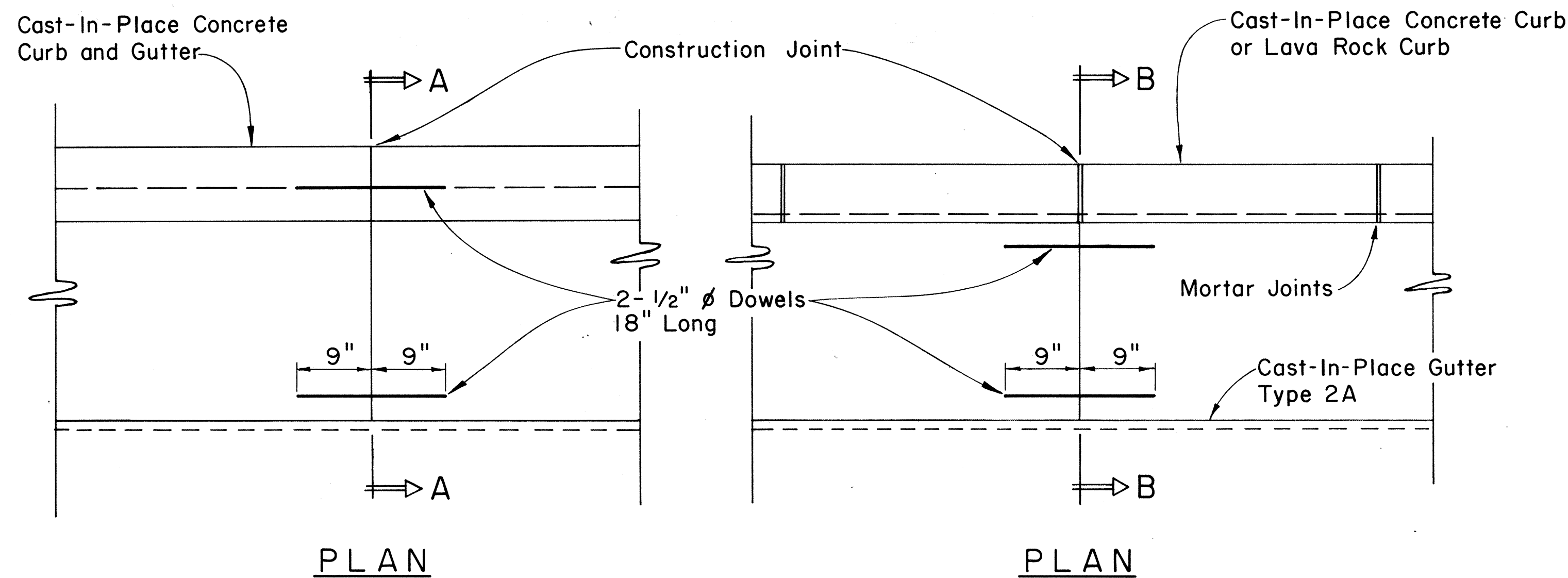
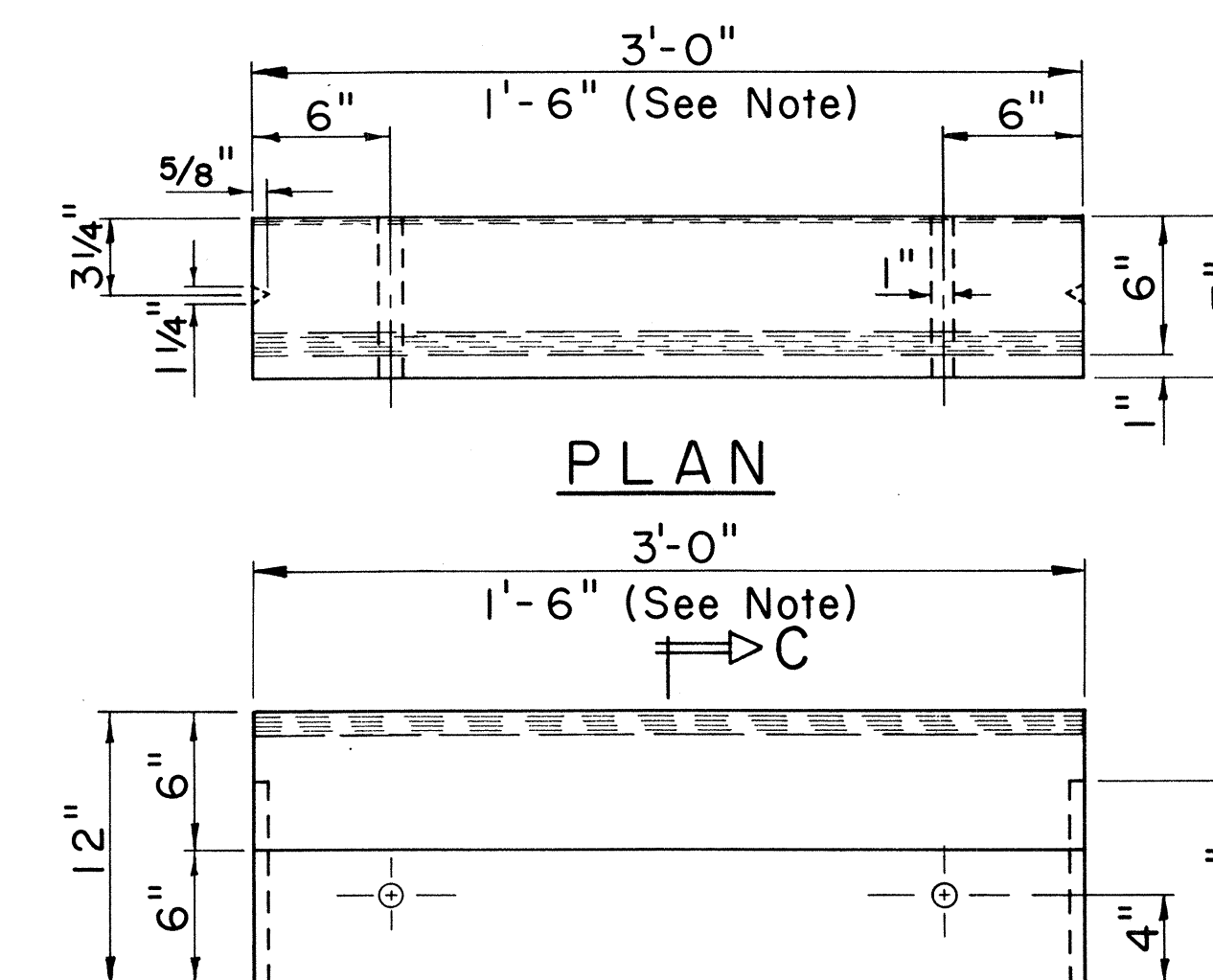
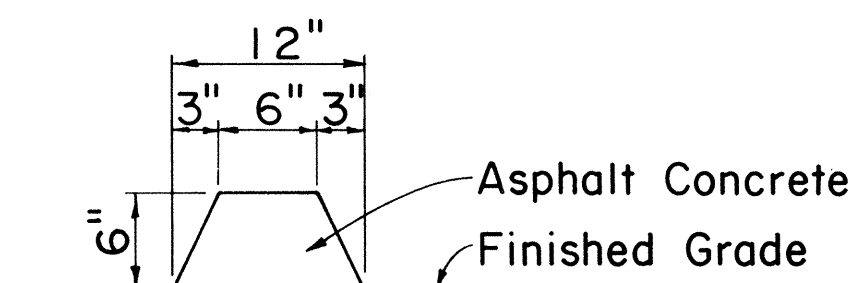


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	7	19

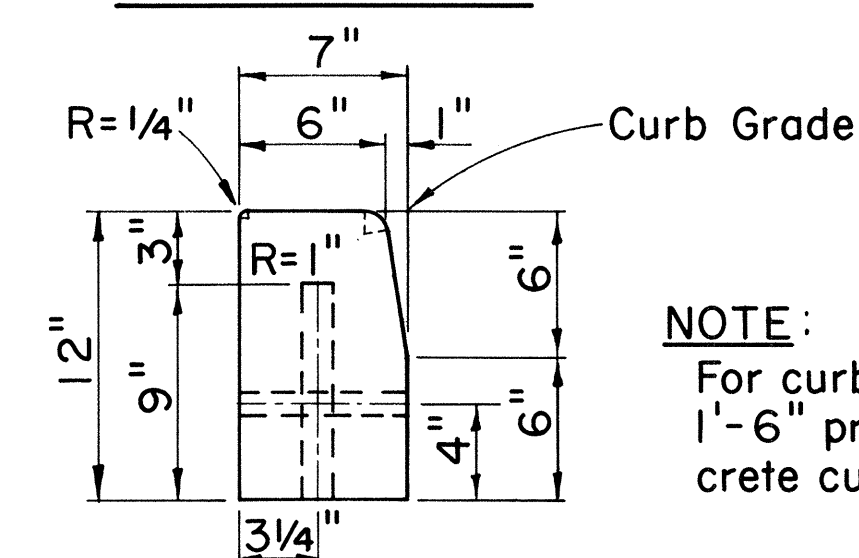


CURB, TYPE 6 BITUMINOUS CURB

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



SECTION C-C ELEVATION



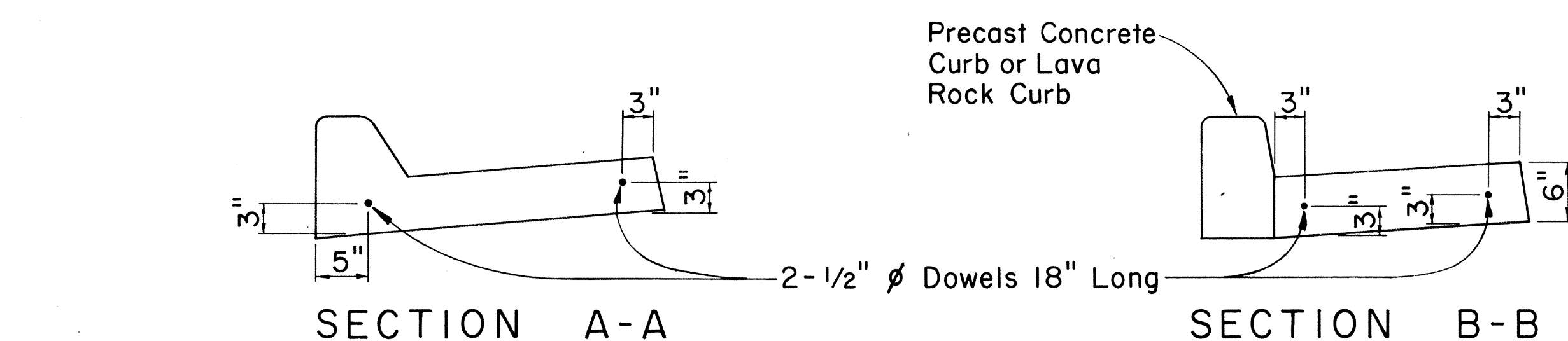
NOTE:
For curb returns use
1'-6" pre-cast concrete curbs.

SECTION C-C

CURB, TYPE 3D

PRE-CAST CONC. CURB

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

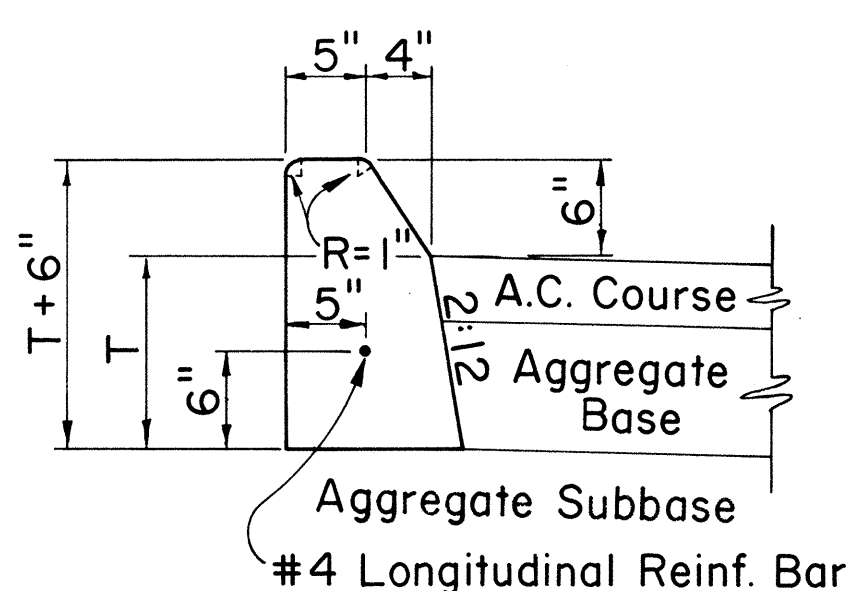


CAST-IN-PLACE CURB & GUTTER

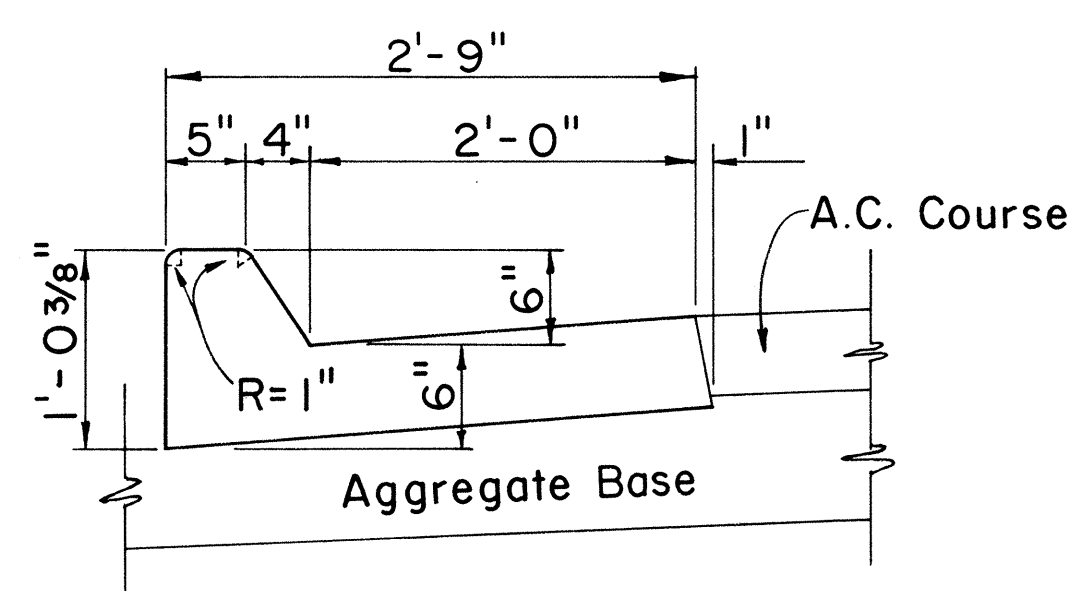
CAST-IN-PLACE GUTTER

CONSTRUCTION JOINT DETAIL

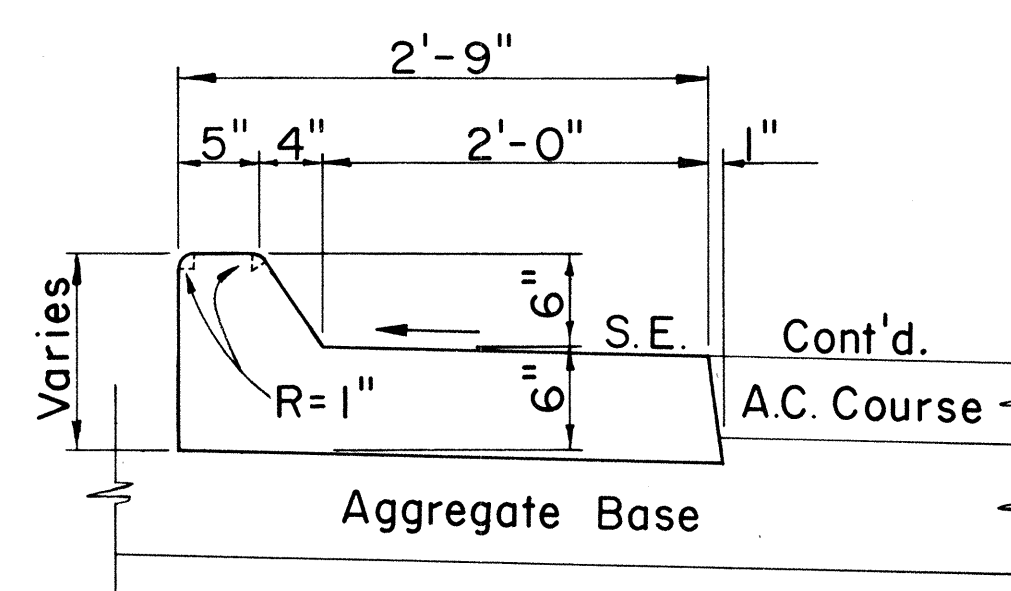
Scale: 1" = 1'-0"



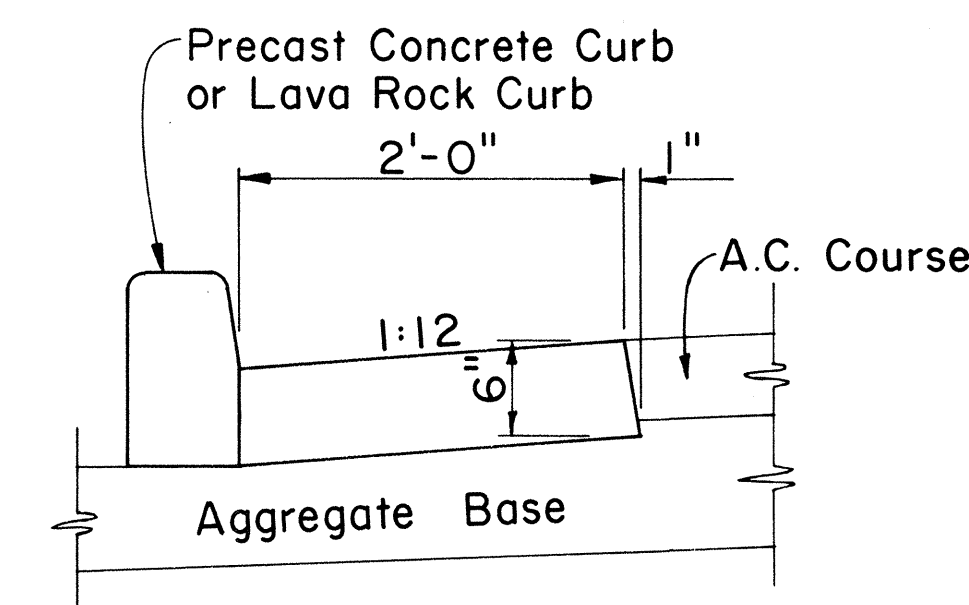
CURB, TYPE 2A



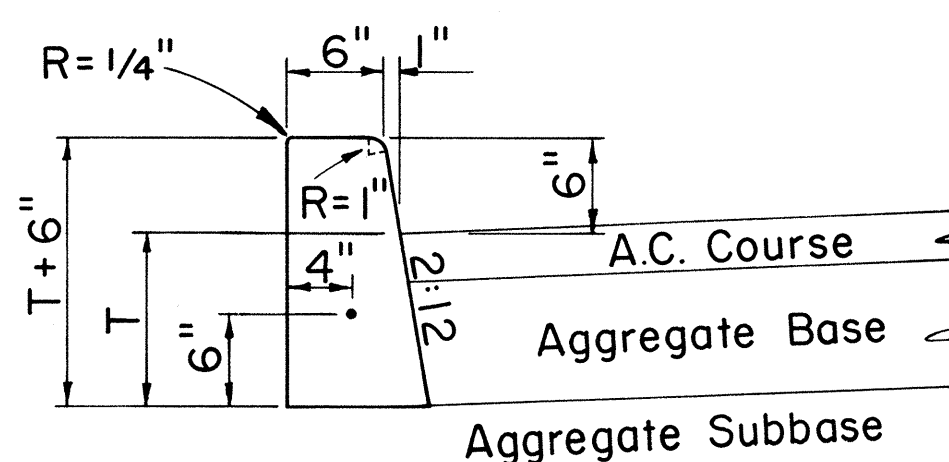
CURB & GUTTER, TYPE 2AG



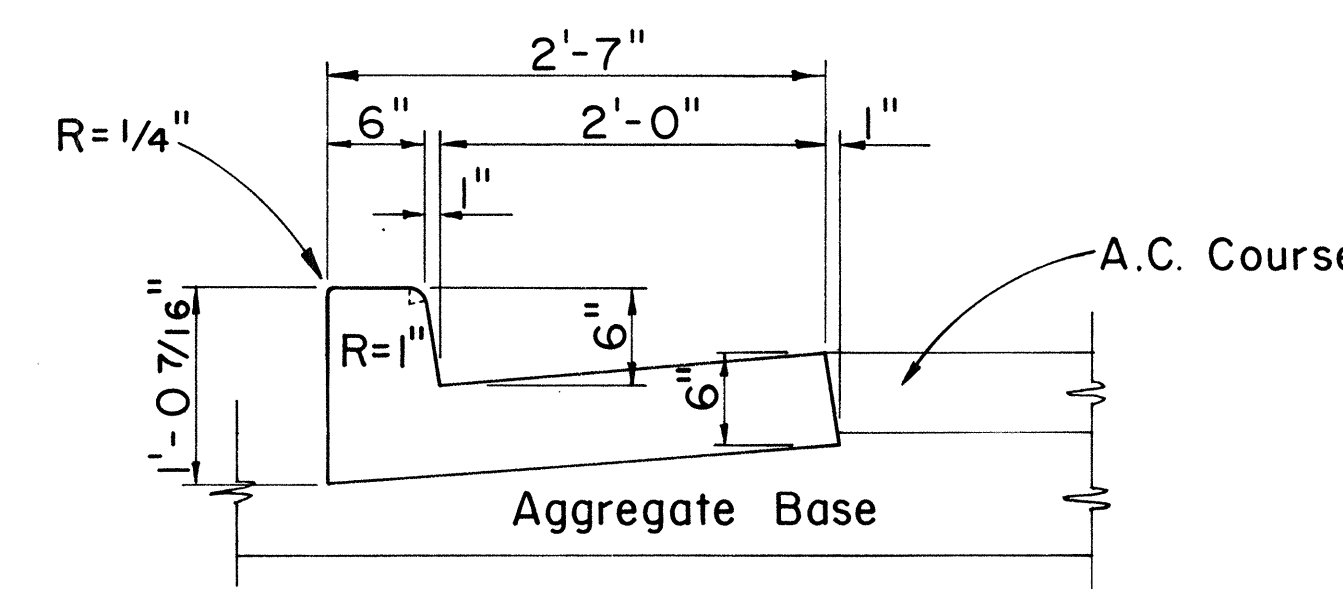
CURB & GUTTER, TYPE 2AGM



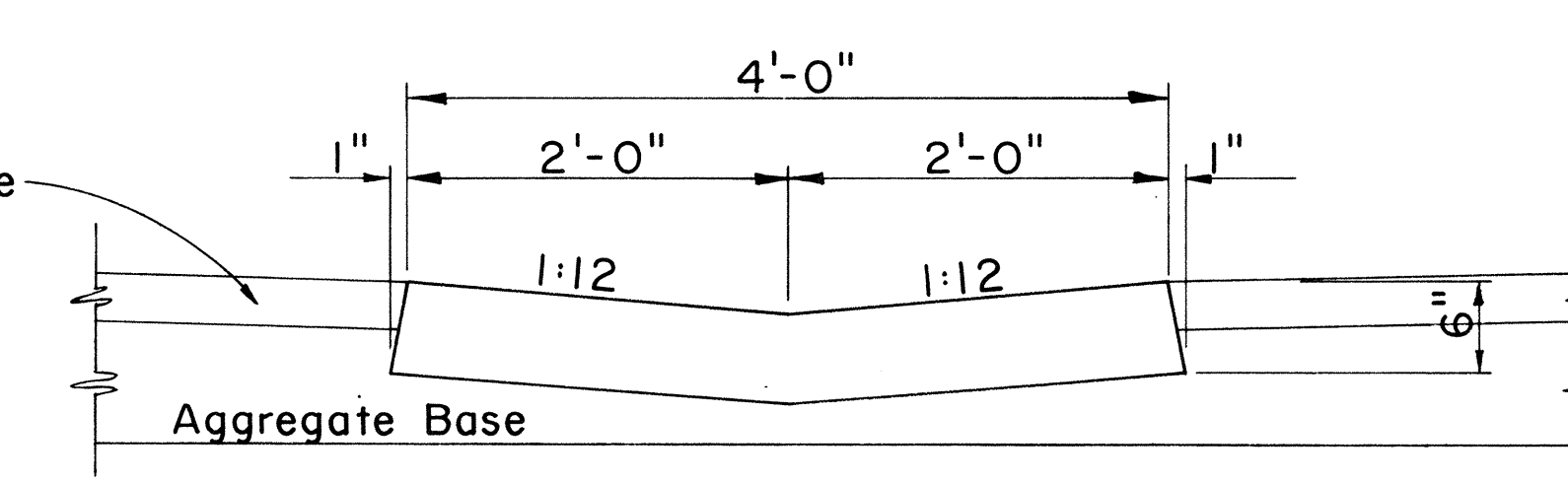
GUTTER, TYPE 2A



CURB, TYPE 2D



CURB & GUTTER, TYPE 2DG



GUTTER, TYPE 2G

CAST-IN-PLACE CONCRETE CURBS AND/OR GUTTERS

Scale: 1" = 1'-0"

APPROVAL RECOMMENDED:
HIGHWAY DESIGN ENGINEER
12-4-69
DATE

APPROVED:
ASSISTANT CHIEF, ENGINEERING
12-10-59
DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
TYPICAL DETAILS OF CURB
AND/OR GUTTERS

