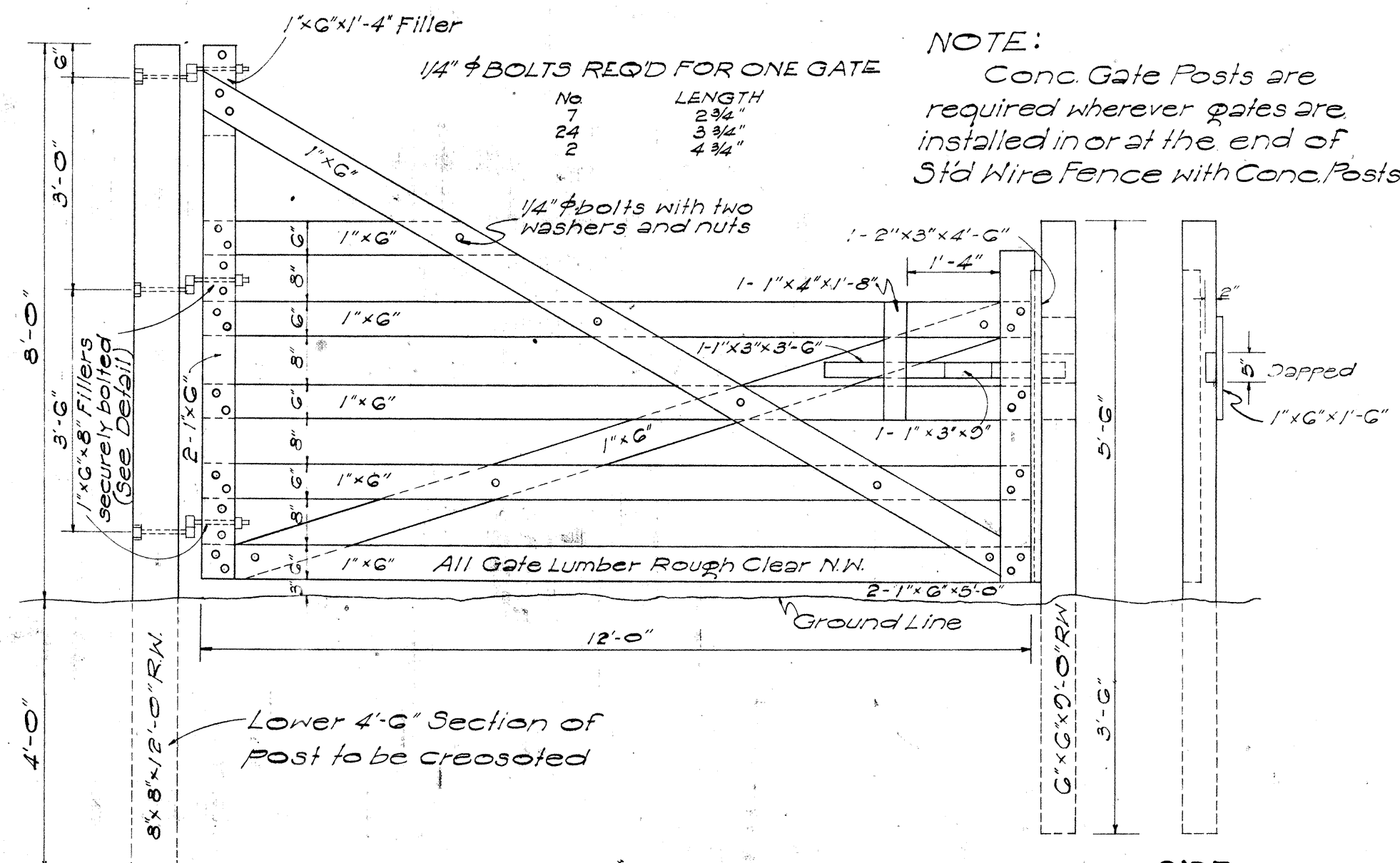


2/17/57

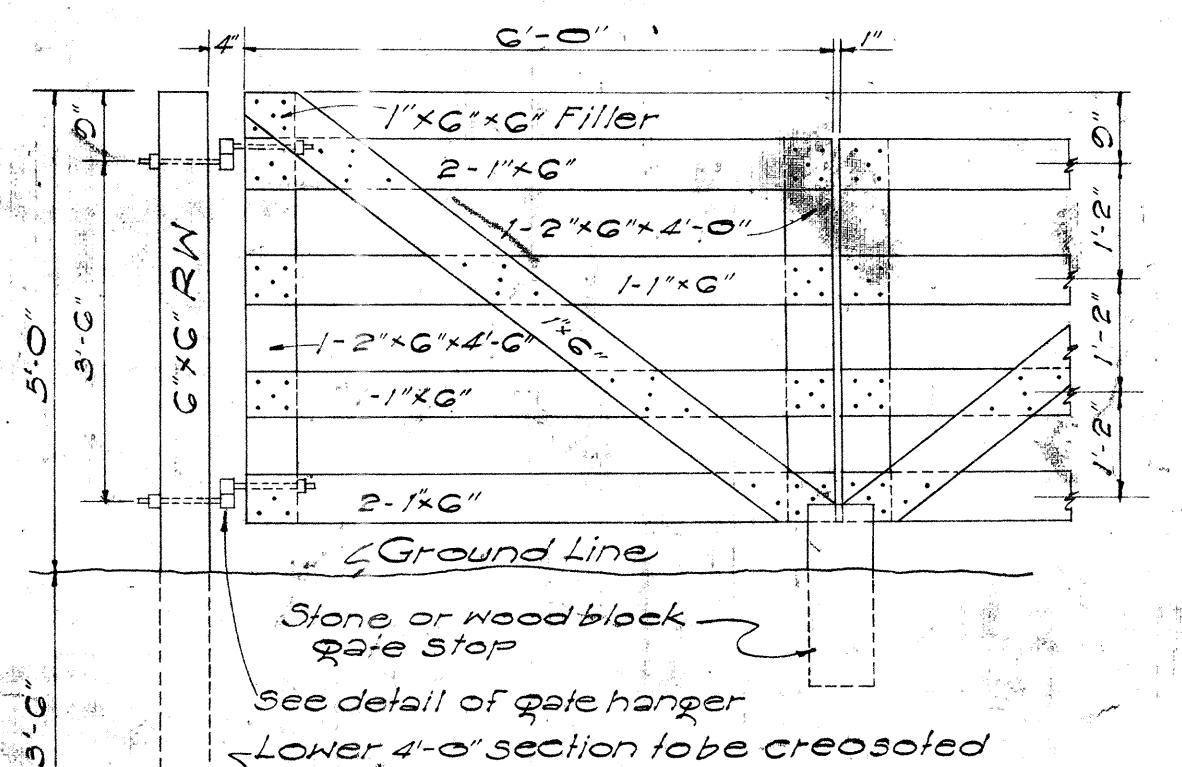
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0261(9)	1966	8	31

AUG. 1957



DETAIL OF CATTLE GATE

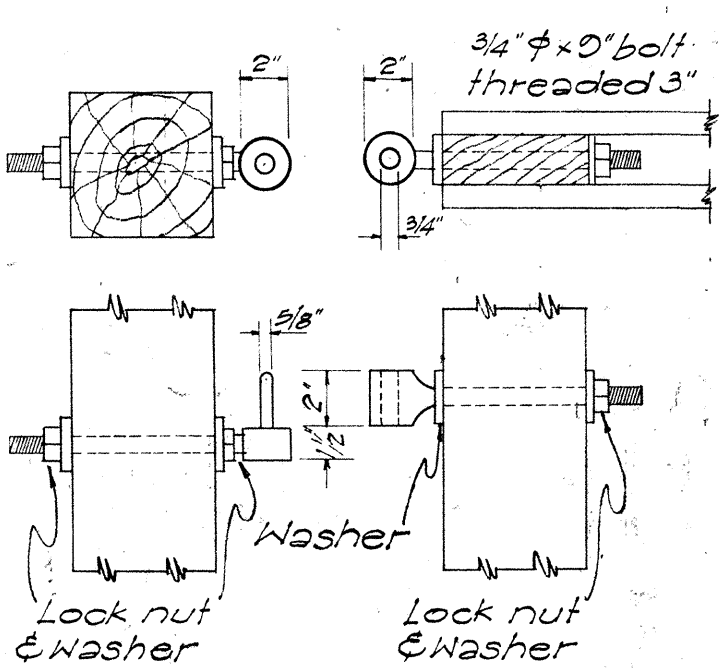
Scale: 1/2" = 1'-0"



DETAIL OF DOUBLE HUNG GATE

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

See note regarding use of Conc. Posts



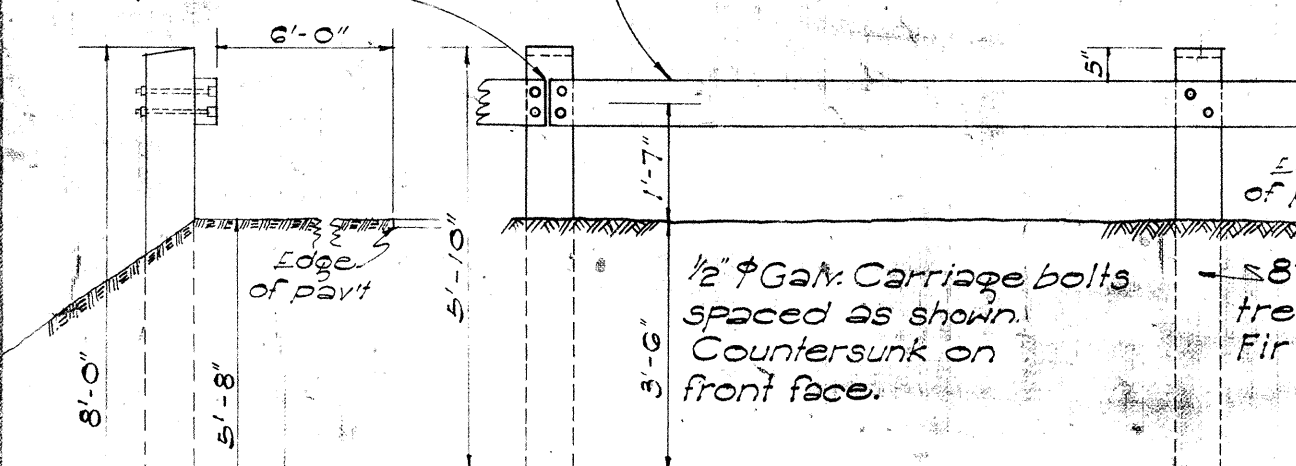
DETAIL OF GATE HANGER

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

Note: Use 3/4" x 11" bolts for Cattle Gate

Butt Joints to be left open approx. 1/2" spaced every other post except on sharp curves.

4'x8'x8'-0" S4S railing painted 3 coats of white paint. Contact surfaces between posts and rails and all butt joints shall be painted 3 coats before assembly.



WOOD GUARD RAIL WITH WOOD POSTS

Scale: 3/8" = 1'-0"

NOTE: For Conc. Post see detail at right

8'x8'x8'-0" S4S railing painted 3 coats of white paint. Contact surfaces between posts and rails and all butt joints shall be painted 3 coats before assembly.

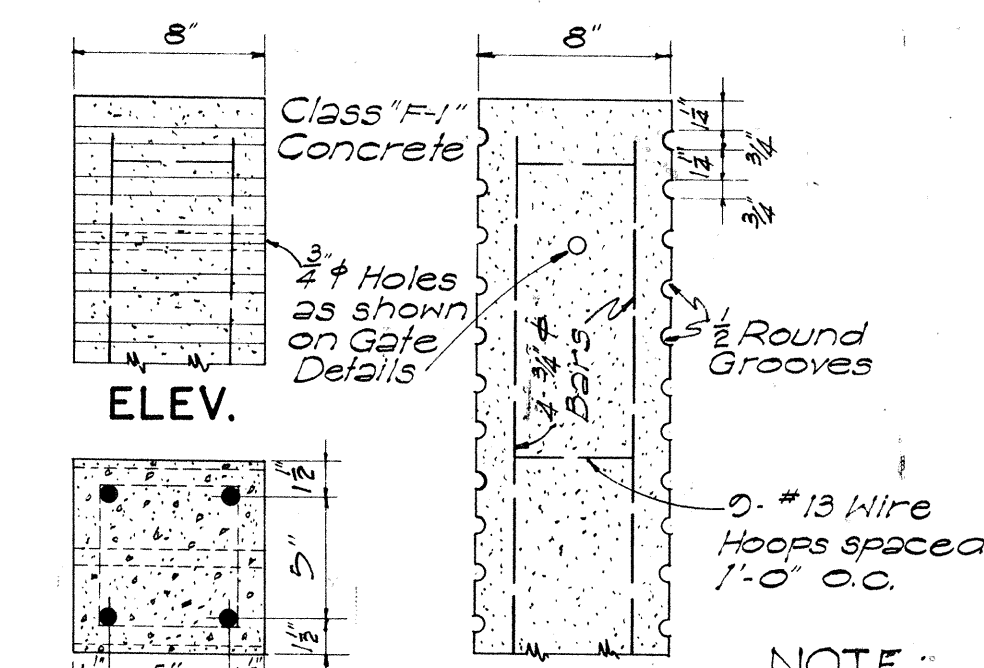
1/2" galv. carriage bolts spaced as shown. Countersunk on front face.

GUIDE POSTS: Wood or Conc. Guide Posts are the same as those used for Wood Guard Rail spaced as shown on plans.

NOTE: All concrete Posts shall be precast.

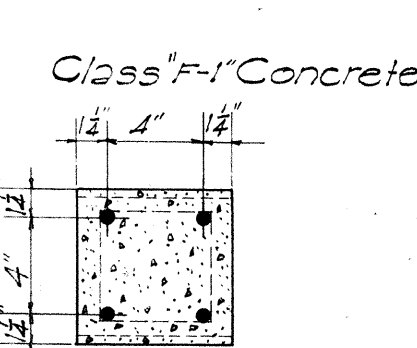
DETAIL OF CONC. POST

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



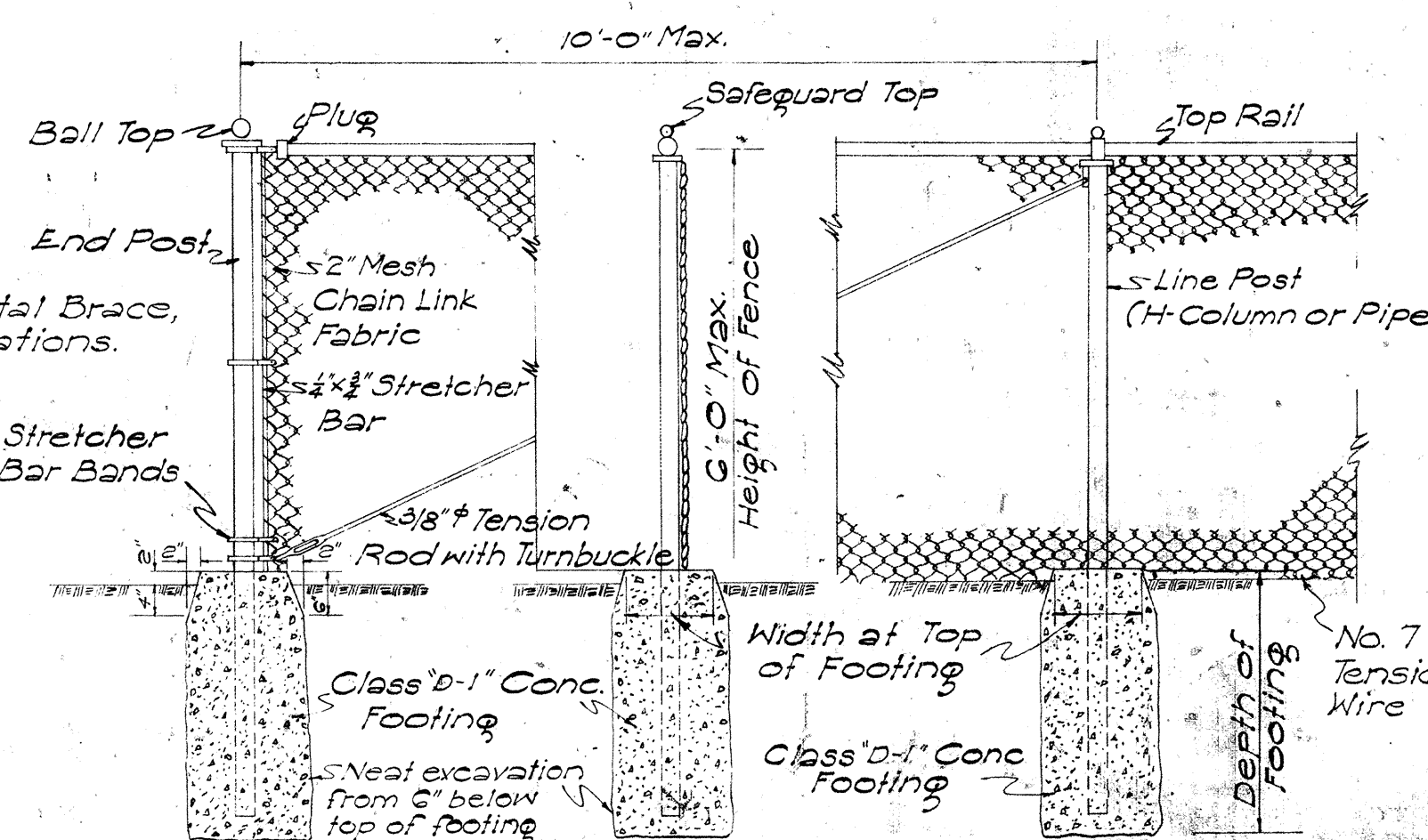
CONC. GATE POST

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



CONC. FENCE POST

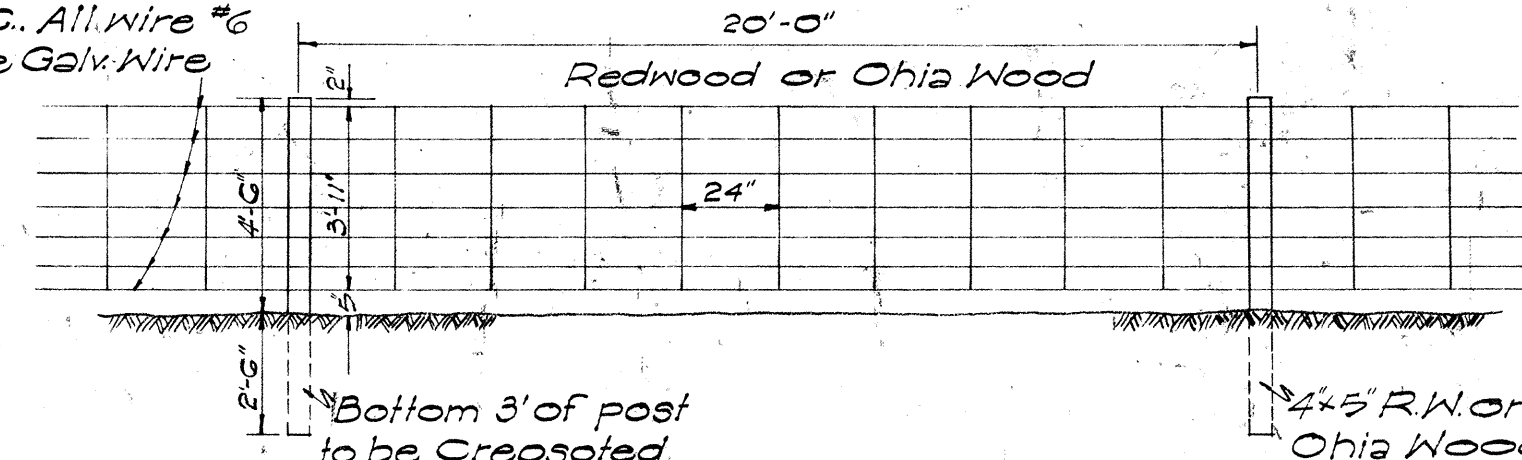
Scale: 1-1/2" = 1'-0"



DETAIL OF CHAIN LINK FENCE

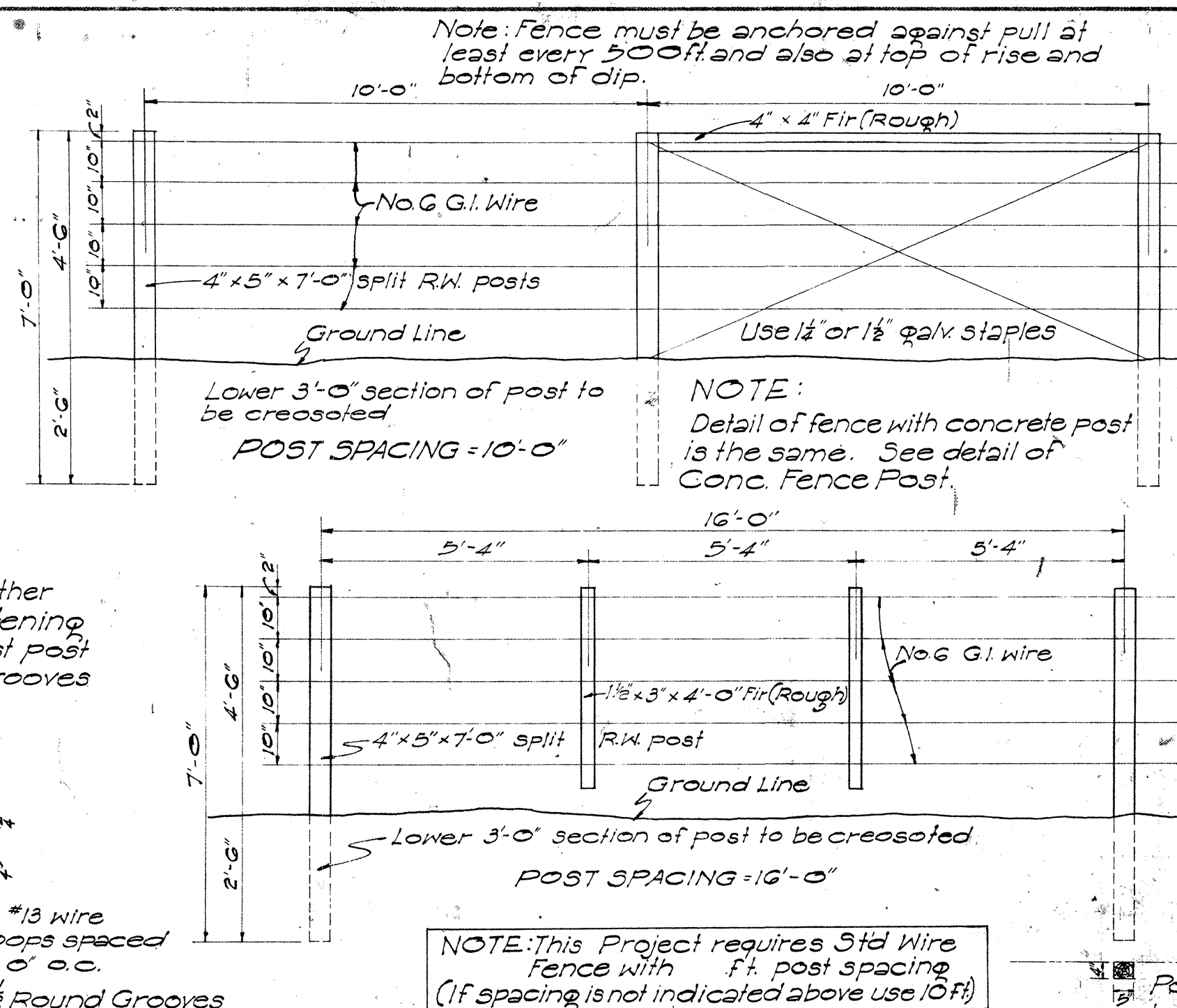
Scale: 1/2" = 1'-0"

7 strands with stays 24" O.C. All wire #6 Gauge Galv. Wire



DETAIL OF WOVEN WIRE FENCE

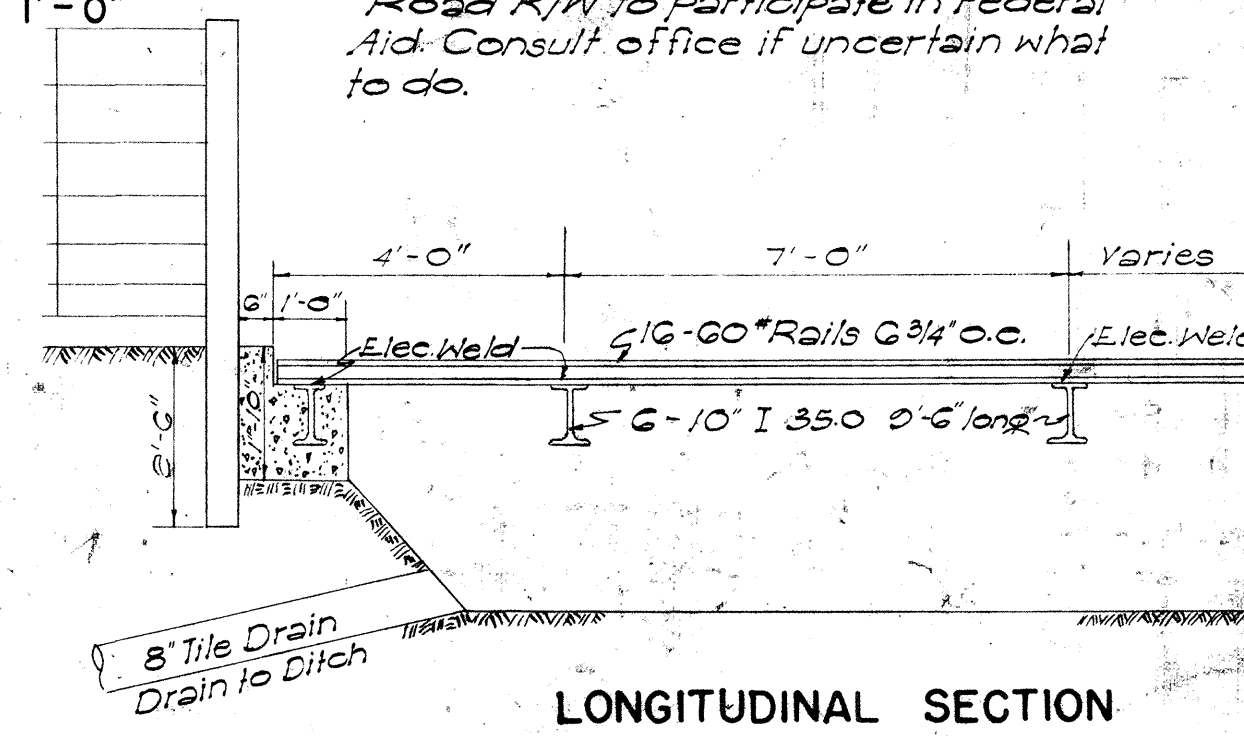
Scale: 1/4" = 1'-0"



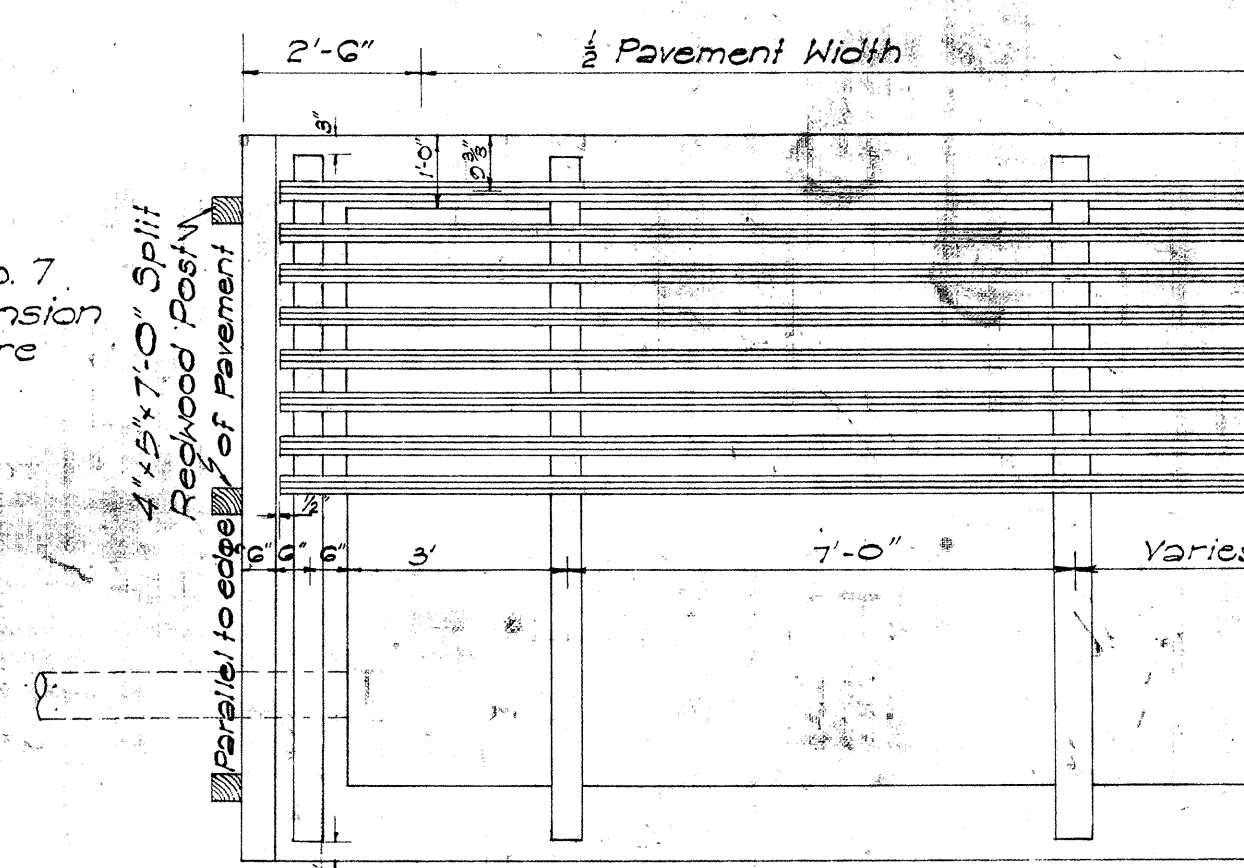
DETAILS OF STANDARD WIRE FENCE WITH WOOD POSTS

Scale: 3/8" = 1'-0"

Note to Engineer: Fence must be on Road R/W to participate in Federal Aid. Consult office if uncertain what to do.



