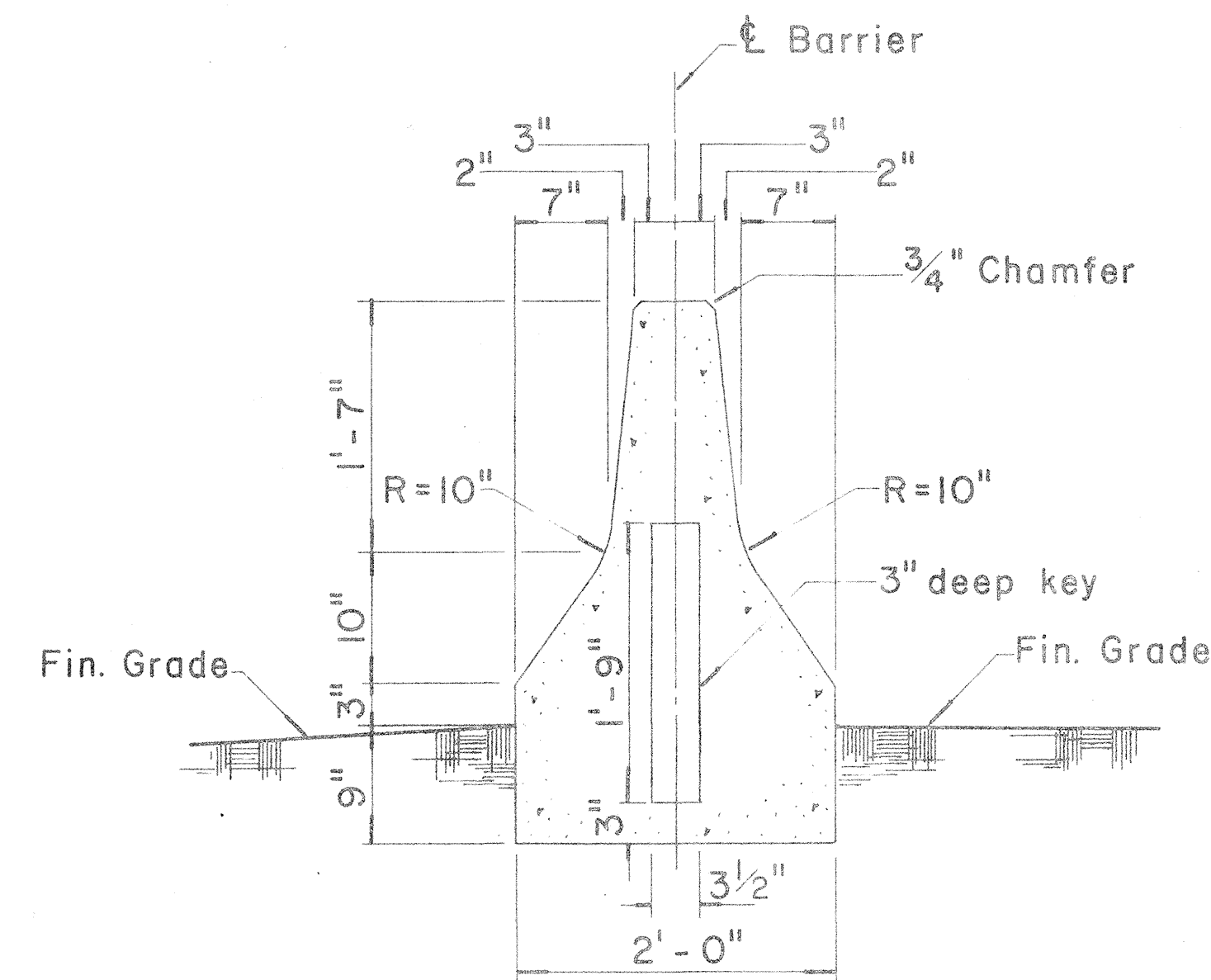
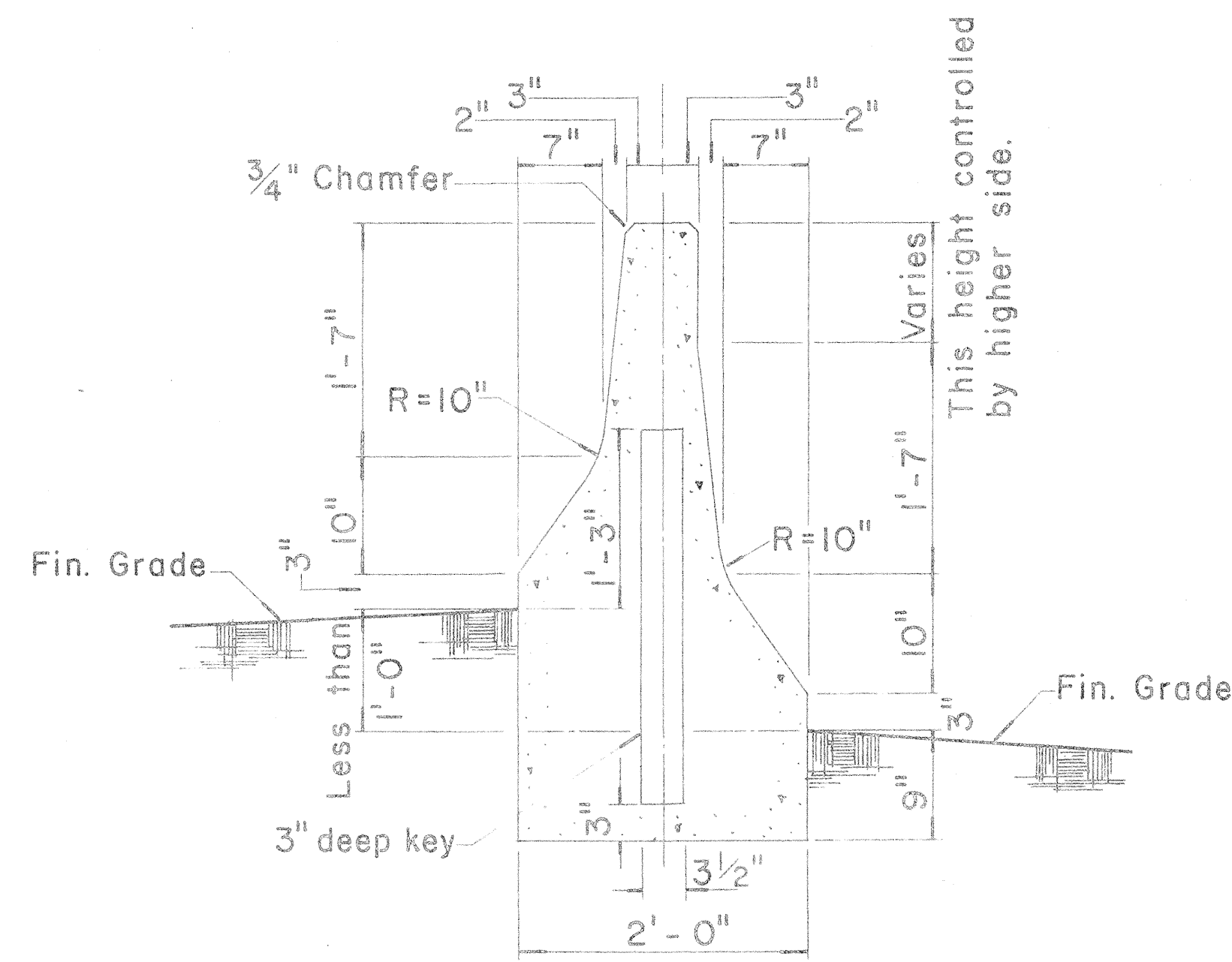


