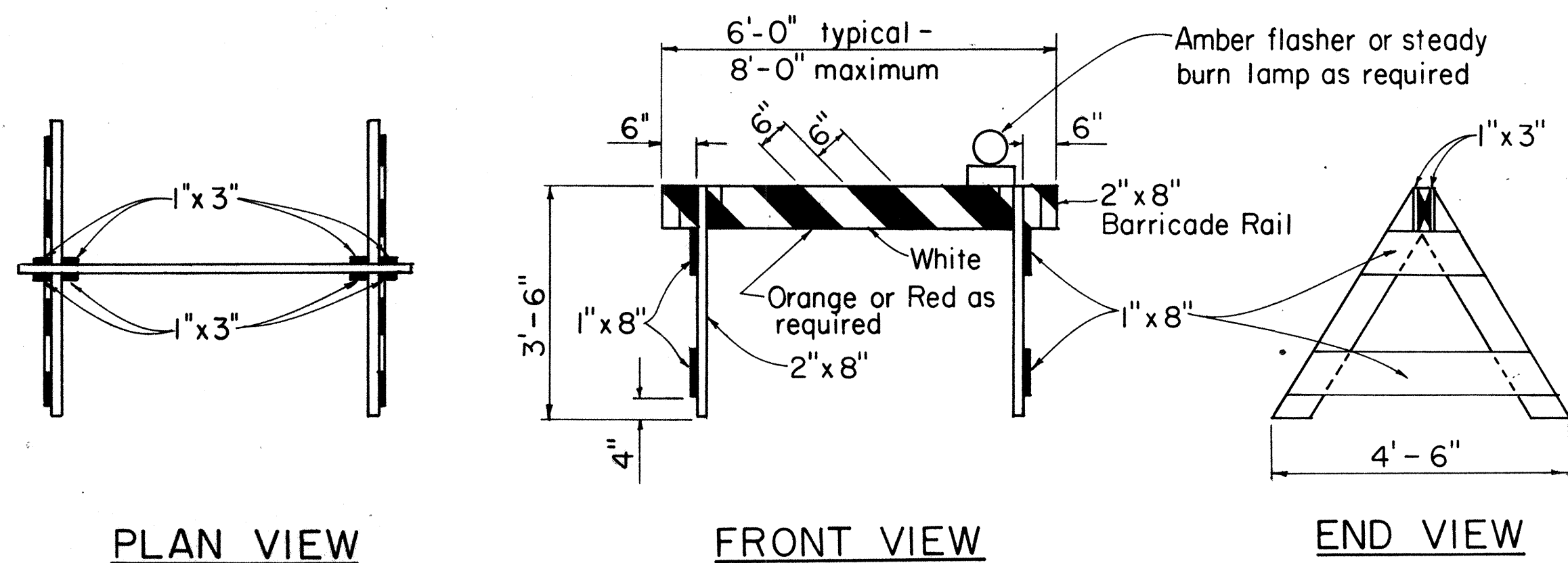
**STANDARD DETAILS**

MISCELLANEOUS  
 PAVEMENT MARKINGS

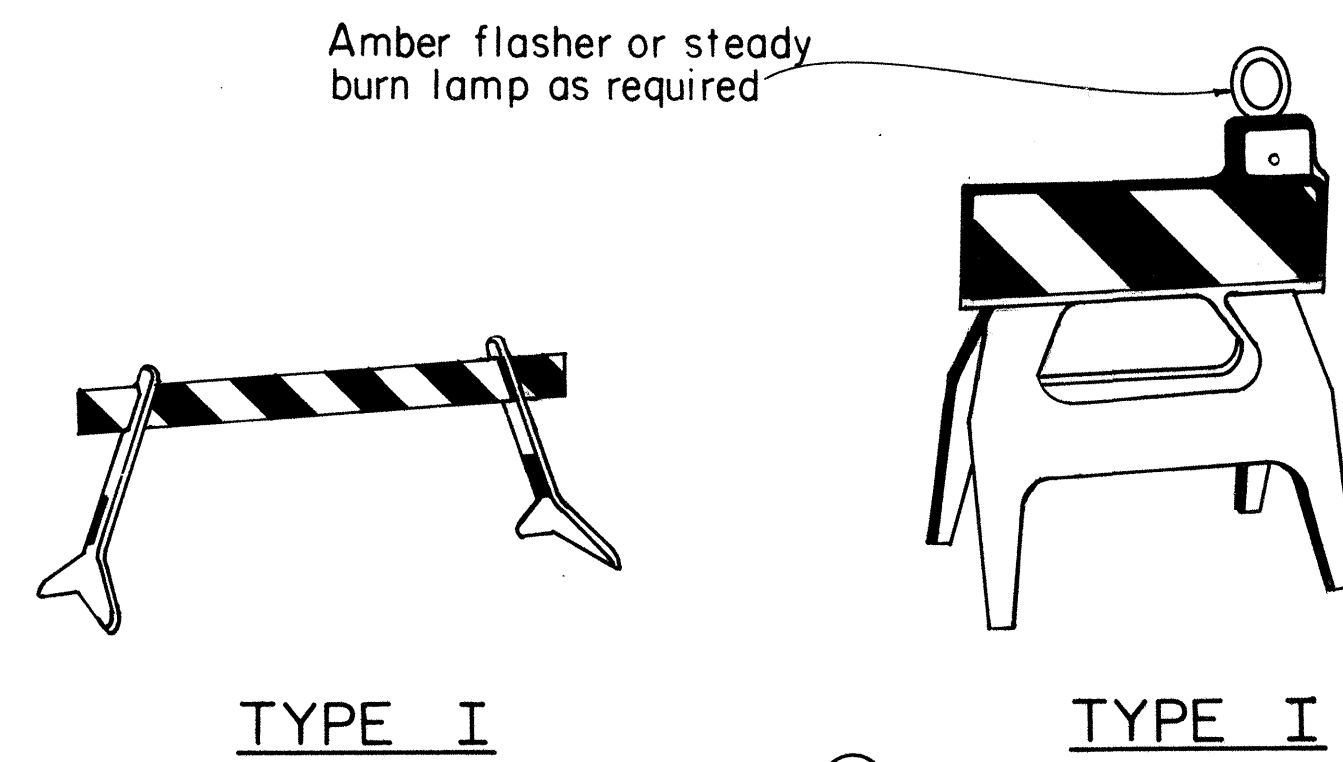
Scale: As Shown Date: March, 1978  
 SHEET No. 9 OF 10 SHEETS DT 306

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

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 61A-01-85 | 1985        | 16        | 16           |