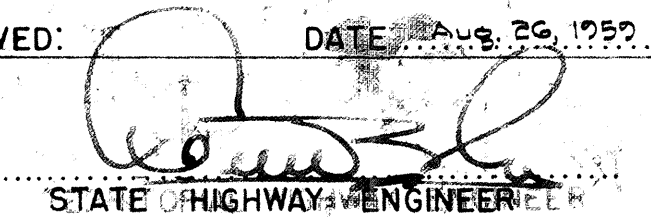
LONGITUDINAL SECTION

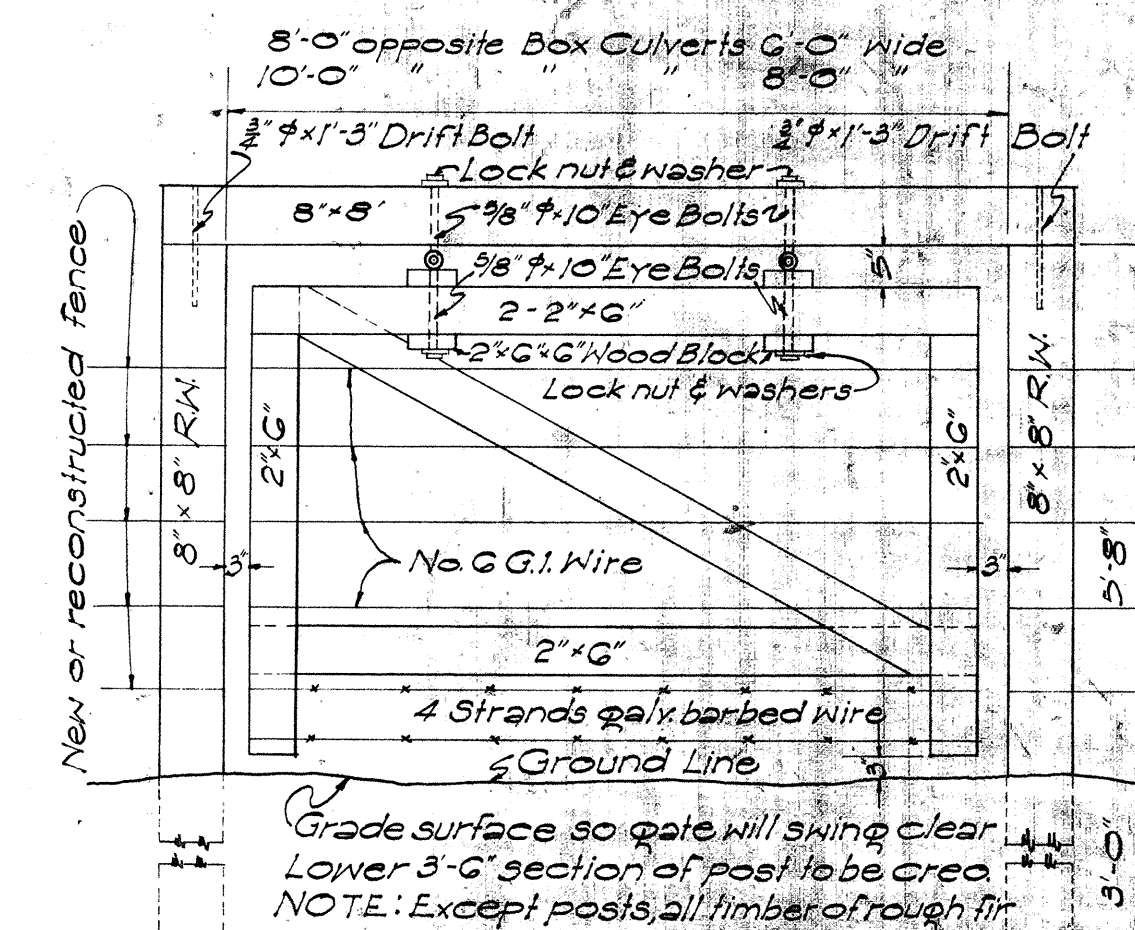


HALF SECTION

DETAIL OF CATTLE GUARD

Scale: 3/8" = 1'-0"

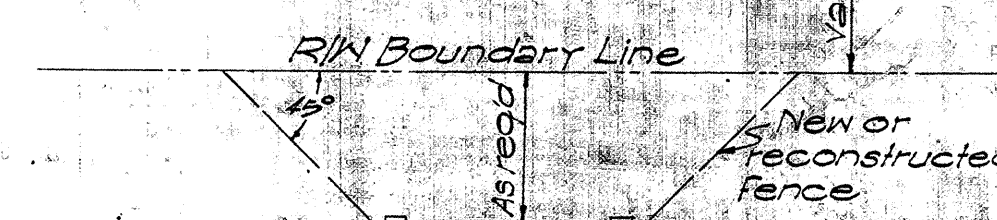
APPROVED:  DATE: Aug. 29, 1957
STATE HIGHWAY ENGINEER



ELEVATION

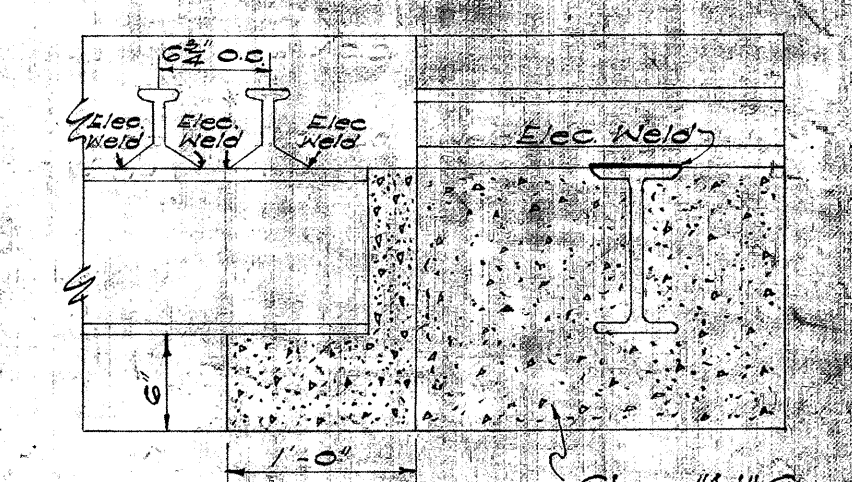
Scale: 1/2" = 1'-0"

of Road

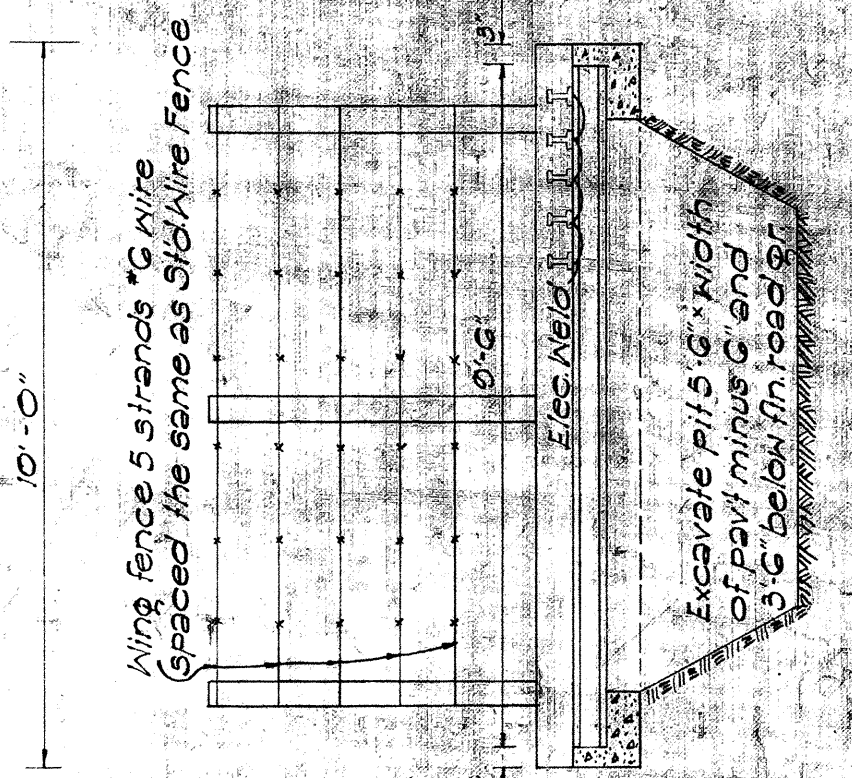


LAYOUT SHOWING HURDLE PLACED BELOW CULVERT IN A POSITION WHICH WILL BE CATTLE TIGHT

DETAILS OF HURDLE



Class 4-1" Conc.

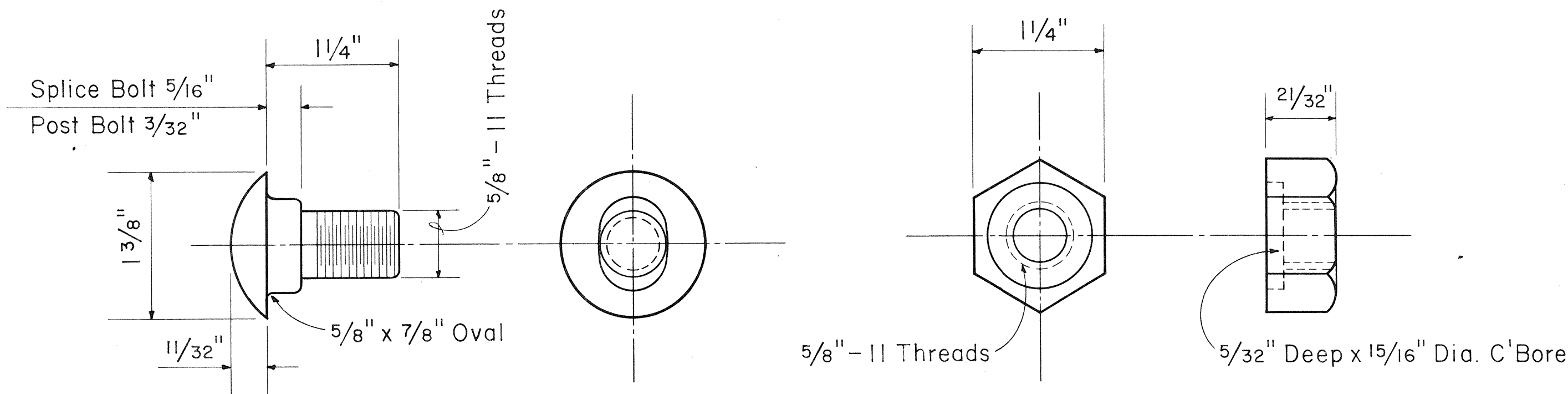


SECTION

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII
STANDARD DETAILS
FENCES, GATES, GUARD RAILS,
GUIDE POSTS, CATTLE GUARD
SCALES AS NOTED

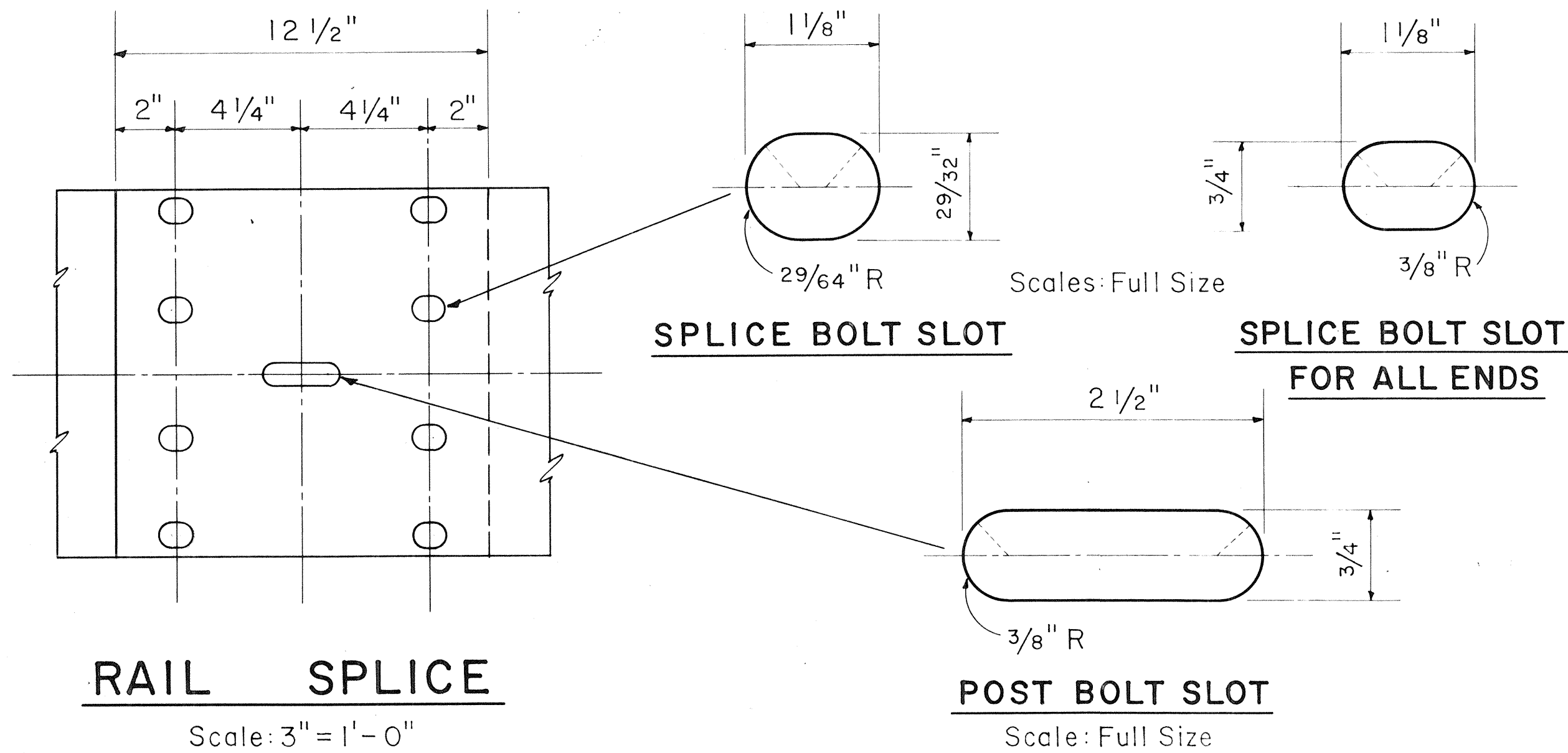
SHEET No. 1 OF 2 SHEETS

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	5-0341(3)	1966	2	3



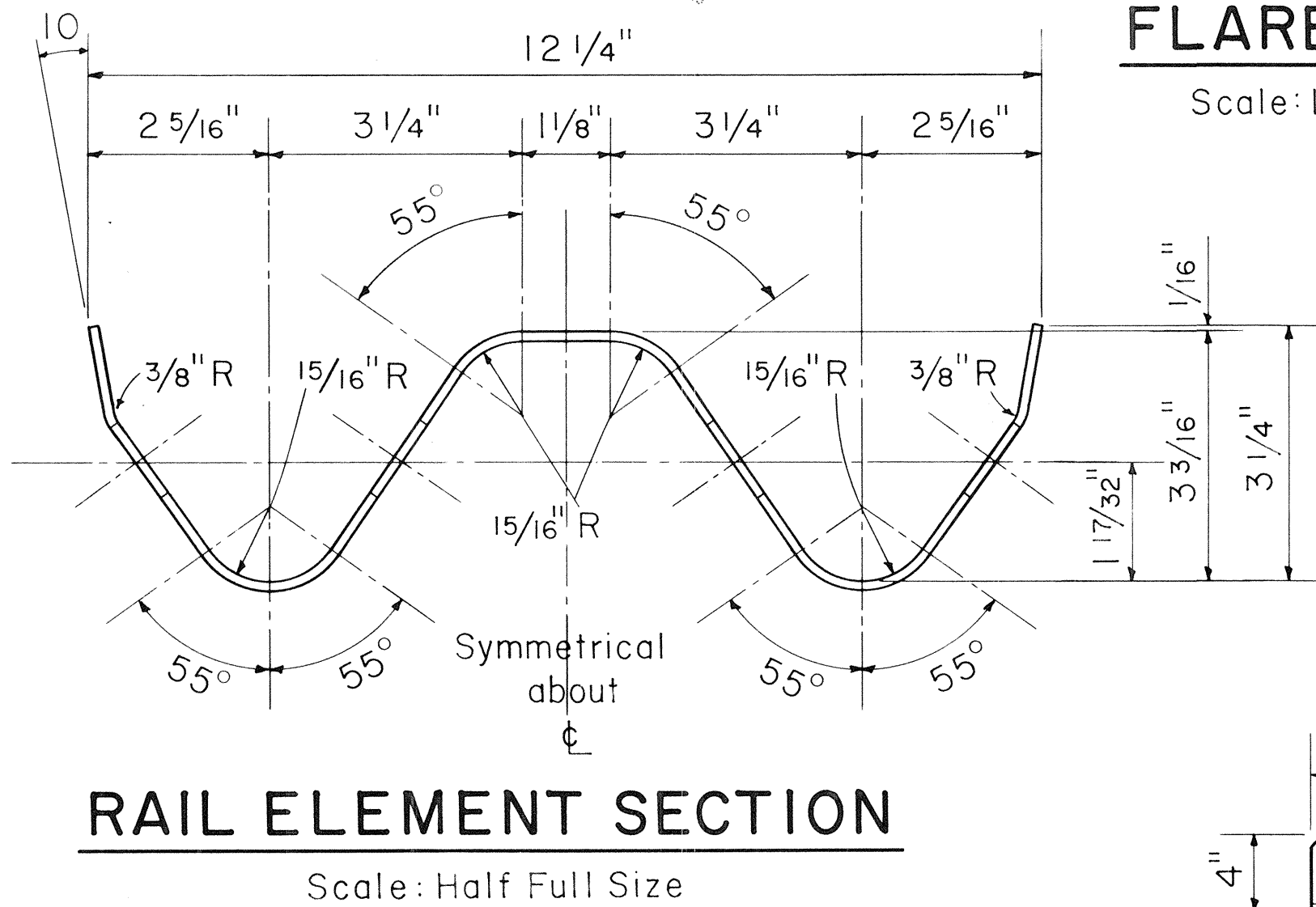
**SPLICE BOLT
POST BOLT** (Same except for length)
Scale: Full Size

HEXAGON NUT
Scale: Full Size

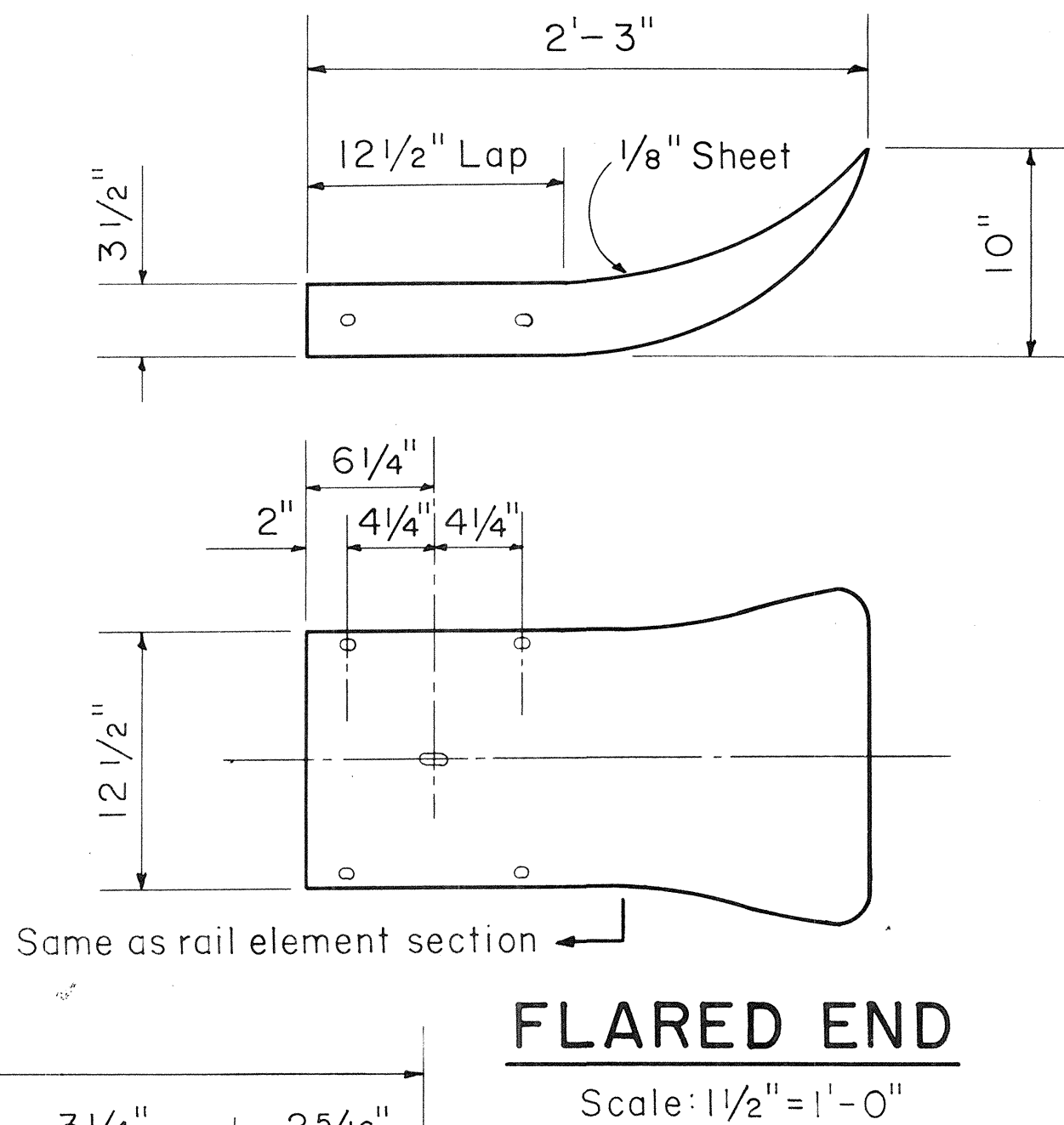


RAIL SPLICE
Scale: 3" = 1'-0"

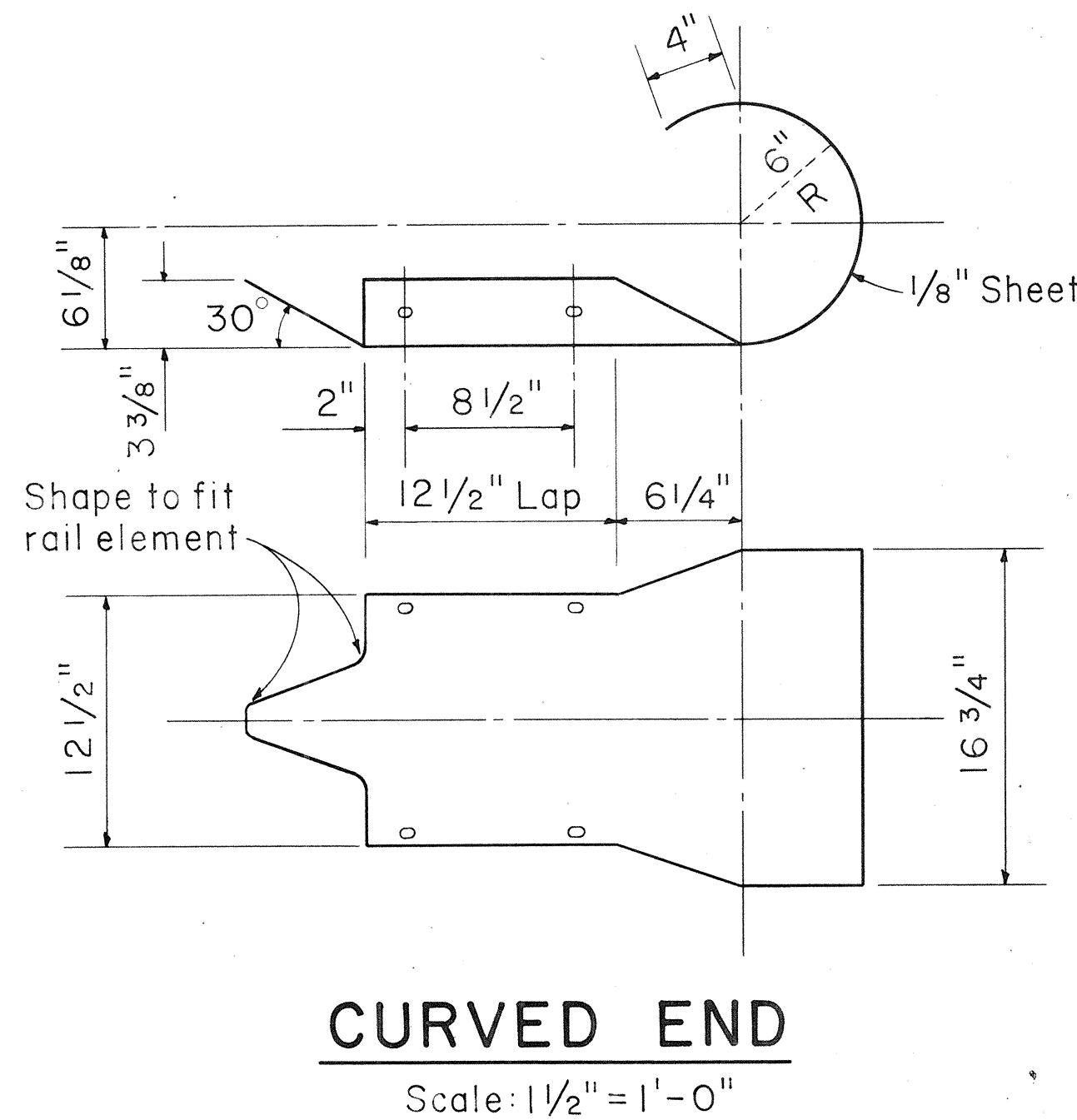
POST BOLT SLOT
Scale: Full Size



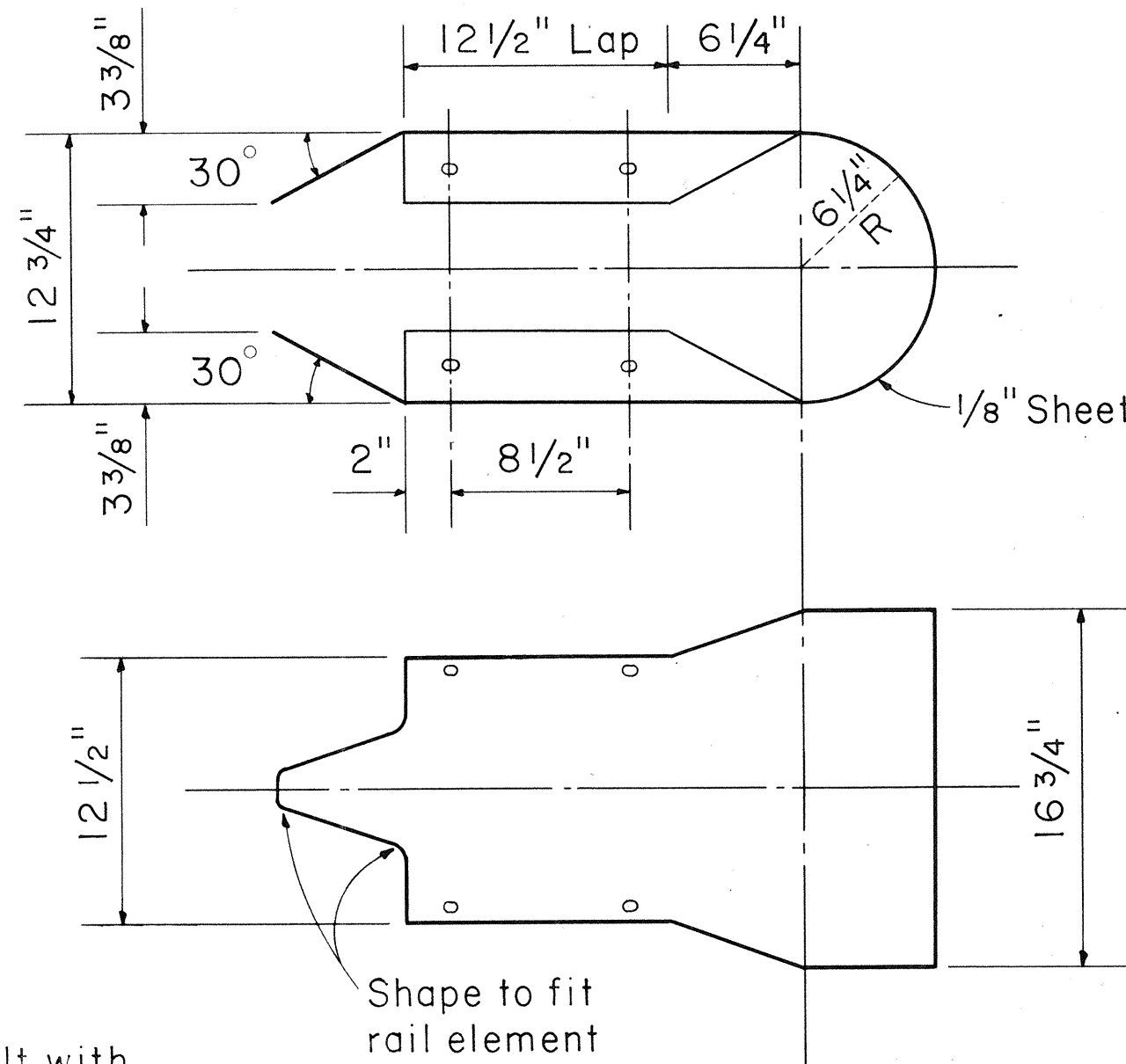
RAIL ELEMENT SECTION
Scale: Half Full Size



