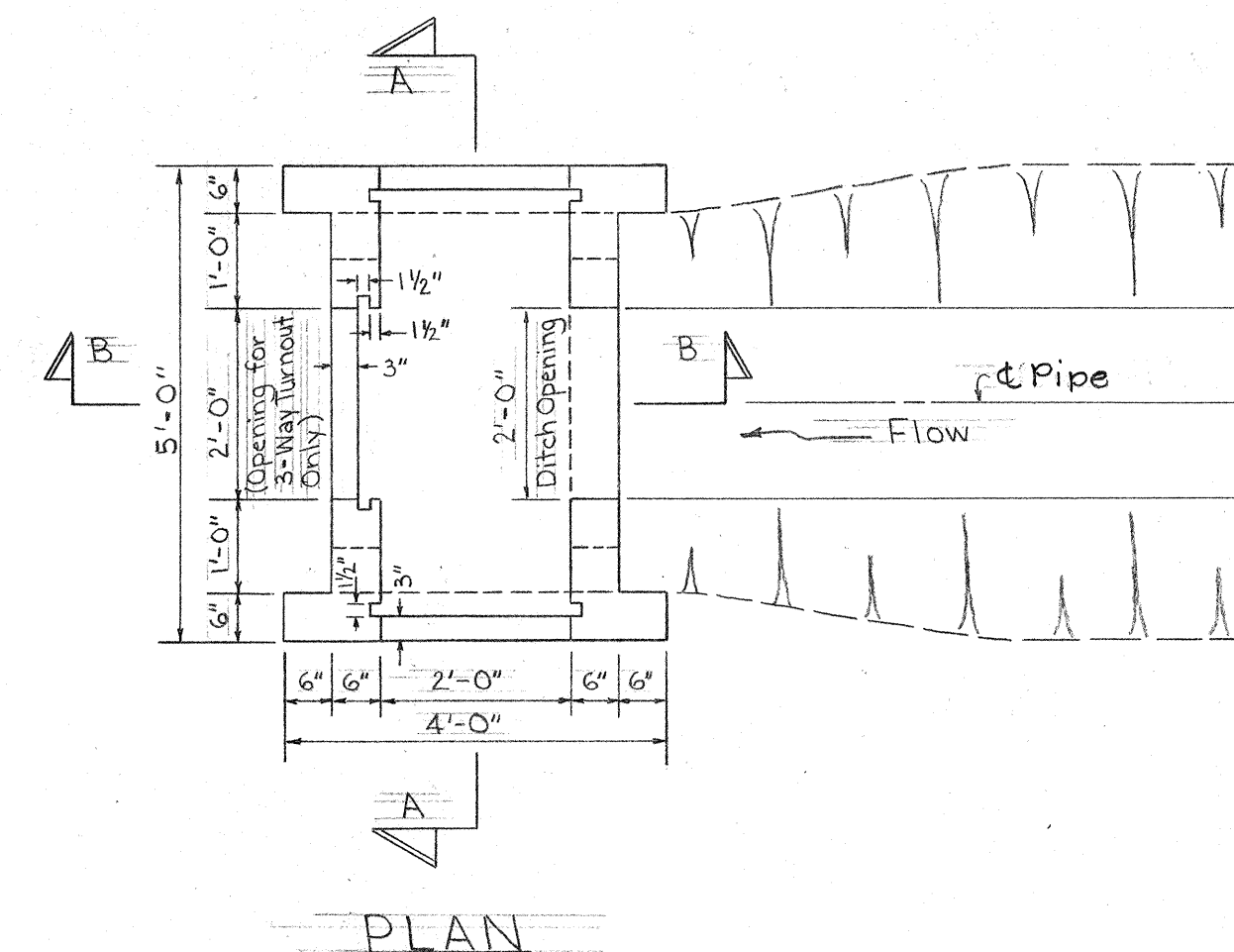
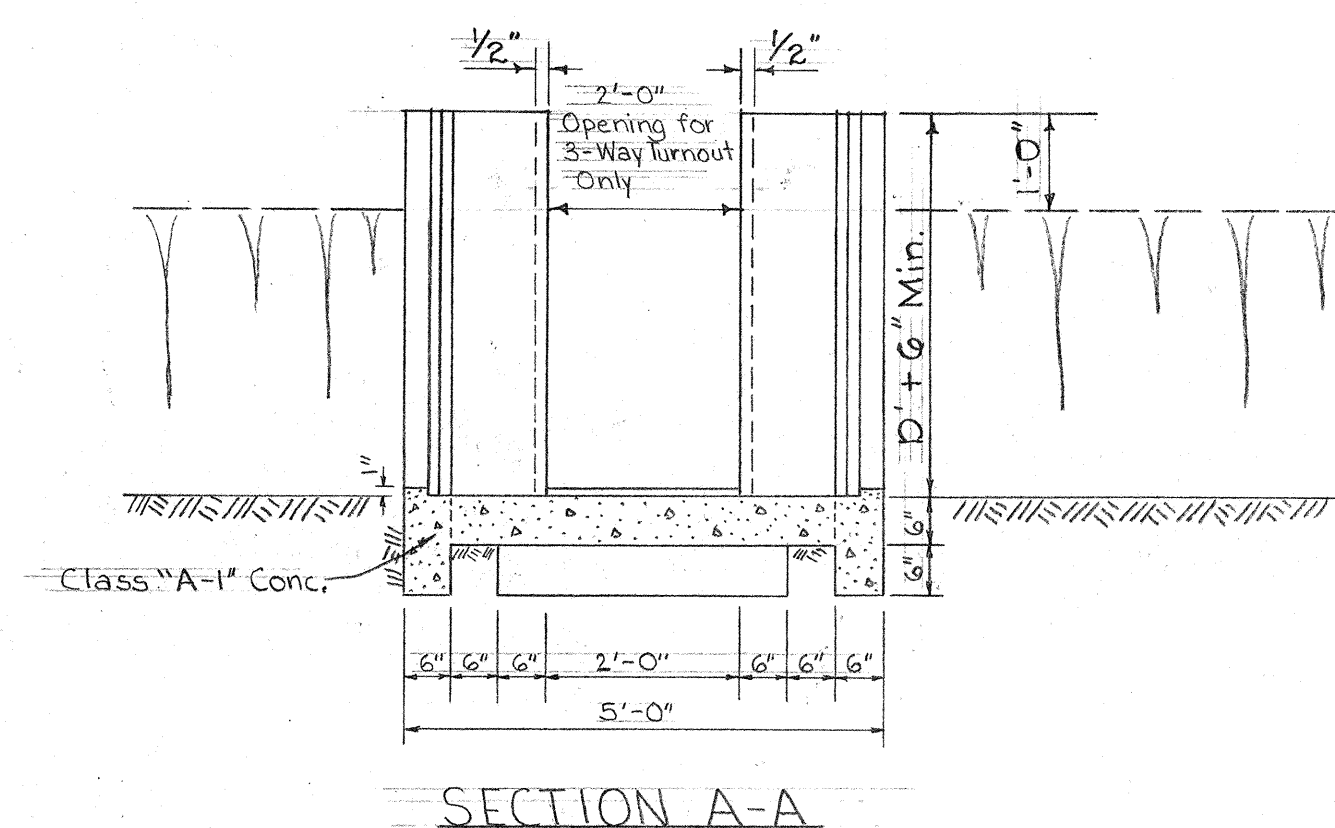


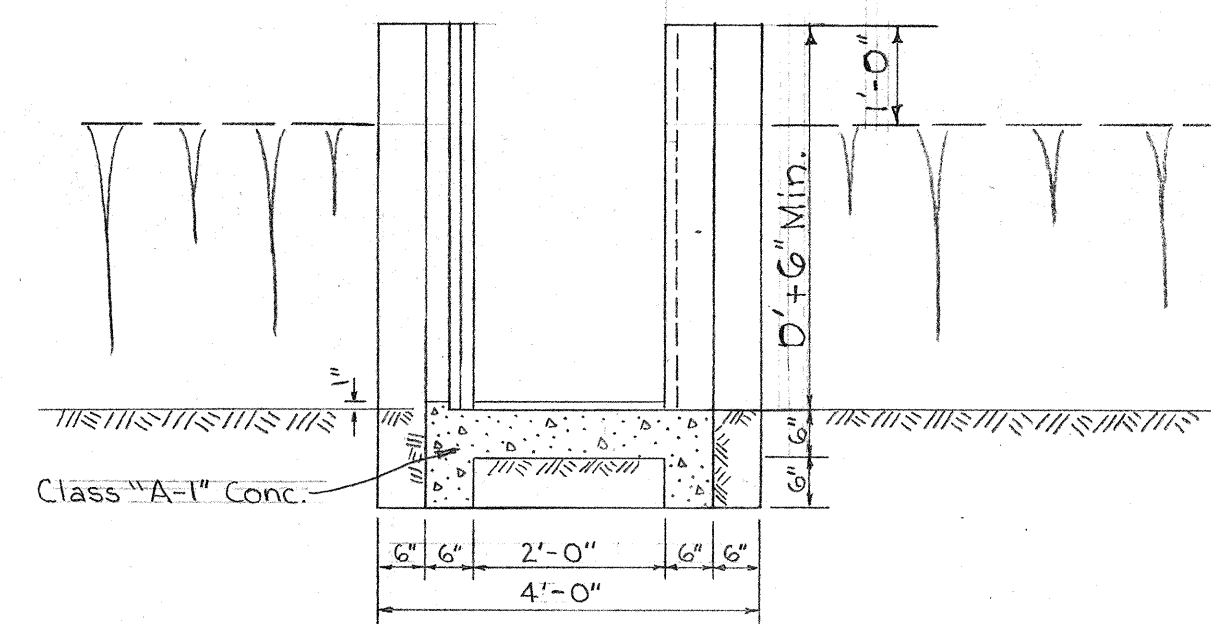
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(8)	1967	7	64



PLAN



SECTION A-A

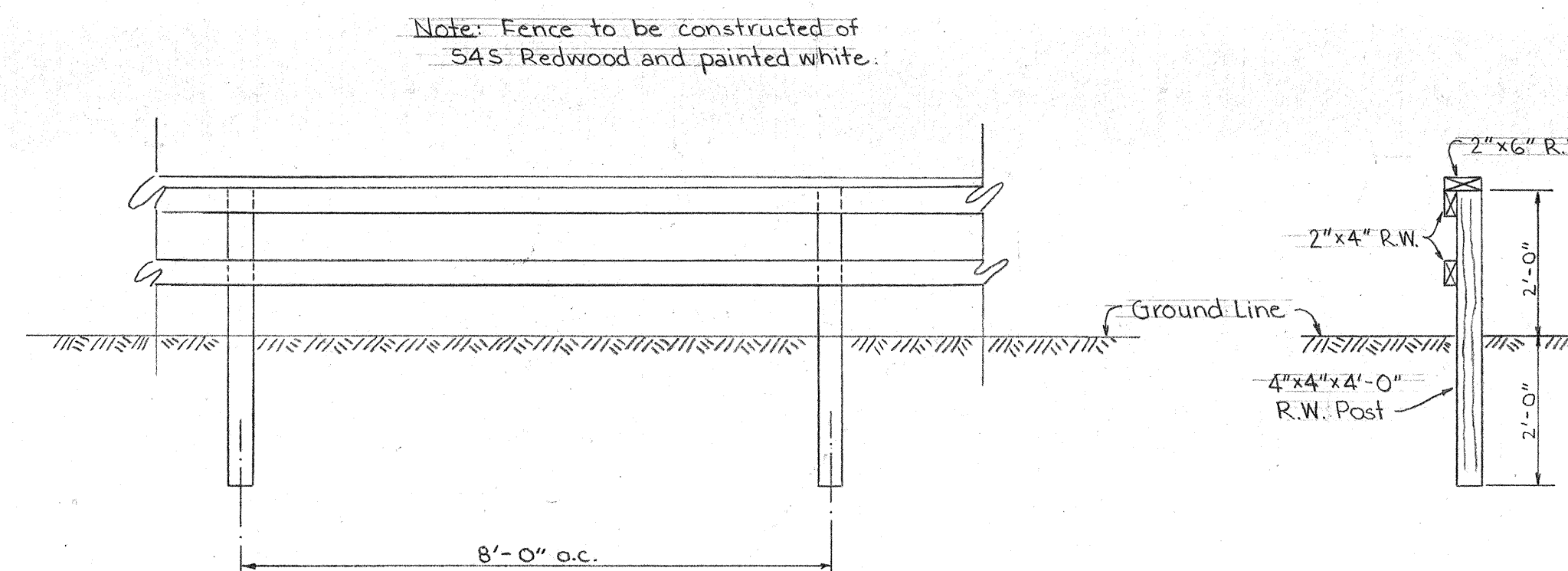


SECTION B-B

DETAILS OF 2-WAY & 3-WAY TURNOUT

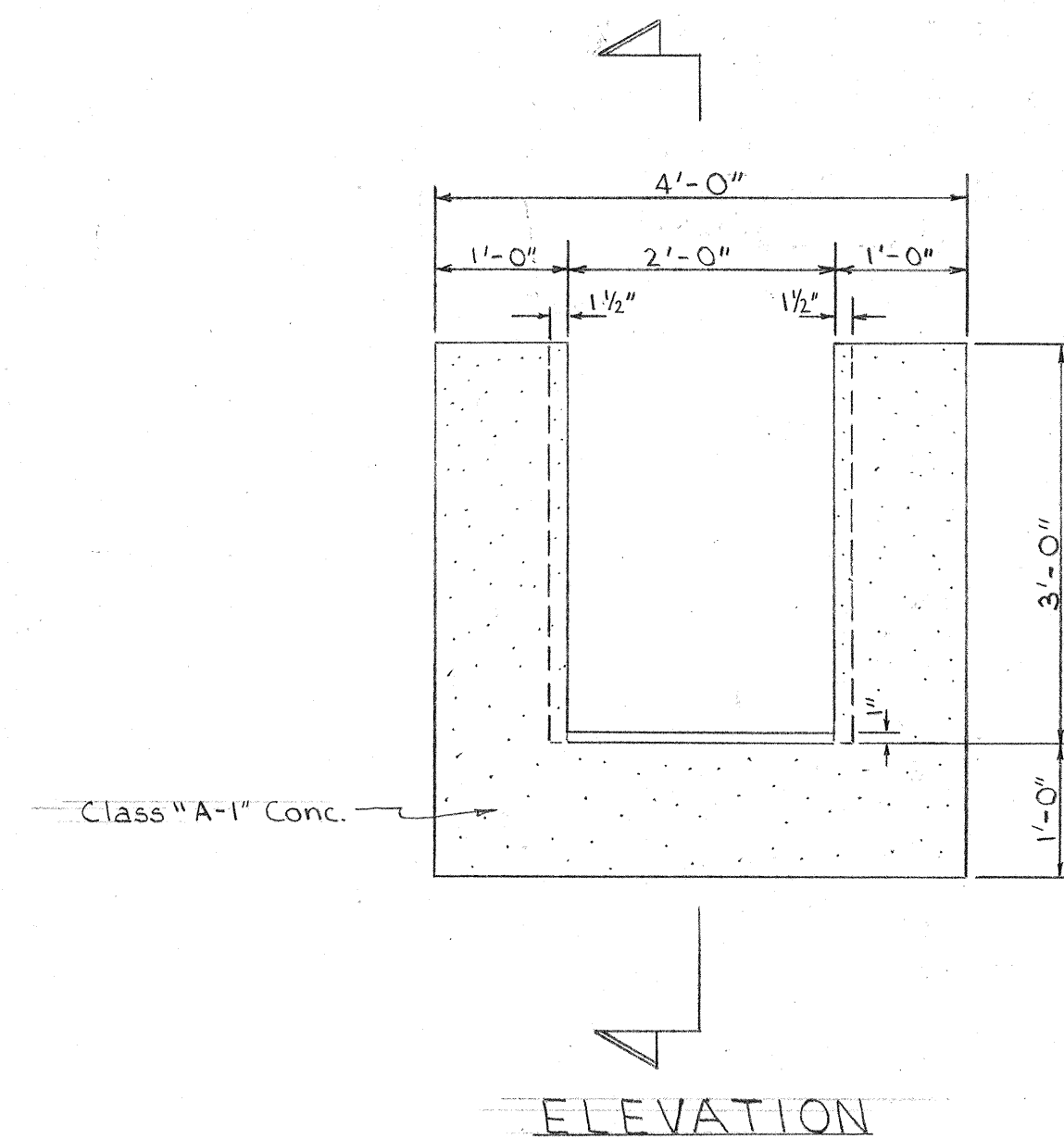
Scale: 1/2" = 1'-0"

Note: Contractor to furnish
6 Pieces 1 1/4" x 6" x 2'-2" Redwood
Slip Boards for each 2-Way Turnout
and 12 Pieces for each 3-Way Turnout.
This shall be considered as the
Wood Gate and shall be incidental
to Class "A-1" Concrete.

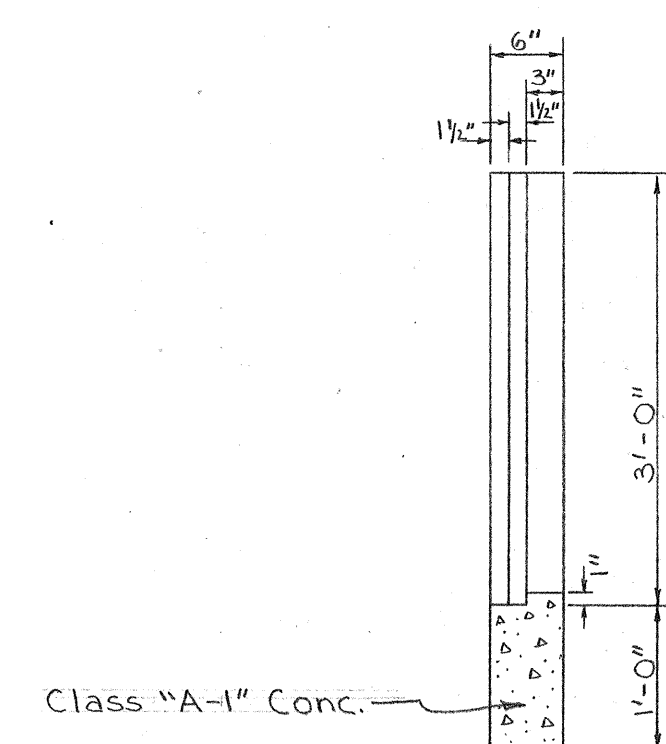


DETAIL
CEMETERY FENCE

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



ELEVATION

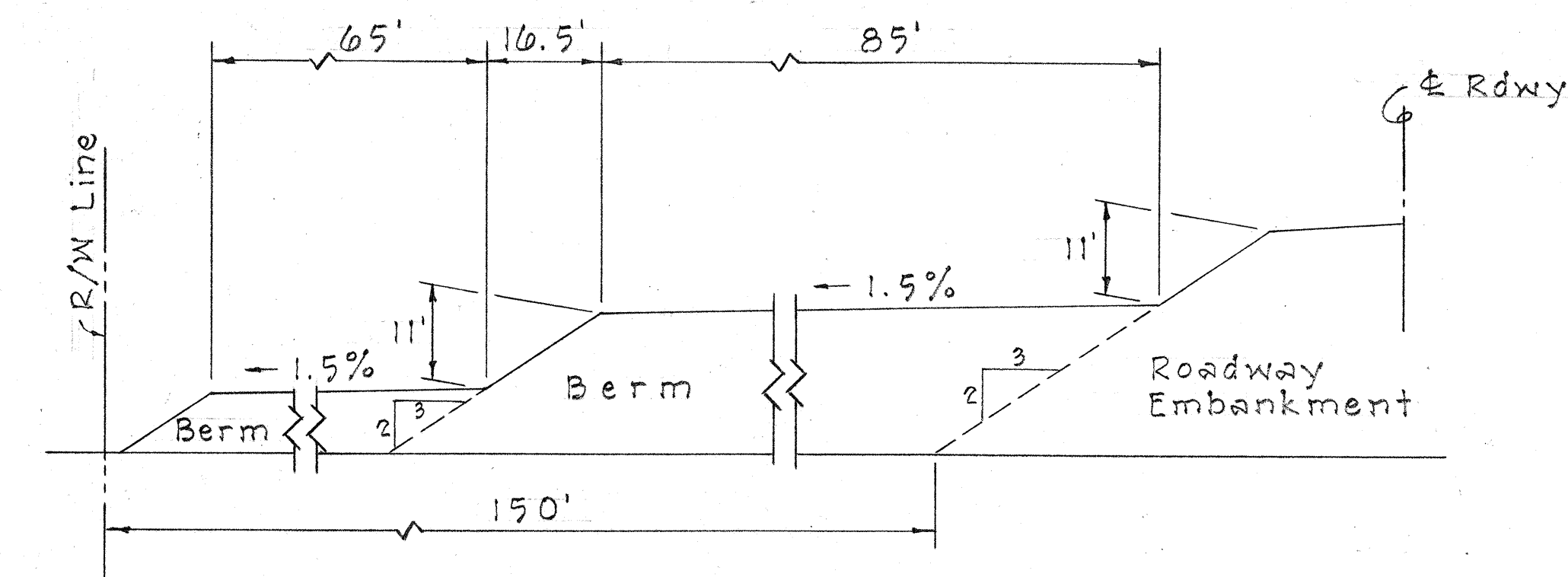


SECTION

WATER GATE DETAILS

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

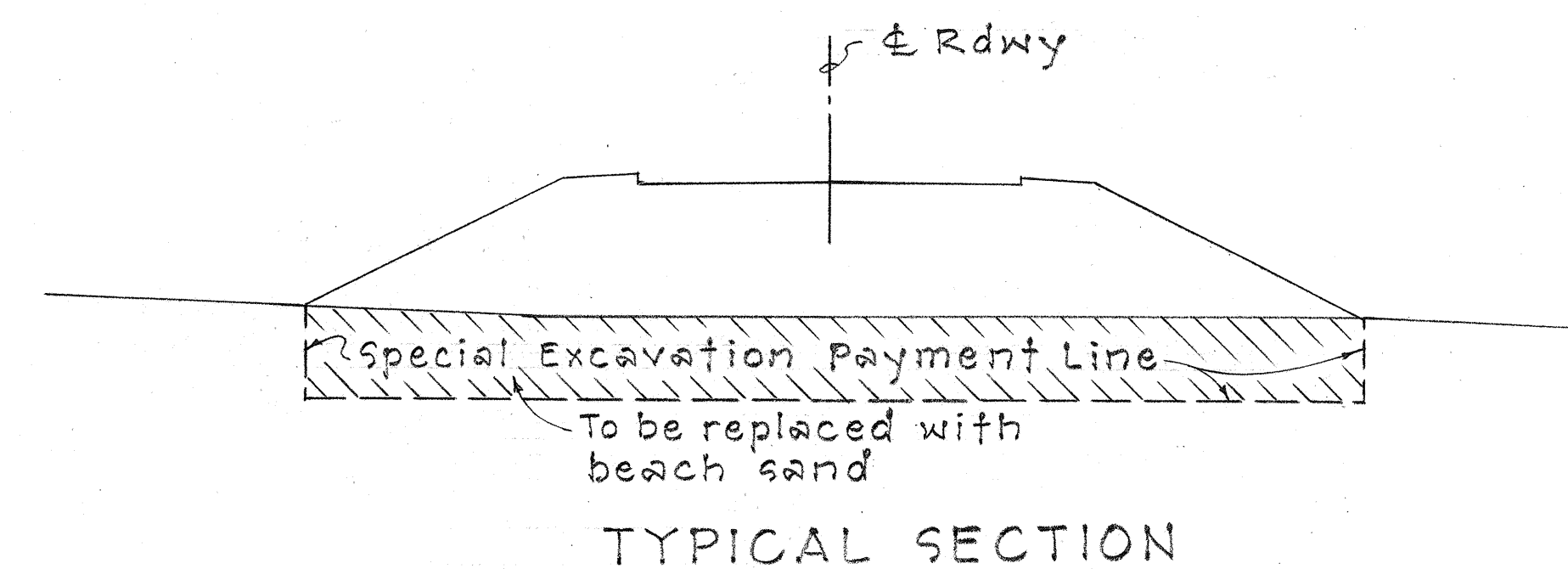
Note: Contractor to furnish
6 Pieces 1 1/4" x 6" x 2'-2" Redwood
Slip Boards for each Water Gate.
This shall be considered as the
Wood Gate and shall be incidental
to Class "A-1" Concrete.