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(B)	1970	17	41



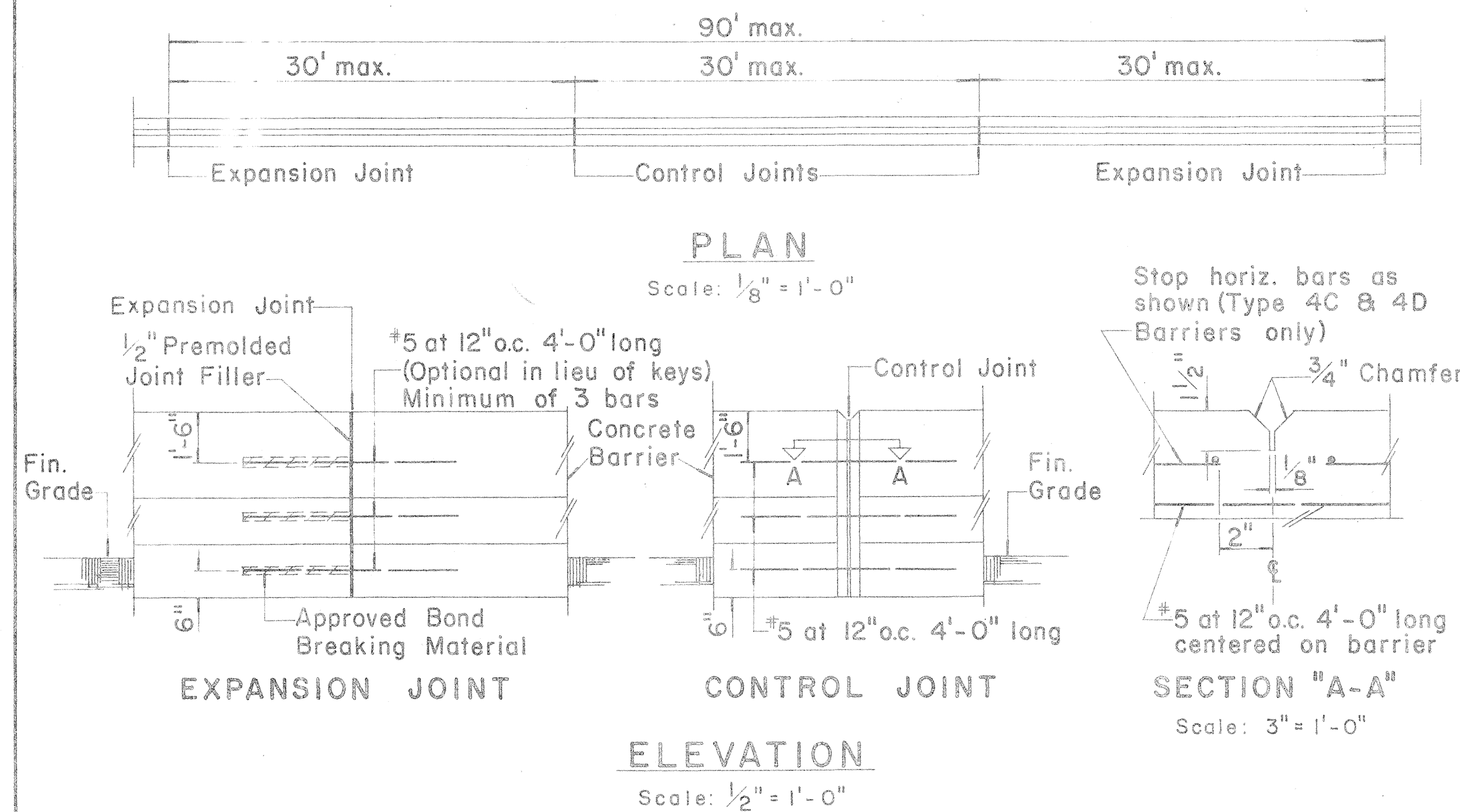
TYPE 4A

Scale: 1" = 1'-0"



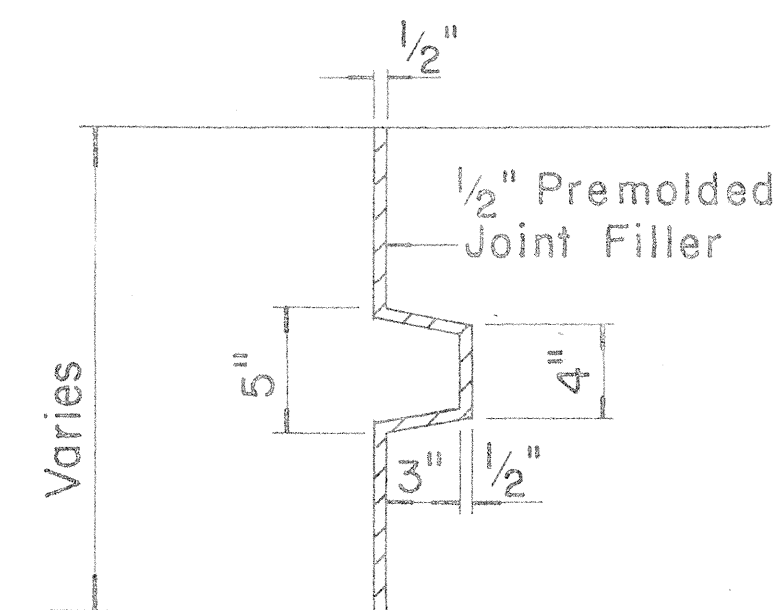
TYPE 4B

Scale: 1" = 1'-0"



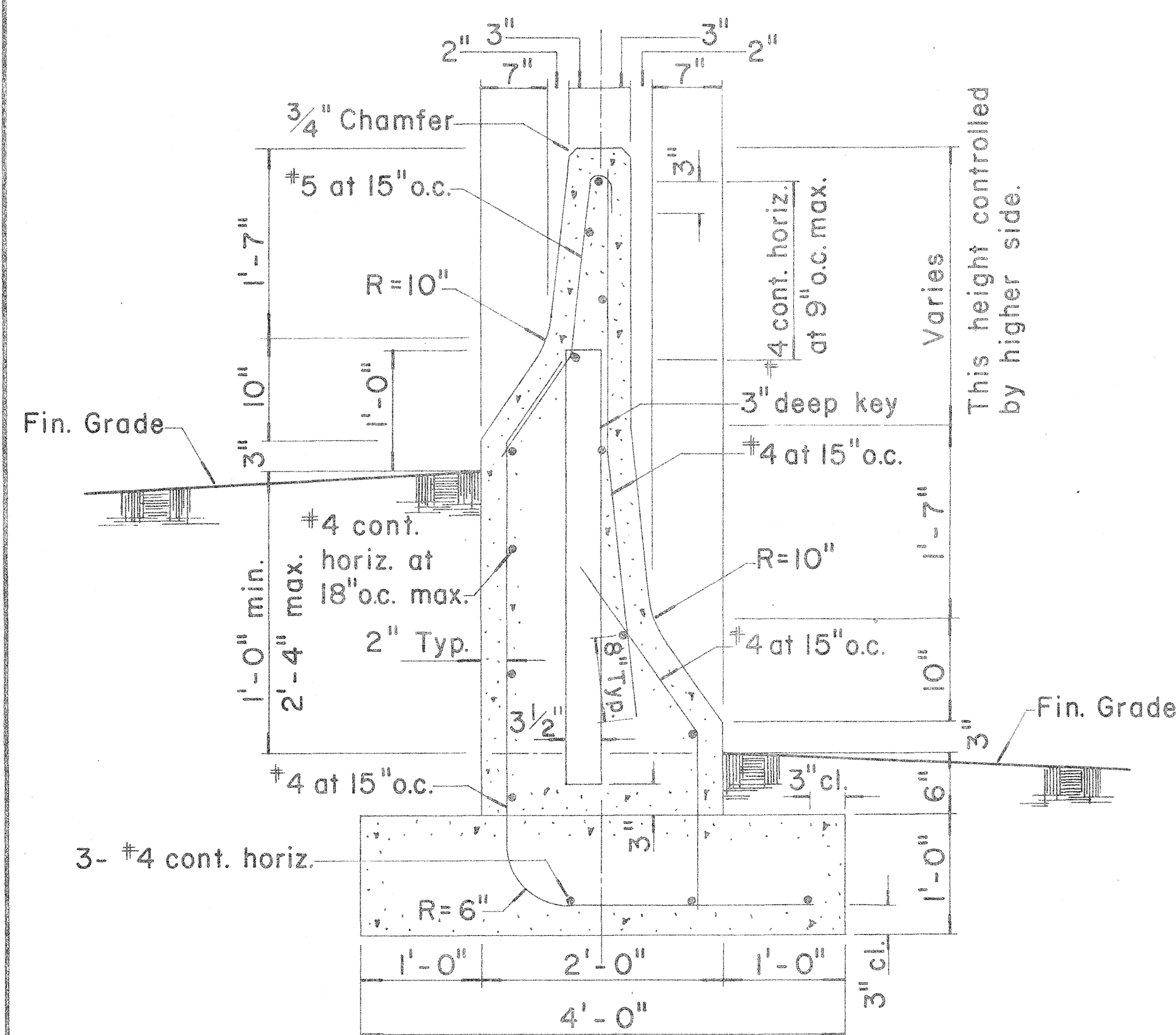
GENERAL NOTES

1. Precast Rigid Barrier Guard Rail may be installed as an option to cast-in-place Type 4 Rigid Barrier Guard Rail. Contractor shall submit shop drawings to Engineer for approval.
2. Expansion Joints shall be constructed at ninety-foot (90 ft.) maximum intervals and at existing expansion joints of structures. (Use 1/2" premolded joint filler, incidental to Type 4 Rigid Barrier Guard Rail). Control Joints shall be placed between expansion joints at 30' maximum. Shear keys shall be required at all construction joints.
3. The exterior surface and vertical alignment of the Type 4 Rigid Barrier Guard Rail shall be constructed to give a uniform and presentable appearance. Variation of more than 1/4" in 20' max. and 1/2" in 40' or more will be considered objectionable. The Engineer shall determine the acceptability of the work. During the course of the work, samples may be tested and measurements made to establish whether or not the specified values or dimensions are being met. If the specified values or dimensions are not being met, the Engineer shall determine the degree of the non-conformance, the effect on the serviceability of the project, whether the work be accepted and remain in place and, if so, the amount to be paid for such work, or whether the work shall be removed and replaced or otherwise corrected at the Contractor's expense.