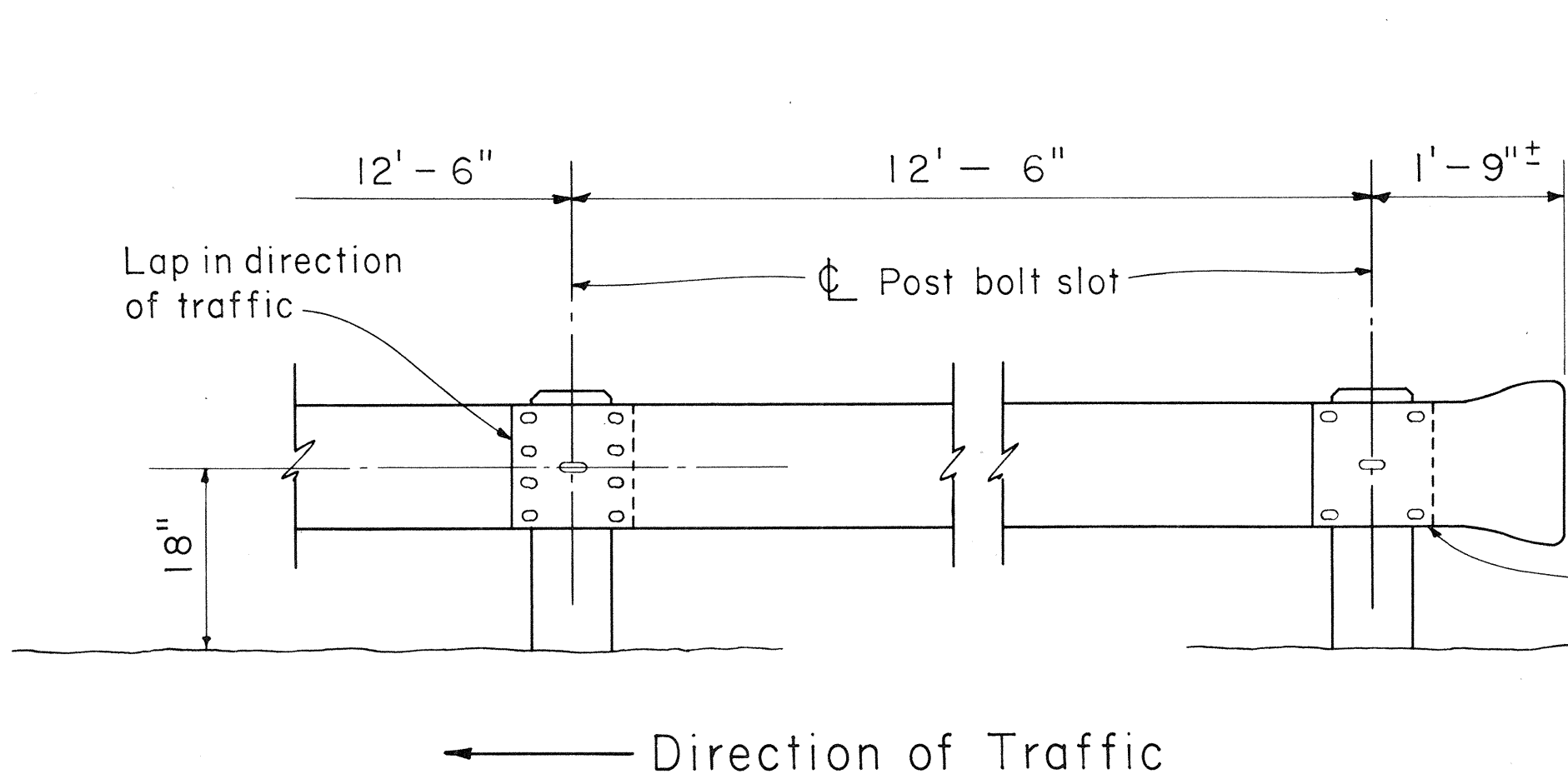
FLARED END
Scale: 1 1/2" = 1'-0"



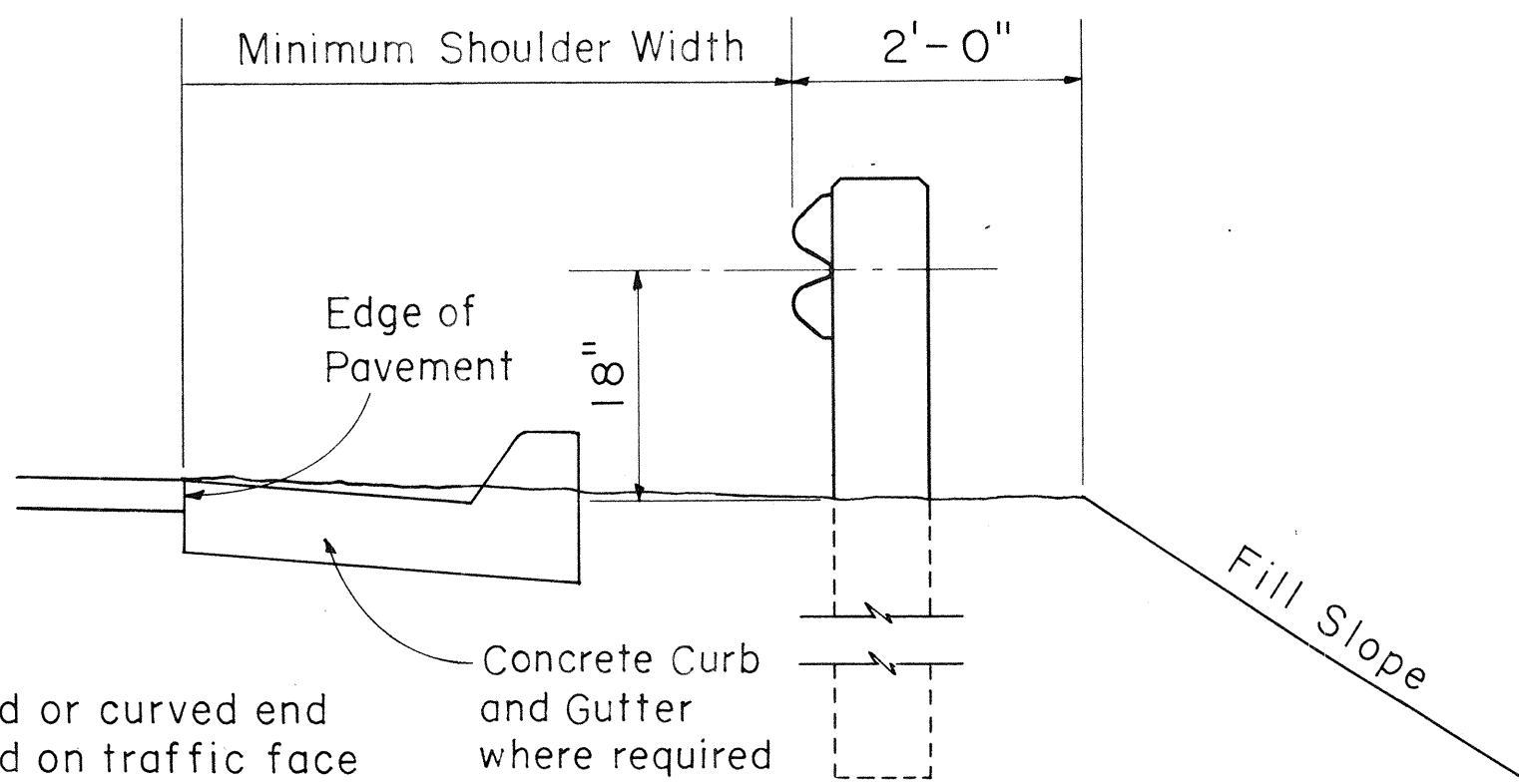
CURVED END
Scale: 1 1/2" = 1'-0"



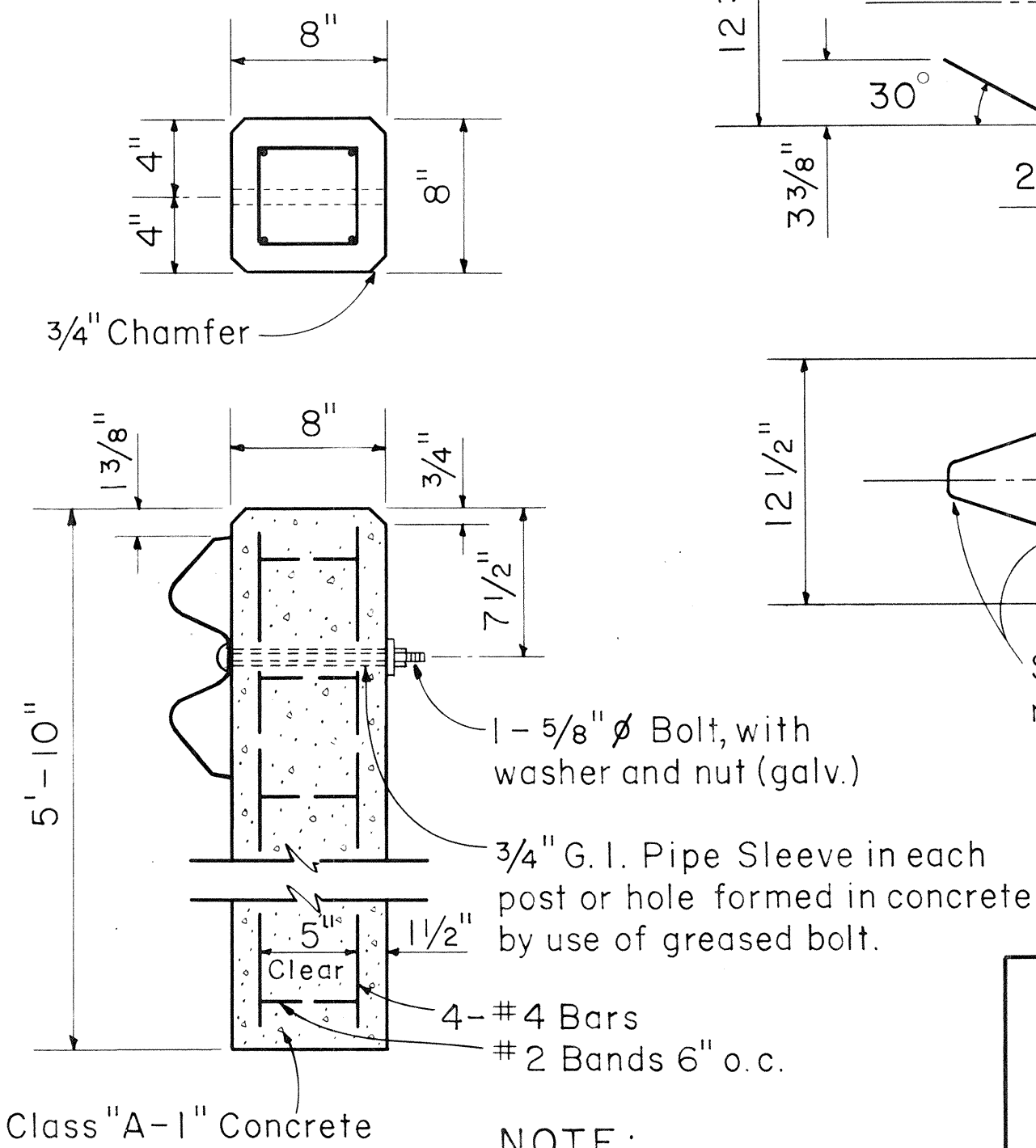
MEDIAN END
Scale: 1 1/2" = 1'-0"



METAL GUARD RAIL
Scale: 3/4" = 1'-0"



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



DETAIL OF CONCRETE POST
Scale: 1 1/2" = 1'-0"

NOTE:
All concrete posts
shall be precast.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

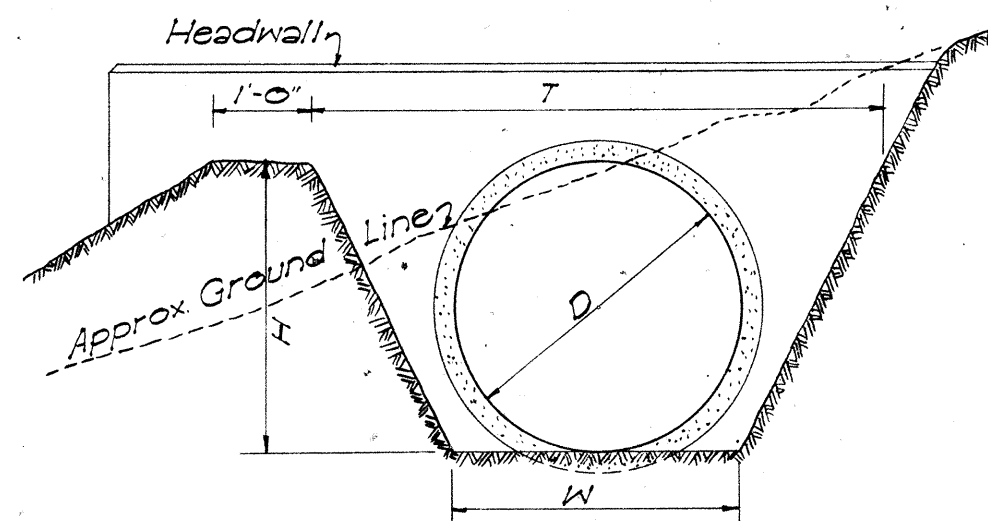
STANDARD DETAILS
METAL GUARD RAIL

WAIHEHU BEACH RD. PROJ. NO. 5-0341(3)
Scales: As Noted Date: May 1966

ORIGINAL PLAN	SURVEYED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
	NO.	

AUG. 1957

DATA FOR OUTLET DITCH			
D	W	H	T-W+H
18"	24"	2'-0"	4'-0"
24"	30"	2'-0"	4'-6"
30"	30"	2'-6"	5'-0"
36"	36"	3'-0"	6'-0"



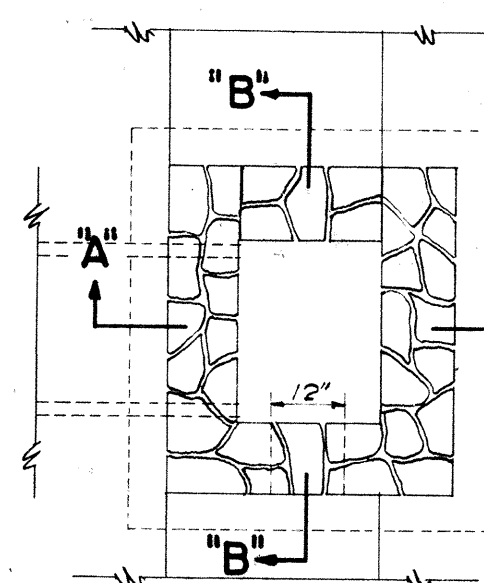
DETAIL OF OUTLET DITCH

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

DATA FOR MASONRY DROP INTAKE				Where Variables Equal
D	D	L: D+G	Cu. Yds.	
23"	18"	2'-5"	3.02	4'-6"
30"	24"	3'-0"	3.61	5'-0"
37"	30"	3'-7"	4.21	5'-6"
44"	36"	4'-2"	4.85	6'-0"

NOTE:

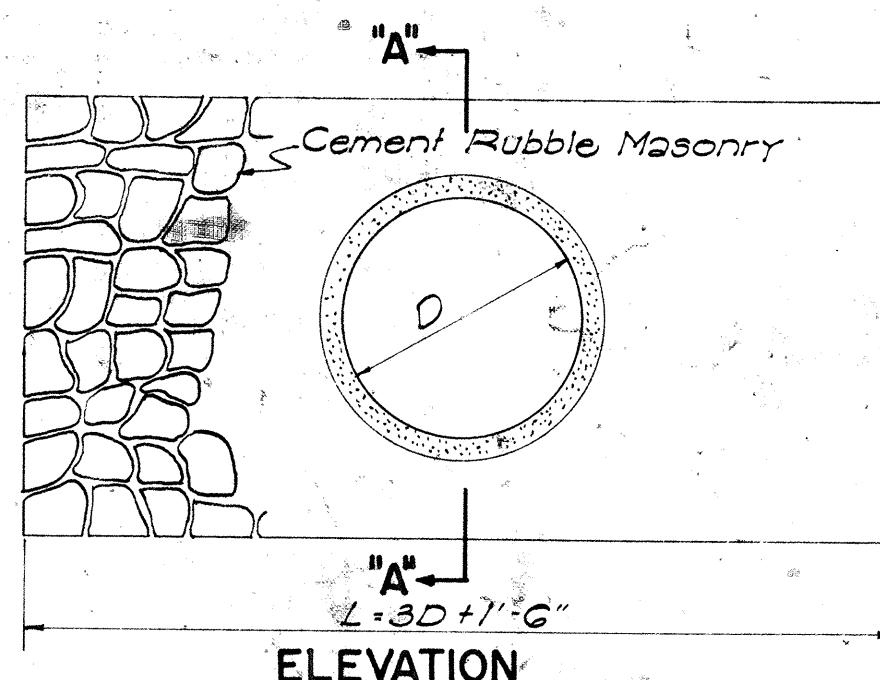
Dimension "X" is assumed as 2'-4" in figuring the above quantities.



DETAIL OF MASONRY DROP INTAKE

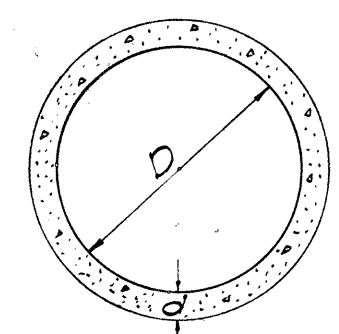
Scale: 3/8" = 1'-0"

DATA - MASONRY HEADWALL				Cast-in-Place Conc. Culvert Cu. Yds.	Conc. Pipe Culvert Cu. Yds.	Corrugated Pipe Culvert Cu. Yds.
D	H	B	L			
18"	3'-6"	1'-0"	6'-0"	0.85	0.95	0.93
24"	4'-0"	2'-0"	7'-6"	1.28	1.42	1.41
30"	4'-6"	2'-3"	9'-0"	1.83	2.06	2.00
36"	5'-0"	2'-6"	10'-6"	2.40	2.84	2.72



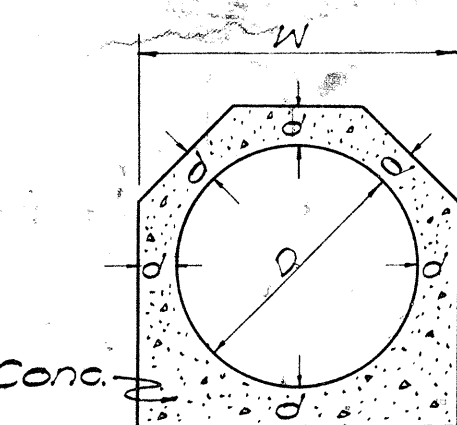
DETAIL OF MASONRY HEADWALL

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



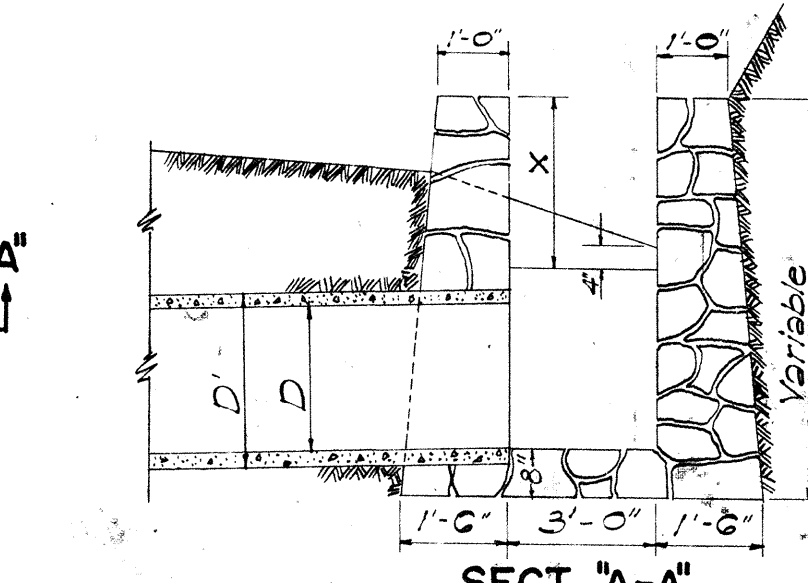
SECTION CONC. PIPE CULVERT

NOTE: Thickness "d", reinforcing, and concrete used, are to conform with the approved design as provided by the Specifications.

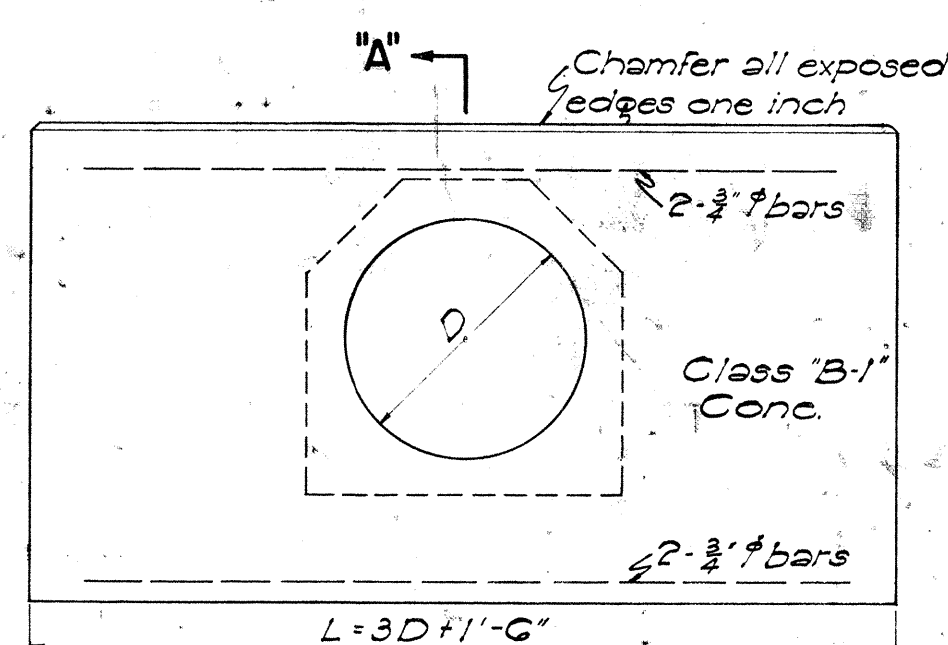


CAST-IN-PLACE CONC. CULVERT

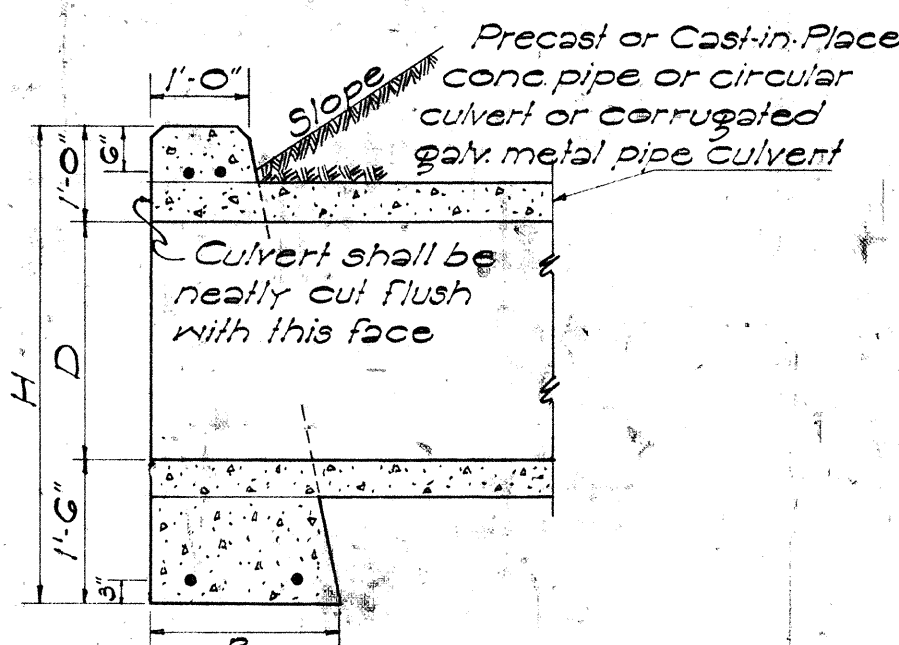
DATA - CAST-IN-PLACE CONC. CULVERT			
D	d	W	Cu. Yds. per Ft.
18"	4"	2'-2"	0.11
24"	4 1/2"	2'-0"	0.14
30"	5"	3'-4"	0.19
36"	5 1/2"	3'-11"	0.26



CONSTR. JOINT DETAILS



ELEVATION

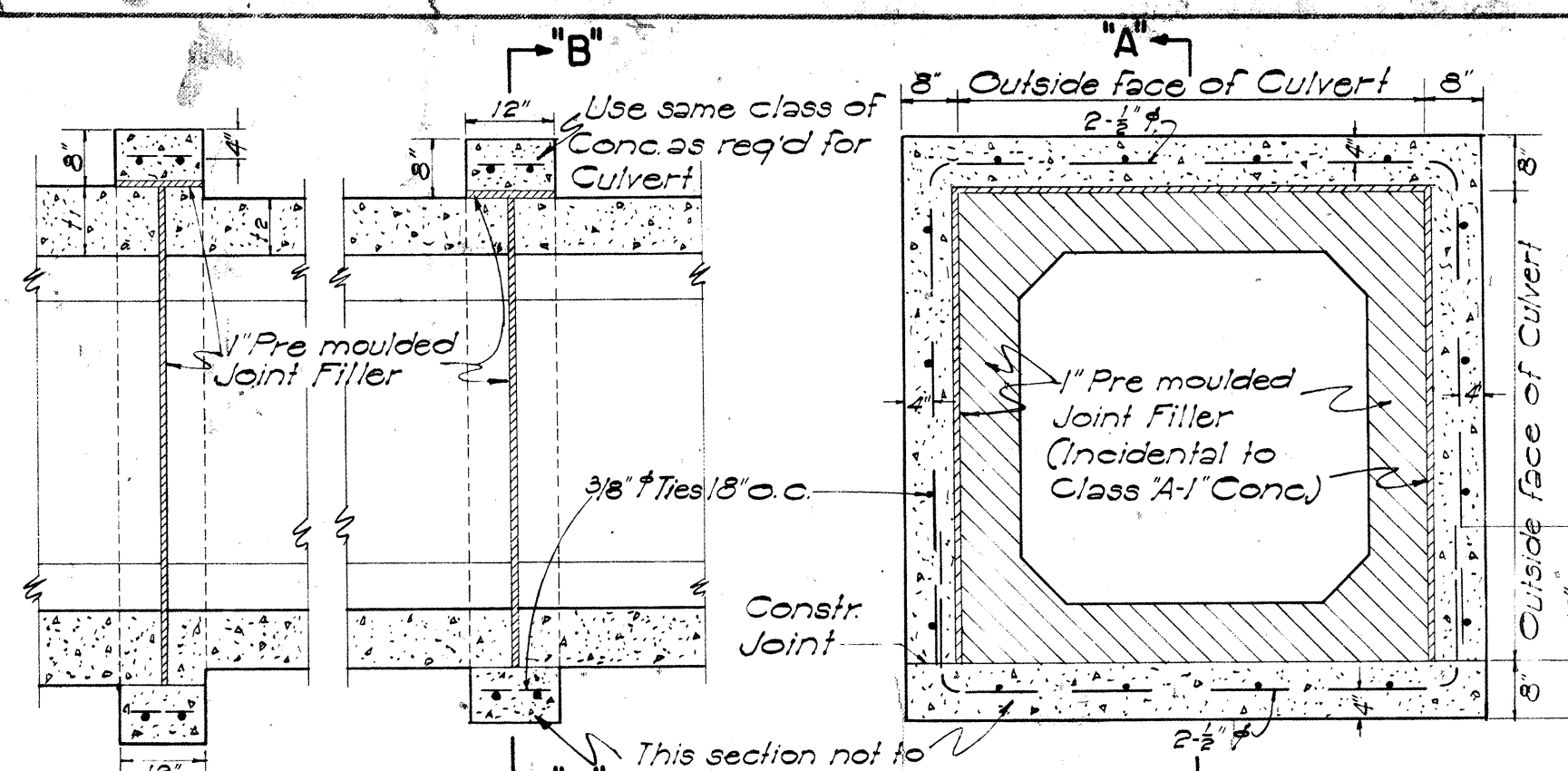


SECTION "A-A"

DATA FOR CONC. HEADWALL				Cast-in-Place Conc. Culvert Cu. Yds.	Conc. Pipe Culvert Cu. Yds.	Steel For One Headwall No. of Bars Size Length Lbs.
D	B	L	H			
18"	1'-0"	6'-0"	4'-0"	0.82	1.00	4 #4 2'-6" 33
24"	1'-6"	7'-6"	4'-6"	1.25	1.38	4 #4 2'-6" 42
30"	2'-0"	9'-0"	5'-0"	1.85	2.17	4 #4 2'-6" 51
36"	2'-6"	10'-6"	5'-6"	2.45	2.74	4 #4 2'-6" 60
42"	3'-0"	12'-0"	6'-0"	3.05	3.37	4 #4 2'-6" 69
48"	3'-6"	13'-6"	6'-6"	3.65	4.06	4 #4 2'-6" 78

DETAIL OF CONCRETE HEADWALL

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



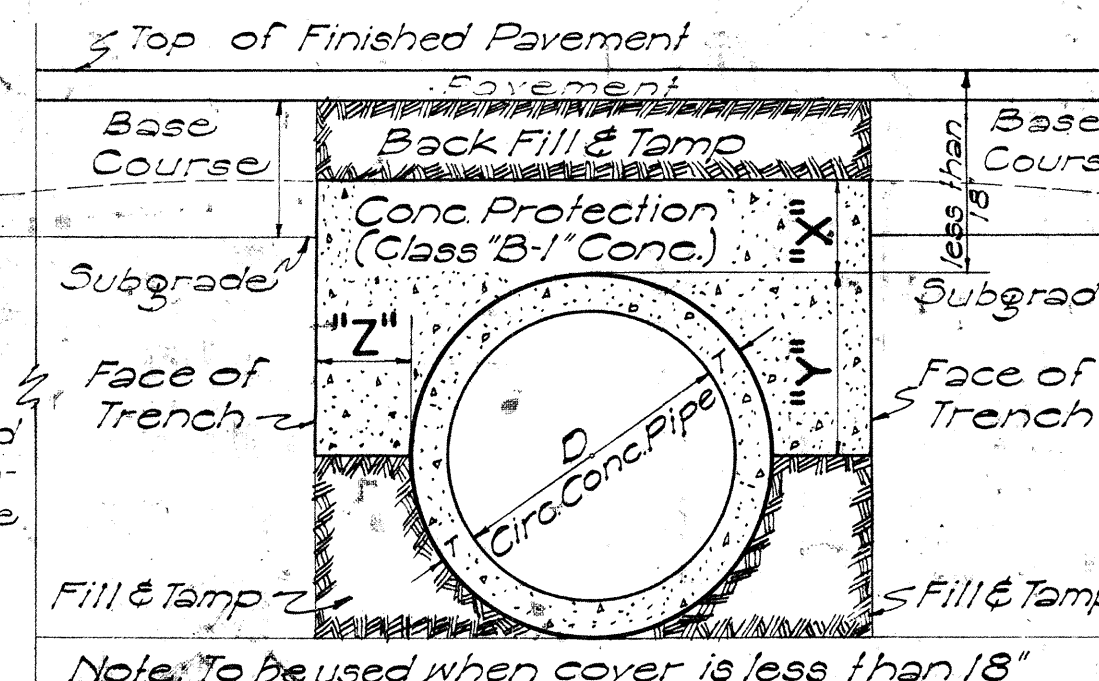
SECTION "A-A" CONC. COLLAR FOR CONC. BOX CULVERT

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

REINFORCING BARS

All reinforcing bars for concrete shall be Billet Steel bars, ASTM A15, intermediate grade. Steel shall be made by the open-hearth process. All bars shall be deformed type conforming to ASTM A-305.