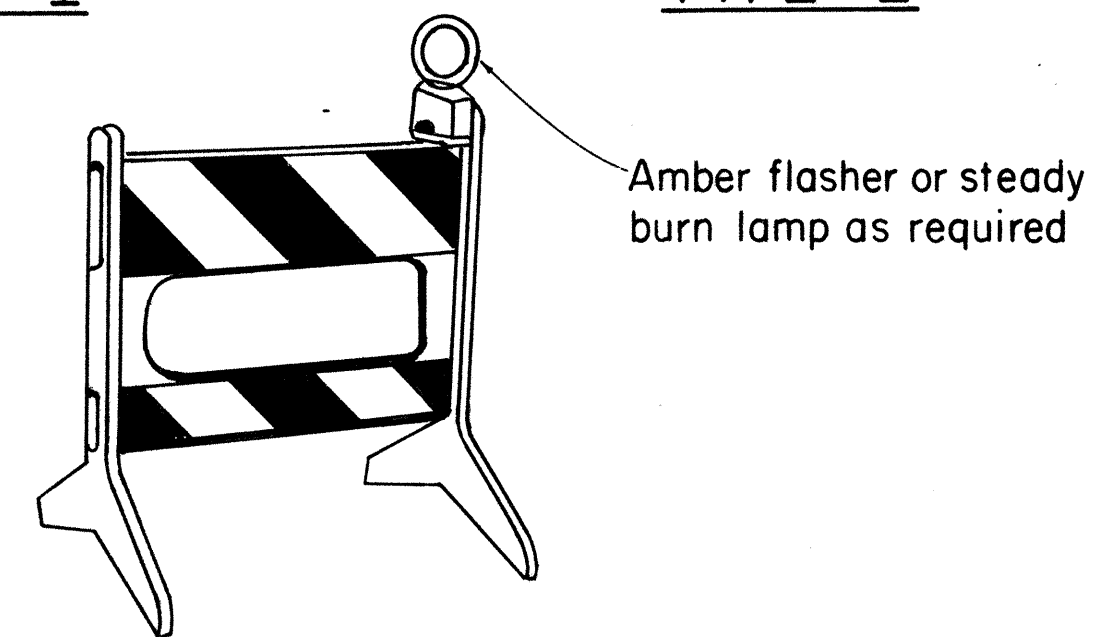


**TYPE I BARRICADE**  
Scale: 1/2" = 1'-0"



TYPE I

TYPE I

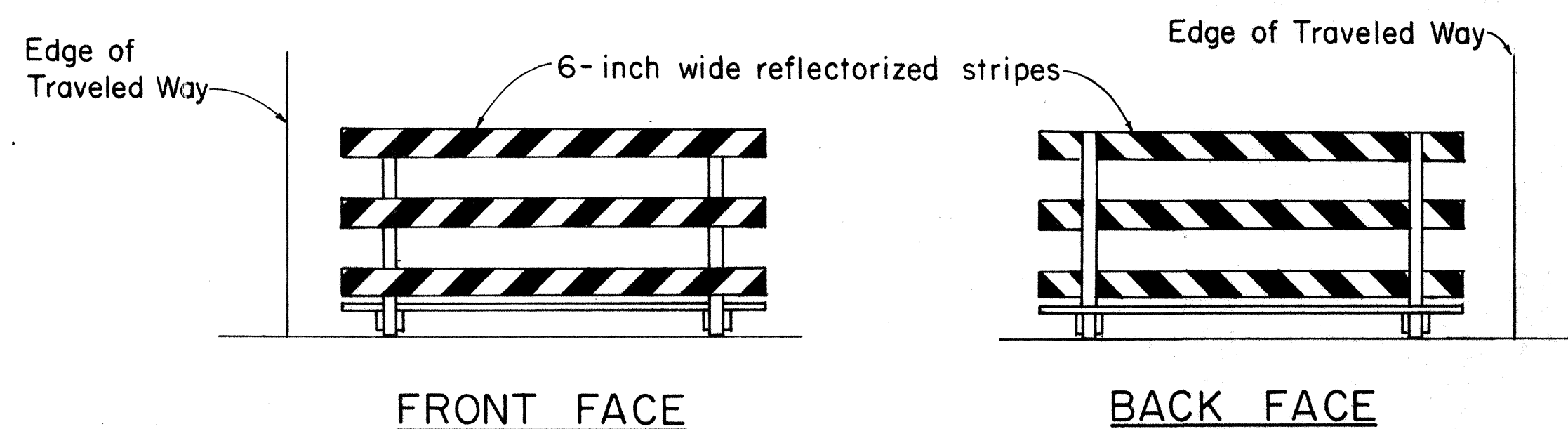


TYPE II

**PLASTIC MOLDED BARRICADE OPTIONS\***

Not to Scale

\* Shop Drawings must be submitted for approval.