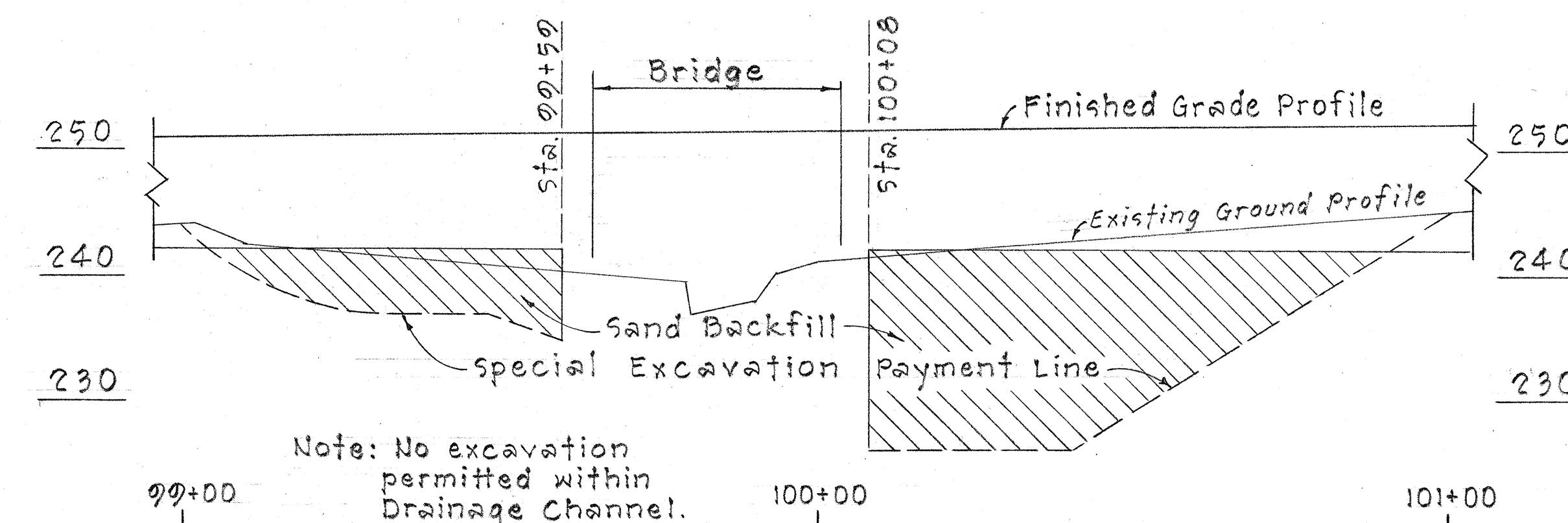
DETAIL OF BERM SECTION

STA. 41+00 TO STA. 48+00

Not to scale



TYPICAL SECTION



Note: No excavation
permitted within
Drainage Channel.

PROFILE

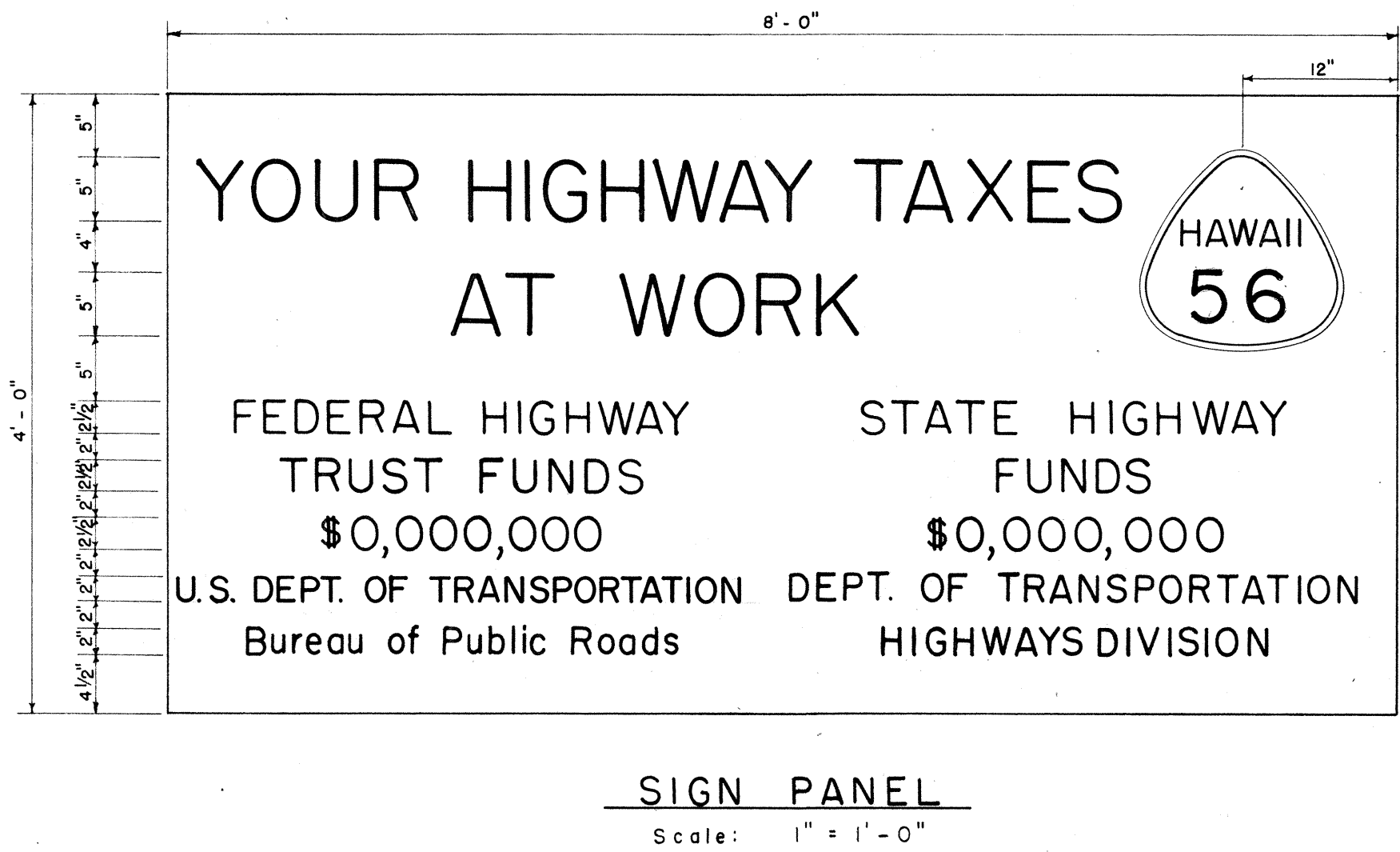
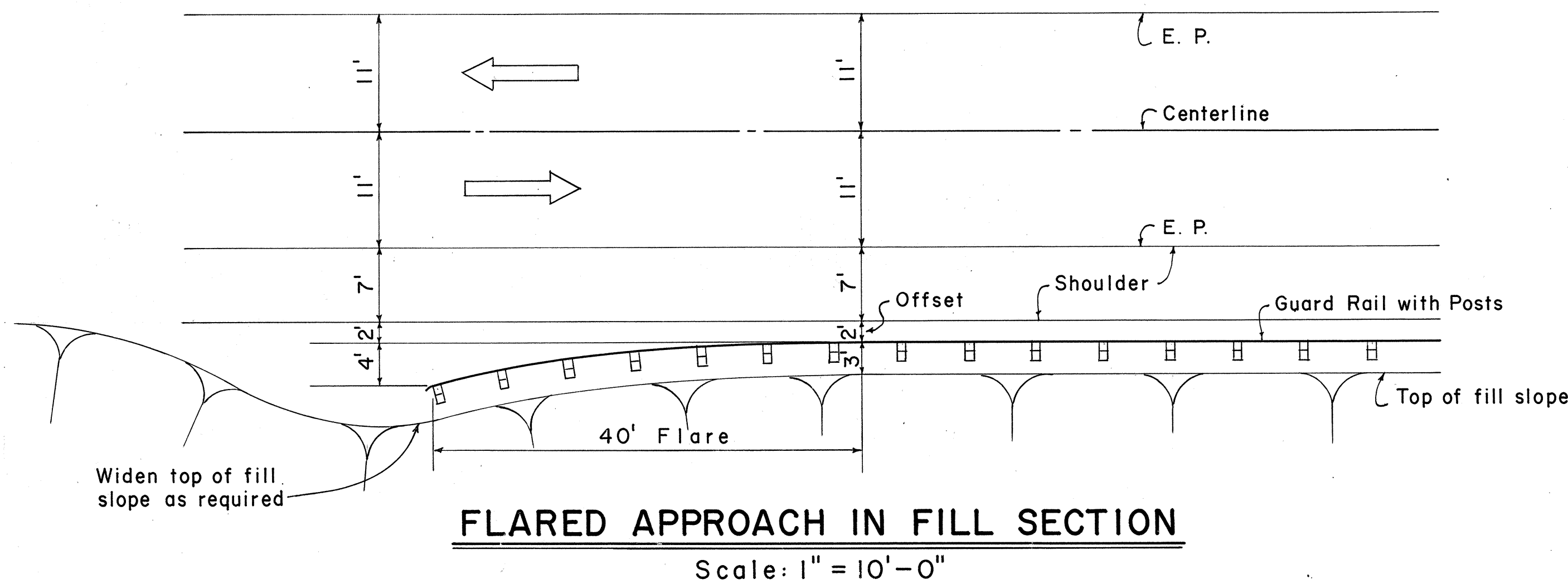
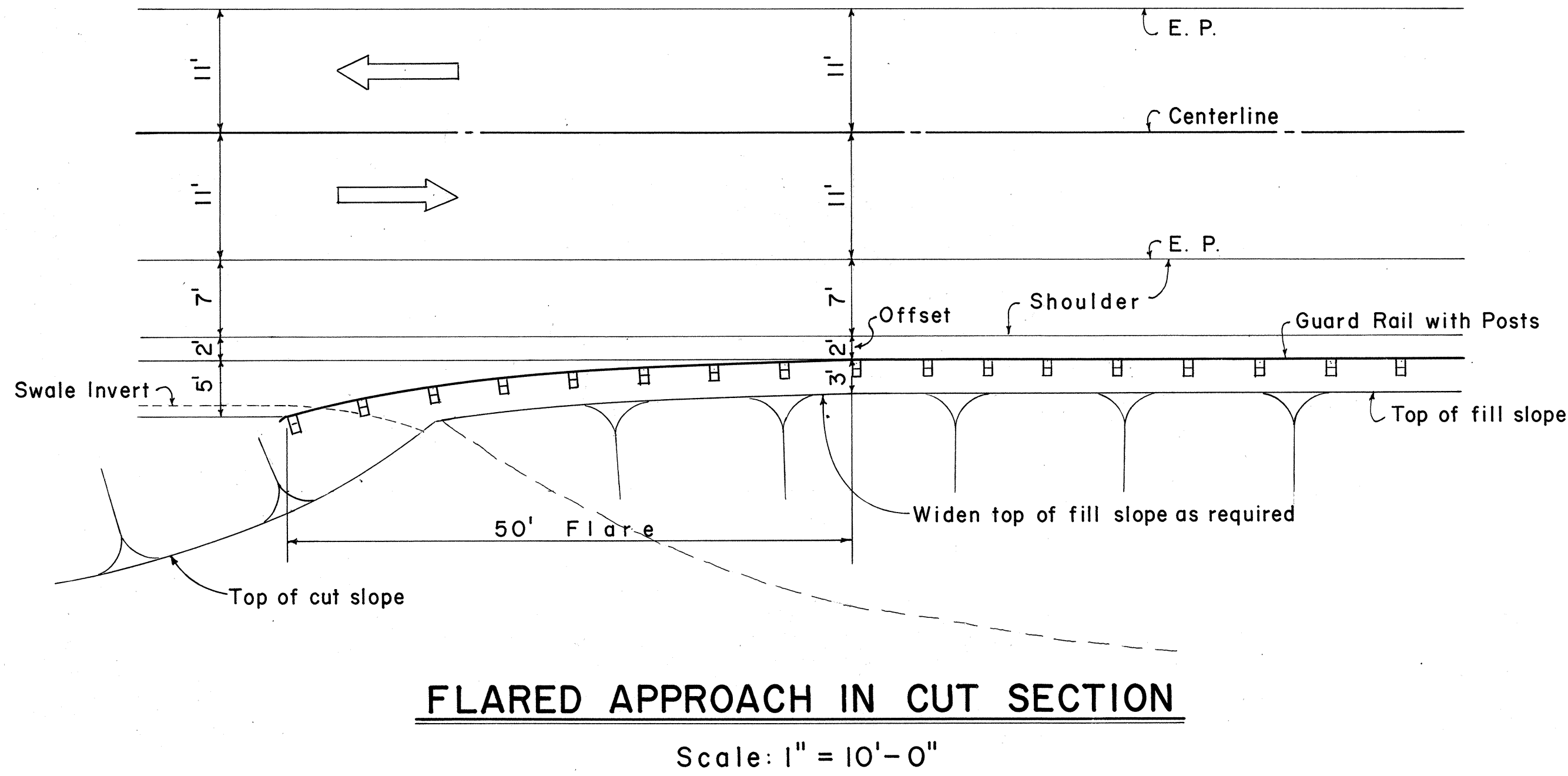
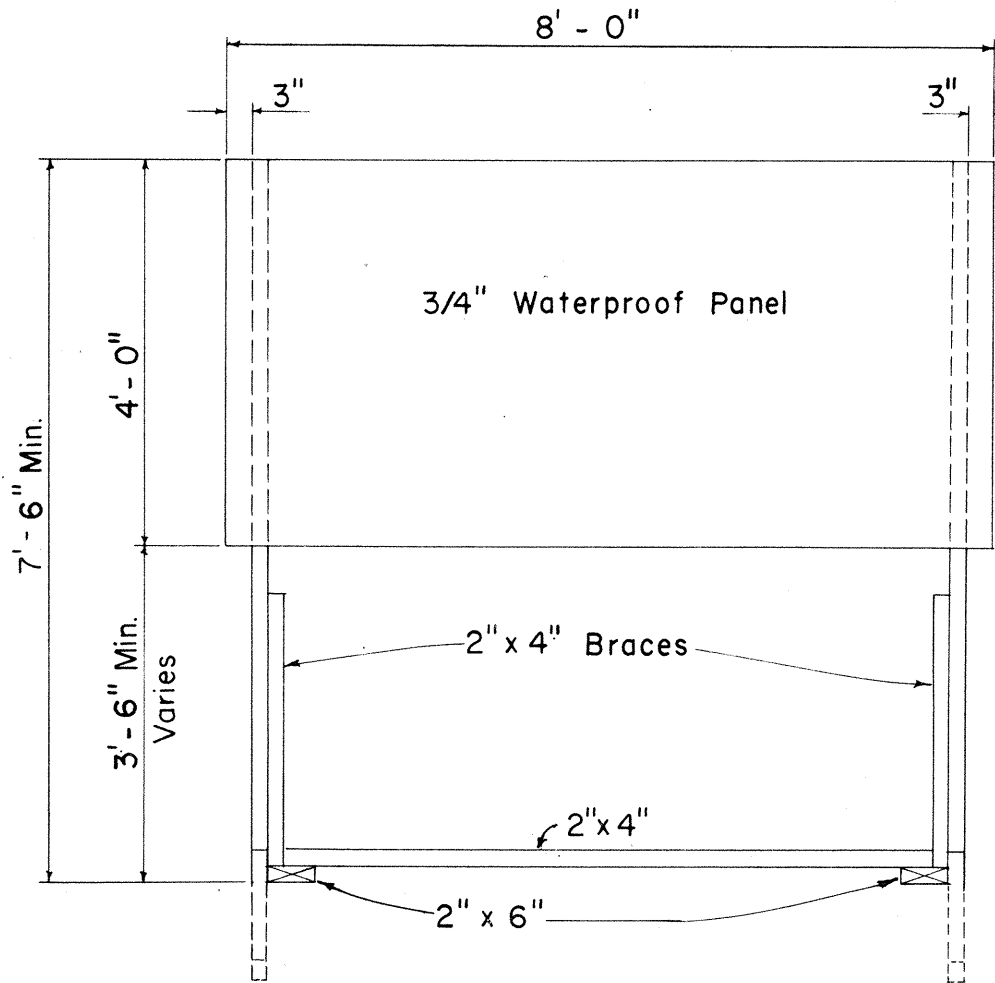
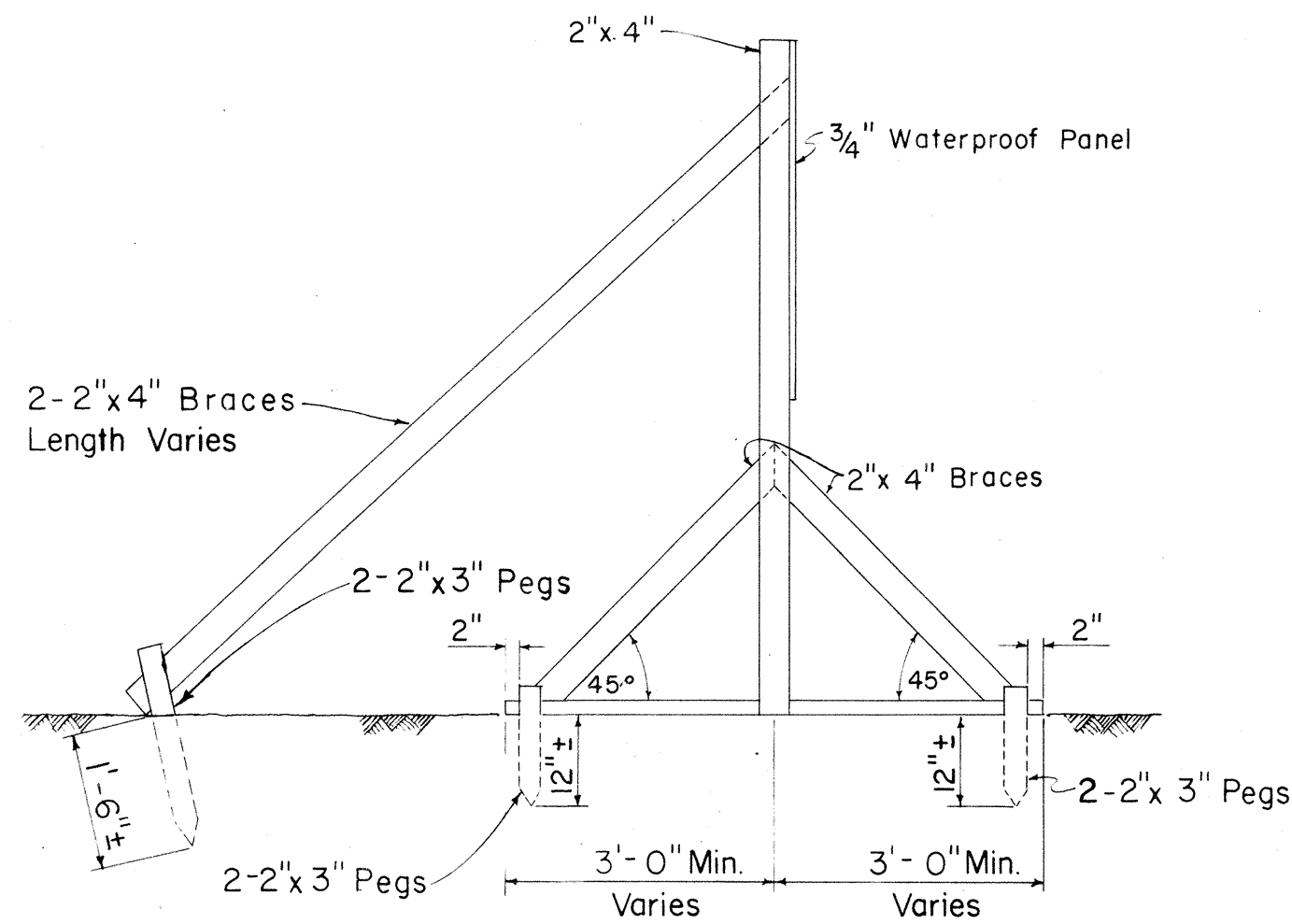
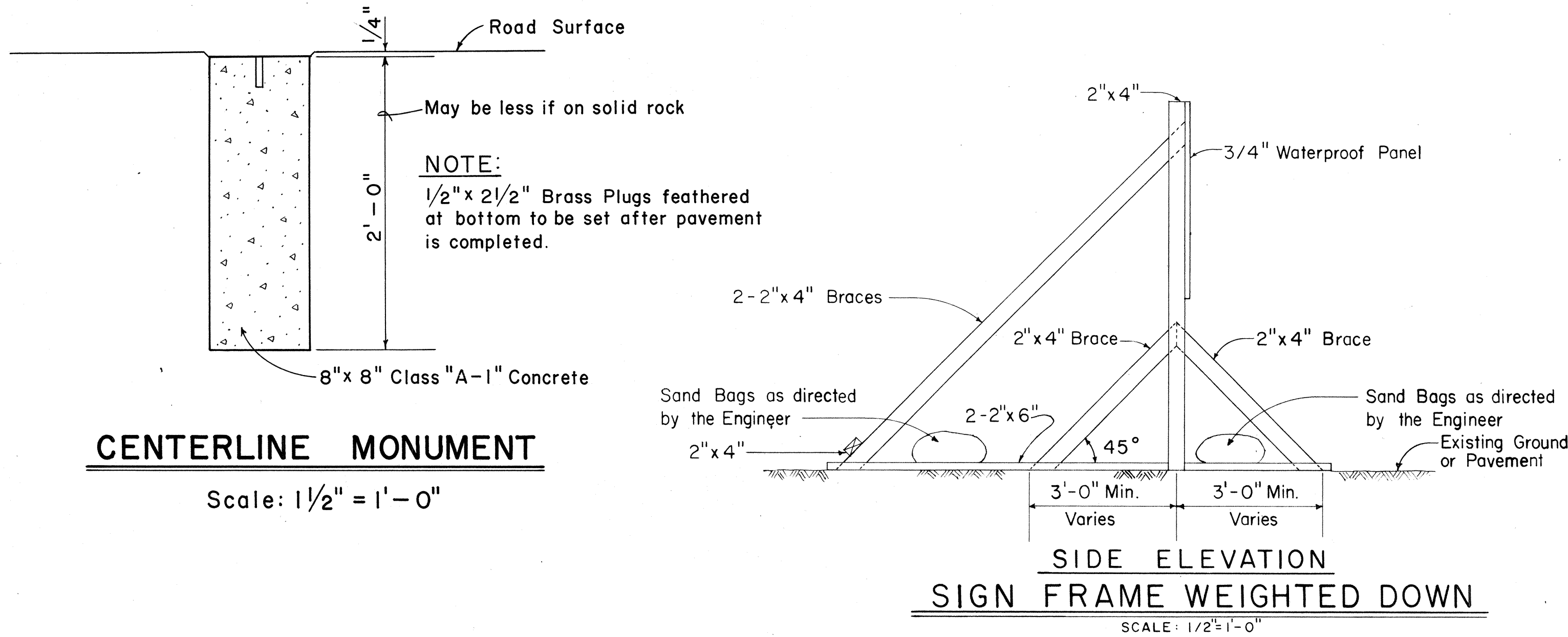
DETAIL OF SPECIAL EXCAVATION AND EMBANKMENT

