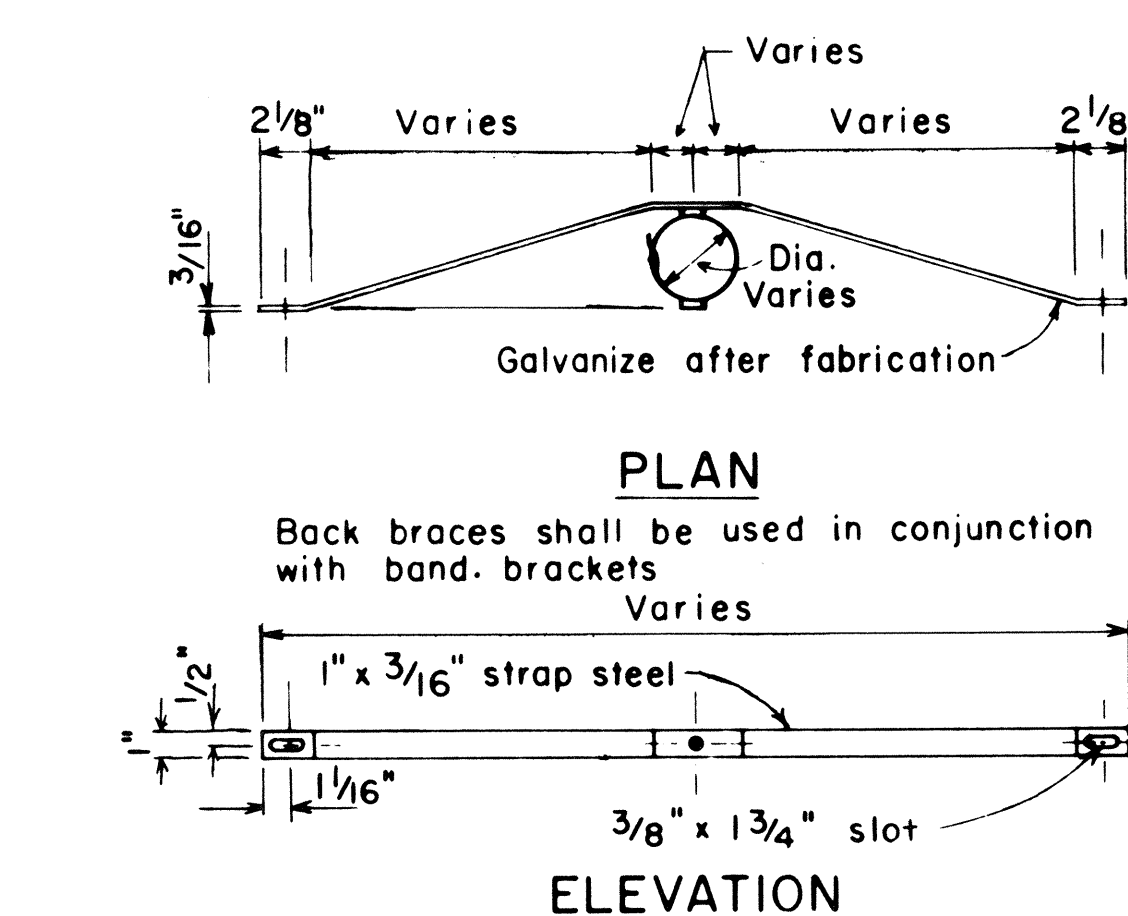
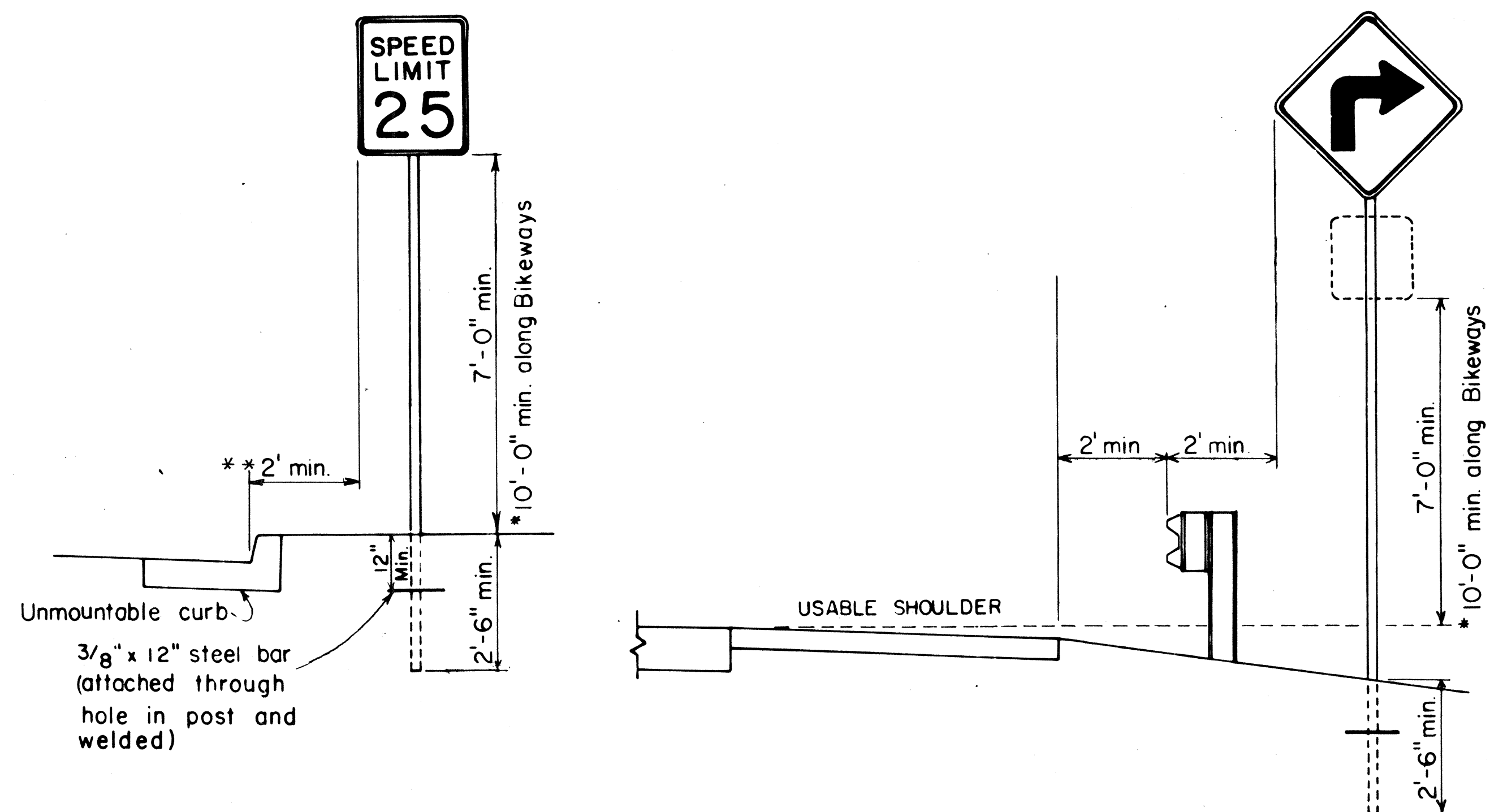


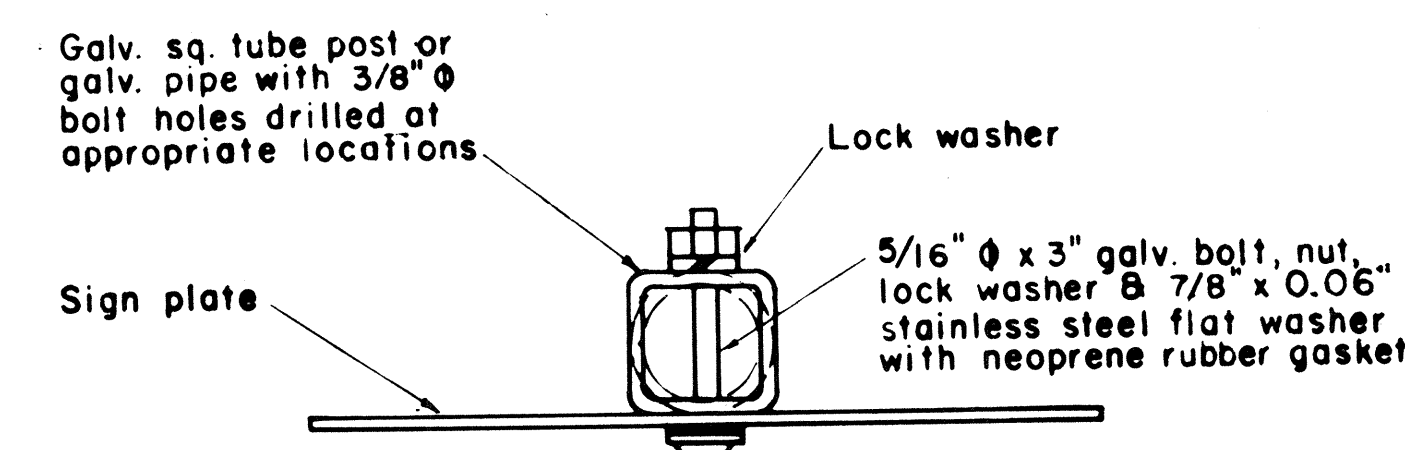
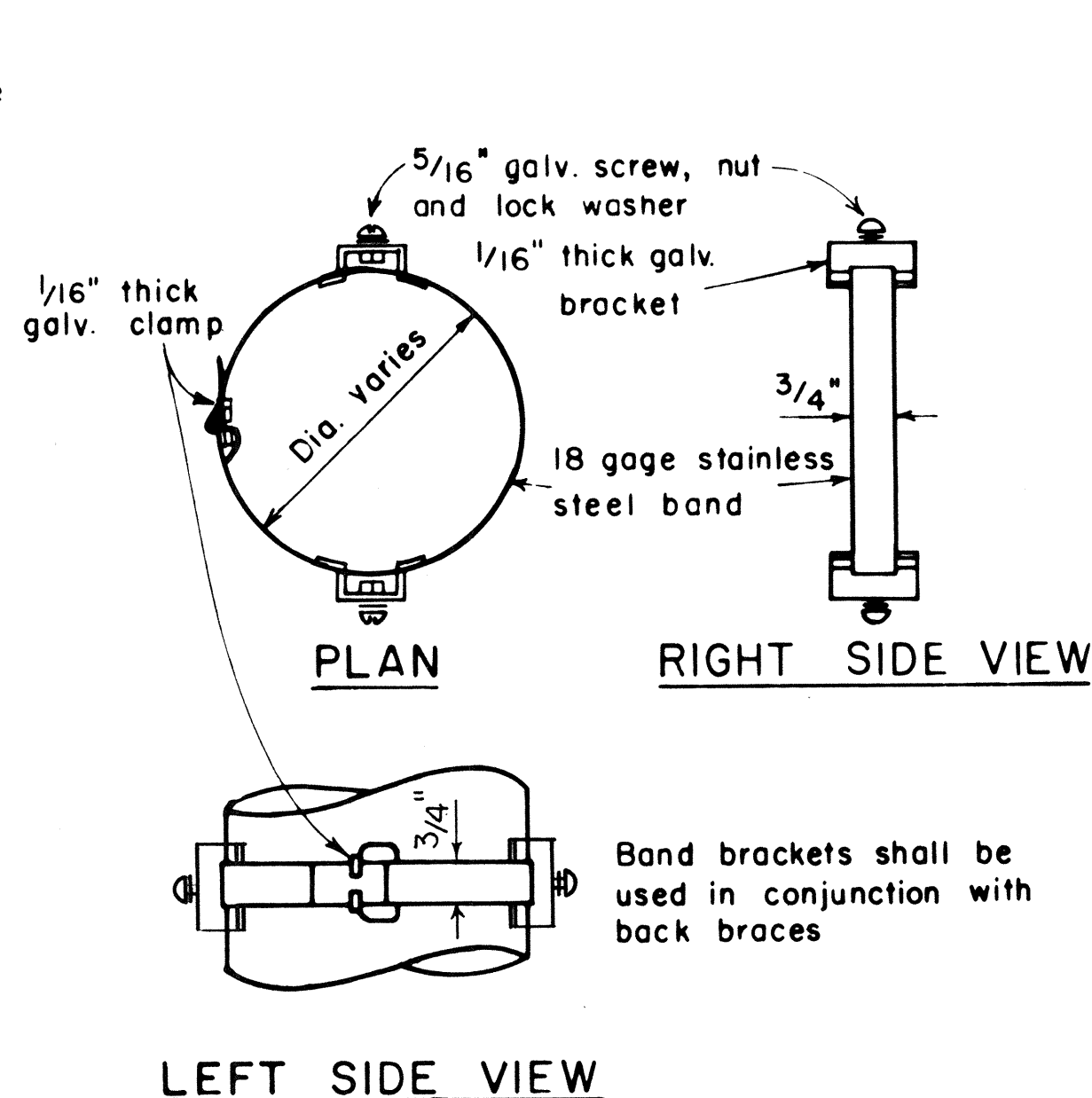
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	12	24

GENERAL NOTES

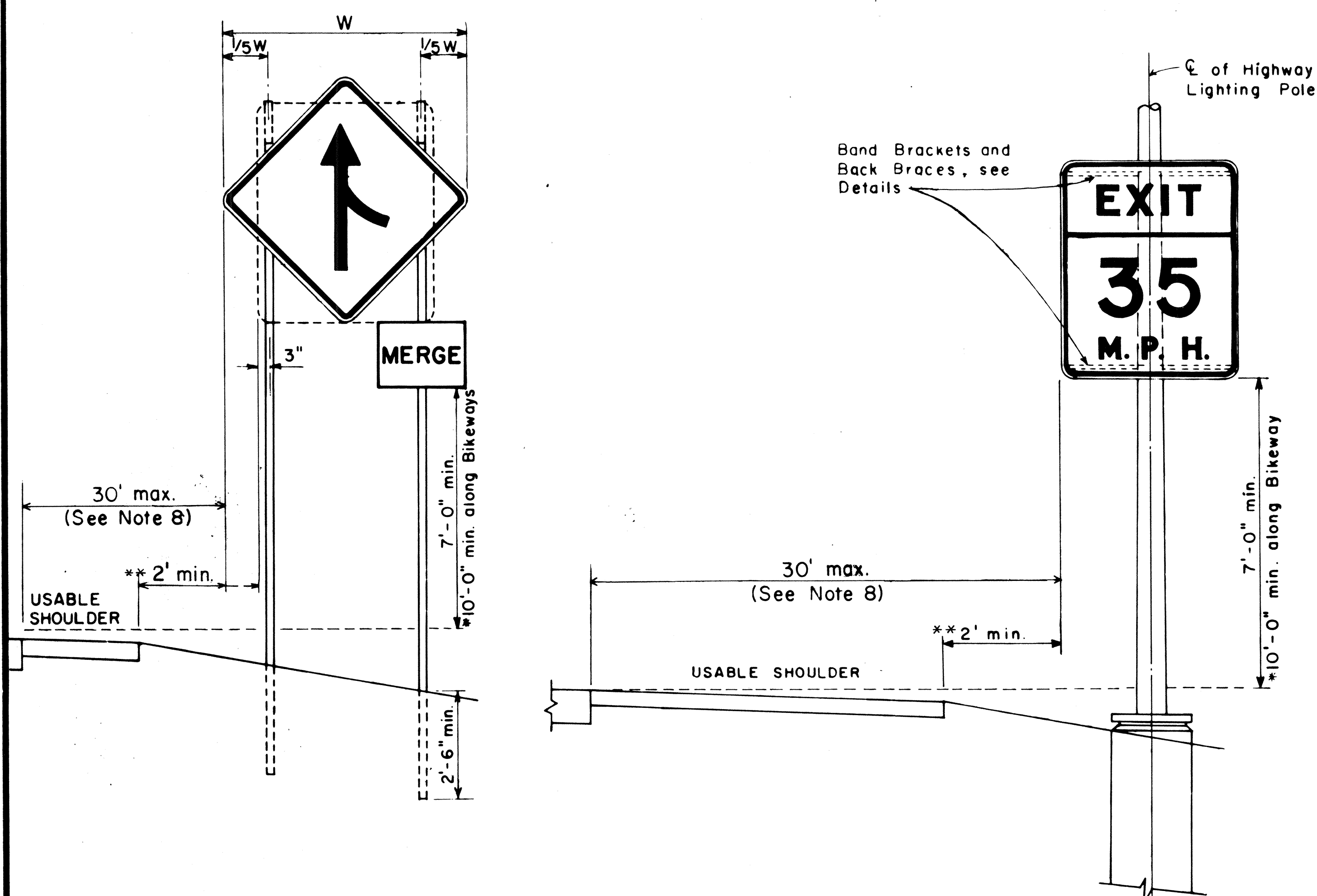
1. Signs shall be placed in accordance with positions shown and described in the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1978, Part II, Section 2A-21, as amended, and as supplemented herein.
 2. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts except as noted below.
 3. 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)
 - a. 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.
 - b. Signs larger than 28 sq. ft. in area shall be mounted with a minimum of three sets of band brackets and back braces.
 4. All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
 5. Sign posts shall extend 3/2" above each sign, where required, for attachment of City and County street name signs.
 6. (R) or (L) indicates right or left and shall be shown on the plans.
- * 7. See plans for special details.
- ** 8. 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.
9. 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)



HEIGHT AND LATERAL LOCATION OF SIGNS

BAND BRACKET

TYPICAL MOUNTING DETAILS

NOT TO SCALE

NO.	REVISION	APPROVED BY	DATE
1	Supercedes Sht. DT -100 approved 12/30/69	H.T.	11/15/69
2	Revised depth of signpost	H.T.	5/8/70
3	Added Notes No. 8 & No. 9	H.T.	5/13/70
4	Revised Gen. Note #4 & Mounting Details	H.T.	4/23/71
5	Revised General Notes, Lateral Sign Locations and Mounting Details	H.T.	5/15/71

APPROVAL RECOMMENDED:

Enichi Tanaka
TRAFFIC ENGINEER

11/10/77
DATE

APPROVED:

Herbert S. Sakai shio
ASSISTANT CHIEF, ENGINEERING

11/15/11
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGN DETAILS

Not to scale

June, 1977

SHEET No. 1 OF 3 SHEETS DT 100

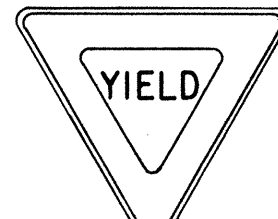
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	13	24



R1-1 30" x 30"
R1-1-A 36" x 36"

4-WAY

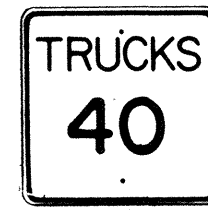
R1-3 12" x 6"
R1-3-A 18" x 9"



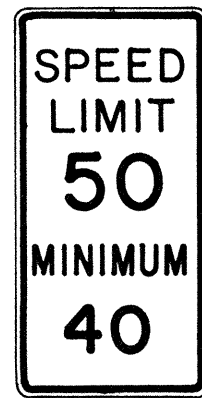
R1-2 36" x 36" x 36"
R1-2-A 48" x 48" x 48"



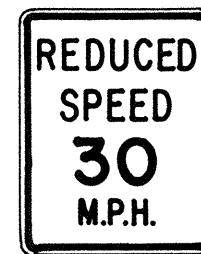
R2-1(50) 24" x 30"
R2-1(50)-A 48" x 60"



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"



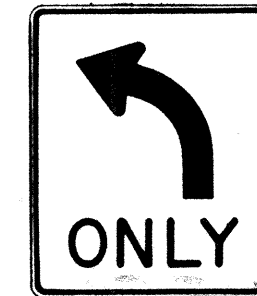
R3-2 24" x 24"
24" x 18"
R3-2-A 48" x 48"
48" x 36"



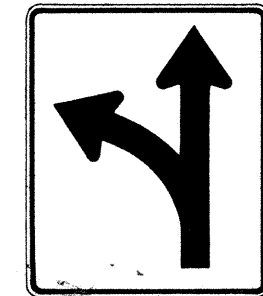
R3-3 24" x 24"
R3-3-A 48" x 48"