SECTION OF HIGH CEMENT RUBBLE MASONRY RETAINING WALL OR SEAWALL

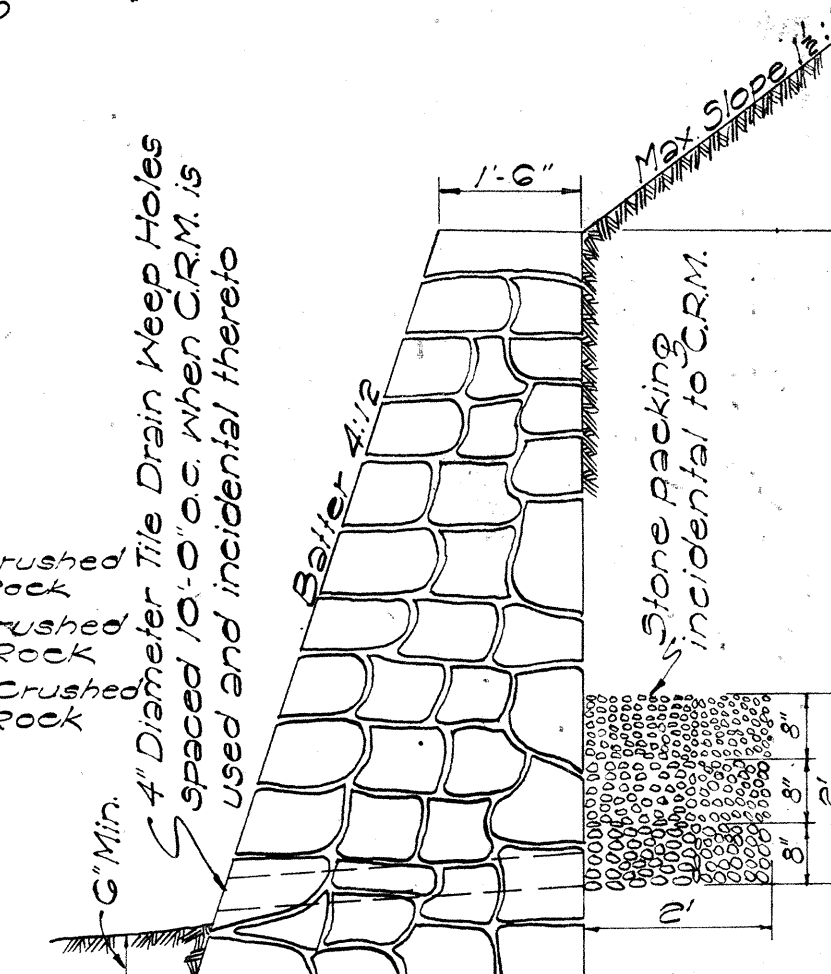


DATA FOR CONCRETE PROTECTION OVER CULVERTS		
X	Y	Z
6" for 18" D		Z must be from pipe to face of trench
7" " 24" D		
8" " 30" D		
9" " 36" D		
10" " 42" D		
11" " 48" D		
12" " 54" D		

SECT. OF CULVERT WITH CONC. PROTECTION

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

Note: To Resident Engineer
1) Consider economy of reinf. conc. for high retaining walls which did not originate on plan layout.
2) Elevation of weep holes to be determined by Resident Engineer. Holes to be placed as close to the existing ground line as local conditions permit.

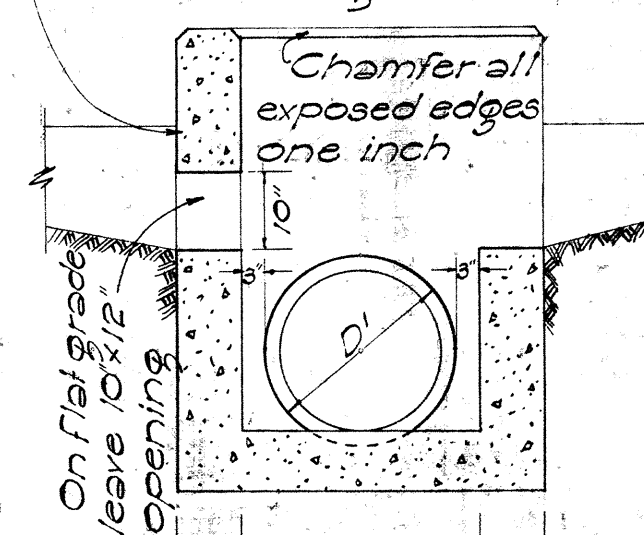


SECTION OF LOW MASONRY RETAINING WALL OR SEAWALL

DATA - CONC. DROP INTAKE				Where Variables Equal
D	D	L: D+G	S	Cu. Yds.
23"	18"	2'-5"	8"	1.41
30"	24"	3'-0"	8"	1.72
37"	30"	3'-7"	9"	2.32
44"	36"	4'-2"	9"	2.73
51"	42"	4'-9"	10"	3.54
58"	48"	5'-4"	10"	4.01

Note: Dimension "X" is assumed as 2'-4" in figuring the above quantities.

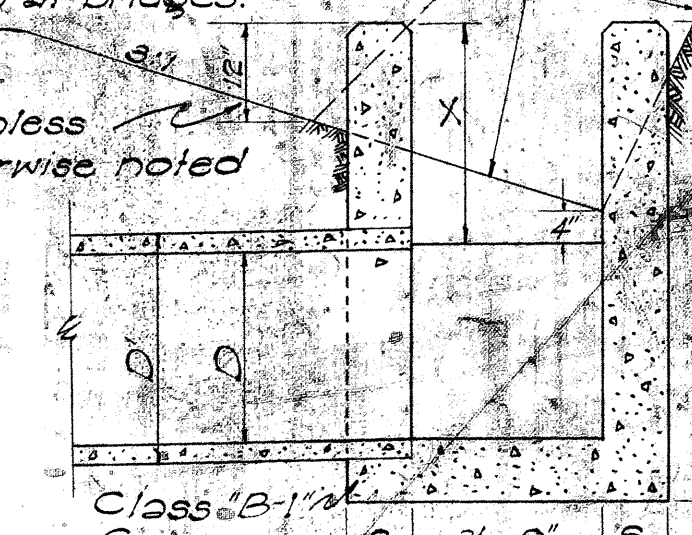
Note: This type of structure shall also be used for the Drop Intakes of Siphons connected with Irrigation Ditches or Flumes with appropriate changes to dimensions. In this case all joints must be made water tight.



SECTION "B-B"

Where drainage comes from both sides, lower this wall to same elevation as shown for opposite wall.

Excavate recess in roadway excavation slope for inlet to dimensions and form designated by Engineer. This is Unclassified Excavation.



SECTION "A-A"

DETAIL OF CONCRETE DROP INTAKE

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

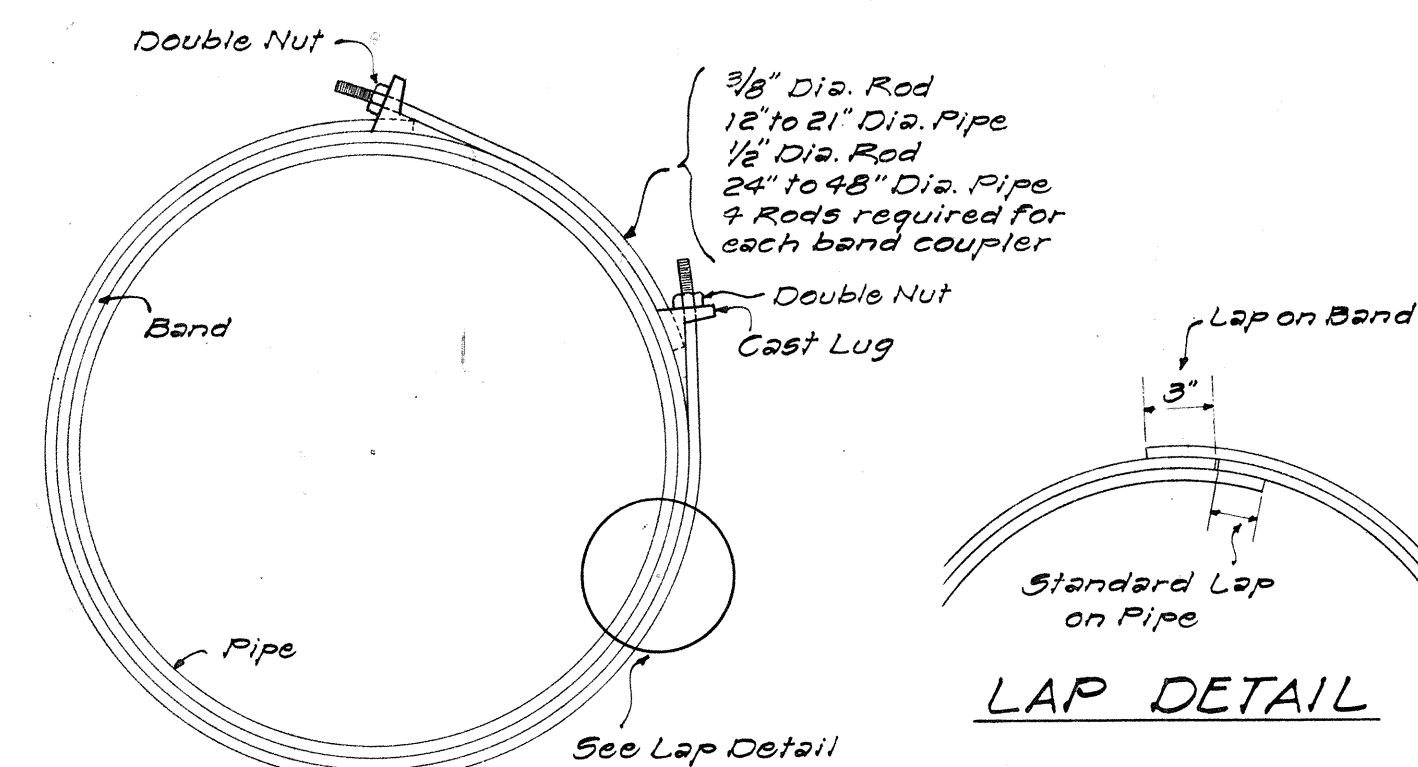
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII

STANDARD DETAILS

DROP INTAKES, RETAINING WALLS,
HEADWALLS, CONSTRUCTION JOINTS
SCALES AS NOTED

SHEET No 3 OF 7 SHEETS

10

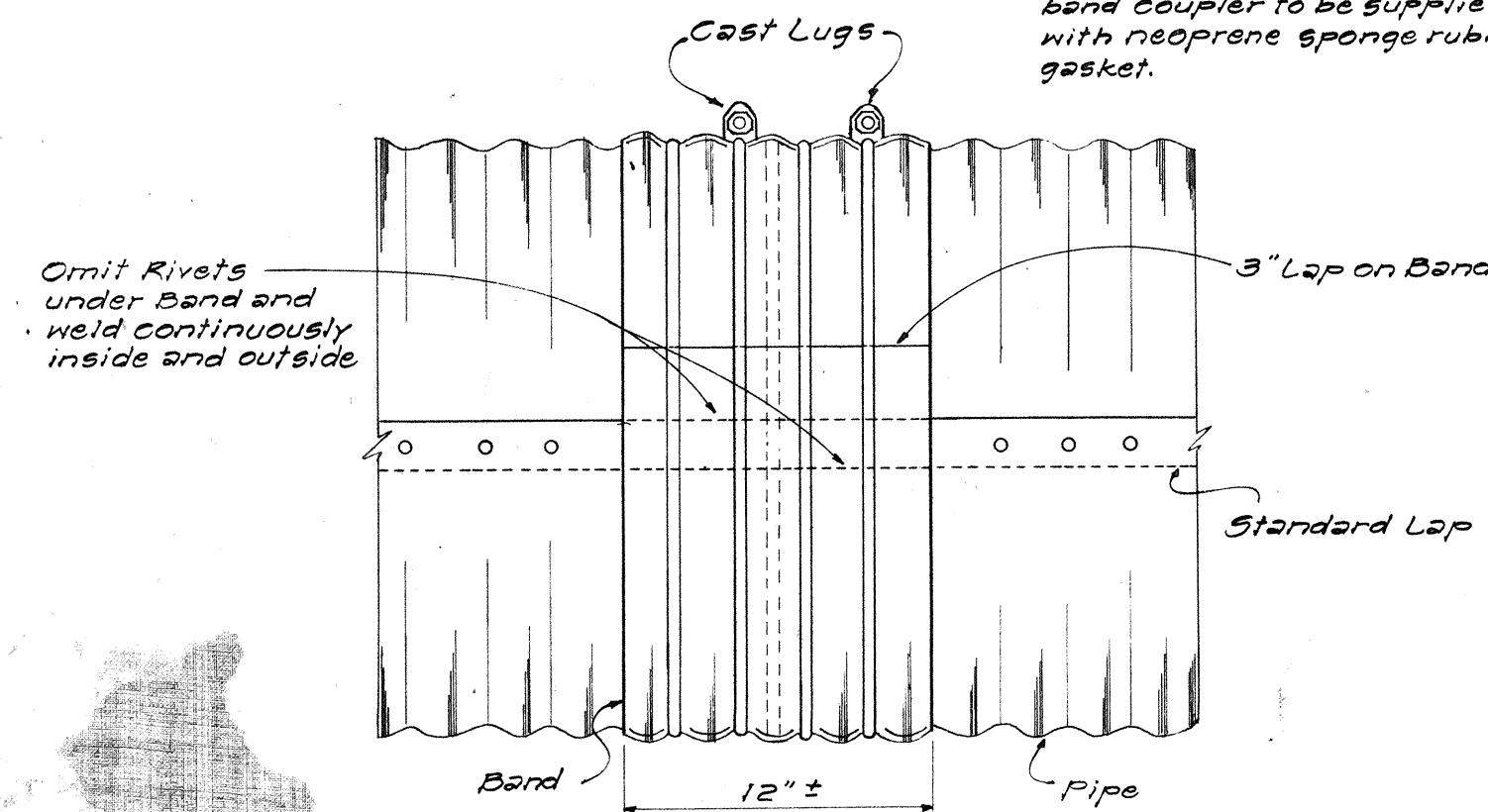


END VIEW

LAP DETAIL

NOTE:

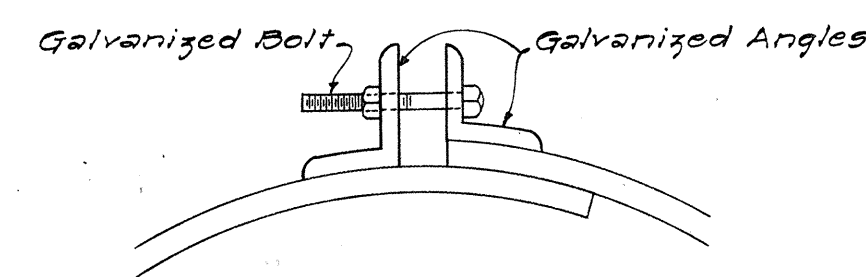
Each watertight band coupler to be supplied with neoprene sponge rubber gasket.



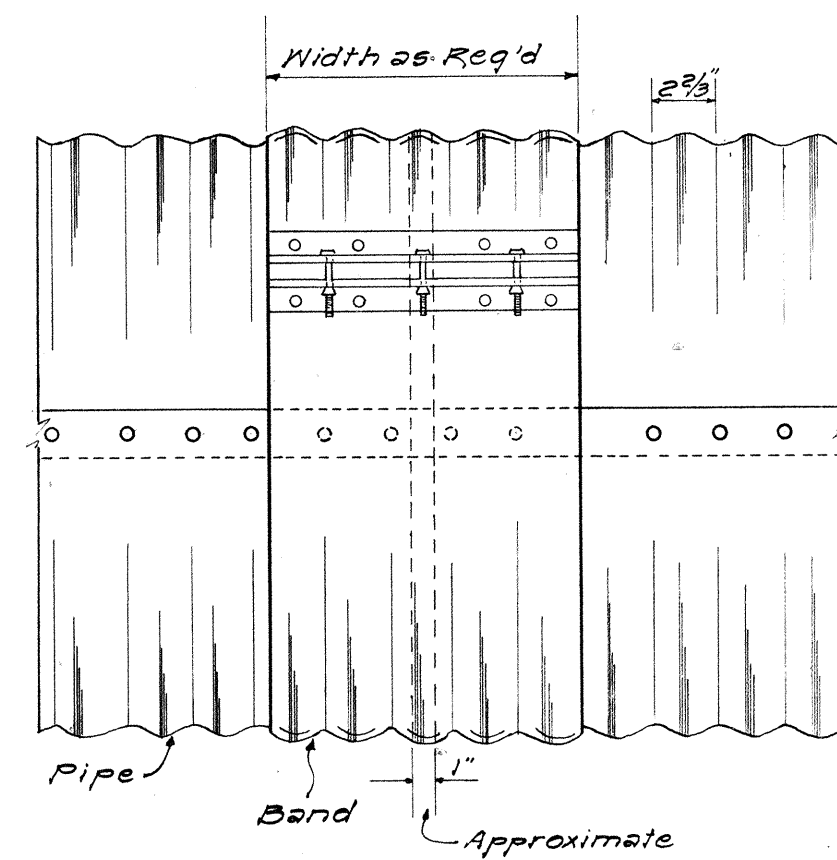
SIDE VIEW

DETAIL OF WATERTIGHT BAND COUPLER

NOT TO SCALE



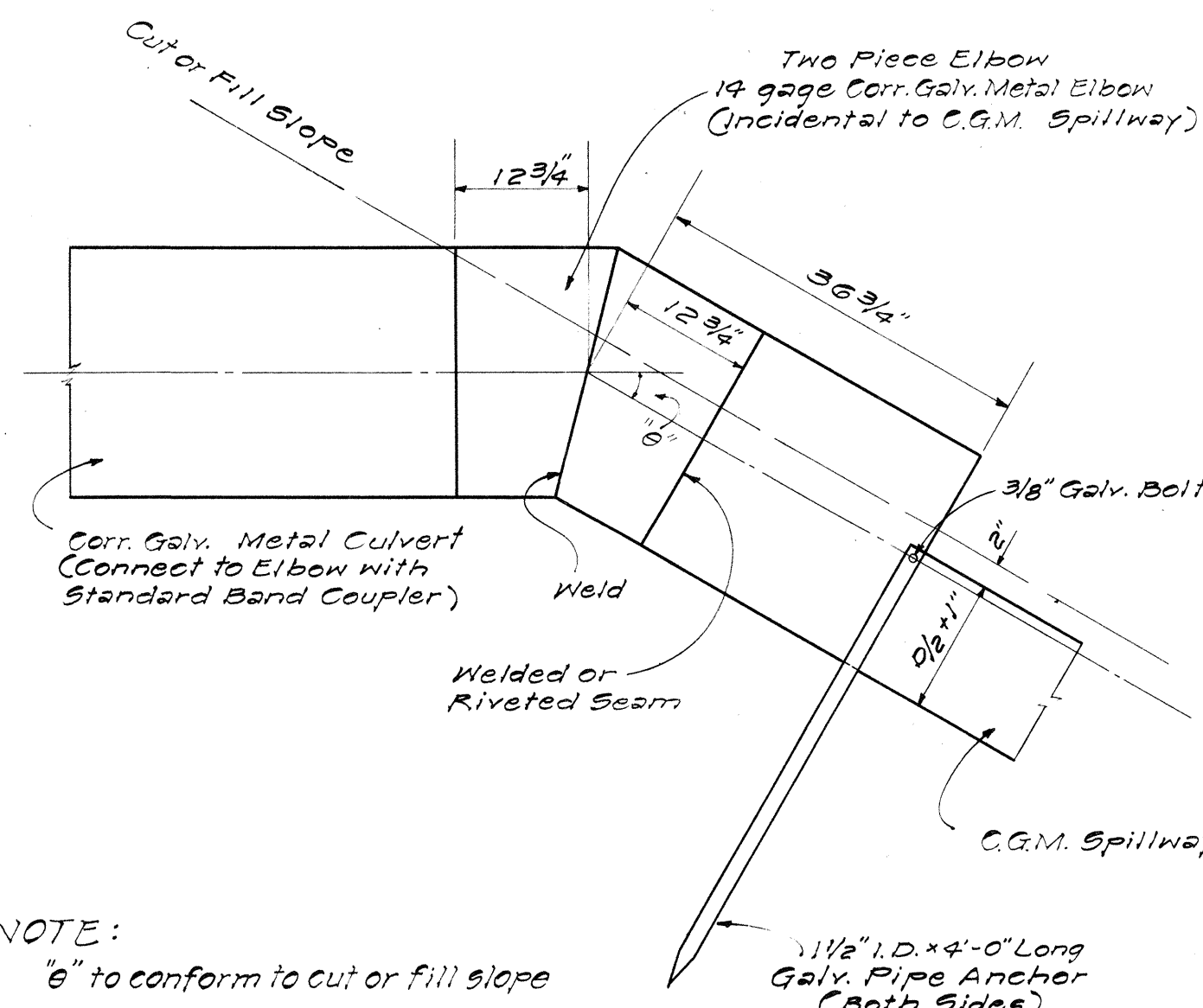
BAND DETAIL



SIDE VIEW

DETAIL OF STANDARD BAND COUPLER

NOT TO SCALE

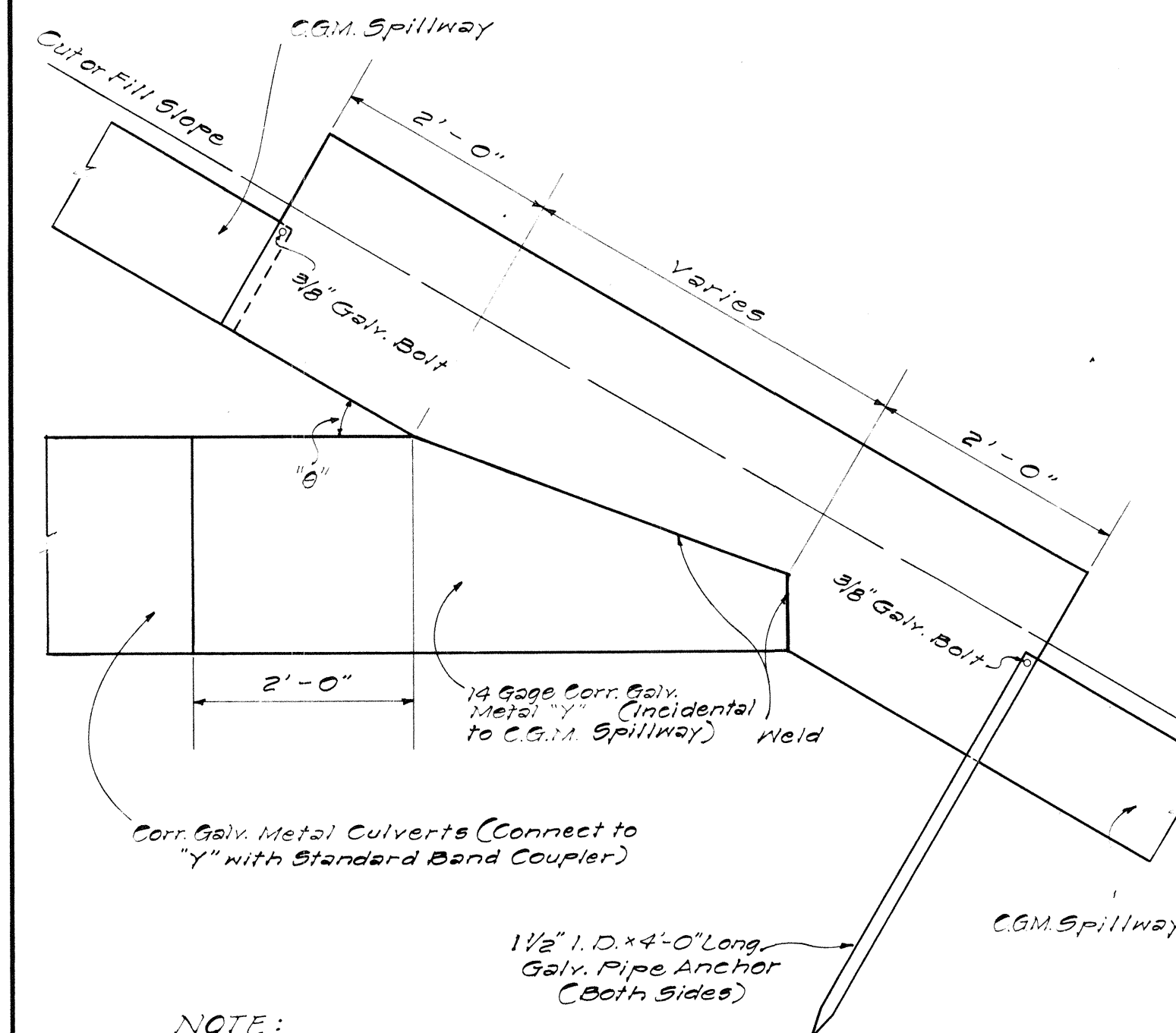


NOTE:

"6" to conform to cut or fill slope

DETAIL OF CULVERT TO SPILLWAY CONNECTION

NOT TO SCALE

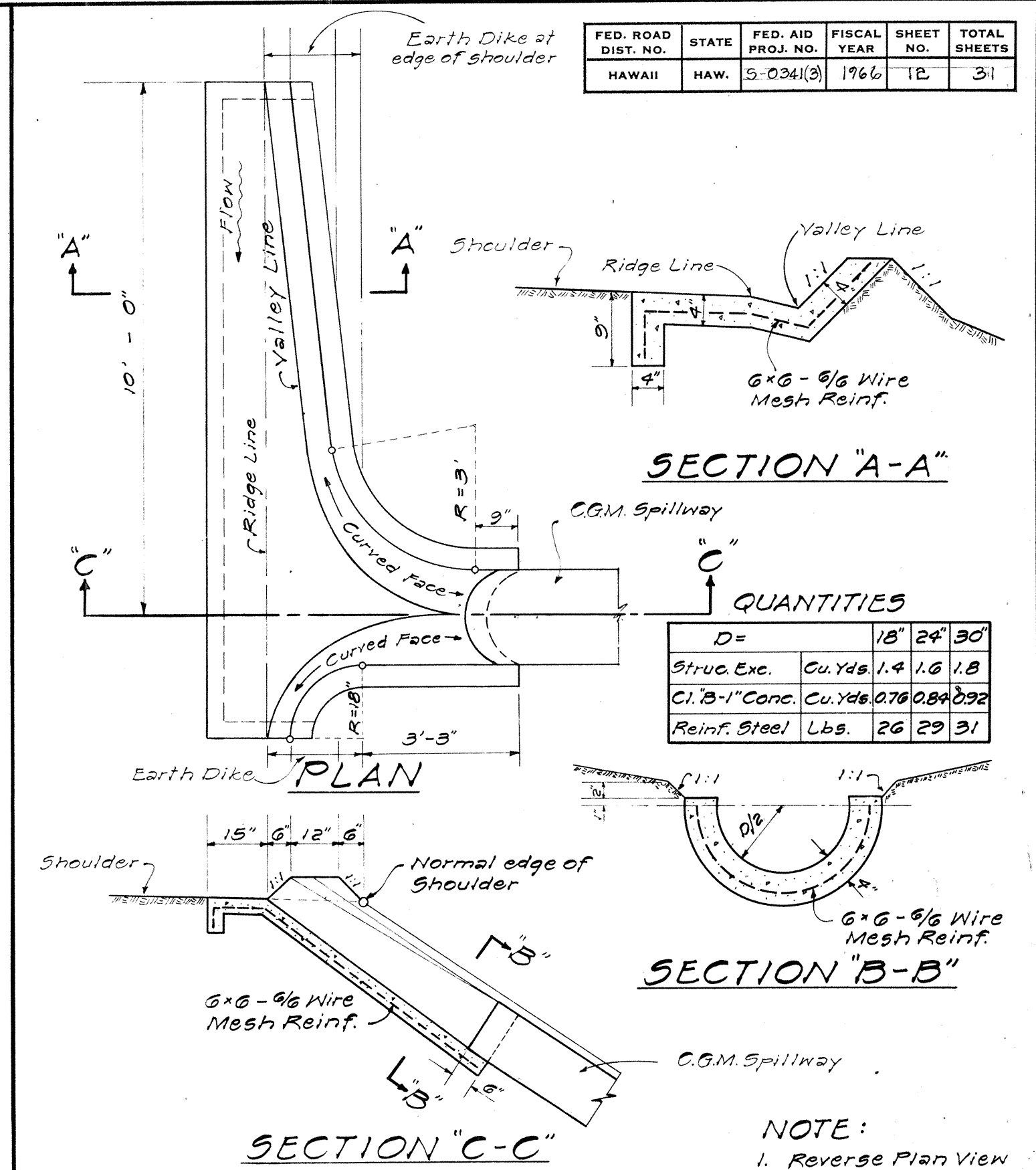


NOTE:

"6" to conform to cut or fill slope

DETAIL OF CULVERT TO SPILLWAY "Y" CONNECTION

NOT TO SCALE



SECTION "A-A"

QUANTITIES

D=	18"	24"	30"
Struc. Exc.	Cu. Yds. 1.4	1.8	1.8
Cl. B-1 Conc.	Cu. Yds. 0.70	0.88	0.92
Reinf. Steel	Lbs. 26	29	31

SECTION "B-B"