Not to scale

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII
MISCELLANEOUS DETAILS
KAUAI BELT ROAD
PROJ. NO. F-056-1(8)
KAHILI TO PILAA
HANALEI DISTRICT
SCALE: AS SHOWN DATE: MAR. 1966

SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(8)	1967	8	64



PRIMARY AND SECONDARY SYSTEMS CONSTRUCTION IDENTIFICATION SIGN
Scale: As Shown

CONSTRUCTION IDENTIFICATION SIGN NOTES

- The Contractor shall construct, install and maintain the Construction Identification Signs, at the locations shown on the plans and as ordered by the Engineer.
- All costs incurred in the construction, installation and maintenance of the Construction Identification Signs, will not be paid for separately, but shall be considered as included in the unit price paid for the various items in the proposal.
- The Construction Identification Signs shall be removed and stockpiled at the completion of the project as ordered by the Engineer and are to become State Property.
- The exact figures for the various funds involved will be furnished to the Contractor for the incorporation in the Construction Identification Signs.
- The legend shall be black on white background unless otherwise specified.
- Refer to Sheet No. 13 for details on the exact shape and size of the State route marker to be shown on these Construction Identification Signs.
- All letters shall be of size and design shown and shall conform with "Standard Alphabets for Highway Signs", Bureau of Public Roads, 1952. Use Series "C" letters unless otherwise noted.

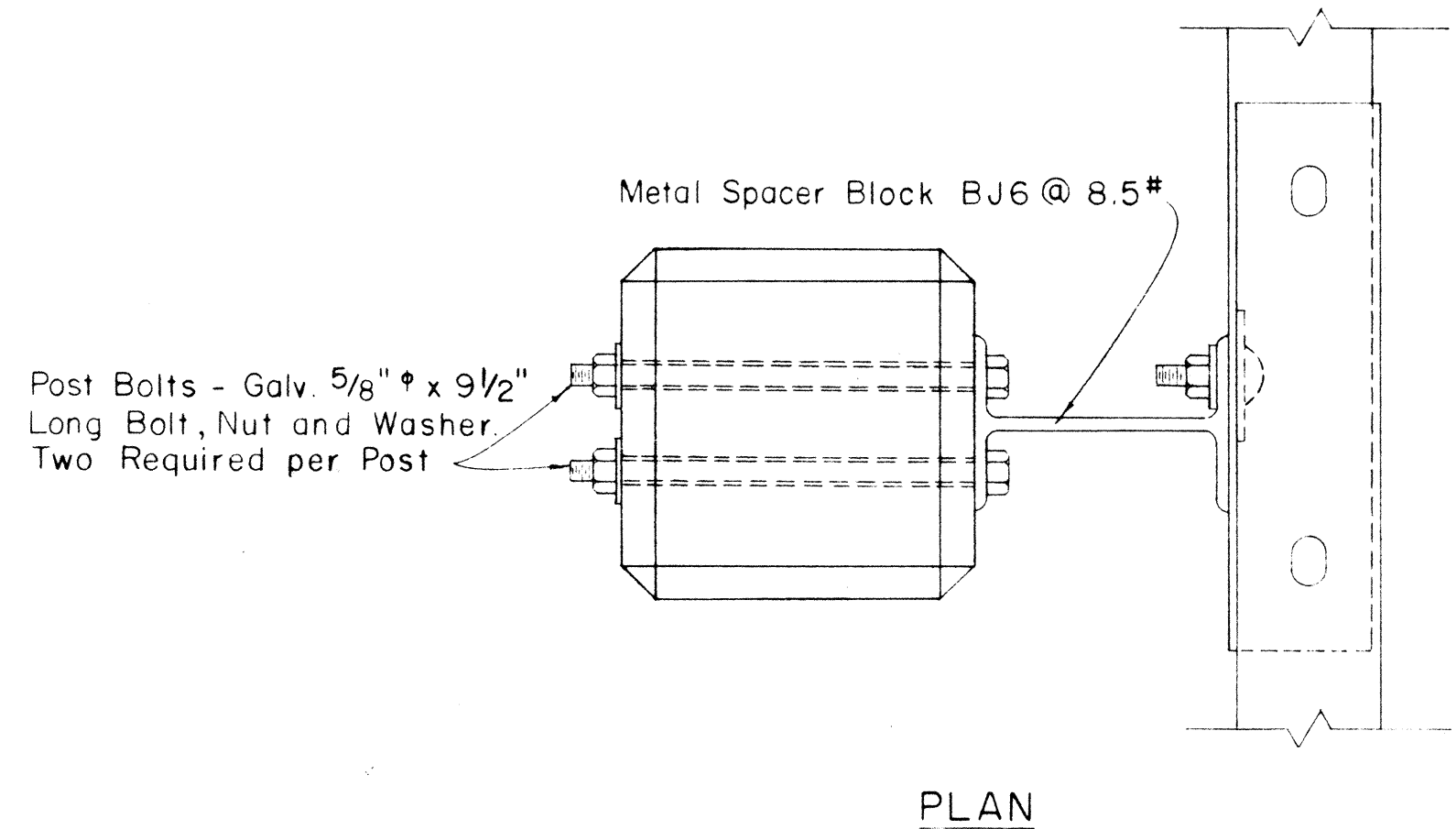
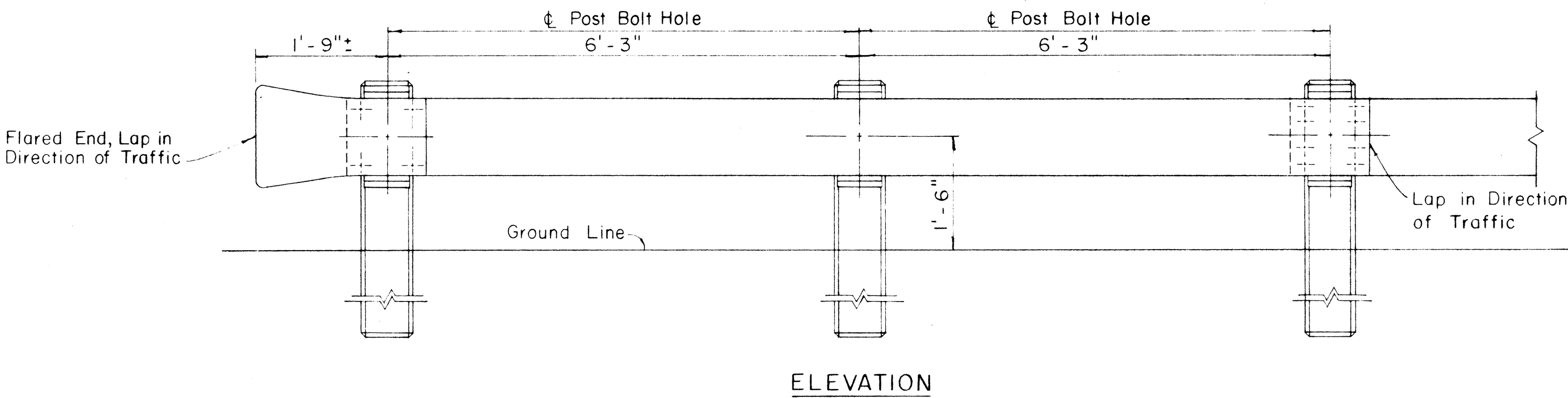
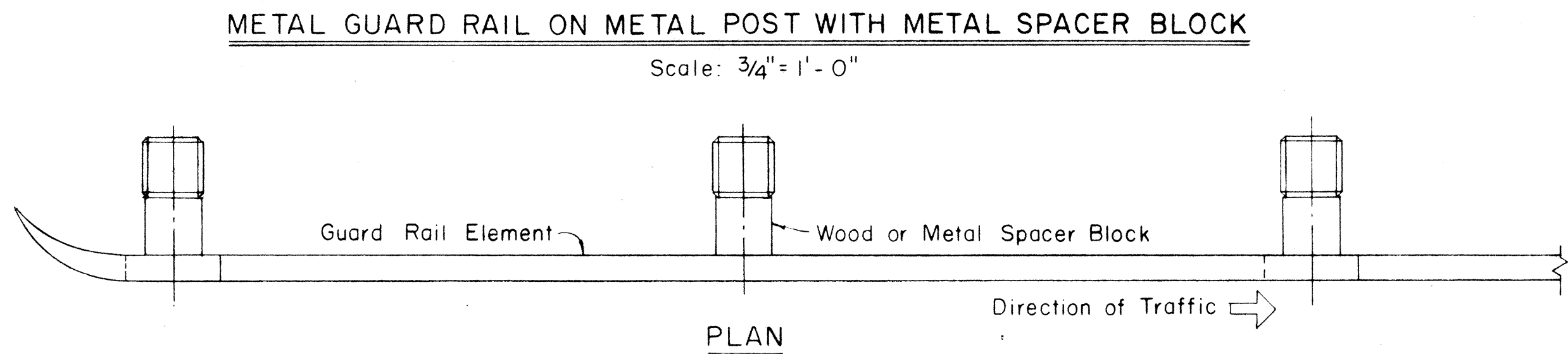
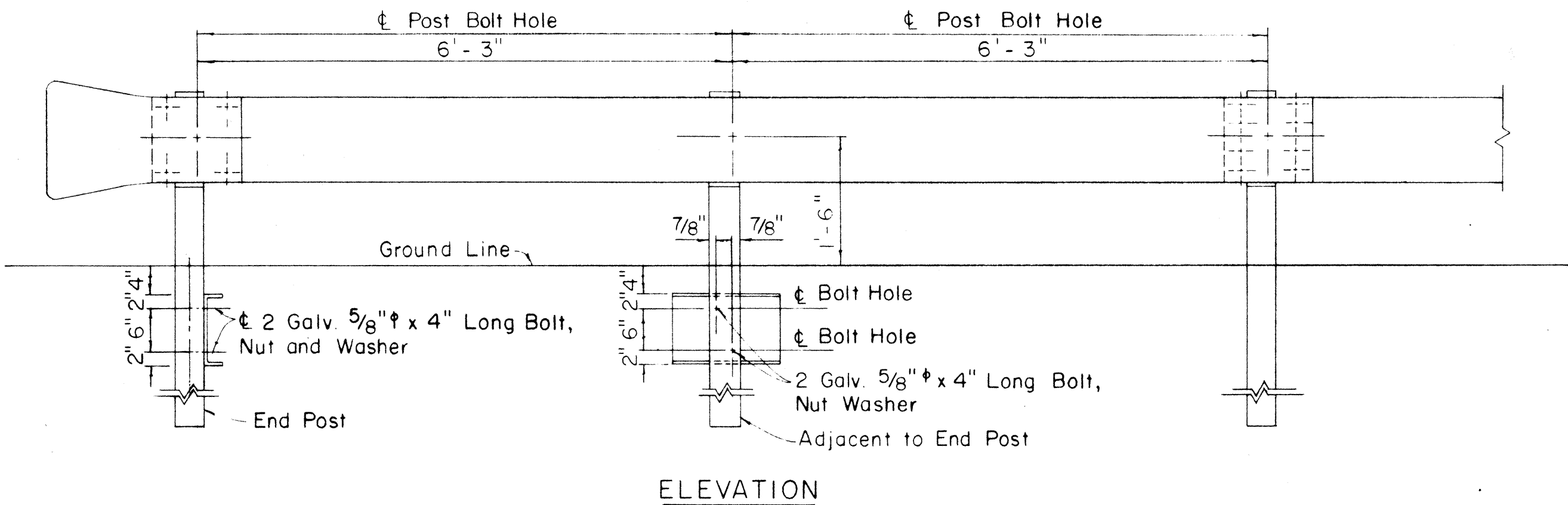
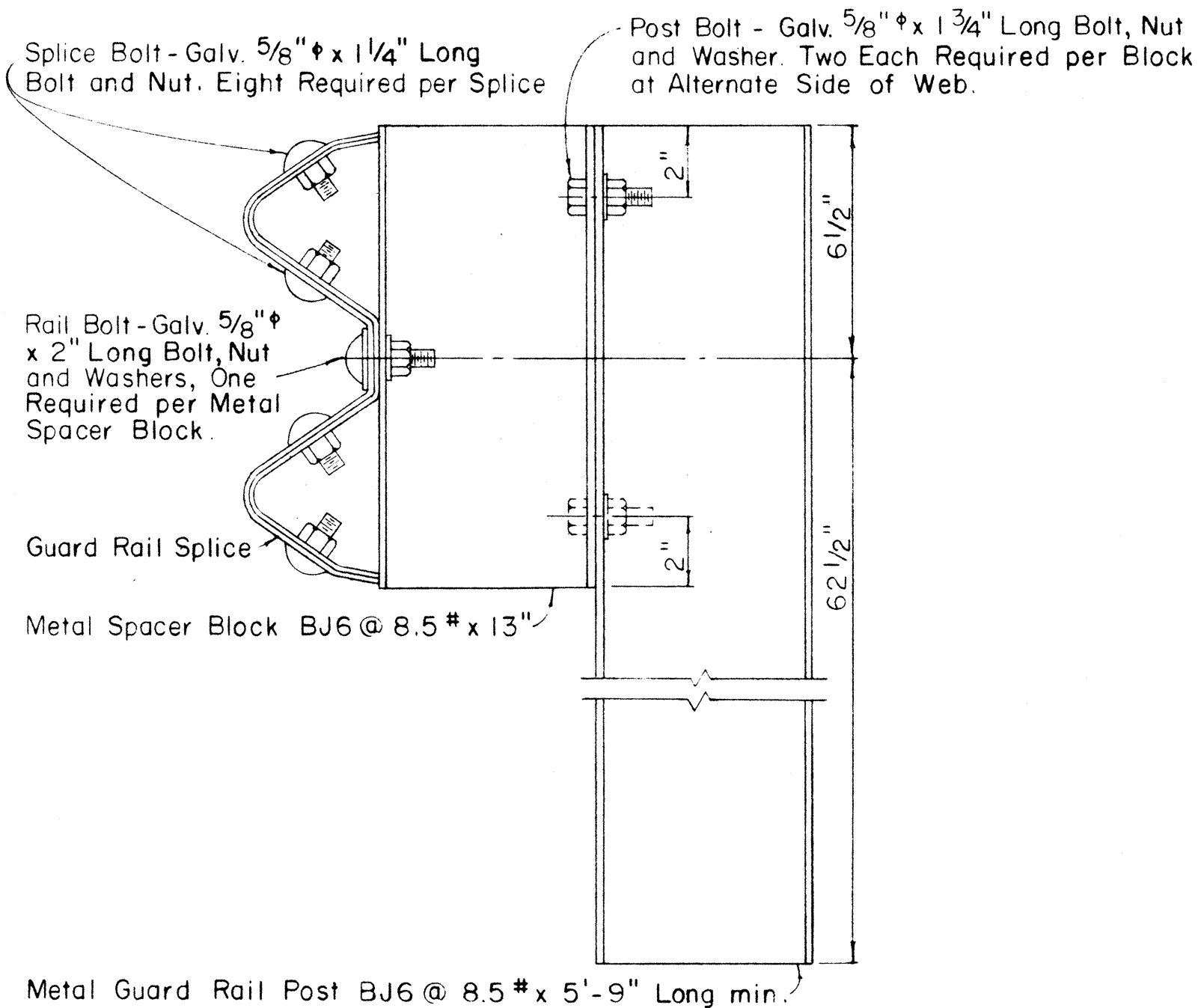
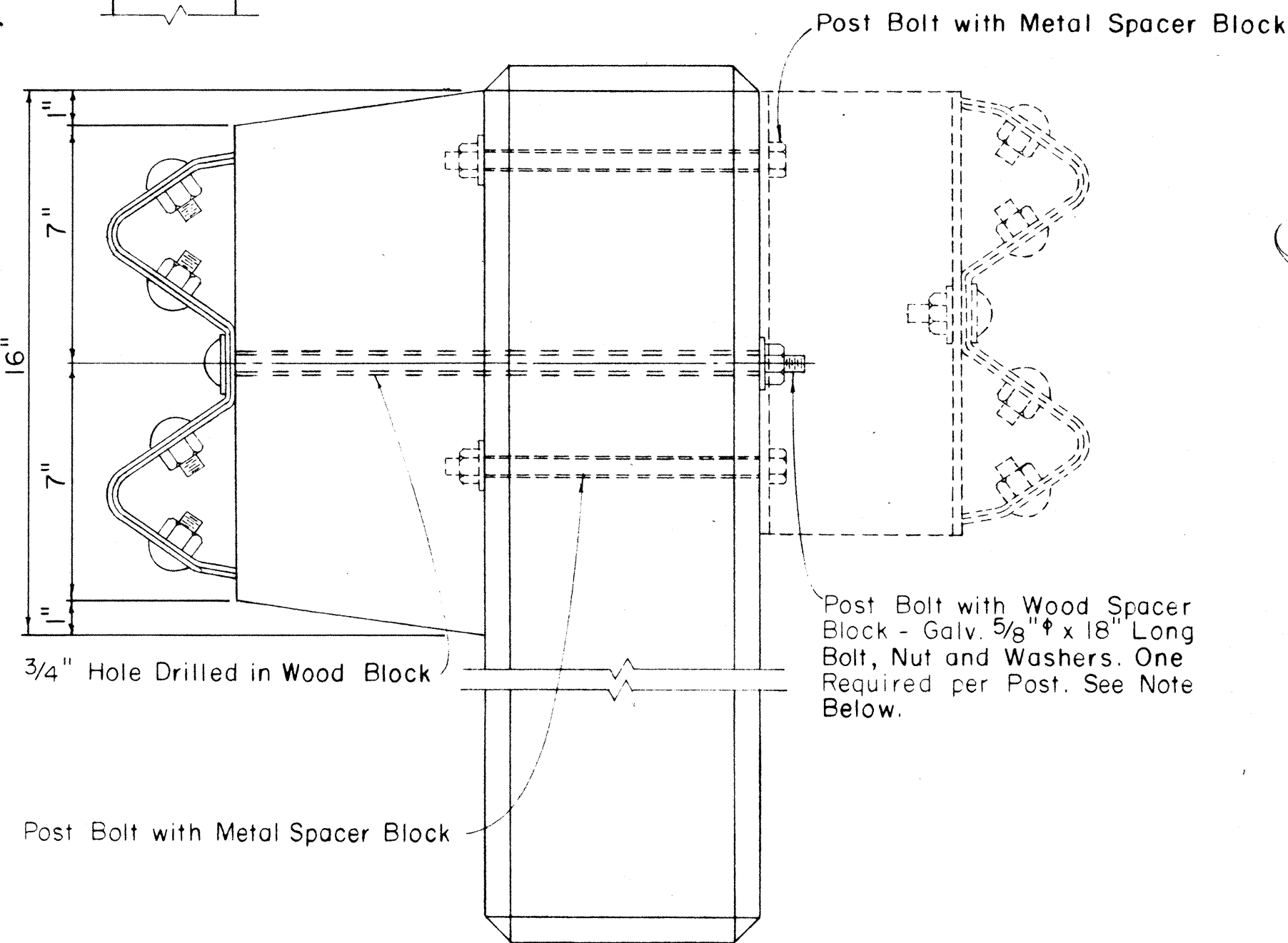
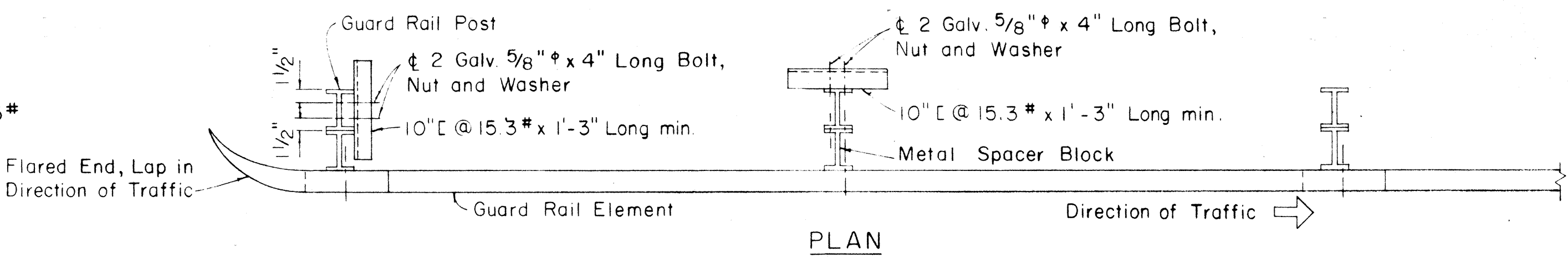
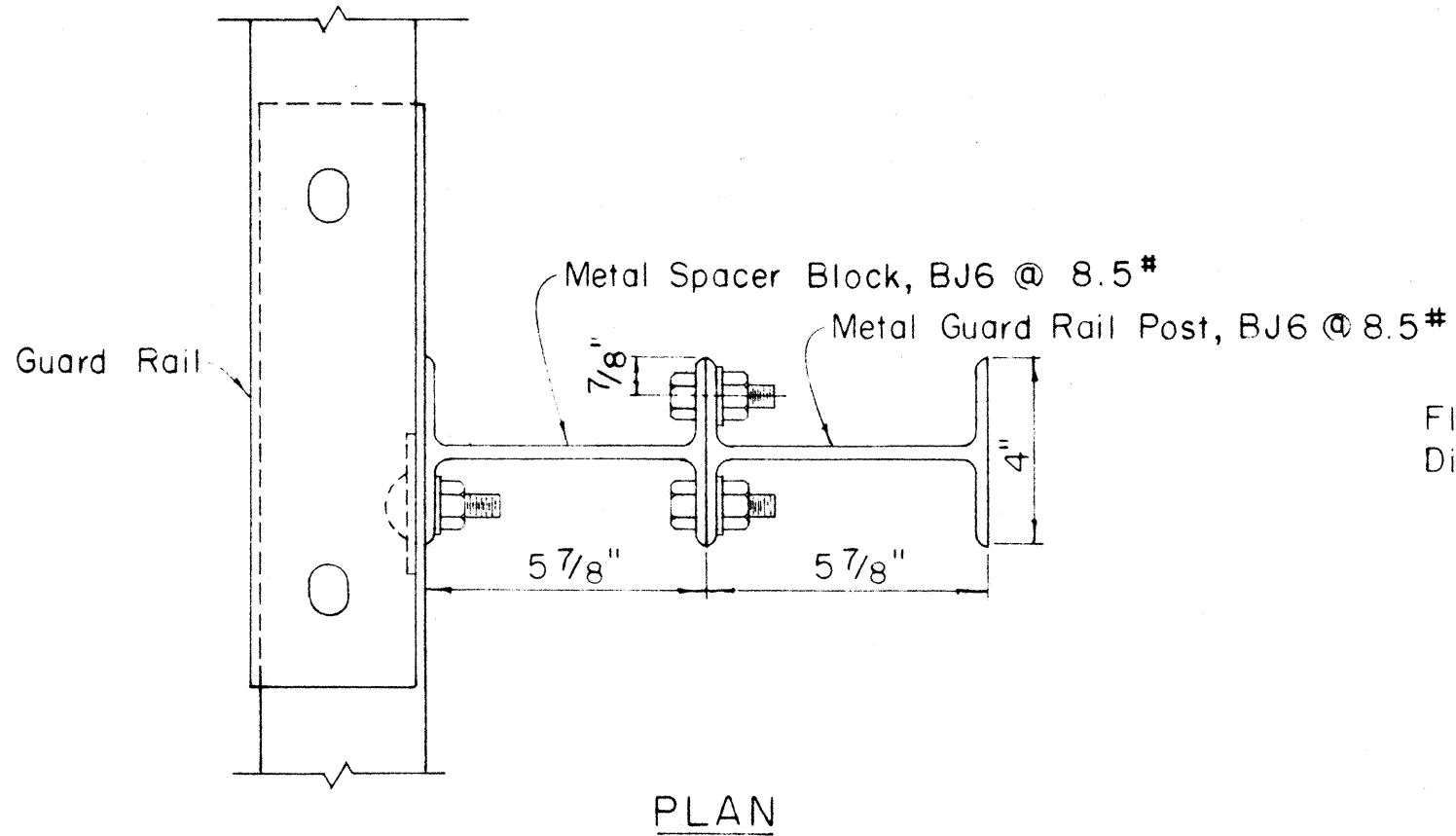
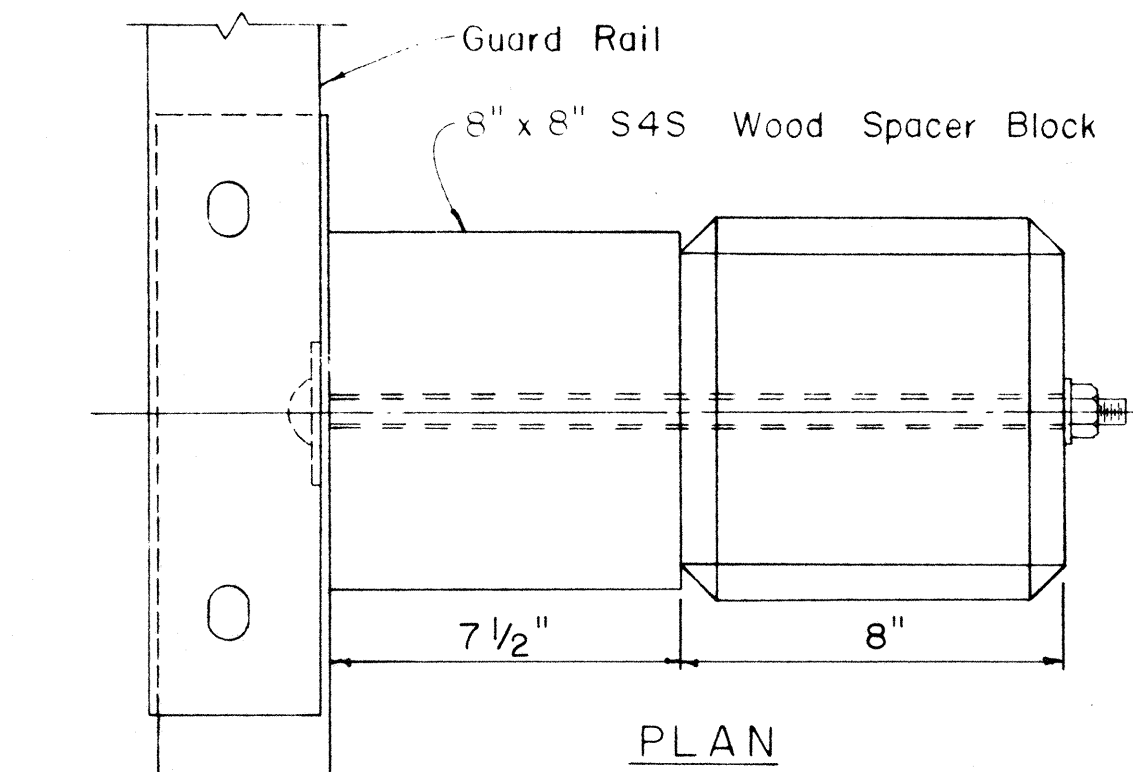
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