Scale: As Shown

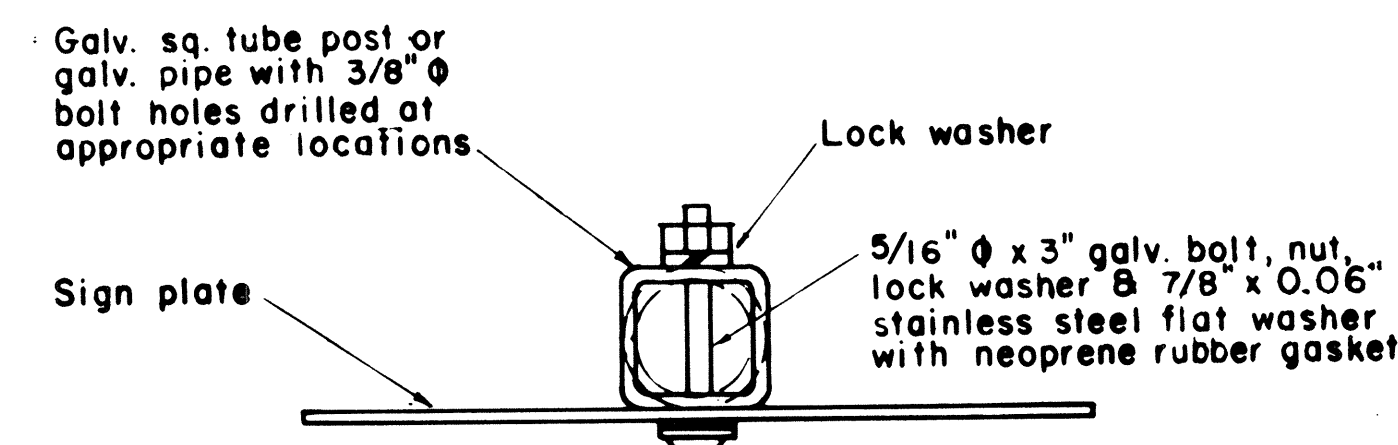
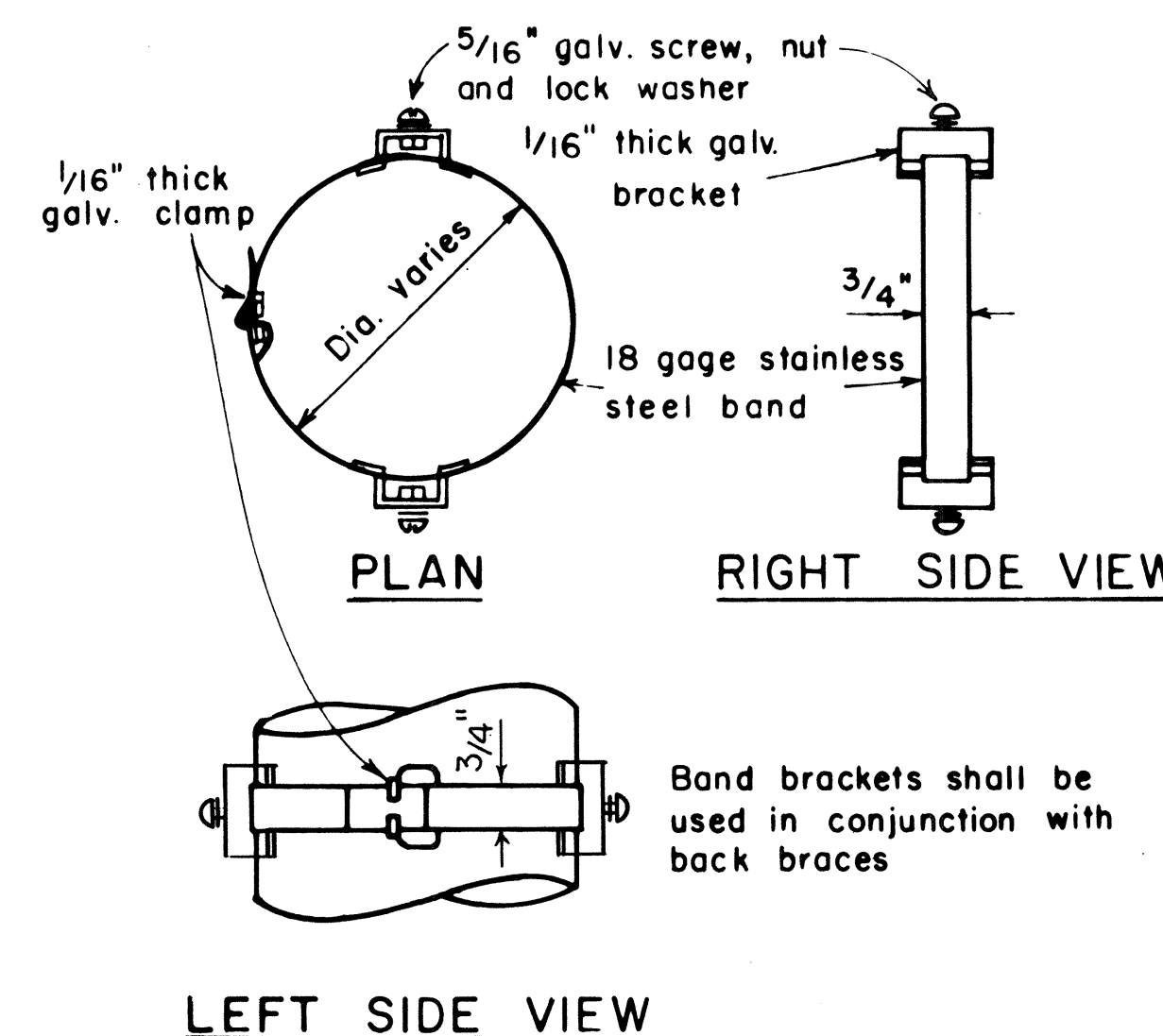
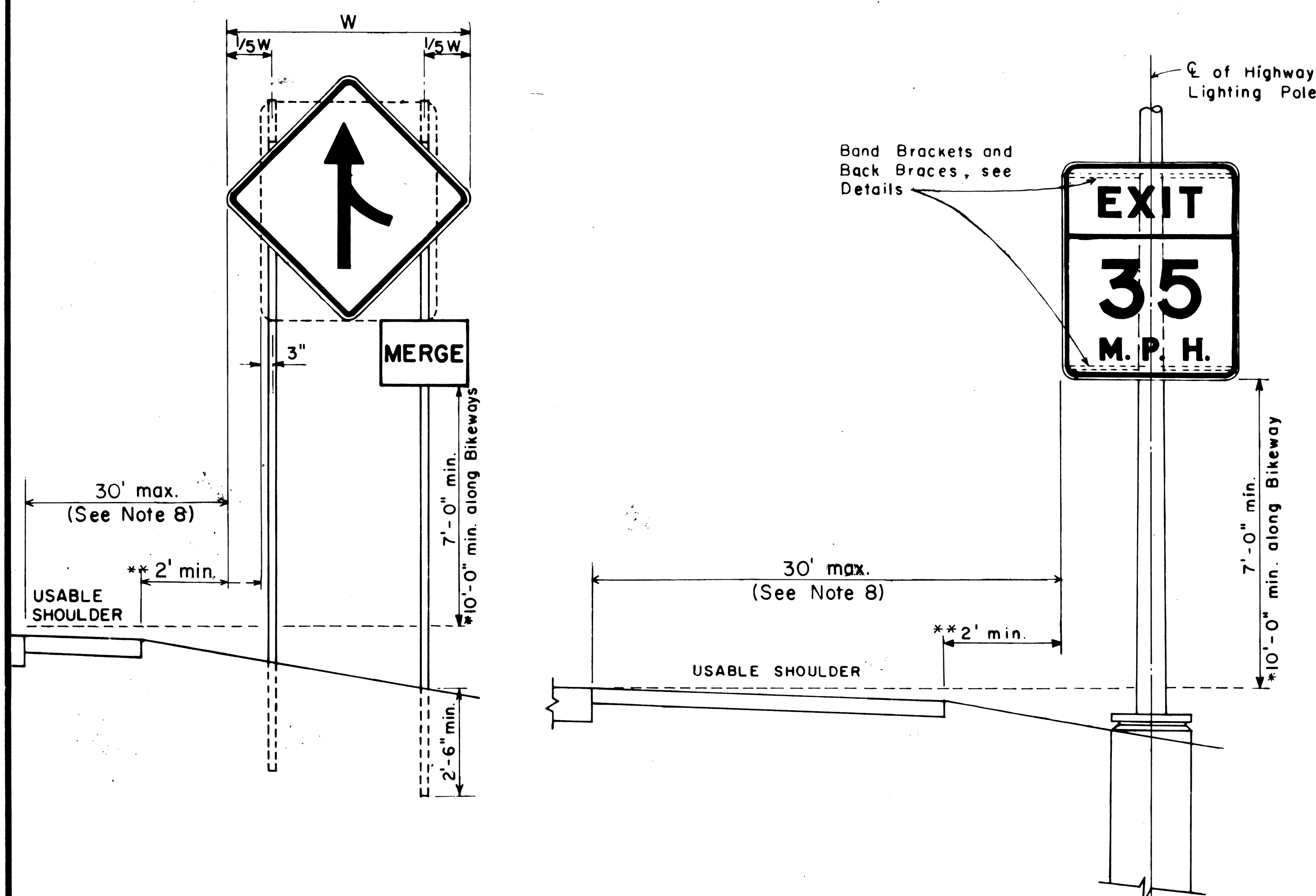
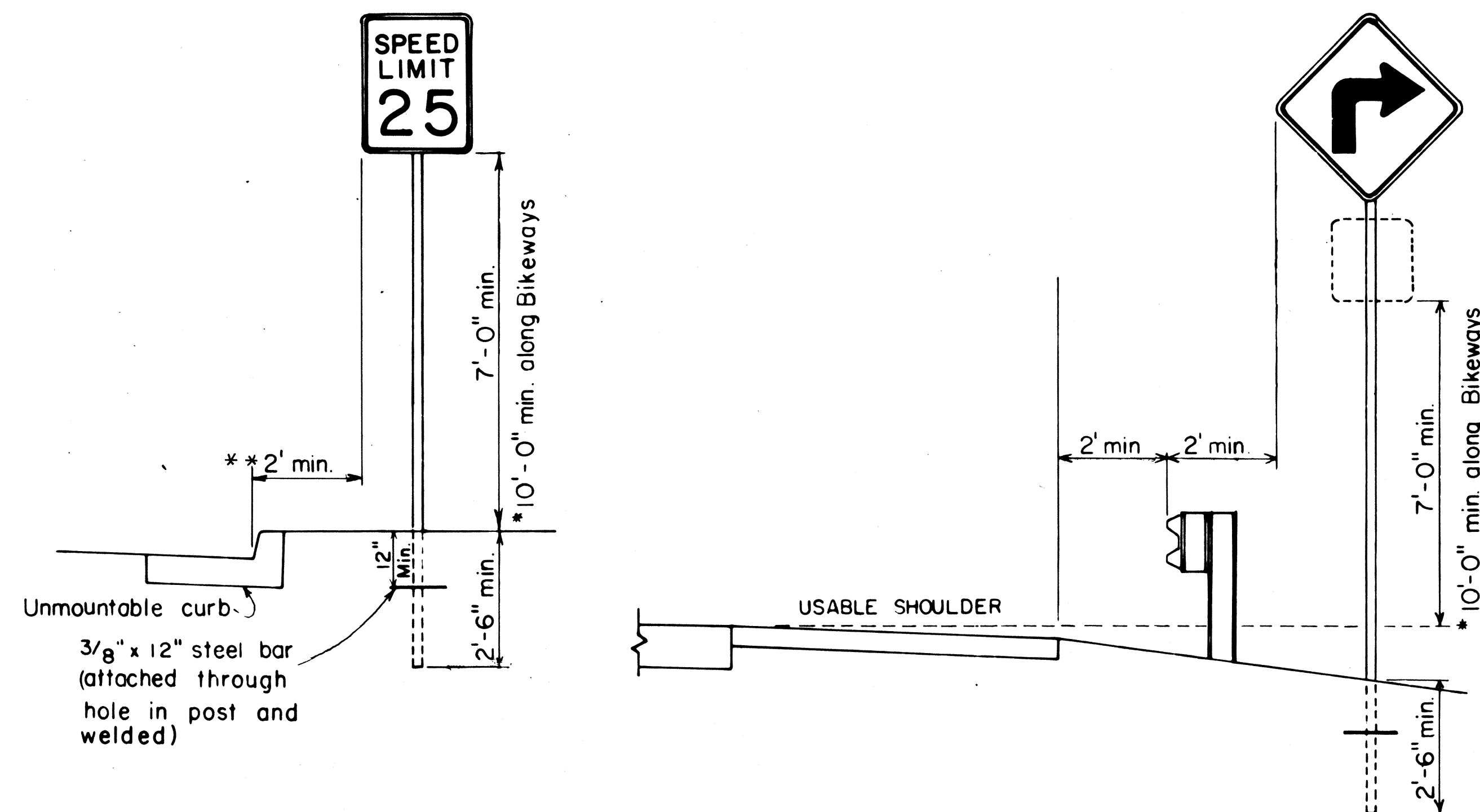
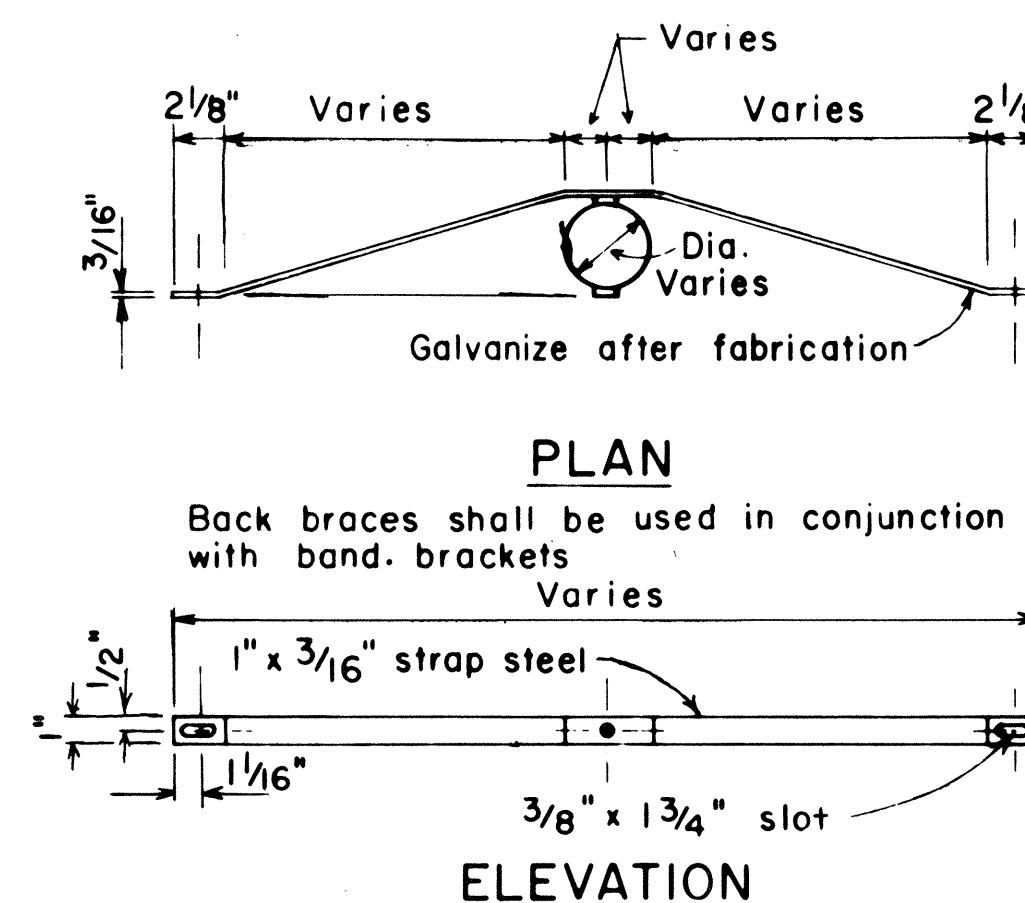
SHEET No. 1 OF 13 SHEETS DD 609.1

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	8	19

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-2I, 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

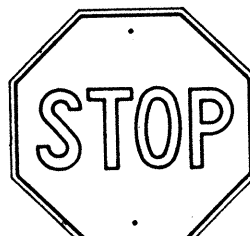
APPROVAL RECOMMENDED:
Eishi Tanaka 11/10/11
 TRAFFIC ENGINEER DATE

APPROVED:
Hubert S. Galois 11/15/11
 ASSISTANT CHIEF, ENGINEERING DATE

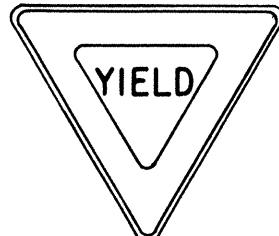
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
STANDARD DETAILS
MISCELLANEOUS SIGN DETAILS
Not to scale June, 1977
SHEET NO. 2 OF 13 SHEETS DT 100

HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION

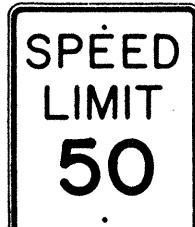
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	9	19



R1-1 30"x30"
R1-1-A 36"x36"
4-WAY
R1-3 12"x6"
R1-3-A 18"x9"



R1-2 36"x36"x36"
R1-2-A 48"x48"x48"



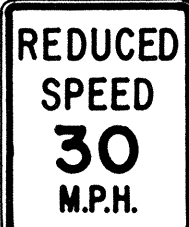
R2-1(50) 24"x30"
R2-1(50)-A 48"x60"



R2-2(40) 24"x24"
R2-2(40)-A 48"x48"



R2-4a(50/40) 24"x48"
R2-4a(50/40)-A 48"x96"



R2-5b(30) 24"x30"
R2-5b(30)-A 48"x60"



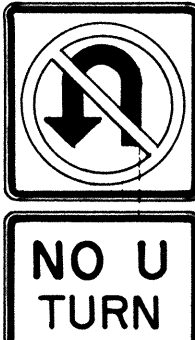
R3-1 24"x24"
24"x18"
R3-1-A 48"x48"
48"x36"



R3-2 24"x24"
24"x18"
R3-2-A 48"x48"
48"x36"



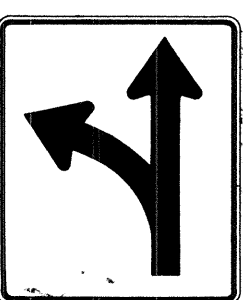
R3-3 24"x24"
R3-3-A 48"x48"



R3-4 24"x24"
24"x18"
R3-4-A 48"x48"
48"x36"



R3-5(L) 30"x36"
R3-5(L)-A 48"x60"



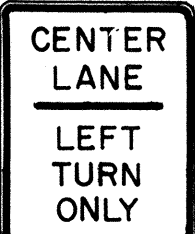
R3-6(L) 30"x36"
R3-6(L)-A 48"x60"



R3-7(R) 30"x30"
R3-7(R)-A 48"x48"



R3-8(L) 30"x30"
R3-8(L)-A 36"x36"
R3-8(L)-B 48"x48"



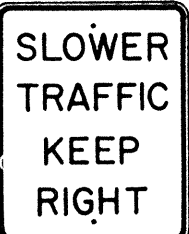
R3-9 24"x30"



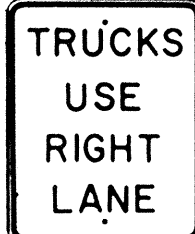
R4-1 24"x30"



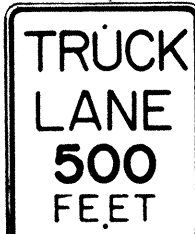
R4-2 24"x30"



R4-3 24"x30"
R4-3-A 48"x60"



R4-5 24"x30"



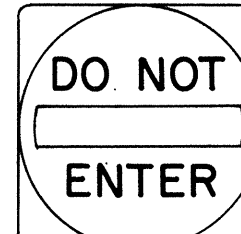
R4-6(500) 24"x30"



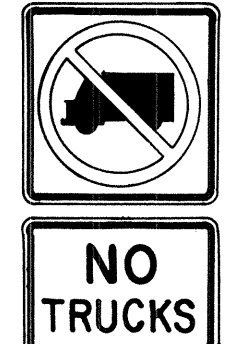
R4-7 24"x30"
24"x18"



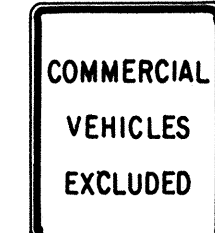
R4-8 24"x30"
24"x18"



R5-1 30"x30"
R5-1-A 48"x48"



R5-2 24"x24"
24"x18"



R5-4 24"x30"



R5-6 24"x24"
24"x18"



R5-9 36"x24"



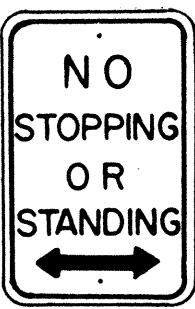
R6-1(R) 36"x12"



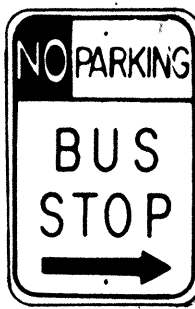
R6-2(R) 18"x24"



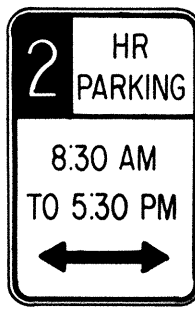
R7-1 12"x18"
R7-1-A 24"x30"



R7-4 12"x18"
R7-4-A 24"x30"



R7-1b(7(R)) 12"x18"



R7-108 12"x18"



R7-201 12"x6"
R7-201-A 24"x12"



R8-1 24"x30"



R8-2 24"x30"



R8-3 24"x30"



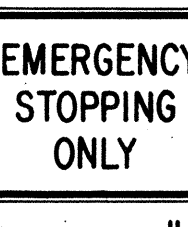
R8-4 30"x24"
R8-4-A 48"x36"



R8-5 24"x30"



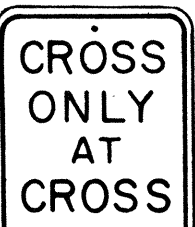
R8-6 24"x30"



R8-7 30"x24"
R8-7-A 48"x36"



R9-1 18"x24"



R9-2 12"x18"



R9-3 12"x18"



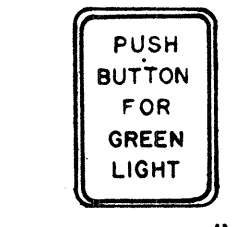
R9-4 18"x24"



R10-1 12"x18"



R10-2 12"x18"



R10-3 9"x12"



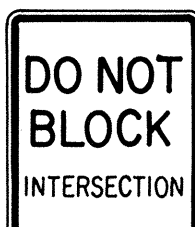
R10-4 9"x12"



R10-5 24"x30"



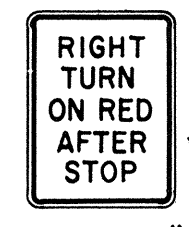
R10-6 24"x36"



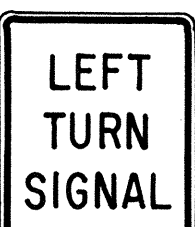
R10-7 24"x30"



R10-8 24"x30"



R10-9 24"x30"



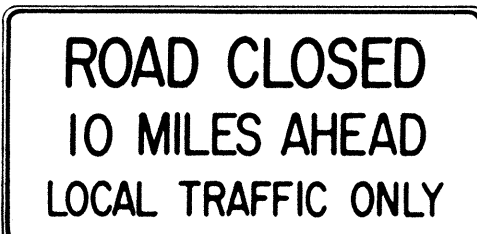
R10-10 24"x30"



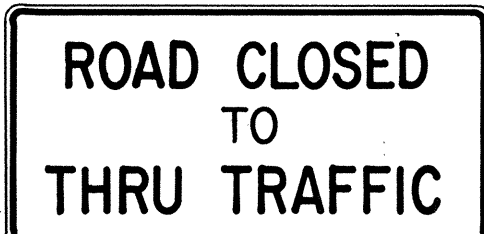
R11-1 24"x30"



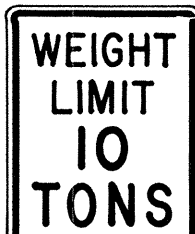
R11-2 48"x30"



R11-3(10) 60"x30"



R11-4 60"x30"



R12-1(10) 24"x30"

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:
TRAFFIC ENGINEER Enishi Tanaka 3/17/72
DATE

APPROVED:
ASSISTANT CHIEF, ENGINEERING Robert Zabin 3-20-72
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.	6/9/79

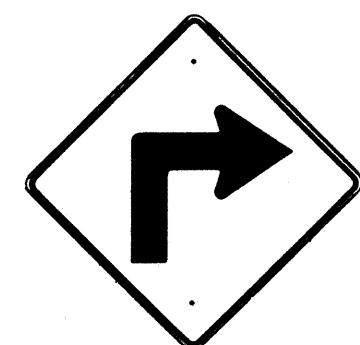
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS REGULATORY SIGNS

NOT TO SCALE

SHEET No. 3 OF 13 SHEETS DT 101

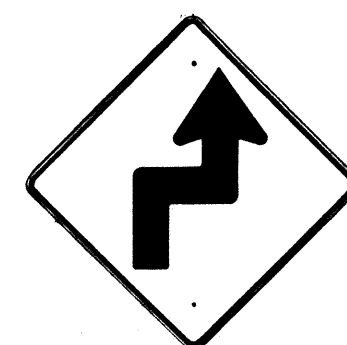
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	9000A-02-82	1982	10	19



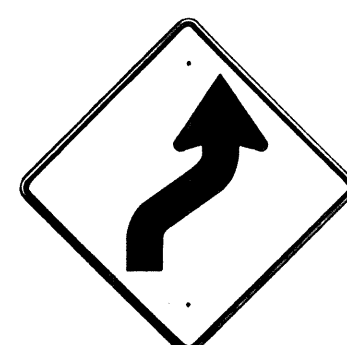
W1-1(R) 30"x 30"
W1-1(R)-A 48"x 48"



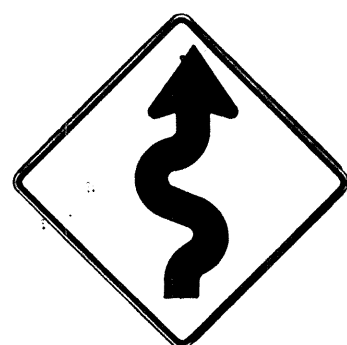
W1-2(R) 30"x 30"
W1-2(R)-A 48"x 48"



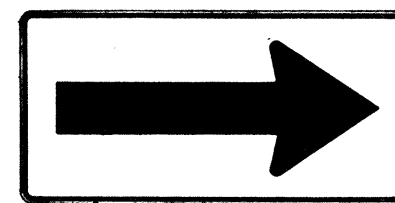
W1-3(R) 30"x 30"
W1-3(R)-A 48"x 48"



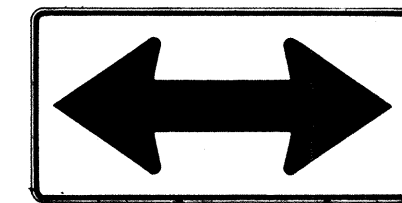
W1-4(R) 30"x 30"
W1-4(R)-A 48"x 48"



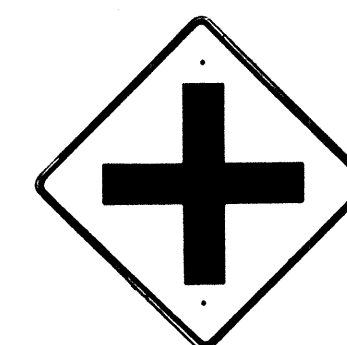
W1-5(R) 30"x 30"
W1-5(R)-A 48"x 48"



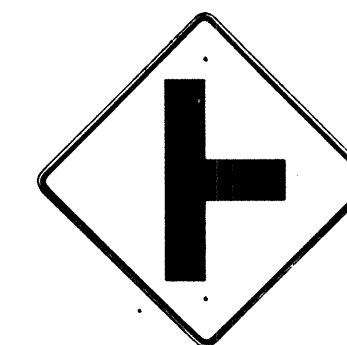
W1-6 48"x 24"



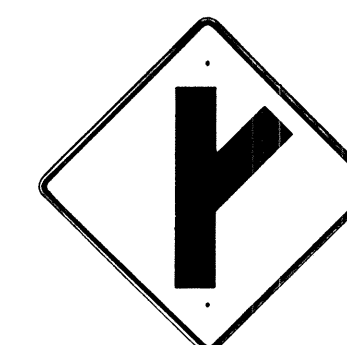
W1-7 48"x 24"



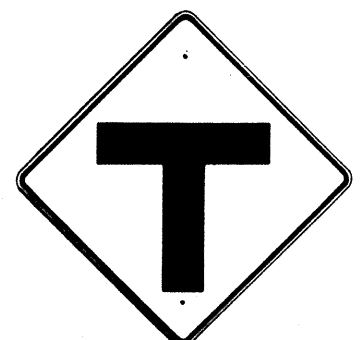
W2-1 30"x 30"
W2-1-A 48"x 48"



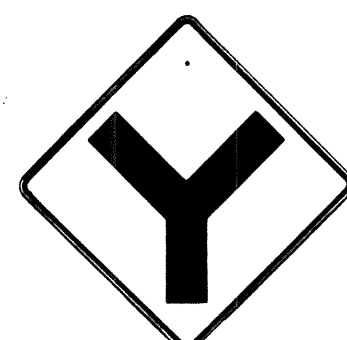
W2-2 30"x 30"
W2-2-A 48"x 48"



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



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



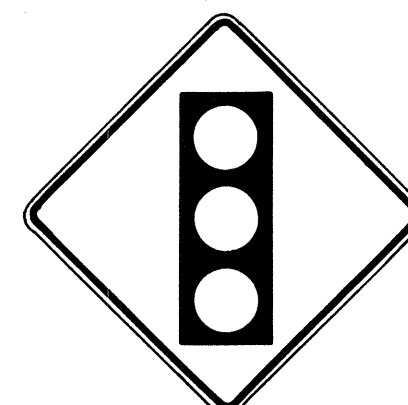
W2-5 30"x 30"
W2-5-A 48"x 48"



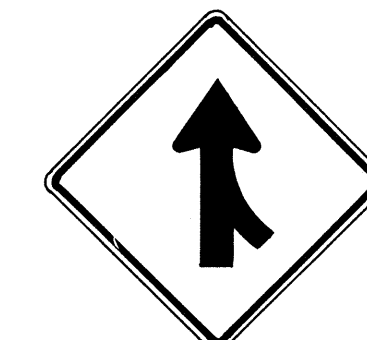
W3-1 30"x 30"
W3-1-A 36"x 36"



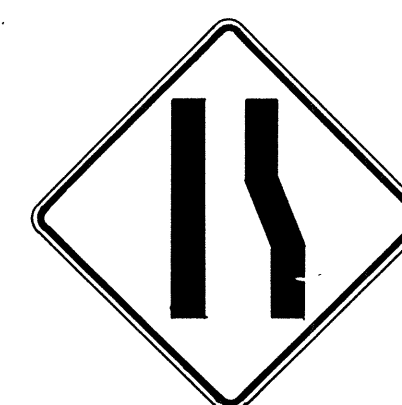
W3-2 30"x 30"
W3-2-A 36"x 36"



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



MERGE
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"



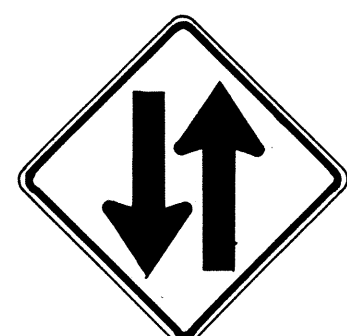
W5-3 36"x 36"



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



DIVIDED
HIGHWAY
ENDS
W6-2 36"x 36"
24"x 18"



TWO WAY
TRAFFIC
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"



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



USE LOW
GEAR
W7-2 24"x 18"



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



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



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



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



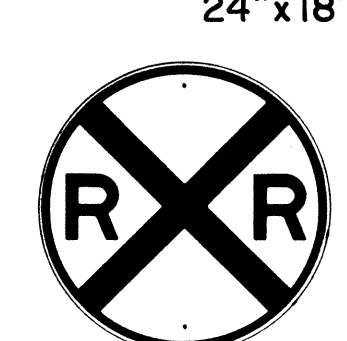
SLIPPERY
WHEN WET
W8-5 30"x 30"
24"x 18"
W8-5-A 36"x 36"
24"x 18"



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



LANE ENDS
MERGE
LEFT
W9-2(L) 36"x 36"
W9-2(L)-A 48"x 48"



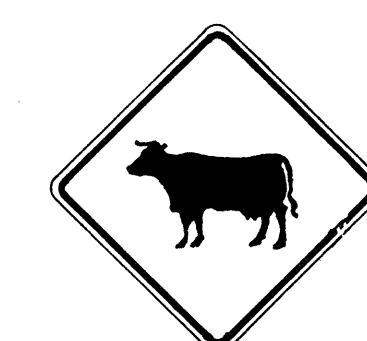
W10-1 36" Diameter



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



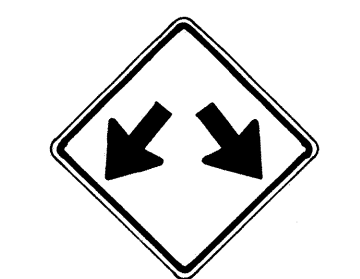
PED
XING
W11-2 30"x 30"
24"x 18"
W11-2-A 36"x 36"
24"x 18"



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



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



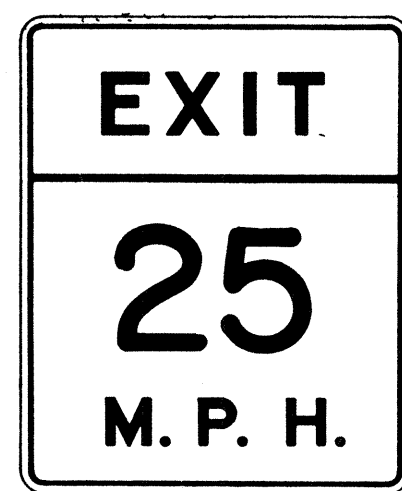
W12-1 24"x 24"
W12-1-A 36"x 36"
W12-1-B 48"x 48"



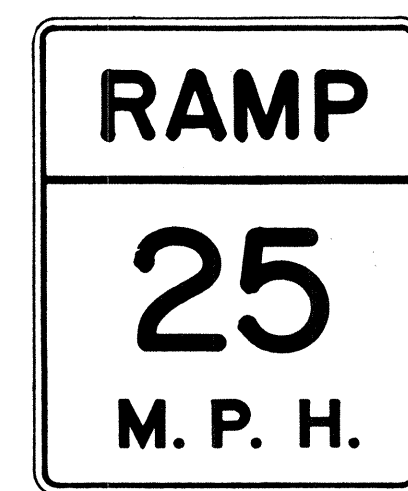
LOW
CLEARANCE
W12-2(12'-6") 36"x 36"
24"x 18"



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

1. 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.