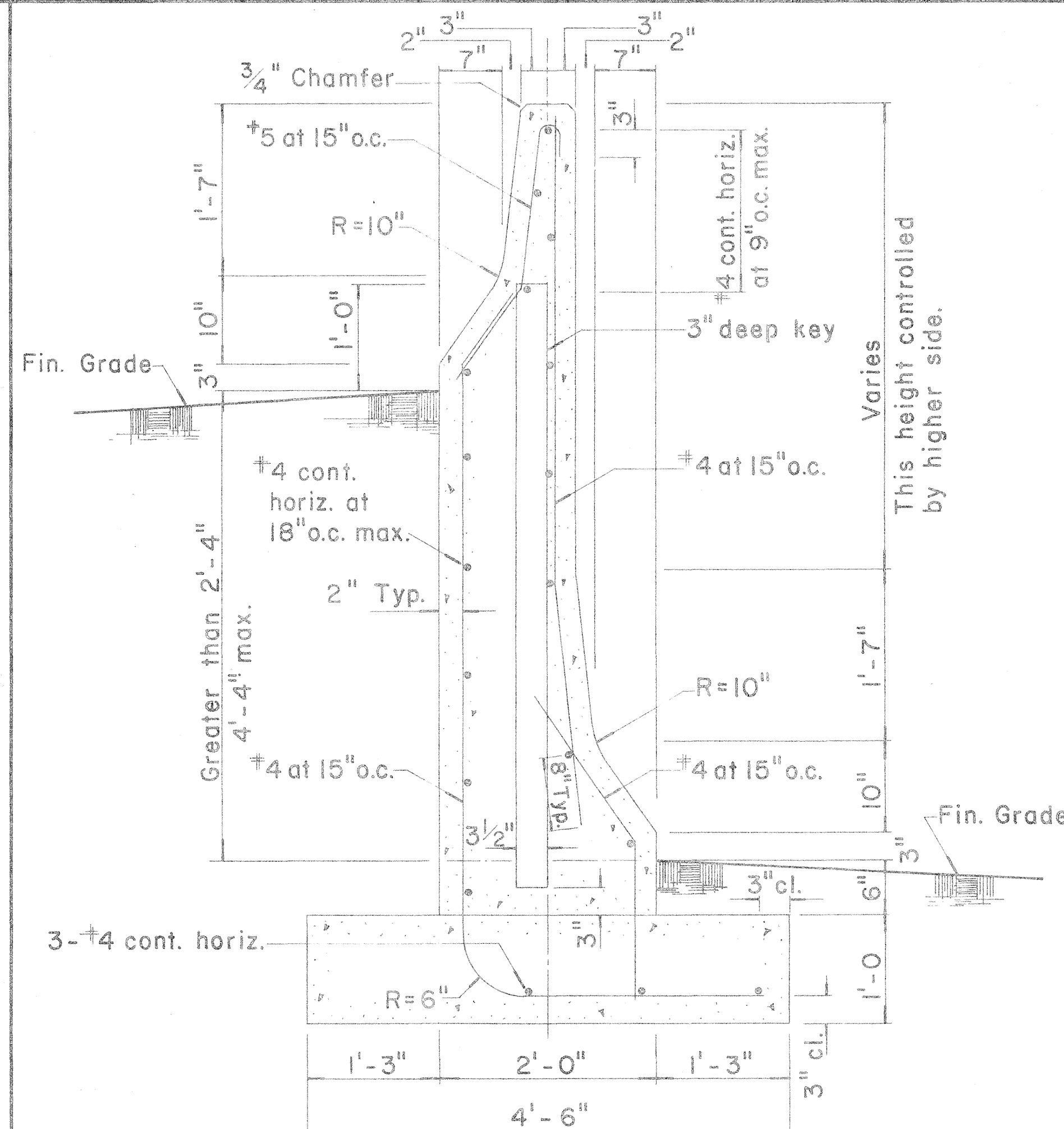
SECTION THRU KEY AT EXPANSION JOINT

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



TYPE 4C

Scale: 1" = 1'-0"



TYPE 4D

Scale: 1" = 1'-0"

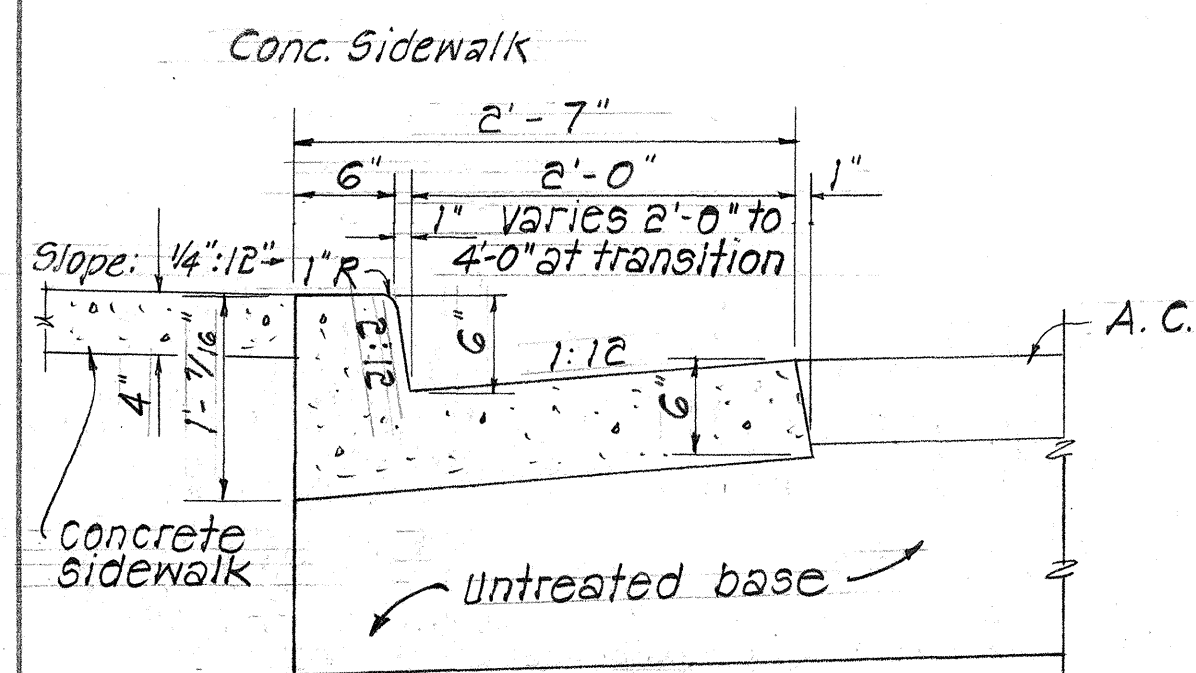
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**STANDARD DETAILS
GUARD RAIL TYPE 4
(RIGID BARRIER)**

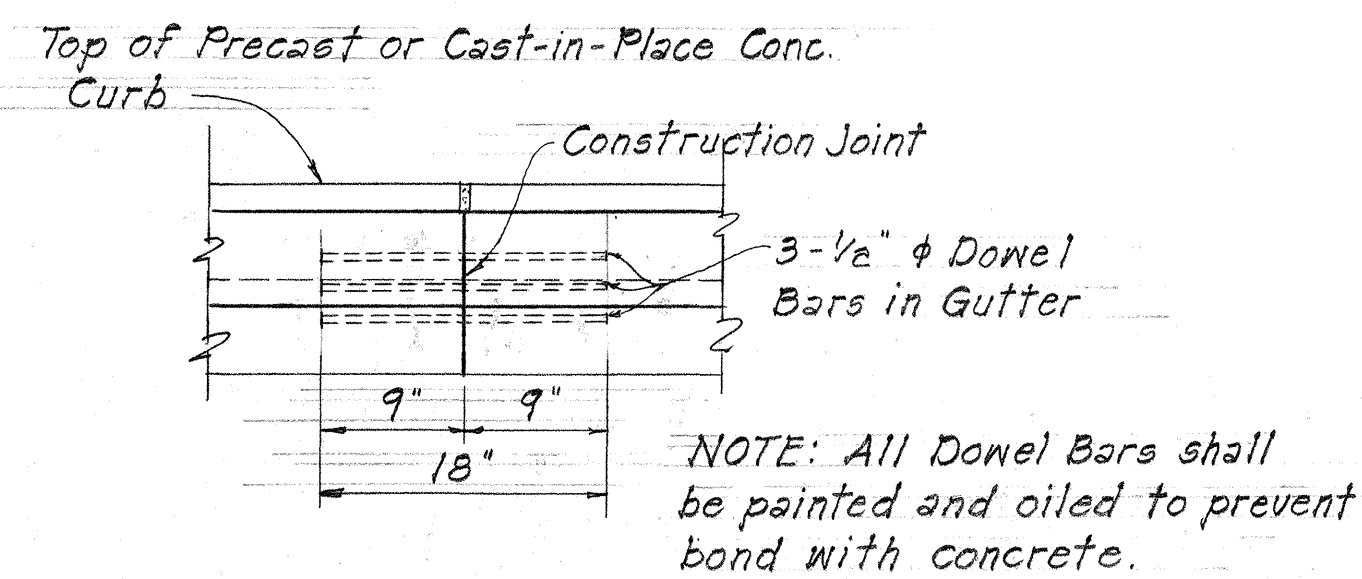
Scale: As Shown Oct. 1969

SHEET No. 17 OF 15 SHEETS

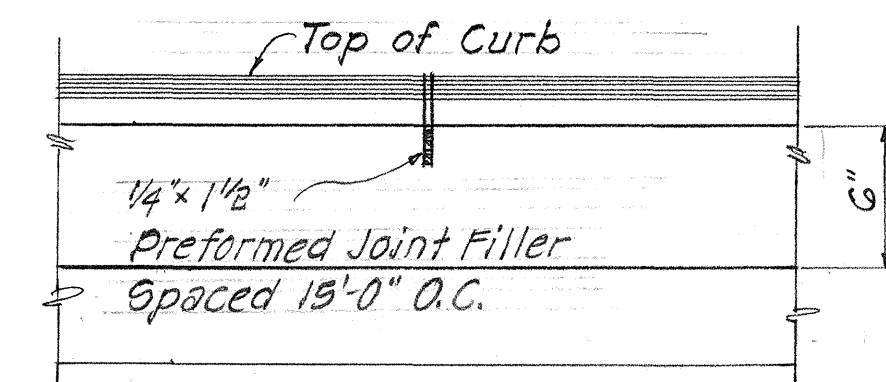
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	U-092-1(8)	1970	18	41