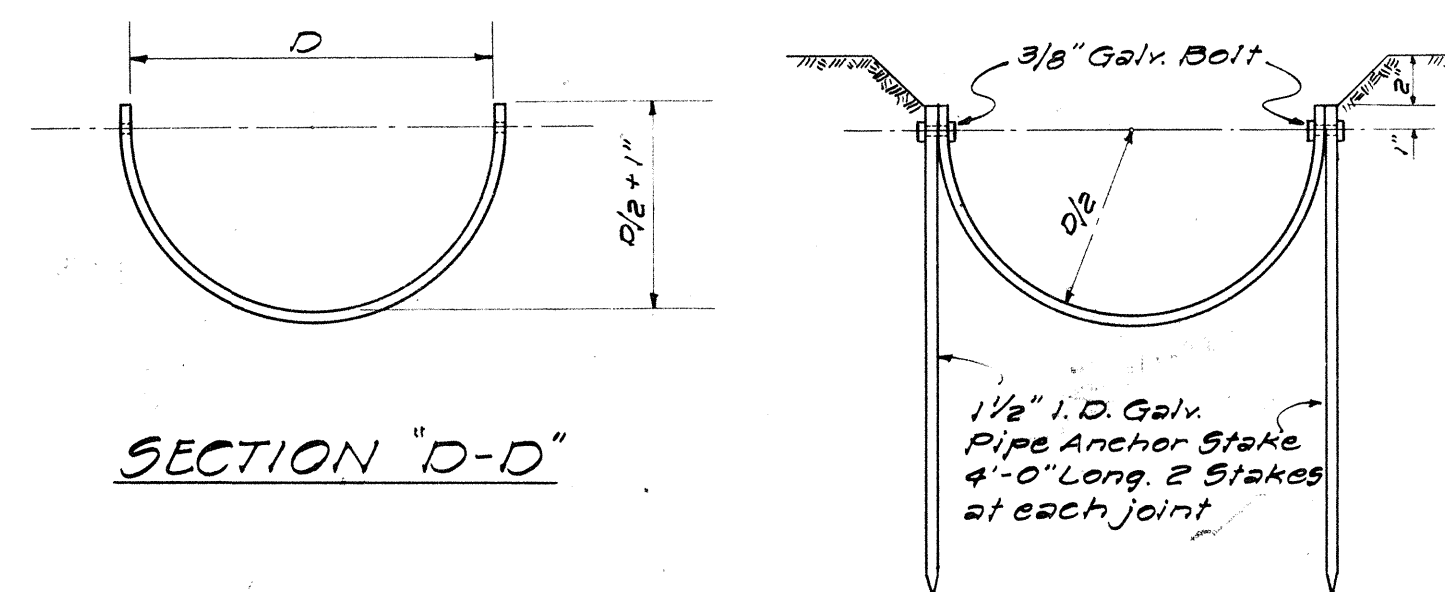
SECTION "C-C"

NOTE:

- Reverse Plan View when flow is in direction opposite to that shown.
- All Conc. to be cl. B-1

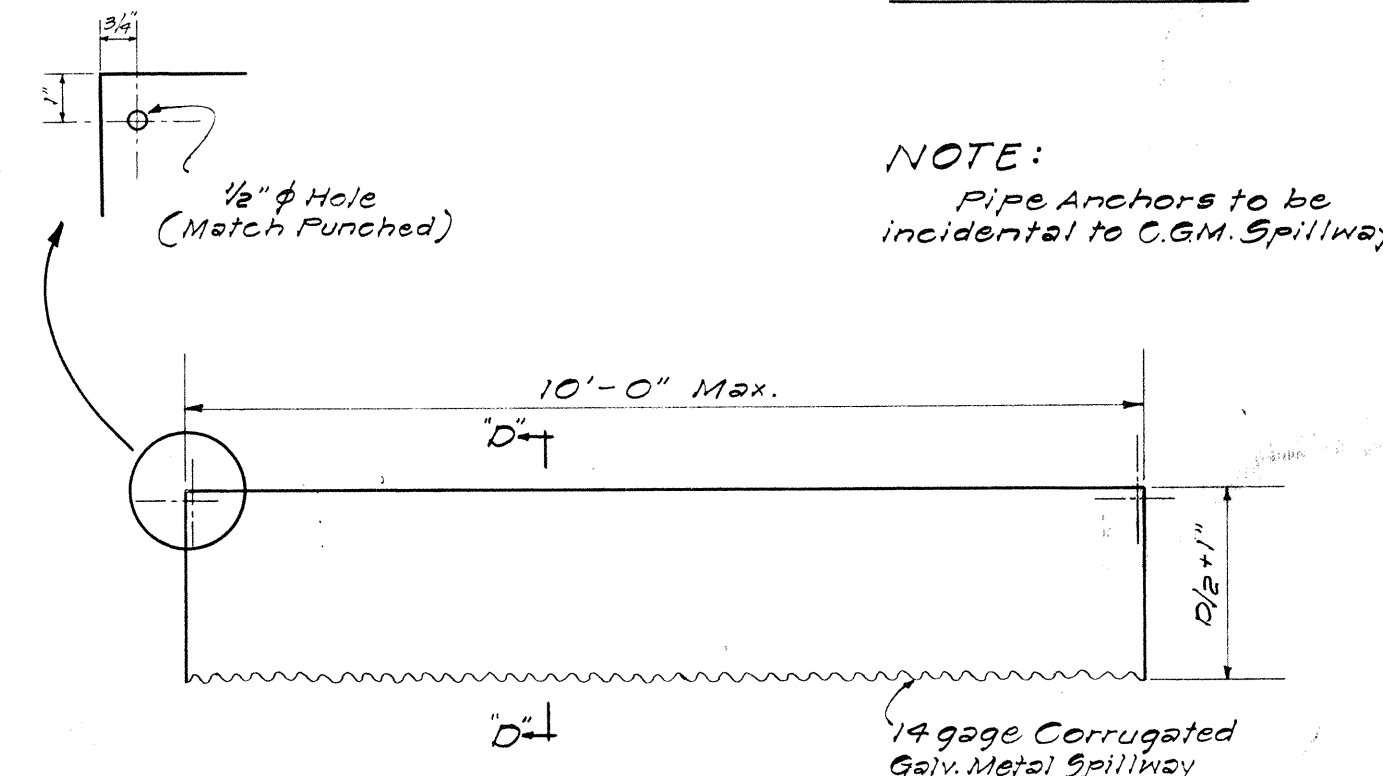
DETAIL OF SPILLWAY INLET

NOT TO SCALE



SECTION "D-D"

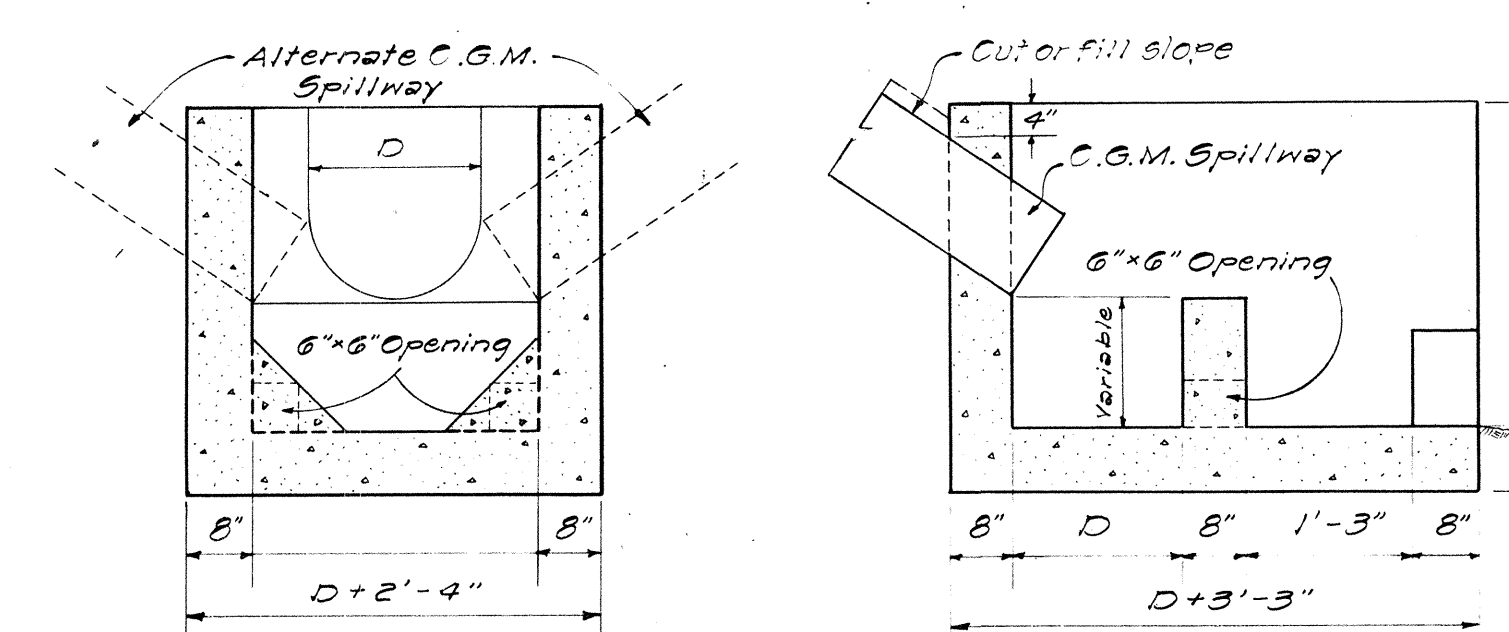
END VIEW



SIDE VIEW

C G.M. SPILLWAY

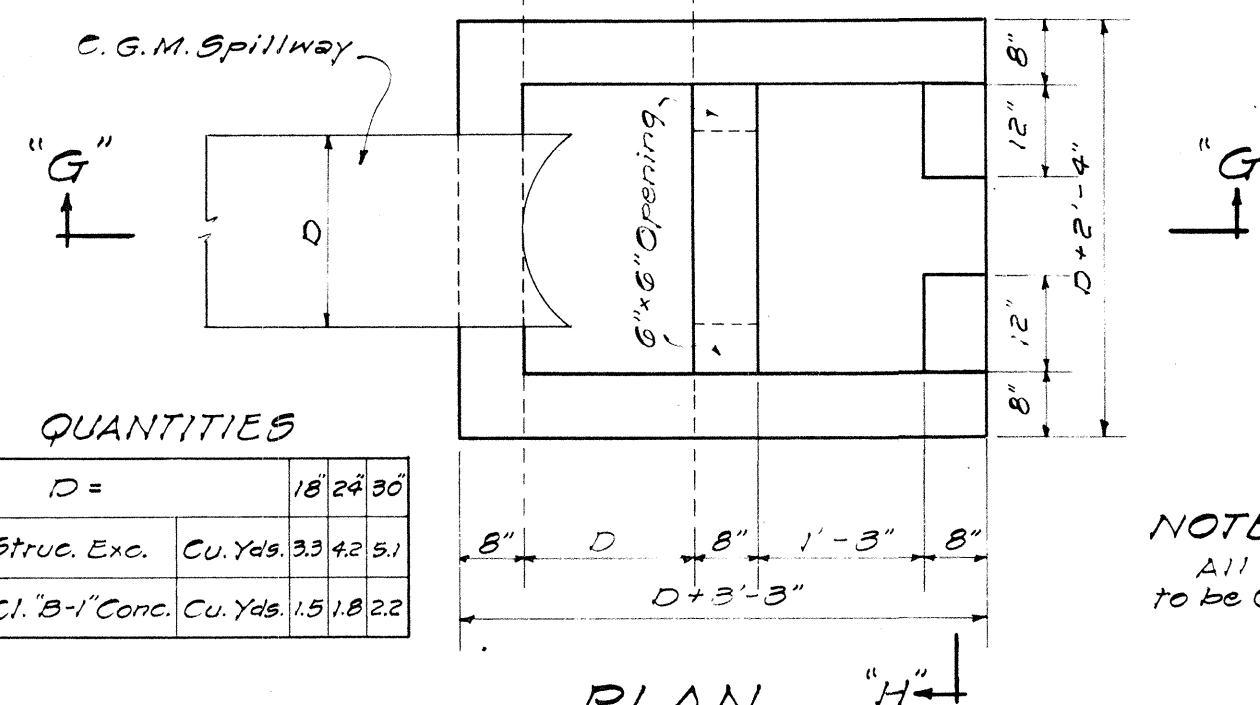
NOT TO SCALE



SECTION "H-H"

SECTION "G-G"

Alternate C.G. M. Spillway Location



PLAN

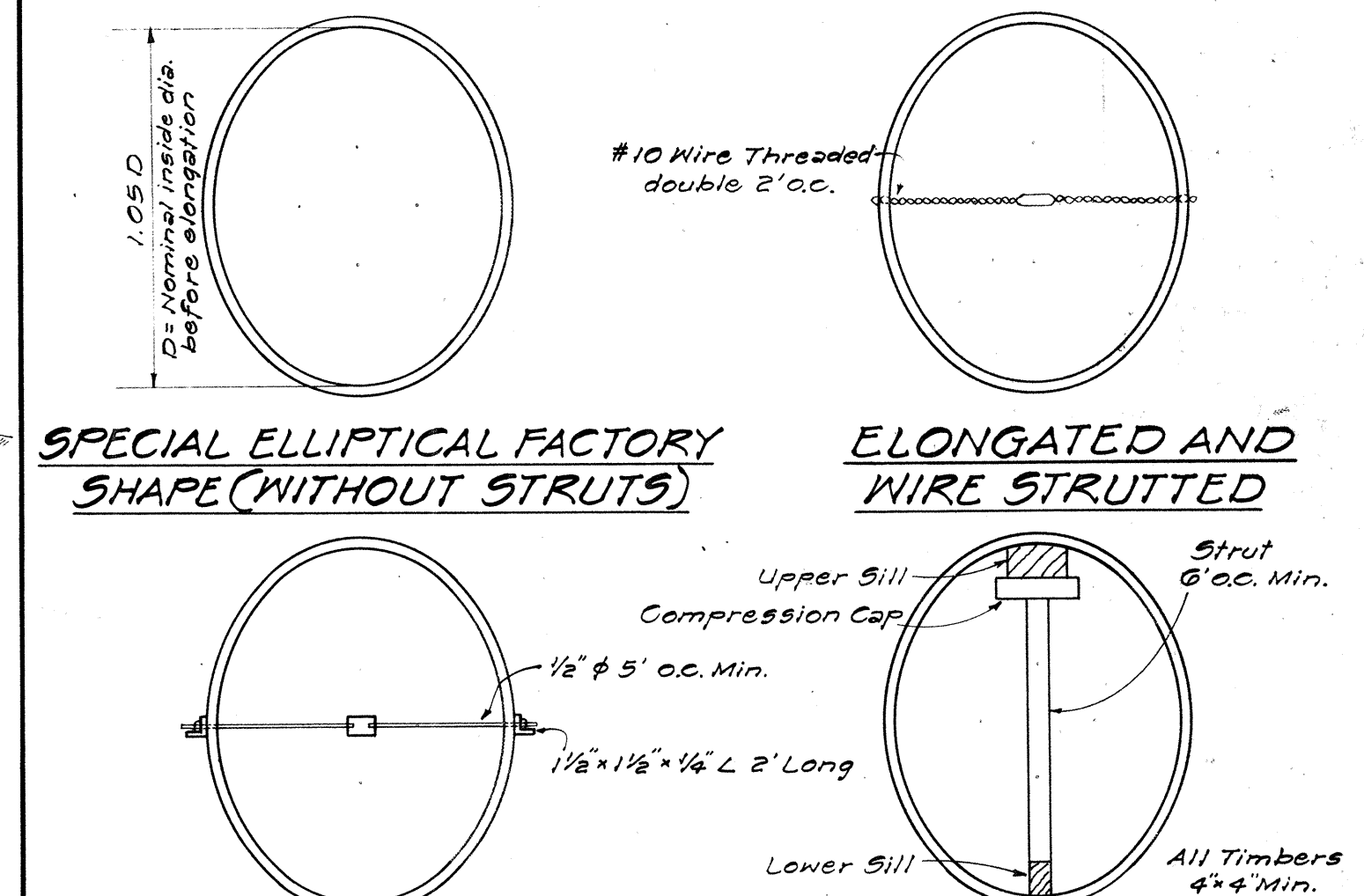
DETAILS OF CONC. DROP BOX AT OUTLET OF C.G.M. SPILLWAY

NOT TO SCALE

QUANTITIES

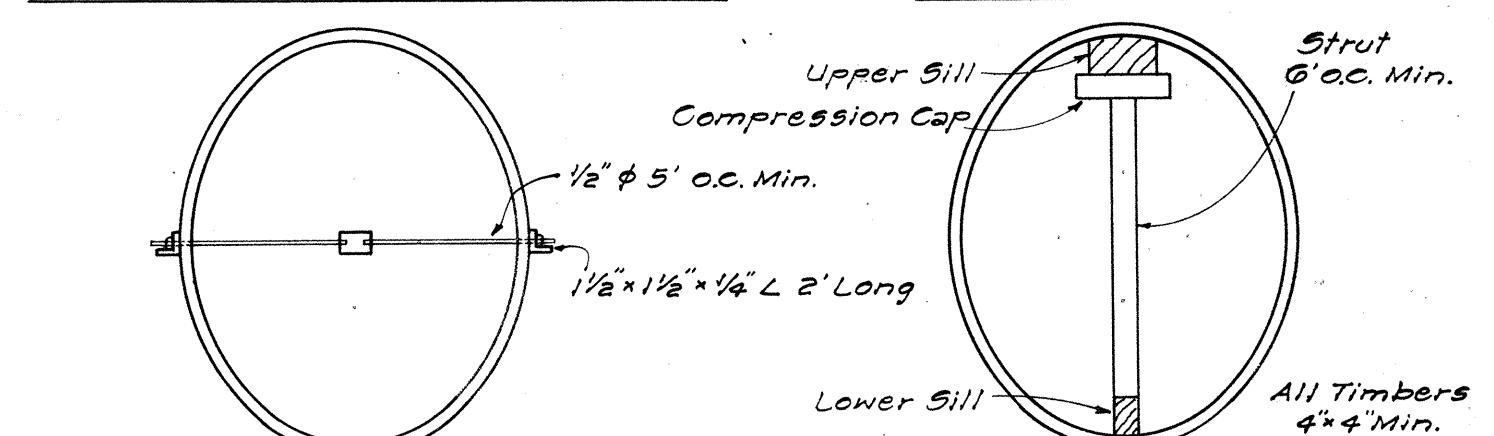
D=	18"	24"	30"
Struc. Exc.	Cu. Yds. 3.3	4.2	5.1
Cl. B-1 Conc.	Cu. Yds. 1.5	1.8	2.2

NOTE:
All Concrete to be Class "B-1"



SPECIAL ELLIPTICAL FACTORY SHAPE (WITHOUT STRUTS)

ELONGATED AND WIRE STRUTTED



ELONGATED WITH ROD AND TURNBUCKLE

ELONGATED WITH TIMBER STRUT

METHOD OF ELONGATING AND STRUTTING CORRUGATED PIPE

NOT TO SCALE

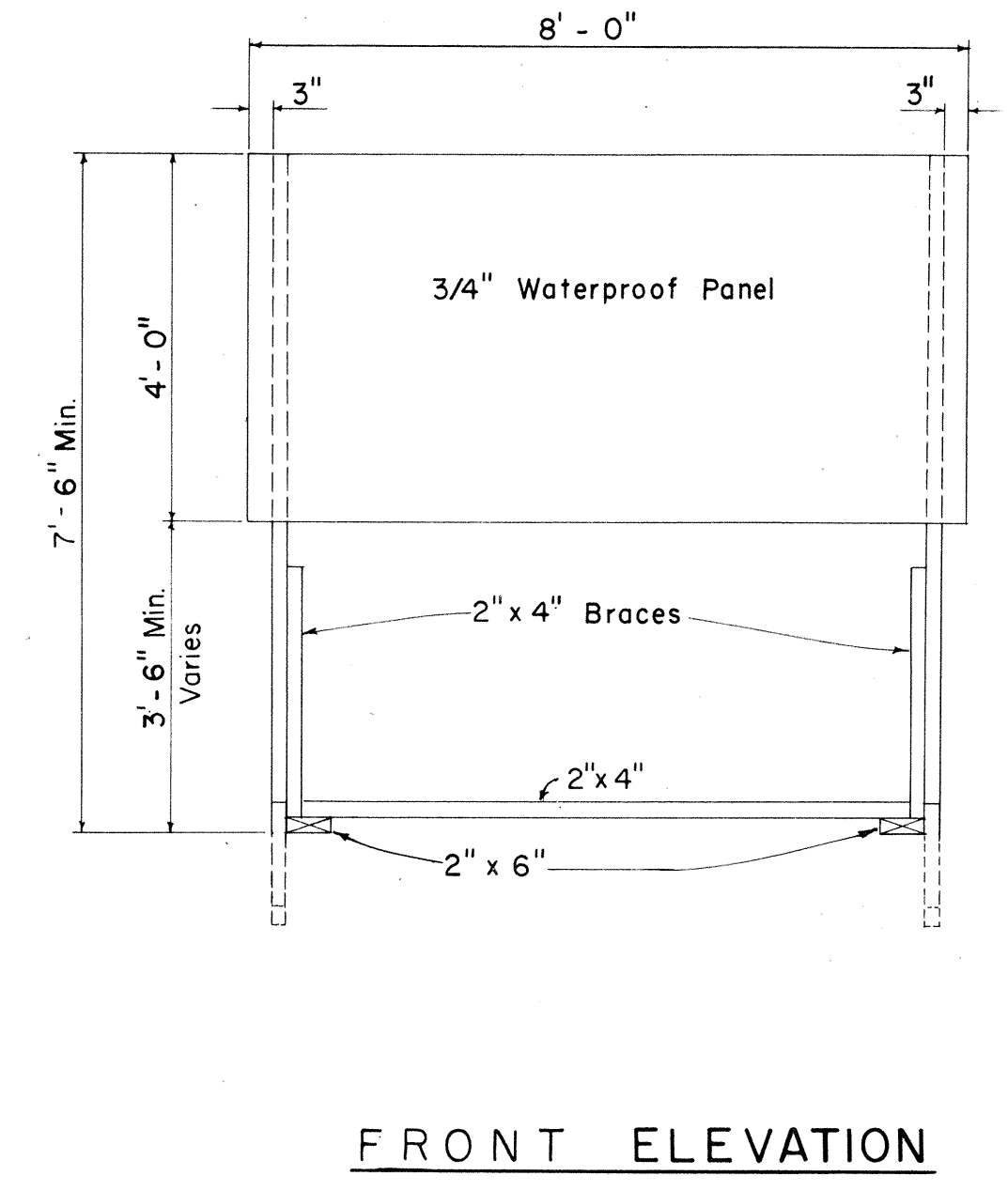
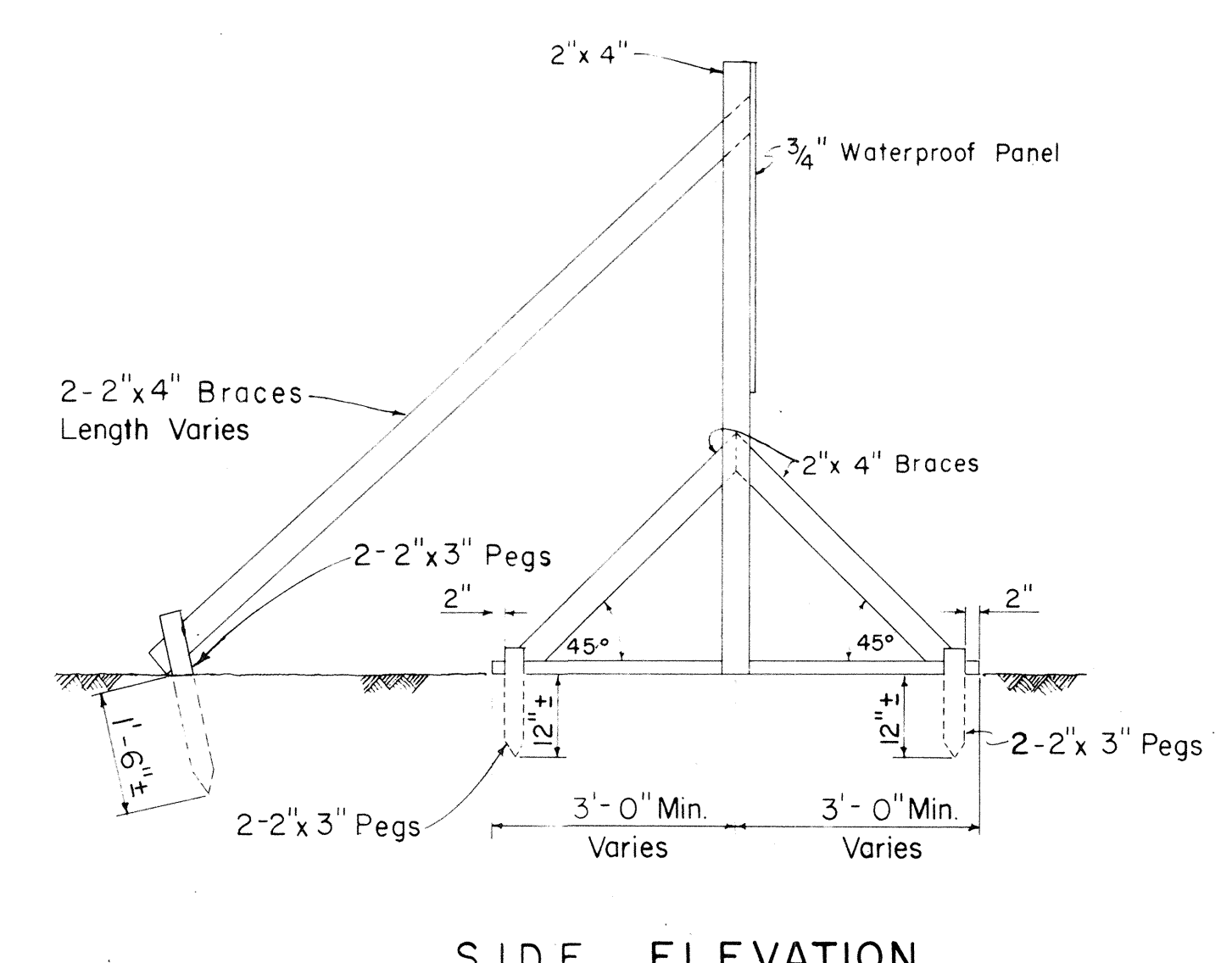
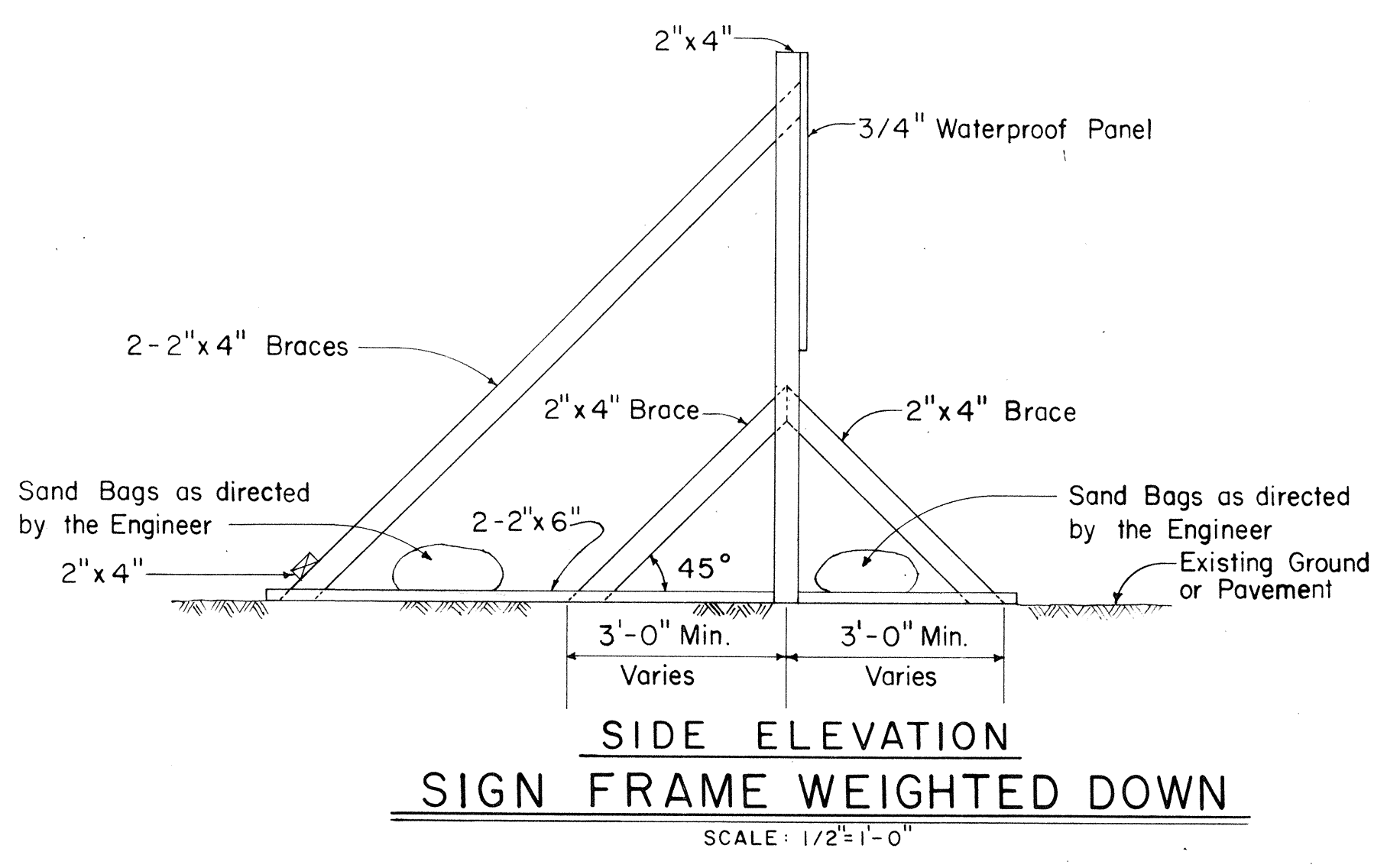
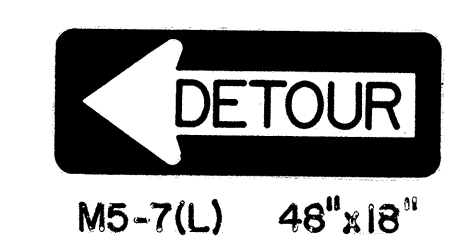
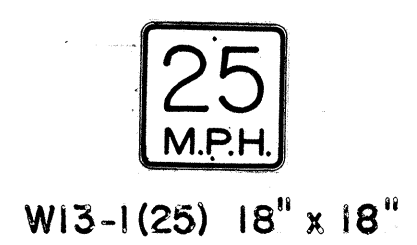
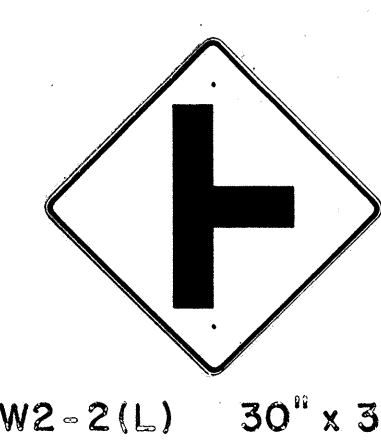
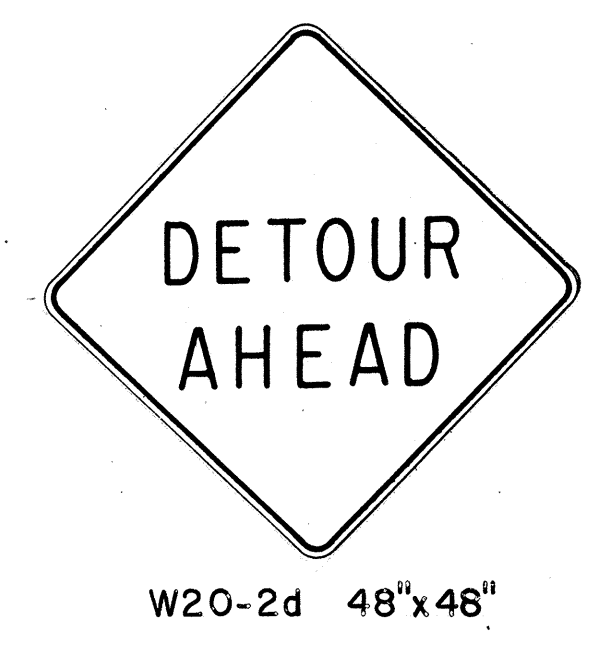
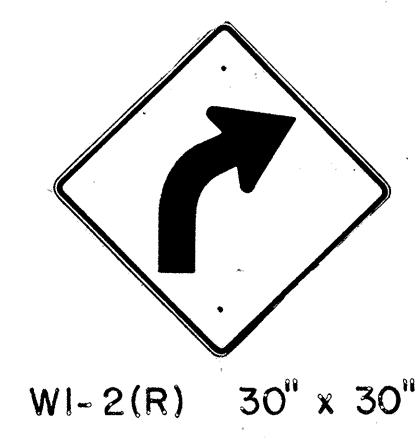
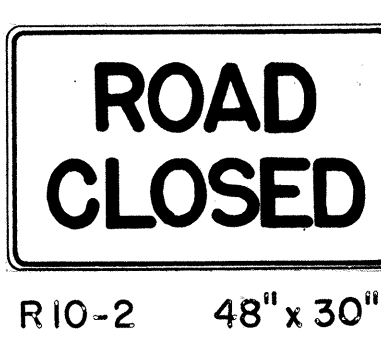
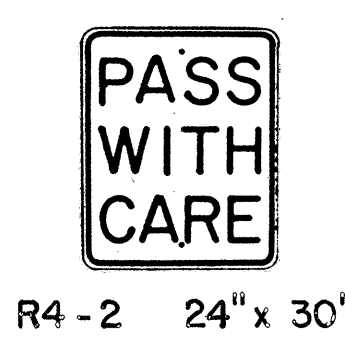
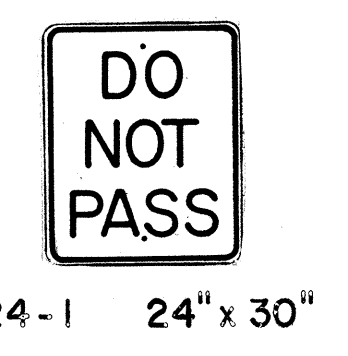
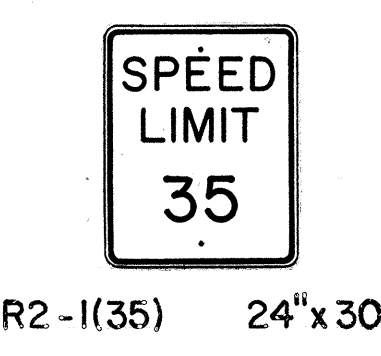
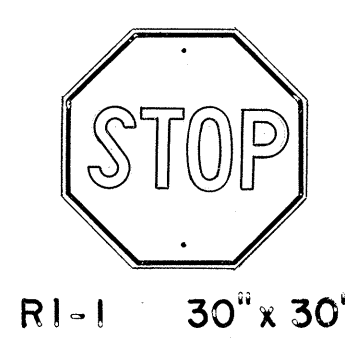
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
CORRUGATED GALVANIZED METAL
CULVERTS, SPILLWAYS, AND
SPECIAL DETAILS
SCALES AS NOTED
SHEET NO 5 OF 7 SHEETS

DATE 5-24-66
SURVILY PLOTTED BY R.Y.
DRAWN BY O.M.
CHECKED BY
NOTE BOOK
No.