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



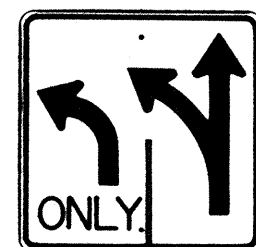
R3-5(L) 30" x 36"
R3-5(L)-A 48" x 60"



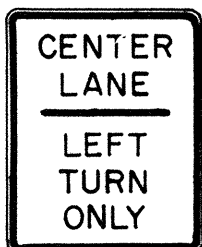
R3-6(L) 30" x 36"
R3-6(L)-A 48" x 60"



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"



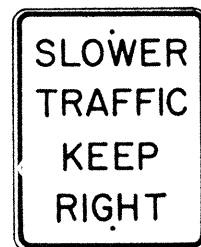
R3-9 24" x 30"



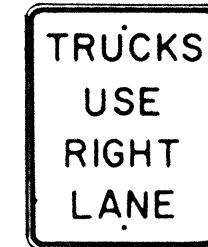
R4-1 24" x 30"



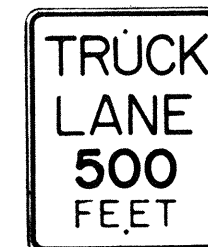
R4-2 24" x 30"



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



R4-5 24" x 30"



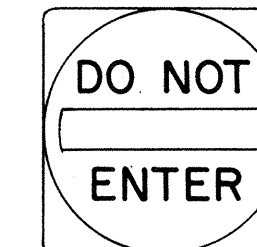
R4-6(500) 24" x 30"



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



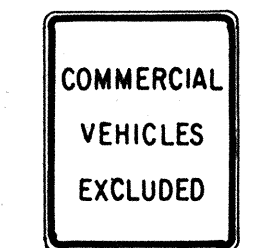
R4-8 24" x 30"
24" x 18"



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



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



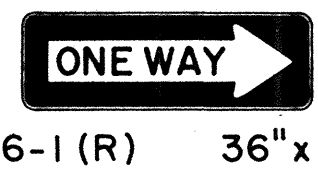
R5-4 24" x 30"



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"



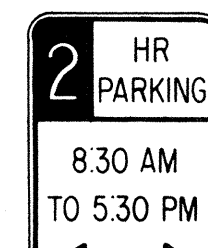
R7-1 12" x 18"
R7-1-A 24" x 30"



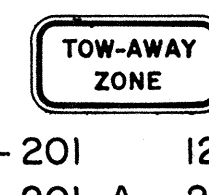
R7-4 12" x 18"
R7-4-A 24" x 30"



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"



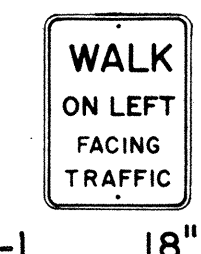
R8-5 24" x 30"



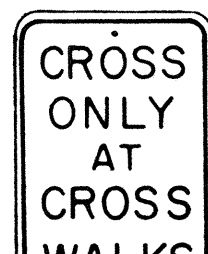
R8-6 24" x 30"



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



R9-1 18" x 24"



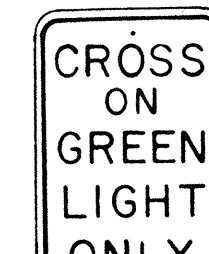
R9-2 12" x 18"



R9-3 12" x 18"



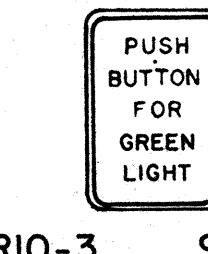
R9-4 18" x 24"



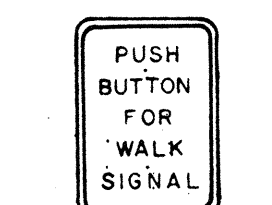
R10-1 12" x 18"



R10-2 12" x 18"



R10-3 9" x 12"



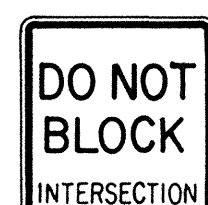
R10-4 9" x 12"



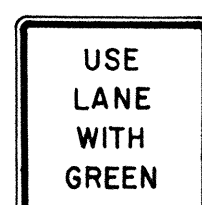
R10-5 24" x 30"



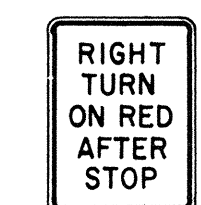
R10-6 24" x 36"



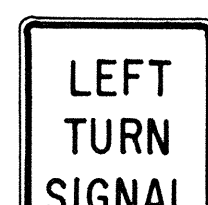
R10-7 24" x 30"



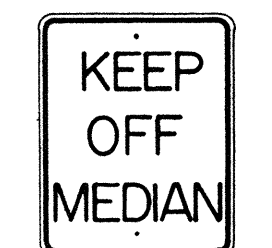
R10-8 24" x 30"



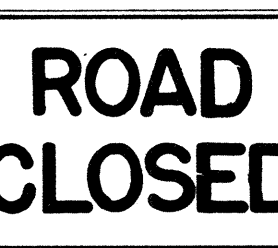
R10-9 24" x 30"



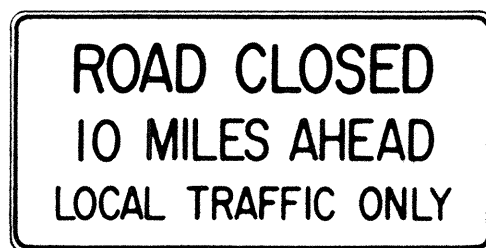
R10-10 24" x 30"



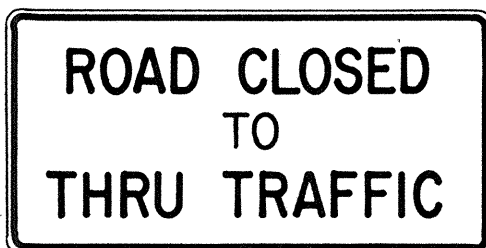
R11-1 24" x 30"



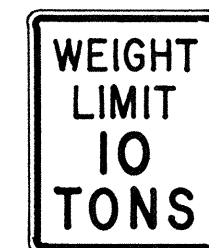
R11-2 48" x 30"



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:

Eishi Tanaka
TRAFFIC ENGINEER

3/17/72
DATE

APPROVED:

Robert J. ...
ASSISTANT CHIEF, ENGINEERING

3-20-72
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 101 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1.	H.T.	10/10/74
3	Added General Note 5	H.T.	8/7/79

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS REGULATORY SIGNS

NOT TO SCALE

SHEET No. 2 OF 13 SHEETS DT 101

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	750A-01-82M	1982	14	24

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

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

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

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

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

W1-6 48"x24"

W1-7 48"x24"

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

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

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

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

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

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

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

W3-3 36"x36"
24"x18"

W4-1(R) 30"x30"
24"x18"

W4-1(R)-A 48"x48"

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

W5-1 36"x36"

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

W5-3 36"x36"

W6-1 36"x36"
24"x18"

W6-2 36"x36"
24"x18"

W6-3 30"x30"
24"x18"

W6-3-A 36"x36"
24"x18"

W6-3-B 48"x48"
24"x18"

W7-1 30"x30"
24"x18"

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

W7-2 24"x18"

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

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

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

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

W8-5 30"x30"
24"x18"

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

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

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

W10-1 36" Diameter

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

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

W13-1(25) 18"x18"

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

W11-1 30"x30"
24"x18"

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

W11-2 30"x30"
24"x18"

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

W11-4 30"x30"
24"x18"

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

W11-5 30"x30"
24"x18"

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

W14-1 30"x30"

W14-3 36"x48"x48"

W13-2(25) 48"x60"

W13-3(25) 48"x60"

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:

Evelyn Tanaka 3/17/72
TRAFFIC ENGINEER DATE

APPROVED:

John J. ... 3-20-72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1	H.T.	10/16/74
3	Revised General Note 5	MA	9-16-75
4	Revised General Note 5	H.T.	9-14-76
5	Added Note 1	H.T.	11-7-77

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE

SHEET No. 3 OF 3 SHEETS DT 102

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	15	24

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.

REDUCED SPEED
35
AHEAD

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"

ANY TIME

4" Series C
1 1/2"

R8-3a 24" x 24"

24" x 18"

R8-3a-A 48" x 48"

NO PED
XING

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"

U
TURN
AHEAD

8" Series F
5" Series D

R16-6 24" x 30"

U
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"

W17-1(L) 60" x 60"

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"

SI-1 36" x 36"

S2-1 36" x 36"

SCHOOL
BUS STOP
AHEAD

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"

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

APPROVED:
Harbor 2.2ateahis 5/2/78
 ASSISTANT CHIEF, ENGINEERING DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGNS

NOT TO SCALE DATE: MAY, 1978

SHEET NO. 4 OF 3 SHEETS DT 103

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-B2M	1982	16	24



CW 20-1a 48" x 48"



CW 20-2d 48" x 48"



CW 20-3b 48" x 48"



CW 20-4d 48" x 48"



CW 20-5d(L) 48" x 48"



CW 20-7c 48" x 48"



CW 21-1 30" x 30"



CW 21-2 30" x 30"



CW 21-3 36" x 36"



CW 21-4 36" x 36"



CW 21-5 30" x 30"



CW 21-6 30" x 30"



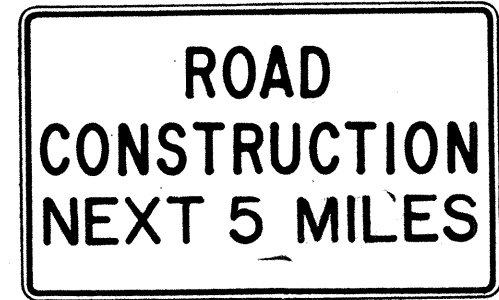
CW 22-1b 48" x 48"



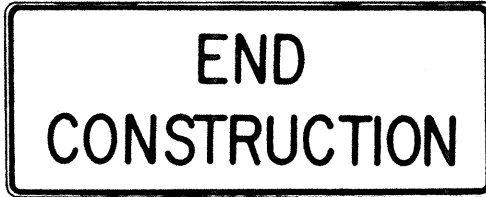
CW 22-2 42" x 36"



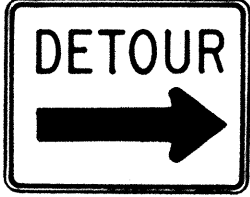
CW 22-3 42" x 36"



CG 20-1(5) 60" x 36"



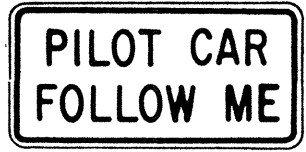
CG 20-2 60" x 24"



CM 4-9(R) 30" x 24"



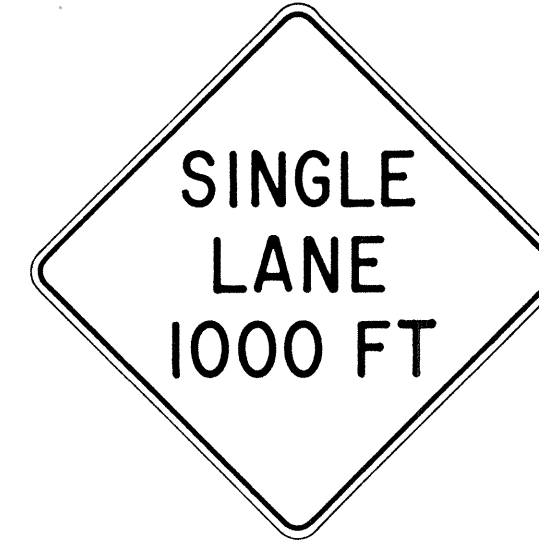
CM 4-10(R) 48" x 18"



CG 20-4 36" x 18"



CW 23-1 36" x 36"



CW 23-2b 48" x 48"



CW 23-3(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 Saleish 3/23/12
ASSISTANT CHIEF, ENGINEERING DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

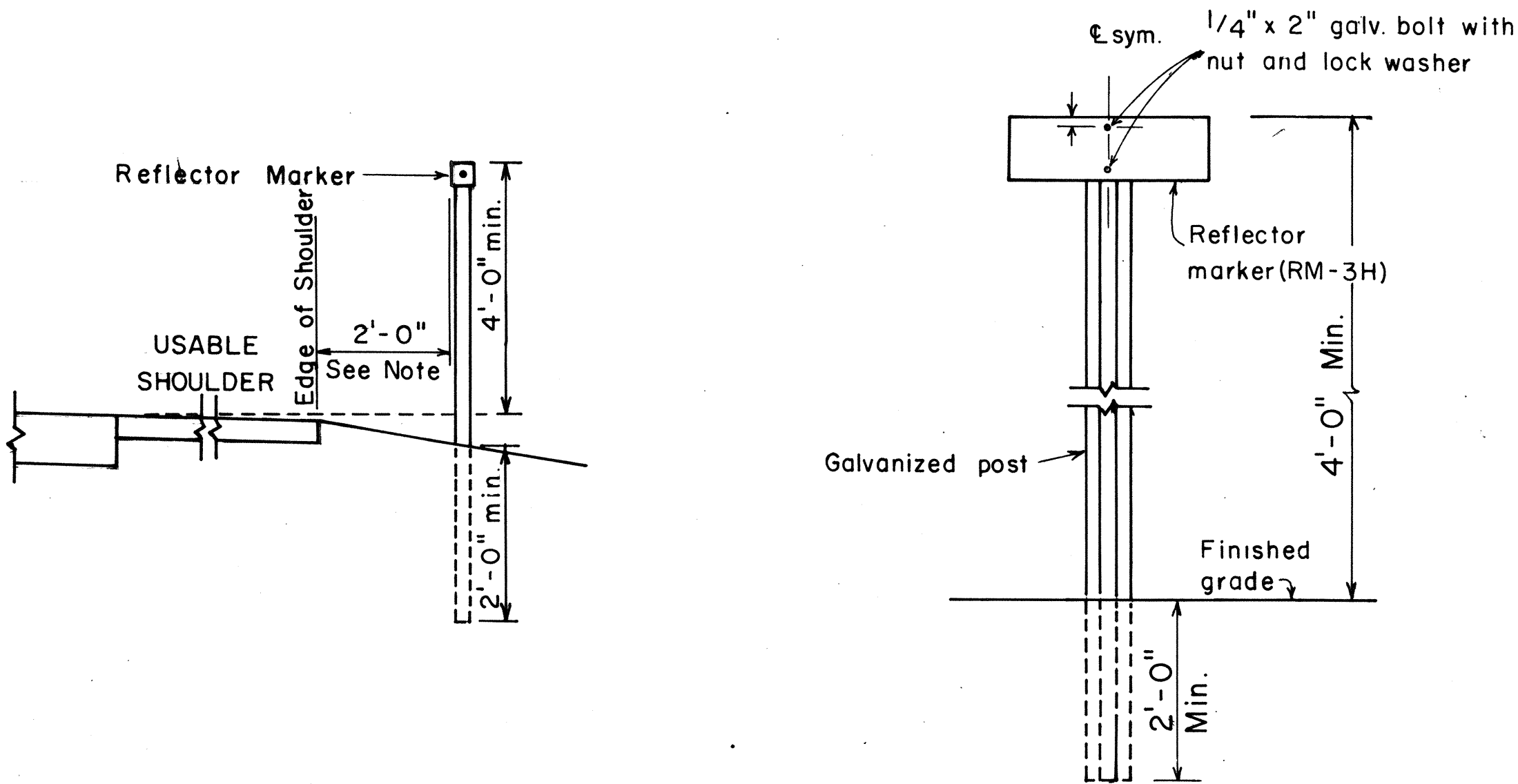
NOT TO SCALE

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

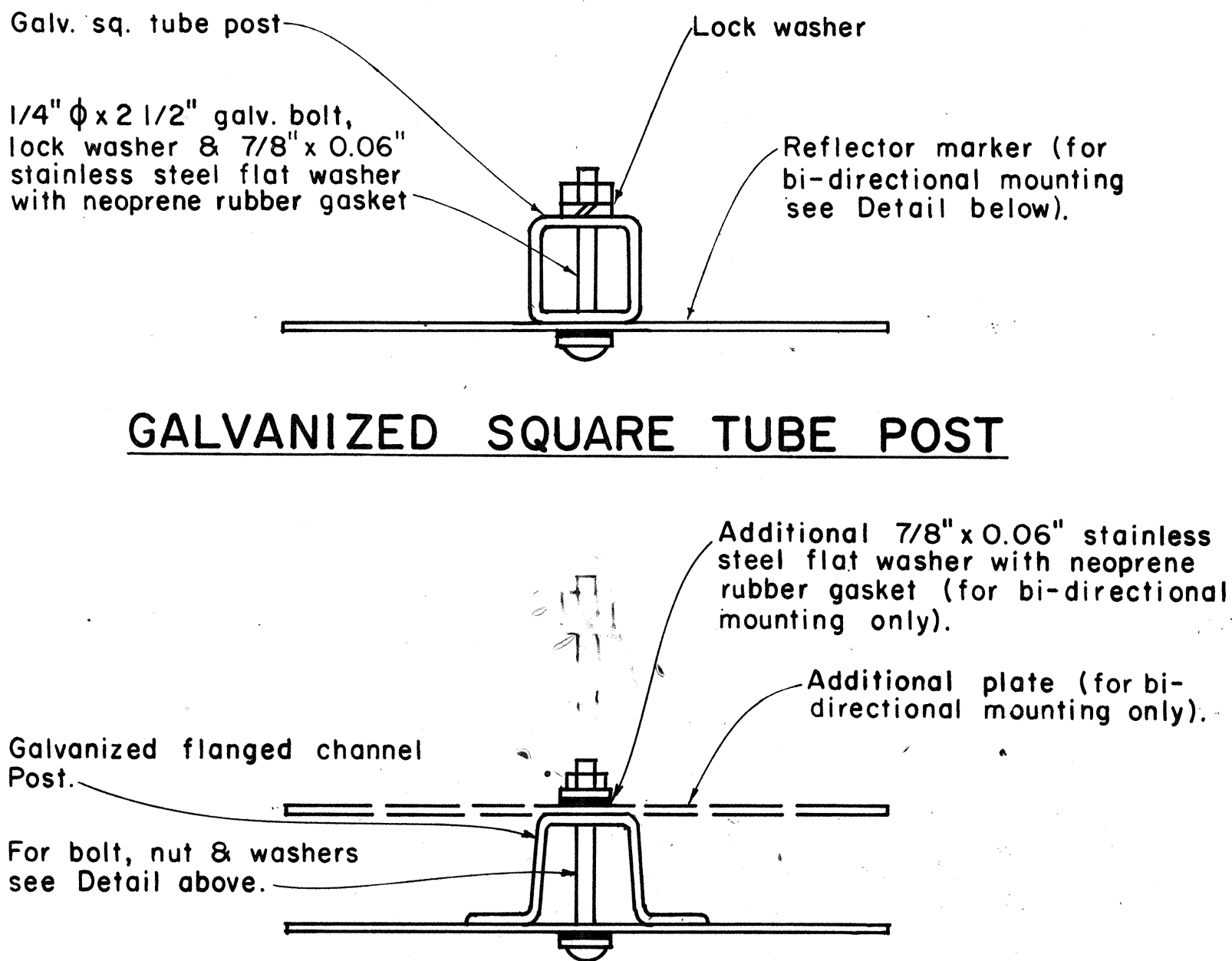
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	150A-0182M	1982	17	24

GENERAL NOTES:

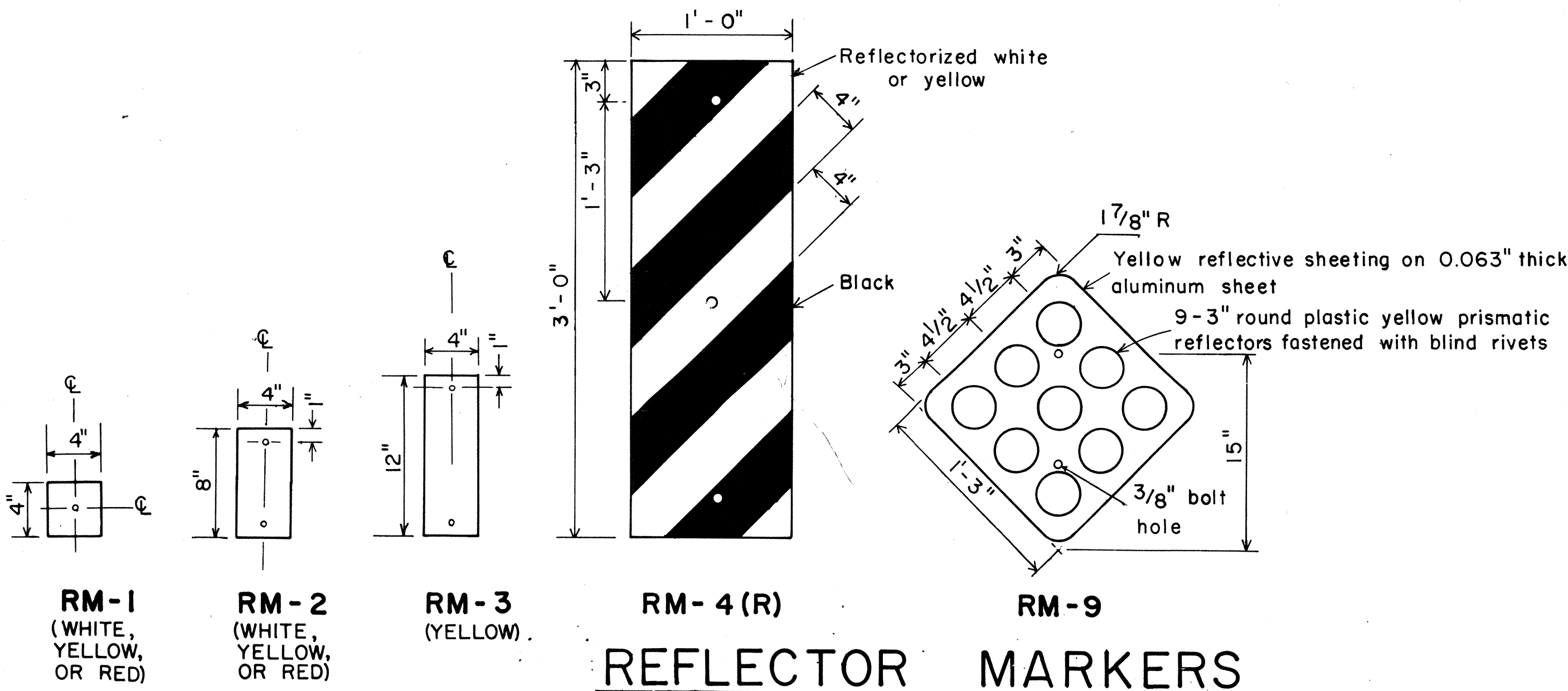
1. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
2. (R) or (L) indicates right or left and shall be as shown on the plans.
3. Reflector markers RM-1 and RM-2 shall be:
 - a) Yellow if placed along the left edge of divided 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



APPROVAL RECOMMENDED:
Euske Tanaka 11/7/77
 TRAFFIC ENGINEER DATE
 APPROVED:
Herbert Z. Zakeish 11/15/77
 ASSISTANT CHIEF, ENGINEERING DATE

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

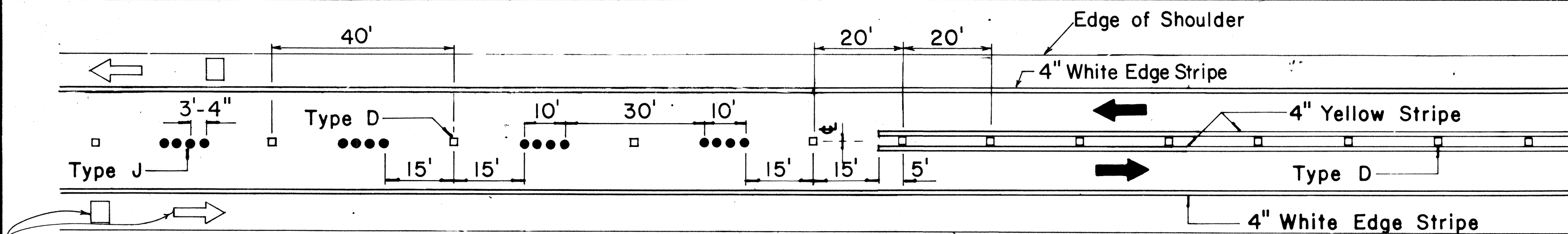
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
MISCELLANEOUS REFLECTOR MARKERS

Not to scale
June, 1977
SHEET No. 6 OF 13 SHEETS DT 110

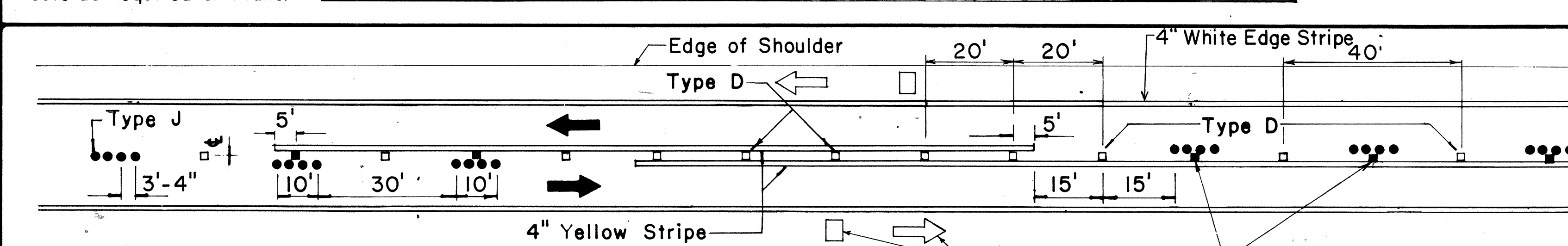
ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
DATE	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82 M	1982	18	24



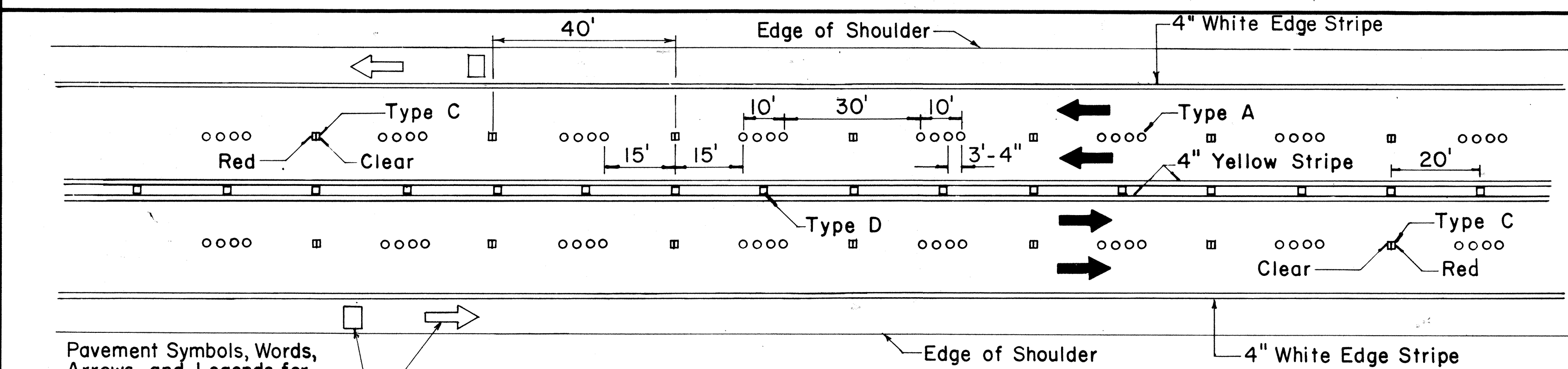
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PERMITTED AND PASSING PROHIBITED

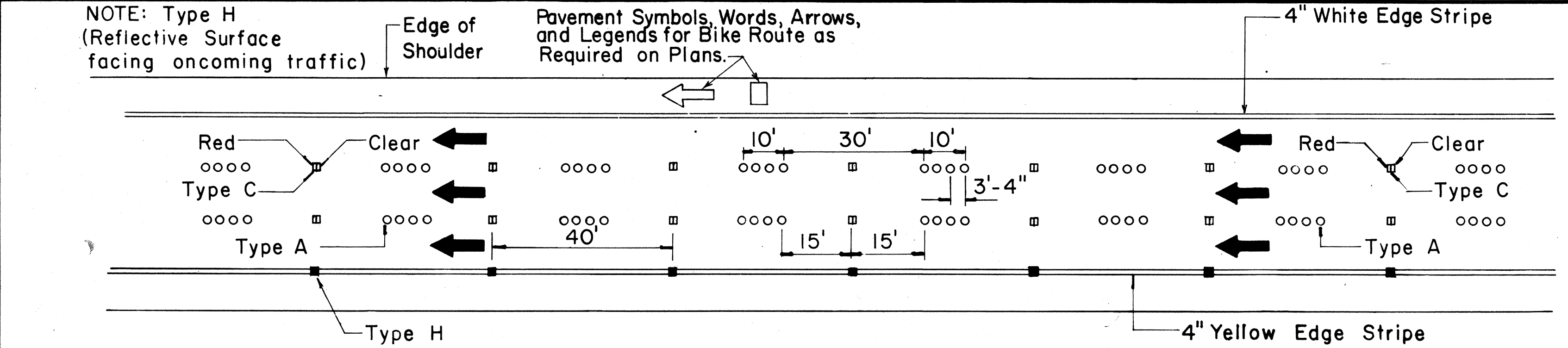


Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

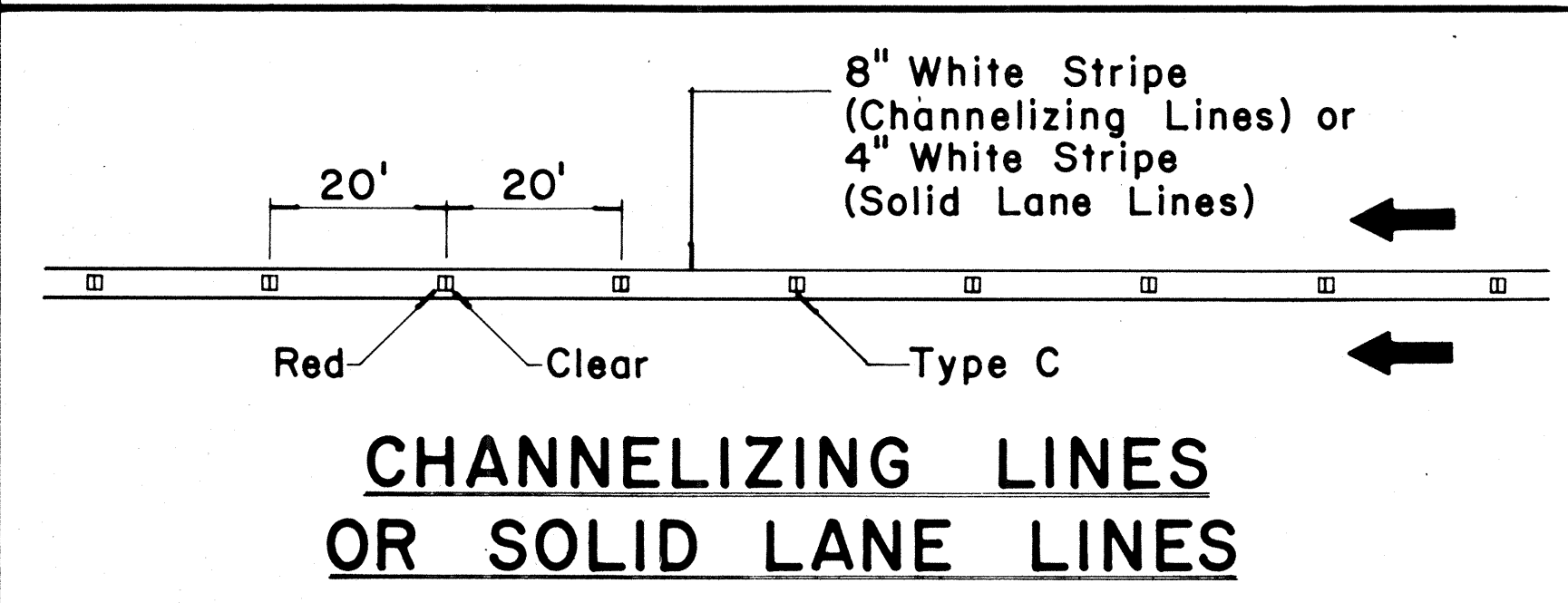
PASSING PROHIBITED ZONES



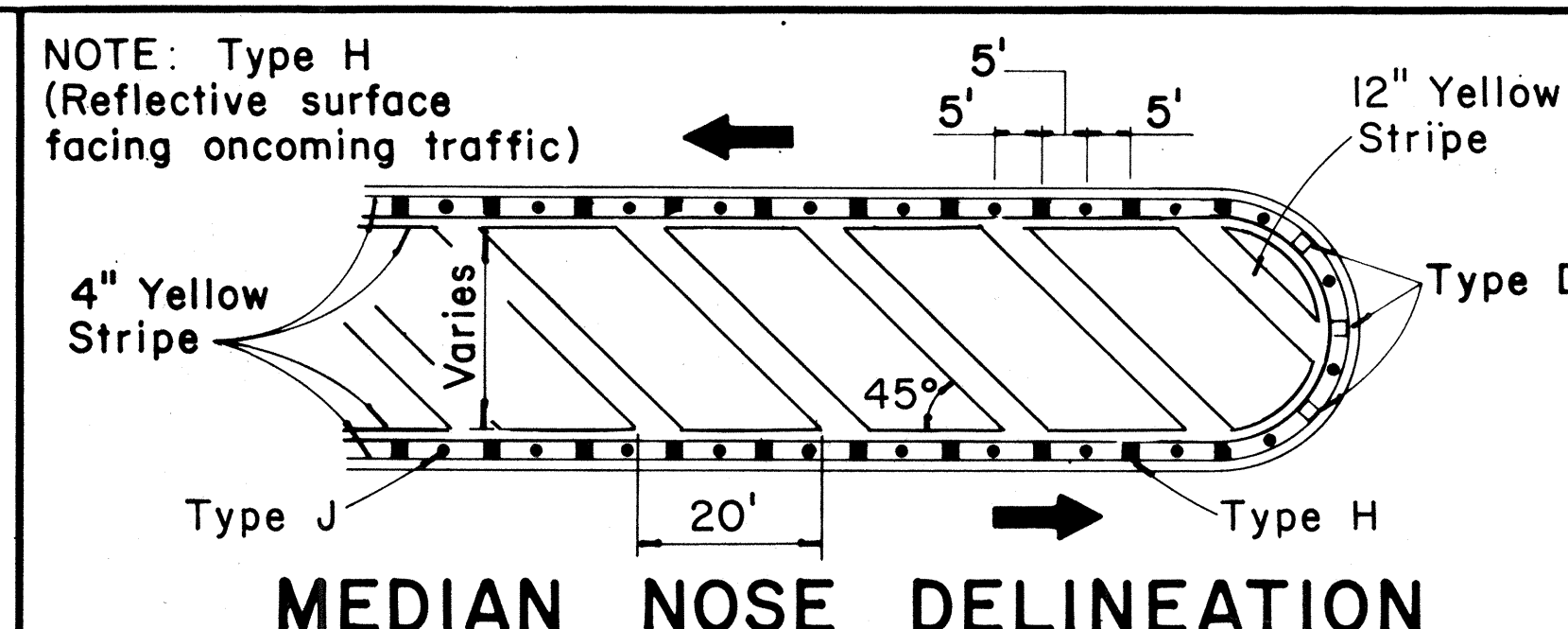
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.



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



CHANNELIZING LINES OR SOLID LANE LINES



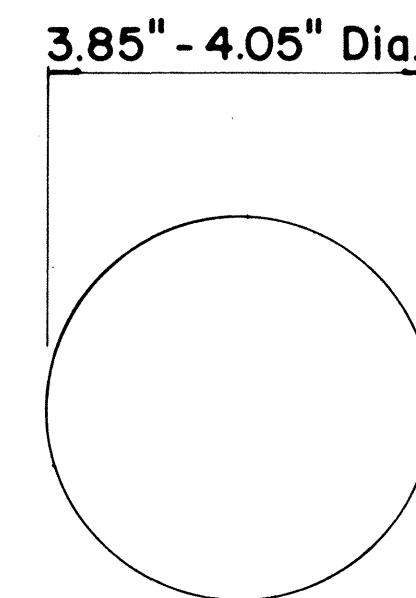
MEDIAN NOSE DELINEATION

TWO - LANE

MULTI - LANE

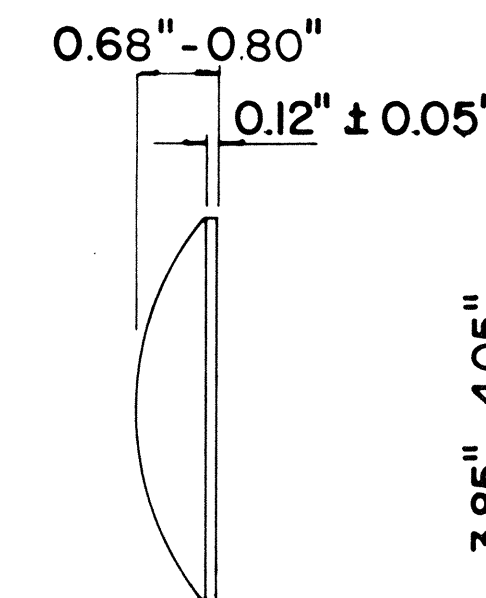
DIVIDED HIGHWAY AND FREEWAY

MISCELLANEOUS



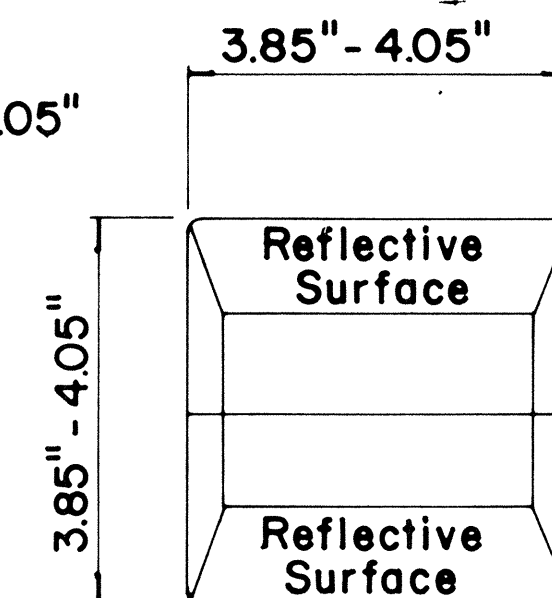
TYPE A

NON - REFLECTIVE WHITE MARKER



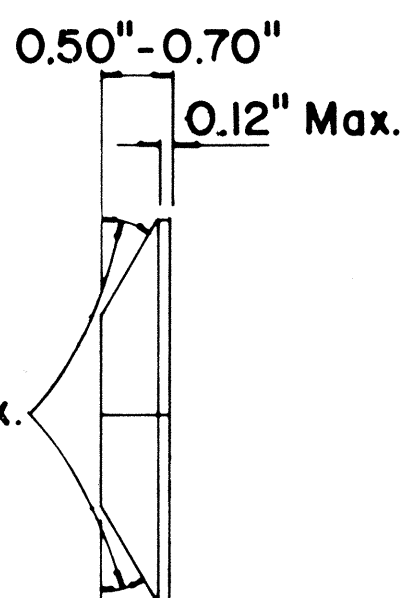
TYPE J

NON - REFLECTIVE YELLOW MARKER



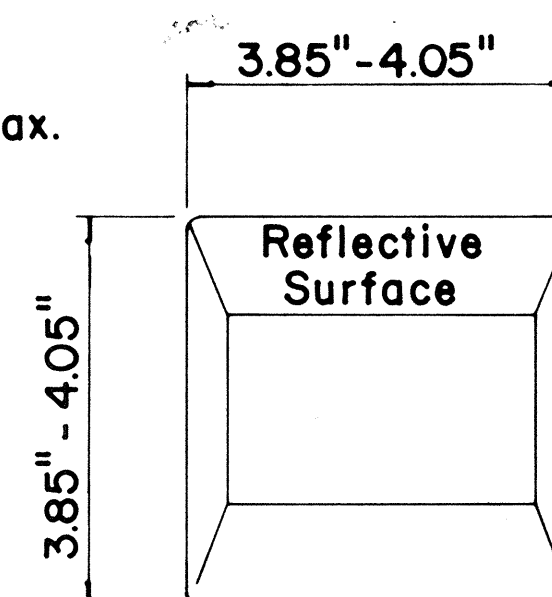
TYPE C

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.