2. All warning signs shall be reflectorized unless otherwise specified.

3. All warning signs shall have 3/8" bolt holes drilled at appropriate locations.

4. Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.

5. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:
TRAFFIC ENGINEER

3/17/72
DATE

APPROVED:
ASSISTANT CHIEF, ENGINEERING

3-20-72
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	HT	3/20/72
2	Revised General Note 1	HT	10/16/74
3	Revised General Note 5	MT	9-16-75
4	Revised General Note 5	HT	9-14-76
5	Added Note 1	HT	11-7-79

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS WARNING SIGNS

NOT TO SCALE

SHEET No. 4 OF 13 SHEETS DT 102

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	11	19



CW20-1a 48" x 48"



CW20-2d 48" x 48"



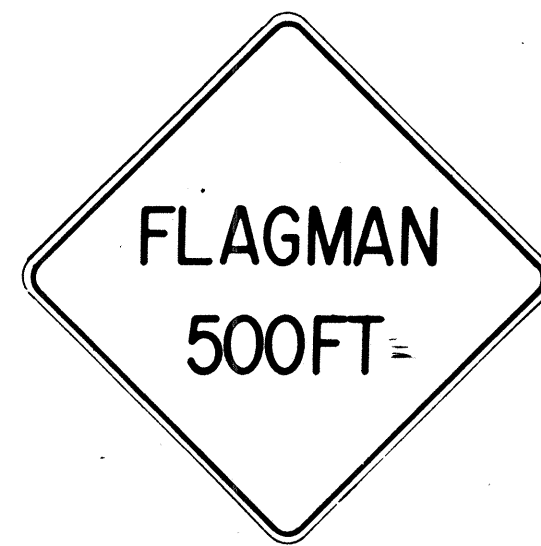
CW20-3b 48" x 48"



CW20-4d 48" x 48"



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



CW20-7c 48" x 48"



CW21-1 30" x 30"



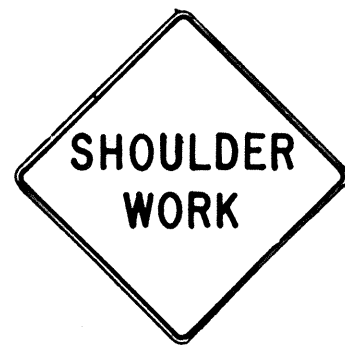
CW21-2 30" x 30"



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"



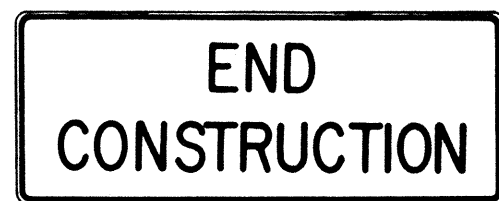
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



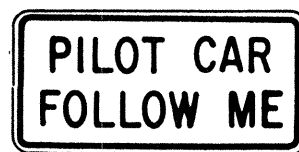
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



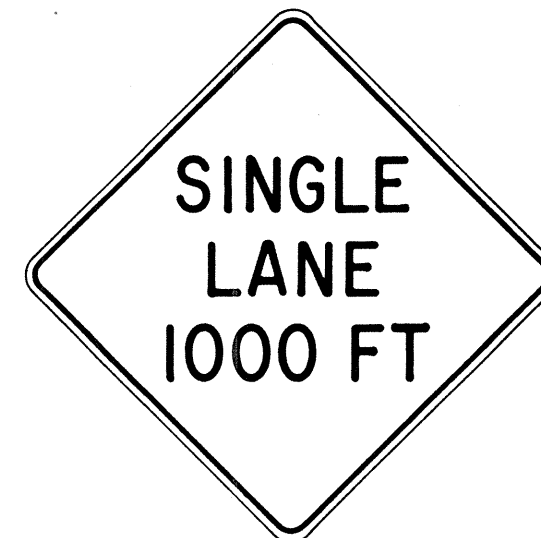
CM4-10(R) 48" x 18"



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.

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	M.H.	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:
Walter Salsich 3/23/72
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

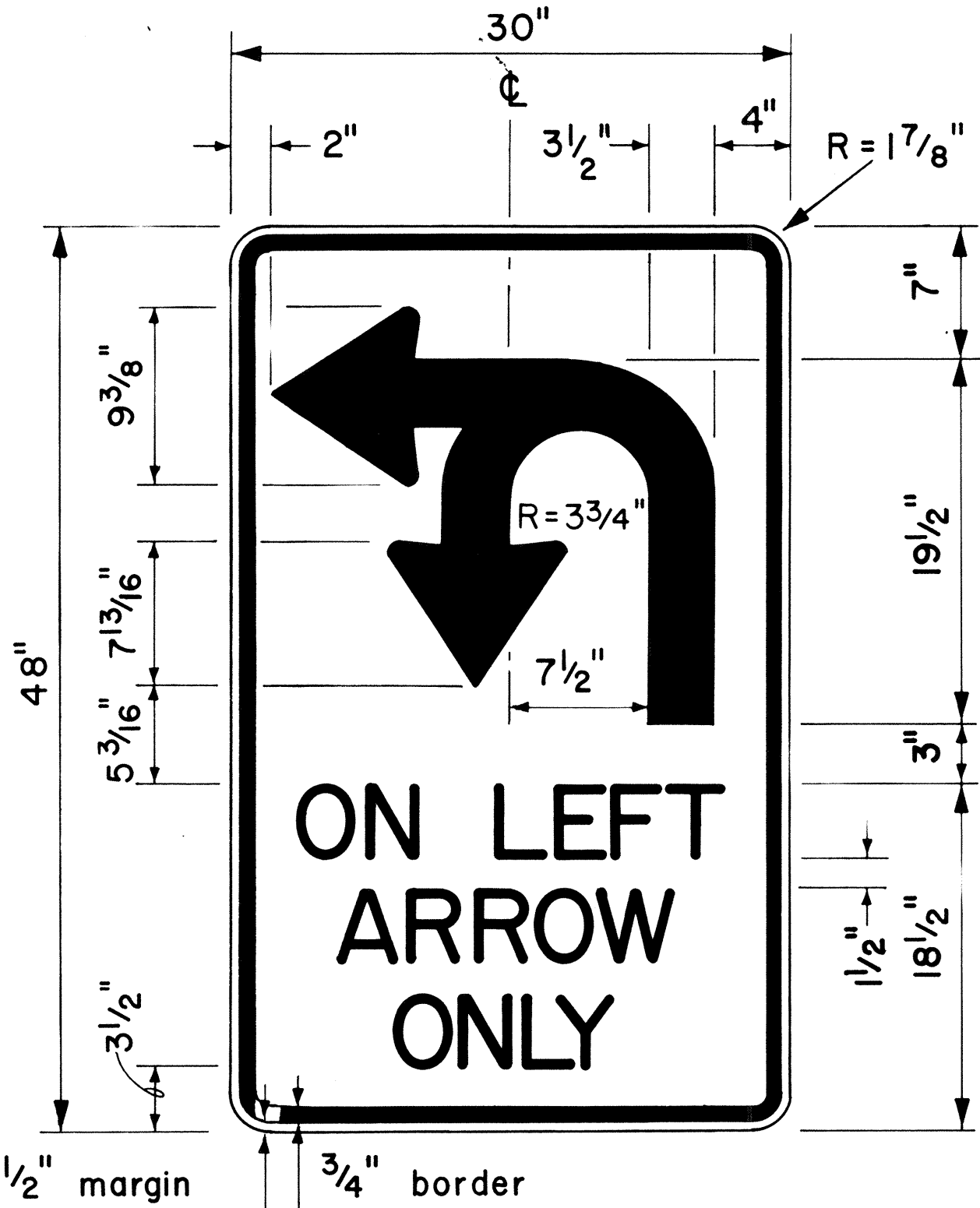
NOT TO SCALE
SHEET No. 5 OF 13 SHEETS DT 104

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

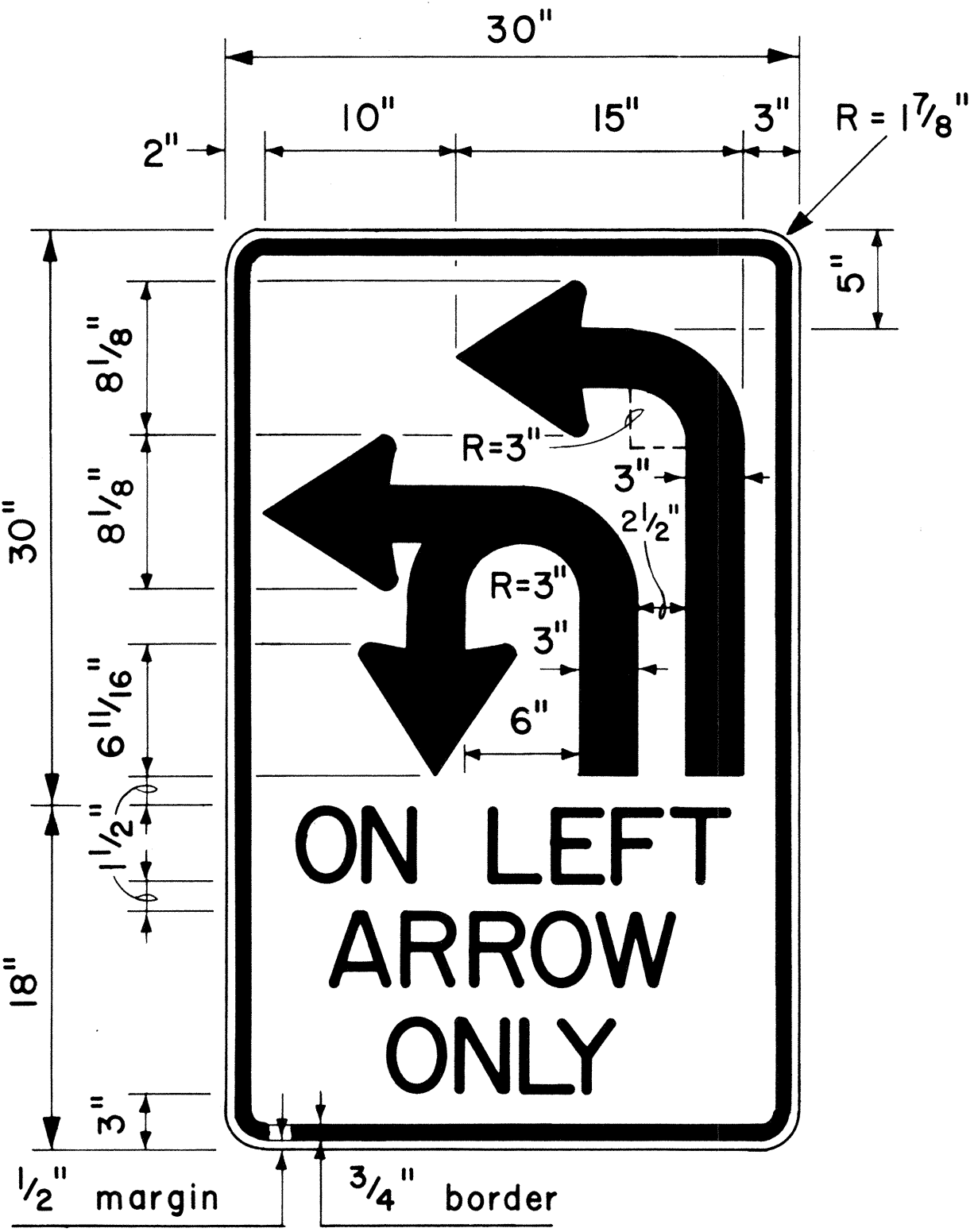
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	12	19

GENERAL NOTES

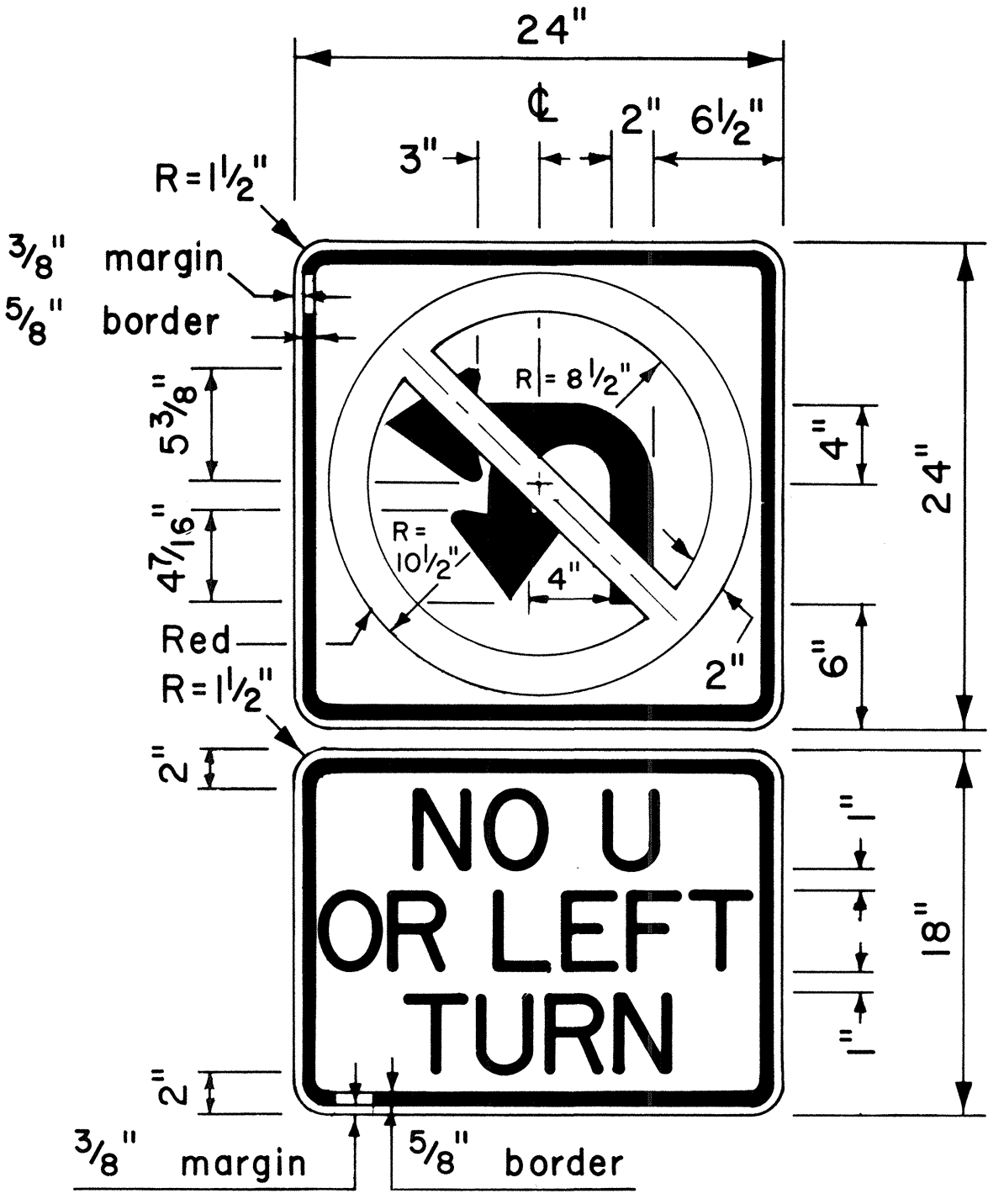
1. Sign details shall conform to the latest editions of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways," and "Standard Highway Signs," and as amended.
2. All regulatory signs shall be reflectorized unless otherwise specified.
3. All regulatory signs shall have 3/8" bolt holes drilled at appropriate locations.



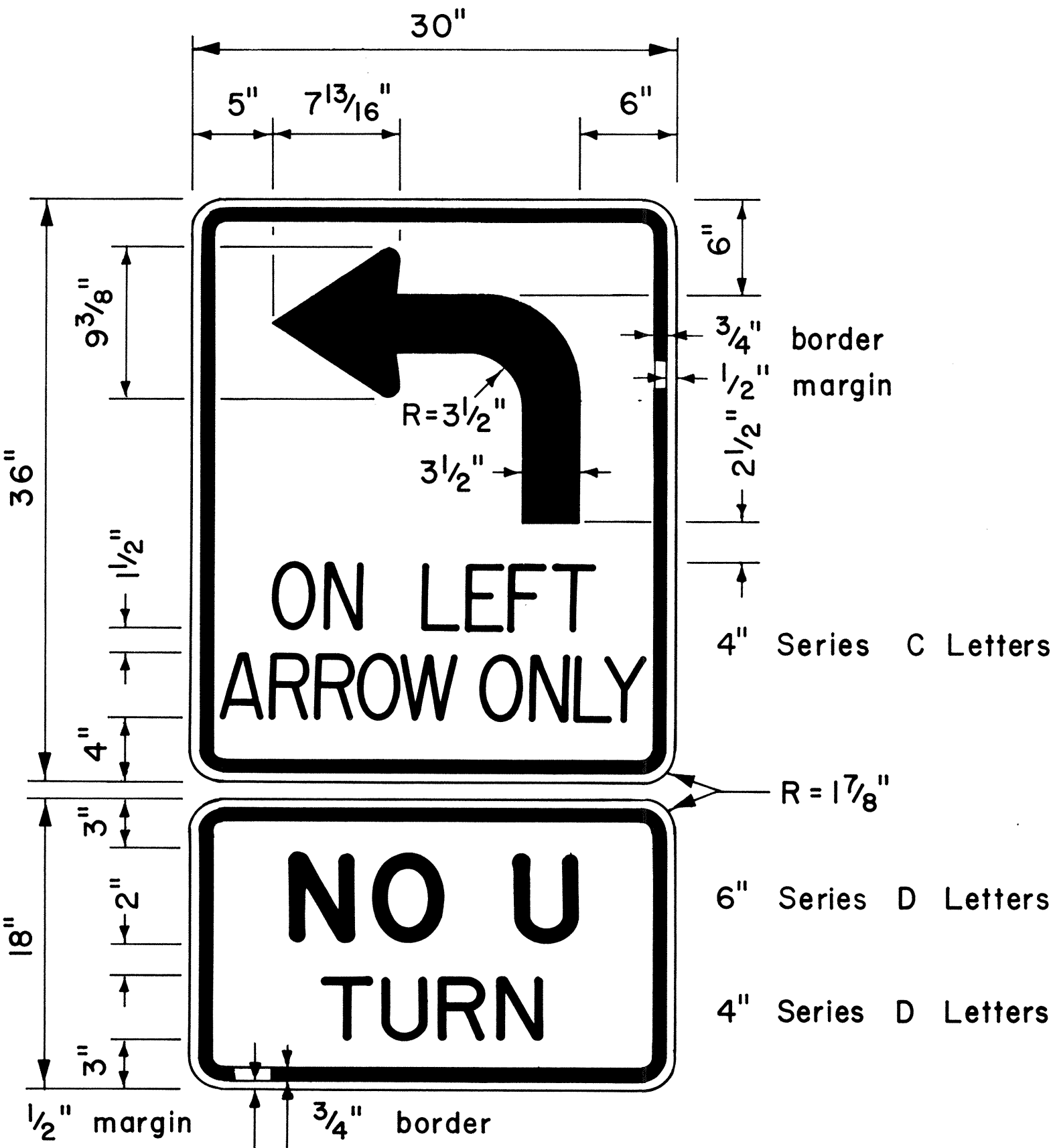
4" Series D Letters
R17-1



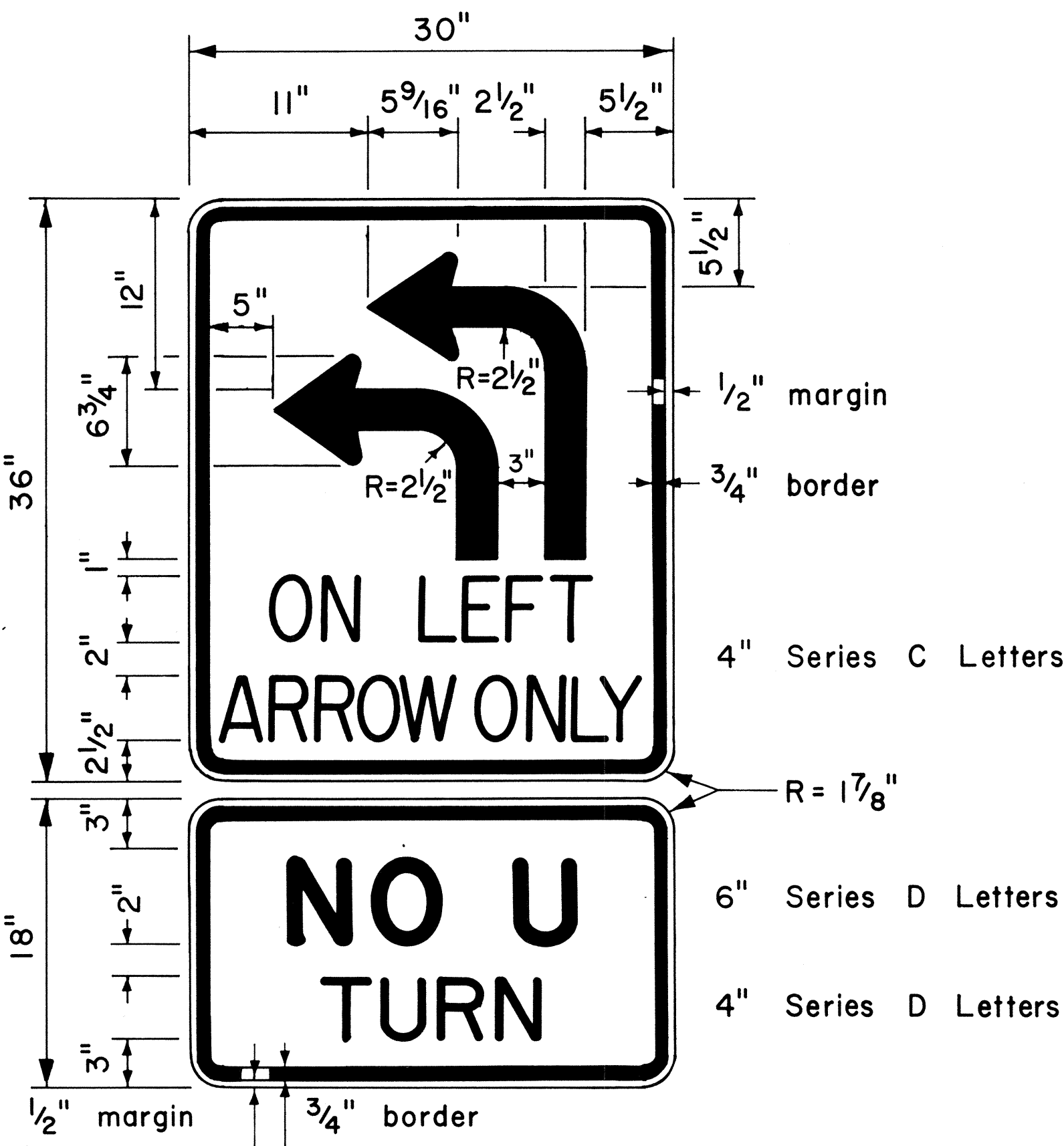
4" Series D Letters
R17-2



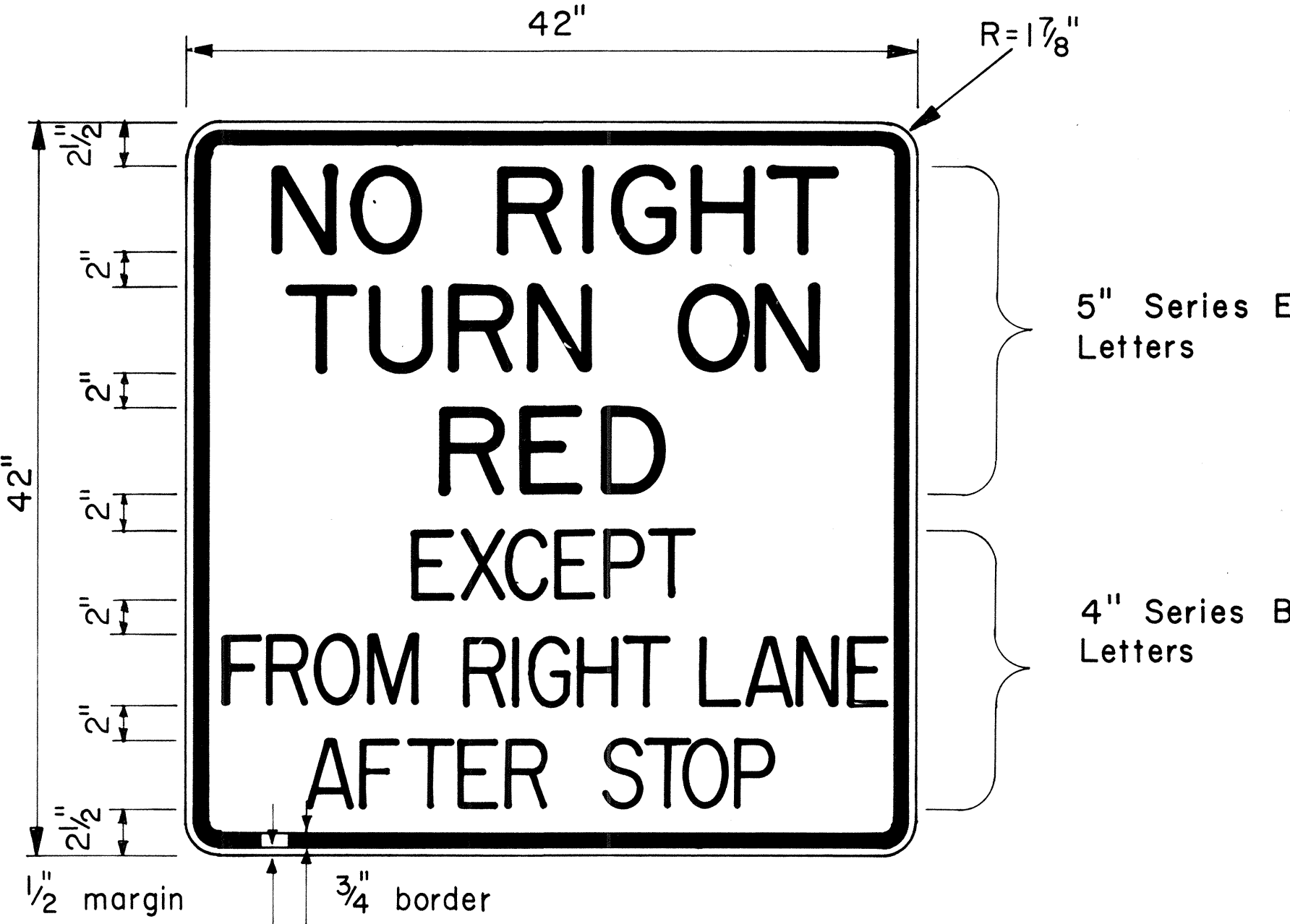
4" Series D Letters
R3-4b



R17-3



R17-4



R10-11d

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Eishi Tanaka 8/1/77
 TRAFFIC ENGINEER DATE
 APPROVED:
Harbor Pakishi 8/16/77
 ASSISTANT CHIEF, ENGINEERING DATE