KAUAI BELT ROAD
PROJECT NO. F-056-1(8)
KAHILI TO PILAA

SHEET No. 2 OF 7 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(8)	1967	7	64



SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK
Scale: 3" = 1' - 0"

METAL GUARD RAIL ON CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
Scale: 3/4" = 1' - 0"

SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
Scale: 3" = 1' - 0"

NOTE:
Single Guard Rails Shown. For Double Guard Rails Additional Spacer Blocks and Rail Elements Required on Opposite Side of Posts. See Bolt Schedule for Required Bolt Lengths.

DETAILS FOR SINGLE GUARD RAIL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

METAL GUARD RAIL

KAUAI BELT ROAD PROJ. NO.F-056-1(8)

Scale: as noted

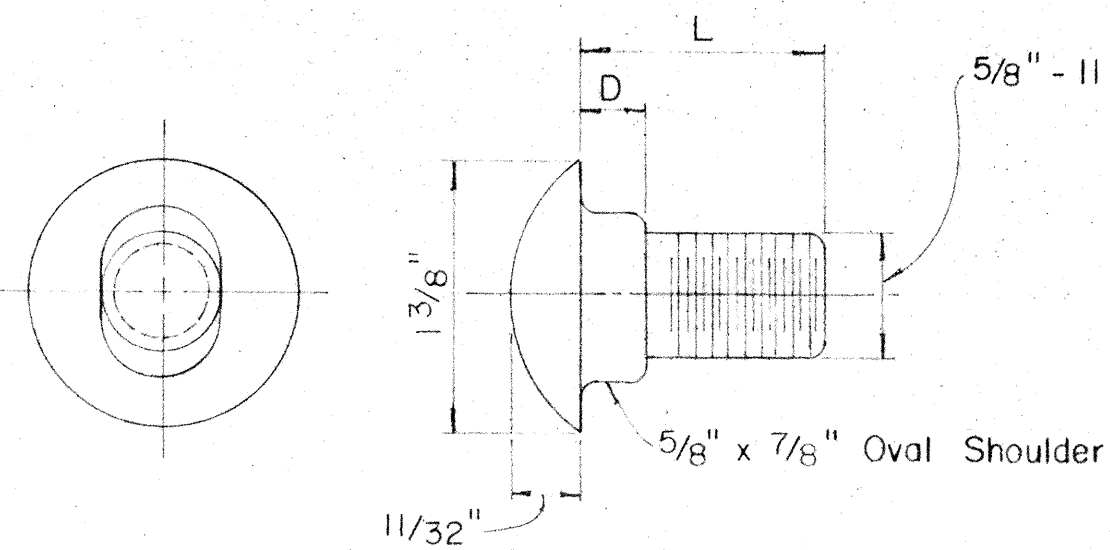
SHEET No. 3 OF 7 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
NOTED BY	
NO.	

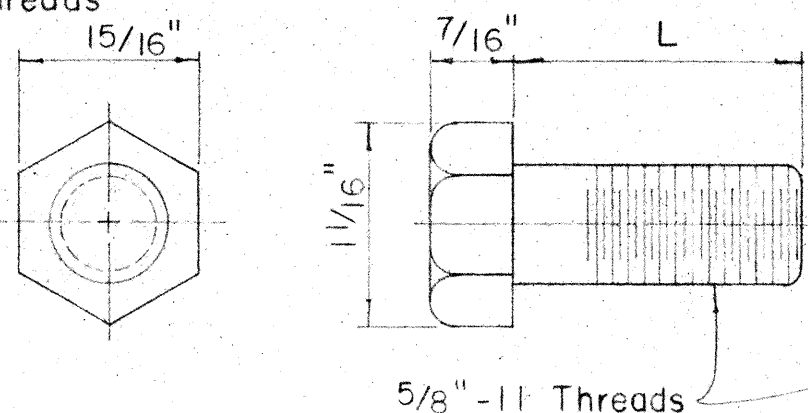
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(8)	1967	10	64

BOLT DIMENSIONS		
TYPE A BOLT		
Splice Bolt	D 5/16"	L 11/4"
Post Bolt for Conc. Post w/ Double Wood Blocks	3/32"	25"
Post Bolt for Conc. Post w/ Single Wood Block	3/32"	18"
Rail Bolt for Metal Block	3/32"	2"

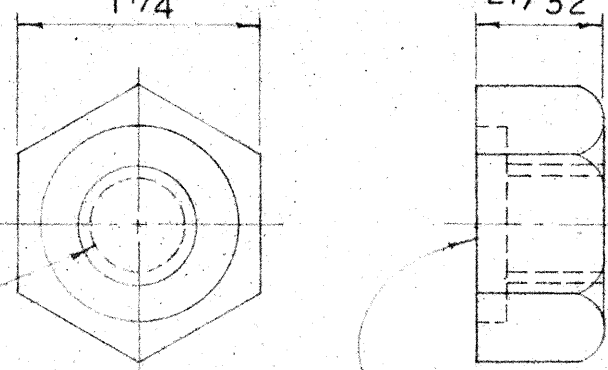
BOLT DIMENSIONS	
TYPE B BOLT	
Post Bolt for Conc. Post w/ Metal Blocks	L 9 1/2"
Post Bolt for Metal Post w/ Metal Block	13/4"



TYPE A BOLT



TYPE B BOLT



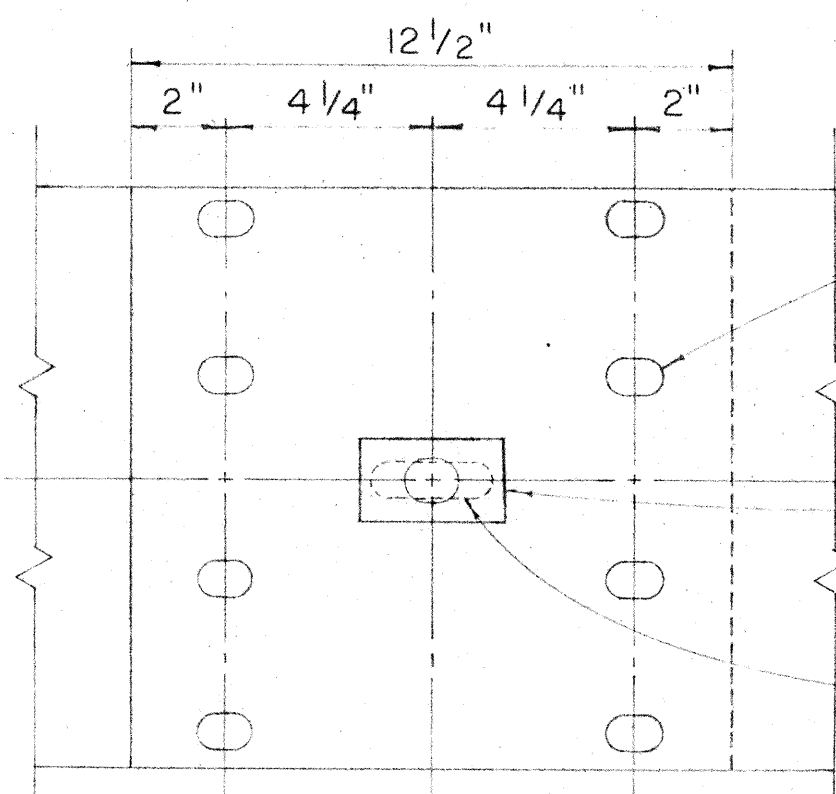
HEXAGON NUT

Scale: Full Size

5/32" Deep x 15/16" Dia.
C' Bore for Type A Bolt only.
Plain nut for Type B Bolt.