LEGEND

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

APPROVAL RECOMMENDED:

Erick Tanaka
TRAFFIC ENGINEER

7/21/78
DATE

APPROVED:

Harbert J. Deleish
ASSISTANT CHIEF, ENGINEERING

1/24/78
DATE

No.	REVISION	APPROVED BY	DATE
1	Supersedes 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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS
AND STRIPING

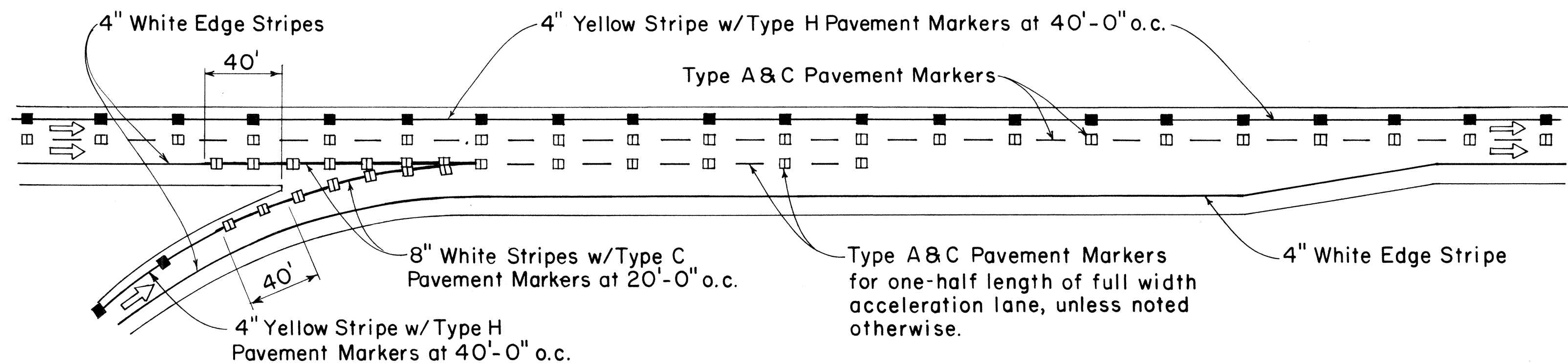
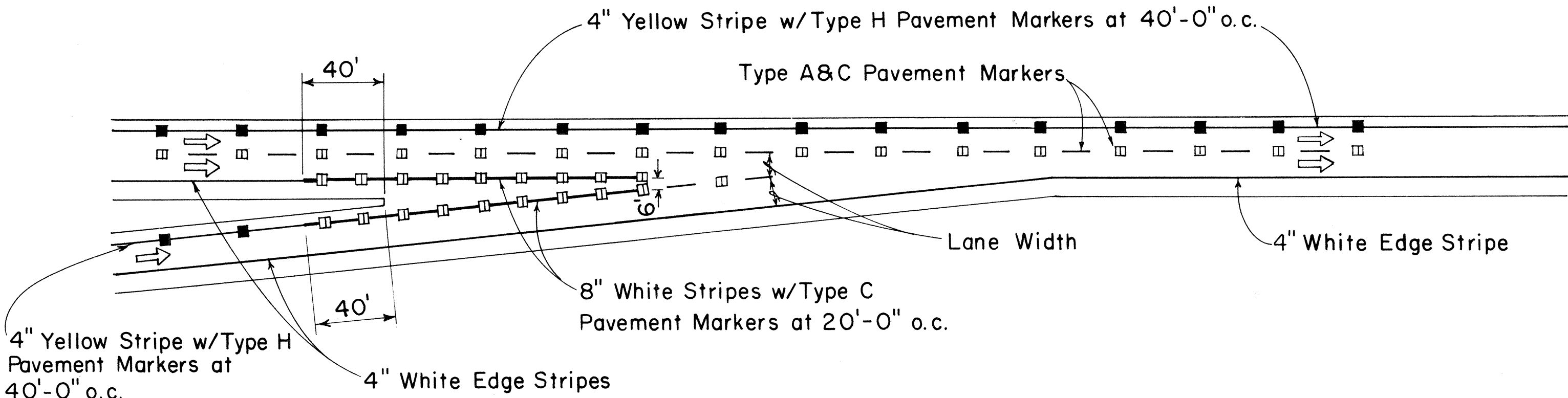
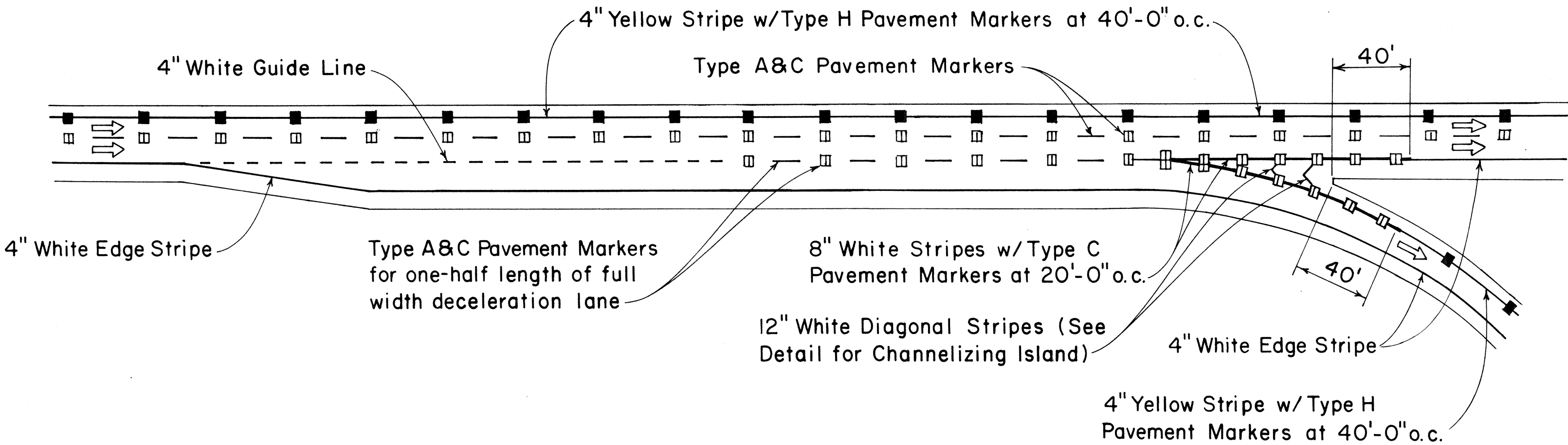
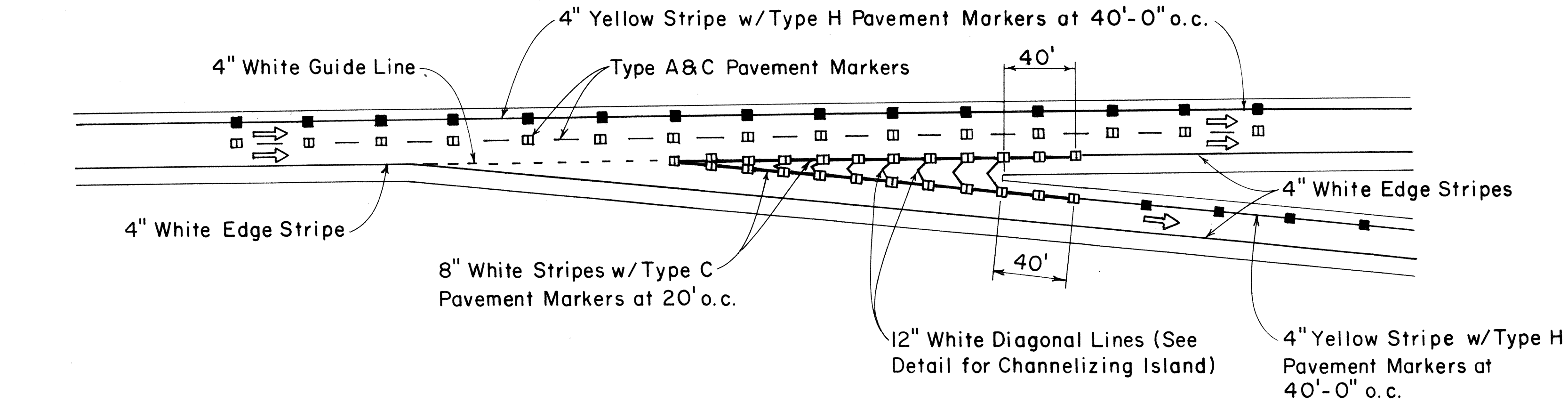
Not to Scale July 1978
SHEET No. 7 OF 13 SHEETS DT 300

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	150A-01-62M	1982	20	24

GENERAL NOTES:

1. Pavement Markings 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 details, see sheet DT 300.

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



TAPERED DECELERATION LANE

PARALLEL DECELERATION LANE

TAPERED ACCELERATION LANE

PARALLEL ACCELERATION LANE

TYPICAL ROADWAY EXIT MARKINGS

TYPICAL ROADWAY ENTRANCE MARKINGS

APPROVAL RECOMMENDED:
Erich Tanaka 1/21/78
TRAFFIC ENGINEER DATE

APPROVED:
Robert S. Sakai 1/24/78
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

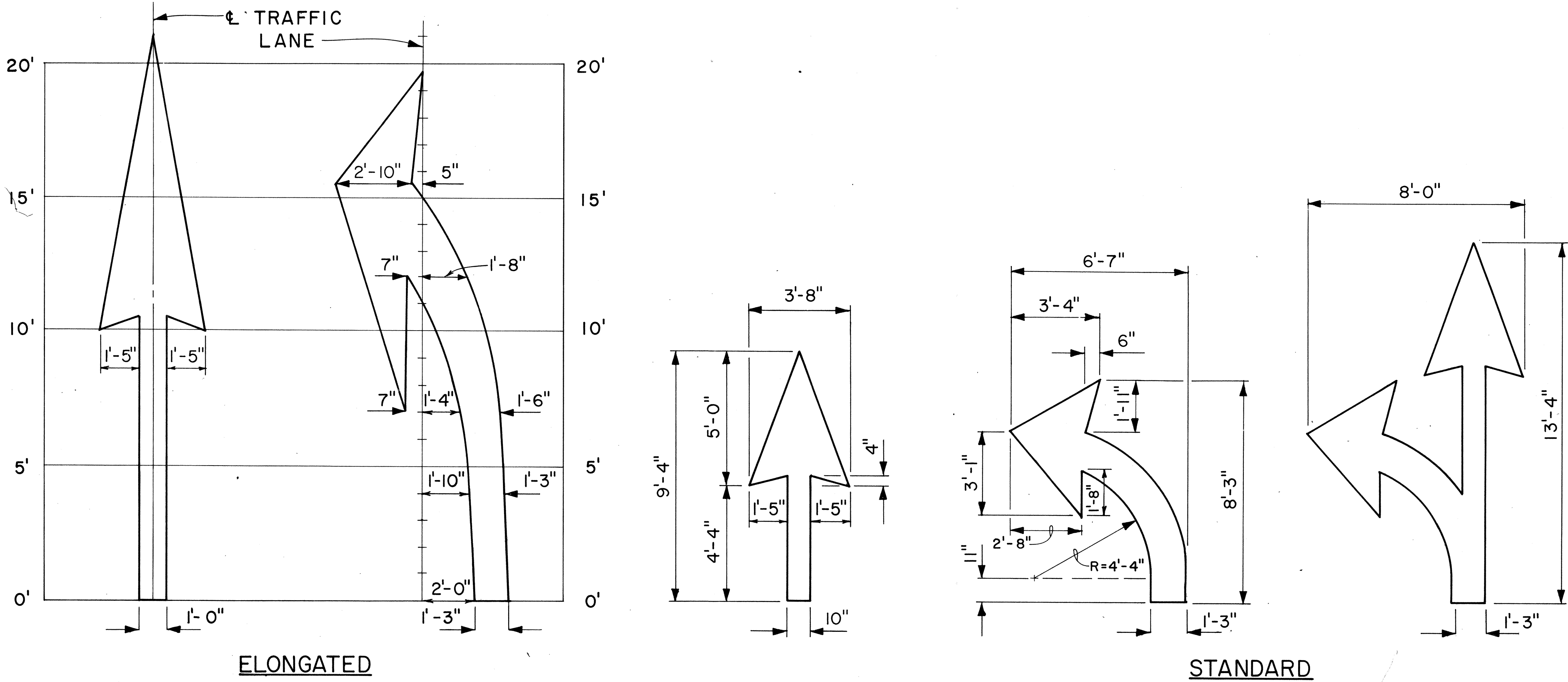
STANDARD DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

Not to Scale July 1978
SHEET NO. 2 OF 3 SHEETSDT 304

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	21	24

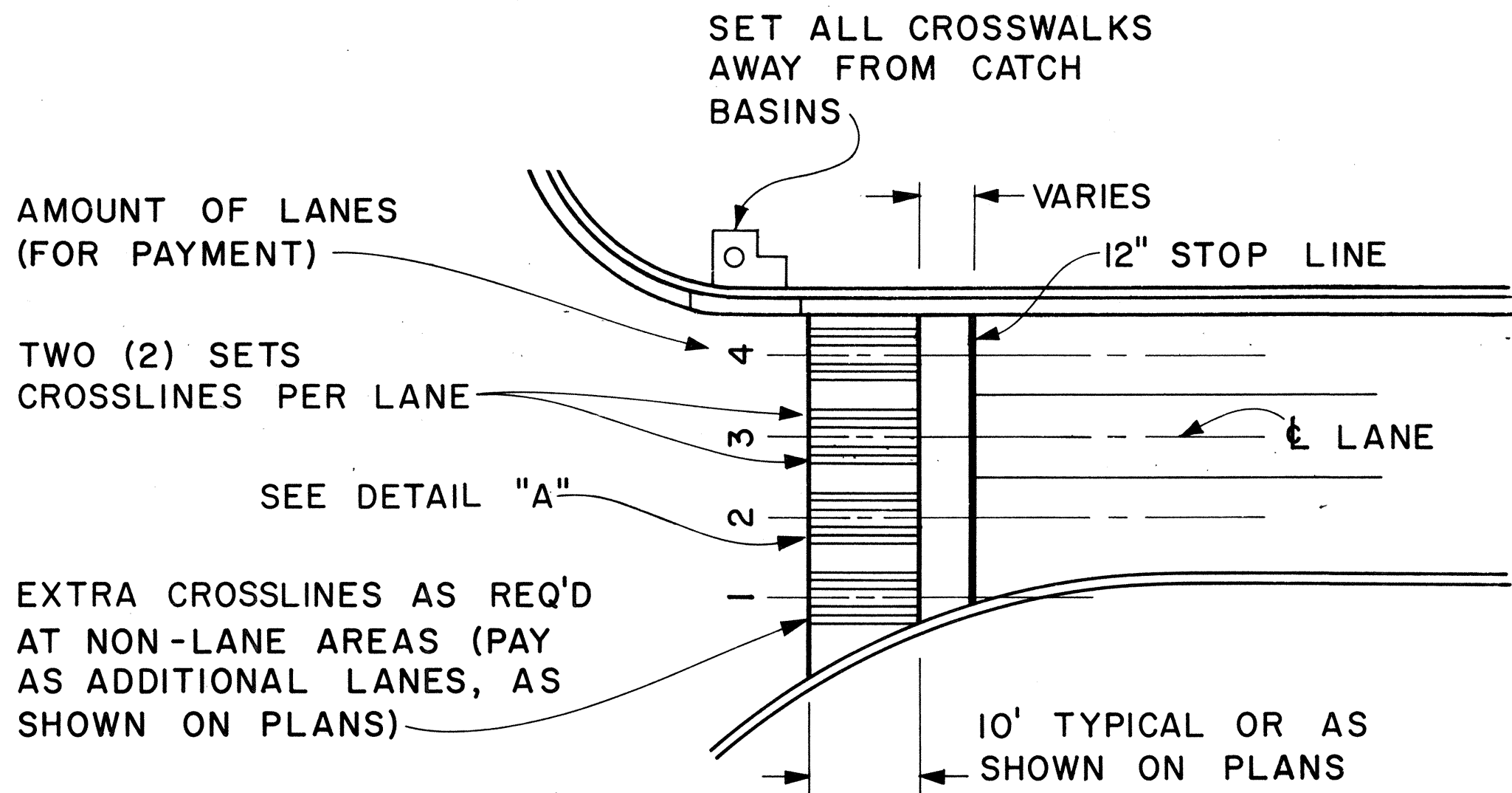
GENERAL NOTES:

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.