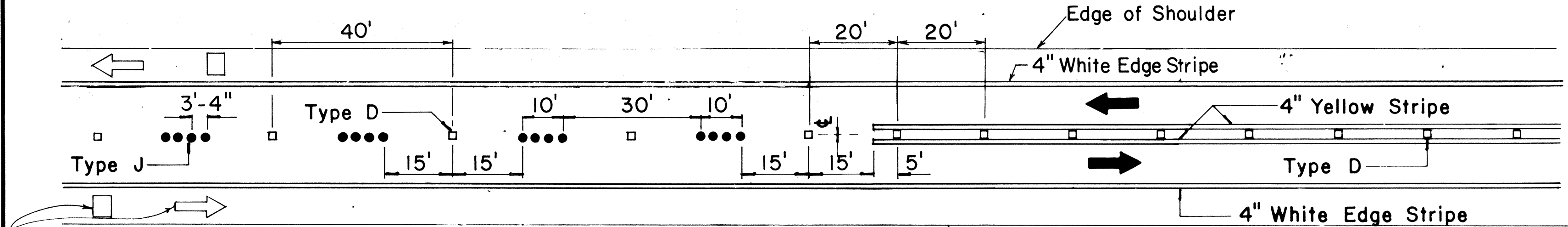
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
MISCELLANEOUS
INTERSECTION SIGNS

Scale: 1/2" = 1'-0" Date: Aug., 1977

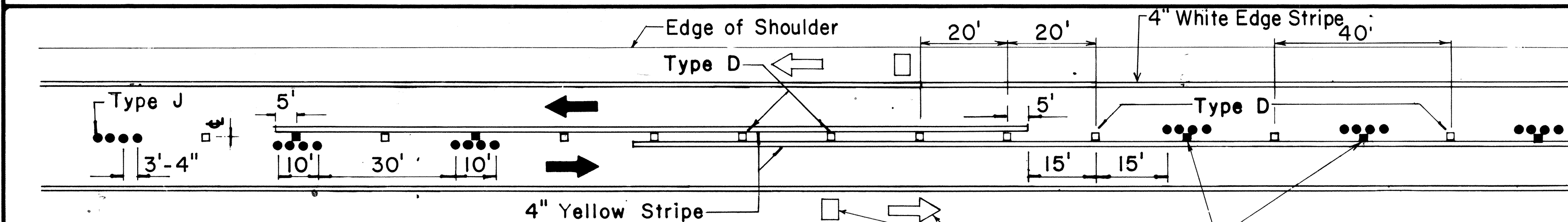
SHEET NO. 6 OF 13 SHEETS DT 112

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	2000A-02-82	1982	13	19



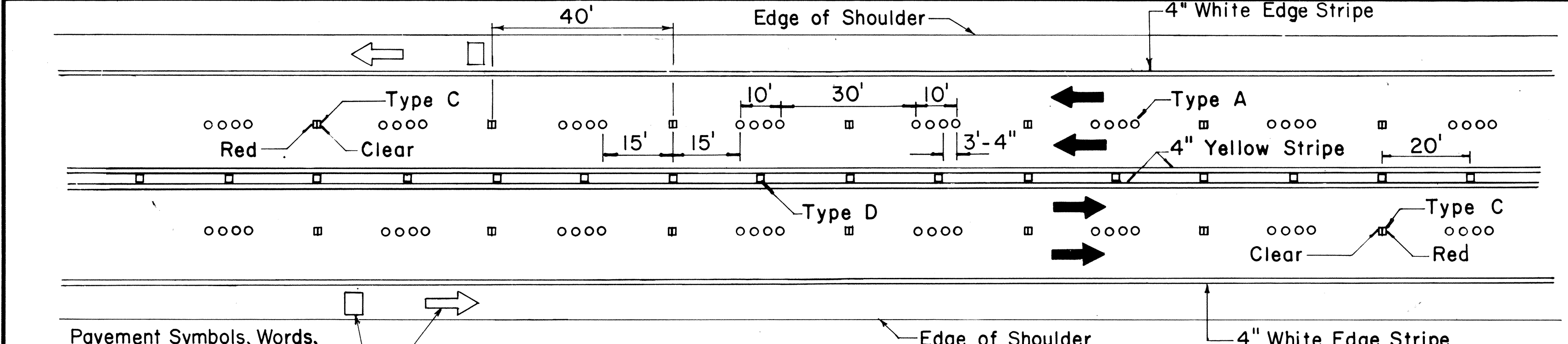
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PERMITTED AND PASSING PROHIBITED

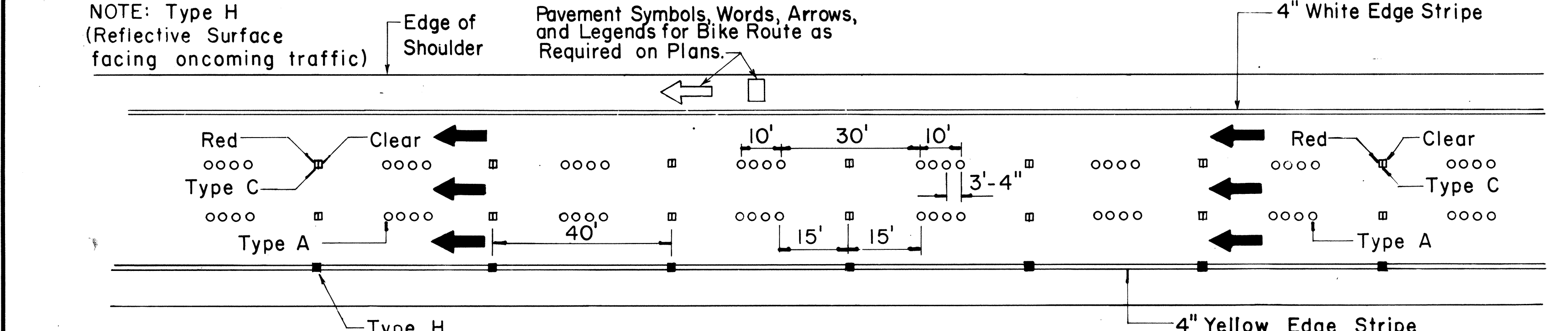


Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PROHIBITED ZONES

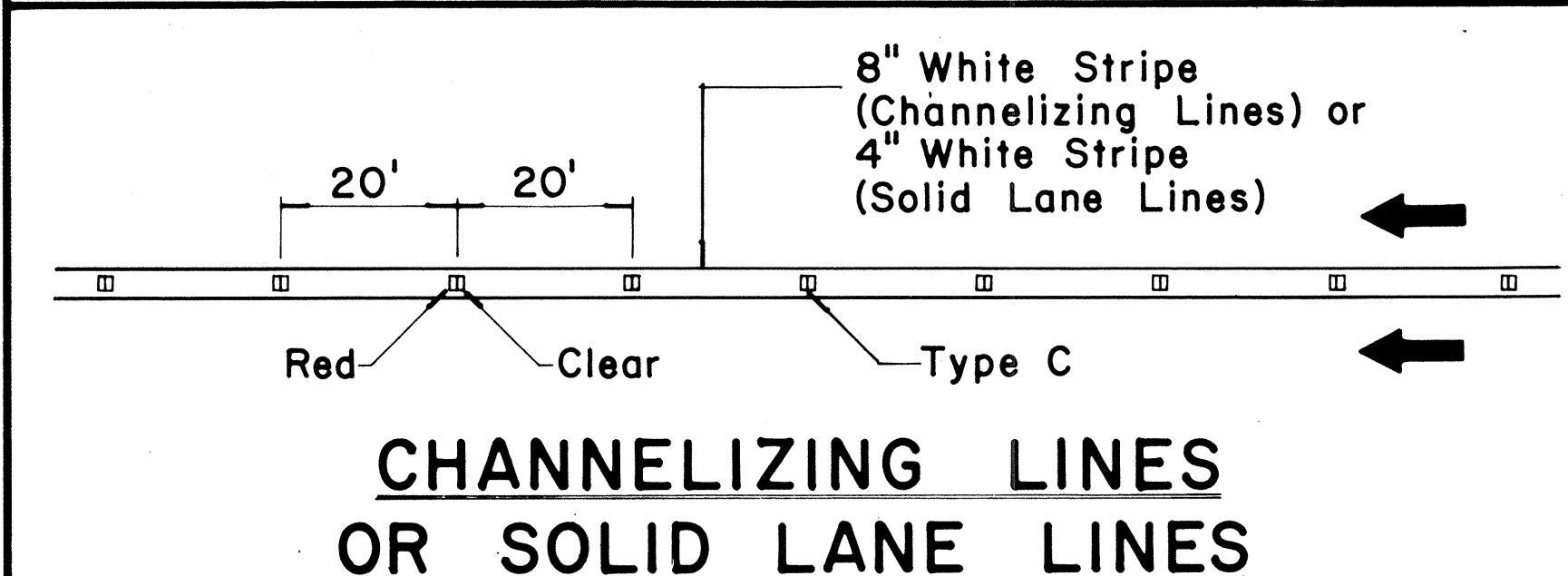


Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

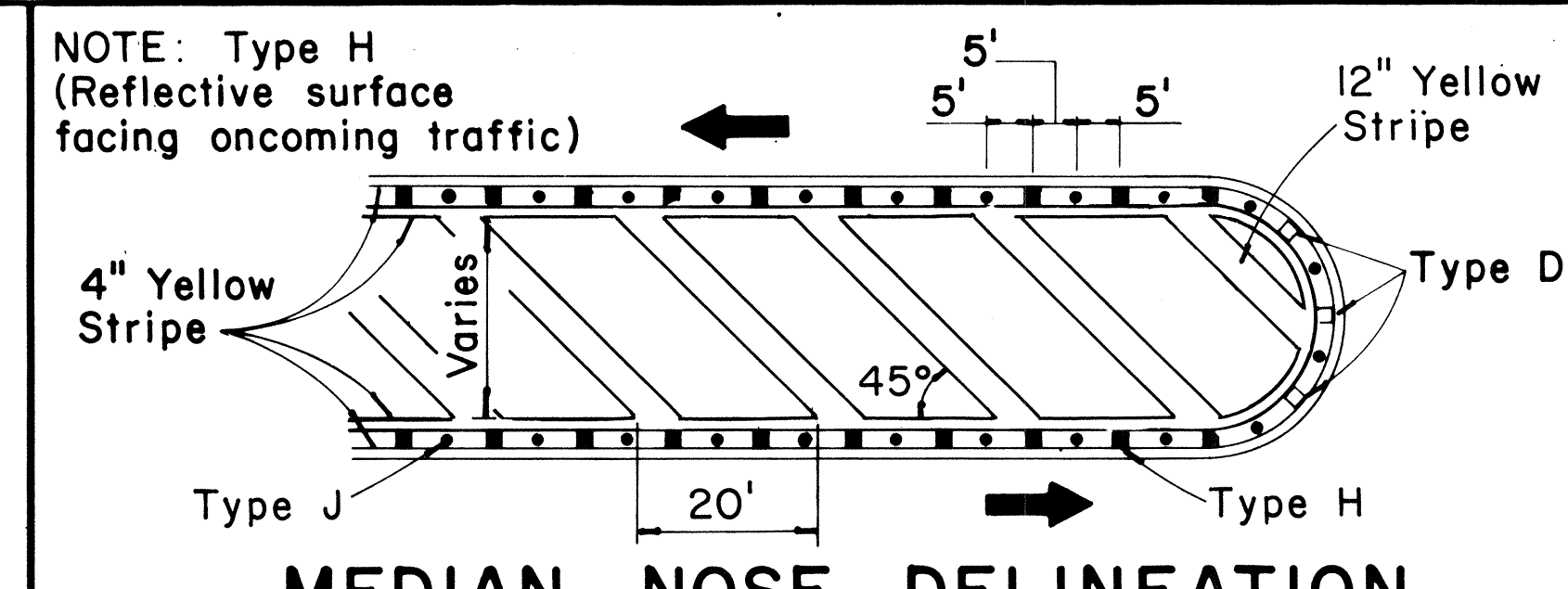


NOTE: Type H (Reflective Surface facing oncoming traffic)

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



CHANNELIZING LINES OR SOLID LANE LINES



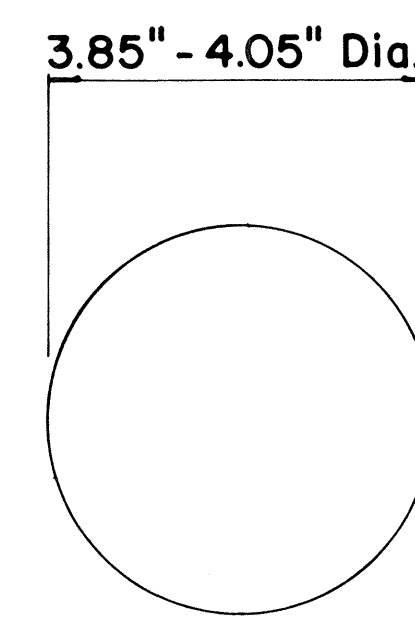
MEDIAN NOSE DELINEATION

TWO - LANE

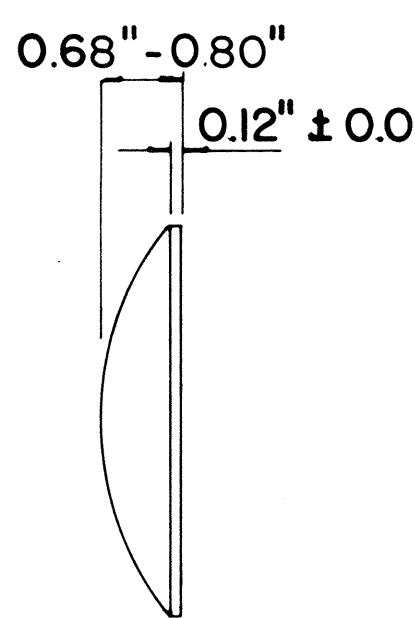
MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

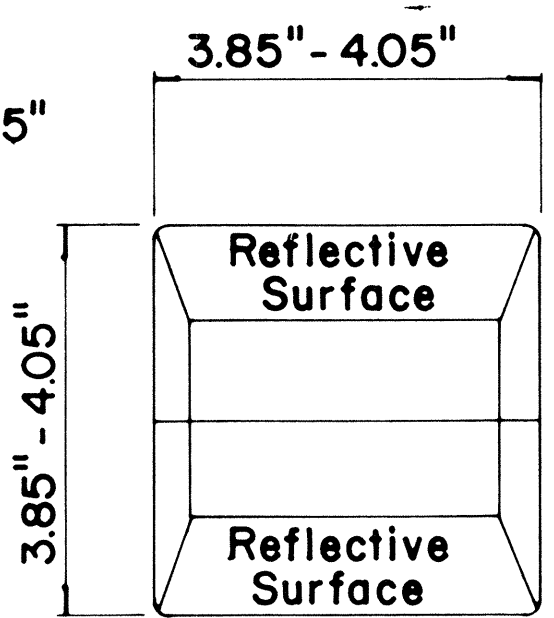
MISCELLANEOUS



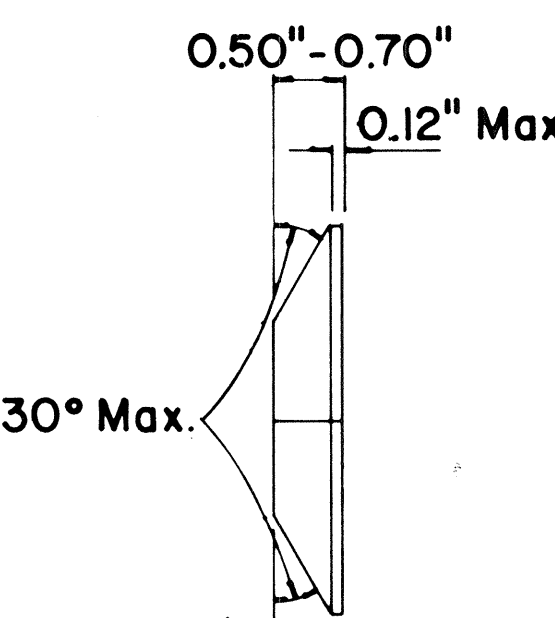
TYPE A
NON-REFLECTIVE WHITE MARKER



TYPE J
NON-REFLECTIVE YELLOW MARKER



TYPE C
RED-CLEAR REFLECTIVE MARKER



TYPE 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:
Erich Tanaka
TRAFFIC ENGINEER
7/21/78
DATE

APPROVED:
Robert J. Zekiah
ASSISTANT CHIEF, ENGINEERING
1/24/78
DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

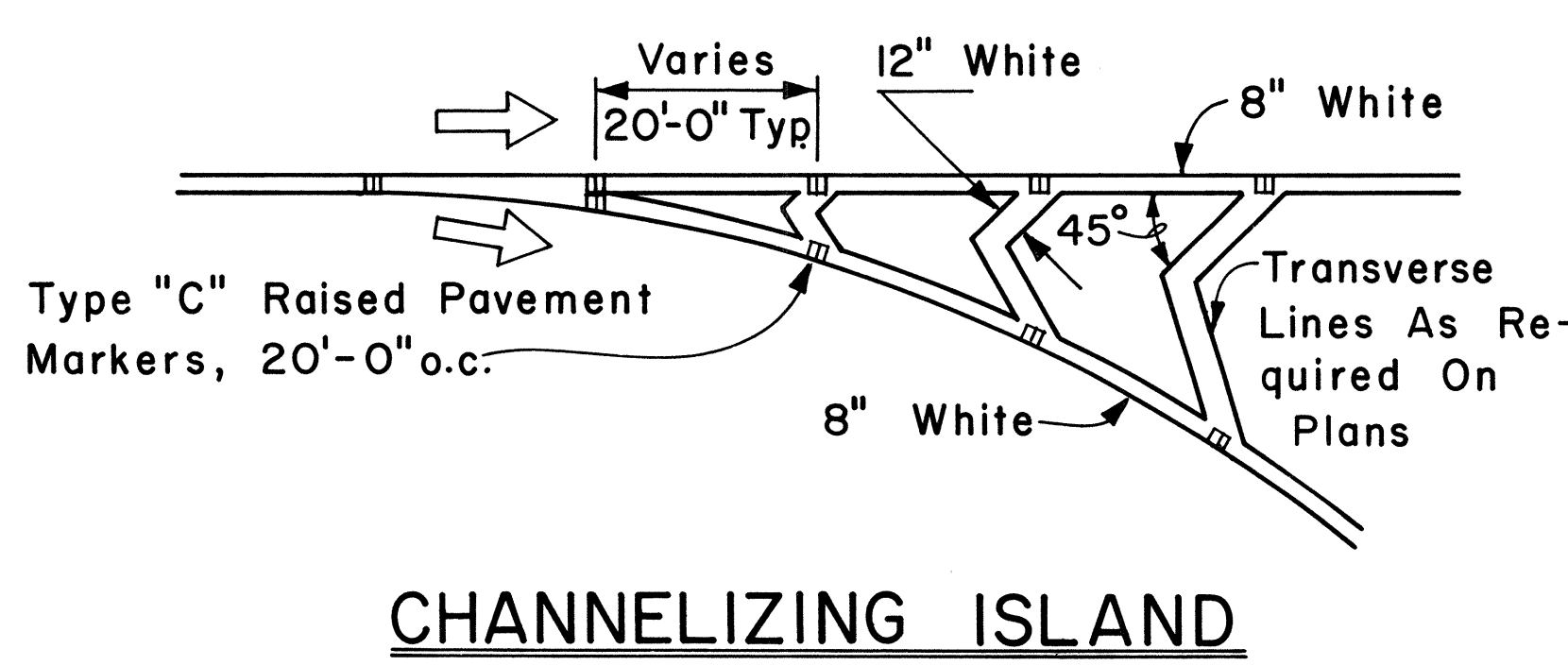
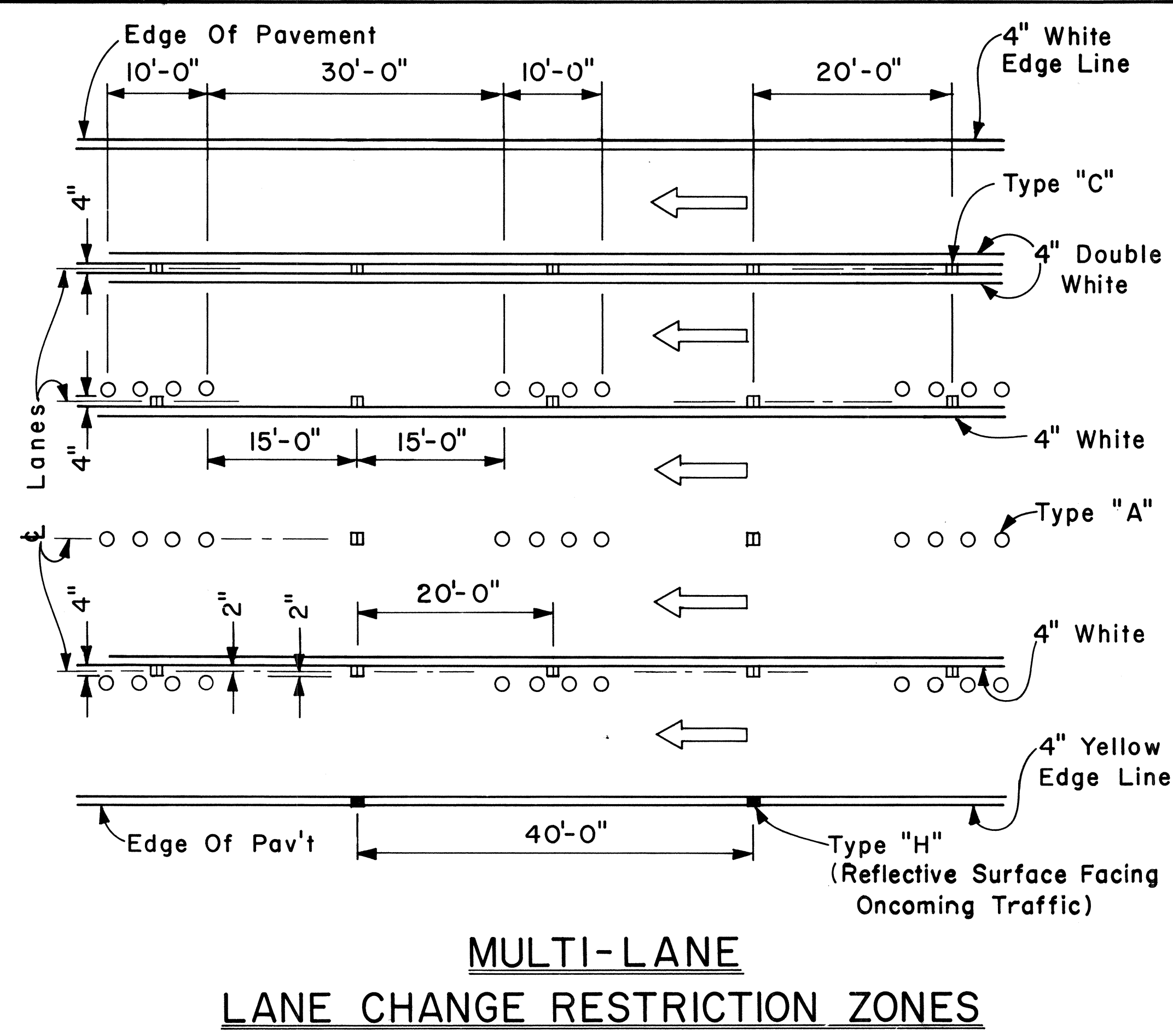
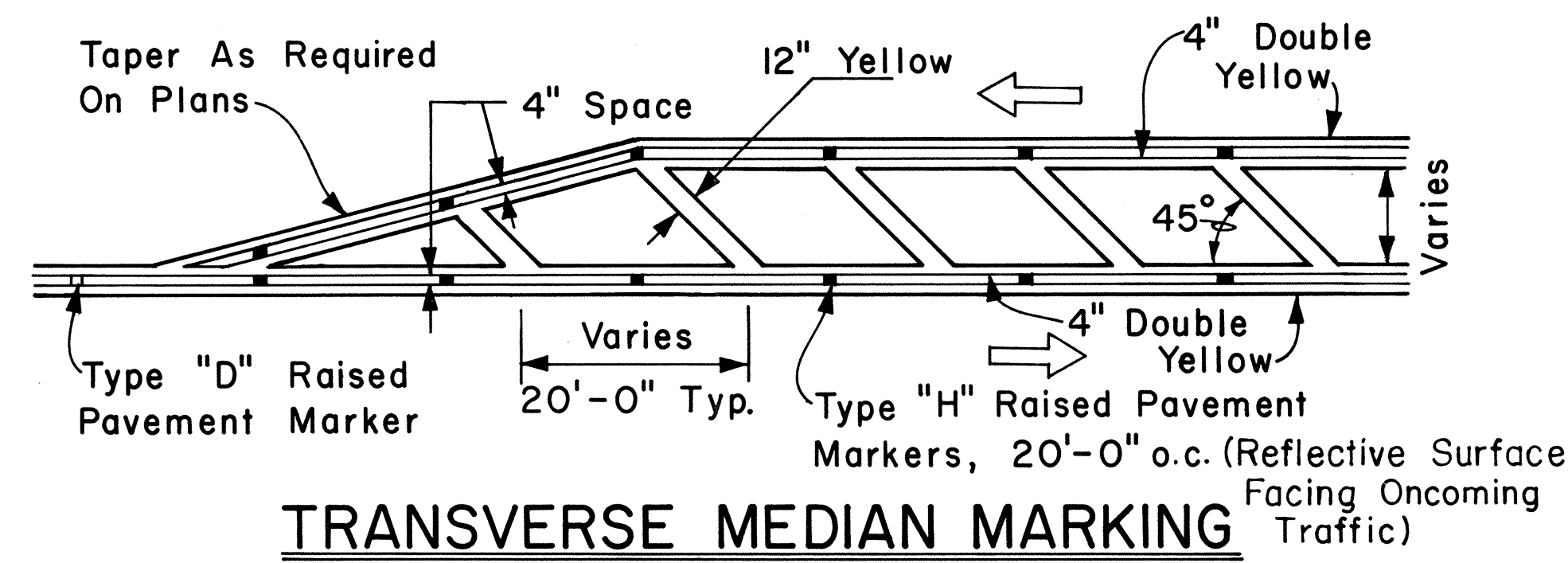
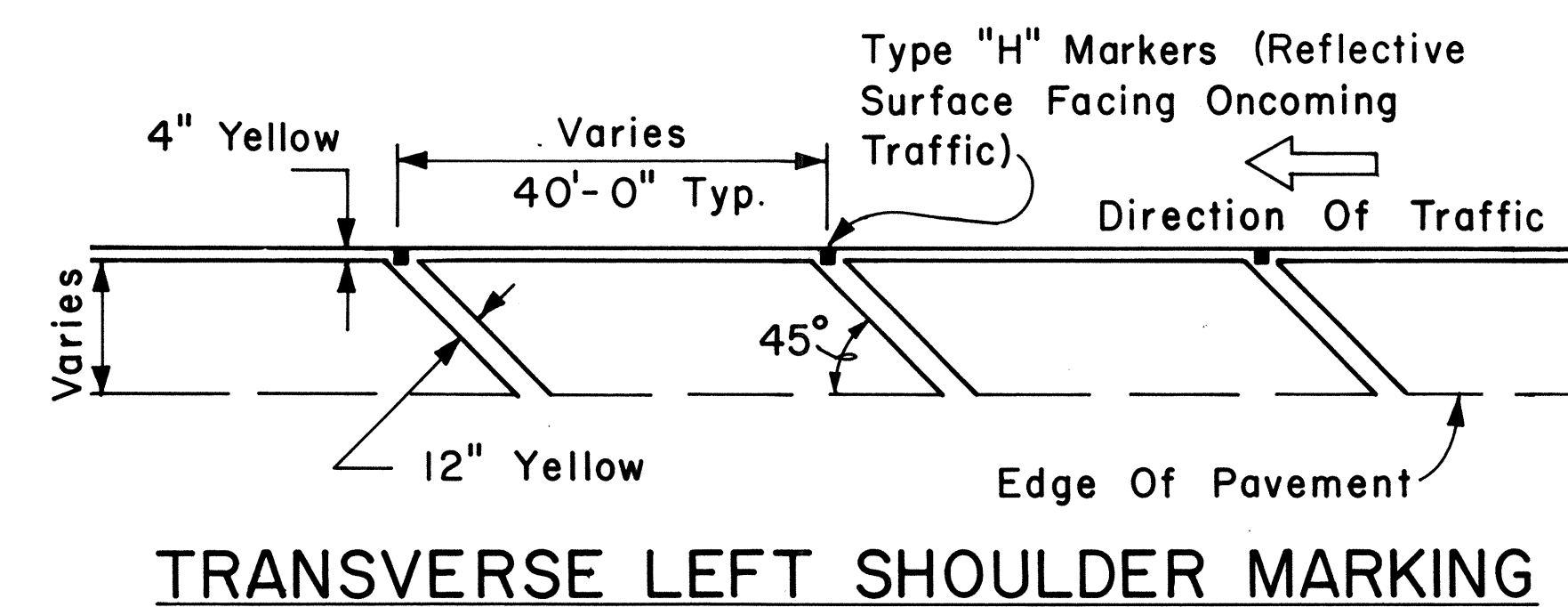
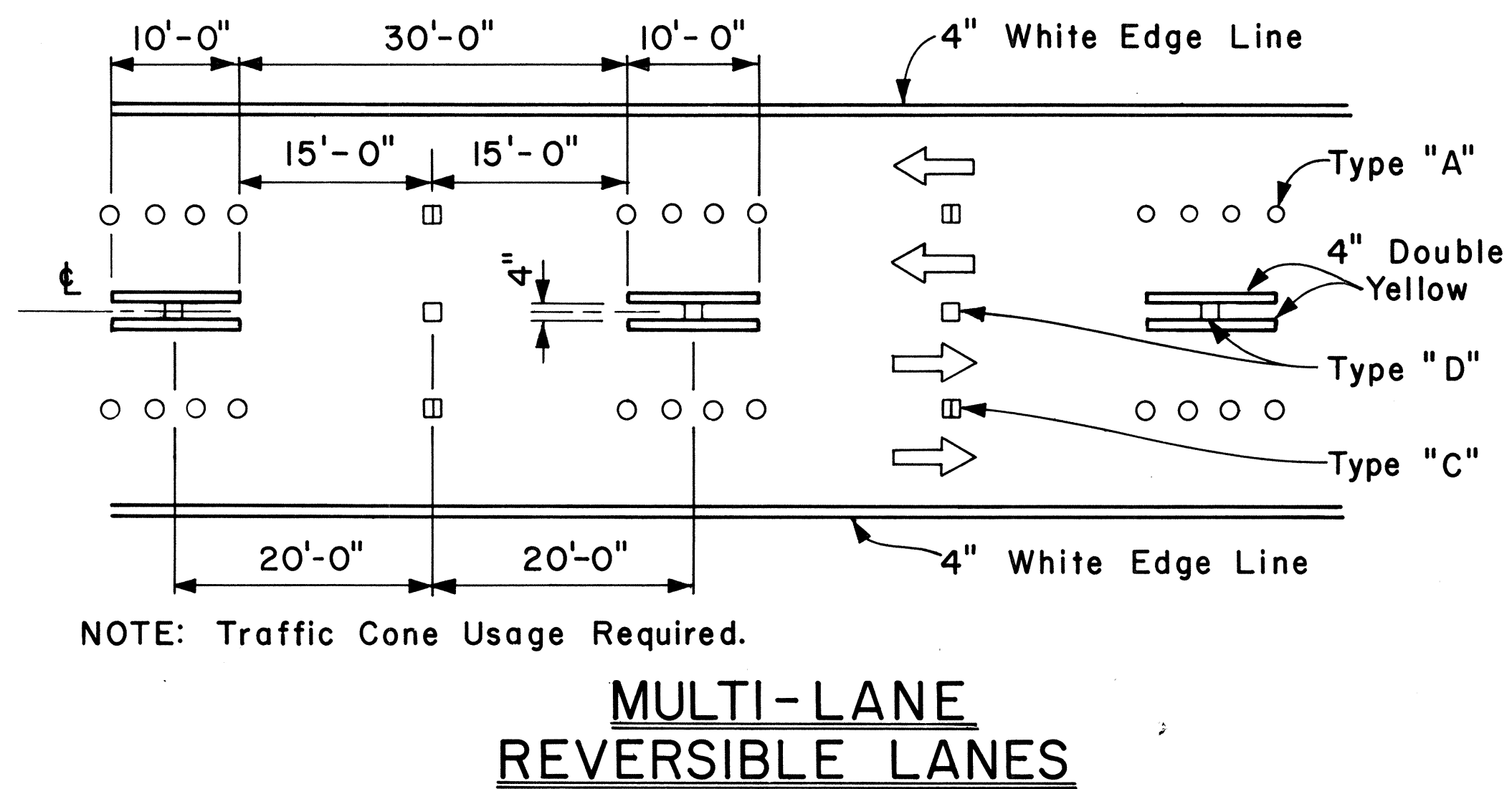
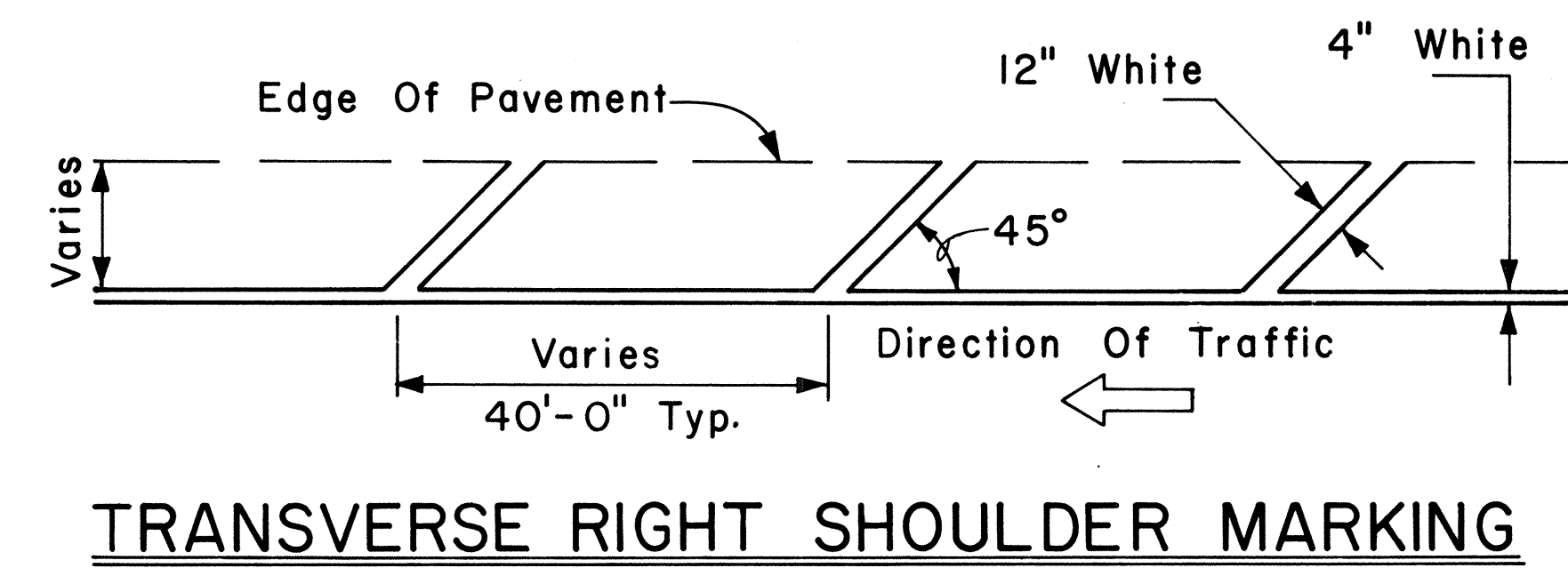
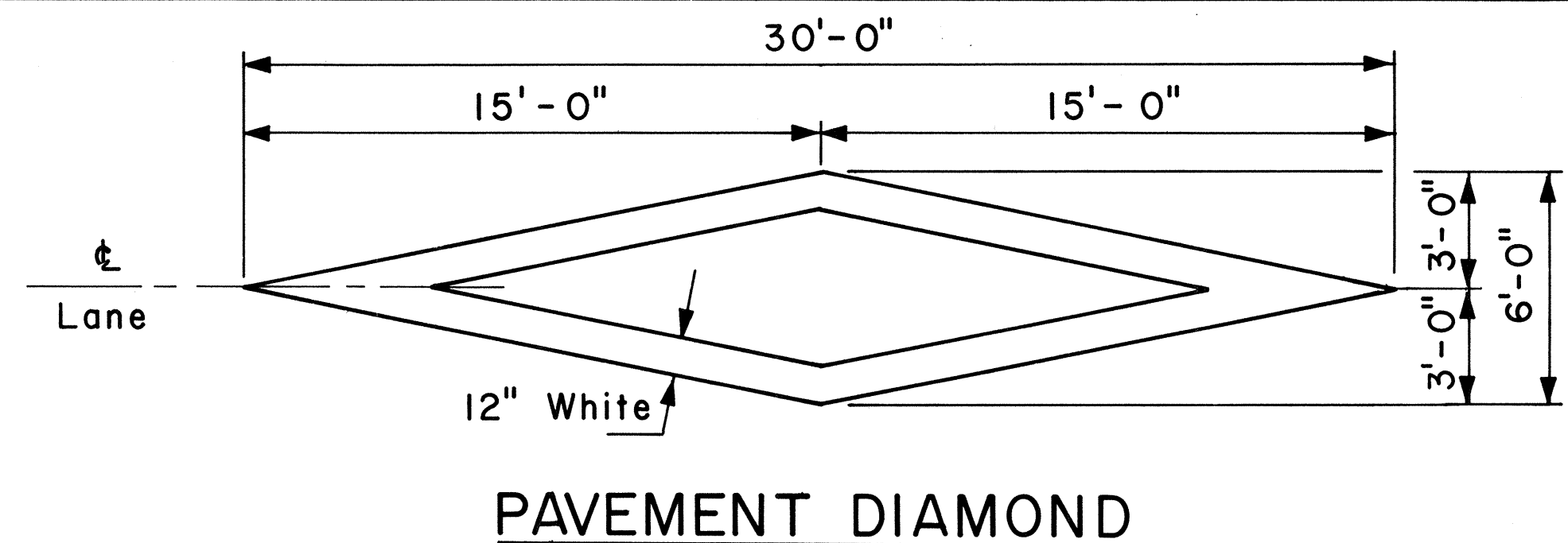
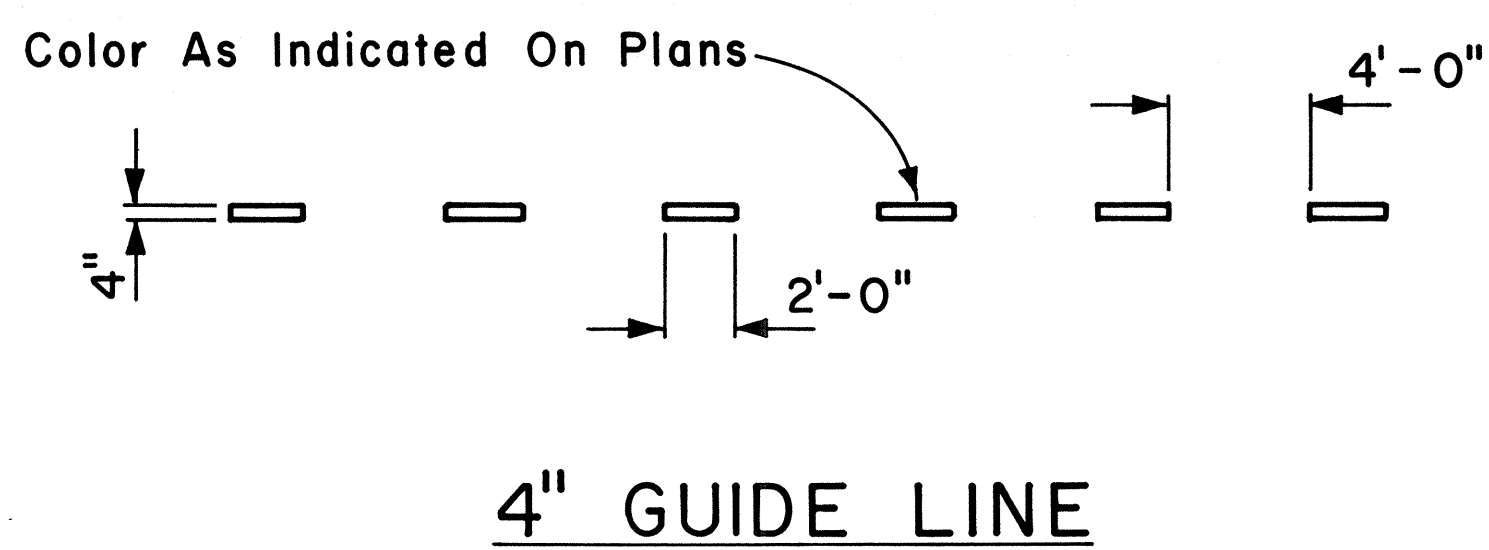
STANDARD DETAILS
RAISED PAVEMENT MARKERS
AND STRIPING