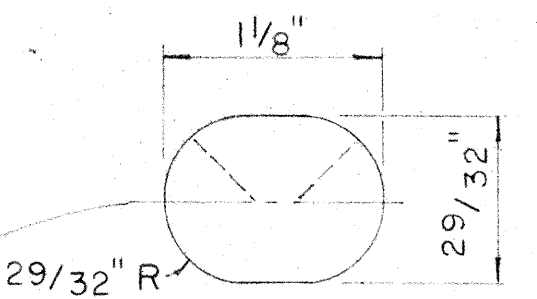
SPLICE RAIL AND POST BOLTS

Scale: Full Size



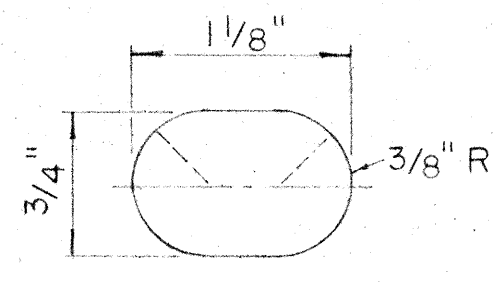
RAIL SPLICE

Scale: 3" = 1'-0"

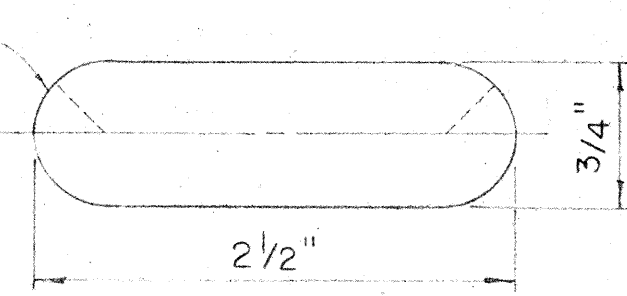


SPLICE BOLT SLOT

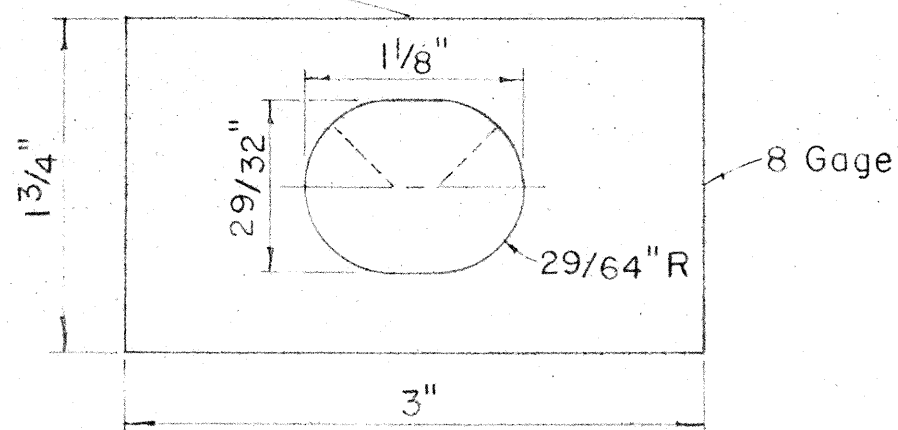
Scale: Full Size



SPLICE BOLT SLOT
FOR ALL ENDS

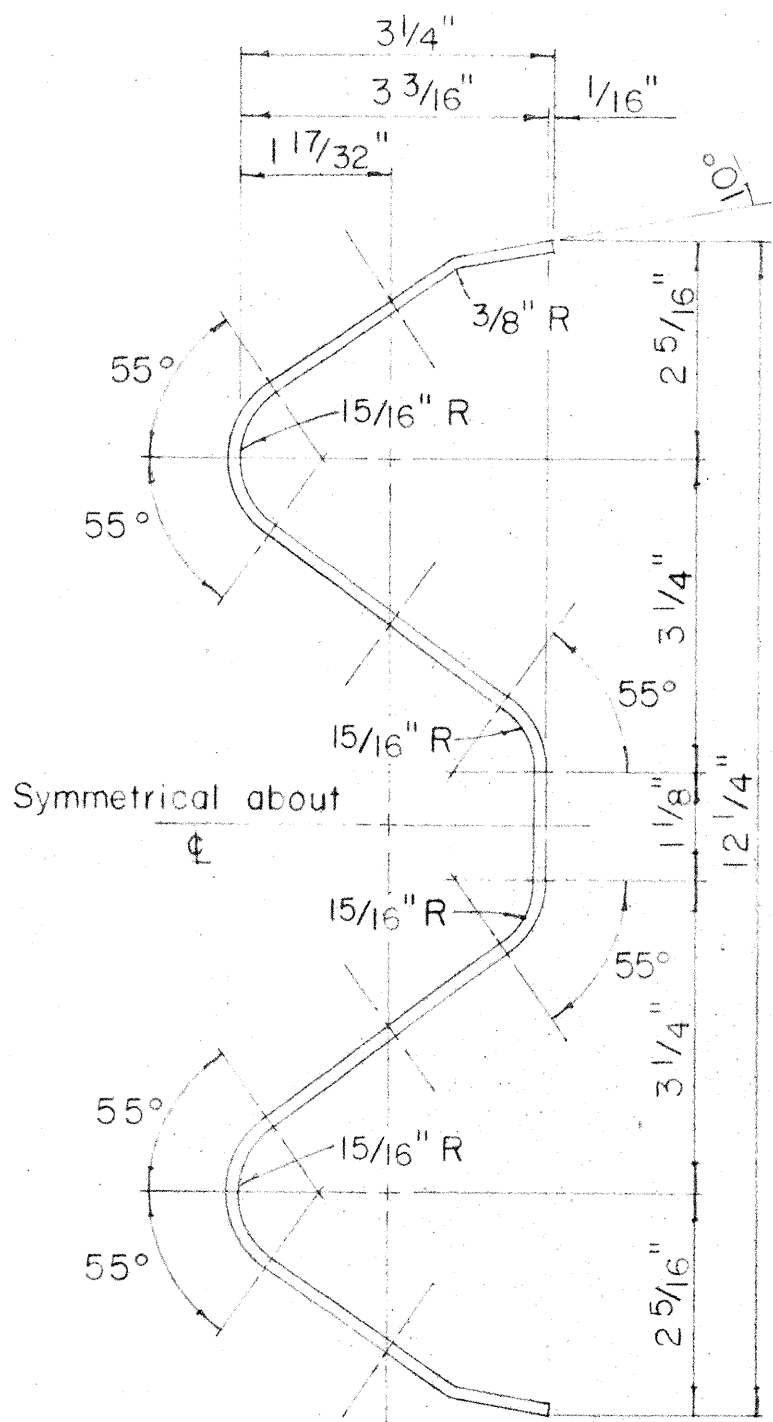


POST BOLT SLOT



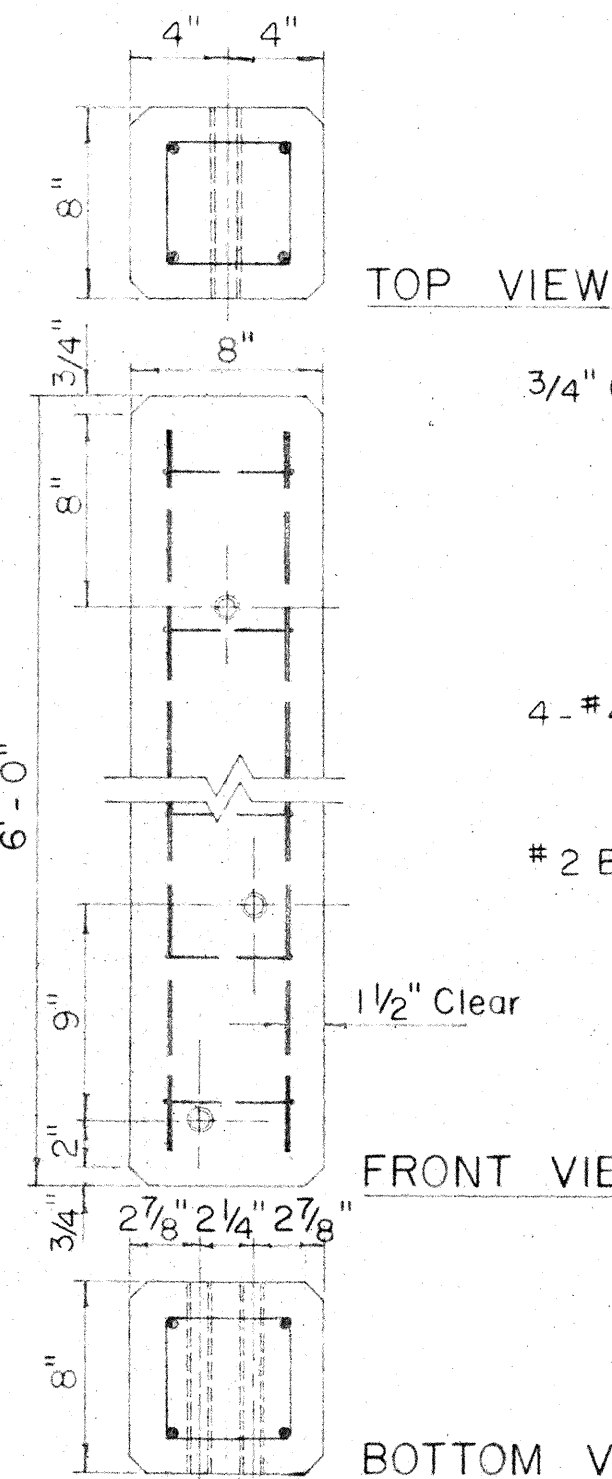
RAIL WASHER

NOTE:
Concrete post shall be precast



RAIL ELEMENT SECTION

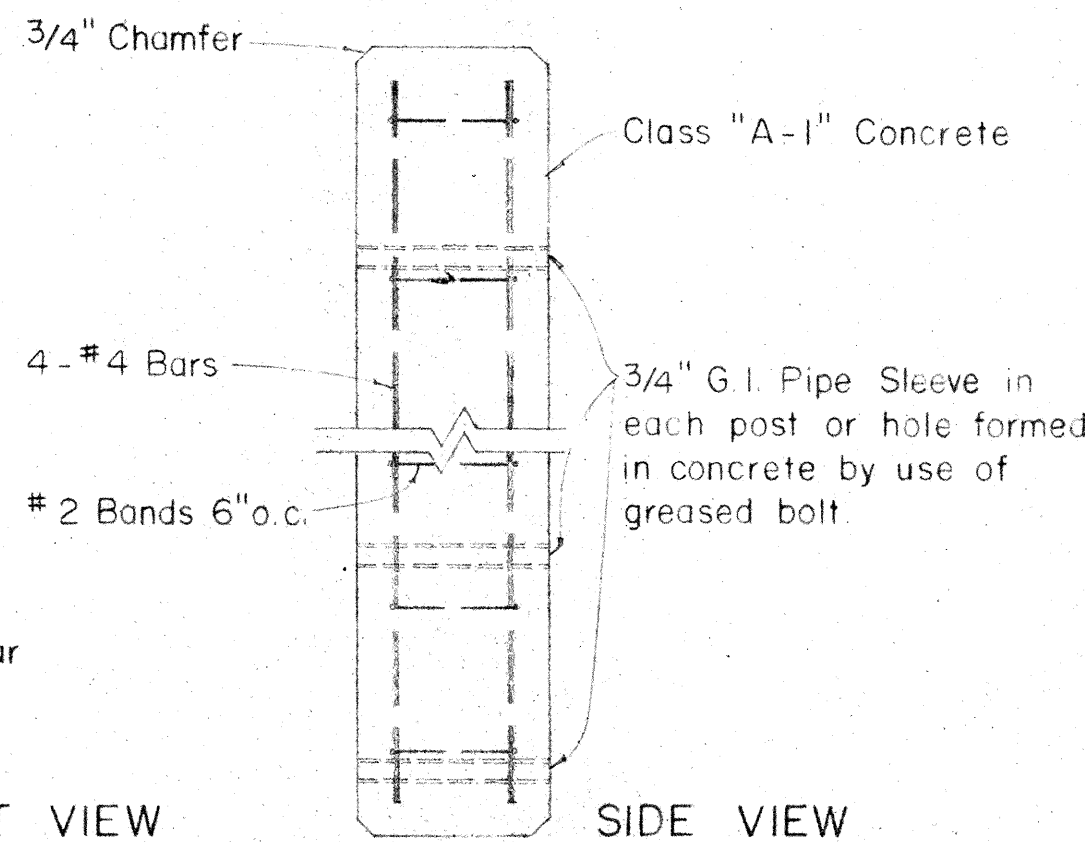
Scale: 6" = 1'-0"



TOP VIEW

FRONT VIEW

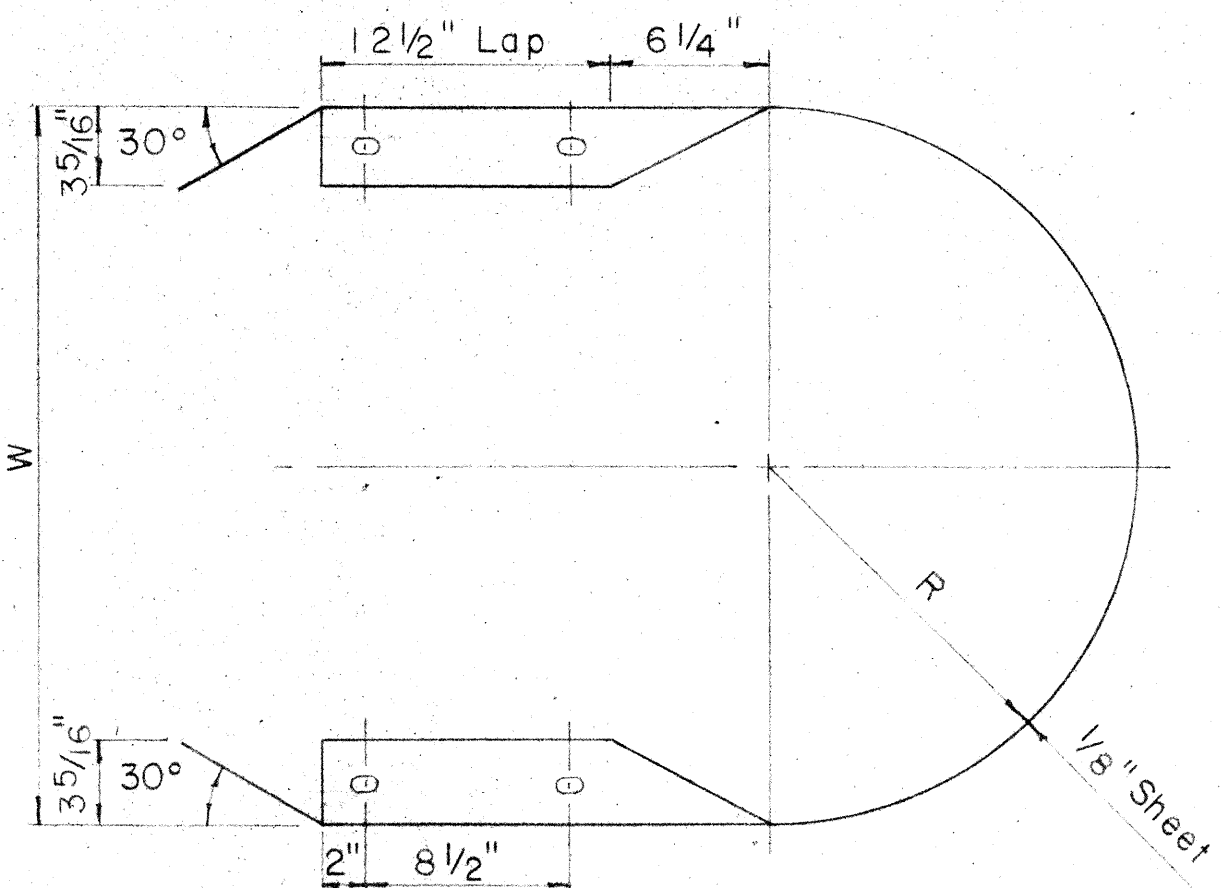
BOTTOM VIEW



SIDE VIEW

DETAIL OF CONCRETE POST

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

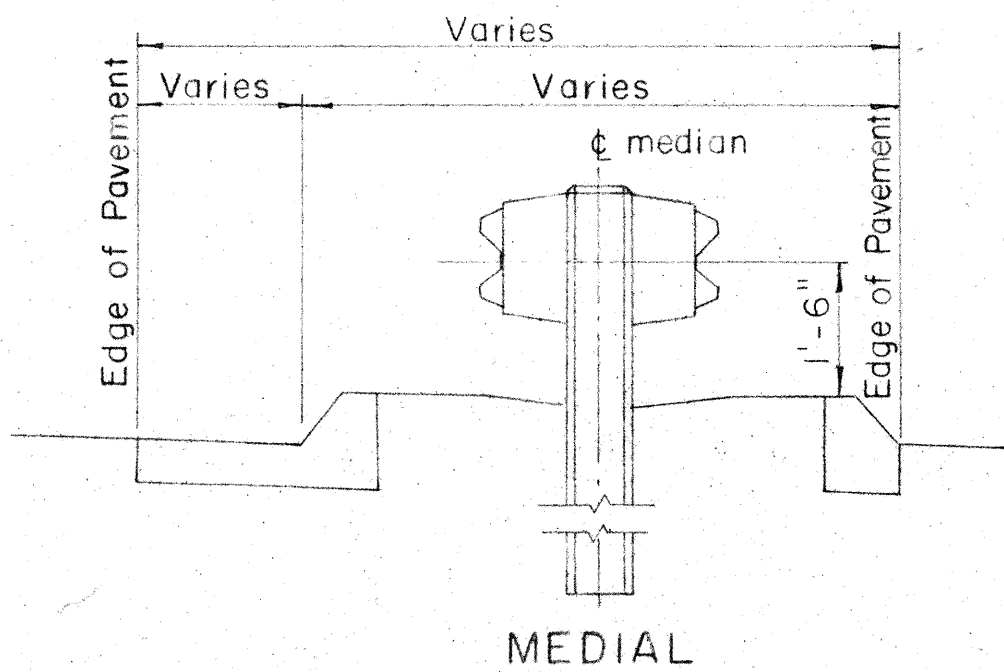


MEDIAN END

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

MEDIAN END DIMENSIONS

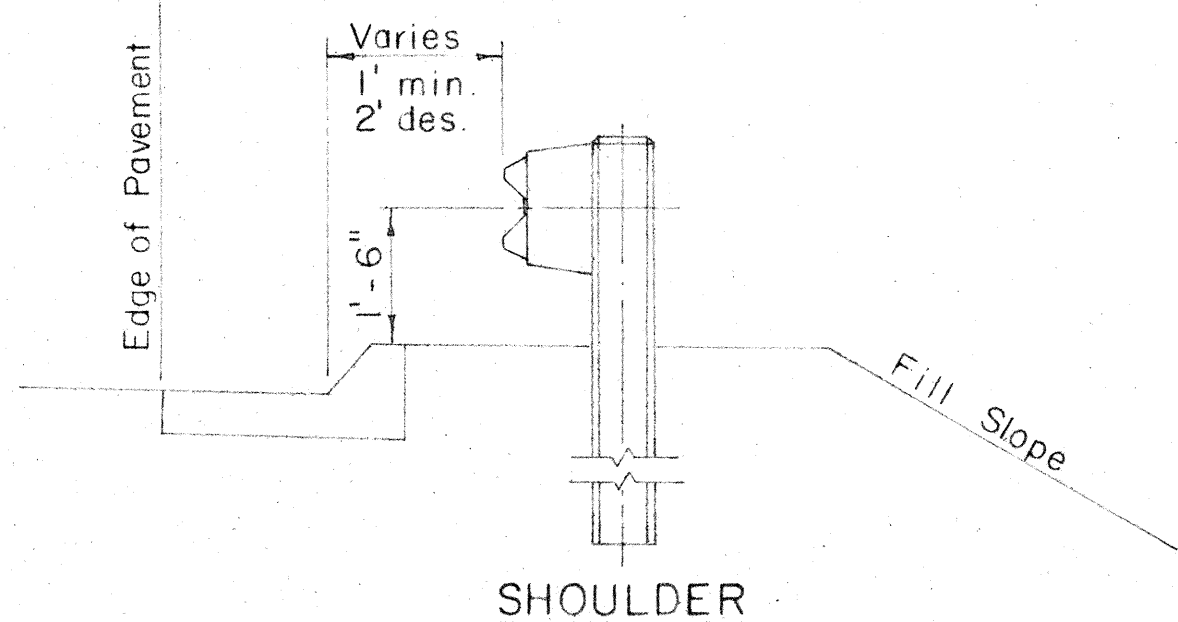
TYPE OF POST AND BLOCK	W	R
Double Metal Guard Rail on Concrete Post with Wood Blocks	29 3/4"	14 7/8"
Double Metal Guard Rail on Concrete Post with Metal Blocks (BJ6)	26 1/2"	13 1/4"
Double Metal Guard Rail on Metal Post with Metal Blocks (BJ6)	24 3/8"	12 3/16"