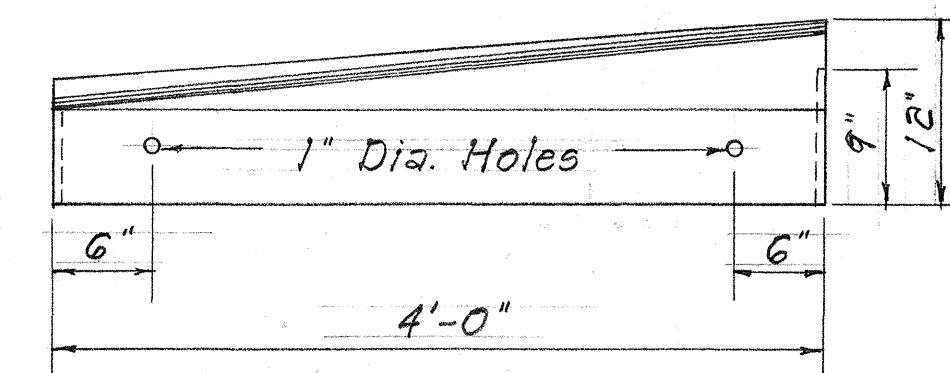
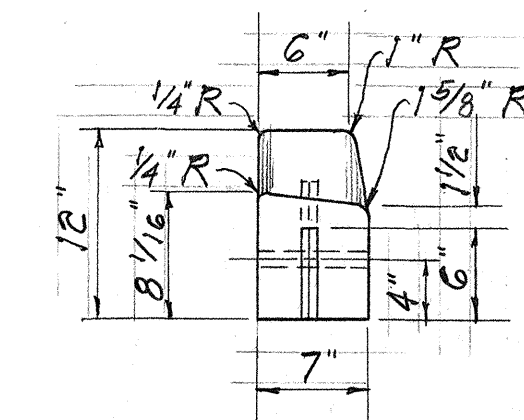
TYPE "2DG" CURB & GUTTER



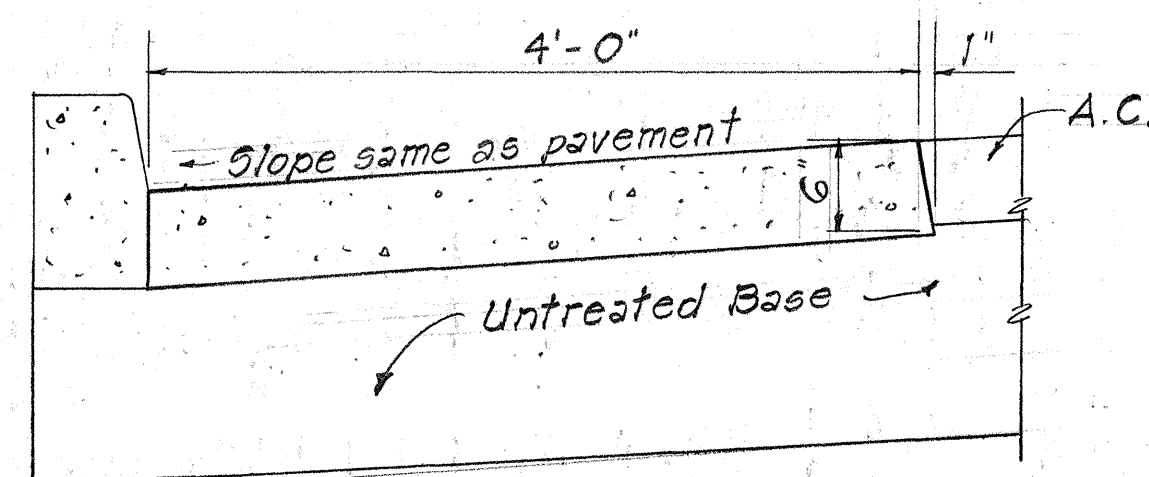
ELEVATION "A-A"



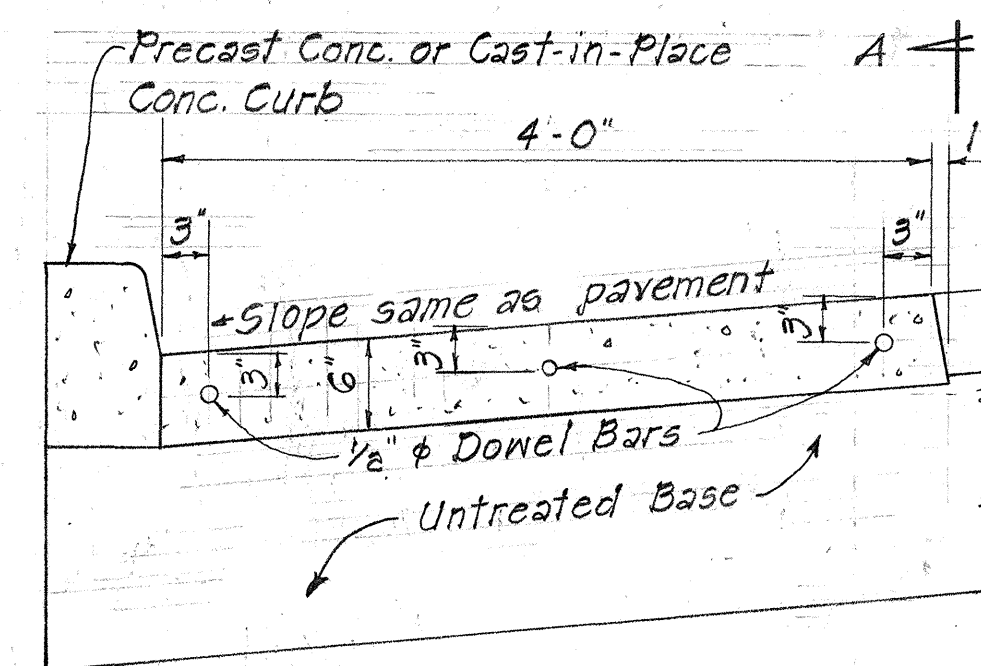
SECTION "A-A"
Scale: $1\frac{1}{2}" = 1'-0"$



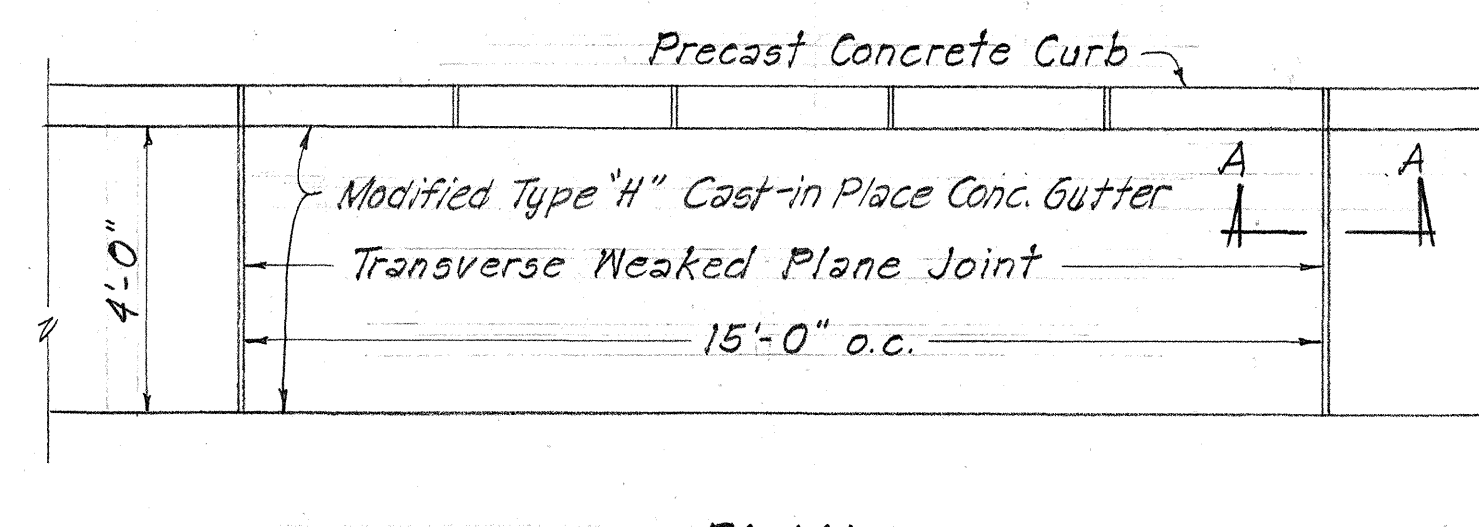
PRECAST CONCRETE DROP CURB
Scale: 1"=1'-0"