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.	9000A-02-02	1982	14	19

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.



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

APPROVED: Harbor 2. Zafrahu 5/3/78
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

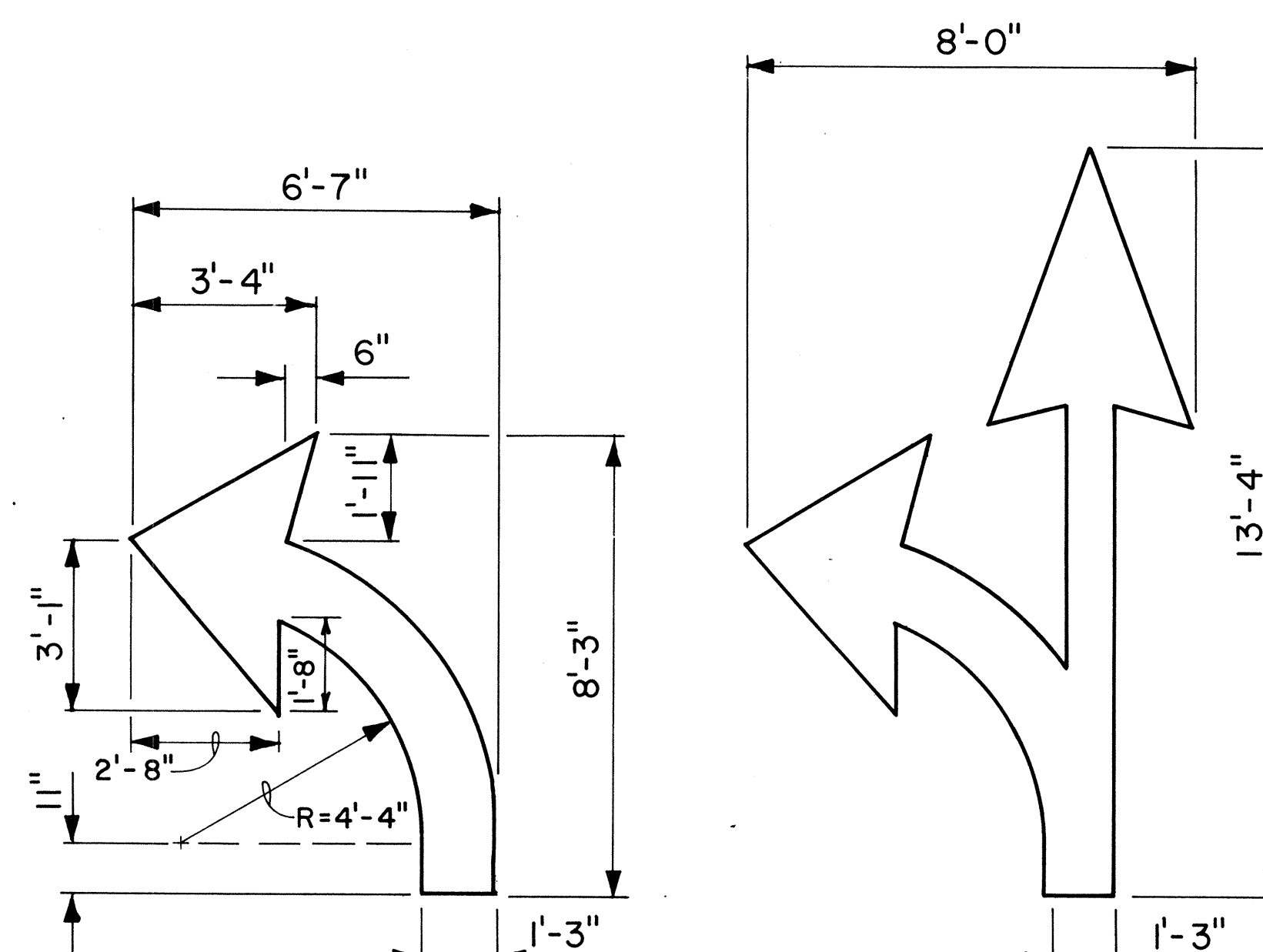
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

Scale: Not to Scale Date: April, 1978
SHEET No. 8 OF 13 SHEETS DT 302

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

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.

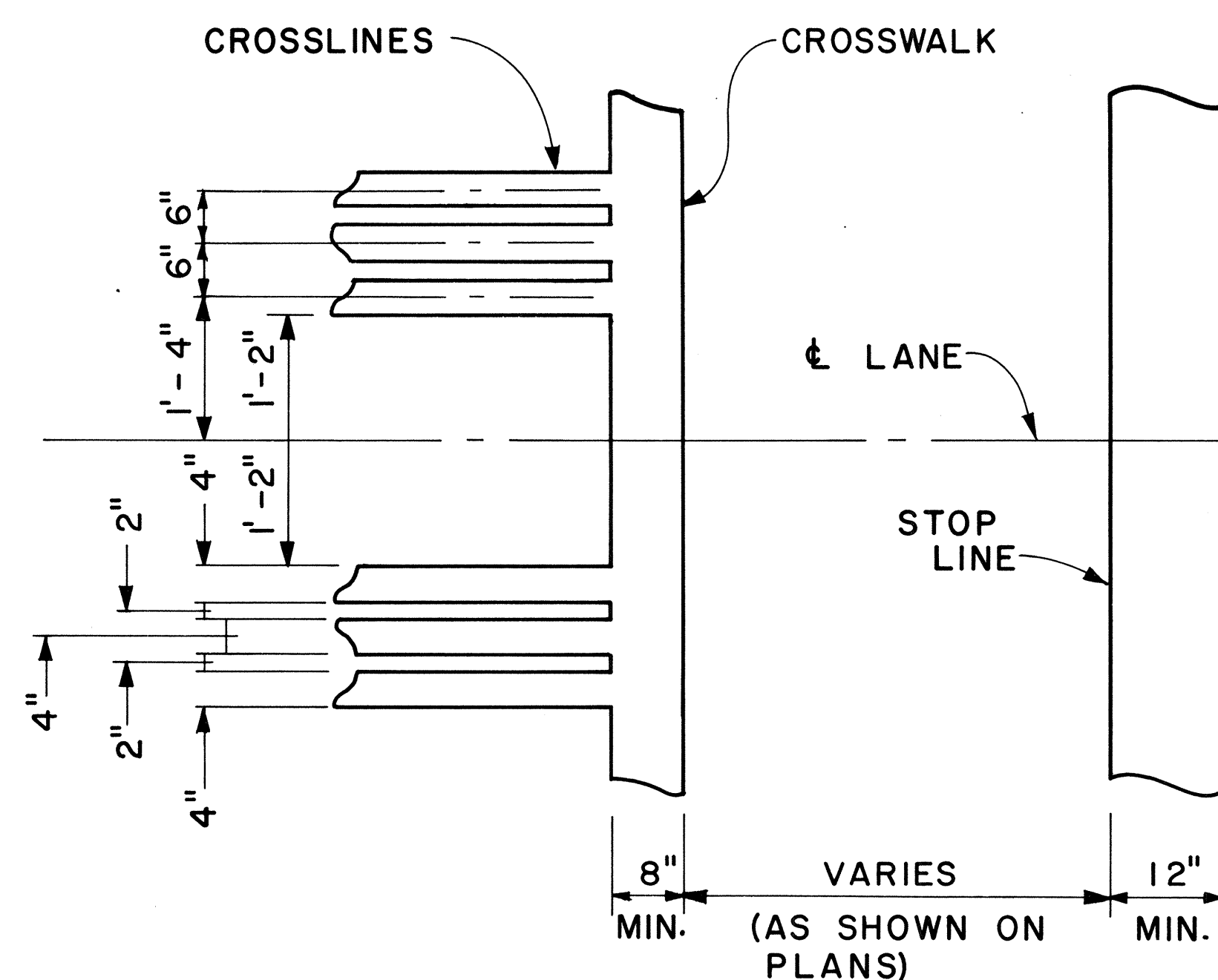


ELONGATED

STANDARD

PAVEMENT ARROWS

Scale: $3/8" = 1'$



PLAN

DETAIL "A"

CROSSWALK & STOP LINE

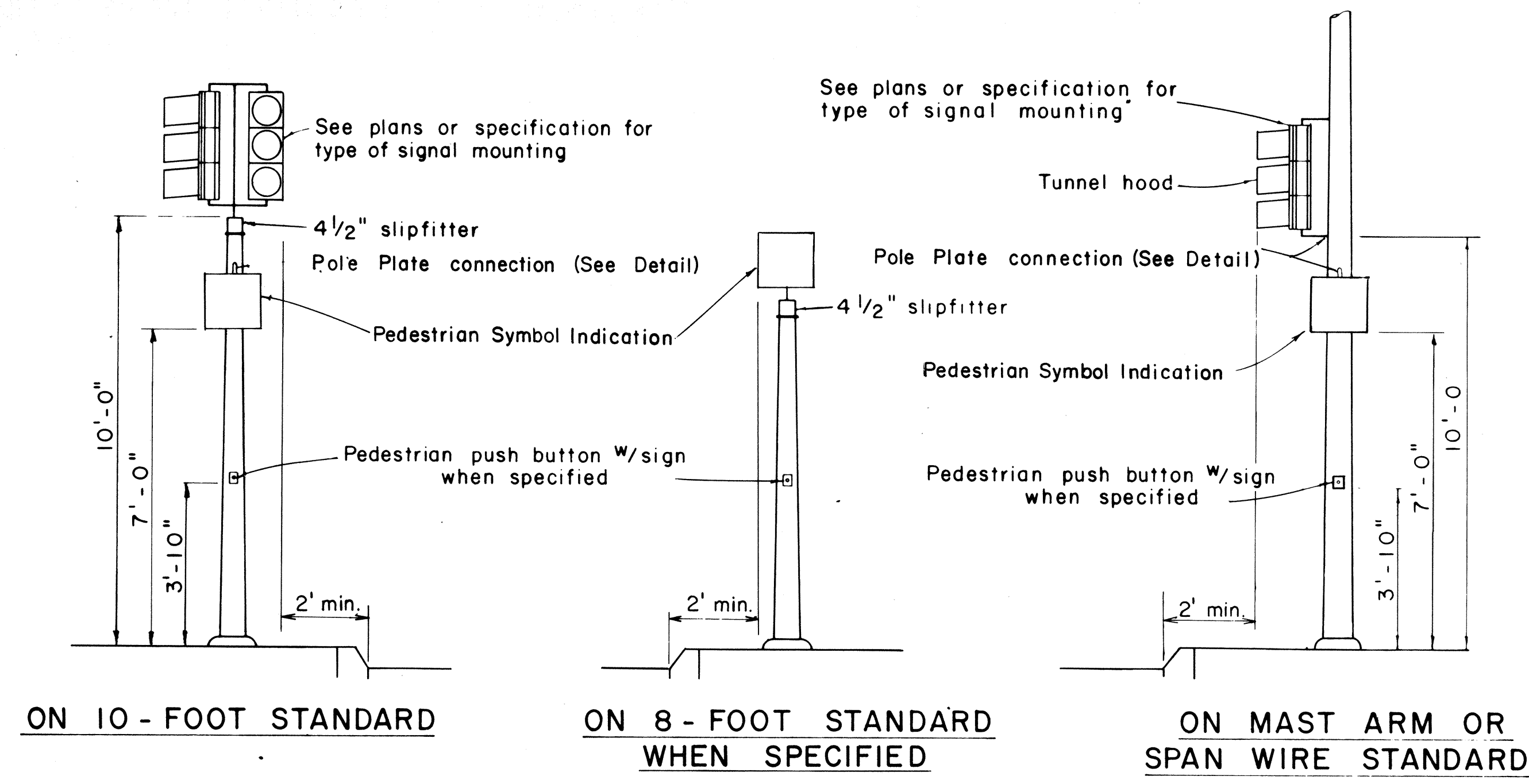
Scale: Not to Scale

NO.	REVISION	APPROVED BY	DATE

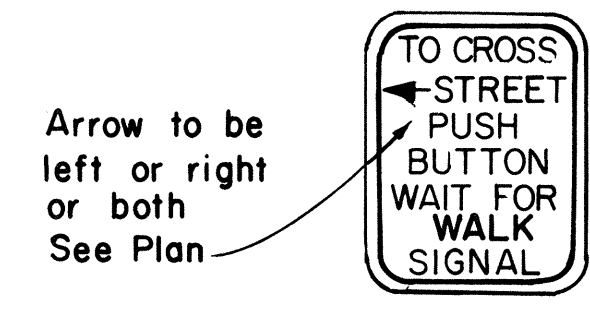
Scale: As Shown Date: March, 1978

SHEET No. 9 OF 13 SHEETS DT 306

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	16	19

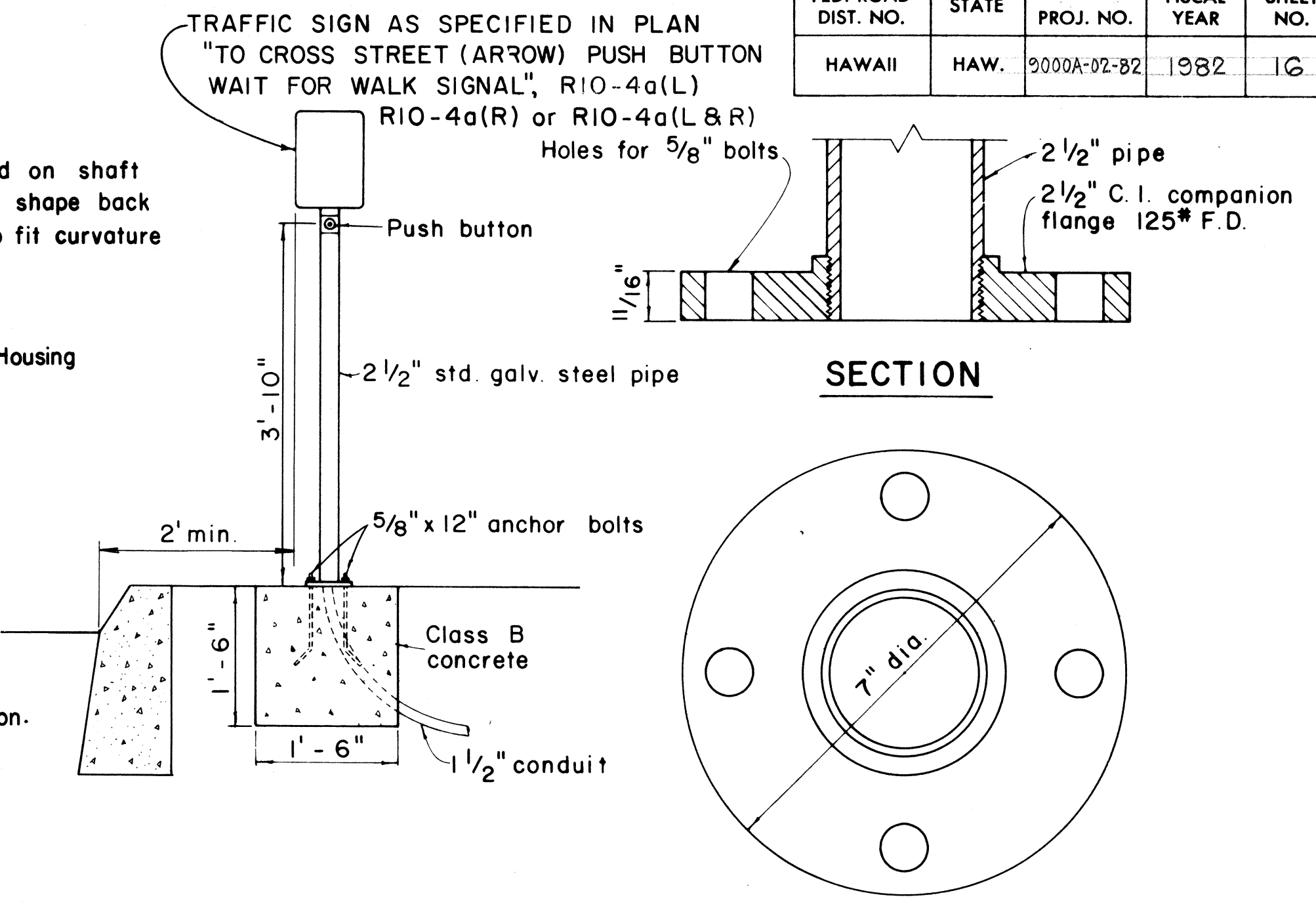


TYPICAL EQUIPMENT MOUNTINGS

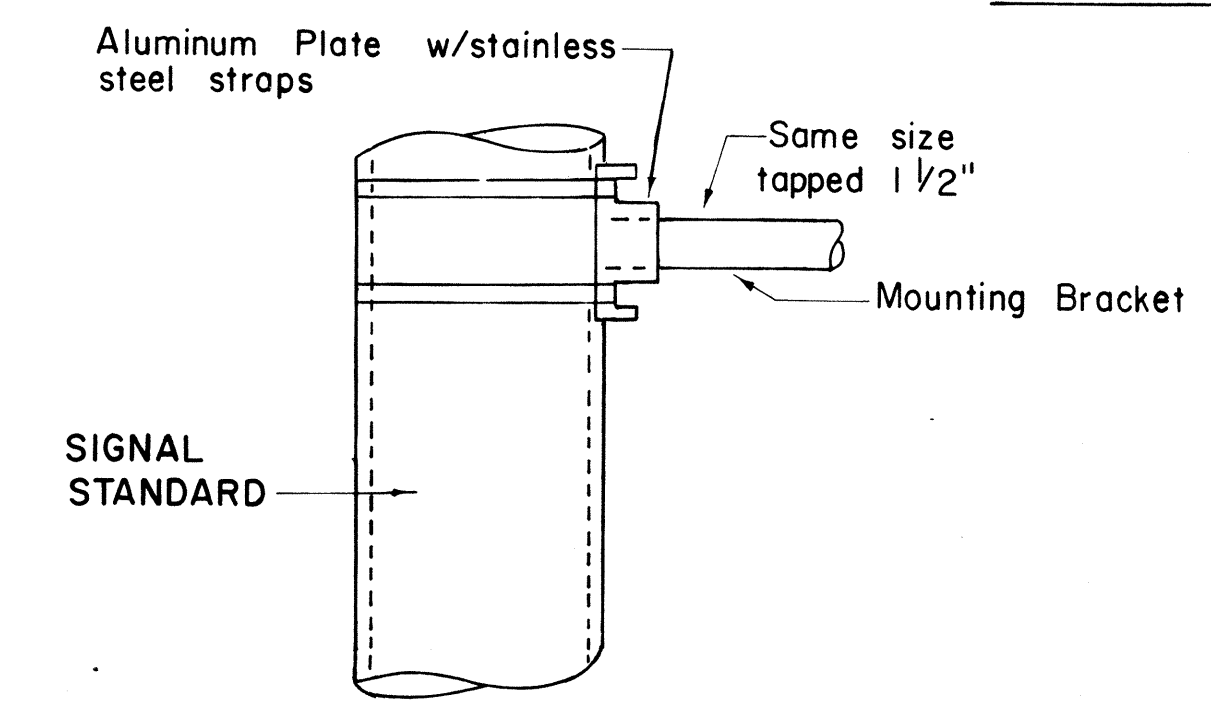


PEDESTRIAN PUSH BUTTON
RIO-4a(L)
5" x 7"