SUMMARY OF TRAFFIC SIGNS			
TYPE	DESCRIPTION	QUANTITY	
		Sign Plate with Post	Sign Plate Only
R1-1	Stop	5	
R2-1(35)	Speed Limit - 35	1	
R4-1	Do Not Pass	2	
R4-2	Pass With Care	1	
R10-2	Road Closed		2
W1-2(L)		1	
W1-2(R)		1	
W1-4(L)		2	
W1-4(R)		2	
W2-2(L)		# 3	
W2-2(R)		# 3	
W13-1(25)	Advisory Speed Plate		4
W20-1d	Road Construction Ahead	2	
W20-2d	Detour Ahead	2	
M1-3(35)	Route Markers - 35	2	
M1-3(341)	Route Markers - 341	1	
M1-4(35)	Route Markers - 35	2	
M1-4(341)	Route Markers - 341	4	
M2-1			3
M4-1			2
M4-3			2
M4-4			1
M5-7(R)			1
M5-7(L)			1
RM-1	Reflectorized Marker	# 48	2
RM-3	Reflectorized Marker	2	

NOTE:

- The shape, color, dimensions, symbols, wording, lettering and reflectorization 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 signs shall be reflectorized unless otherwise specified.
- All signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise noted.
- For W20 series signs, suffixes a, b, c and d are as follows:
a - 1500 ft., b - 1000 ft., c - 500 ft. and d - AHEAD.
- (R) or (L) indicates right or left and shall be as shown on the plans.



HAWAII 33 as appropriate.

YOUR HIGHWAY TAXES AT WORK

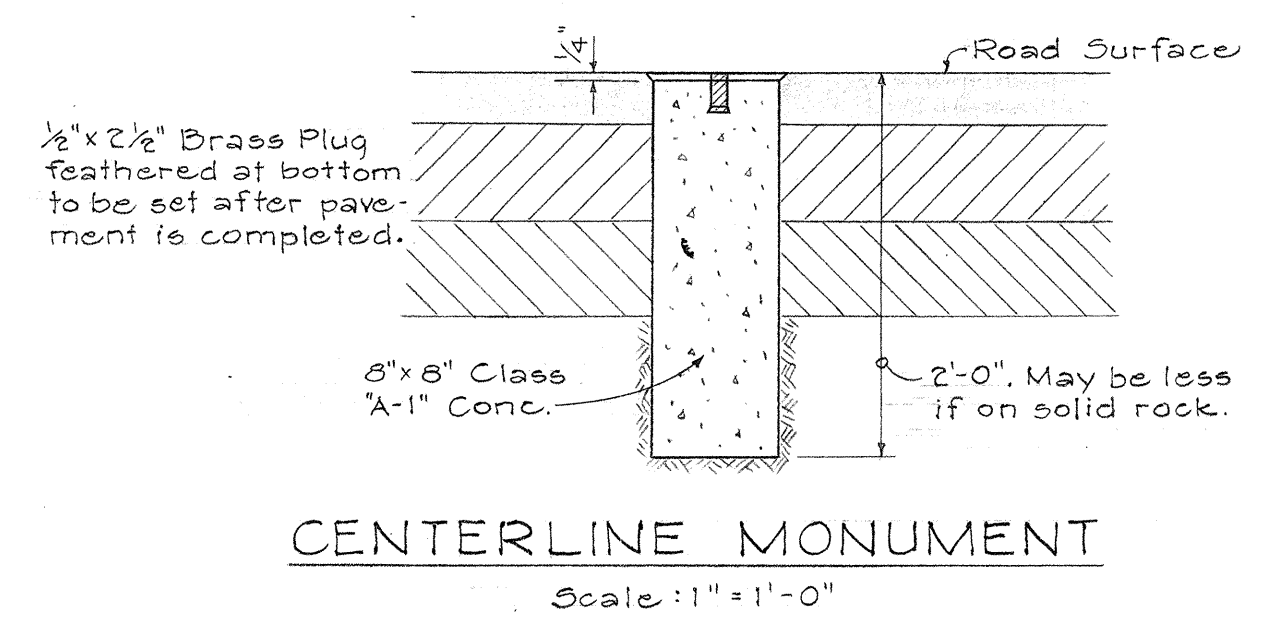
FEDERAL HIGHWAY TRUST FUNDS \$0,000,000 U.S. DEPT. OF COMMERCE Bureau of Public Roads

STATE HIGHWAY FUNDS \$0,000,000 DEPT. OF TRANSPORTATION HIGHWAYS DIVISION

HAWAII 341

PROJECT SIGN PANEL Scale: 1" = 1'-0"

PROJECT IDENTIFICATION SIGN Scale: As Shown

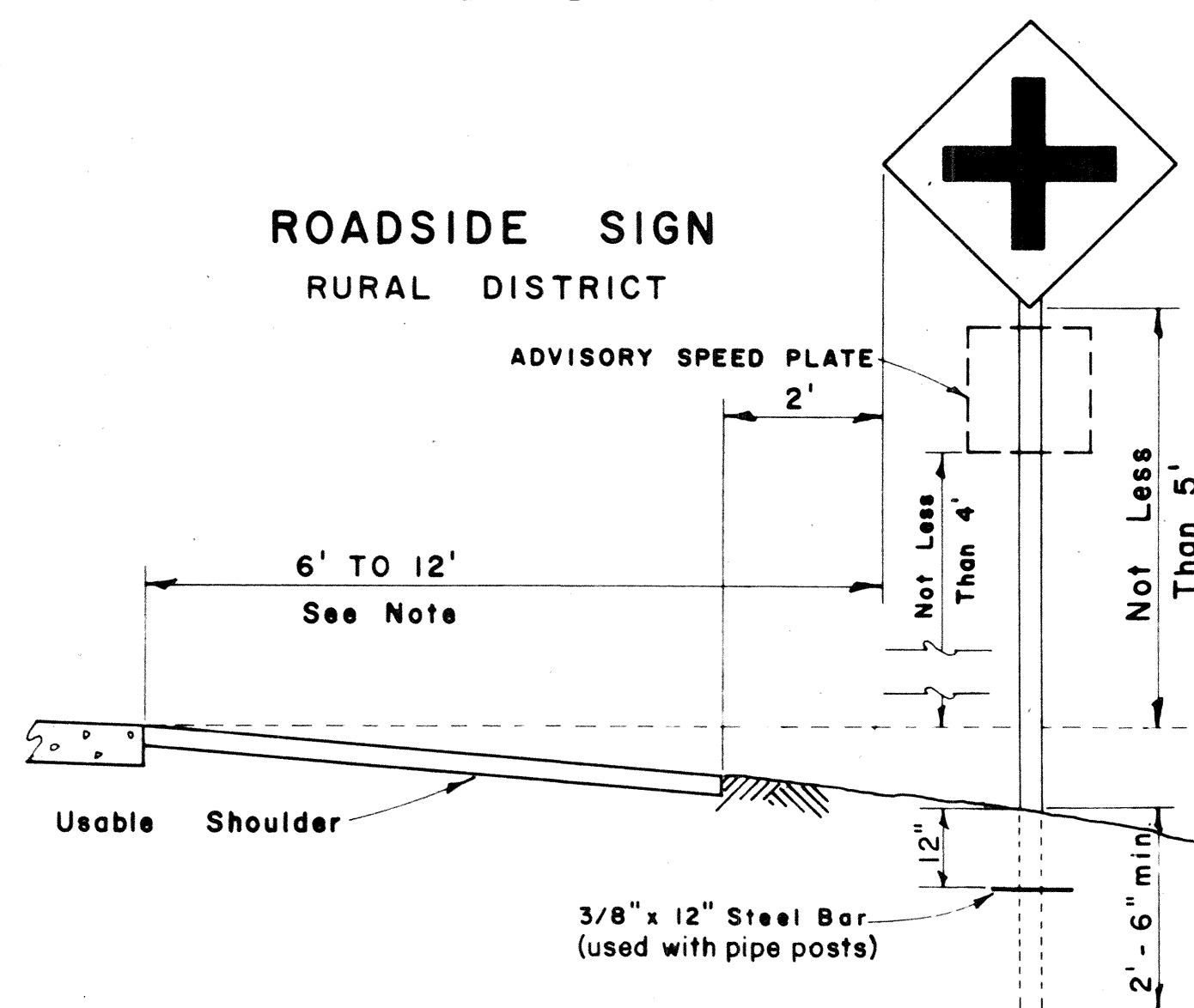
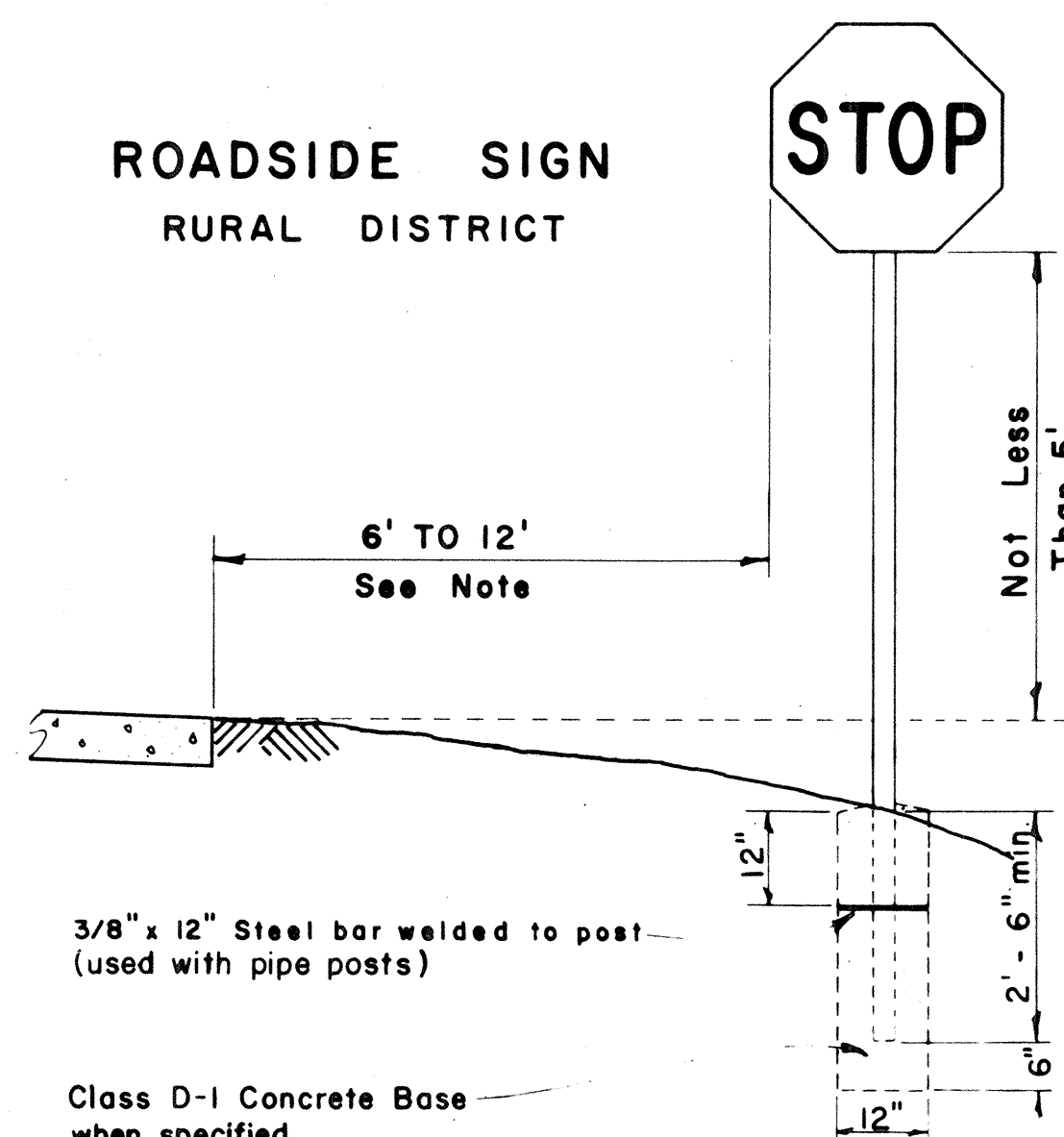


- PROJECT SIGN NOTES
- The Contractor shall construct, install and maintain the Project Signs, at the locations shown on the plans and as ordered by the Engineer.
 - All costs incurred in the construction, installation and maintenance of the Project Signs, will not be paid for separately, but shall be considered as included in the unit price paid for the various items in the proposal.
 - The Project 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 Project Signs.
 - The legend shall be black on white background unless otherwise specified.
 - Refer to Sheet No. 15 for details on the exact shape and size of the State route marker to be shown on these Project 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.

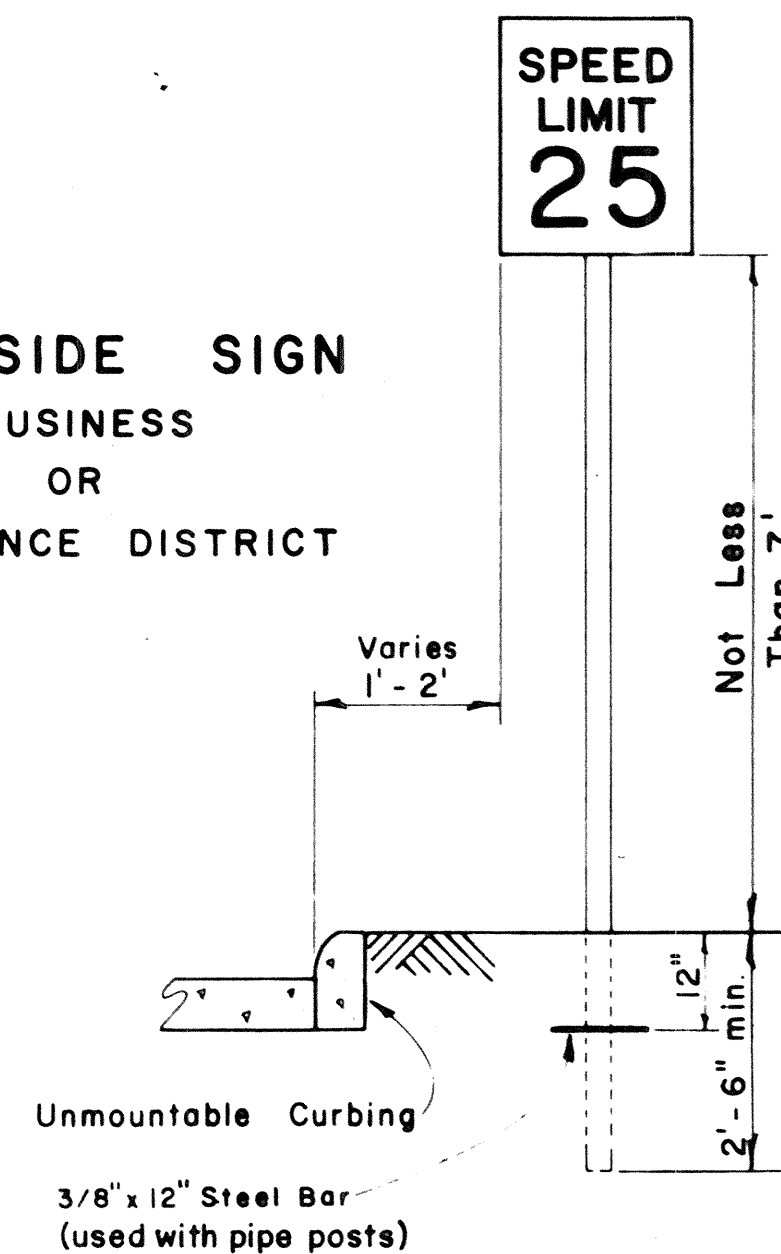
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
STANDARD DETAILS
PROJECT IDENTIFICATION SIGN
AND
MISCELLANEOUS SIGN DETAILS
WAIEHU BEACH RD. PROJ. NO. 6-0341(3)
Scale: As Noted Date: May 1966
SHEET No. 6 OF 7 SHEETS

DATE
DESIGNED BY
CHECKED BY
ORIGINAL PLAN
NOTE BOOK
No.

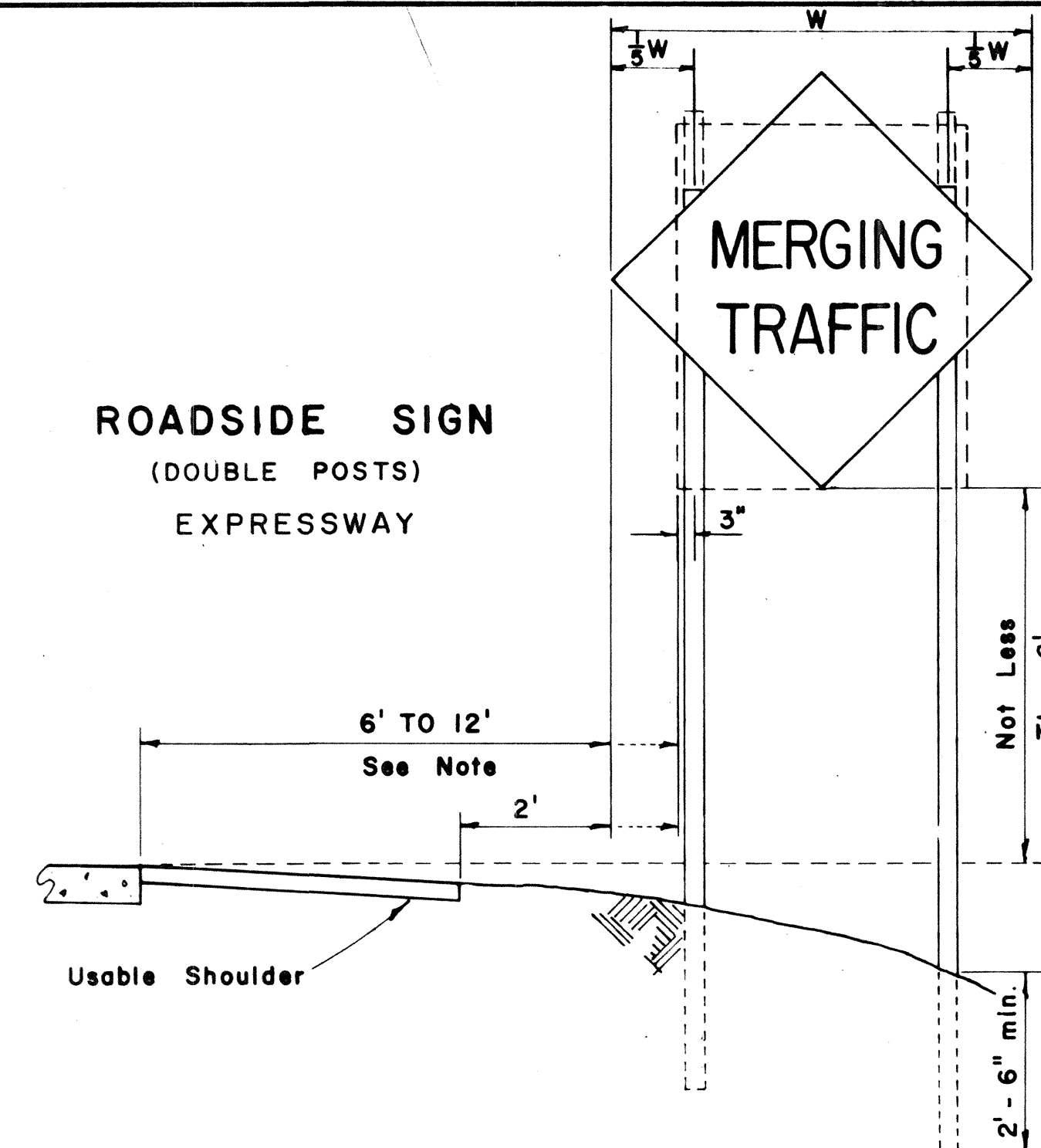
- NOTE:
1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 2. Except as noted below, sign posts shall be either 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts for signs larger 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" galv. carriage bolts with nuts and 7/8" x 7/8" x .120" stainless-steel washers with neoprene rubber gasket.
 4. Clearance Markers (RM-3, RM-4) shall be installed with the inside edge of the marker in line with the inner 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 two 2 1/2" x 2 1/2" galv. square tube posts.



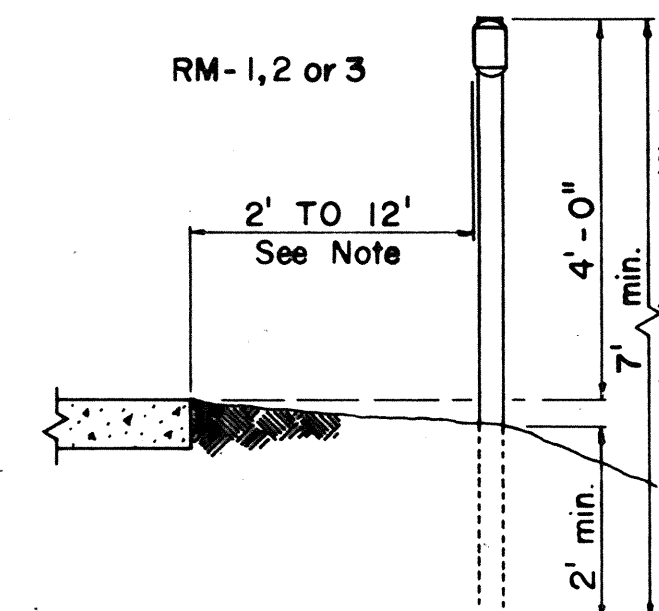
ROADSIDE SIGN
BUSINESS
OR
RESIDENCE DISTRICT



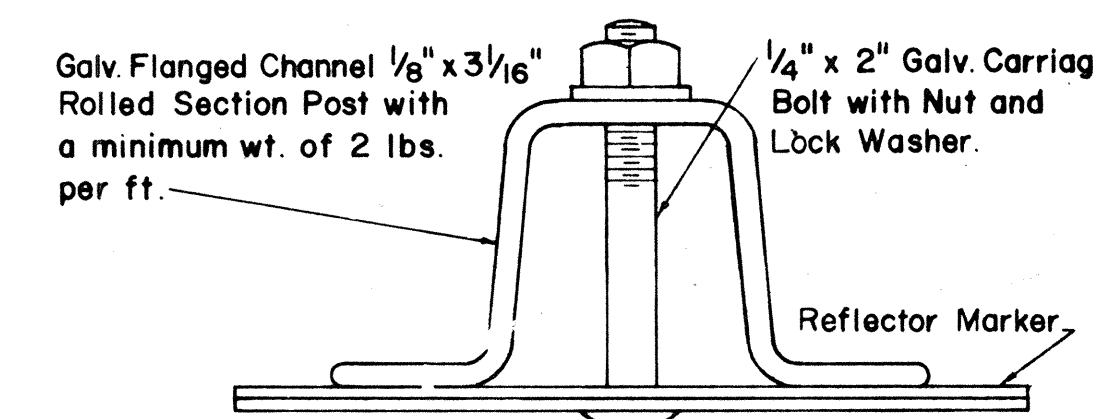
ROADSIDE SIGN
(DOUBLE POSTS)
EXPRESSWAY



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	S-0341(2)	1966	14	31

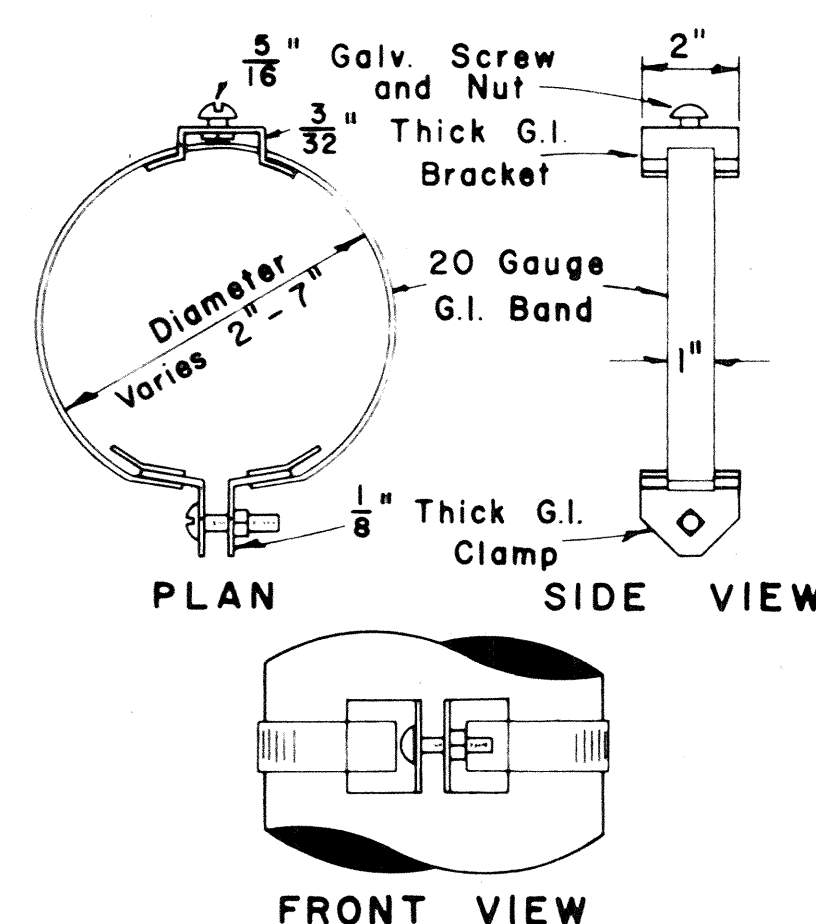
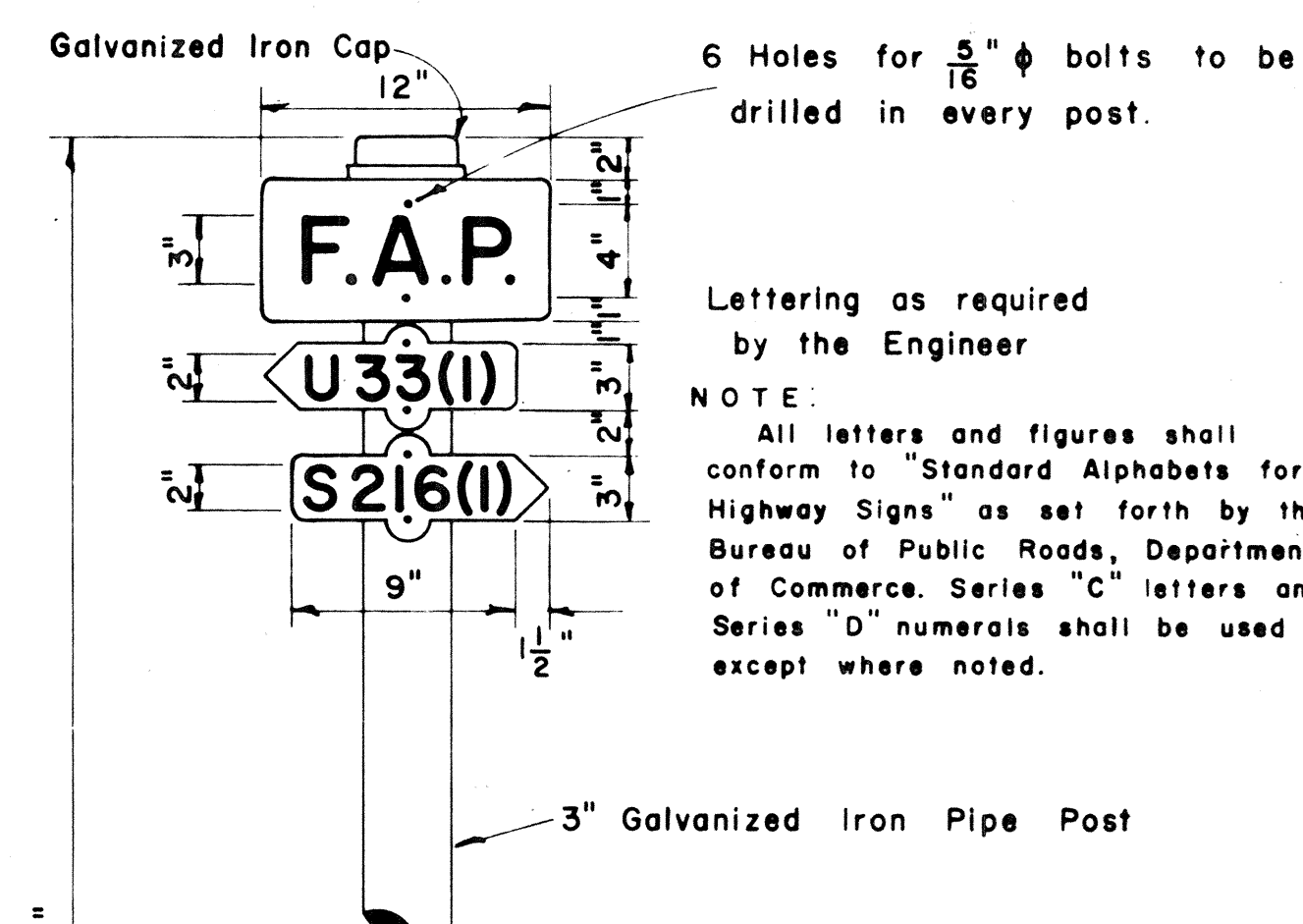