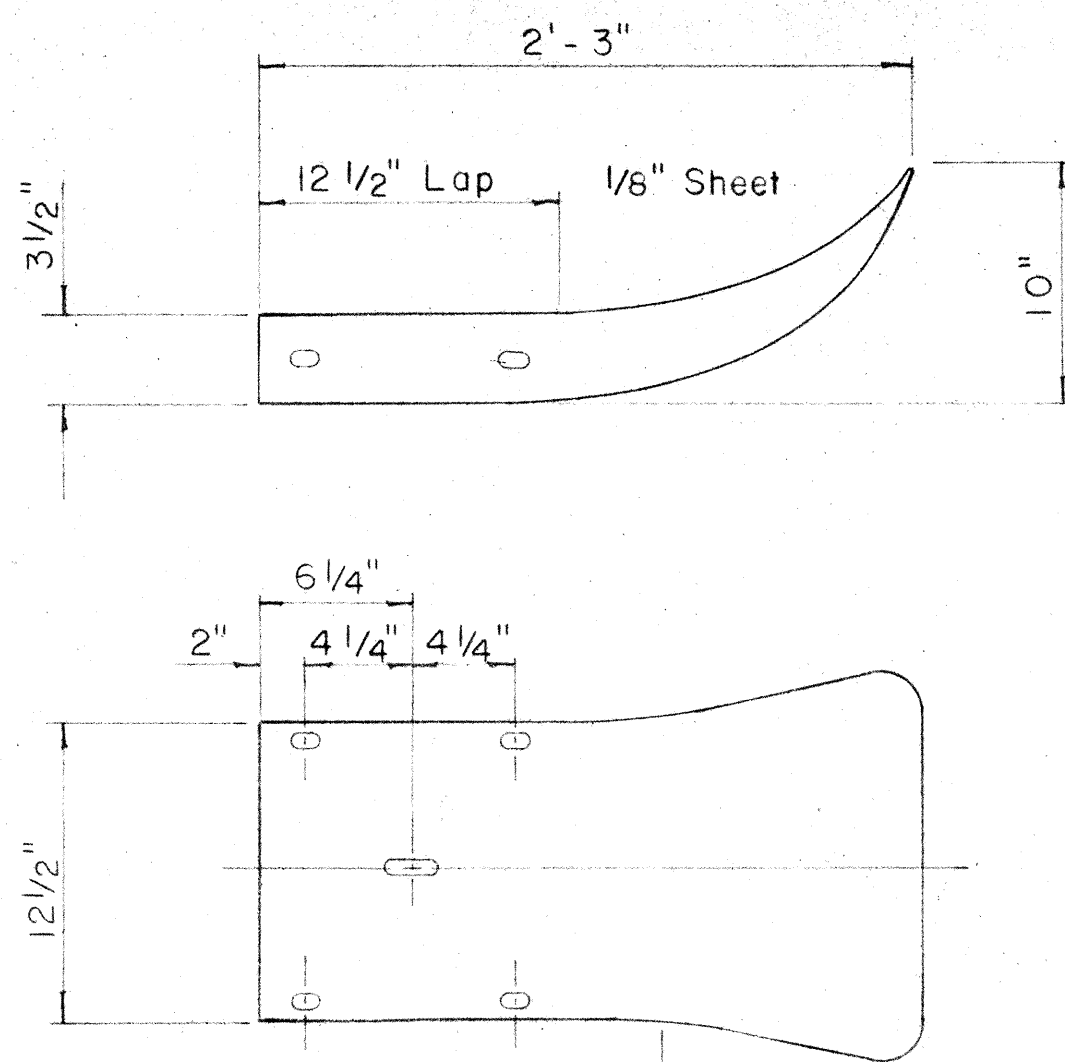
MEDIAL

TYPICAL GUARD RAIL DETAIL

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

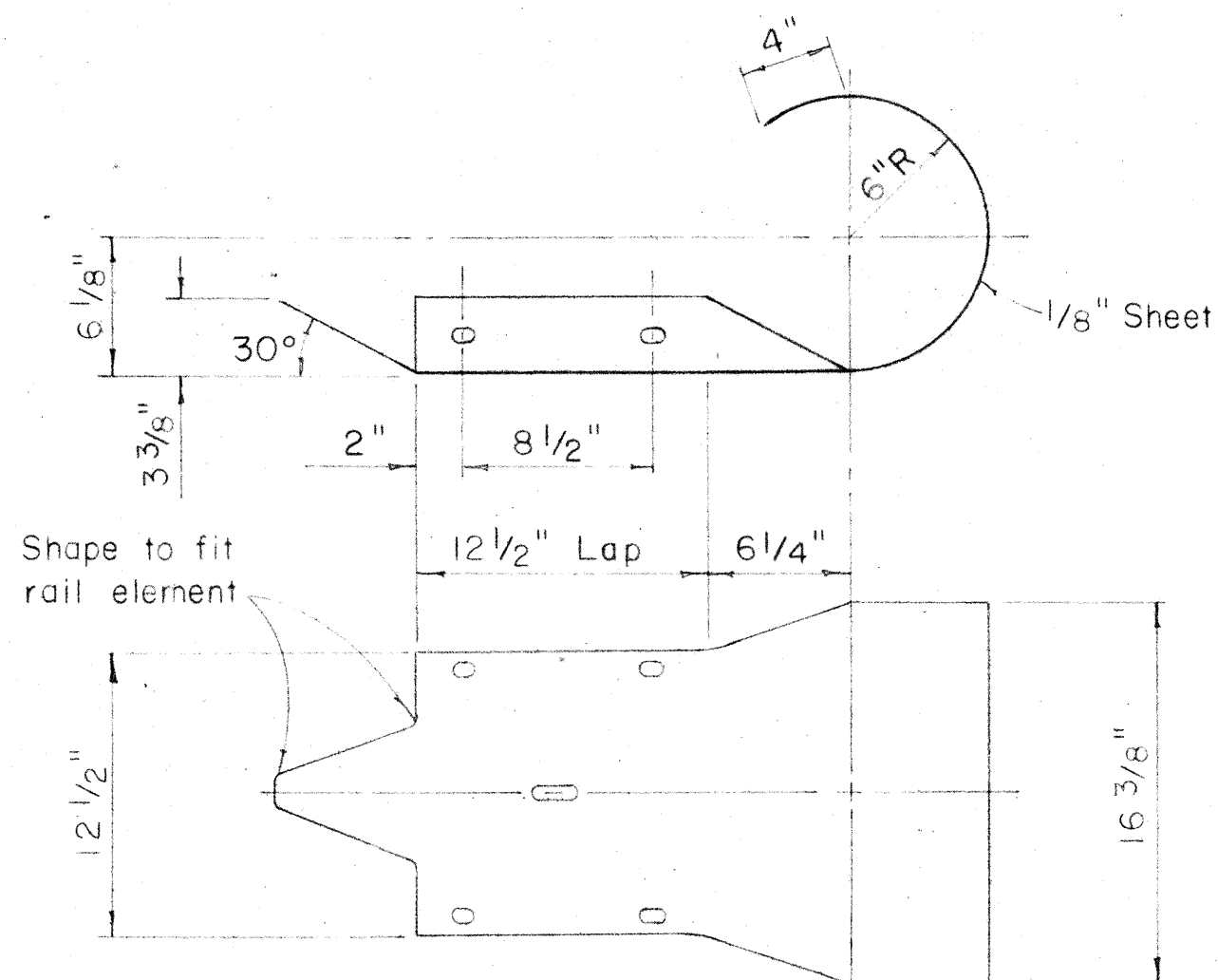


SHOULDER



FLARED END

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



CURVED END

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

REVISED: June 2, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

METAL GUARD RAIL

KAUAI BELT ROAD PROJ. NO. F-056-1(8)

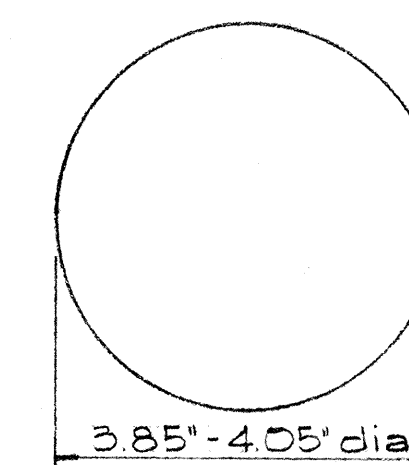
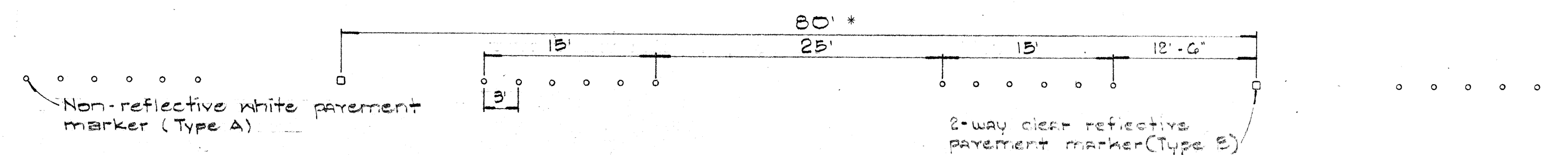
Scale: as noted

SHEET No. 4 OF 7 SHEETS

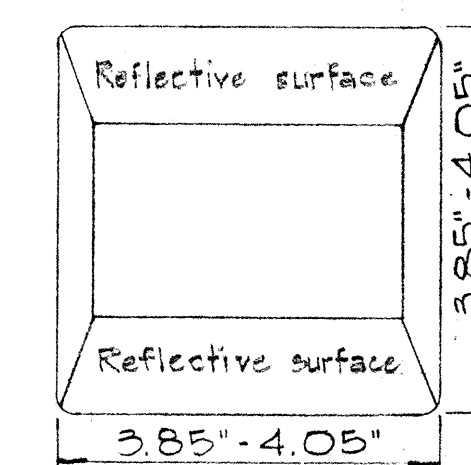
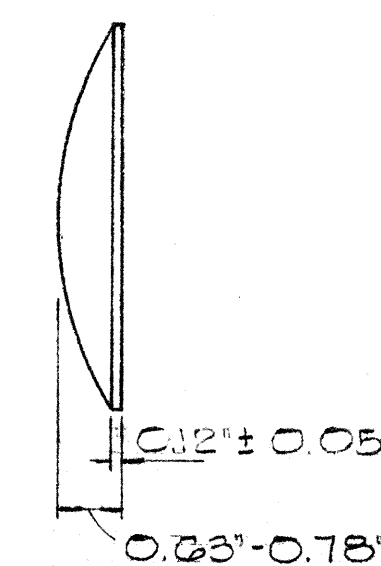
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	
NOTED BY	TRACED BY	
NOTED BY	QUANTITIES BY	
NOTED BY	CHECKED BY	
No.		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(8)	1967	11	64

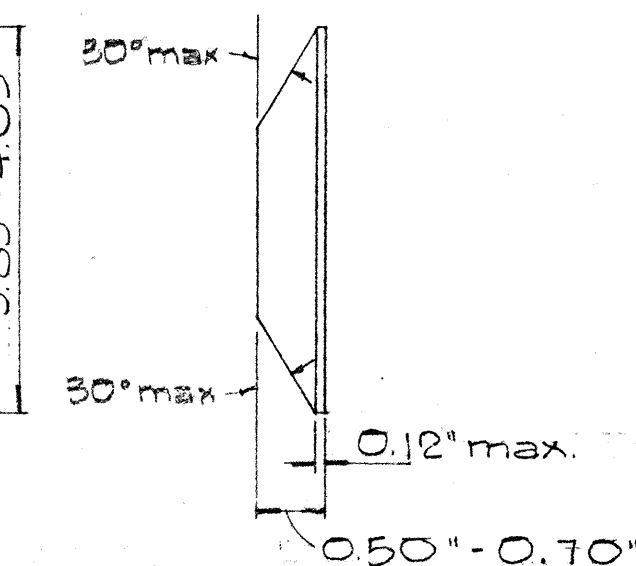
① CENTER LINES ON TWO-LANE RURAL ROADS AND CITY STREETS



TYPE A
Non-reflective white marker

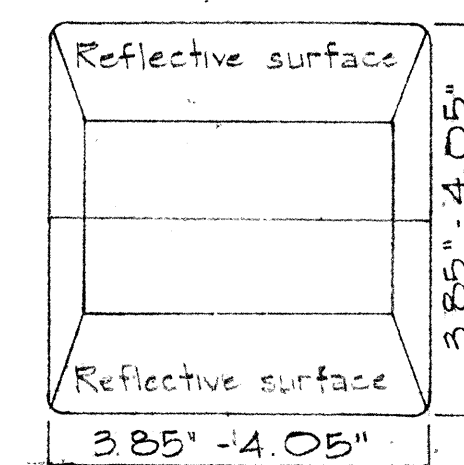
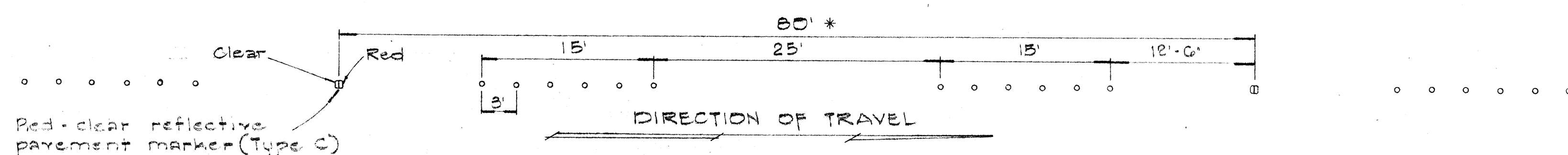


TYPE B
2-way clear reflective surface

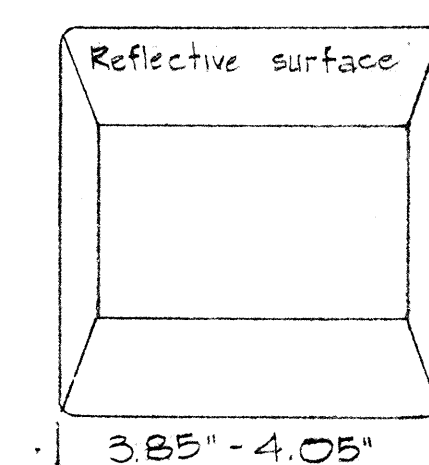
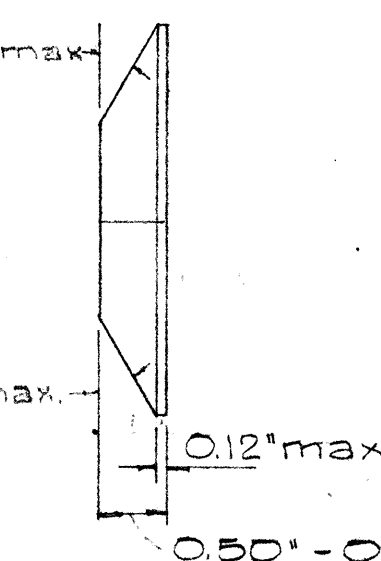


TYPE D
2-way yellow reflective surface

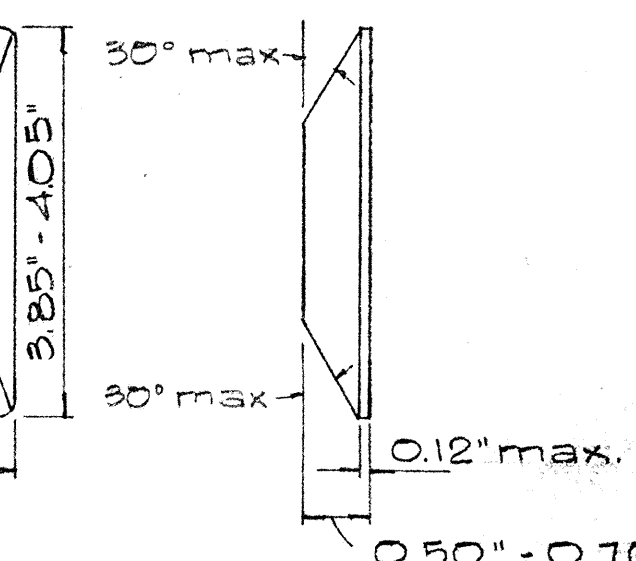
② LANE LINES



TYPE C
Red-clear reflective surface

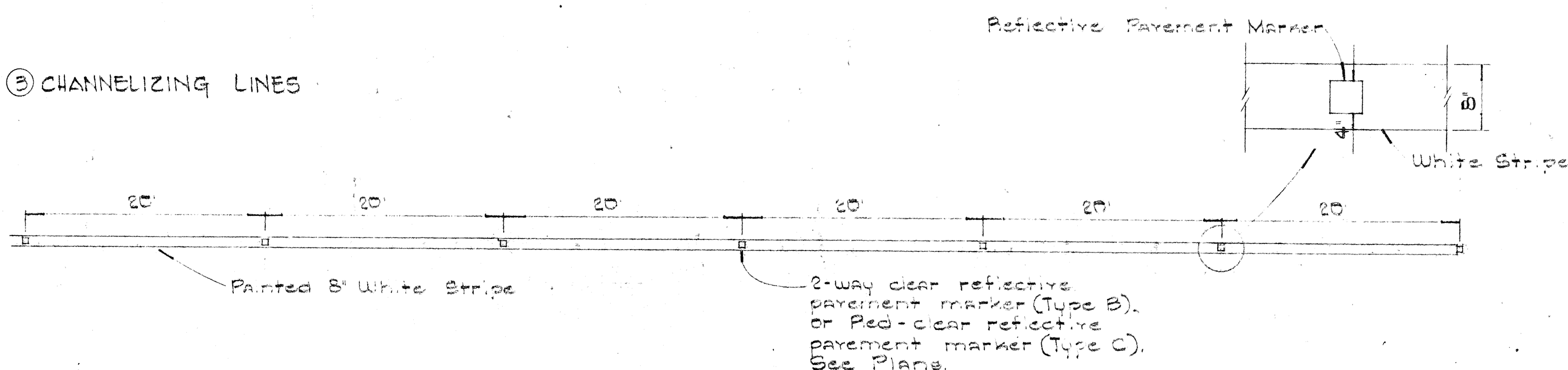


TYPE H
One-way yellow reflective surface



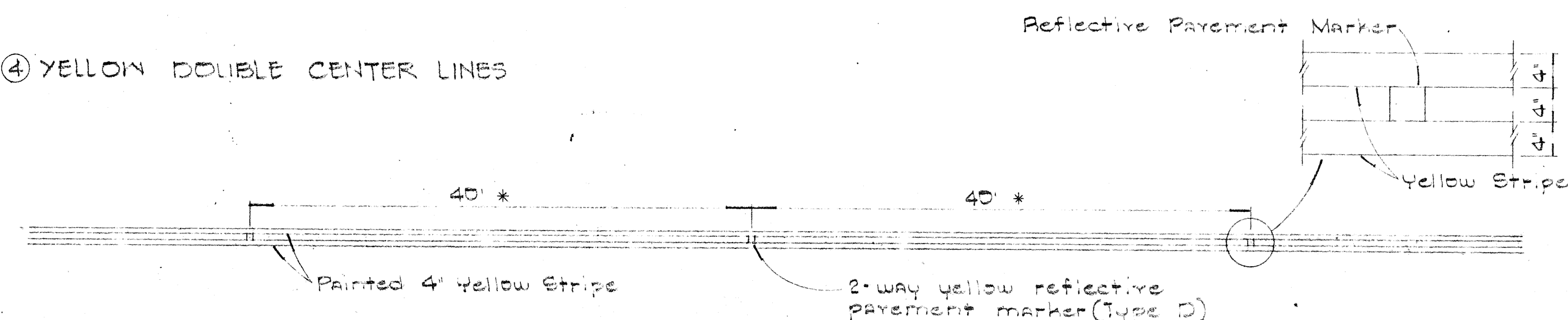
TYPE G
One-way clear reflective surface

③ CHANNELIZING LINES

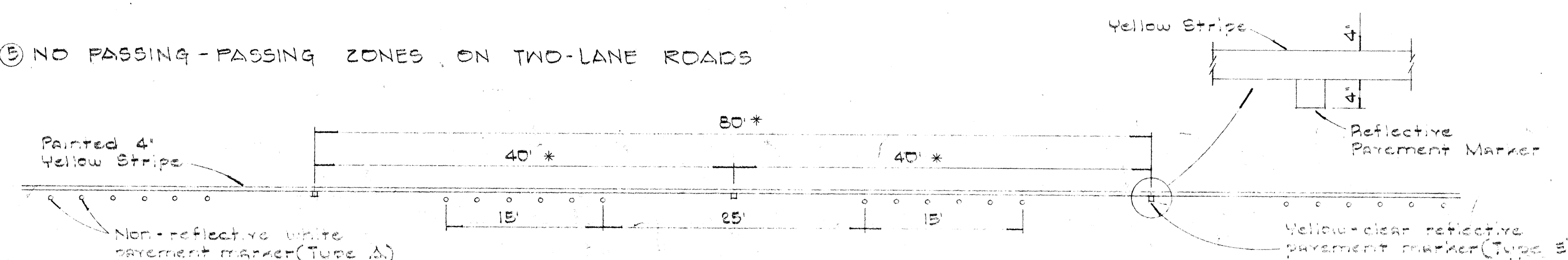


TYPE E
Yellow-clear reflective surface

④ YELLOW DOUBLE CENTER LINES



⑤ NO PASSING - PASSING ZONES ON TWO-LANE ROADS



NOTE:
Painted stripes to be done by State forces.

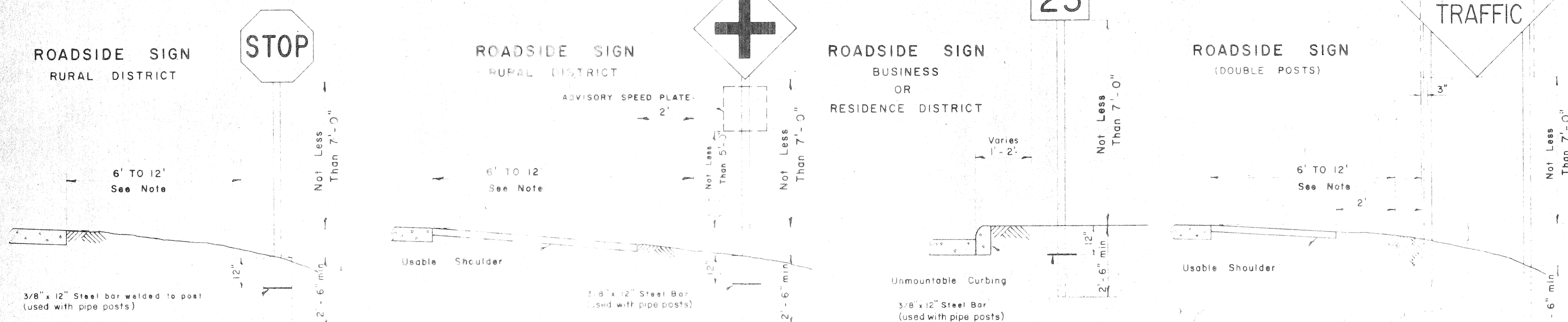
* For curves less than 1000' radius use one-half spacing.