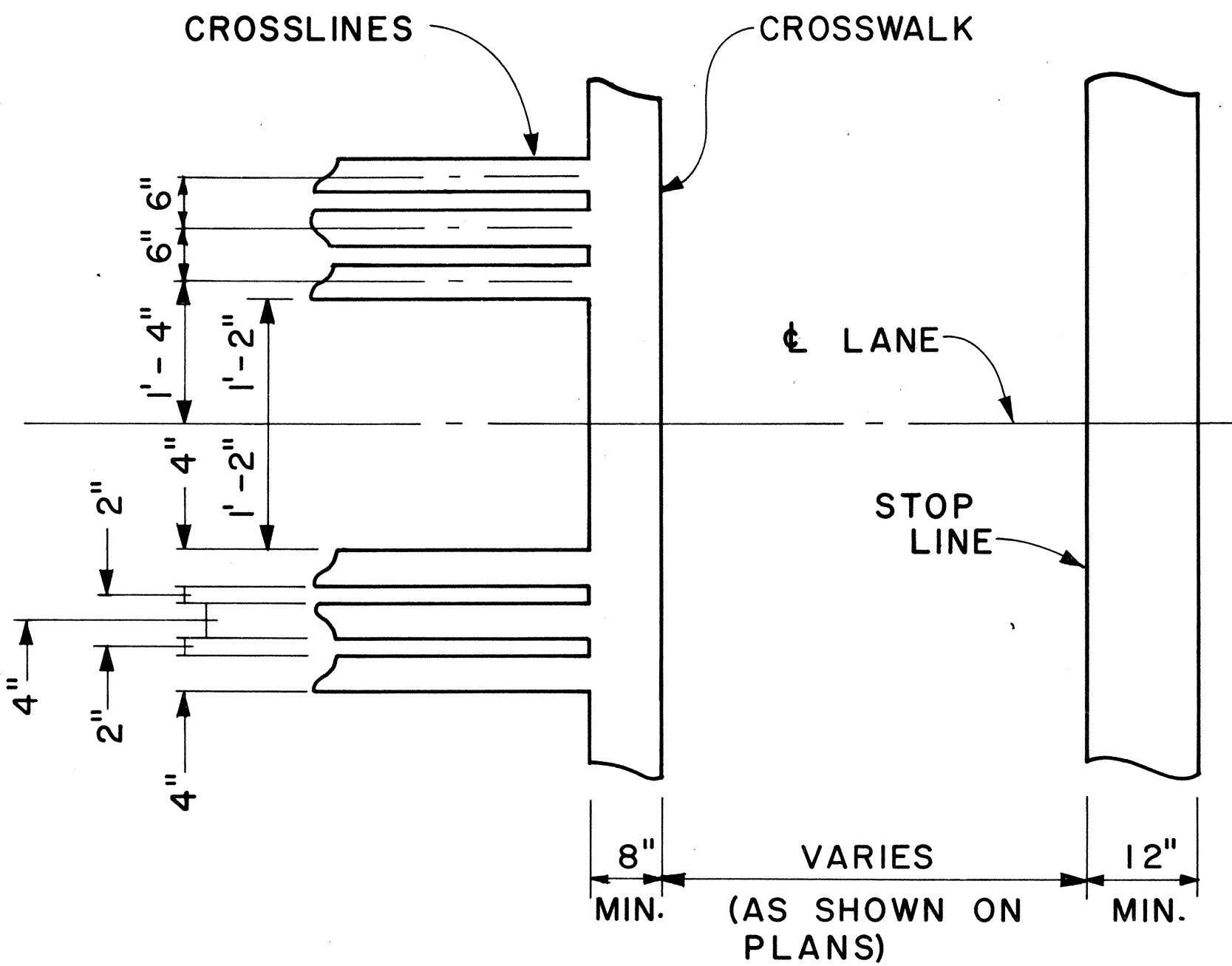


PAVEMENT ARROWS

Scale: 3/8" = 1'



PLAN



DETAIL "A"

CROSSWALK & STOP LINE

Scale: Not to Scale

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

APPROVED:
Robert S. Sakai
 ASSISTANT CHIEF, ENGINEERING
 5/3/78
 DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

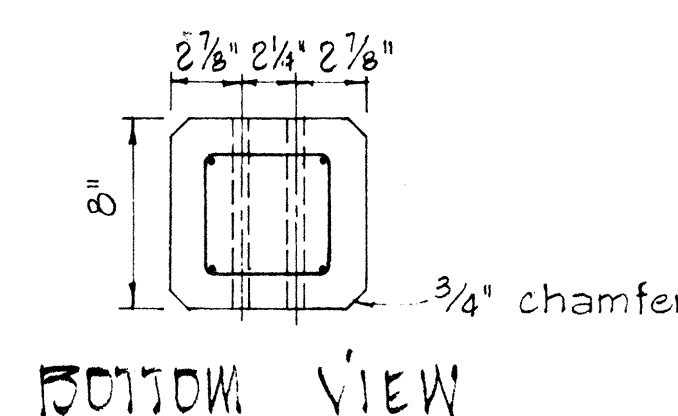
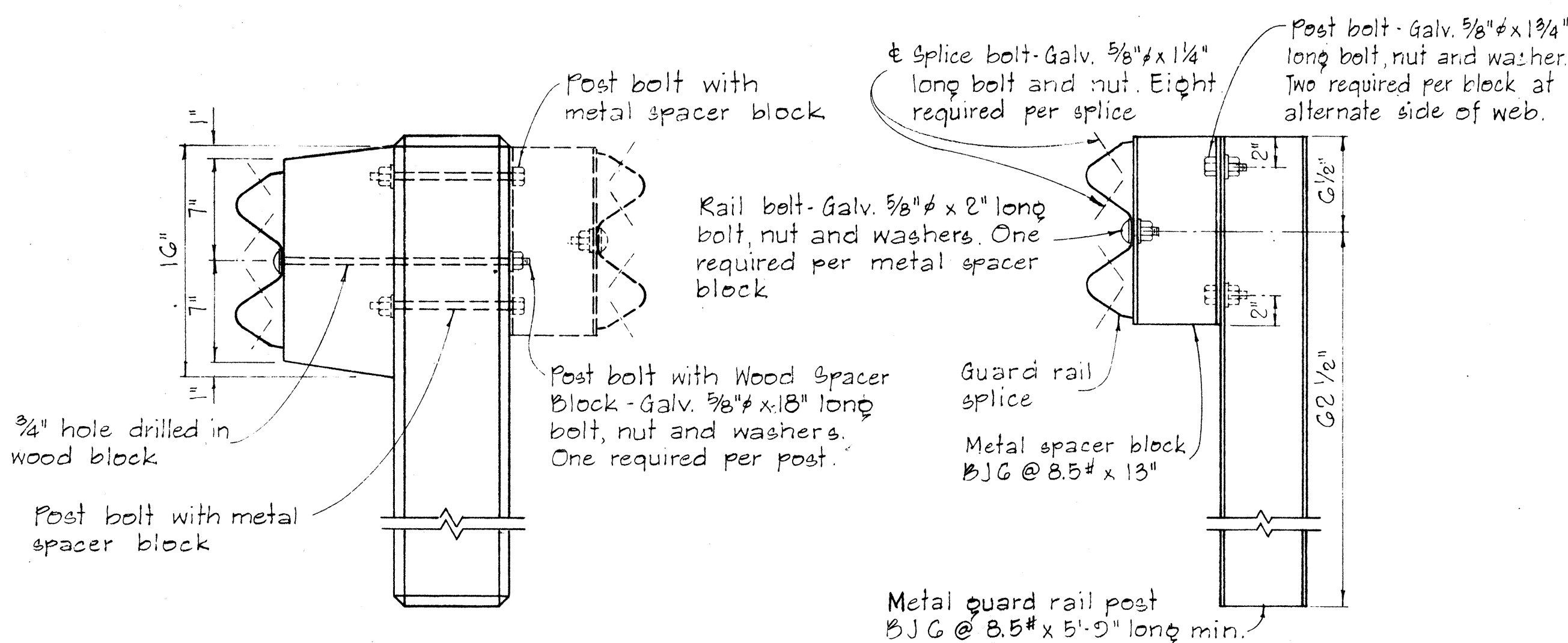
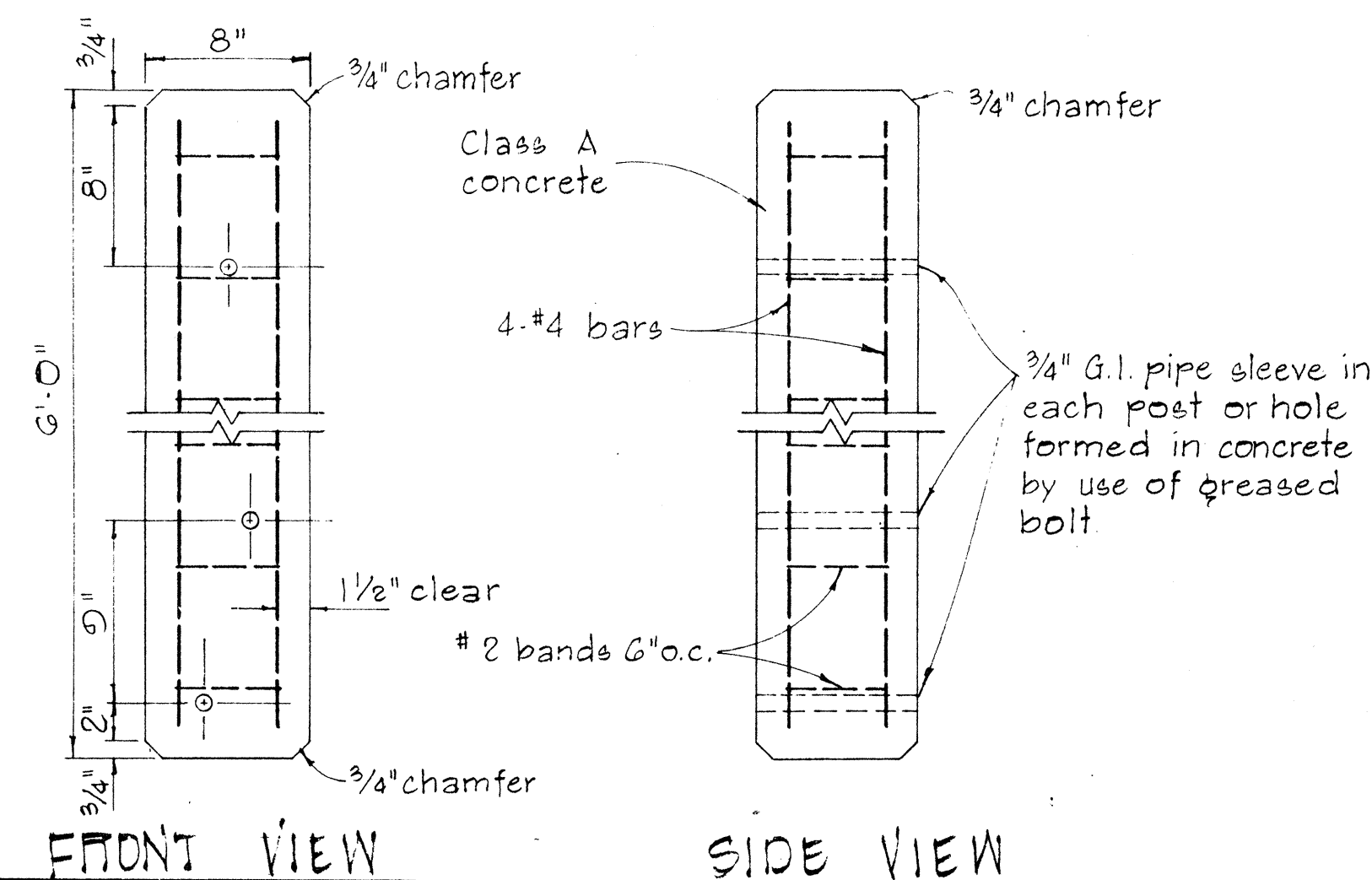
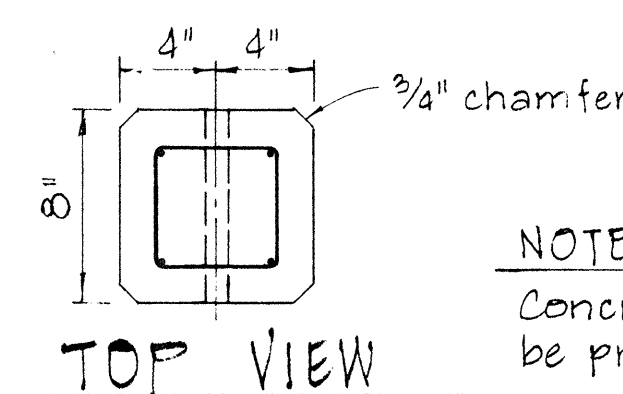
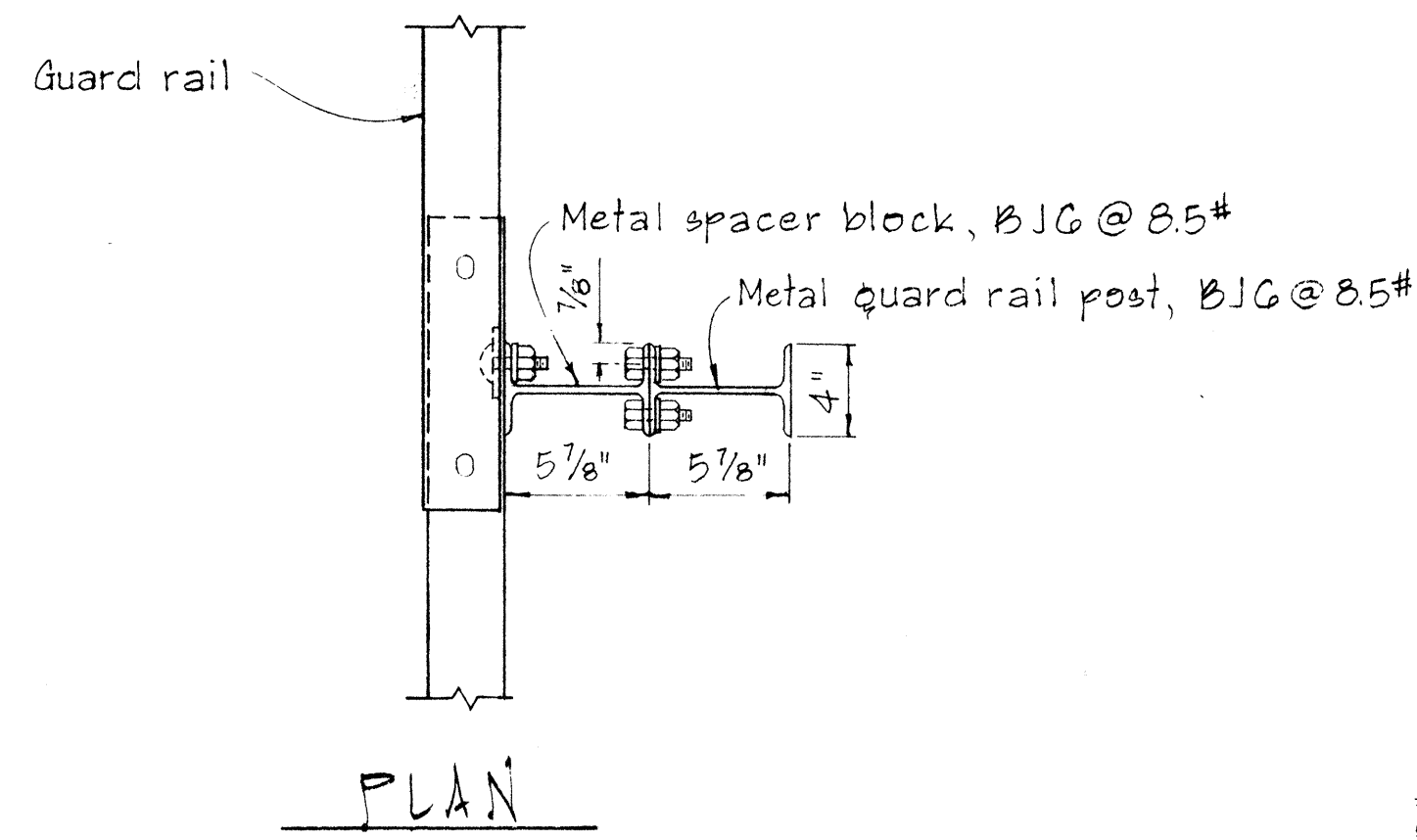
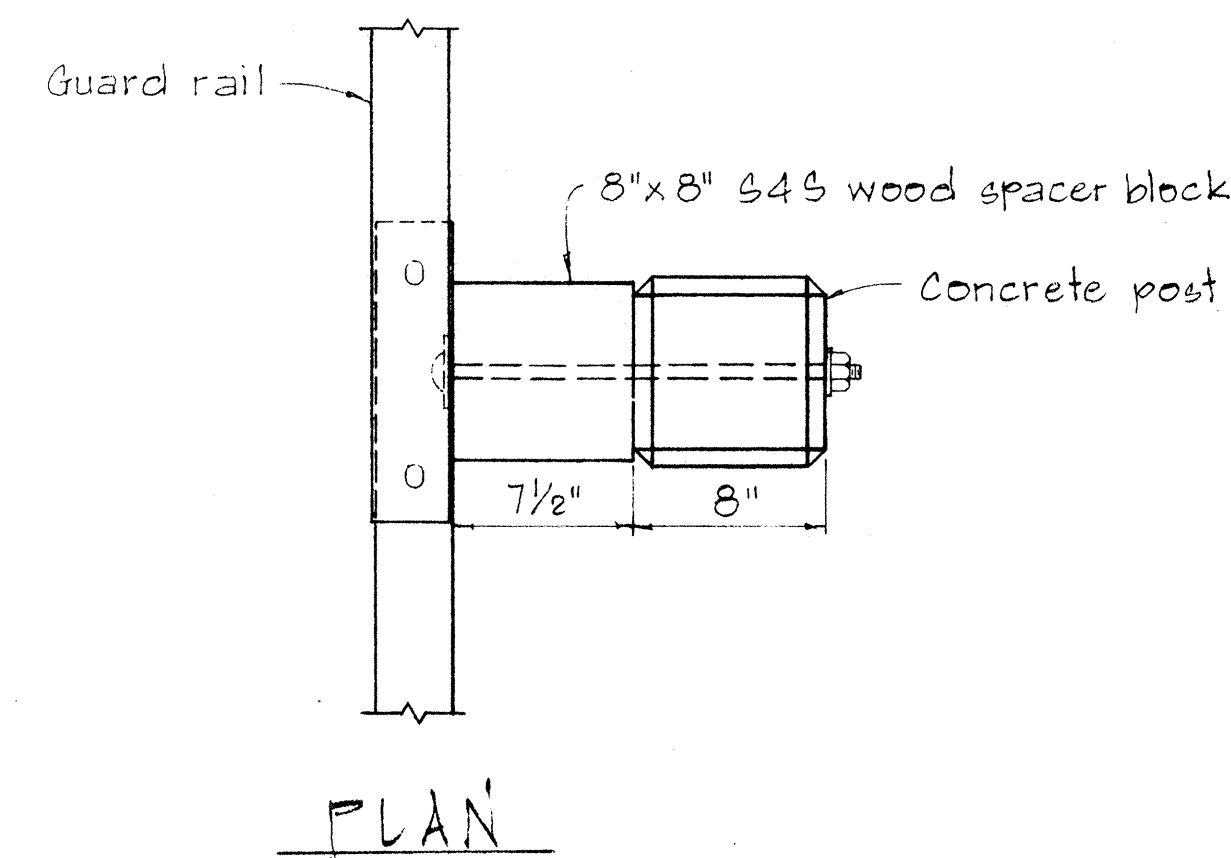
STANDARD DETAILS

MISCELLANEOUS
 PAVEMENT MARKINGS

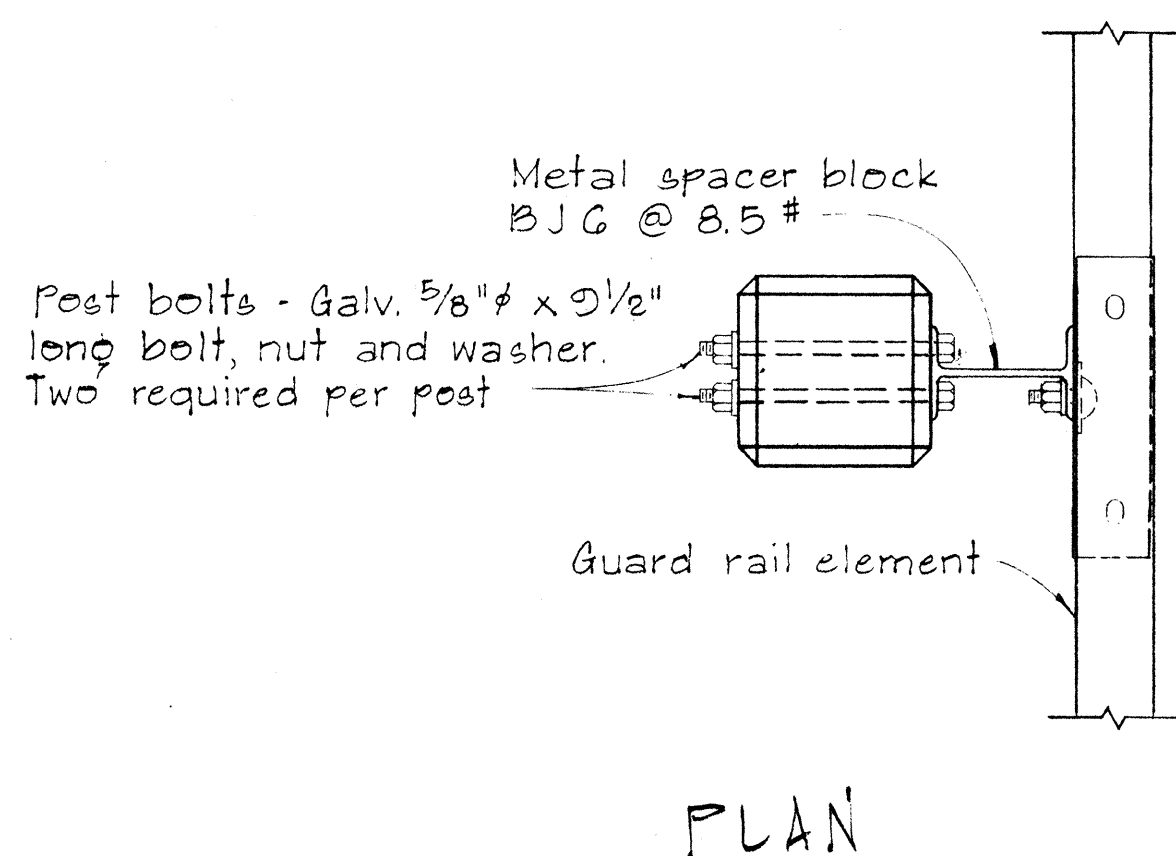
Scale: As Shown Date: March, 1978

SHEET No. 10 OF 13 SHEETS DT 306

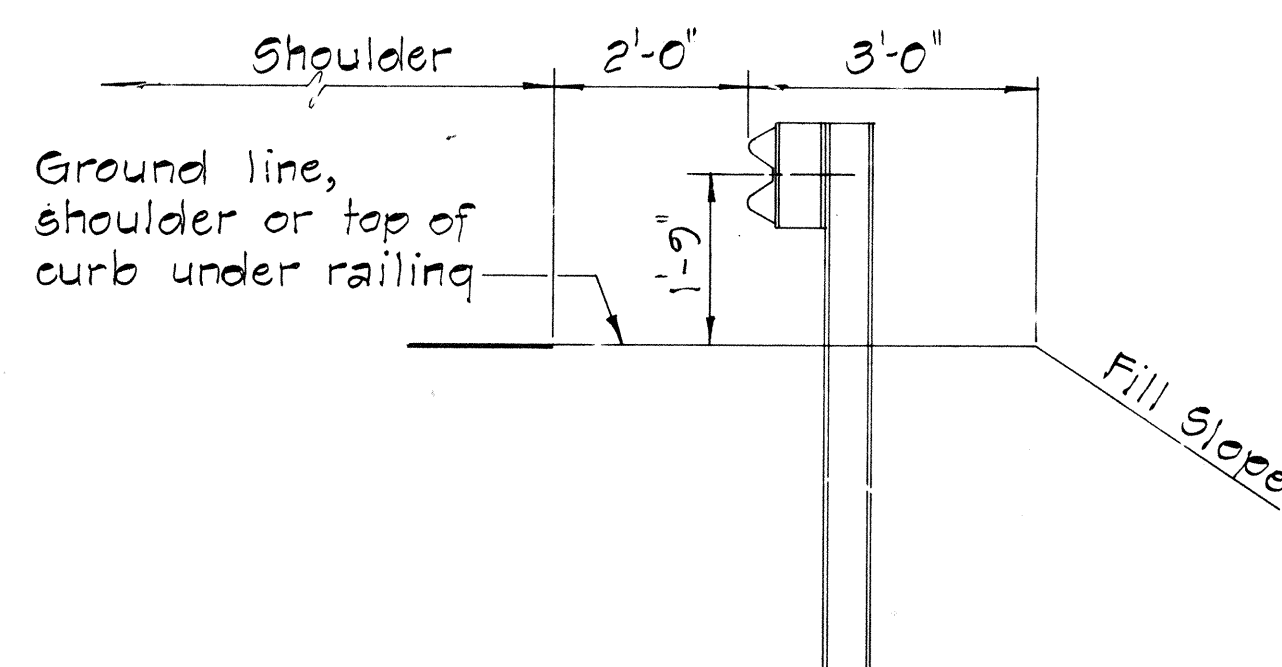
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	22	24