ROAD DELINEATOR
Scale: 1/2" = 1' - 0"

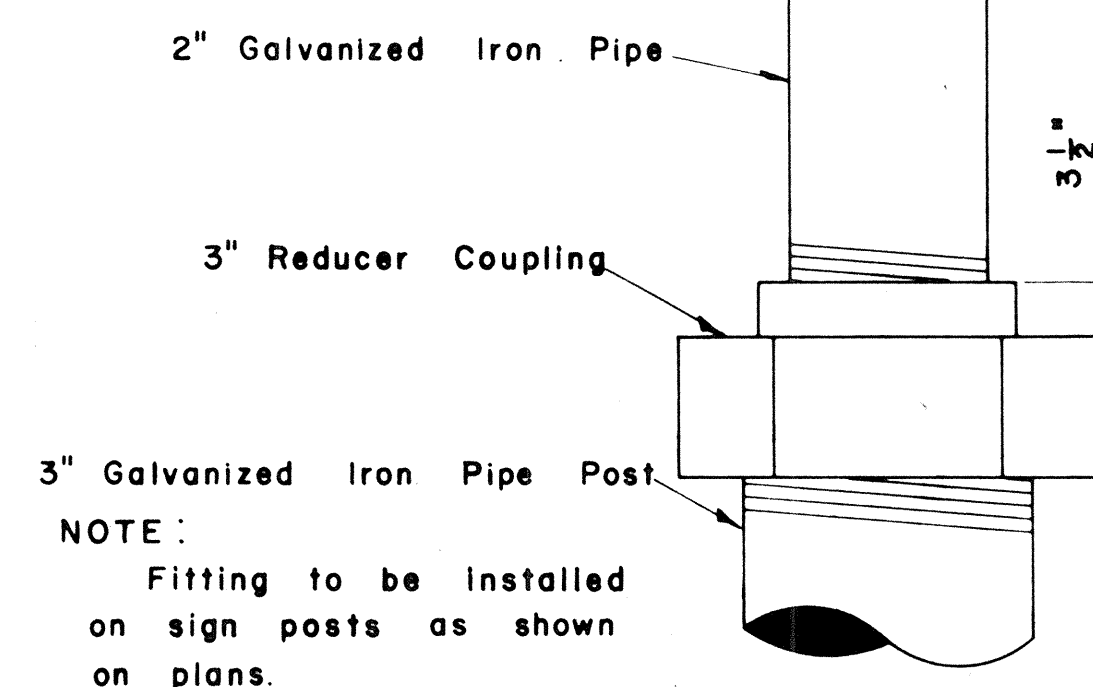


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS

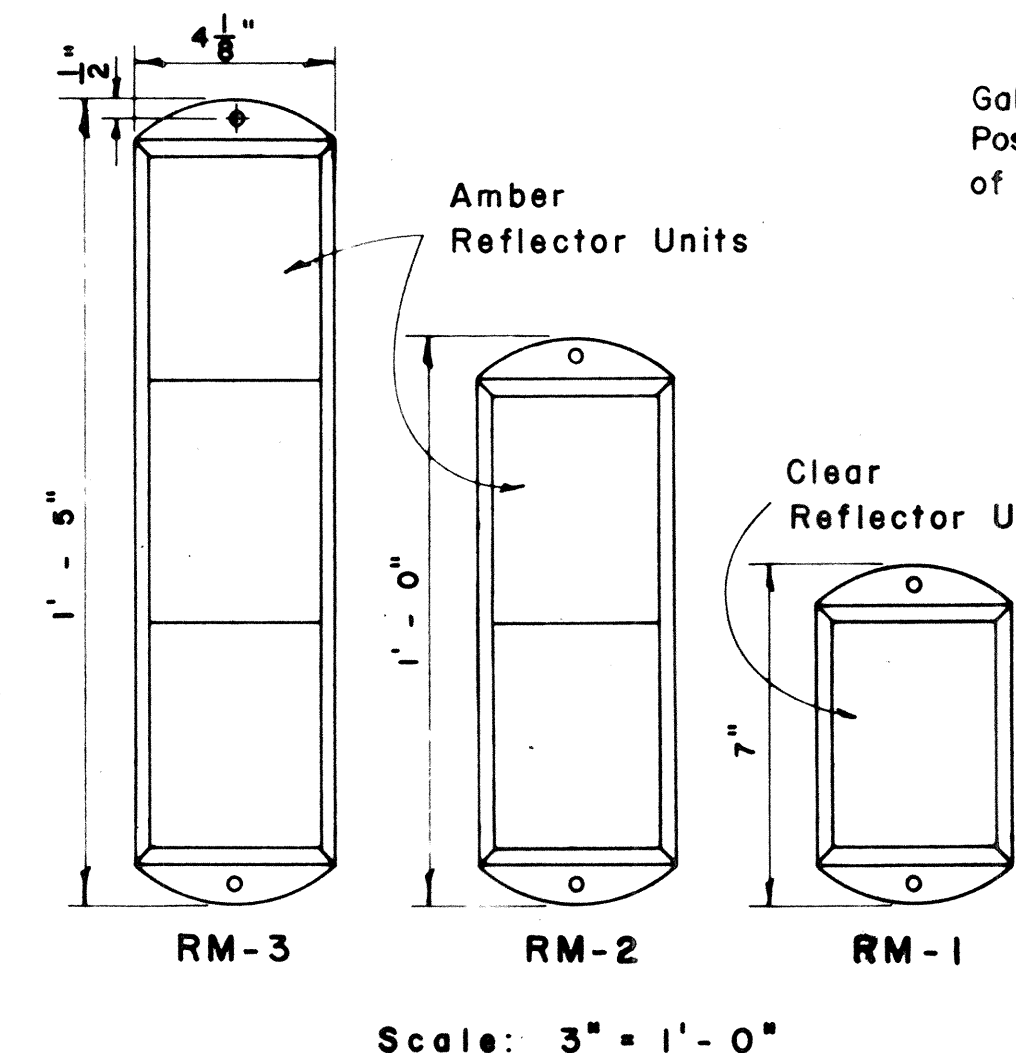
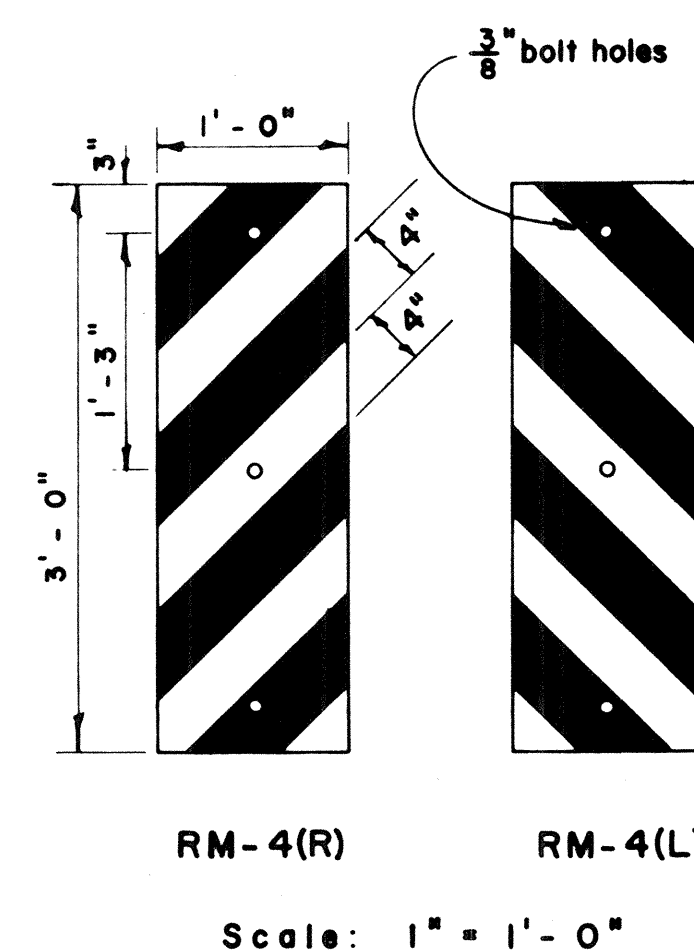
Scale: 1/2" = 1' - 0"



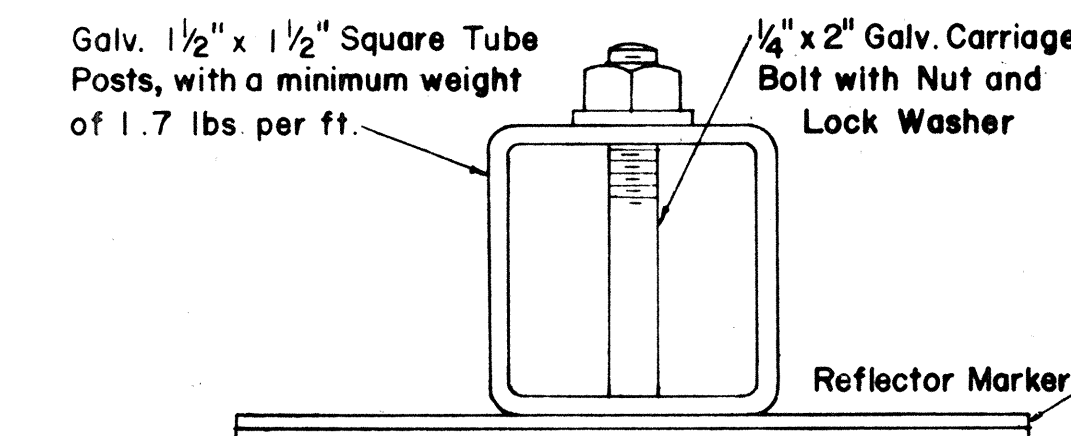
TYPICAL BAND BRACKET
FOR MOUNTING TRAFFIC SIGNS
Scale: 3" = 1' - 0"



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

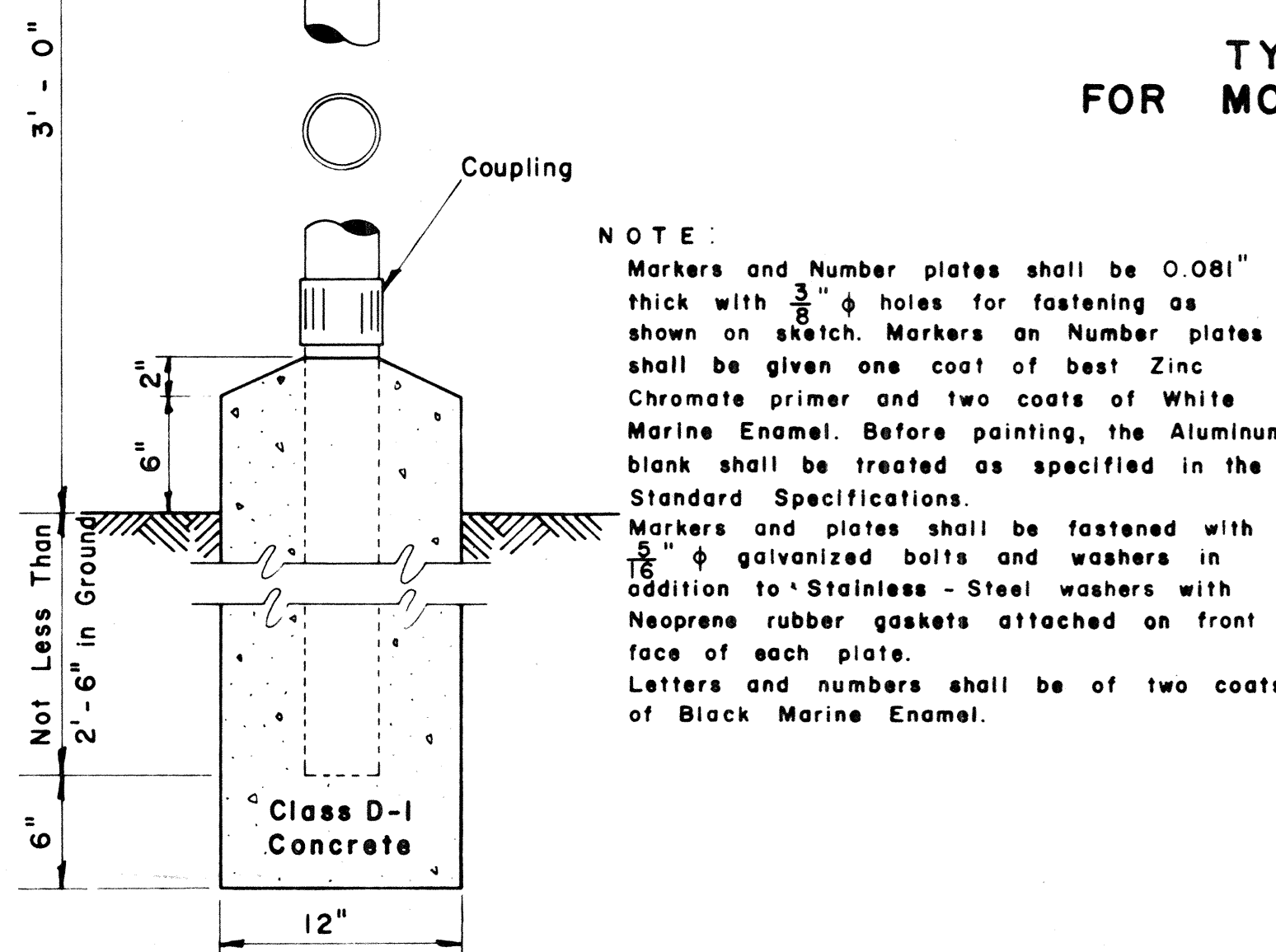


REFLECTOR MARKERS
Scale: As Shown

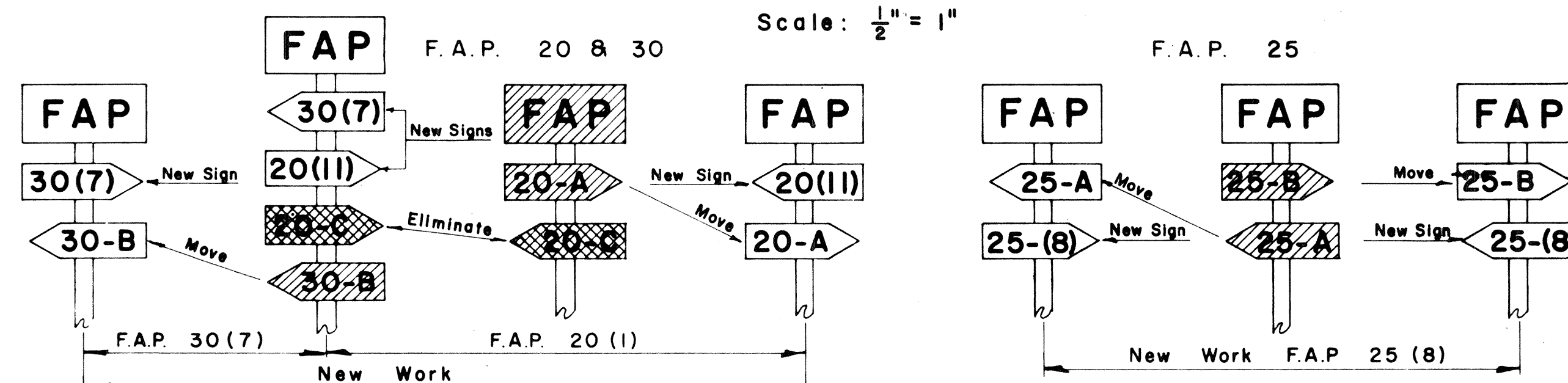


TYPICAL SECTION
OF ROAD DELINEATOR
Full Size

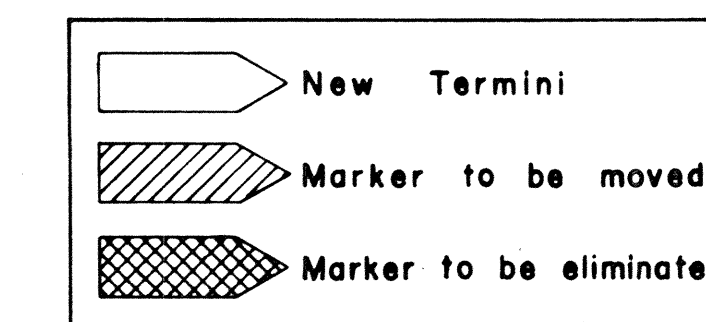
NOTE: Reflector Markers RM-1, 2, 3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.



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



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

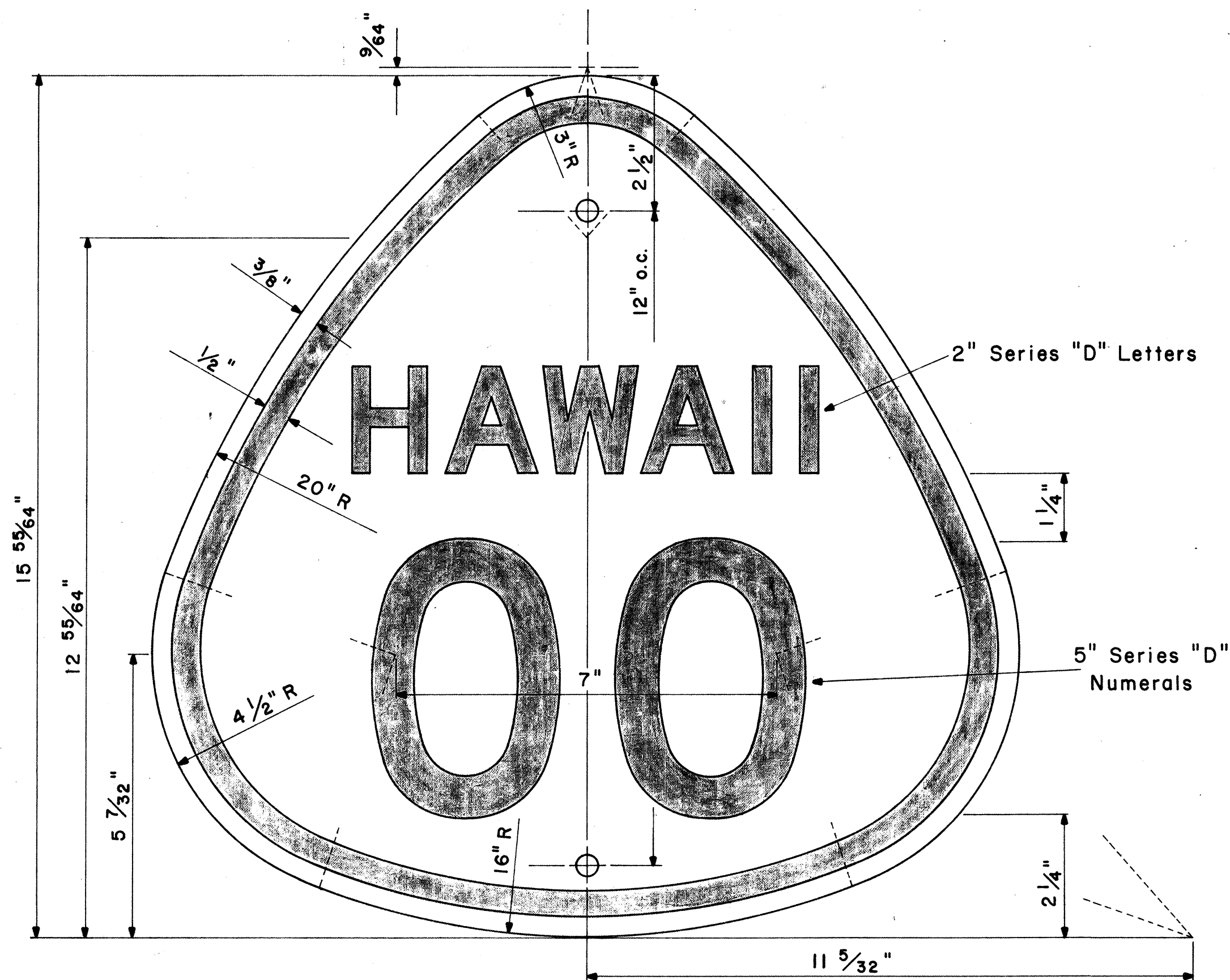


APPROVED: DATE: 1/10/67
DIRECTOR OF TRANSPORTATION

DECEMBER 8, 1964
REVISED: FEBRUARY 25, 1964

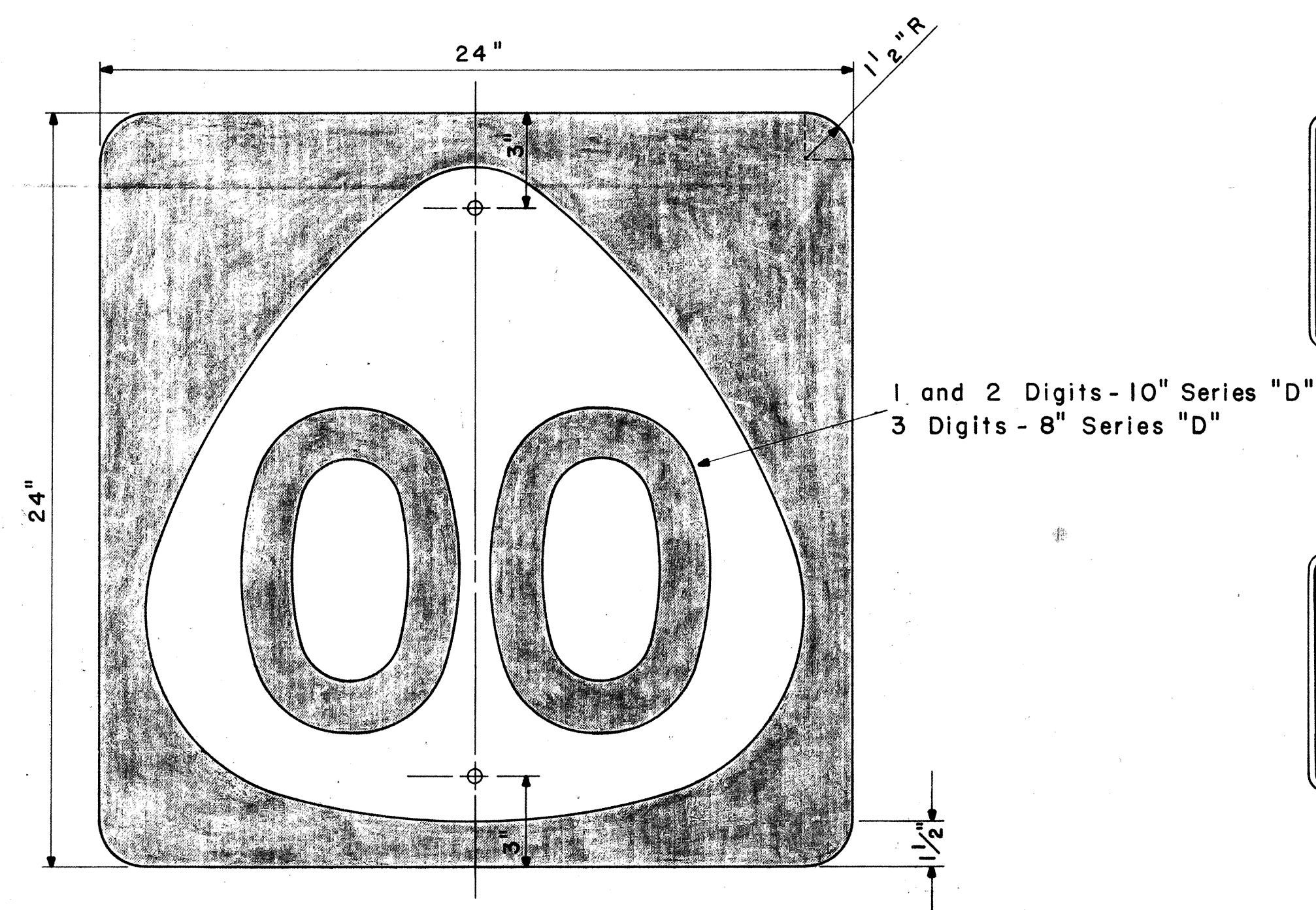
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
F.A. MARKER
AND
MISCELLANEOUS SIGN
DETAILS
Scale: As Shown

SHEET No. 7 OF 9 SHEETS



STATE ROUTE MARKER
MI-3(00)

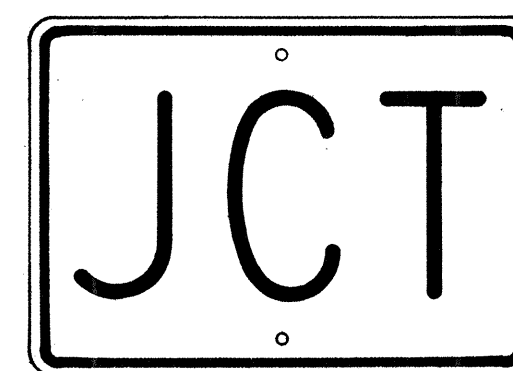
Scale: $\frac{1}{2}$ " = 1"



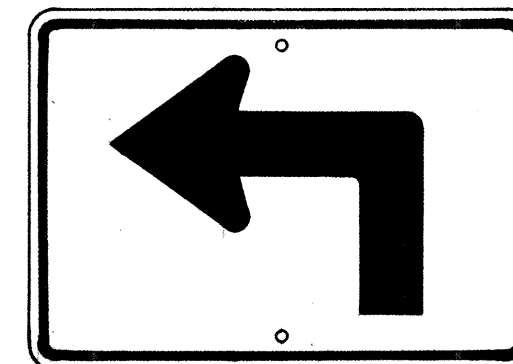
STATE ROUTE MARKER
MI-4(00)

Scale: $\frac{1}{4}$ " = 1"

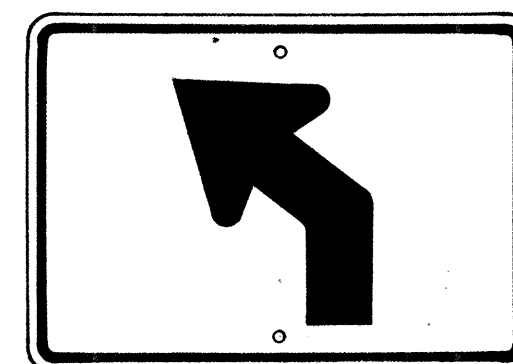
NOTE:
Multiply all dimensions of State Route Marker MI-3 by 1.3 for the dimensions of the shield for MI-4.