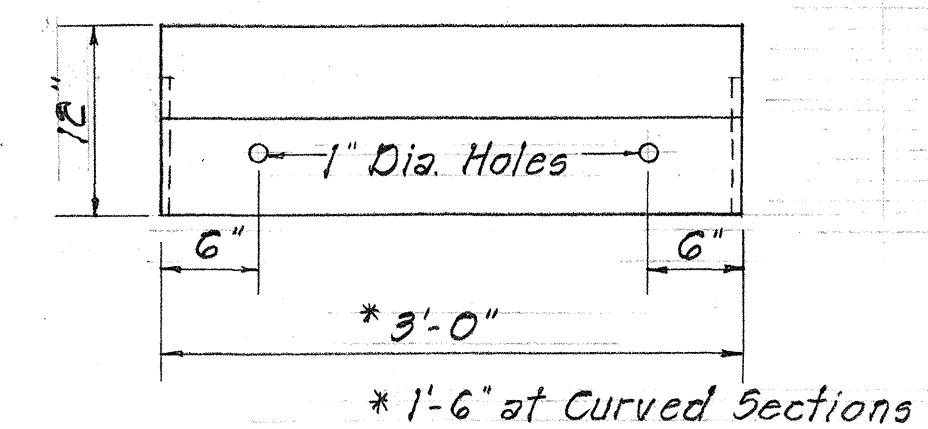
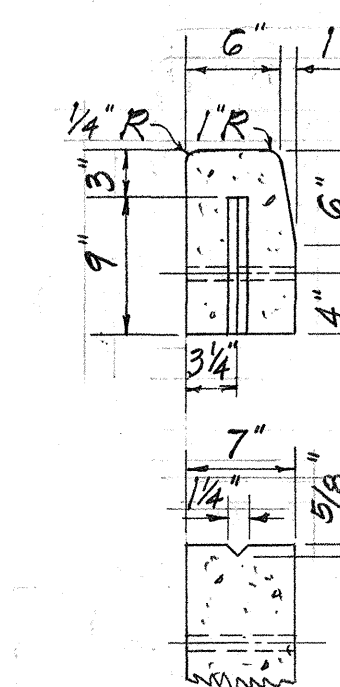
MODIFIED TYPE "2H" GUTTER



CONSTRUCTION JOINT DETAIL
FOR MODIFIED TYPE "2H"
CAST-IN-PLACE GUTTER
Scale: 1" = 1'-0"



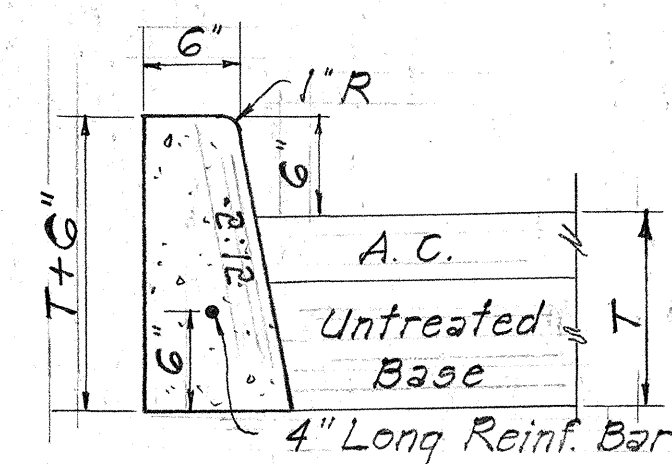
PLAN
Scale: $\frac{3}{8}" = 1'-0"$



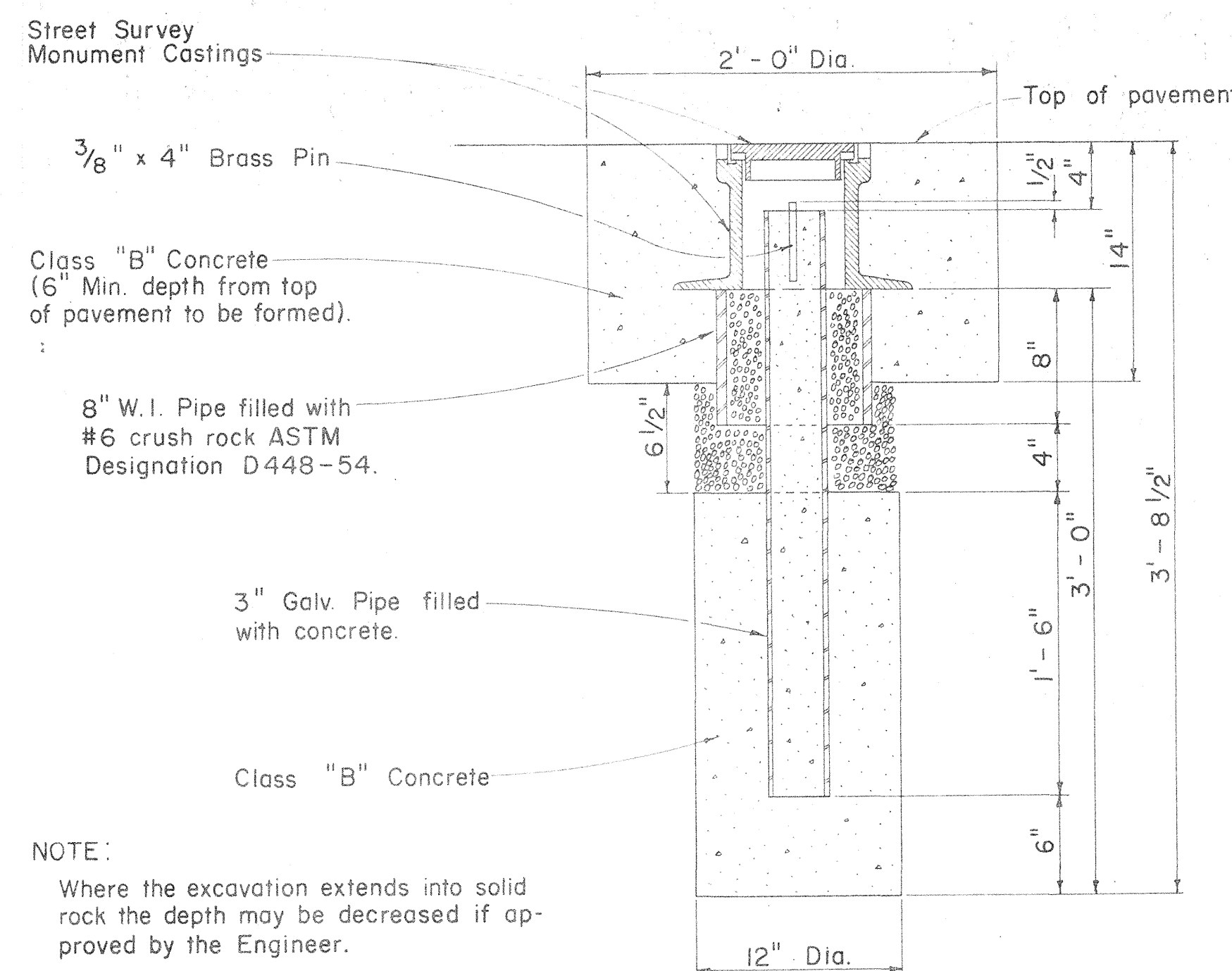
PRECAST CONCRETE CURB
Scale: 1" = 1'-0"

GENERAL NOTES:

1. Concrete for all Curb and/or Gutters shall be Class A.
2. Except for Precast Concrete Curbs, all Curbs and Gutters shall be Cast-in-Place.



TYPE "2D" CURB

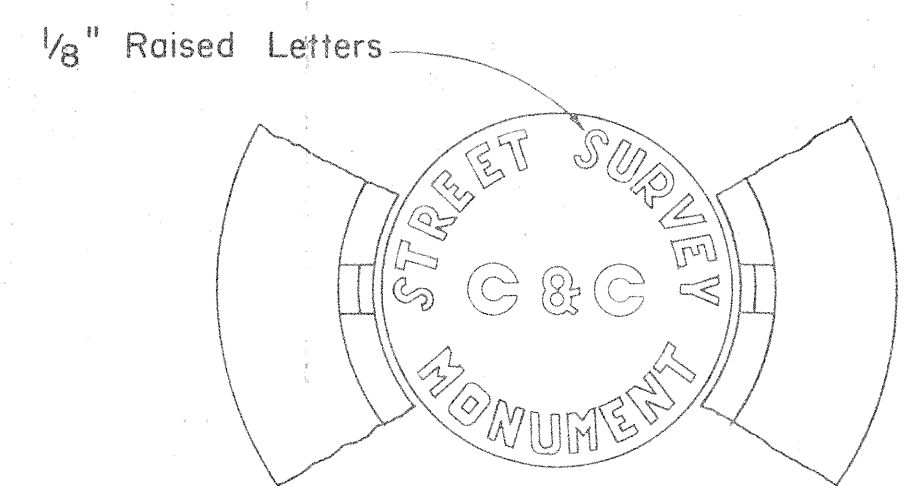


NOTE:

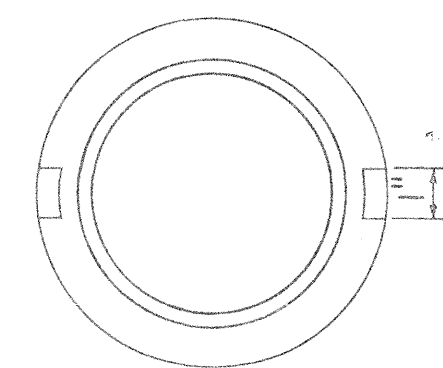
Where the excavation extends into solid rock the depth may be decreased if approved by the Engineer.