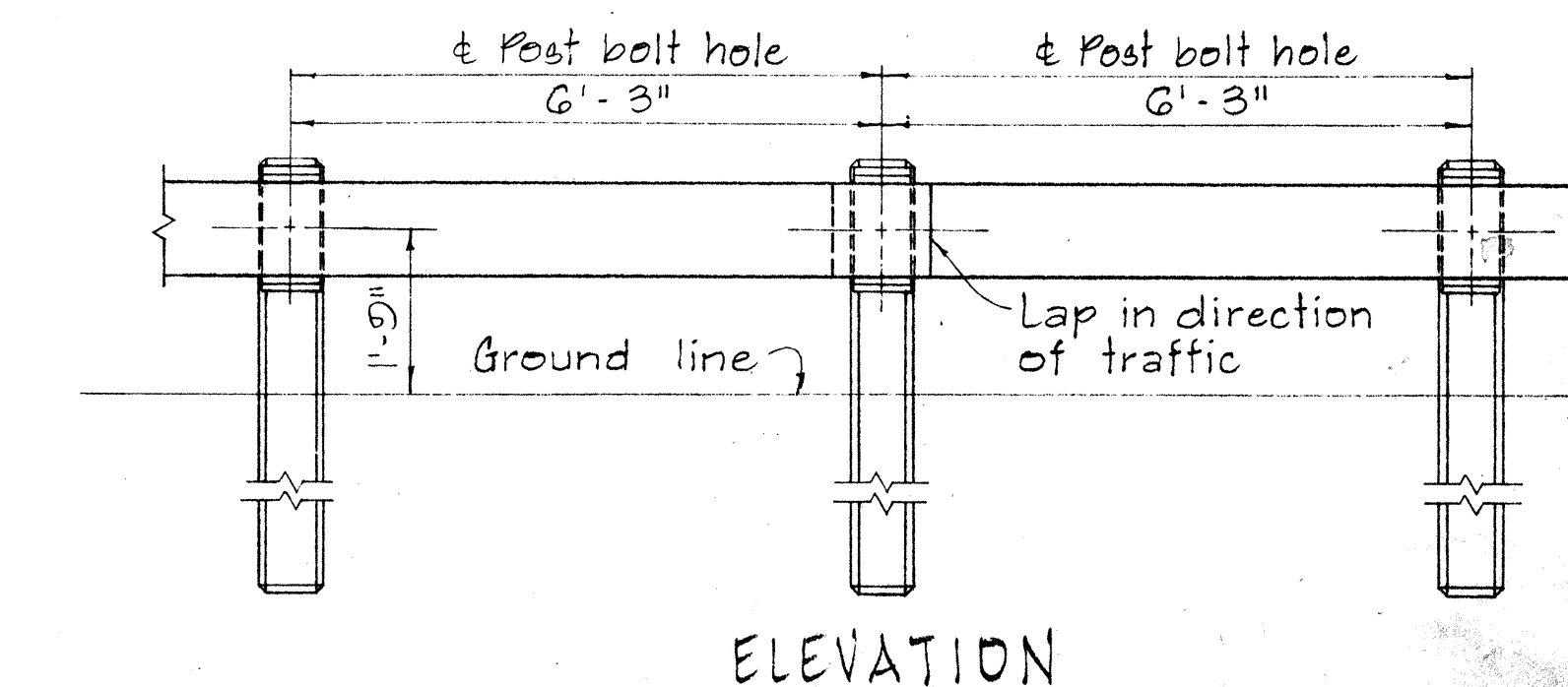
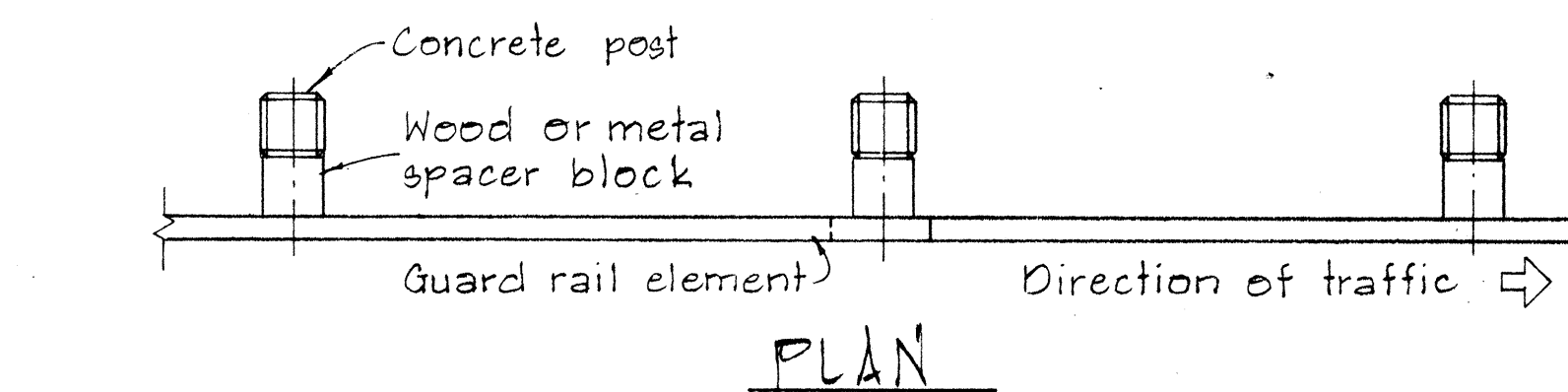
SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"



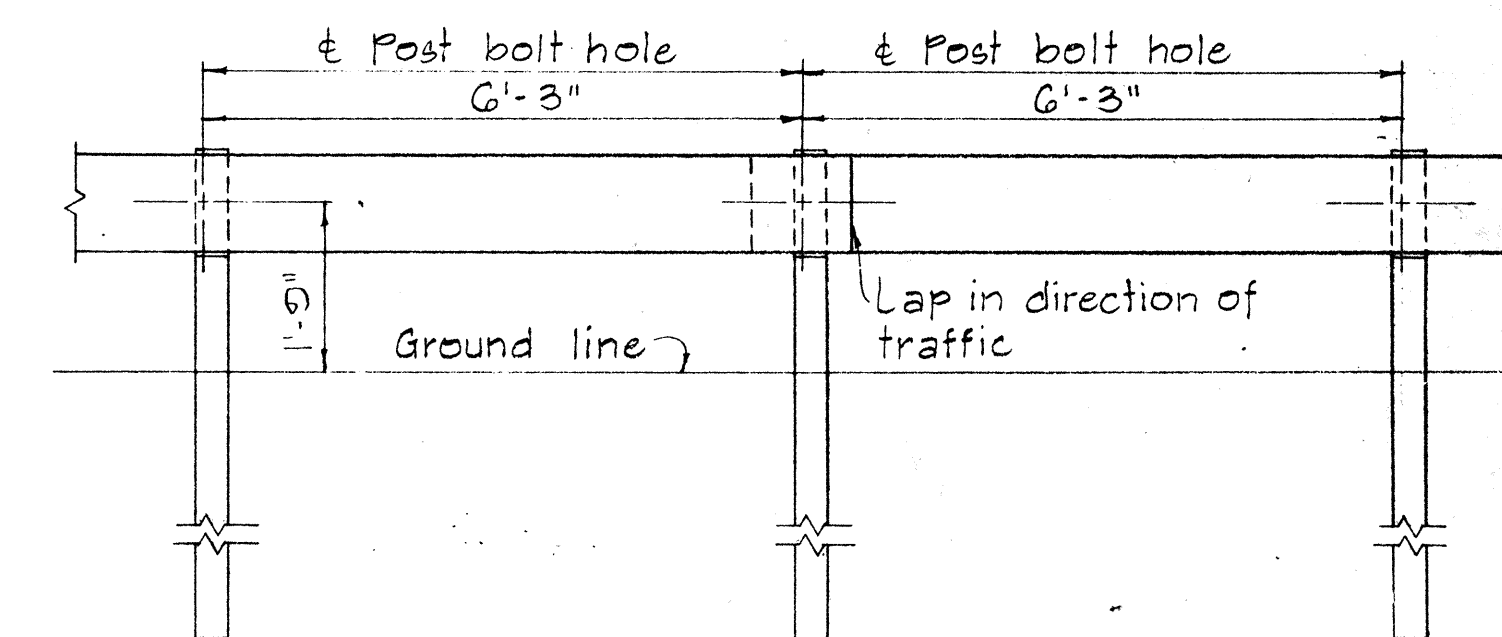
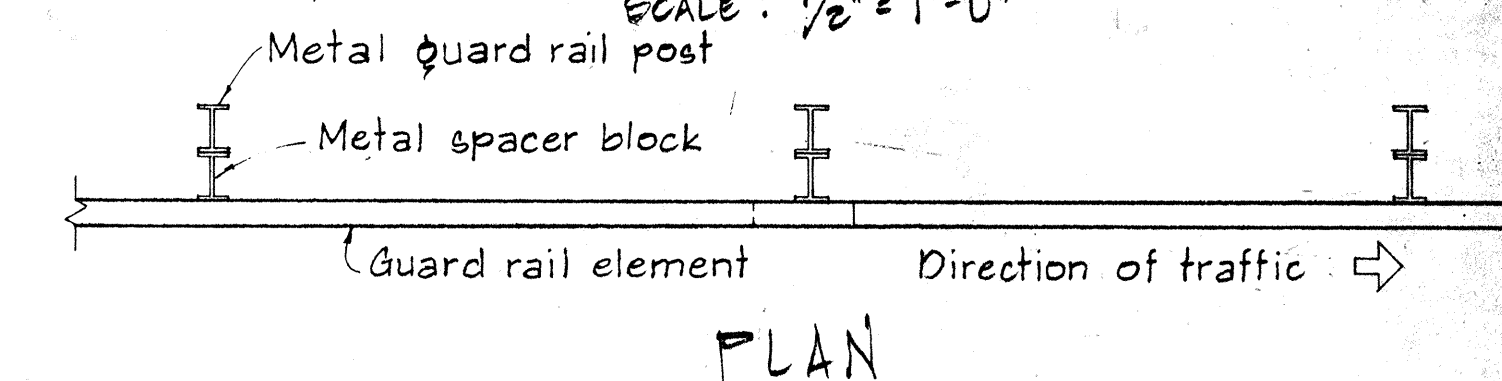
SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"



AT SHOULDER SECTION TYPICAL METAL GUARD RAIL DETAIL
SCALE: 1/2" = 1'-0"



METAL GUARD RAIL ON CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
SCALE: 1/2" = 1'-0"



METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK
SCALE: 1/2" = 1'-0"

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Enoch Tanaka
TRAFFIC ENGINEER 12/29/62
DATE

APPROVED:
Robert J. DeLeon
ASSISTANT CHIEF, ENGINEERING 12-30-62
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
METAL GUARD RAIL

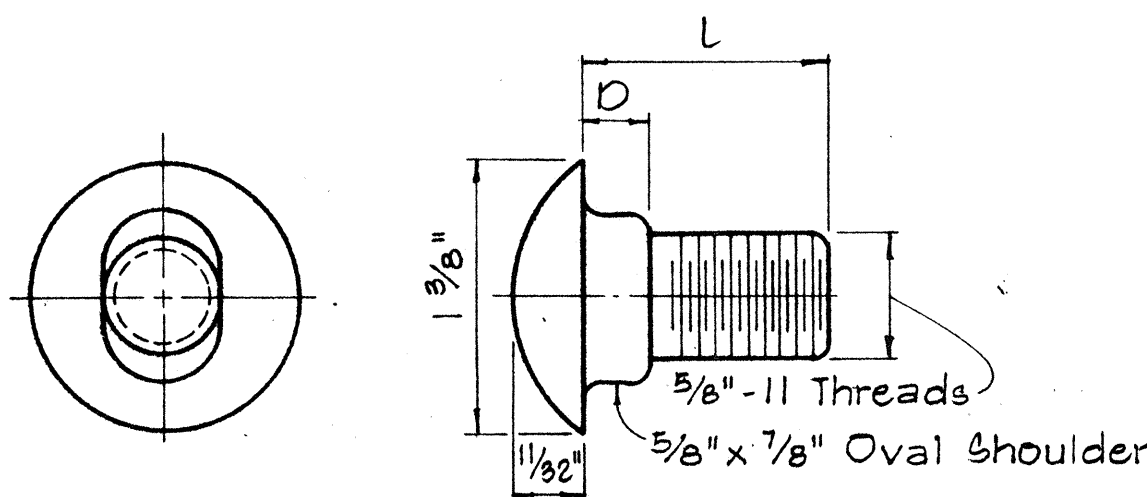
SCALE: AS SHOWN NOV. 1968

SHEET No. 11 OF 13 SHEETS DT 500

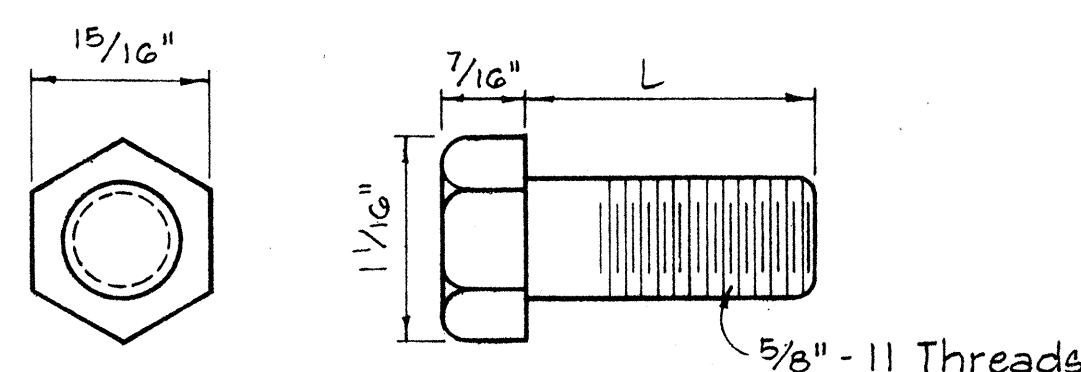
BOLT DIMENSIONS		
TYPE A BOLT		
Splice Bolt	D	L
Post Bolt for Conc. Post w/ Double Wood Blocks	5/16"	1 1/4"
Post Bolt for Conc. Post w/ Single Wood Block	3/32"	24"
Rail Bolt for Metal Block	3/32"	18"
	2 1/2"	2"

BOLT DIMENSIONS		
TYPE B BOLT		
Post Bolt for Conc. Post w/ Metal Blocks		9 1/2"
Post Bolt for Metal Post w/ Metal Block		1 3/4"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	23	24