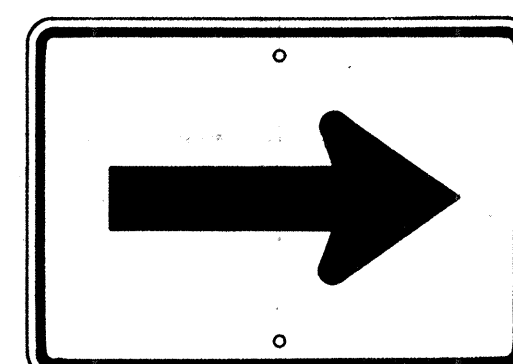
M2-1
21" x 15"



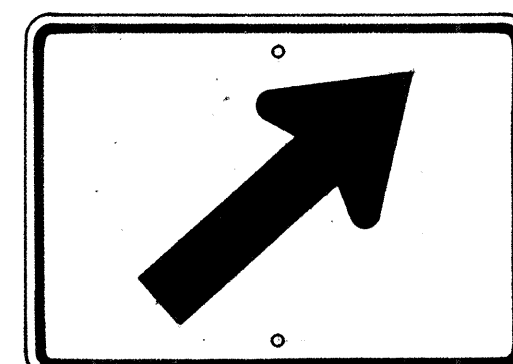
M3-1-L
* M3-1-R
21" x 15"



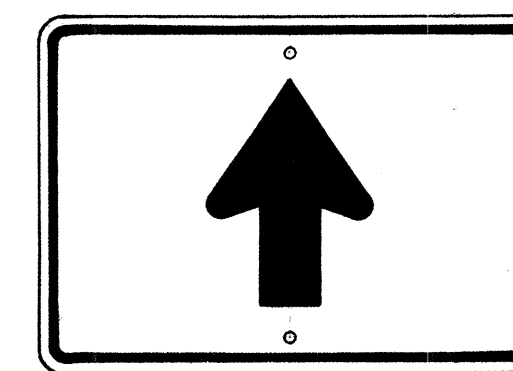
M3-2-L
* M3-2-R
21" x 15"



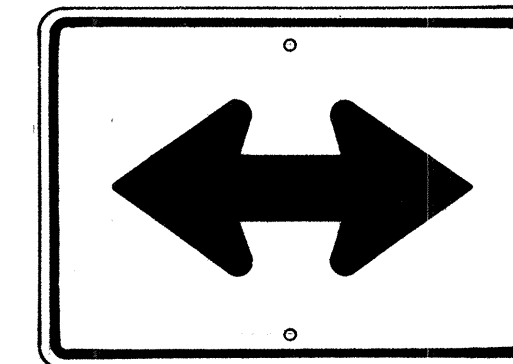
M4-1
21" x 15"



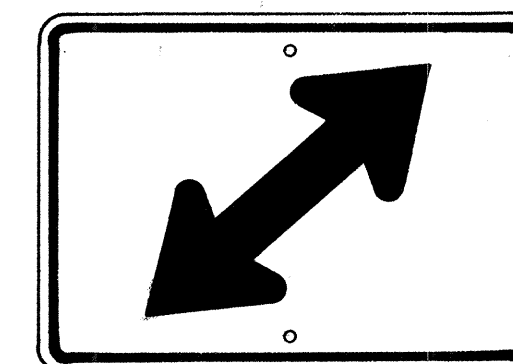
M4-2-R
* M4-2-L
21" x 15"



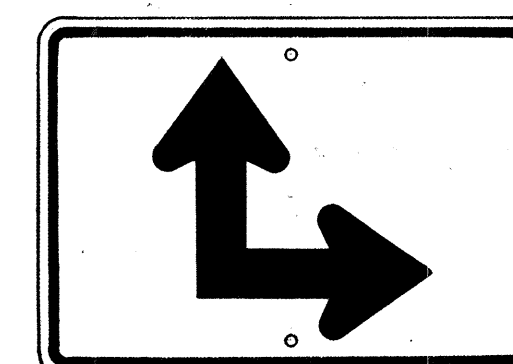
M4-3
21" x 15"



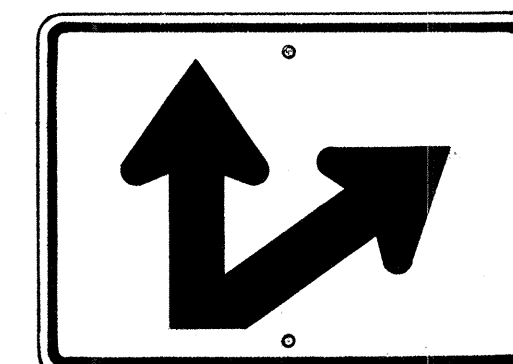
M4-4
21" x 15"



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



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

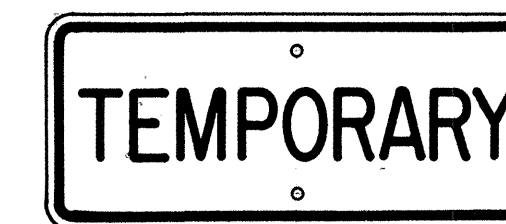


M4-7-R
* M4-7-L
21" x 15"

AUXILIARY MARKERS

Scale: $\frac{1}{8}$ " = 1"

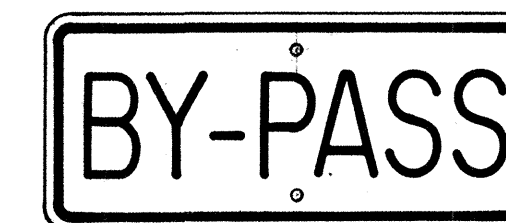
* NOTE:
Signs shall be similar but opposite in direction.



M5-1
21" x 9"



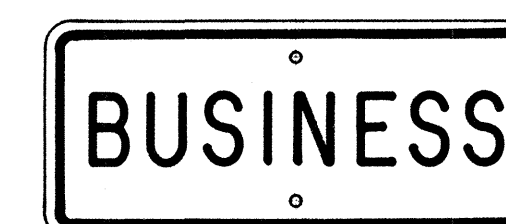
M5-2
21" x 9"



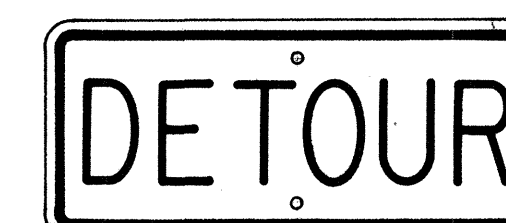
M5-3
21" x 9"



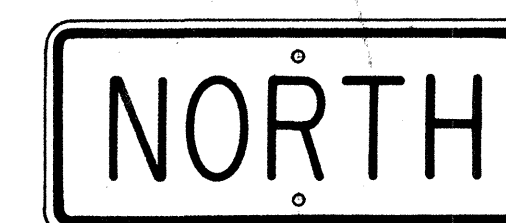
M5-4
21" x 9"



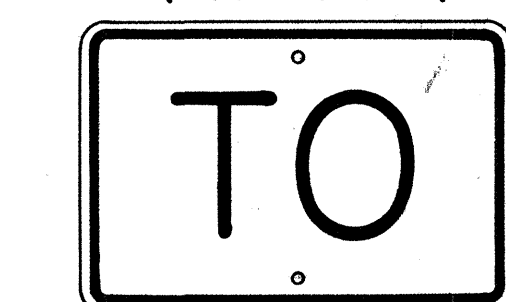
M5-5
21" x 9"



M5-6
21" x 9"



M6-1-N
21" x 9"
(See Note 6)



M7-1
18" x 12"

GENERAL NOTES

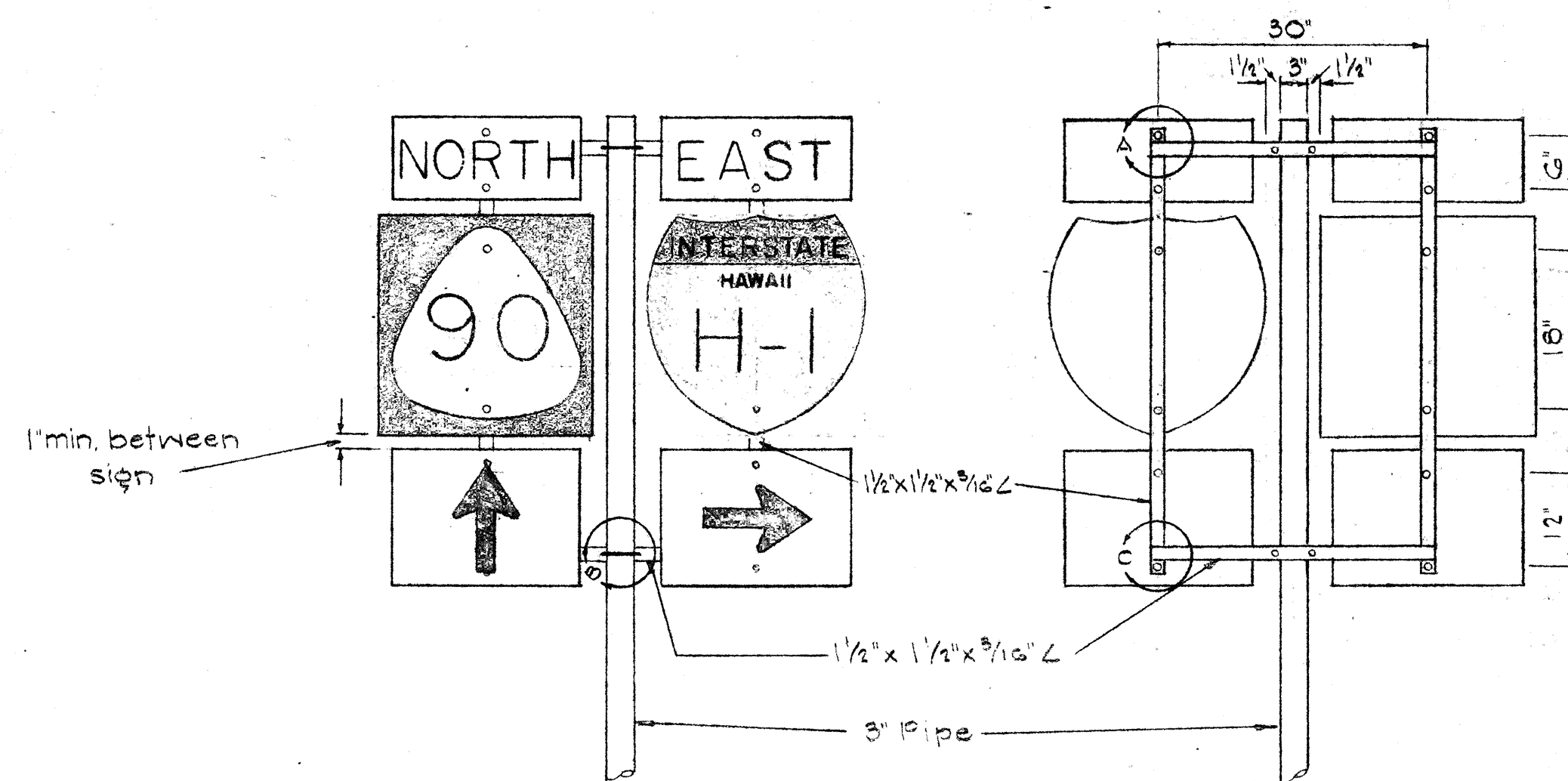
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
- 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 $\frac{3}{8}$ " 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 "1" (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.

ORIGINAL PLAN
DATE
DRAWN BY
CHECKED BY
NOTE BOOK
QUANTITIES BY
No.

APPROVED: _____ DATE: _____
DIRECTOR OF TRANSPORTATION

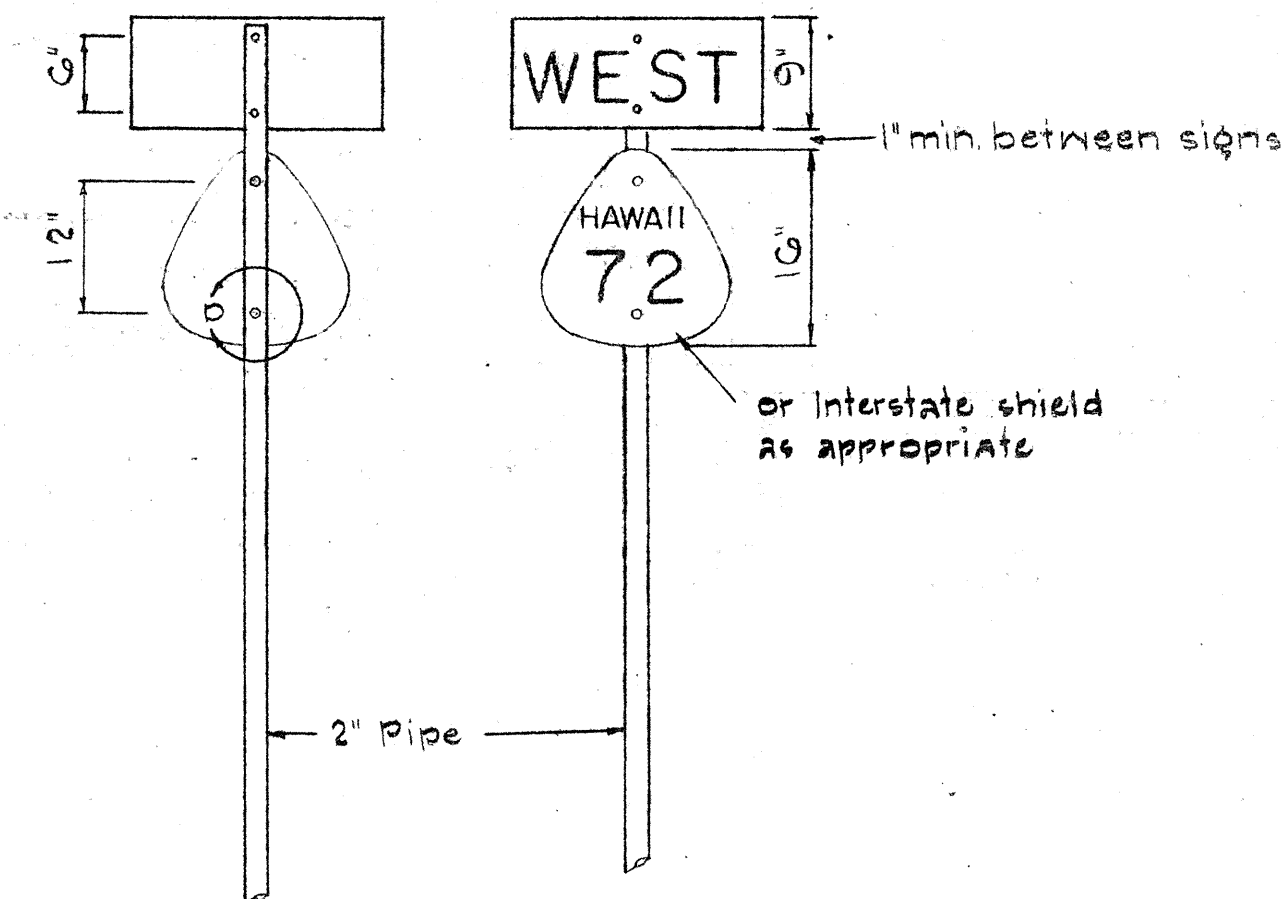
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
STATE ROUTE MARKERS
AND
AUXILIARY MARKERS
Scale: As Noted
SHEET No 8 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0341(3)	1966	16	31



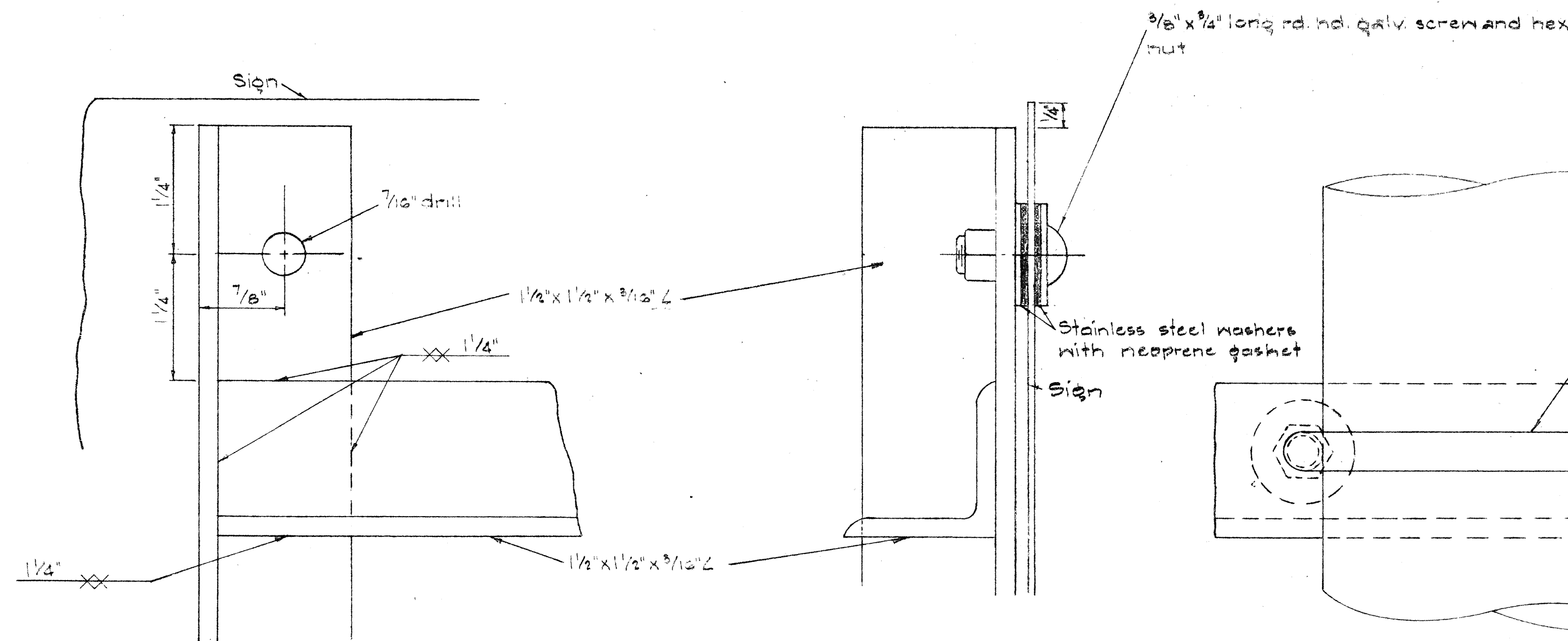
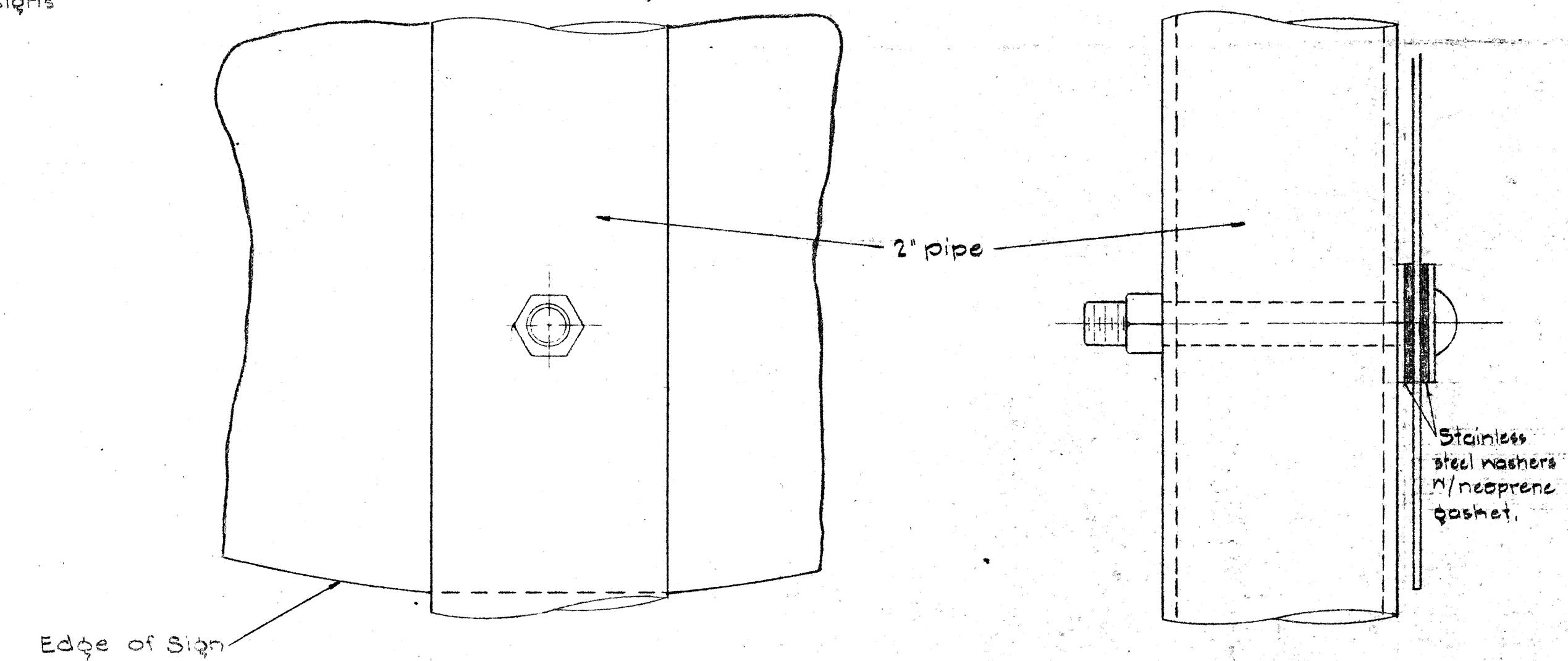
TYPE "B" ASSEMBLY
NOT TO SCALE

NOTE:
Minimum clearance between signs shall be 1 inch. (Larger clearances shall be in multiples of 1 inch.)



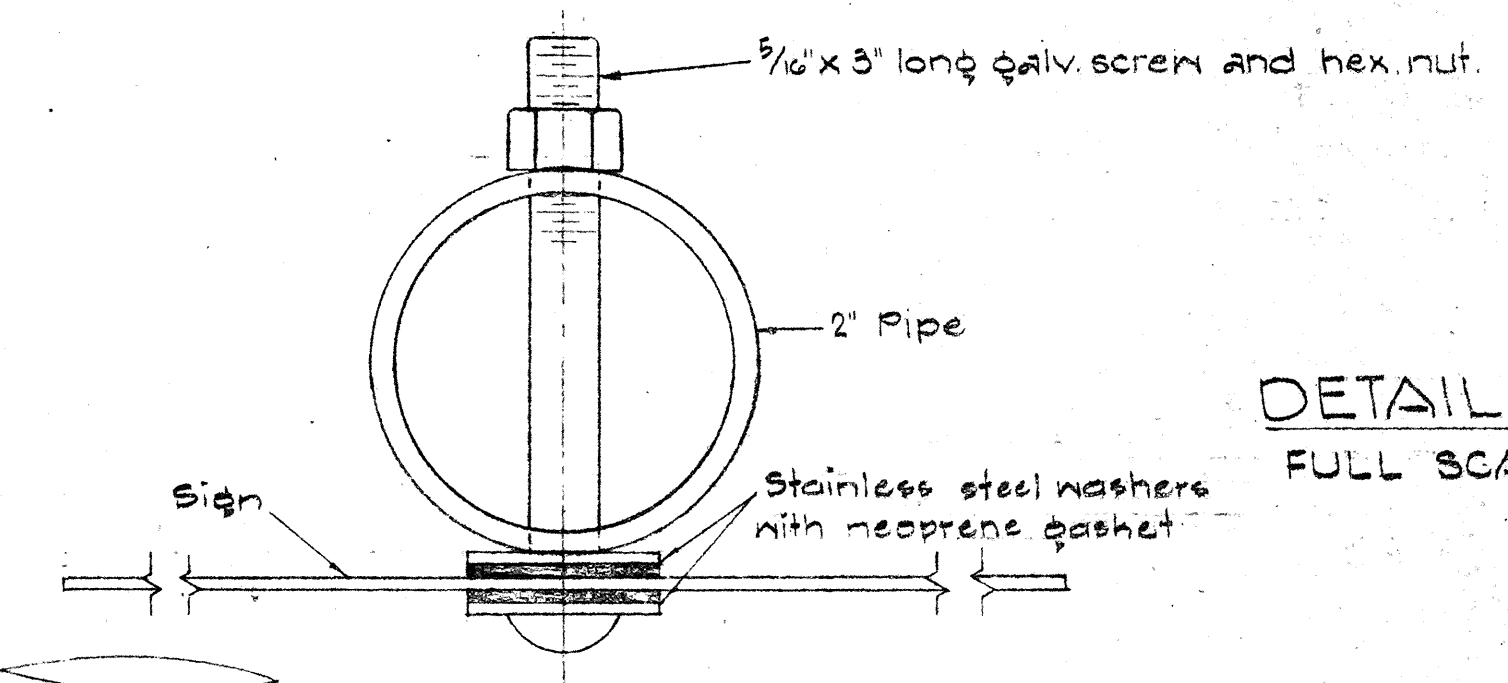
TYPE "A" ASSEMBLY
NOT TO SCALE

NOTE:
Use 2" pipe for Type "A" Assembly.
Use 3" pipe for Type "B" Assembly.

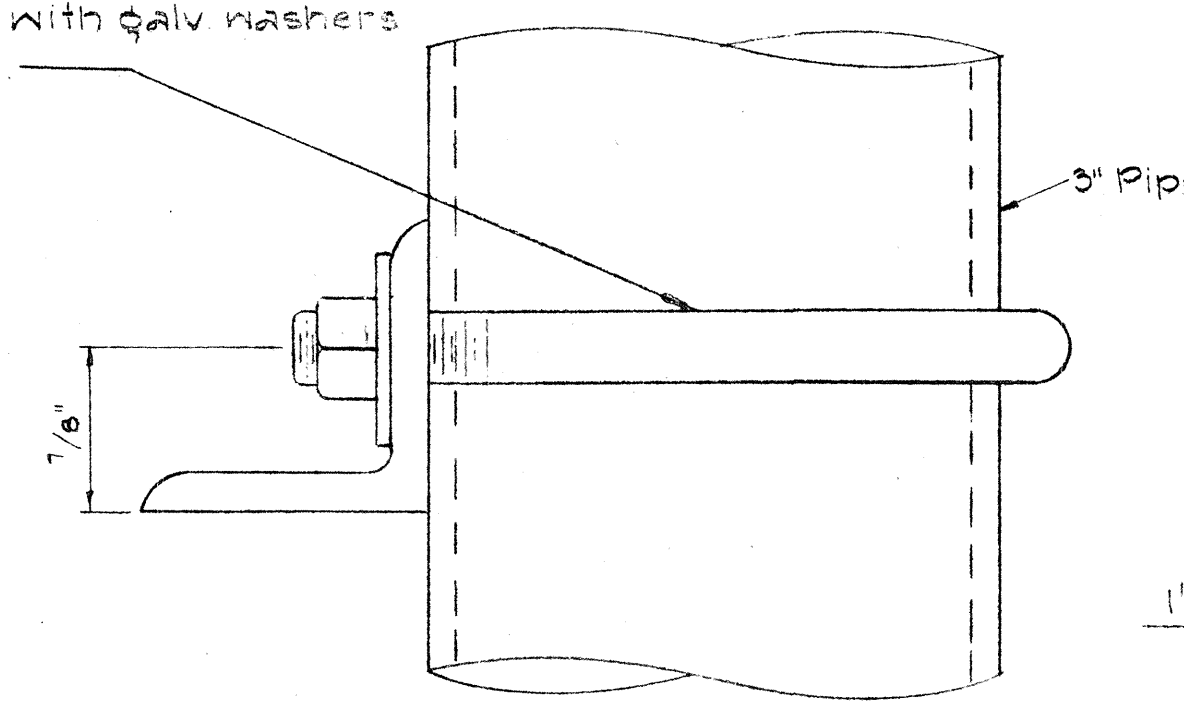


DETAIL "A"
FULL SCALE

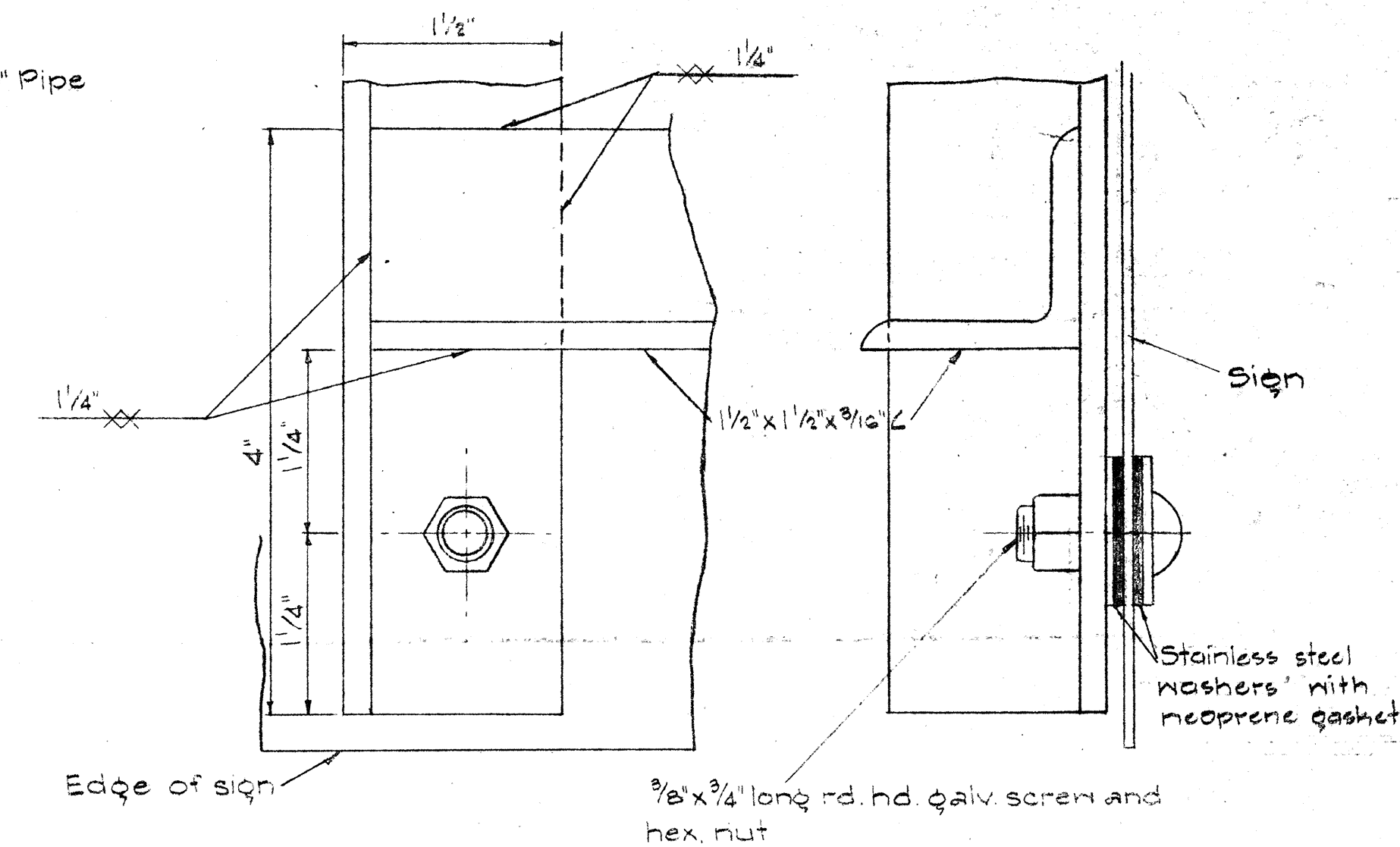
3/8" galvanized U-bolt and hex. nut with galv. washers on back.



DETAIL "D"
FULL SCALE



DETAIL "B"
FULL SCALE



DETAIL "C"
FULL SCALE

NOTE:
For height and lateral location of Route Marker Assembly, see Sheet No. _____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS OF
ROUTE MARKER ASSEMBLY

Scale: As Noted

SHEET No. 7 OF 7 SHEETS

DATE	BY
DESIGNED BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	