STREET SURVEY MONUMENT

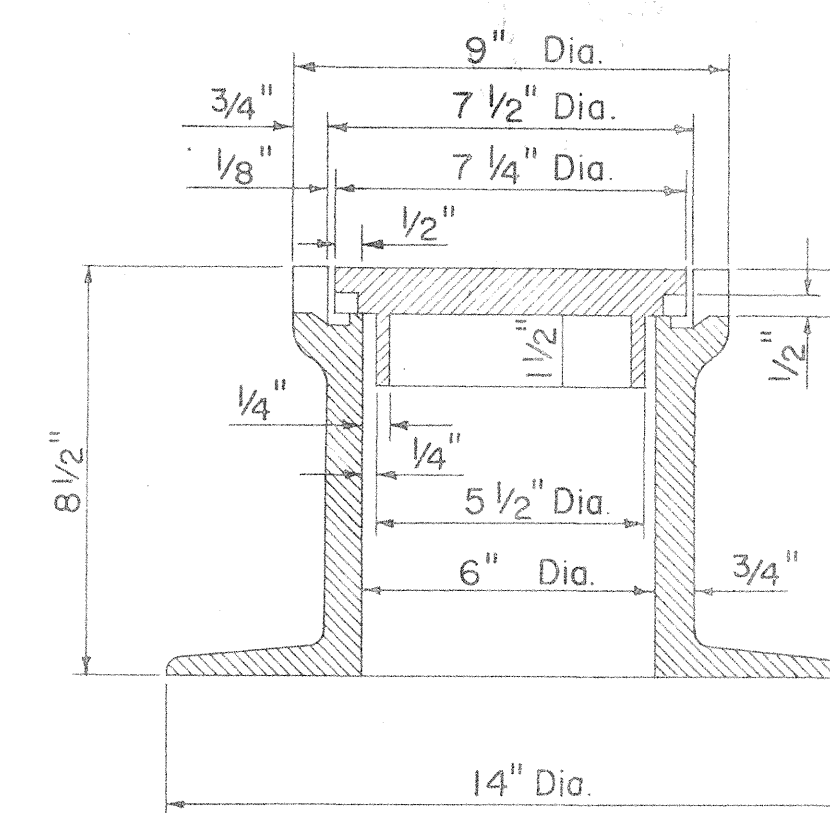
Scale: $1/2'' = 1' - 0''$



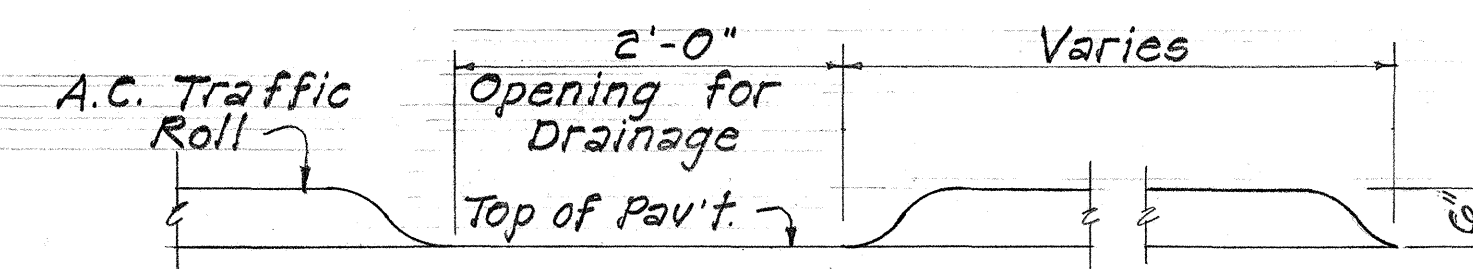
TOP VIEW OF COVER
AND PORTION OF FRAME



BOTTOM OF COVER

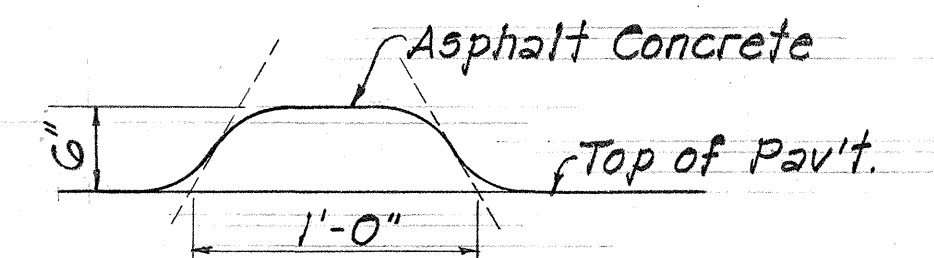


SECTIONAL VIEW OF
FRAME AND COVER

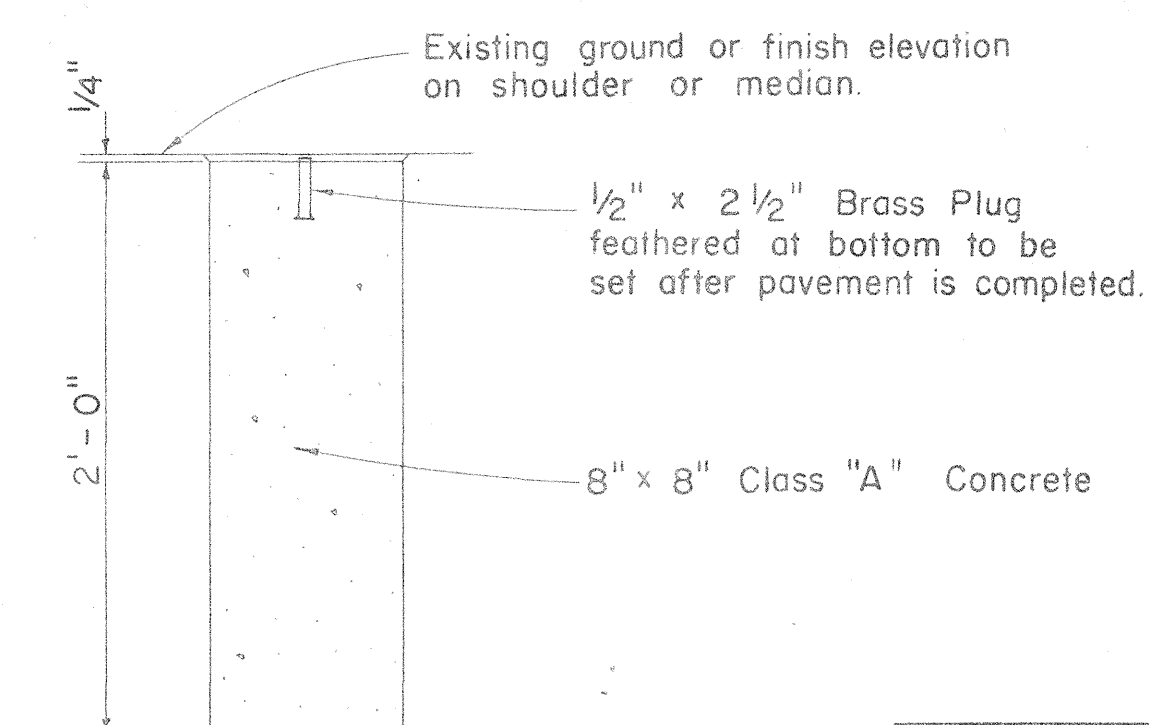


ELEVATION

A.C. TRAFFIC ROLL TYPE "6" CURB
NOT TO SCALE



SECTION



DETAIL FOR
AND REFERENCE
SURVEY MONUMENT

Scale: $1\frac{1}{2}'' = 1' - 0''$

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
SURVEY MONUMENTS,
CURB AND GUTTERS

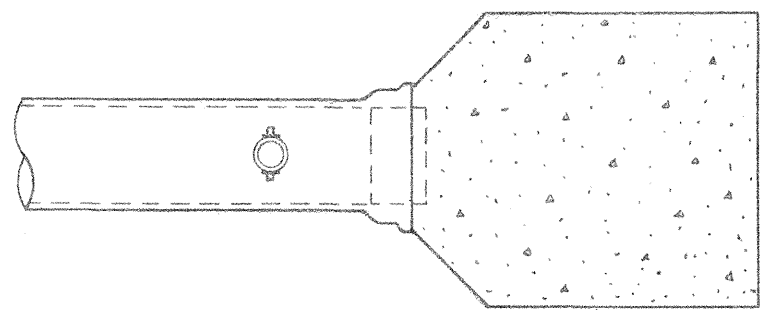
NIMITZ HIGHWAY IMPROVEMENTS
SUMNER STREET TO AWA STREET
PROJECT NO. U-092-1 (8)

SCALE: AS NOTED DATE: MAY 1969

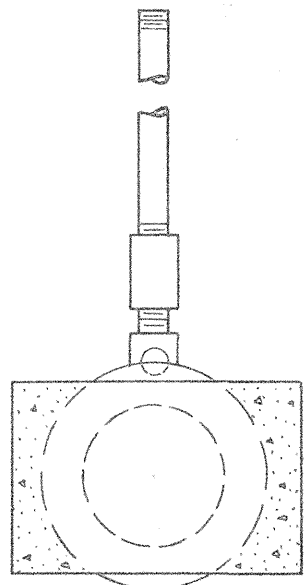
SHEET NO. 2 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	U-092-1(8)	1970	20	41

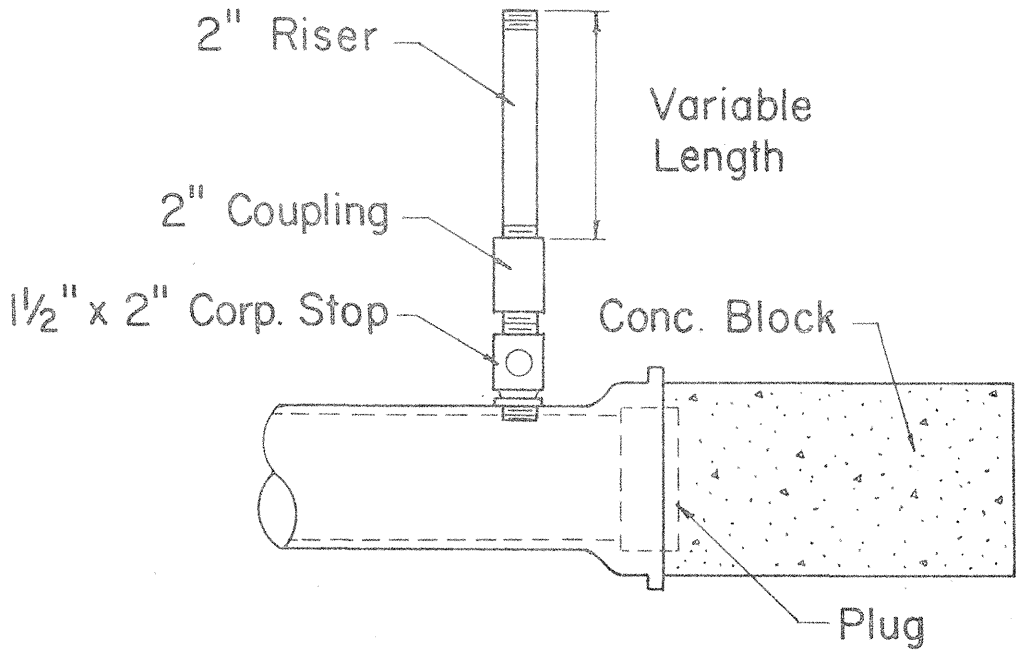
NOTE:
Contractor to furnish 1 1/2" brass plug (Tapered thread) to replace corporation stop upon completion of chlorination.