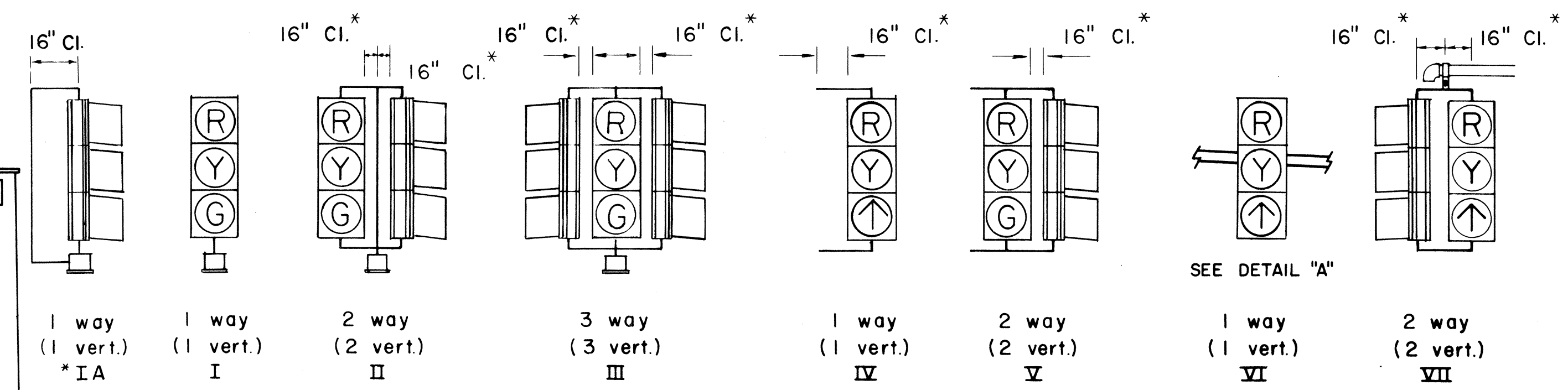
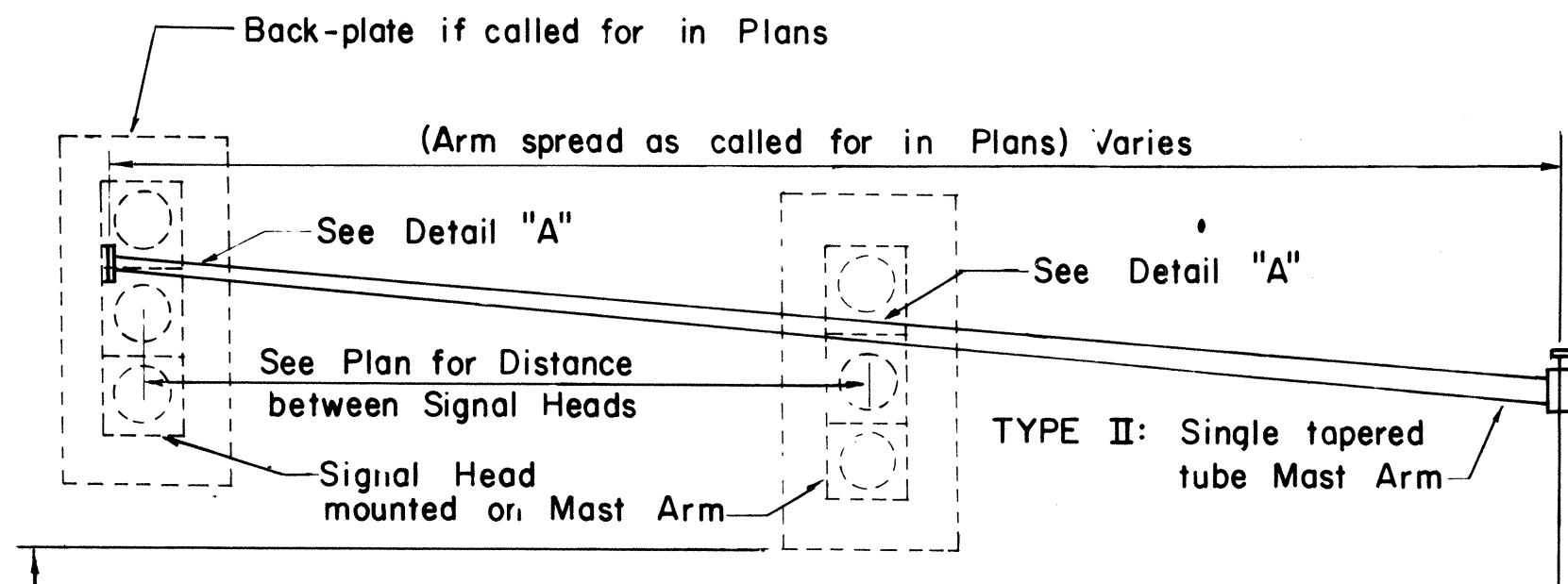
- NOTE:
1. Conduits shall protrude 2" max. above finished surface of foundation.
 2. Conduits shall slope away from pole foundation.



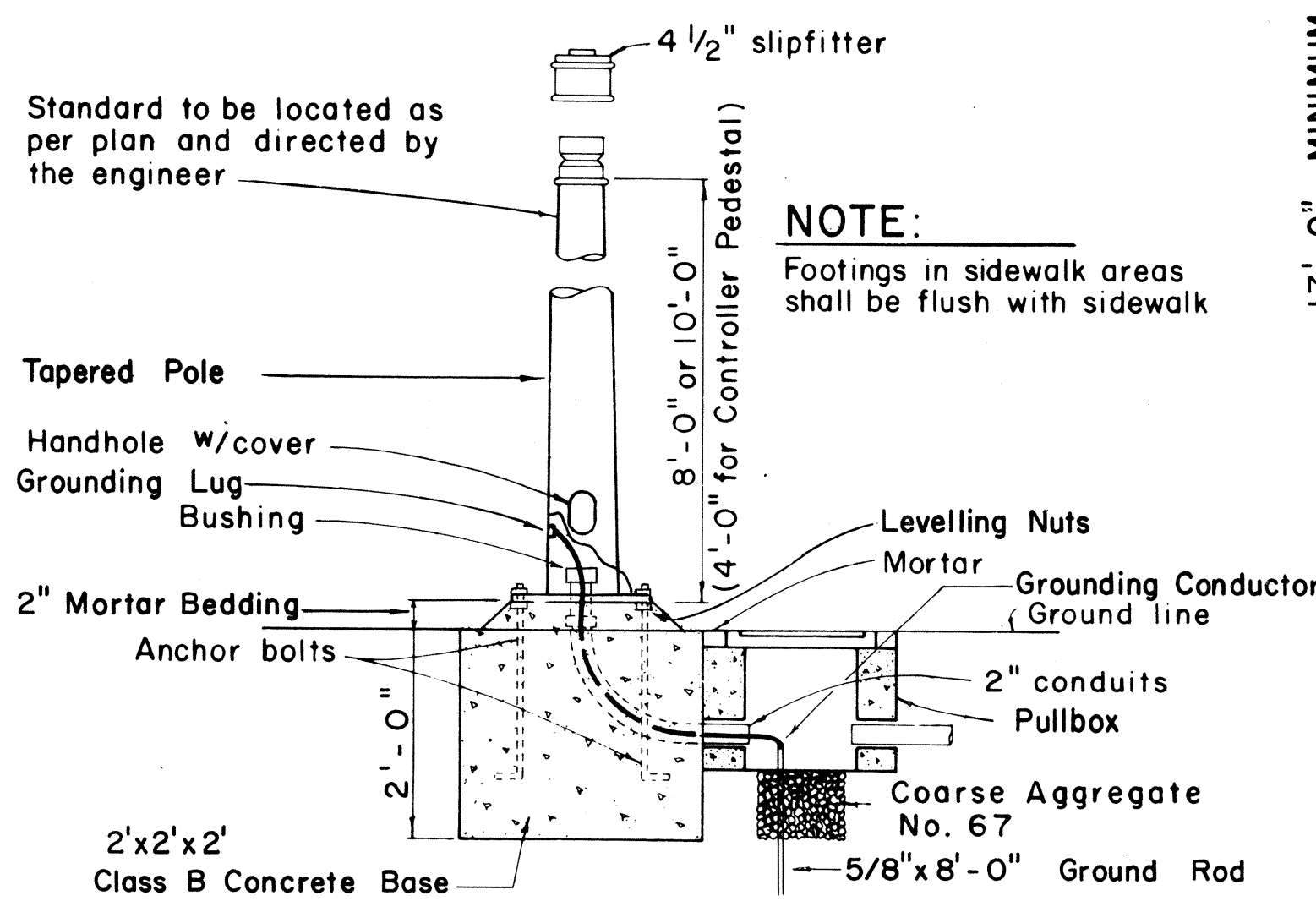
PEDESTRIAN PUSH BUTTON POST AND FOOTING



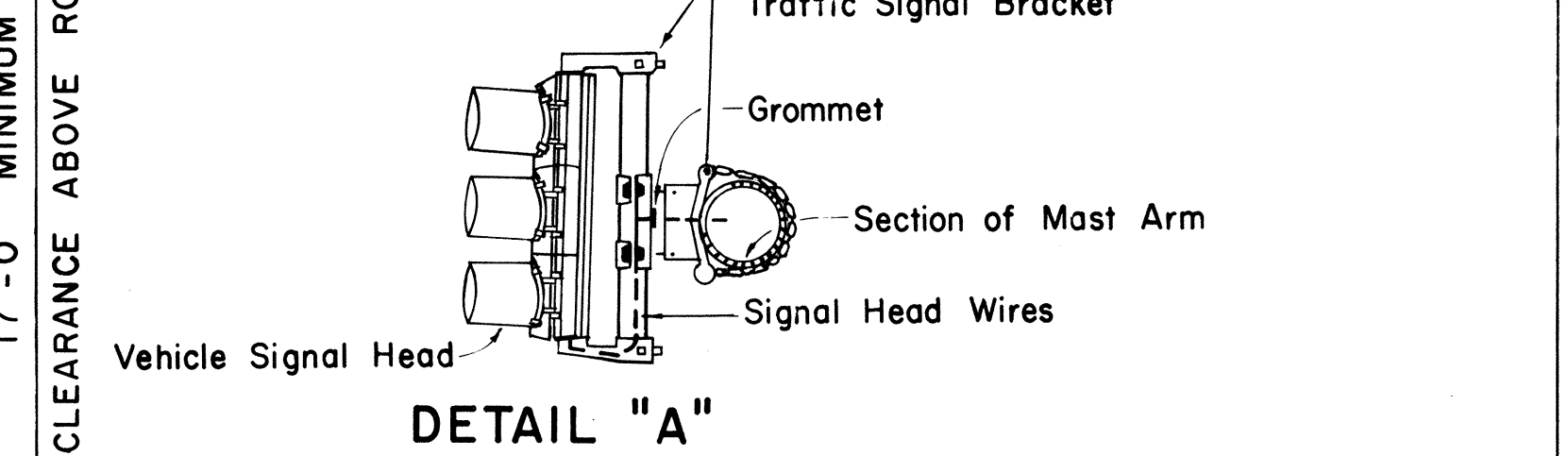
DETAIL OF POLE PLATE CONNECTIONS



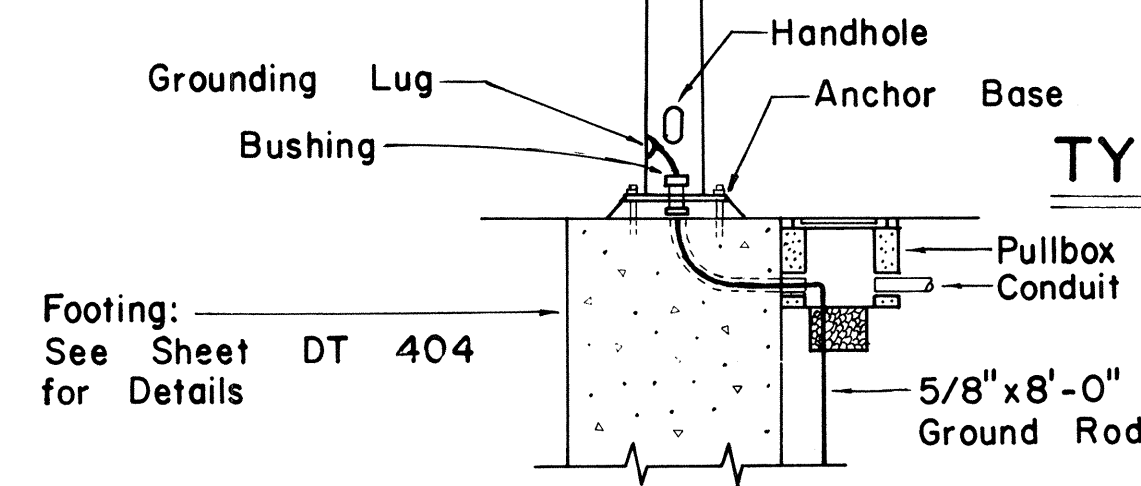
TYPICAL VEHICULAR AND PEDESTRIAN SIGNAL MOUNTINGS



TYPE I SIGNAL STANDARD OR CONTROLLER PEDESTAL AND FOOTING

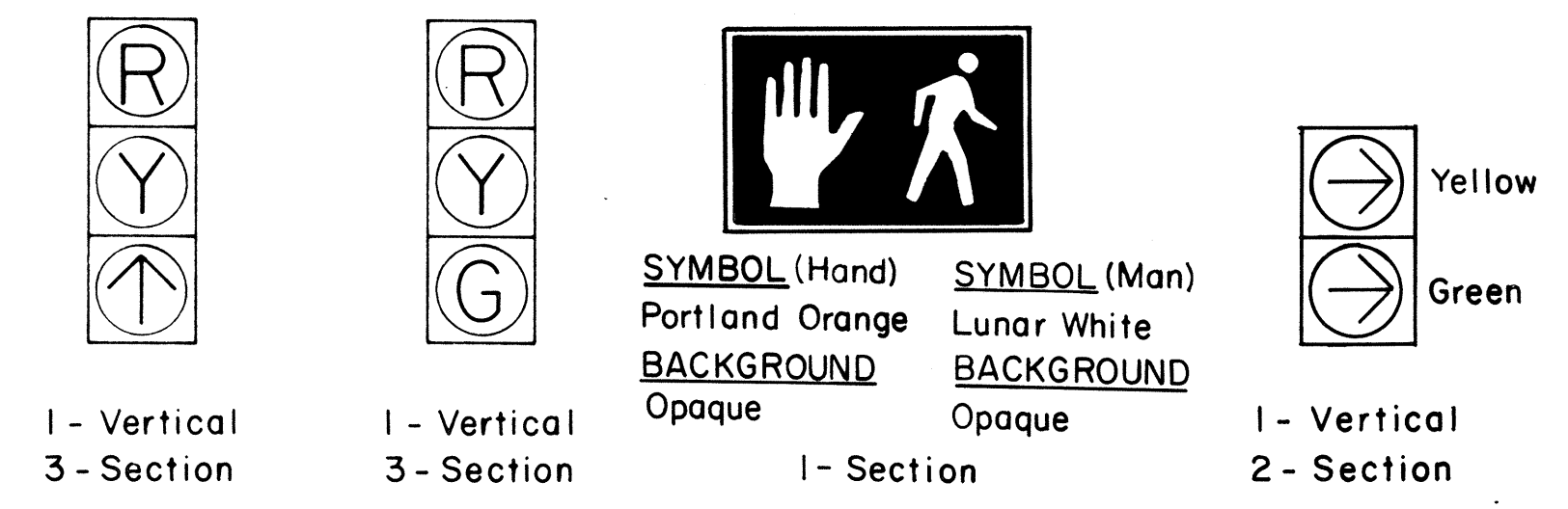


DETAIL "A"