REVISED: April 14, 1967
REVISED: April 13, 1967

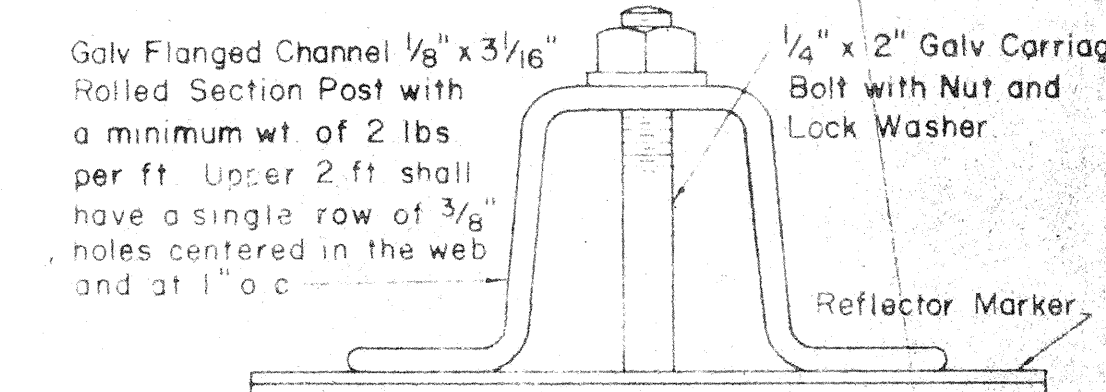
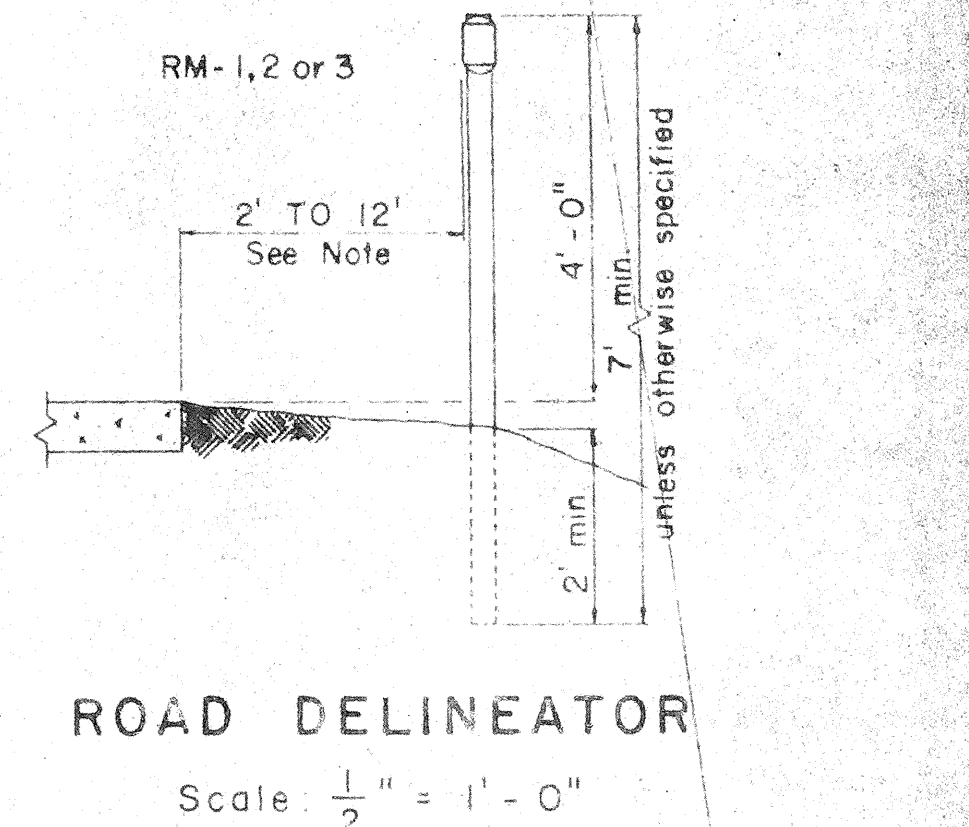
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
RAISED PAVEMENT MARKERS
KAUAI BELT ROAD
PROJECT NO. F-056-1(8)
Not to Scale

SHEET No. 5 OF 7 SHEETS

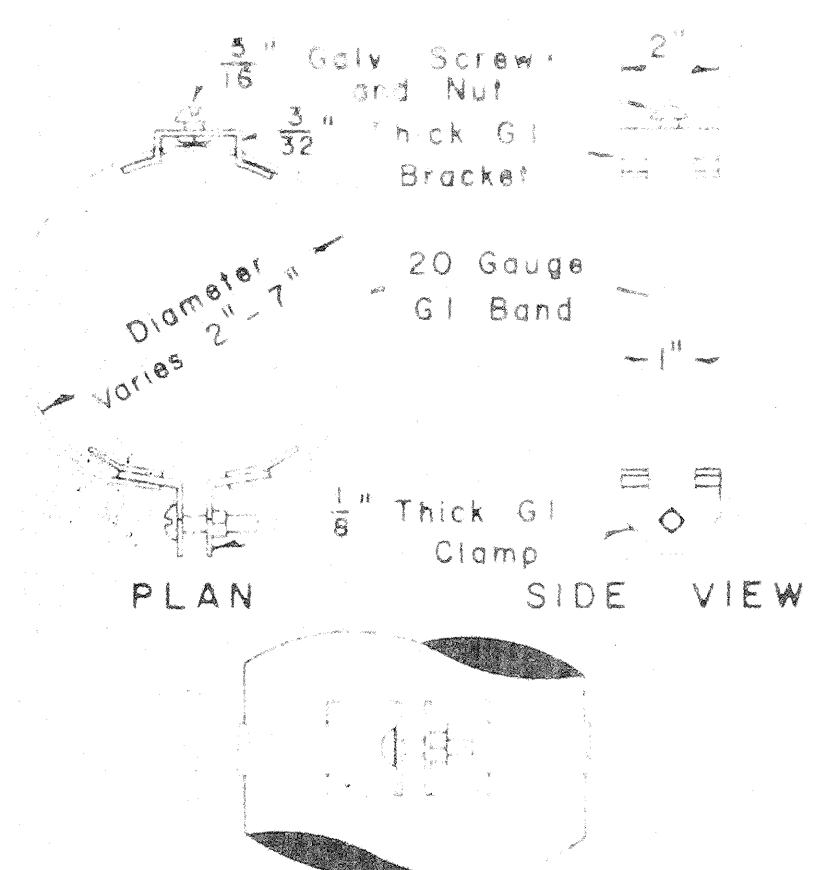
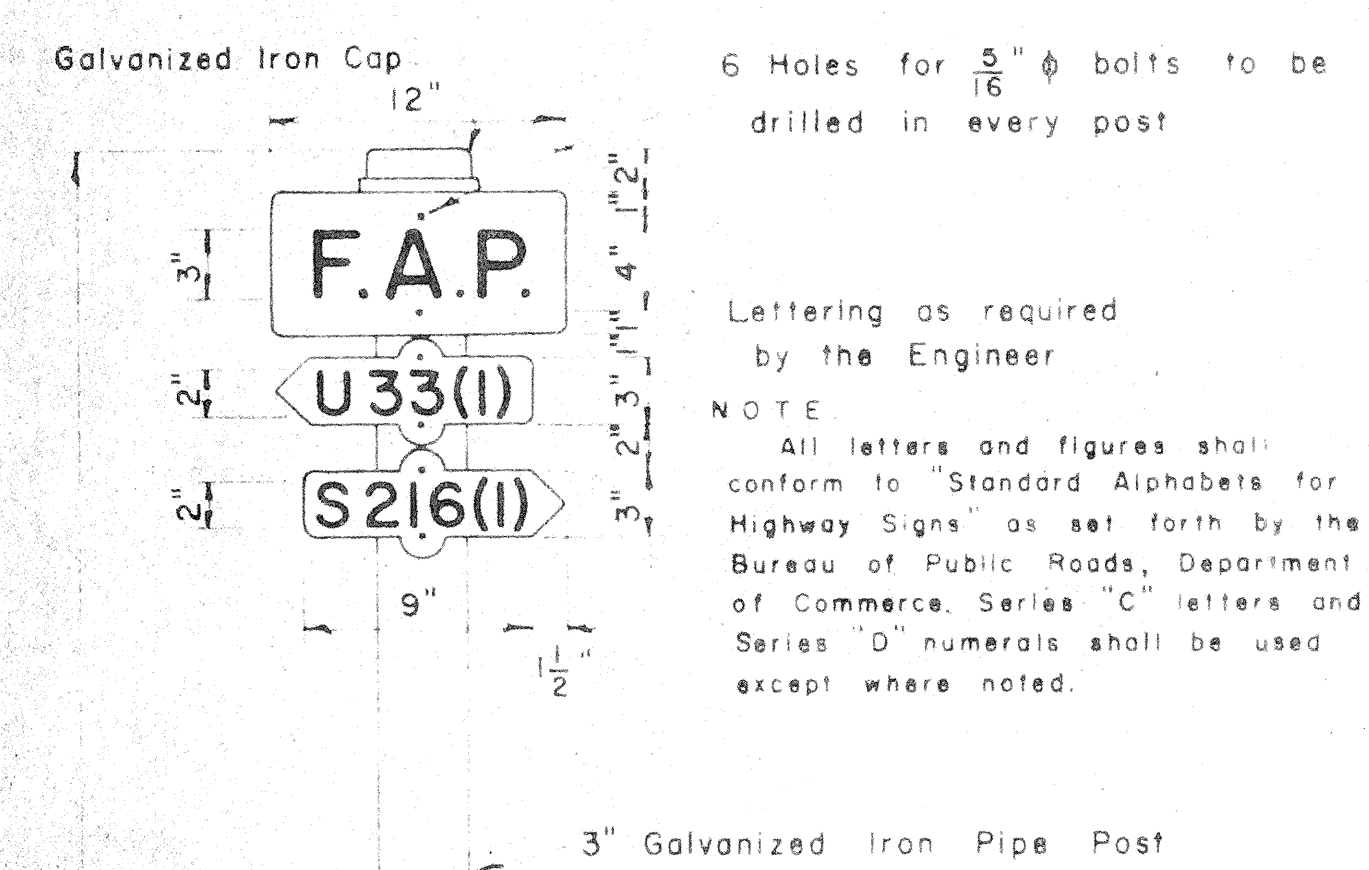
- NOTE
1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing unless otherwise specified below.
 2. Except as noted below, sign posts shall be either 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts for signs larger than 24" in any dimension; 2" galv. std. pipe or 2" x 2" galv. square tube posts for signs 24" or less in any dimension.
 3. Sign shall be attached to post with 5/16" galvanized bolts with nuts and 7/8" x 7/8" x .001" stainless steel washers with neoprene rubber gaskets.
 4. Clearance Markers (RM-3, RM-4) shall be installed with the inside edge of the marker in line with the upper edge of the obstruction.
 5. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts.



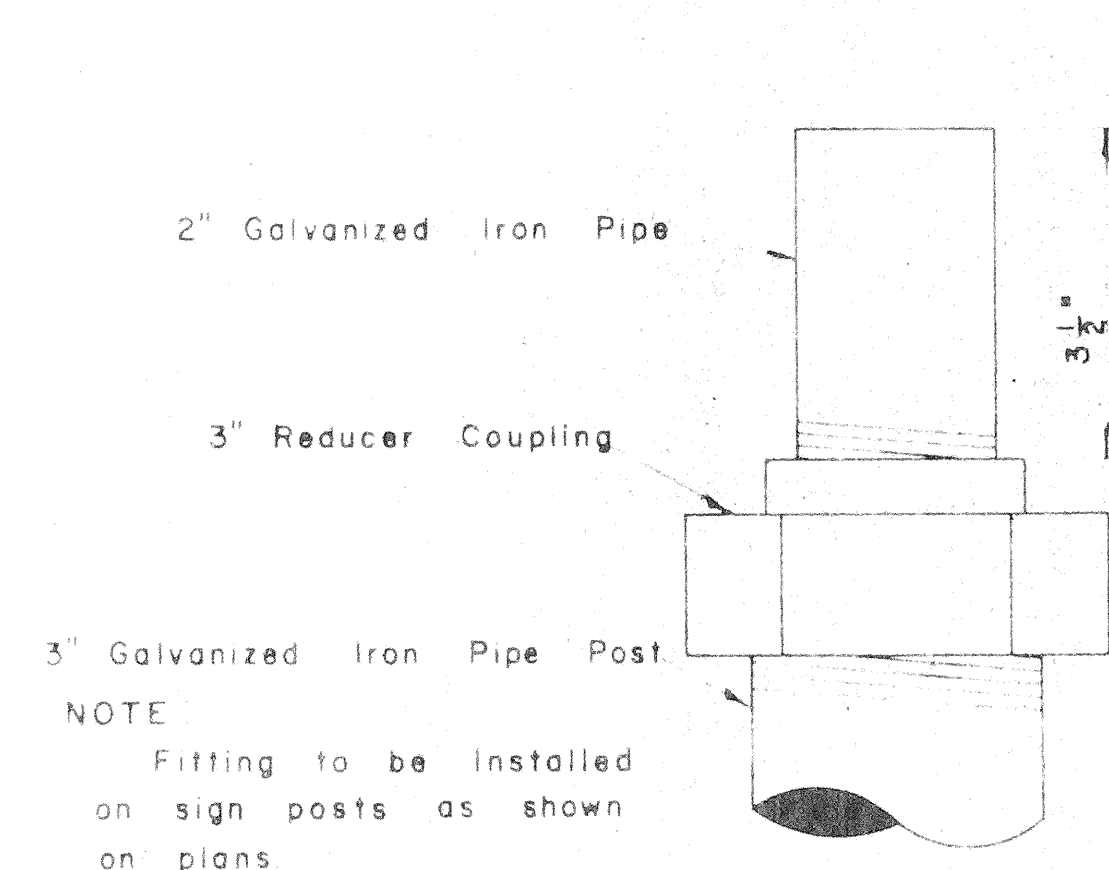
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HA	F-056-1(8)	1967	12	64



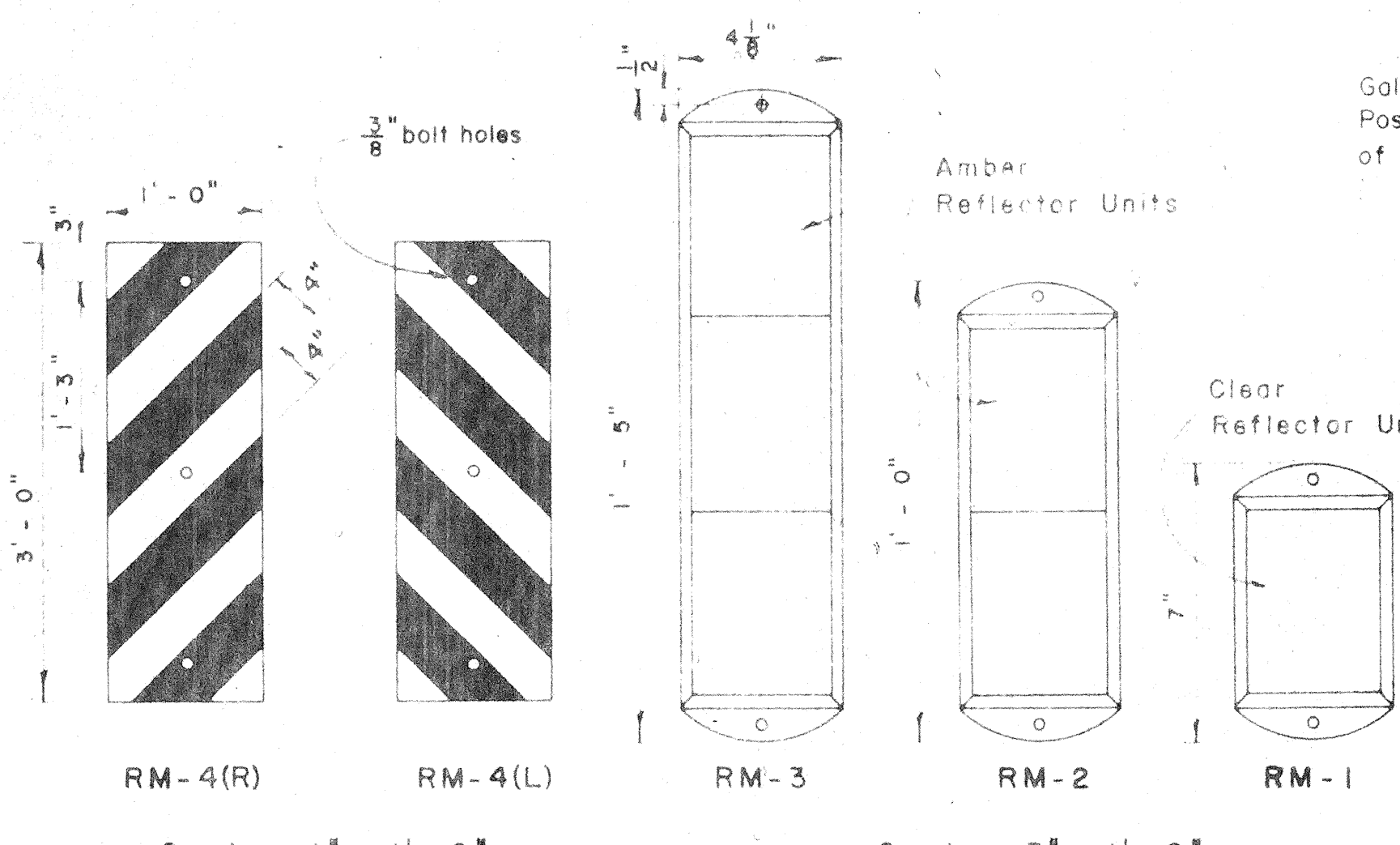
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS



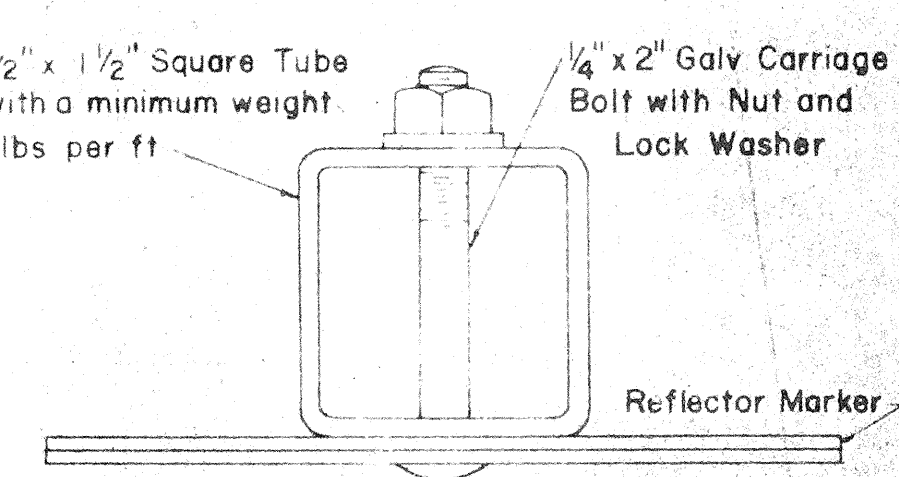
FRONT VIEW
TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS
Scale: 3" = 1'-0"



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

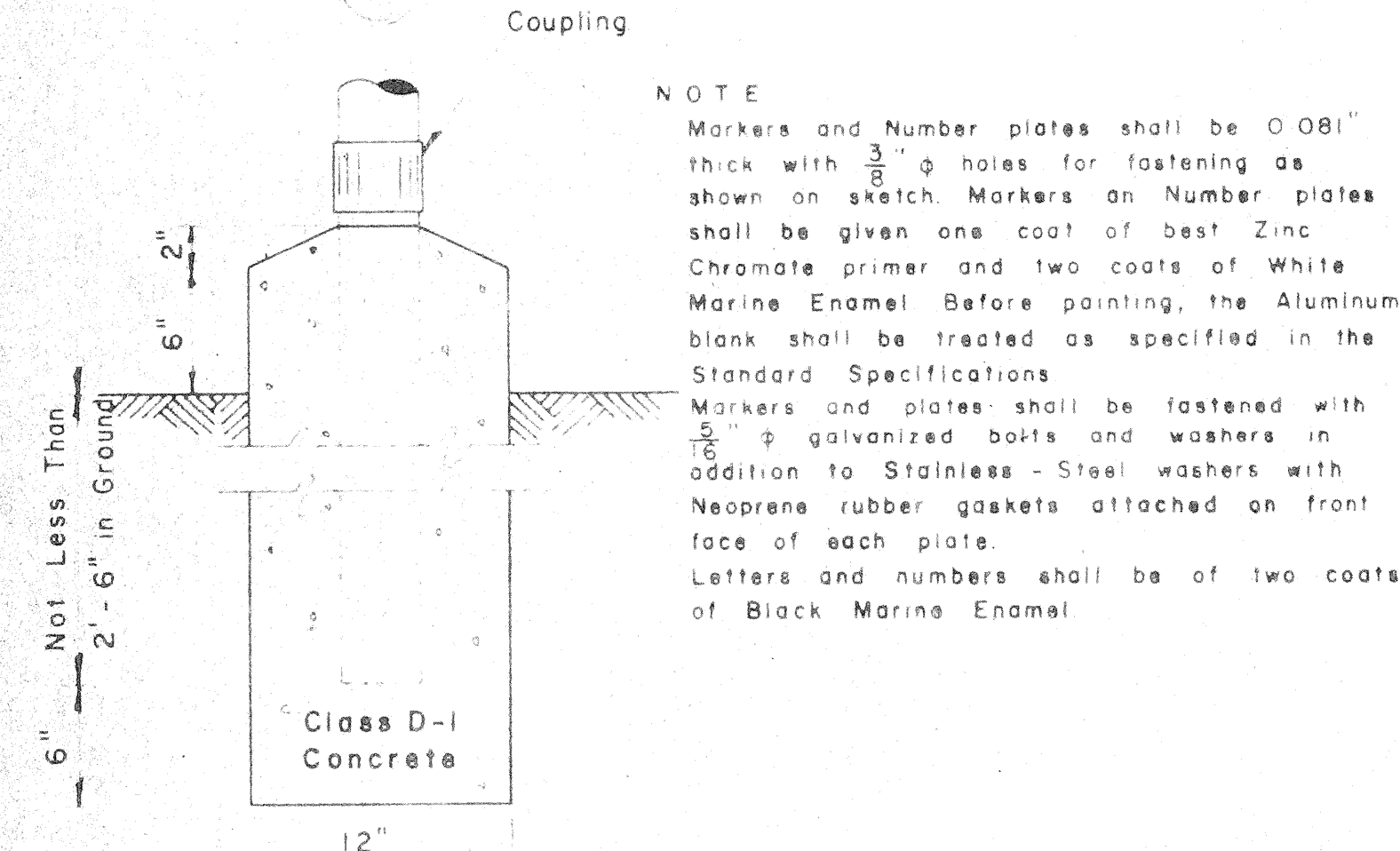


REFLECTOR MARKERS
Scale: As Shown

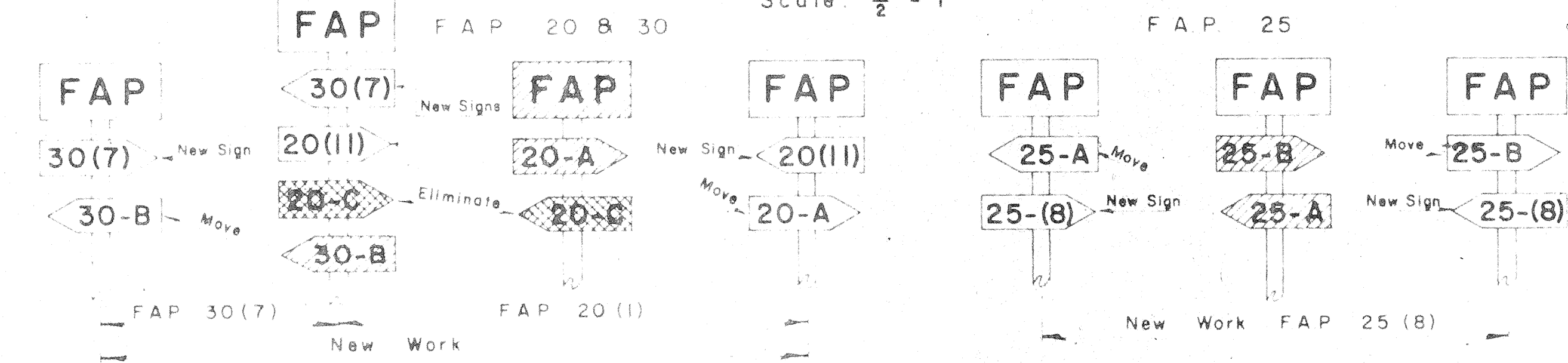


TYPICAL SECTION OF ROAD DELINEATOR
Full Size

NOTE: Reflector Markers RM-1,2,3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.