TOP VIEW



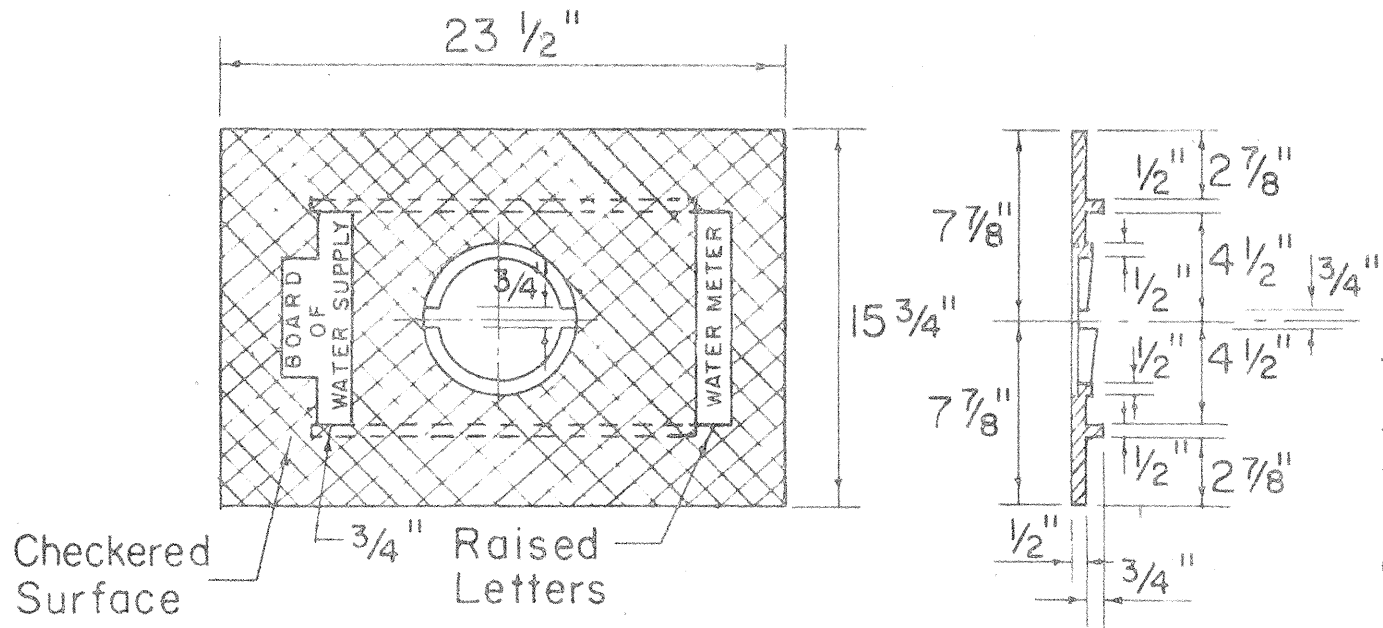
END VIEW



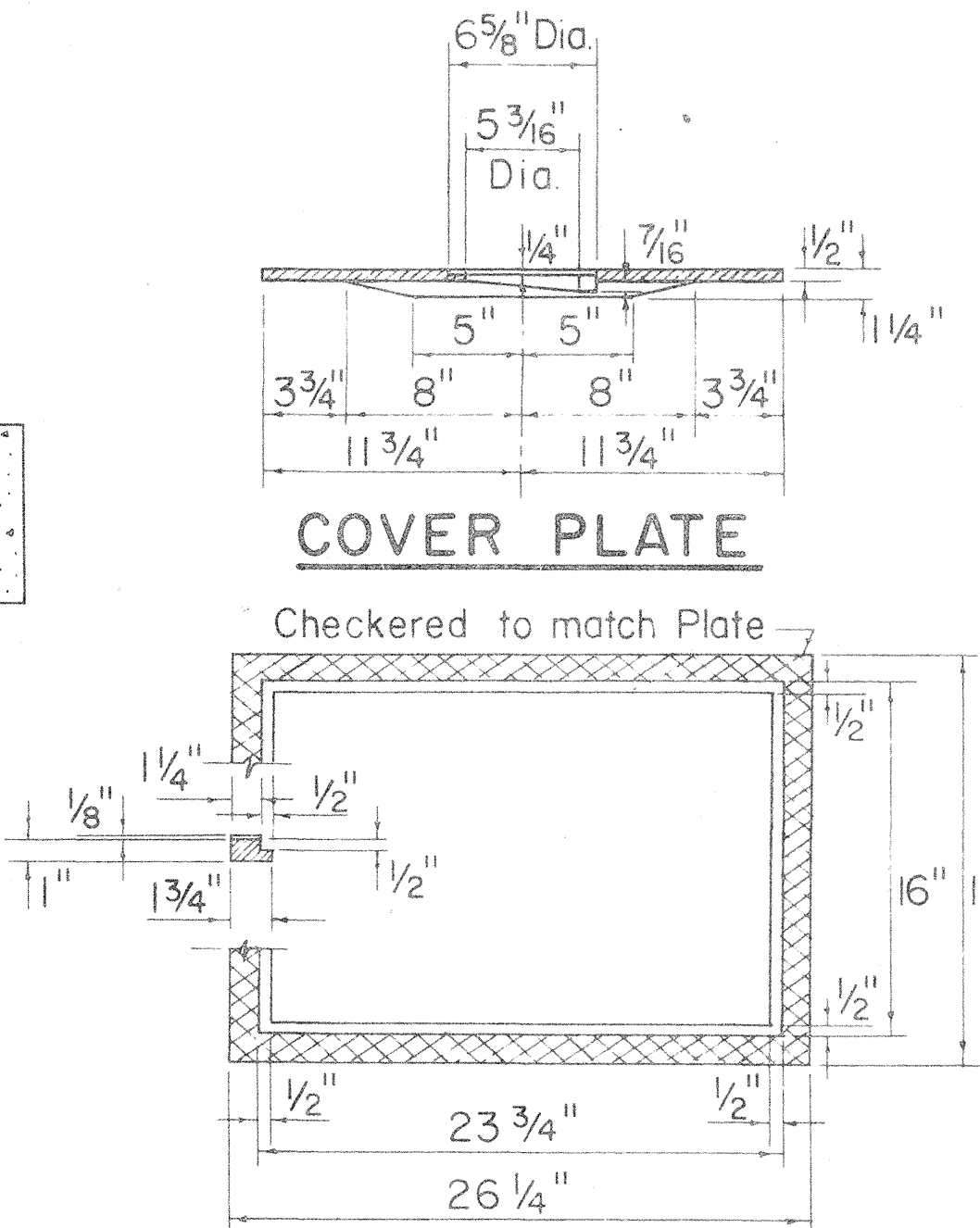
SIDE VIEW

DETAIL OF TEMPORARY 2" CLEANOUT

Not to Scale



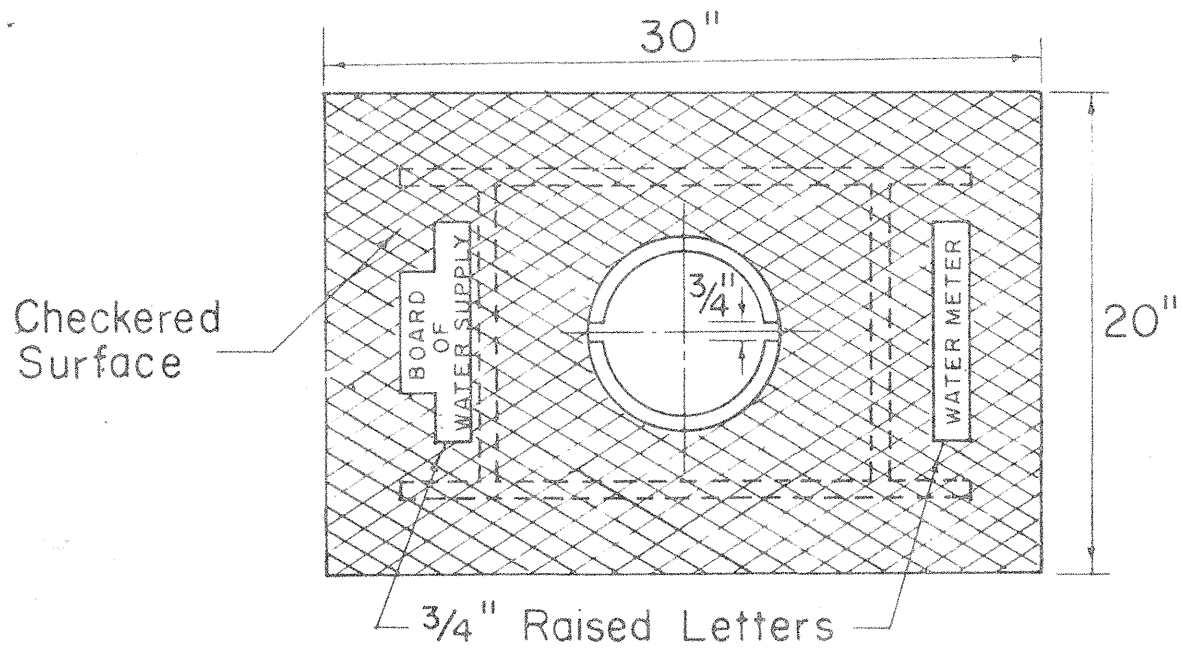
COVER PLATE



FRAME

CAST IRON FRAME AND PLATE TYPE II