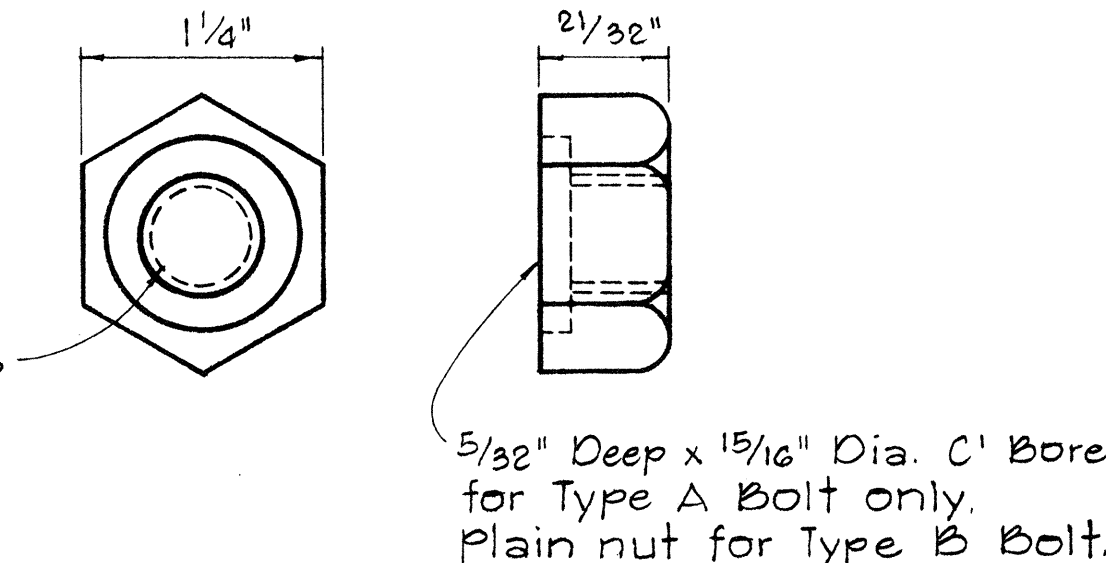
TYPE A BOLT



TYPE B BOLT

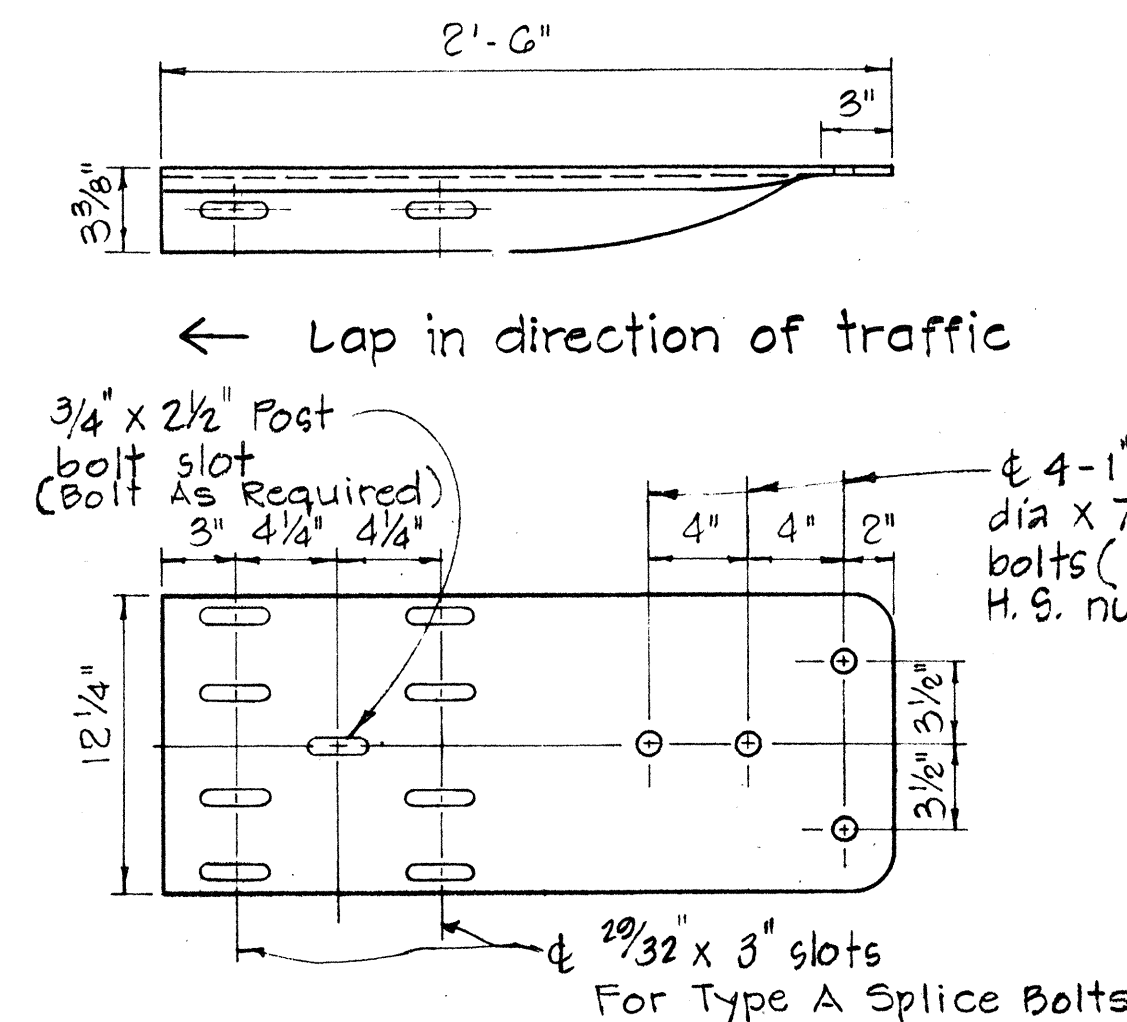
SPlice RAIL AND POST BOLTS

Scale: Full Size



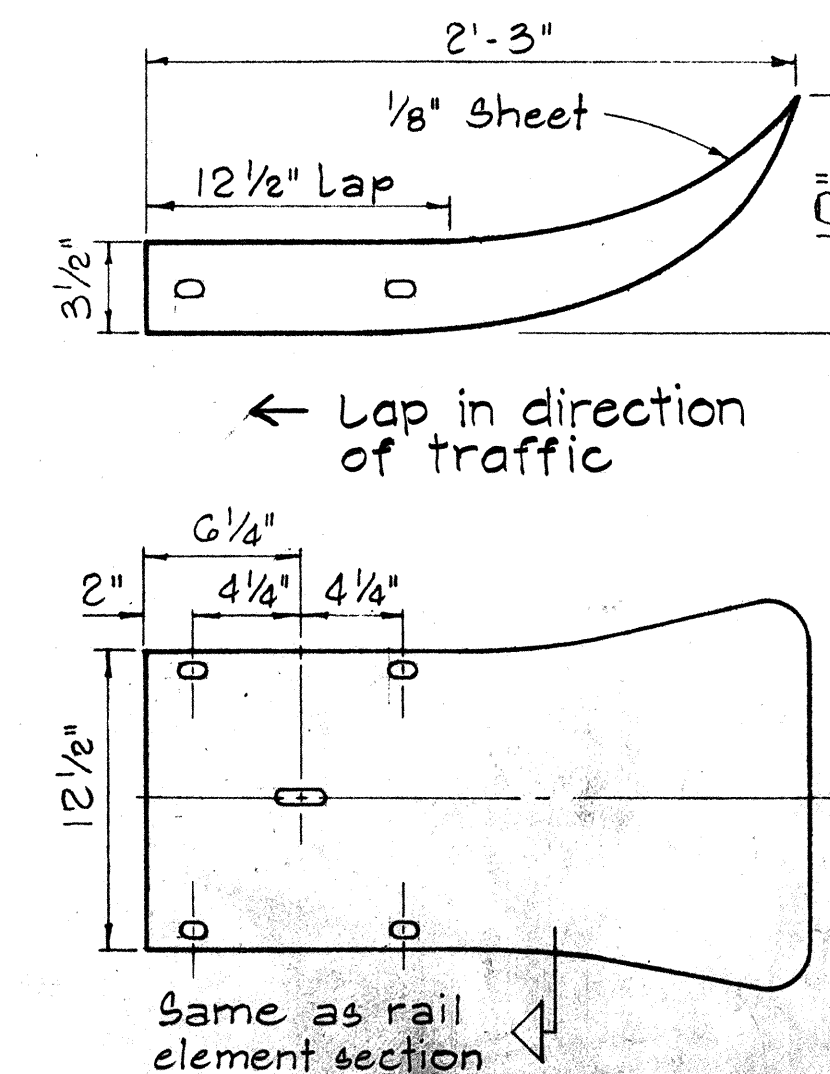
HEXAGON NUT

Scale: Full Size



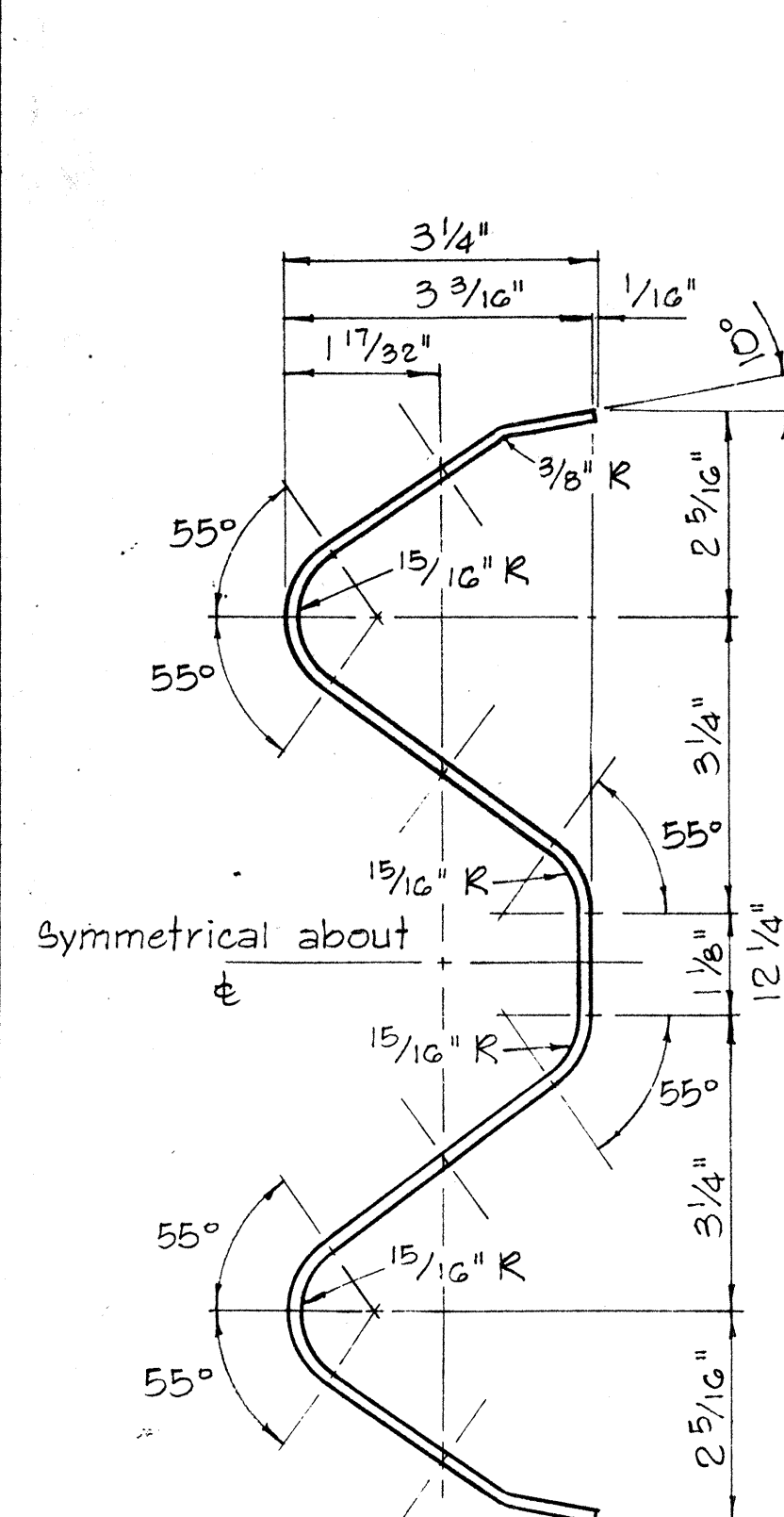
SPECIAL END SHOE

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



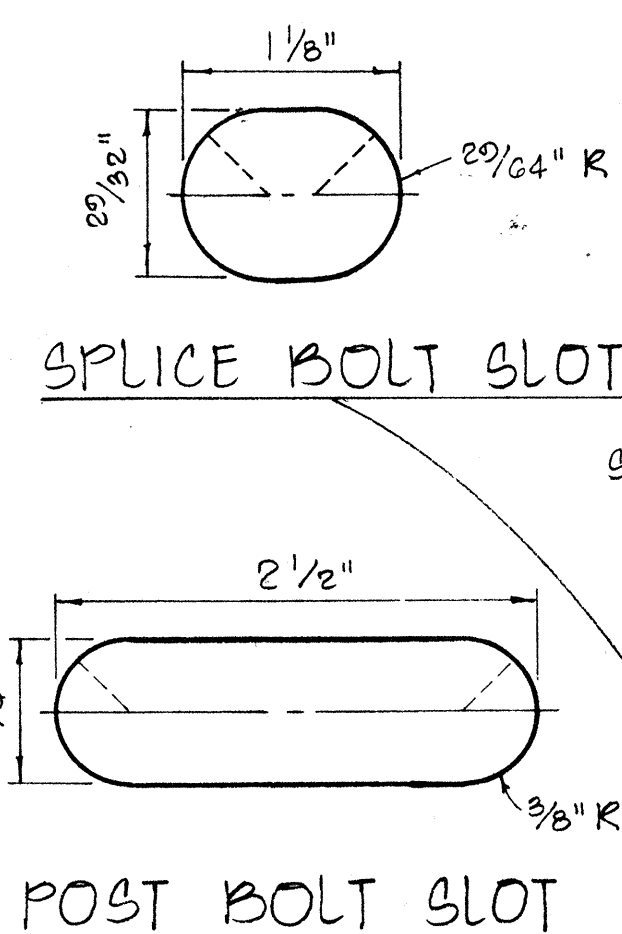
FLARED END

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



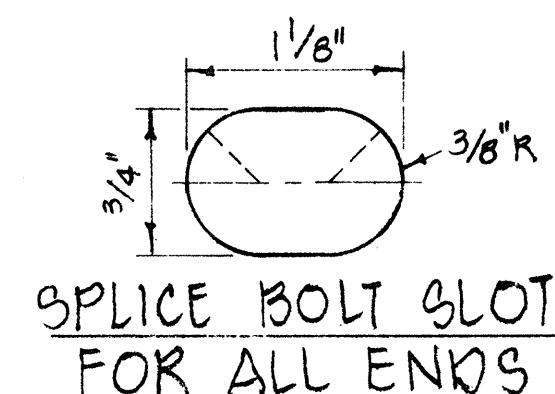
RAIL ELEMENT SECTION

Scale: 6" = 1'-0"