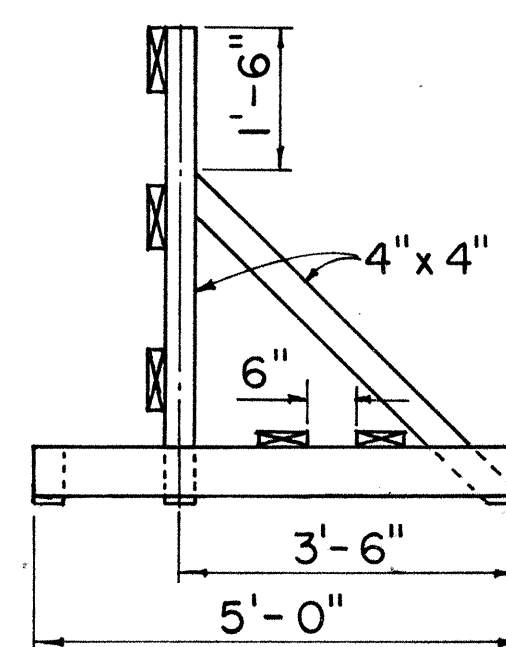
FRONT FACE

BACK FACE

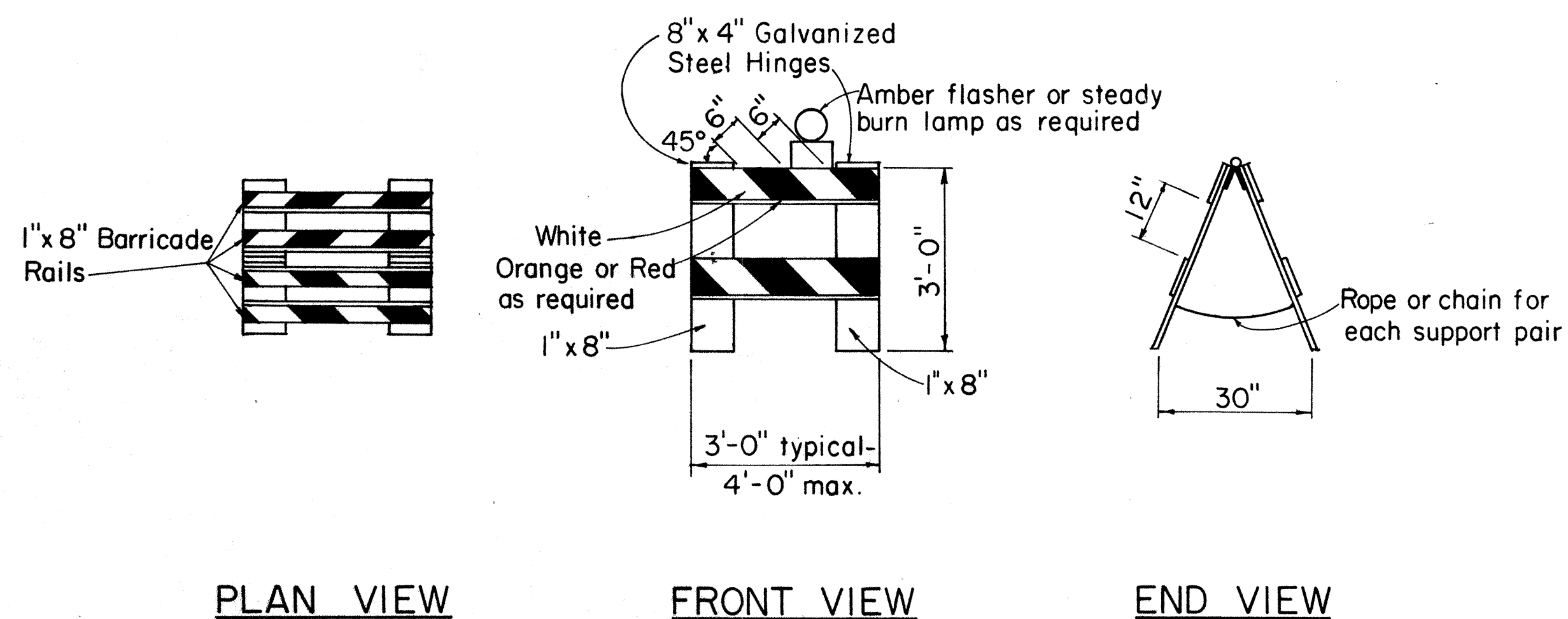
**TYPICAL BARRICADE STRIPING DETAILS\*\***

Not to Scale

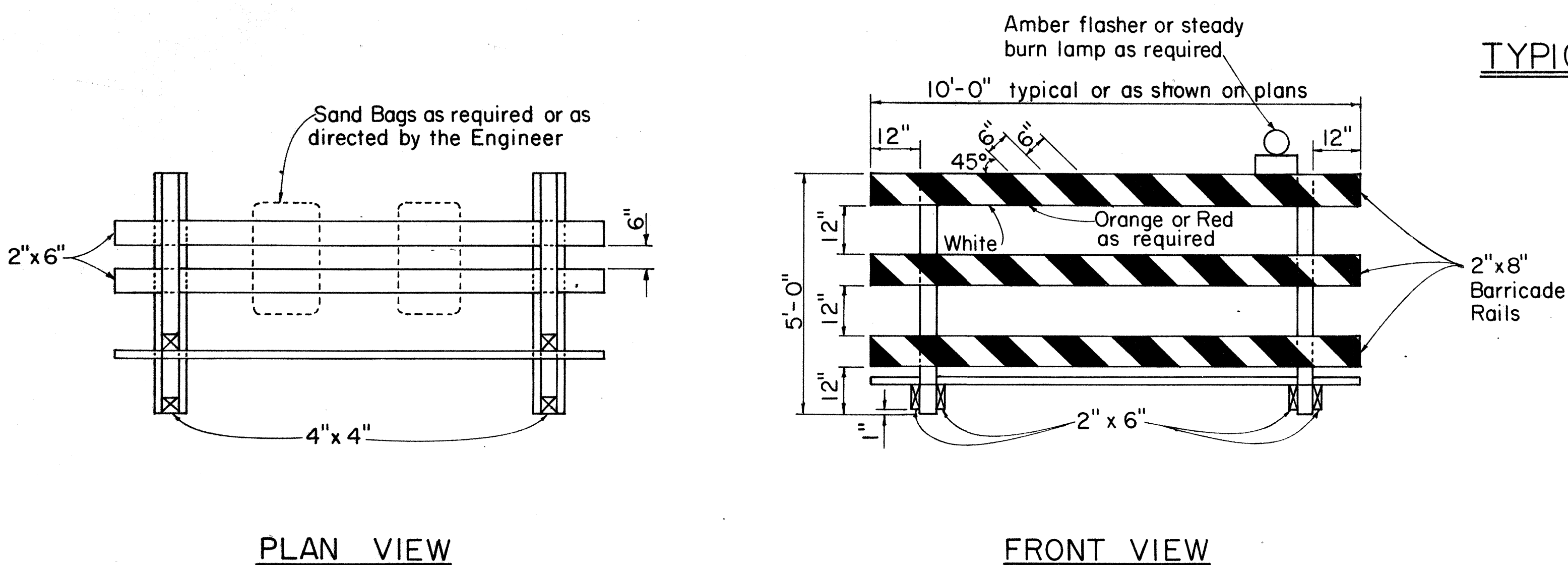
\*\* Similar for Types I & II



END VIEW



**TYPE II BARRICADE**  
Scale: 1/2" = 1'-0"



**TYPE III BARRICADE**  
Scale: 1/2" = 1'-0"

**GENERAL NOTES**

1. The front and back faces of each barricade rail shall be reflectorized with stripes sloping downward toward the same side (traveled way) of each barricade.
2. Contractor may submit alternate barricade designs for approval.
3. Sandbags or other approved weights shall not be placed on top of any striped rail.
4. The Contractor is directed to Section 626.

|                   |       |
|-------------------|-------|
| DATE              | _____ |
| SURVEY PLOTTED BY | _____ |
| DRAWN BY          | _____ |
| DESIGNED BY       | _____ |
| CHECKED BY        | _____ |
| NO.               | _____ |

APPROVAL RECOMMENDED:  
*Eishi Tanaka* 10/21/81  
TRAFFIC ENGINEER DATE

APPROVED:  
*Robert S. Scheraga* 10/23/81  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                               | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supersedes DT 800<br>Approved 12/30/69 | H.T.        | 10/23/81 |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**

**BARRICADES**

SCALE: As Shown

SHEET NO. 10 OF 10 SHEETS DT 800