TYPE II MAST ARM AND STANDARD

TYPICAL SIGNAL ARRANGEMENTS



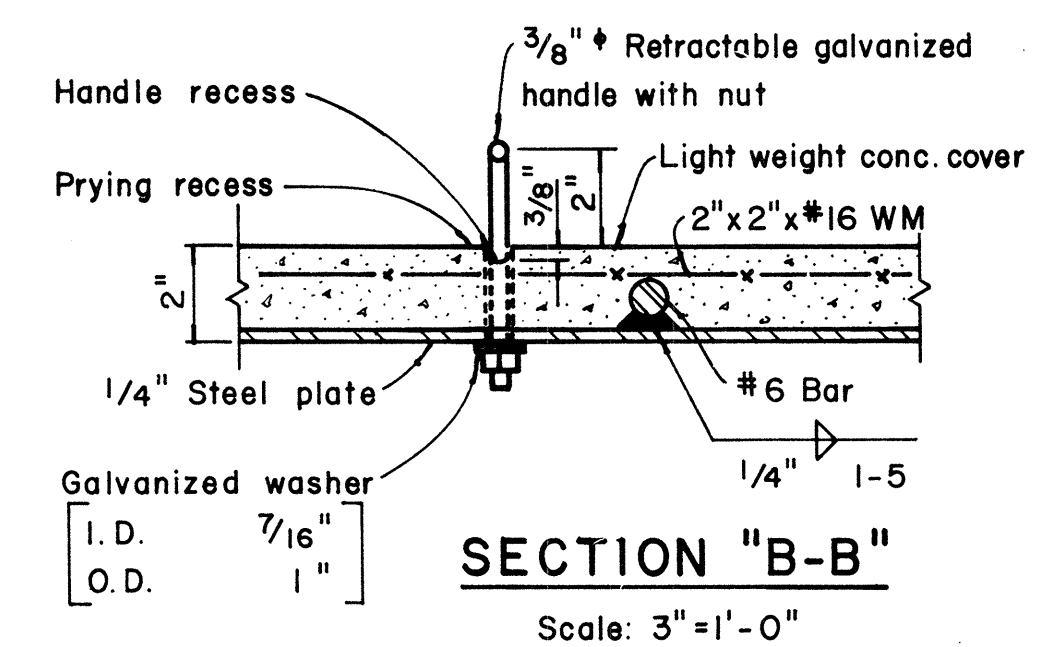
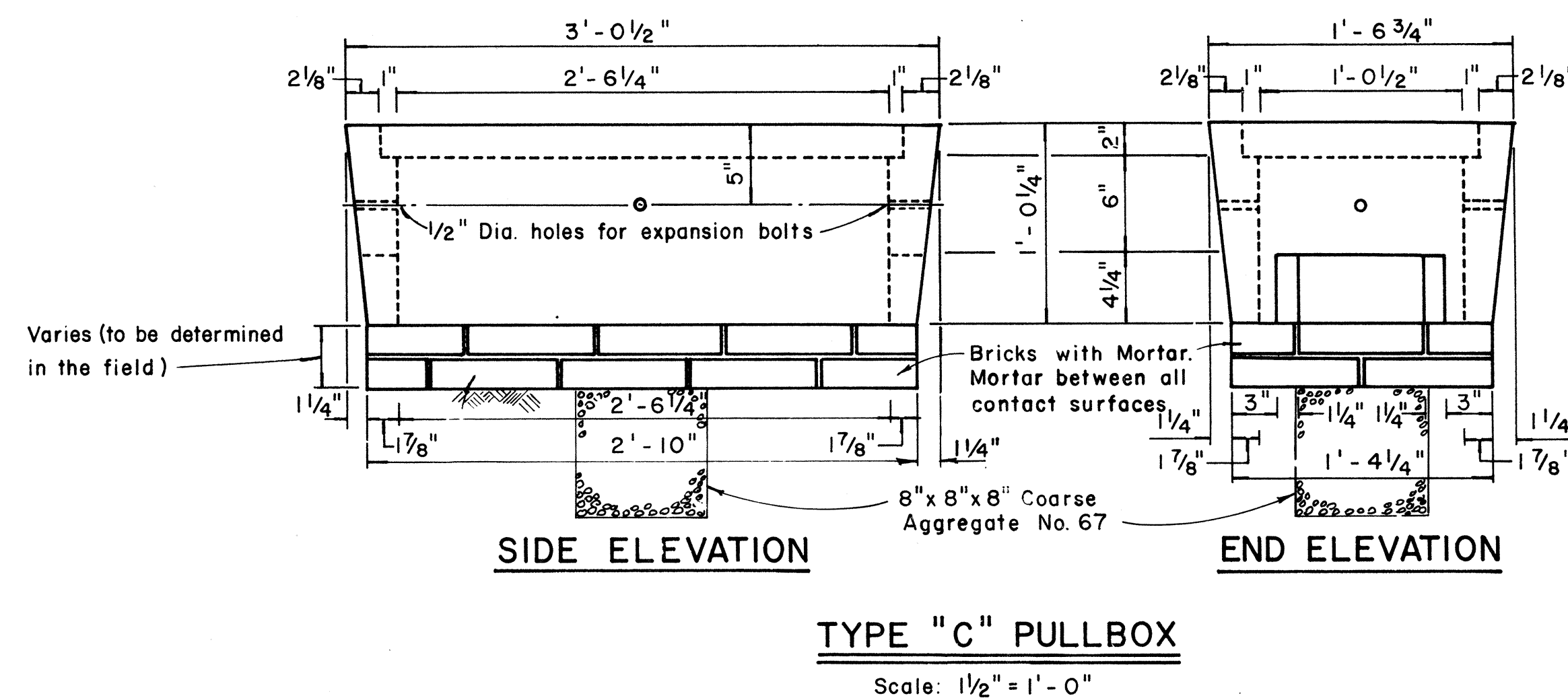
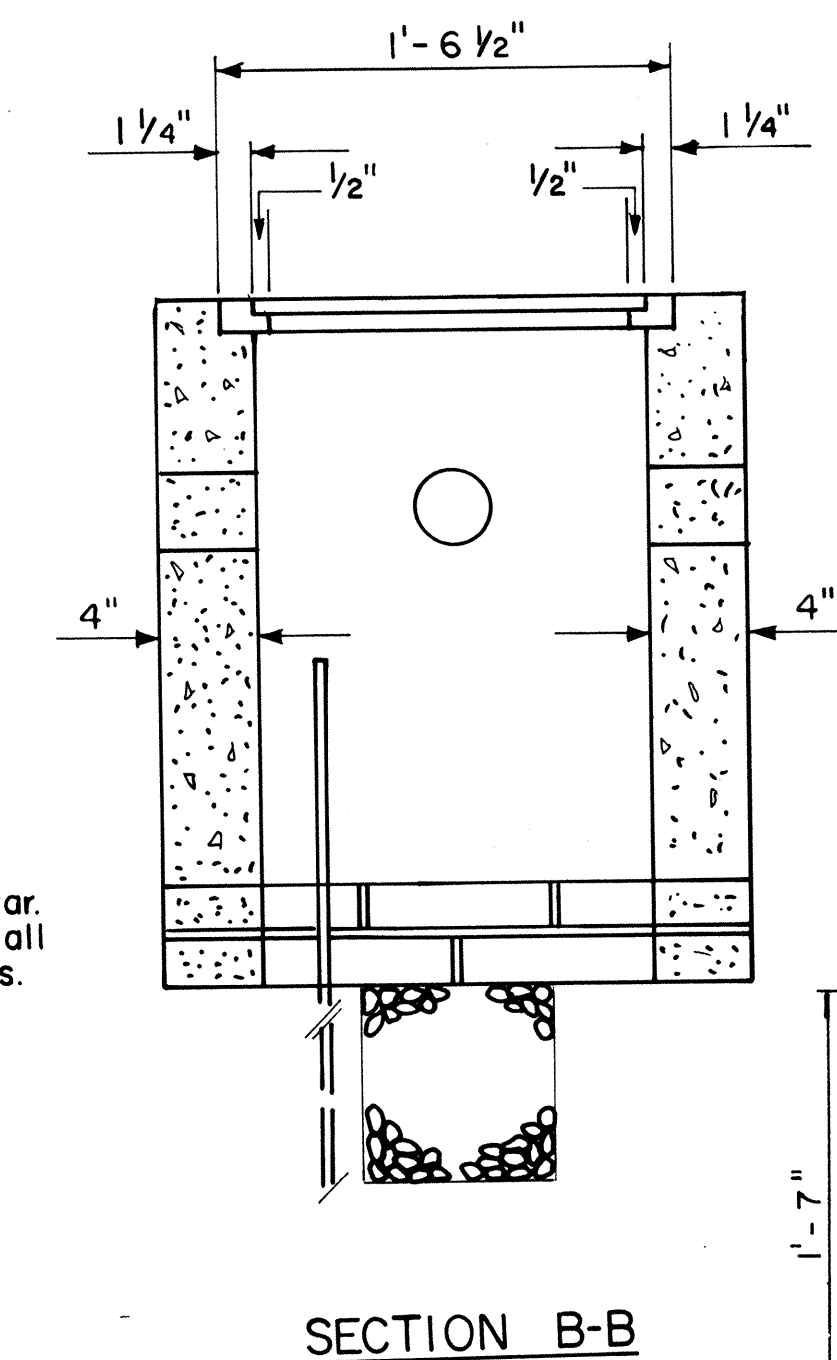
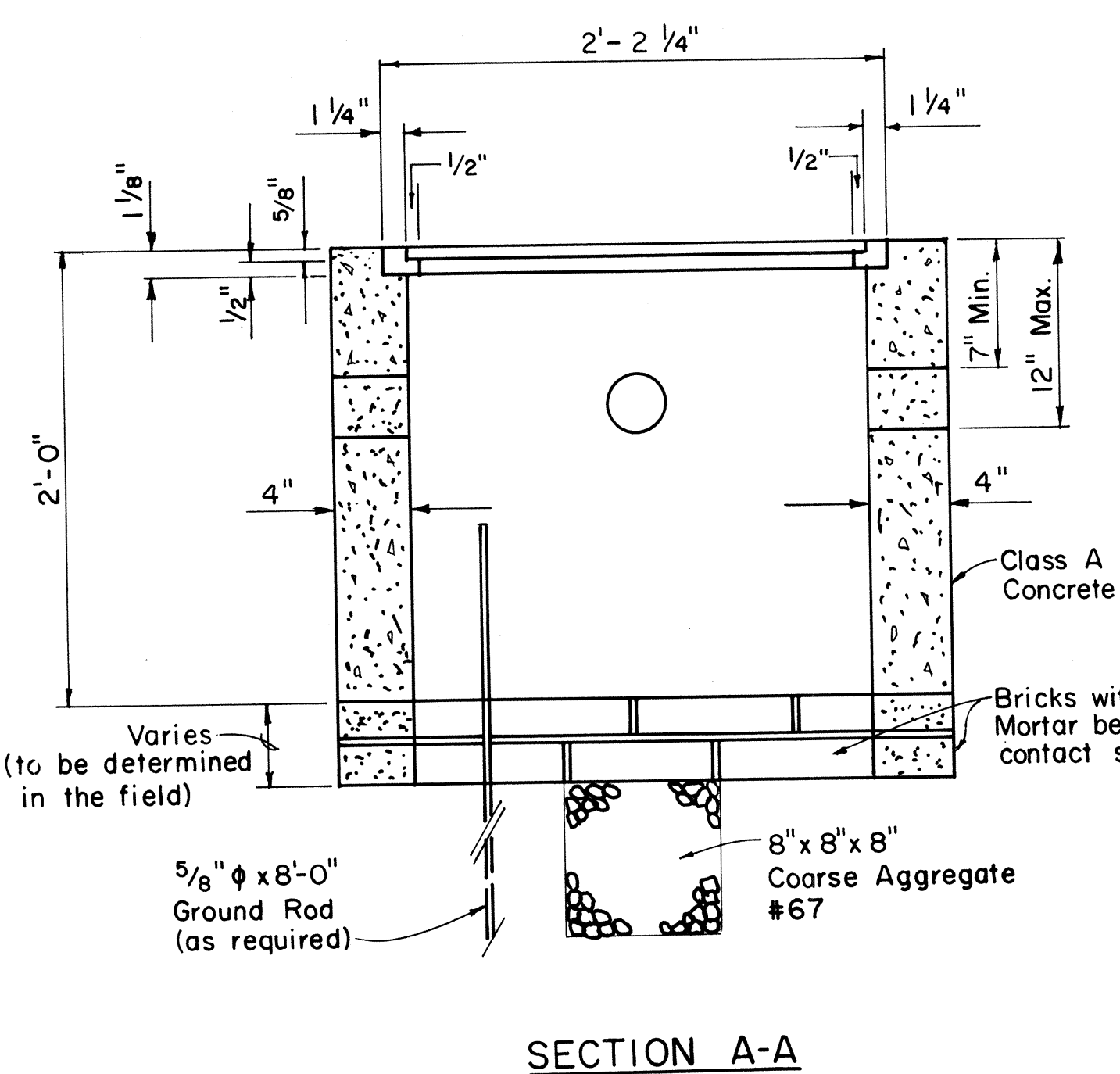
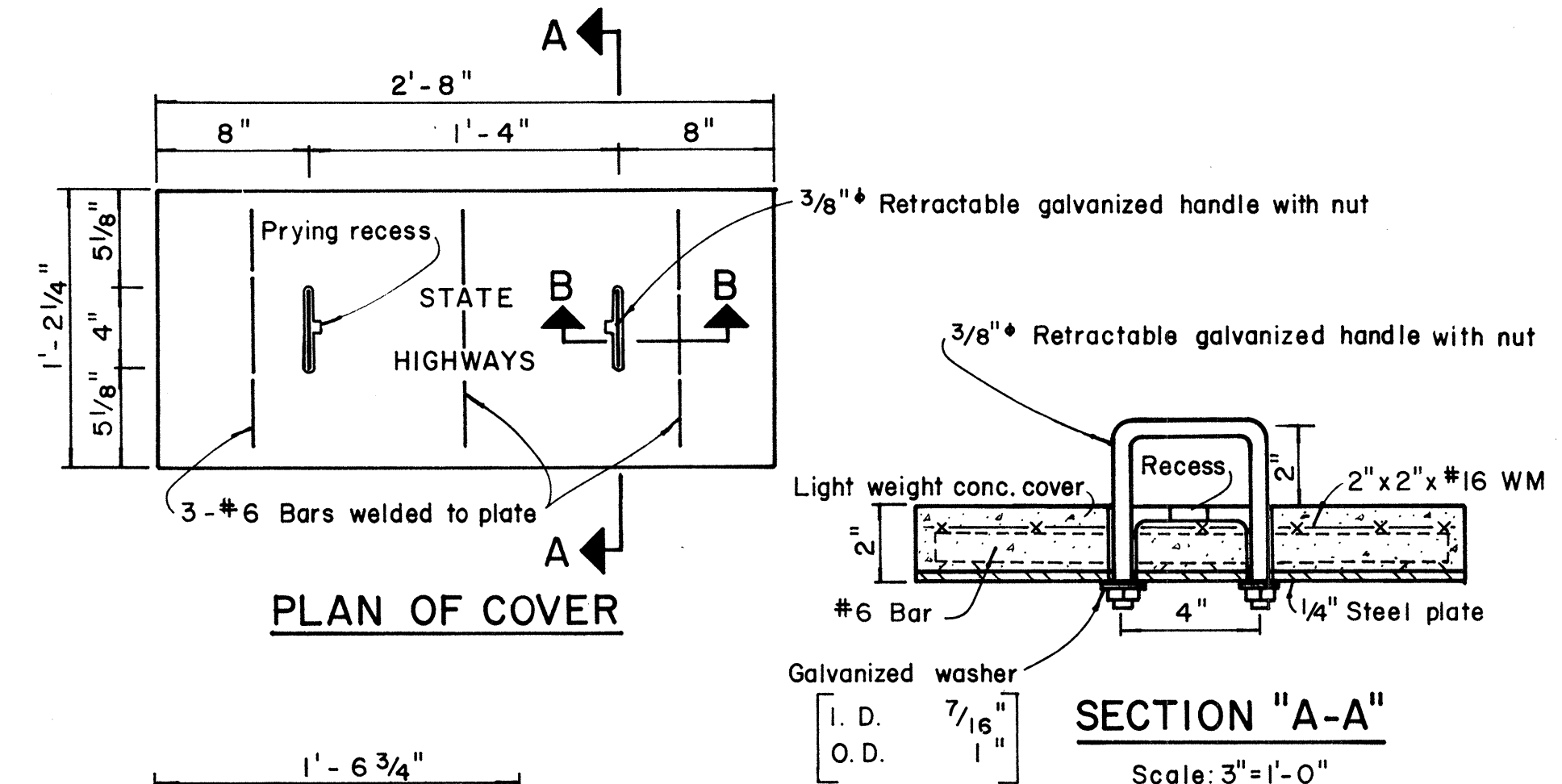
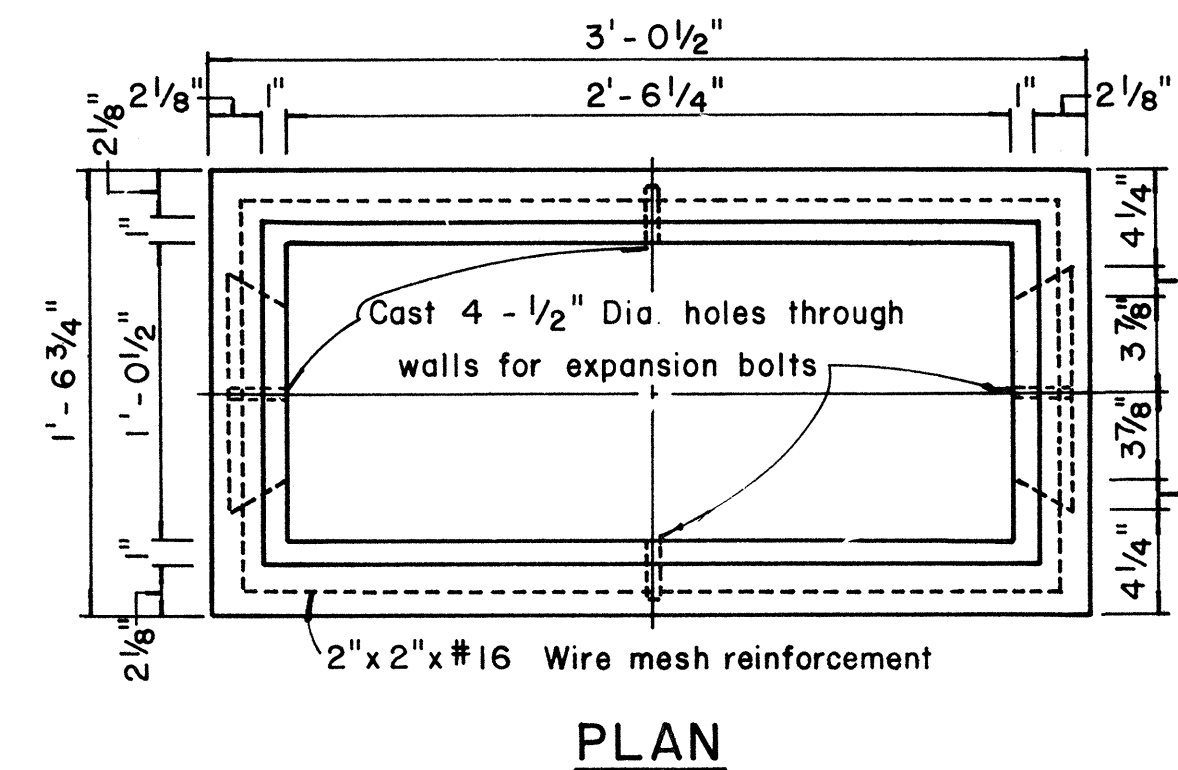
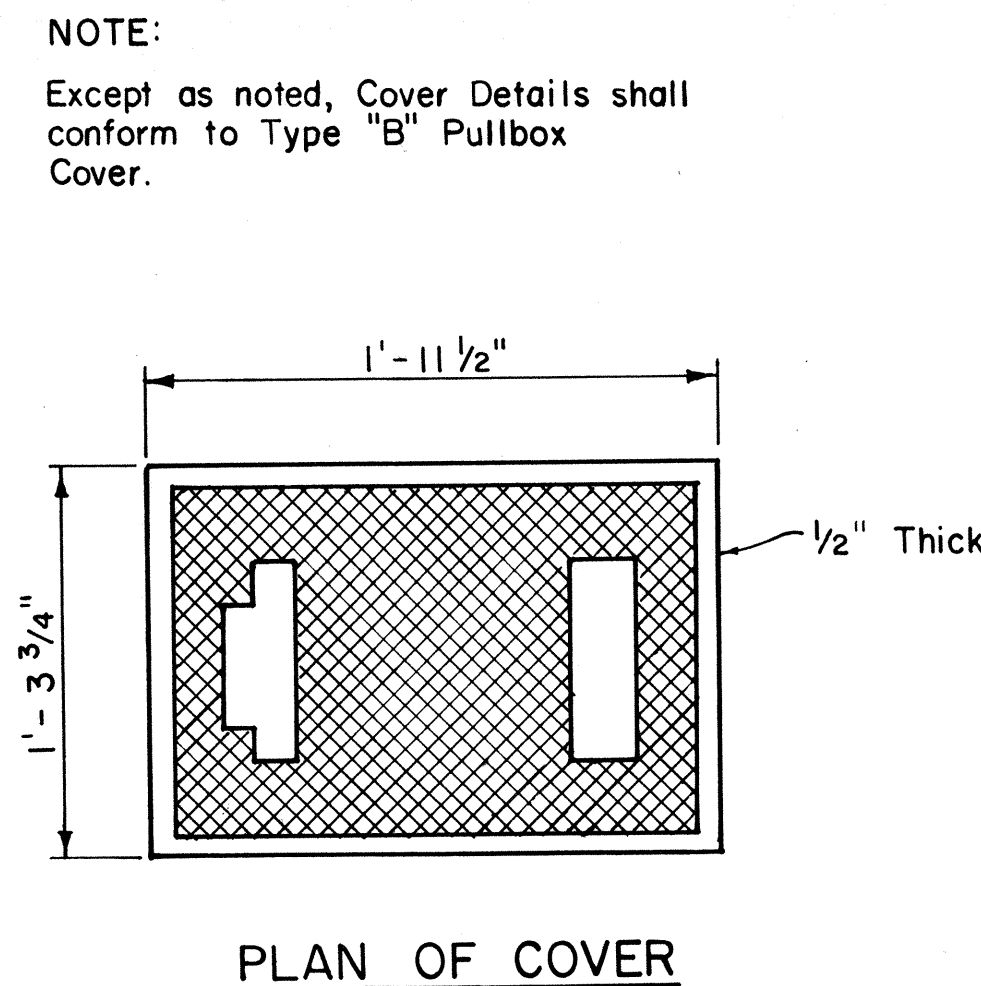
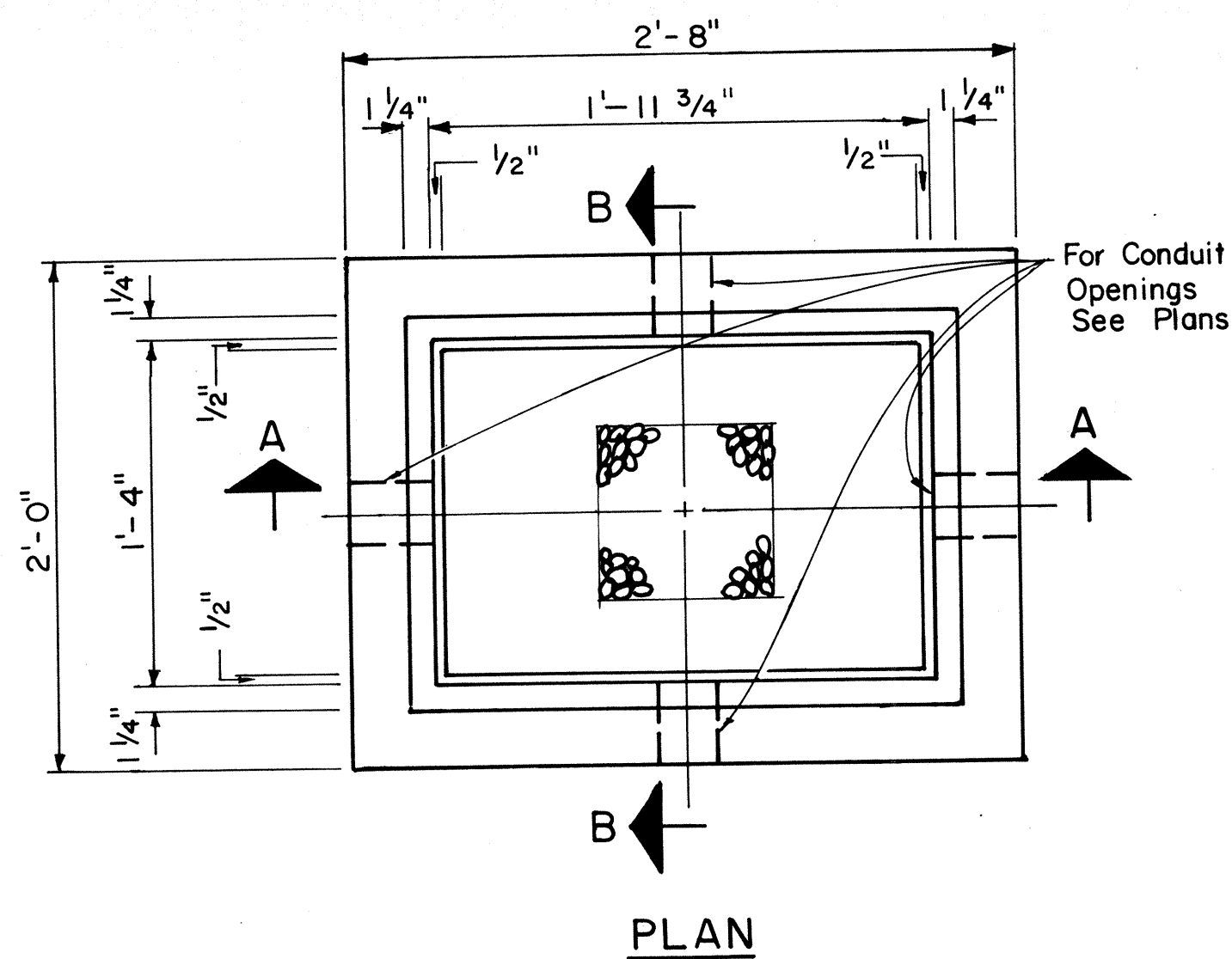
NO.	REVISION	APPROVED BY	DATE
1	Revise code nos. for Pedestrian Push Button signs.	H.T.	3/23/12
2	Revise Details of Traffic and Pedestrian Signals, Standards and Pedestrian Push Button and Signs.	H.T.	3/5/12
3	Revise signal indications.	H.T.	9/22/10
4	Remove Note No. 3 & Revise clearance and dimension.	H.T.	9/19/11
5	Revise Ped. Signal Indication	H.T.	8/6/80

APPROVAL RECOMMENDED:
Erich Tanaka
 TRAFFIC ENGINEER
 DATE 12/29/09

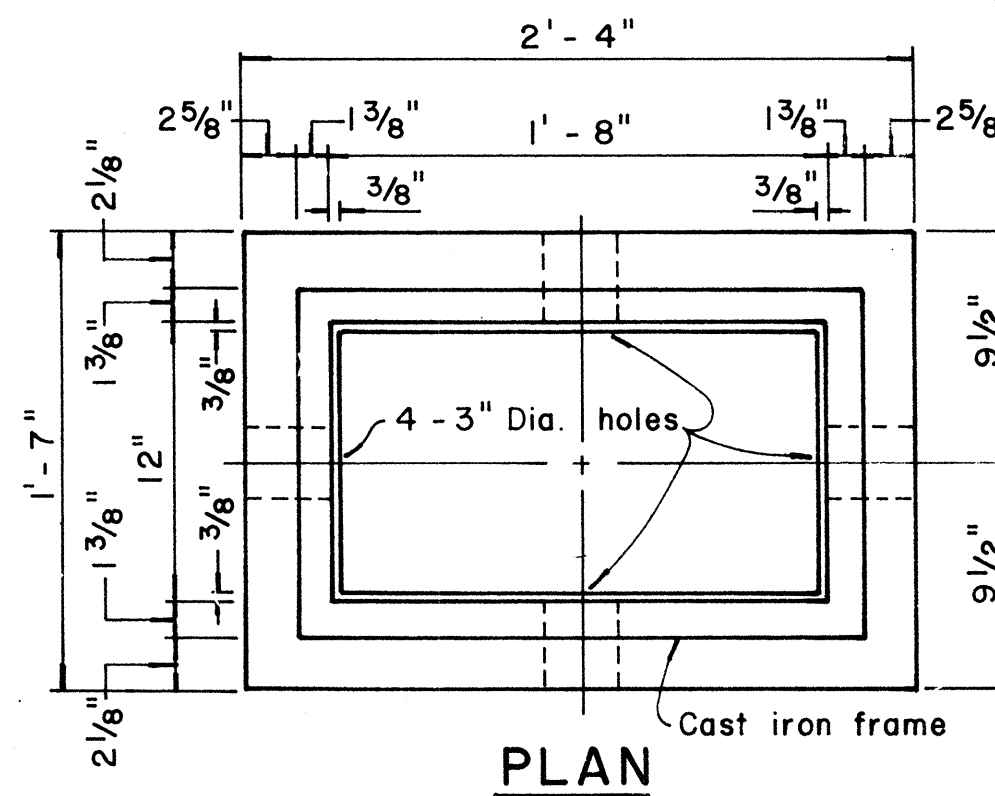
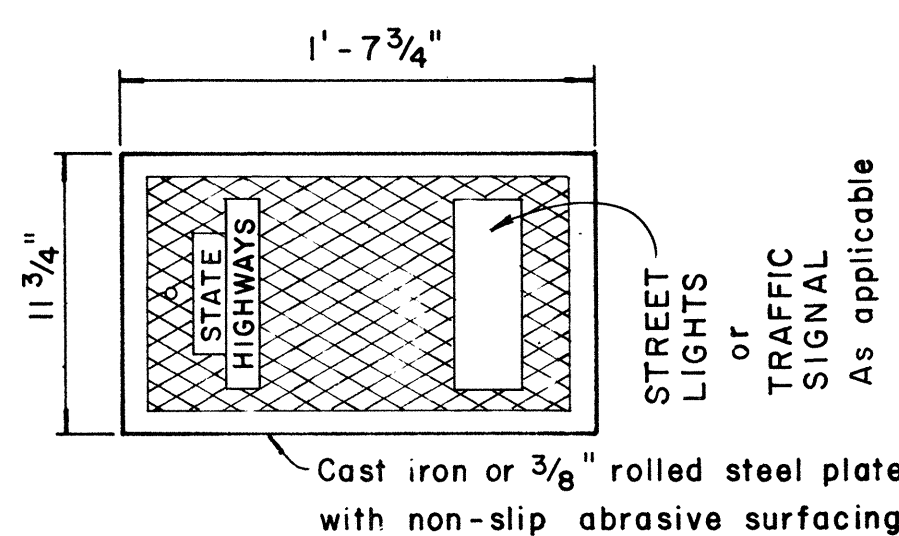
William B. B. B.
 ASSISTANT CHIEF, ENGINEERING
 DATE 12/29/09

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TRAFFIC SIGNAL SYSTEM
 MISCELLANEOUS DETAILS
 Not to Scale
 SHEET No. 10 OF 13 SHEETS DT 400

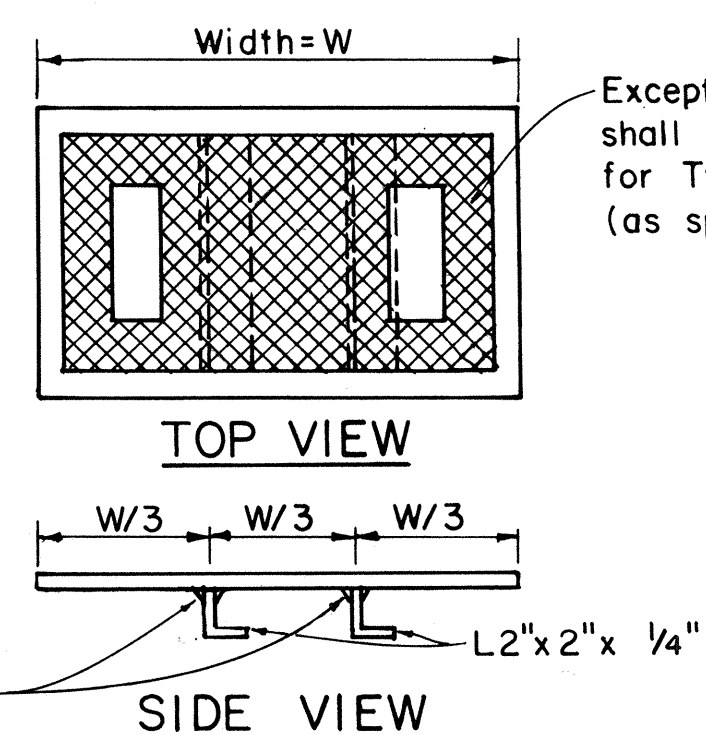
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	2000A-02-82	1982	17	19



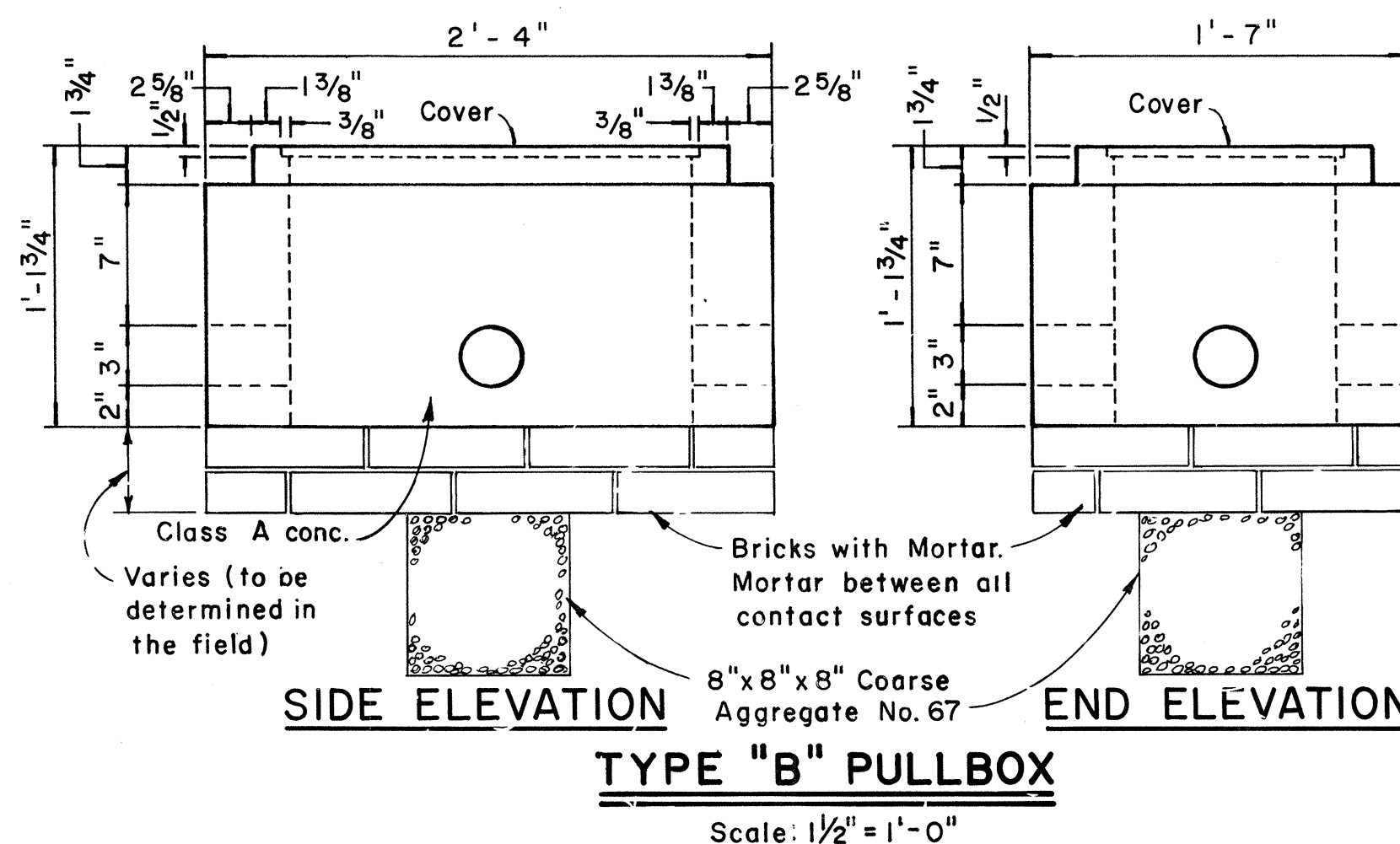
NOTE:
Steel rim shall be welded to bottom of steel cover if necessary so that top of cover and frame are flush.



TYPE "A" PULLBOX
Scale: 1 1/2" = 1'-0"



NOTE:
Hot dip galvanize after fabrication. Modified cover shall be furnished when called for on plans.



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

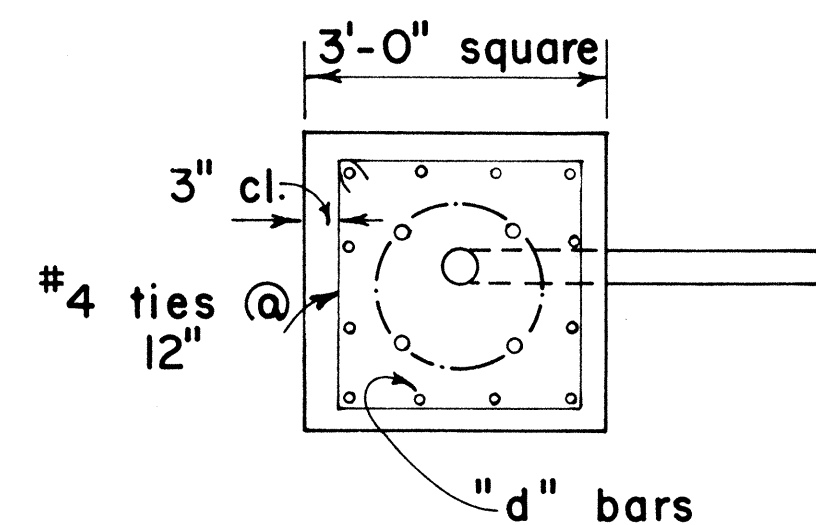
APPROVED:
ASSISTANT CHIEF, ENGINEERING
DATE: 12-30-69

NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	3-5-76
2	Revised Type "A" Pullbox & Added Modified Cover.	H.T.	1-31-80

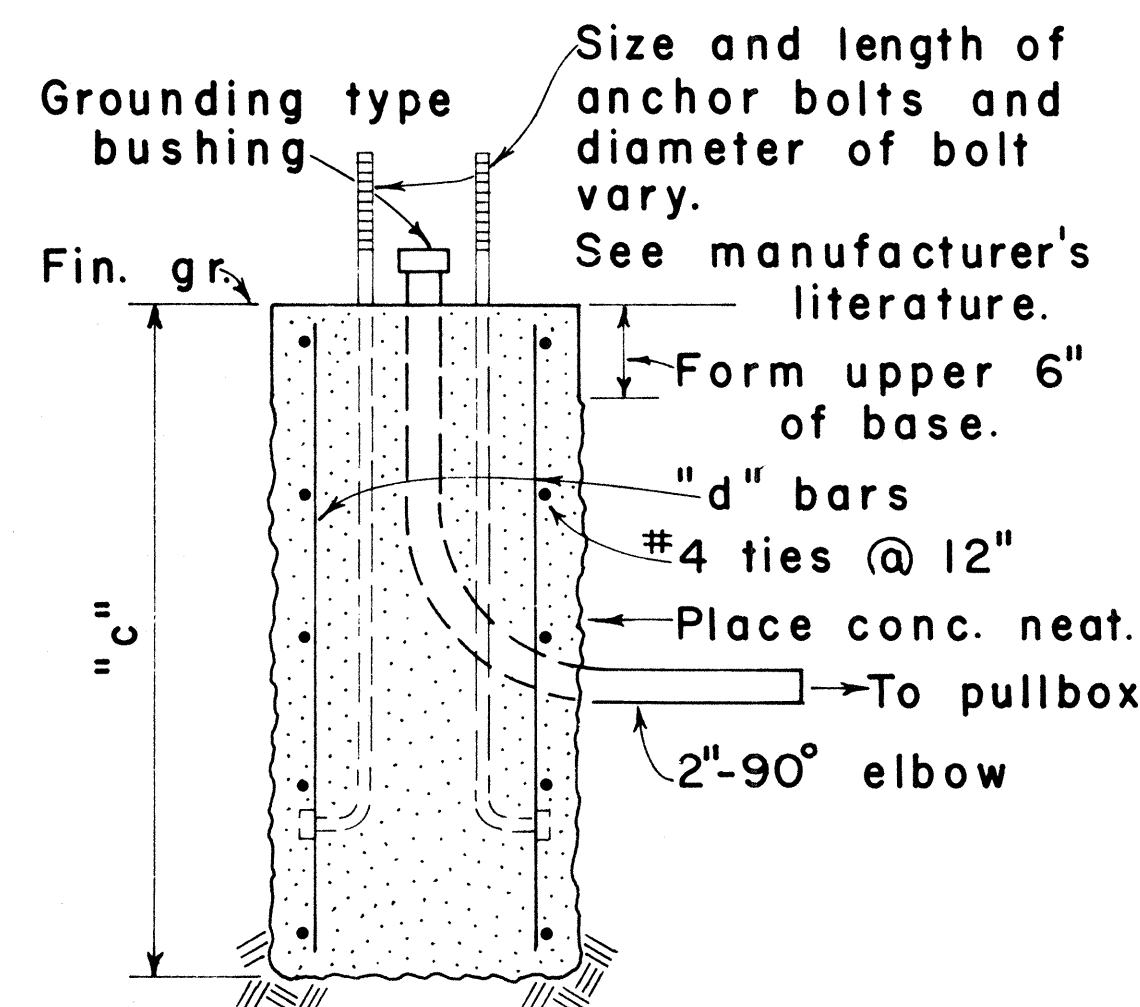
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
PULLBOXES
Scale as noted
Date
SHEET No. 11 OF 13 SHEETS DT 401

DATE	12/29/62
DESIGNED BY	H.T.
CHECKED BY	H.T.
NOTED BY	H.T.
ORIGINAL	H.T.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	18	19



PLAN - SECTION

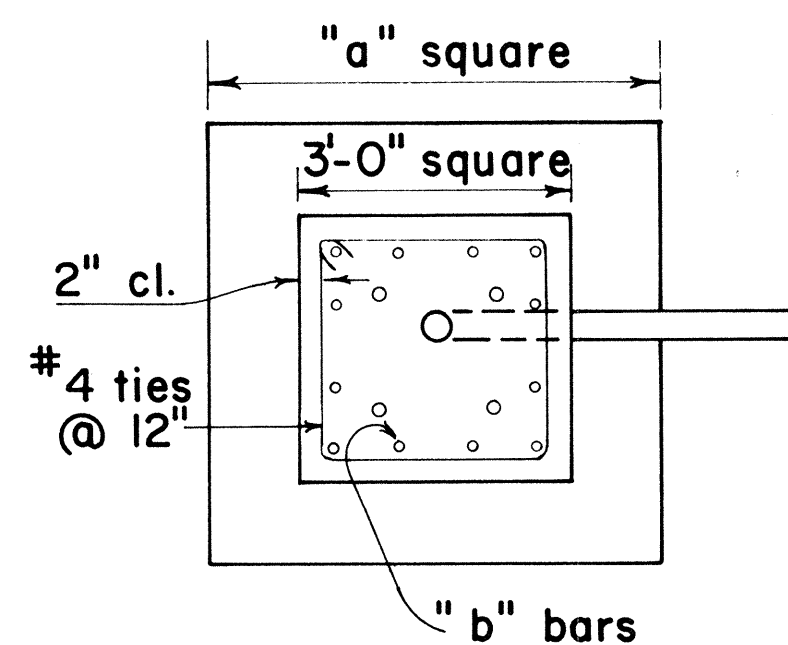


NOTE:
Concrete shall be Class B.