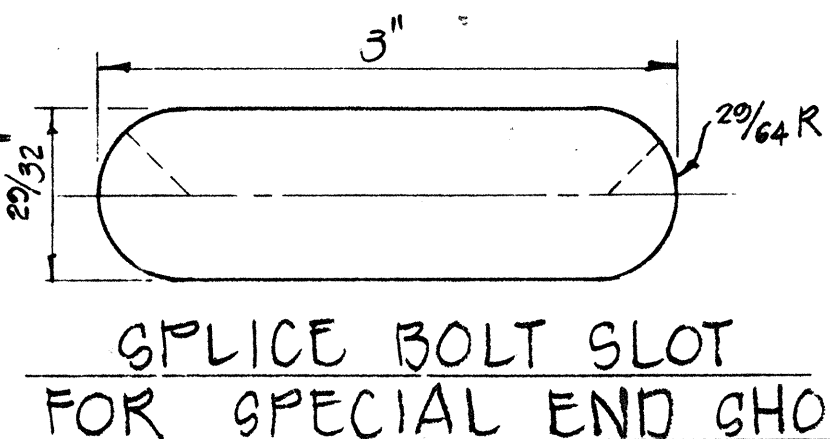


SPlice BOLT SLOT

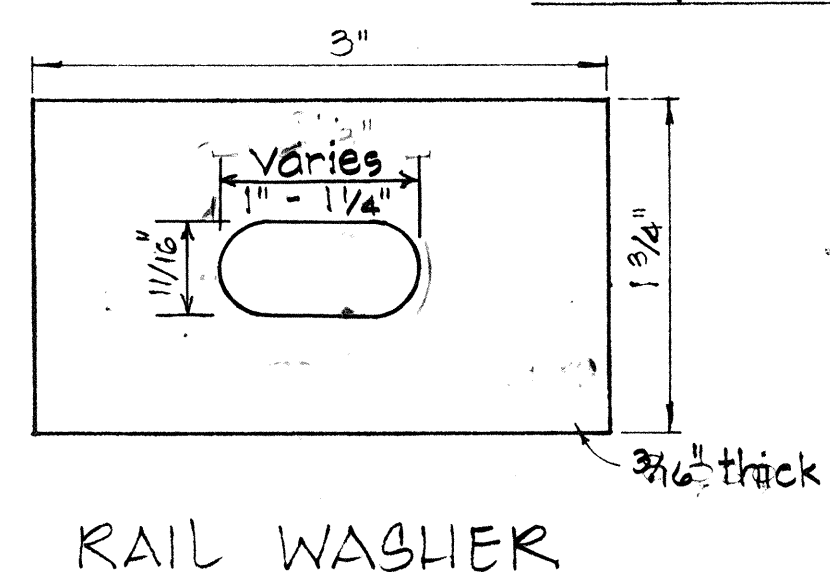
Scale: Full Size



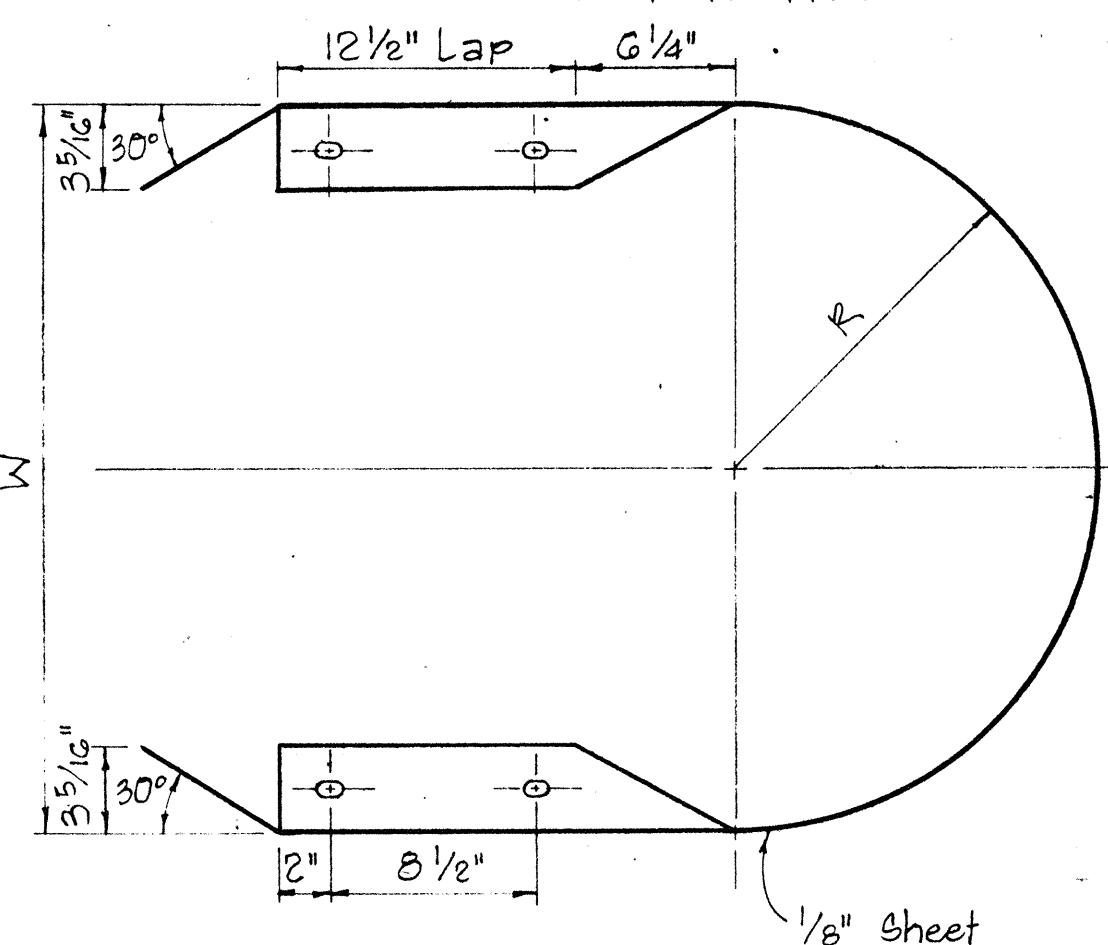
SPlice BOLT SLOT FOR ALL ENDS



SPlice BOLT SLOT FOR SPECIAL END SHOE

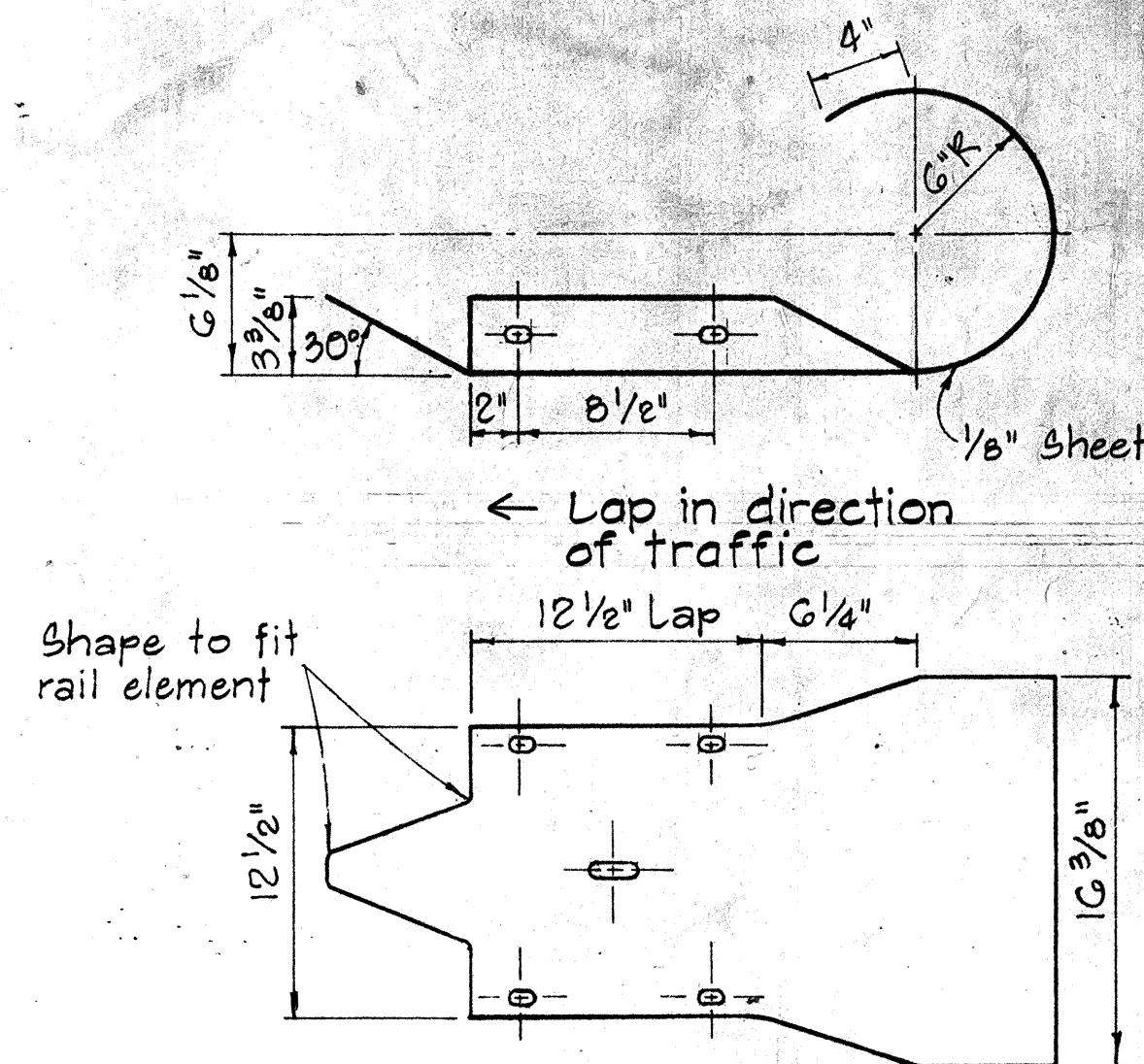


RAIL WASHER



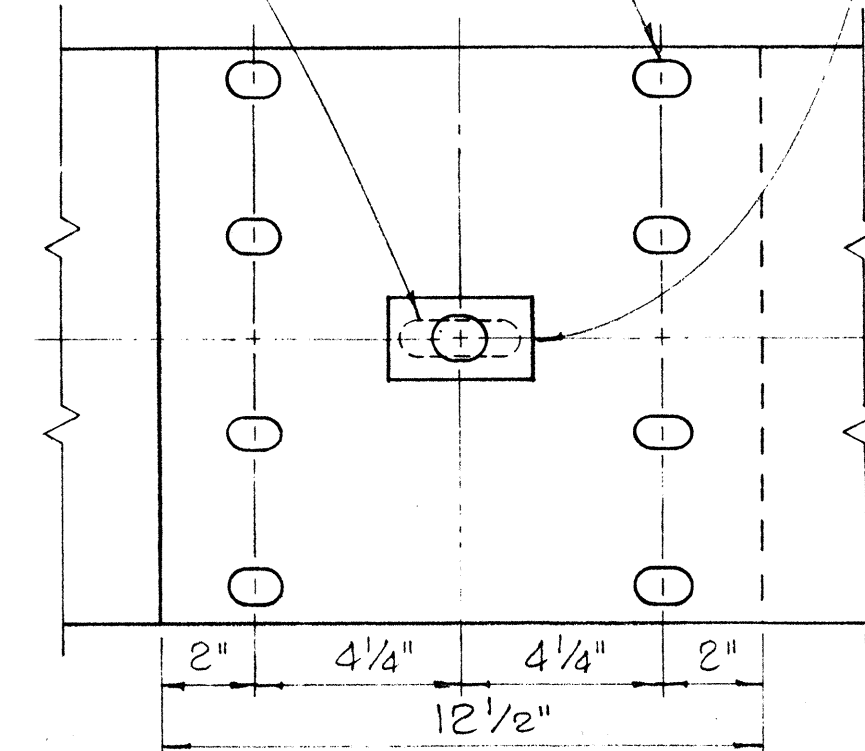
MEDIAN END

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



CURVED END

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



RAIL SPlice

Scale: 3" = 1'-0"

NOTES:

1. H.S. Bolts shall conform to the requirements of ASTM A 325.
2. Special End Shoe shall be fabricated from 10 Gage steel conforming to the requirements of AASHTO 180.

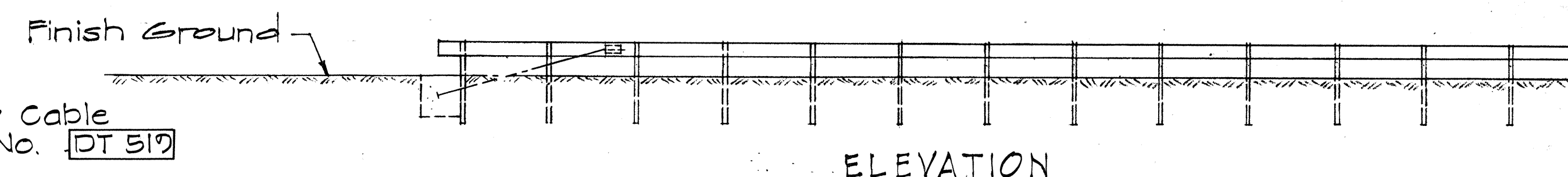
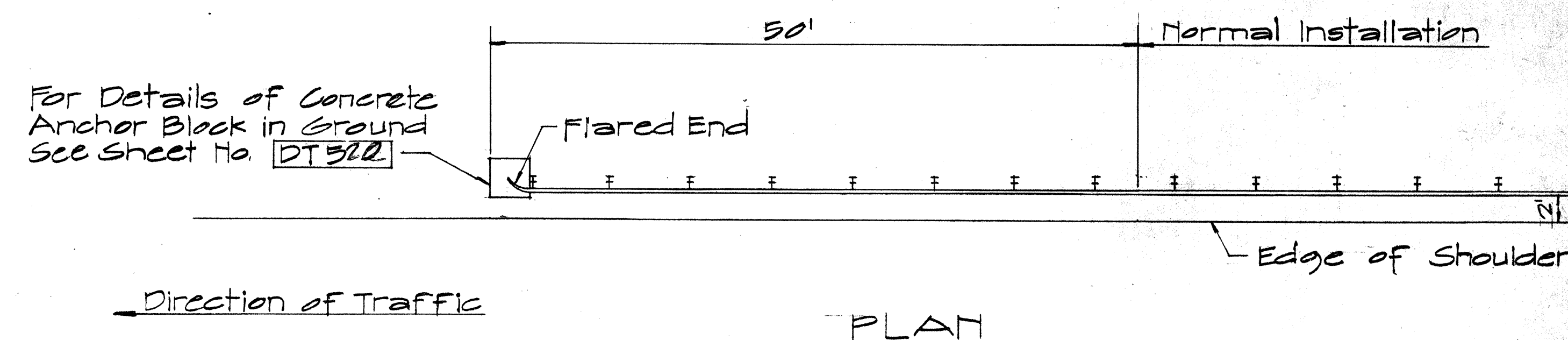
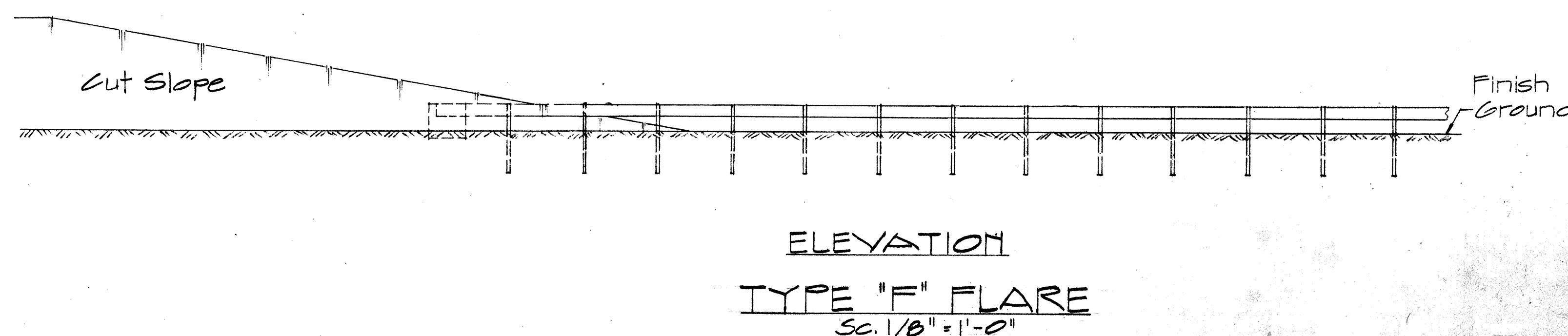
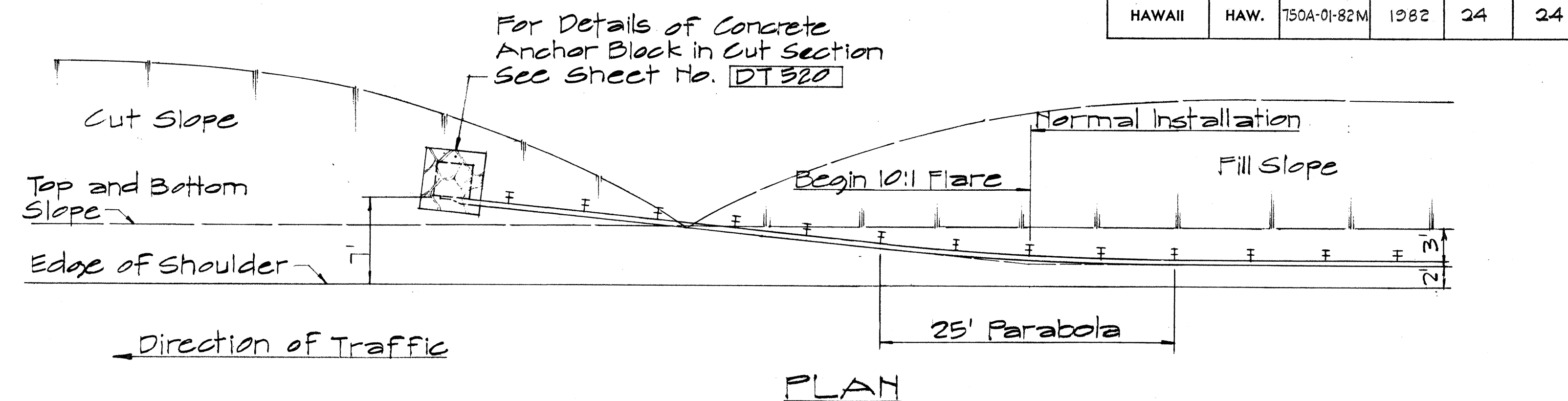
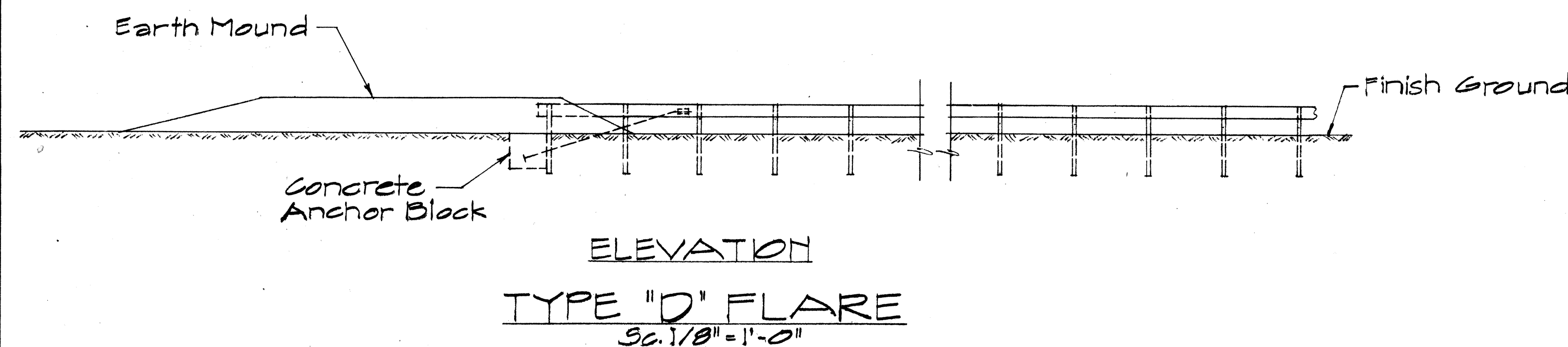
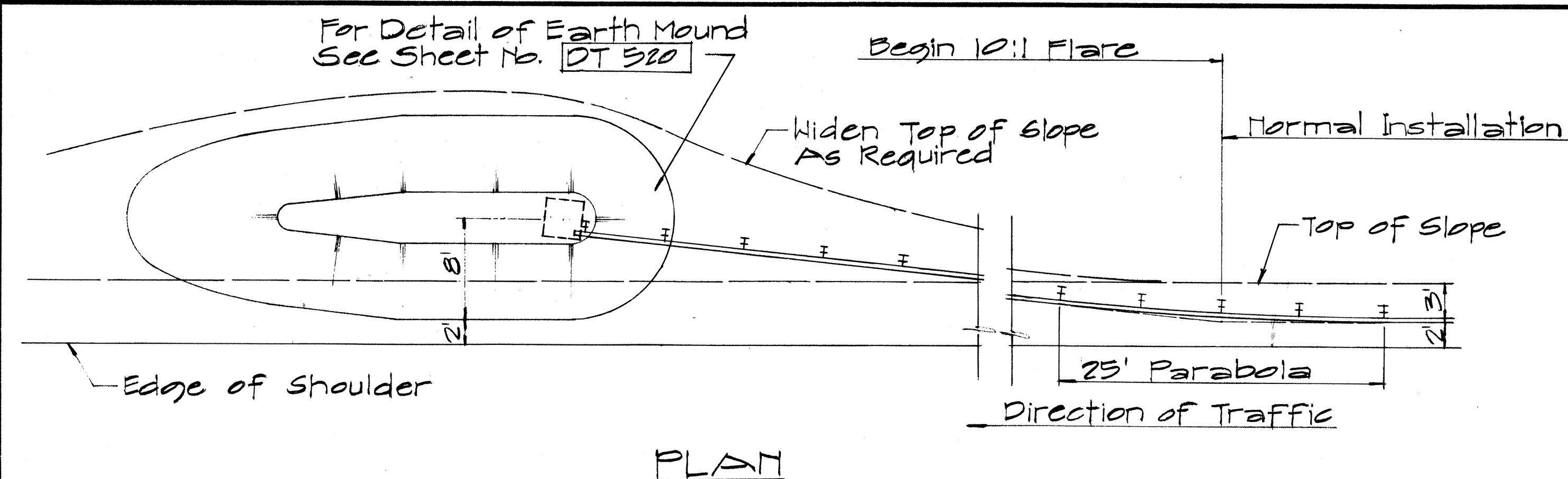
MEDIAN END DIMENSIONS		
TYPE OF POST AND BLOCK	W	R
Double Metal Guard Rail on Concrete Post with Wood Blocks	29 3/4"	14 3/8"
Double Metal Guard Rail on Concrete Post with Metal Blocks (BJG)	26 1/2"	13 1/4"
Double Metal Guard Rail on Metal Post with Metal Blocks (BJG)	24 3/8"	12 3/16"

NO.	REVISION	APPROVED BY	DATE
1	Revised Hole Size for Rectangular Rail Washer	H.T.	3/30/88

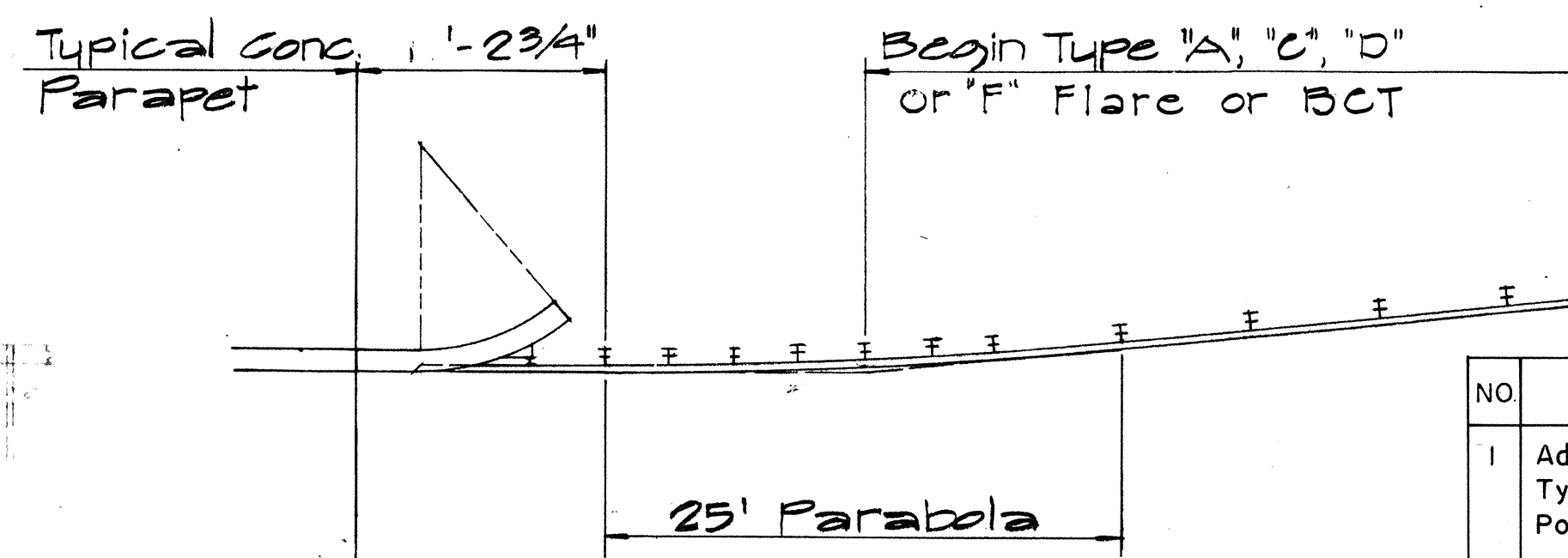
APPROVAL RECOMMENDED:
E. J. Tanaka
 TRAFFIC ENGINEER
 APPROVED:
[Signature]
 ASSISTANT CHIEF, ENGINEERING
 DATE: 12/29/69
 DATE: 12-30-69

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
STANDARD DETAILS
METAL GUARD RAIL
 Scale: As Noted
 August, 1968
 SHEET No. 12 OF 13 SHEETS DT 501

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	750A-01-82M	1982	24	24



NOTE:
For detail of Breakaway Cable Terminal (BCT) See Sheet No. DT 519



TYPICAL LAYOUT PLAN OF
END POST CONNECTION

Sc. 1/8" = 1'-0"

NO.	REVISION	APPROVED BY	DATE
1	Additional Posts Added to Typical Layout Plan Of End Post Connection	H.C.	4-12-72
2	Delete Type "B" Flare and Type "E" Flare	H.C.	6-15-78

APPROVAL RECOMMENDED:
TRAFFIC ENGINEER
DATE 12/29/69

APPROVED:
ASSISTANT CHIEF, ENGINEERING
DATE 12-30-69

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
TRAILING END
FLARE - ONE & TWO
WAY ROADWAY

Scale: As Noted April 1969

SHEET No. 13 OF 13 SHEETS DT 517