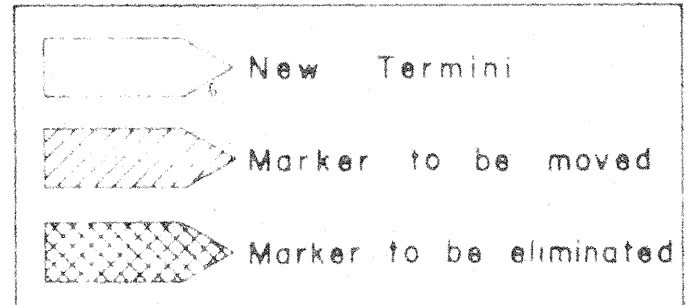


FEDERAL AID MARKER
Scale: 1/2" = 1'-0"



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

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



APPROVED: _____ DATE: 1/1/67
DIRECTOR OF TRANSPORTATION

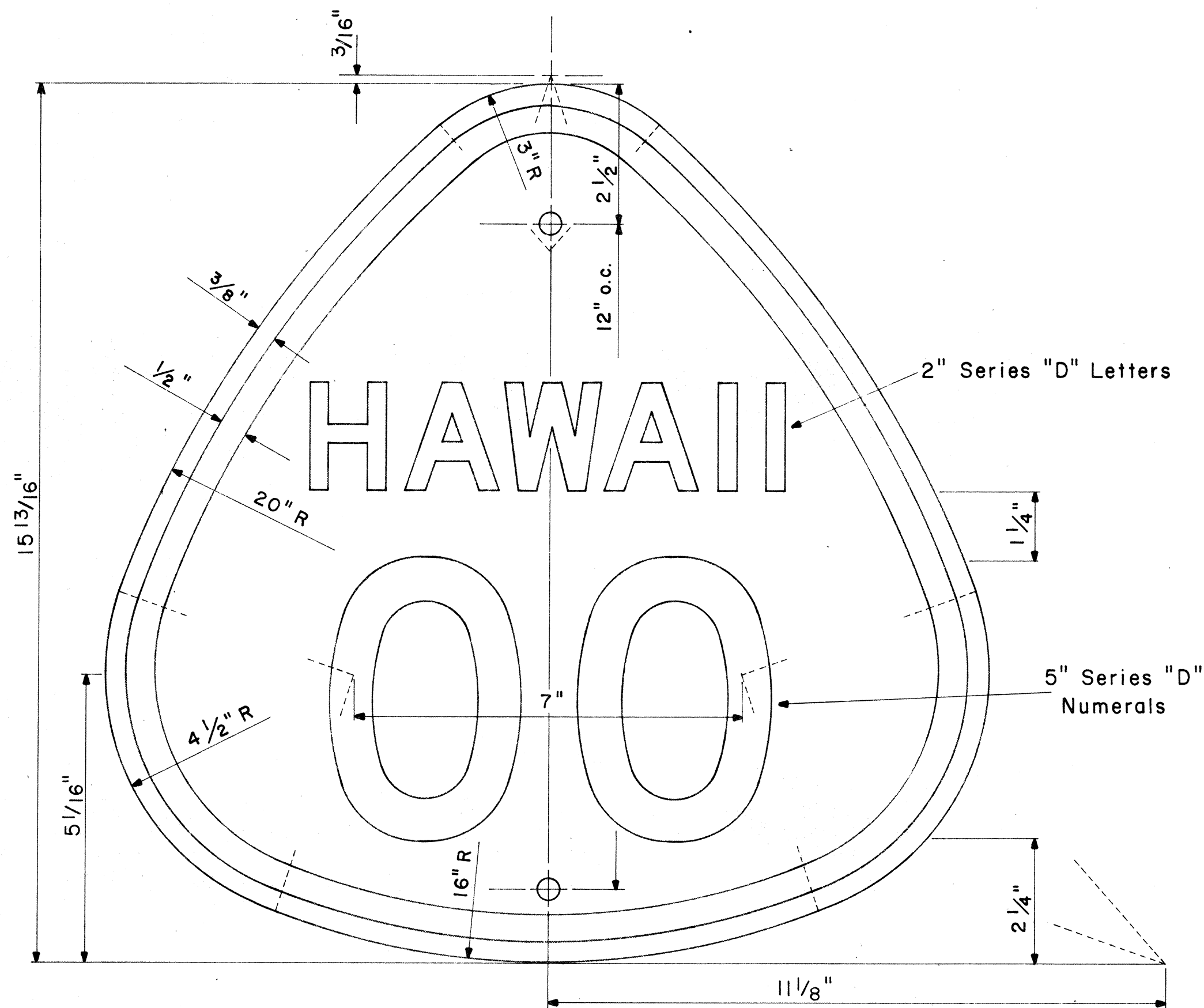
JANUARY 27, 1967
DECEMBER 8, 1964
REVISED: FEBRUARY 25, 1964

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-056-1(6)	1967	13	64

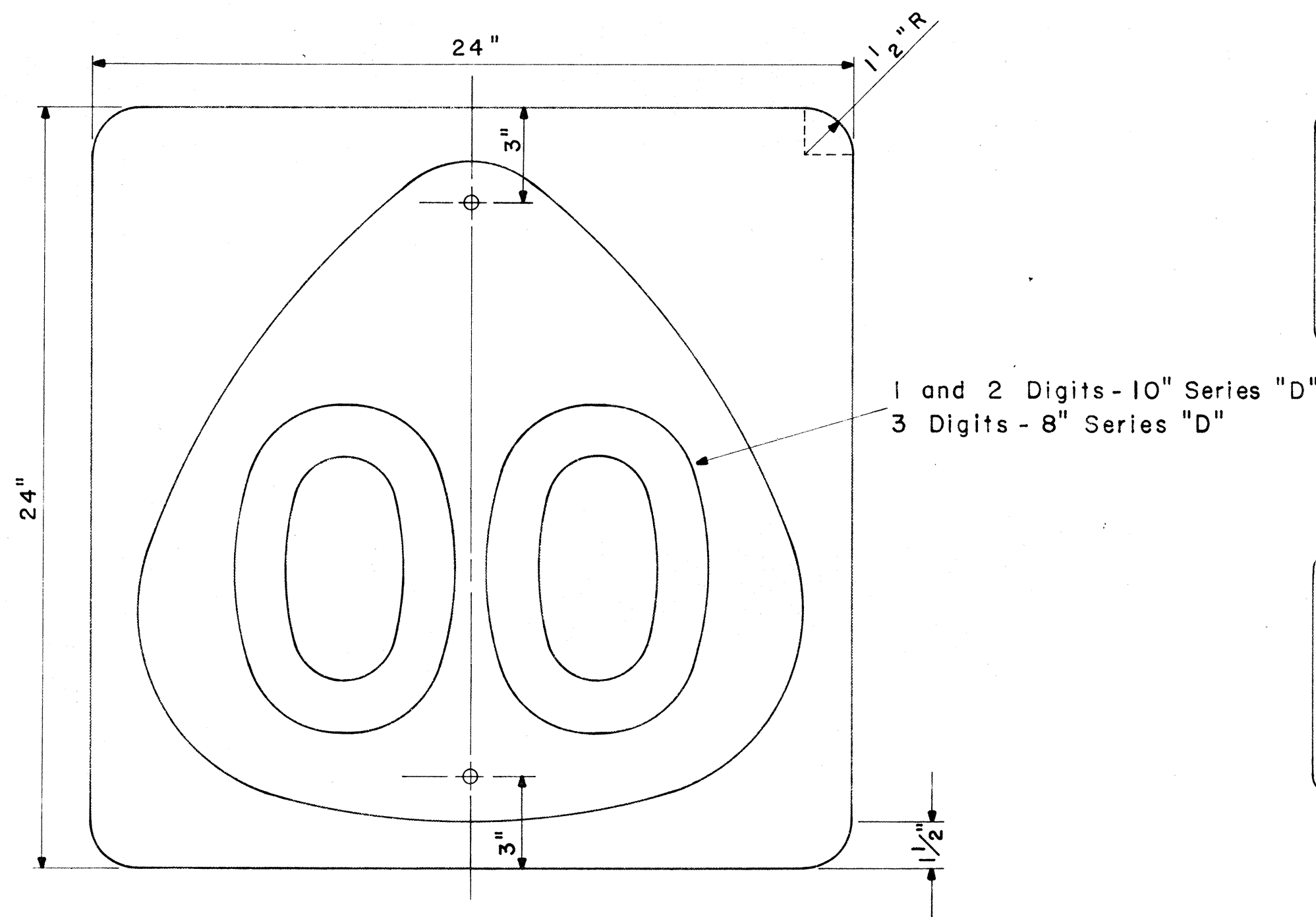
- ### GENERAL NOTES
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
 - All letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1952.
 - All markers shall be reflectorized unless otherwise specified.
 - All markers shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.
 - All markers shall have a black legend on a white background unless otherwise specified.
 - Sign message of Cardinal Direction Marker (M6-1) shall be denoted by the following suffixes:

M6-1-N : NORTH
 M6-1-E : EAST
 M6-1-S : SOUTH
 M6-1-W : WEST
 - Auxiliary markers denoted with the suffix "I": (M4-1-I) shall have a white legend on a blue background.
 - Cardinal Direction Marker (M6-1) with suffix I (3) shall have a white legend on a blue background and shall be 30" x 15" in size.
 - For MI-3 and MI-4 signs, number in () indicates route number and shall be as shown on the plan.



STATE ROUTE MARKER
MI-3(00)

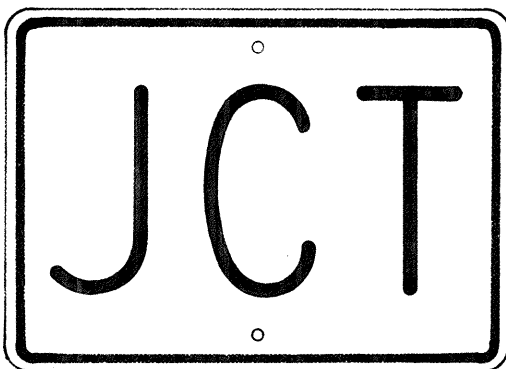
Scale: 1/2" = 1"



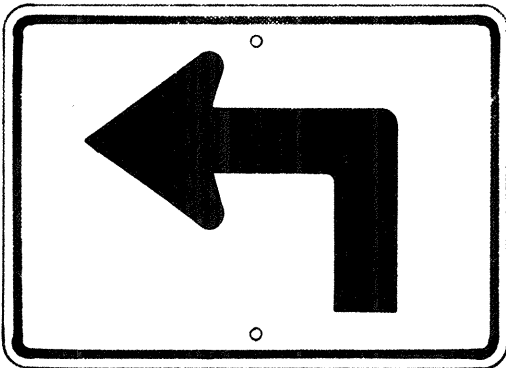
STATE ROUTE MARKER
MI-4(00)

Scale: 1/4" = 1"

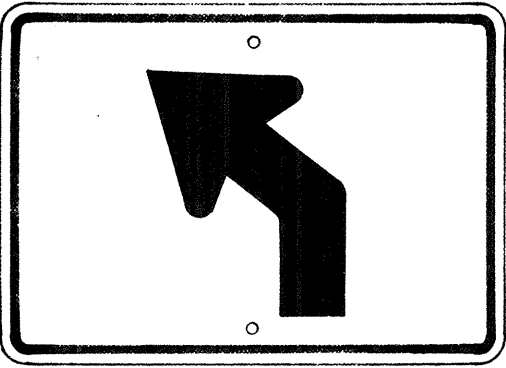
NOTE:
Multiply all dimensions of State Route Marker MI-3 by 1.3 for the dimensions of the shield for MI-4.



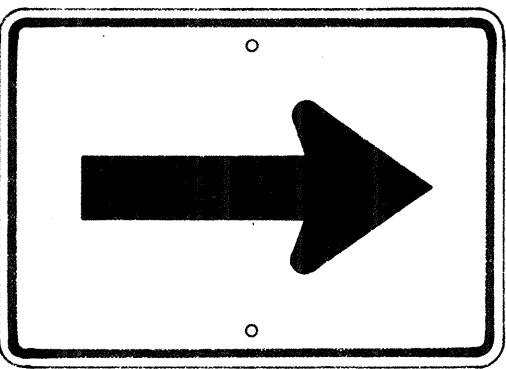
M2-1
21" x 15"



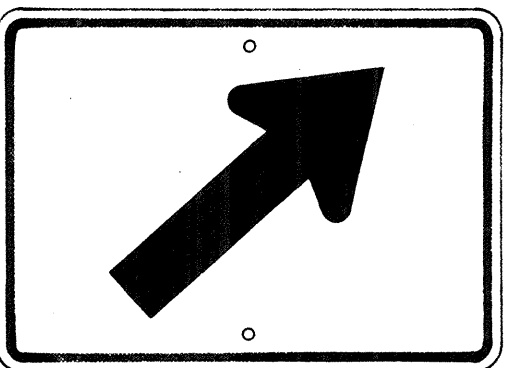
M3-1-L
* M3-1-R
21" x 15"



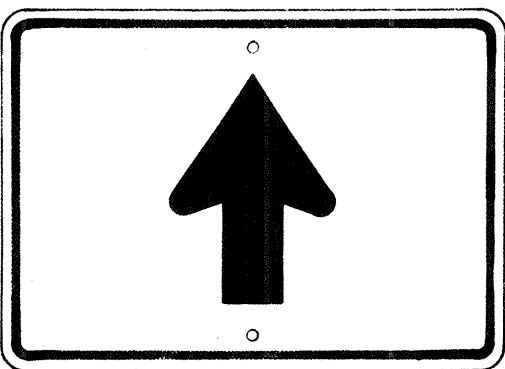
M3-2-L
* M3-2-R
21" x 15"



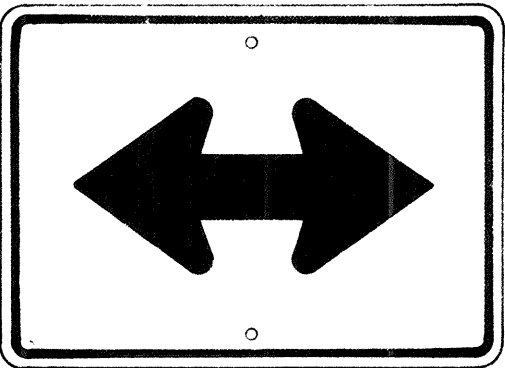
M4-1
21" x 15"



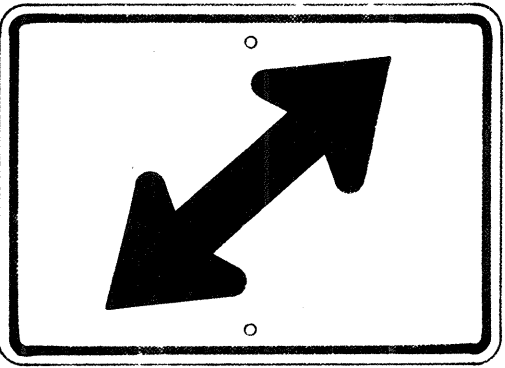
M4-2-R
* M4-2-L
21" x 15"



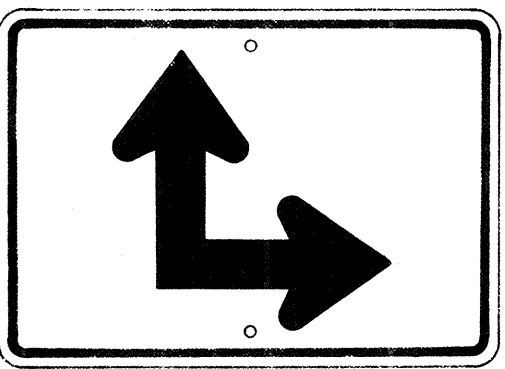
M4-3
21" x 15"



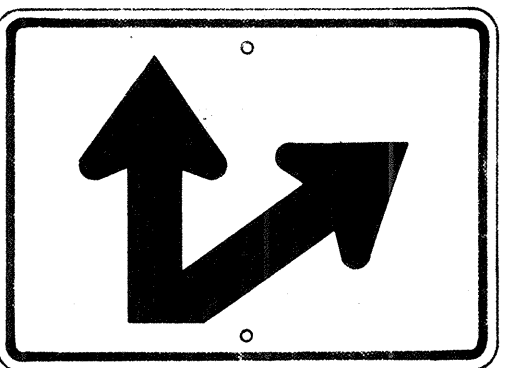
M4-4
21" x 15"



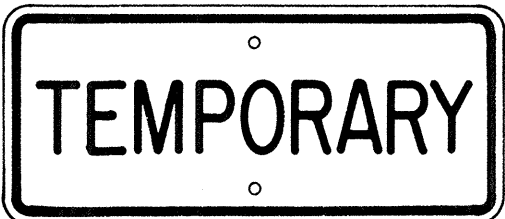
M4-5-R
* M4-5-L
21" x 15"



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



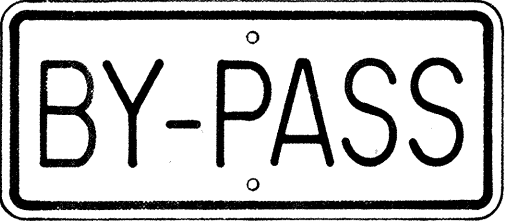
M4-7-R
* M4-7-L
21" x 15"



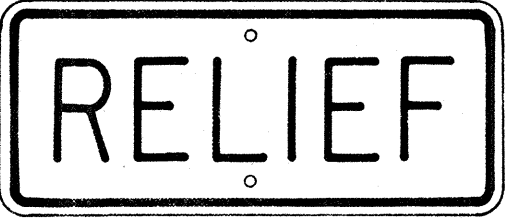
M5-1
21" x 9"



M5-2
21" x 9"



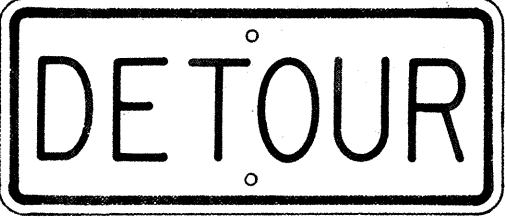
M5-3
21" x 9"



M5-4
21" x 9"



M5-5
21" x 9"

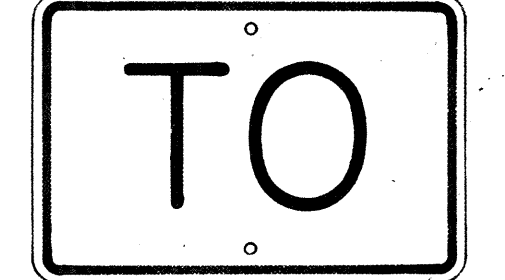


M5-6
21" x 9"



M6-1-N
21" x 9"

(See Note 6)



M7-1
18" x 12"

AUXILIARY MARKERS

Scale: 1/8" = 1"

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
STATE ROUTE MARKERS
AND
AUXILIARY MARKERS
Scale: As Noted
SHEET NO. 7 OF 7 SHEETS

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