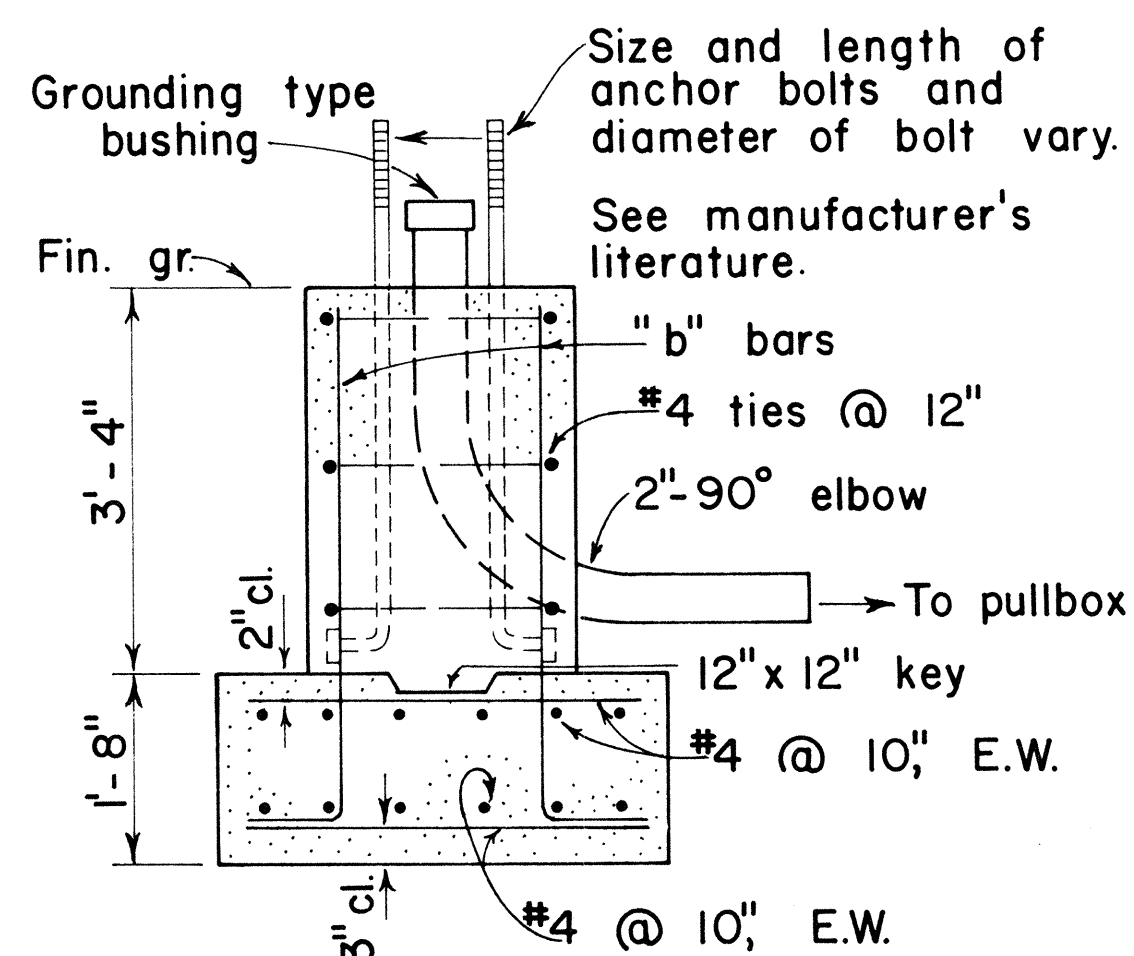
SECTION

MAST ARM LENGTH	"c"	"d" BARS
16' - 18'	5' - 0"	12 - #6
20'	5' - 6"	12 - #6
25'	6' - 0"	12 - #6
30'	6' - 6"	12 - #6
35'	7' - 0"	12 - #8
40'	8' - 0"	12 - #8

TYPE II



PLAN - SECTION



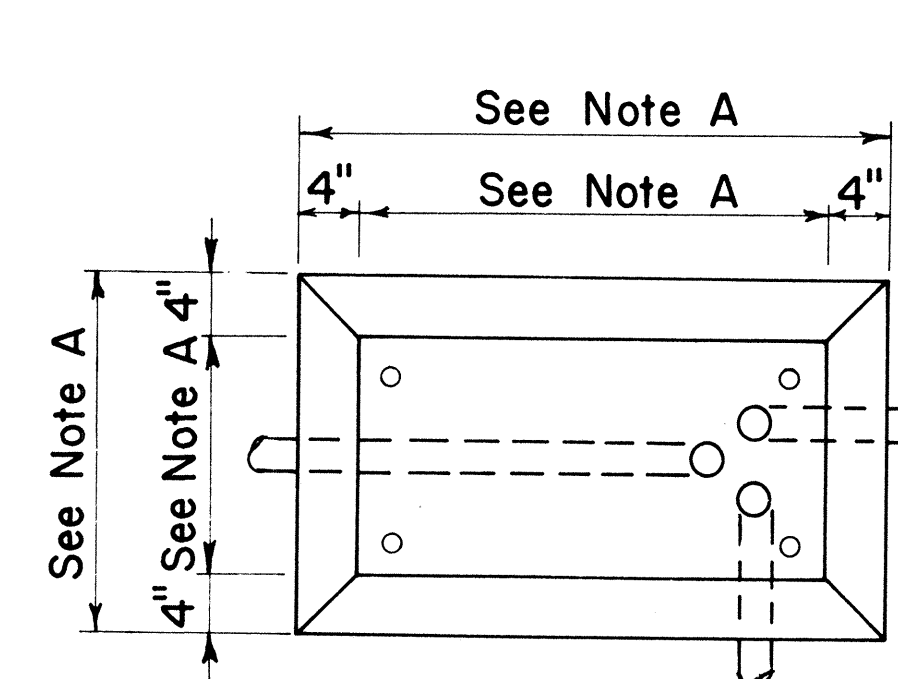
NOTE:
Concrete shall be Class B.

SECTION

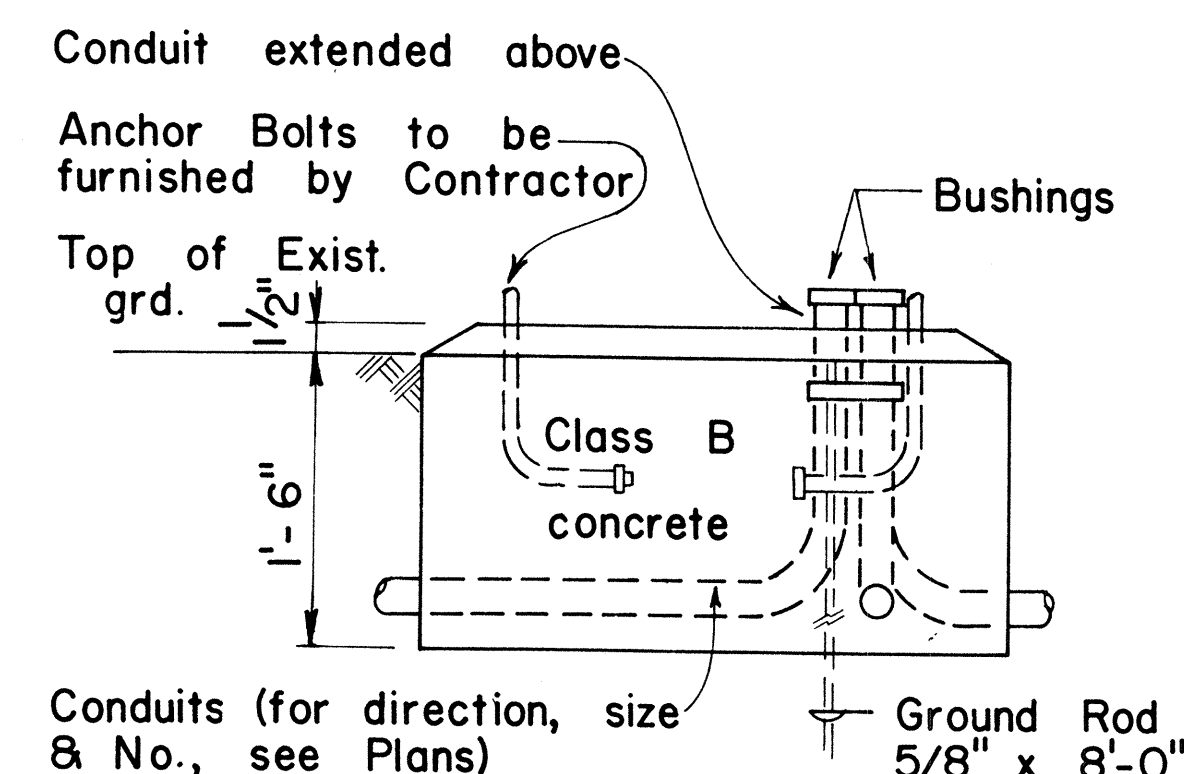
MAST ARM LENGTH	"a"	"b" BARS
16' - 18'	5' - 0"	12 - #6
20'	5' - 6"	12 - #6
25'	6' - 0"	12 - #6
30'	6' - 6"	12 - #8
35'	6' - 6"	12 - #8
40'	7' - 0"	12 - #8

TYPE IIA

FOOTING FOR MAST ARM STANDARD



PLAN



ELEVATION

CONCRETE BASE FOR CONTROLLER CABINET

- NOTES:
- Dimensions to be determined by the size of the Controller Cabinet to be furnished under this Contract.
 - Details of Conduits, Anchor Bolts, etc., are approximate only. Exact details shall be secured by the Contractor from Manufacturer.

APPROVAL RECOMMENDED:
Eishi Tanaka 3/4/76
TRAFFIC ENGINEER DATE

APPROVED:
Robert Z. Zehner 2-5-76
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

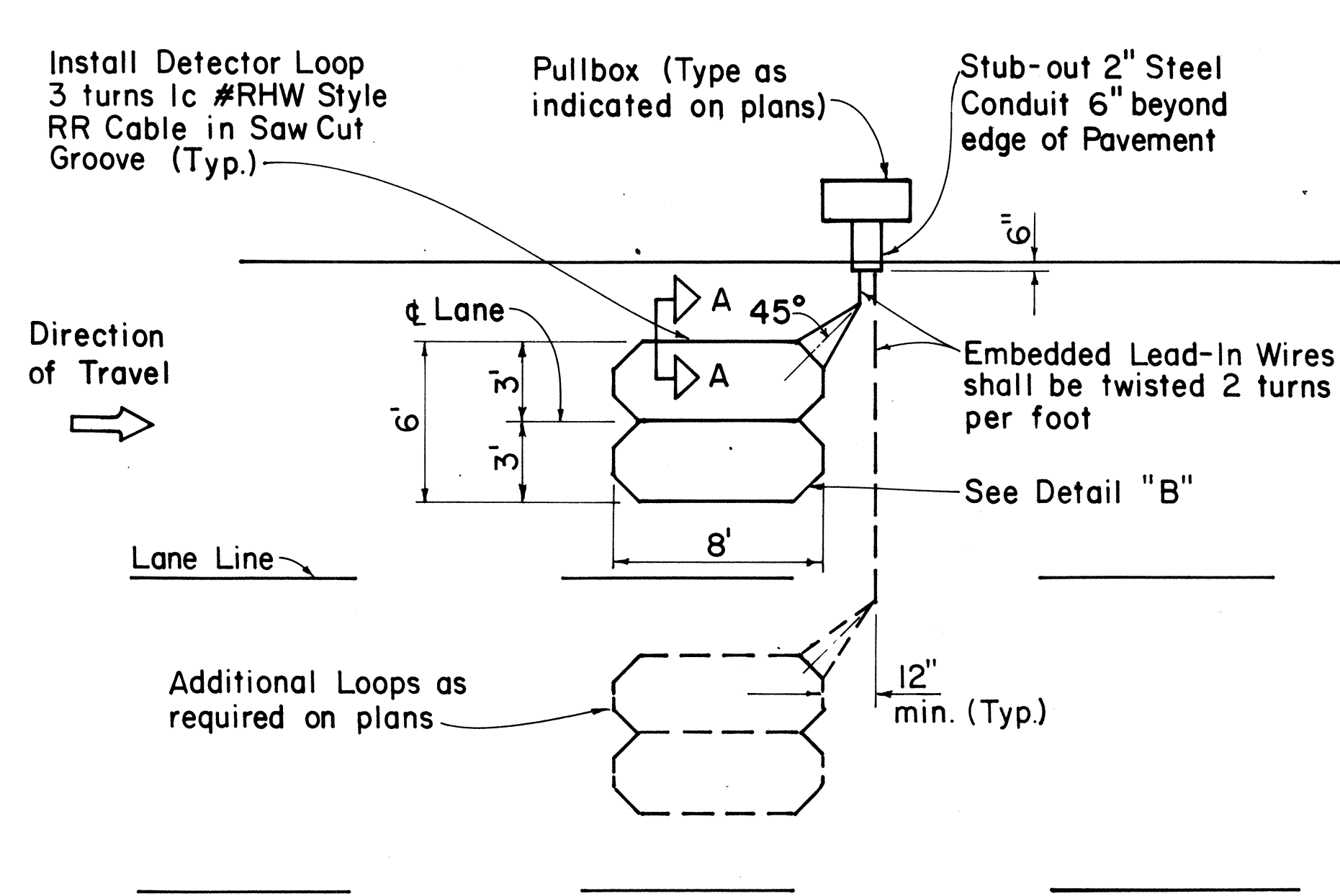
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TRAFFIC SIGNAL SYSTEM
MISCELLANEOUS DETAILS

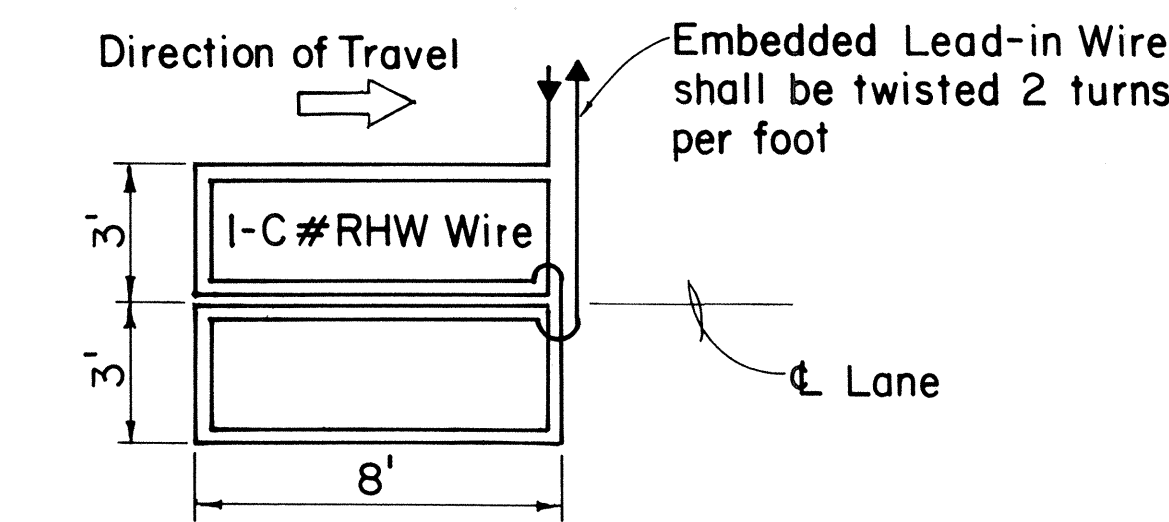
Not to Scale

SHEET No. 12 OF 13 SHEETS DT404

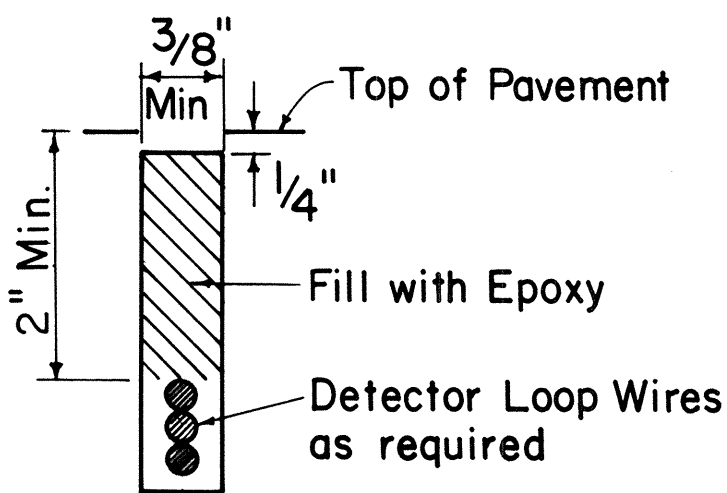
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	9000A-02-82	1982	19	19



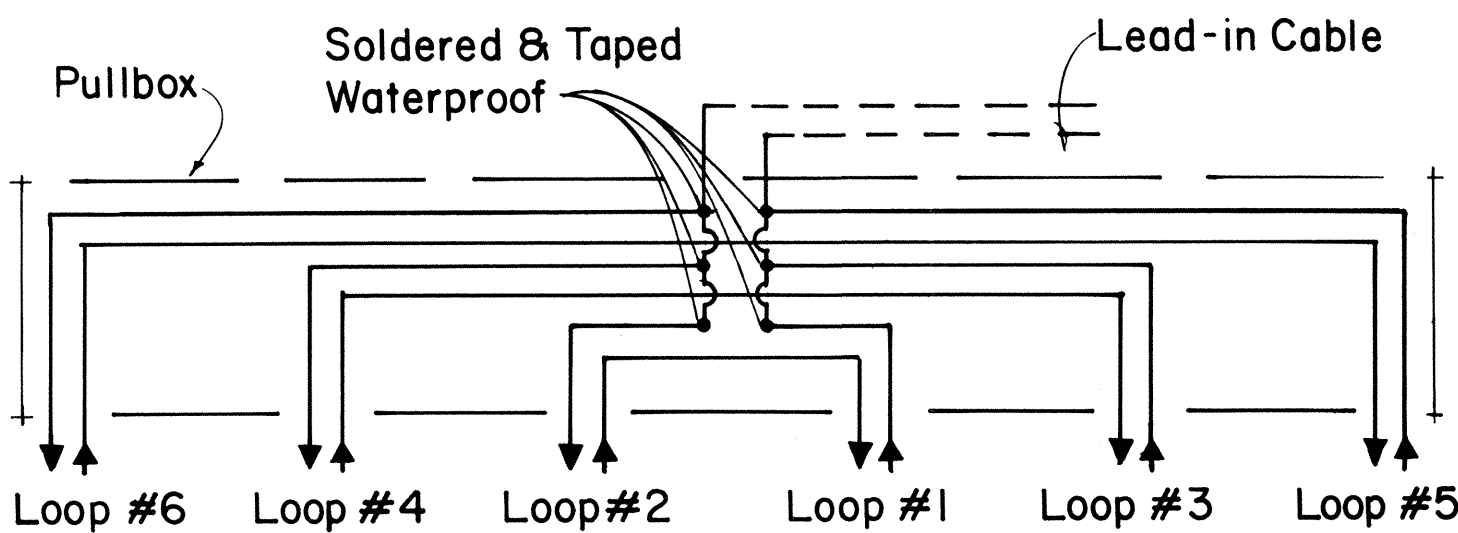
SINGLE LOOP LAYOUT



WIRING DIAGRAM



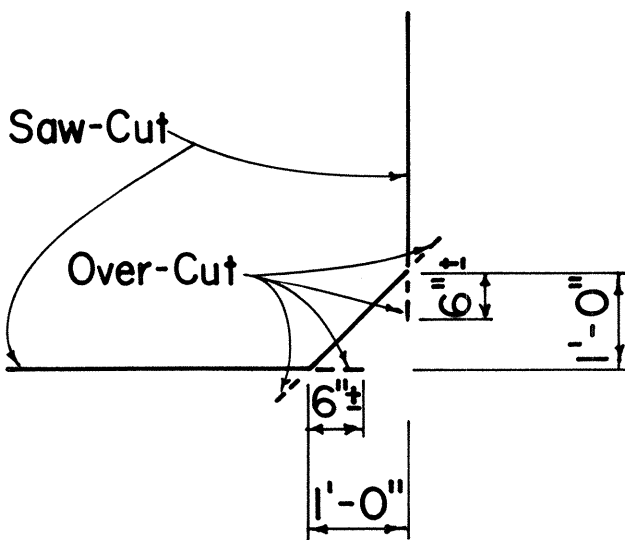
DETECTOR LOOP SAW-CUT SECTION A-A (TYPICAL)



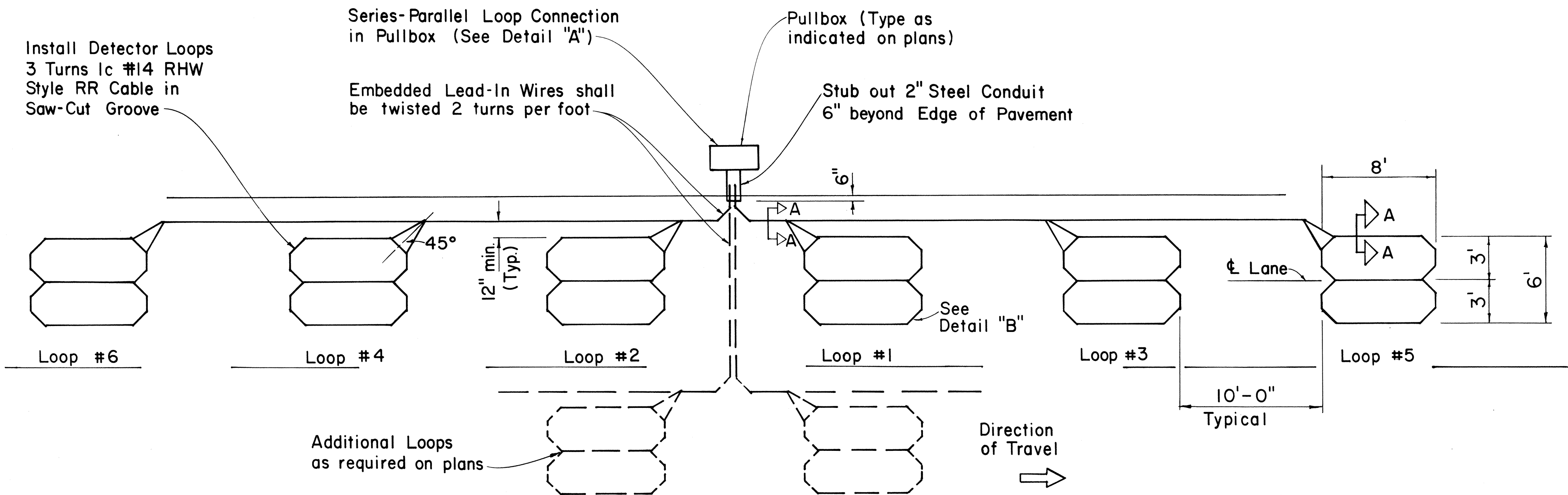
DETAIL "A"

TYPICAL SERIES-PARALLEL LOOP CONNECTION

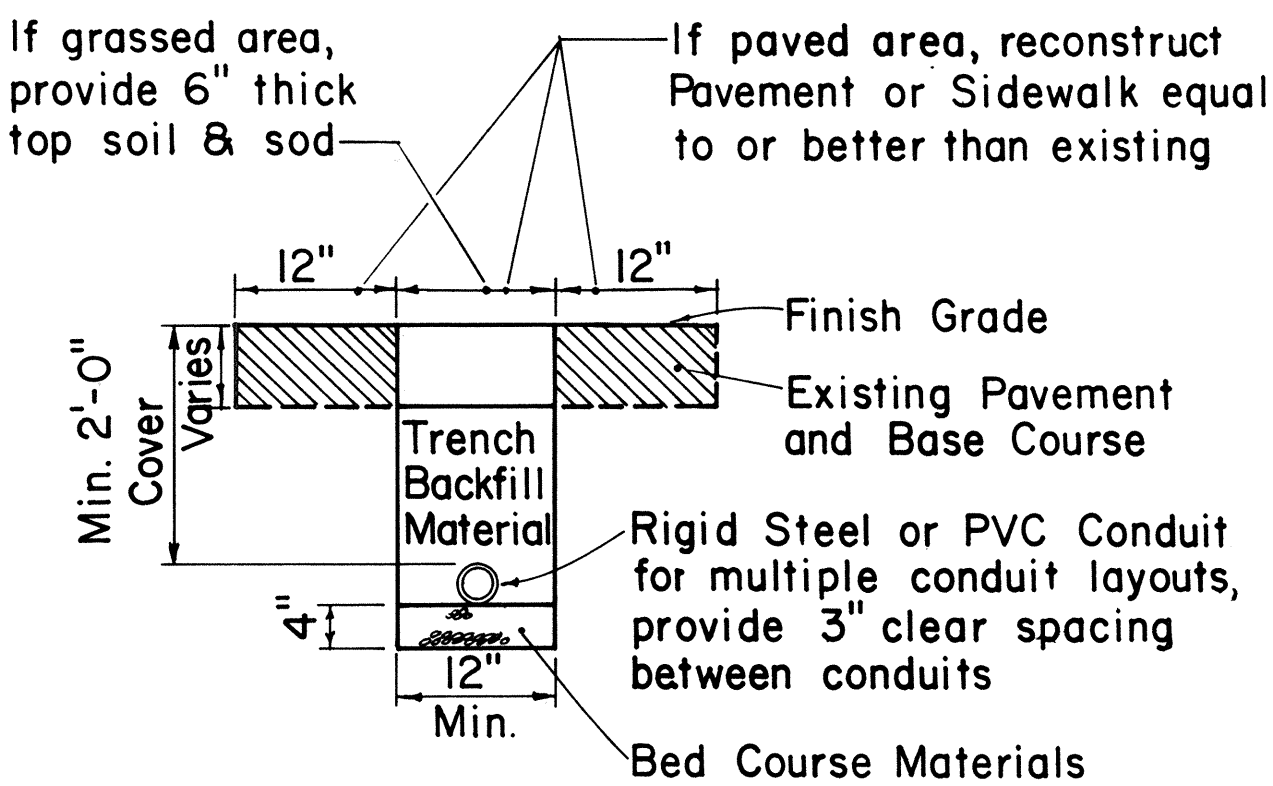
Note: Back-Fill Over-Cuts with Epoxy



DETAIL "B" SAW-CUT AT CORNERS



MULTIPLE LOOP LAYOUT



TYPICAL TRENCH SECTION FOR CONDUIT

NOTE:

- All conduits under roadways shall be steel or PVC schedule 80. All other conduits shall be steel or PVC schedule 40.

APPROVAL RECOMMENDED:

Erich Tanaka 9/26/80
TRAFFIC ENGINEER DATE

APPROVED:

Hubert Zafishu 9/30/80
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Replaces Sht. DT 405 dated 3/5/76	H.T.	9/30/80
2	Revised Section A-A	H.T.	5/15/81

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS LOOP DETECTORS

Not to Scale

SHEET NO. 13 OF 13 SHEETS DT 405

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO. 1	DRAWN BY	
NO. 2	DESIGNED BY	
NO. 3	QUANTITIES BY	
NO. 4	CHECKED BY	