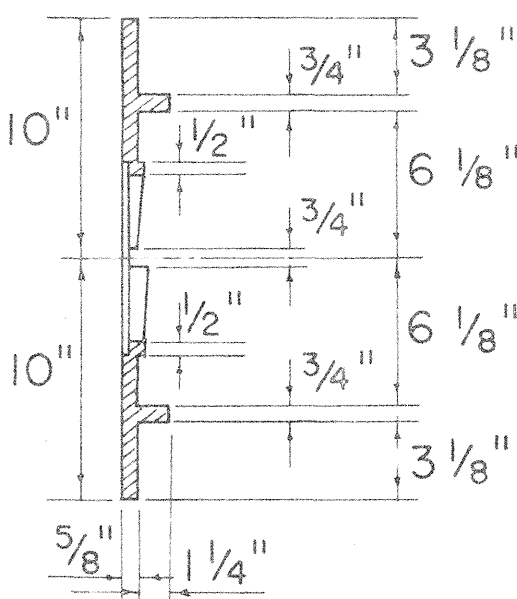
Scale: 1 1/2" = 1'-0"



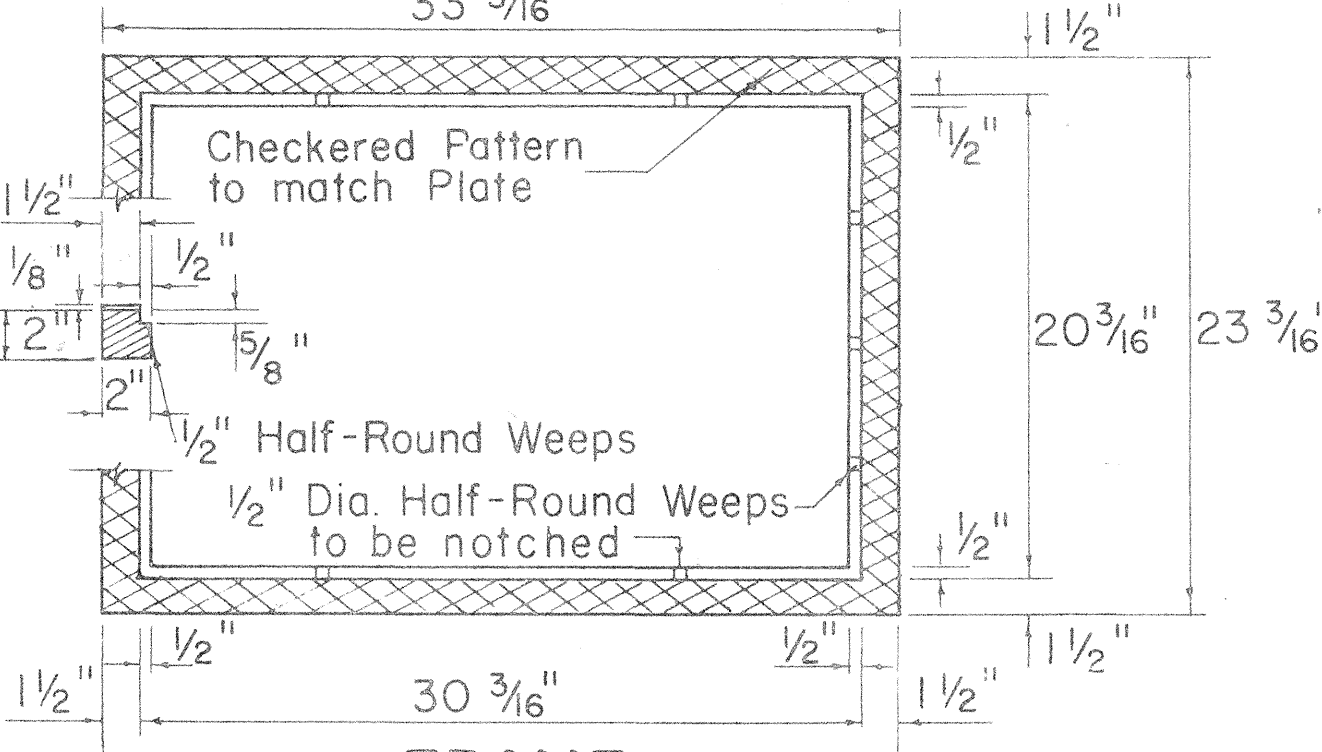
COVER PLATE

CAST IRON FRAME, PLATE AND COVER TYPE III

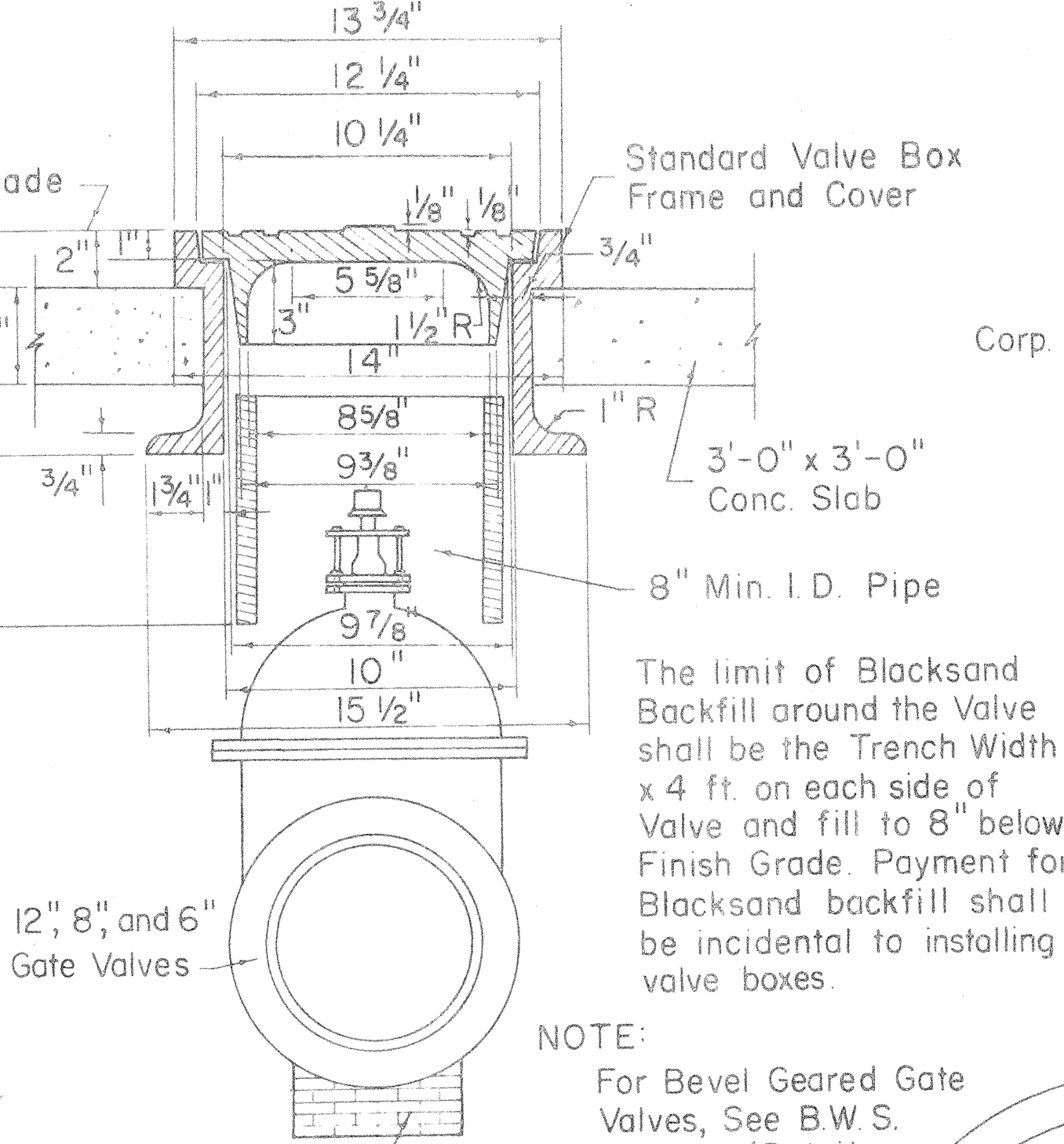
Scale: 1 1/2" = 1'-0"



READING COVER

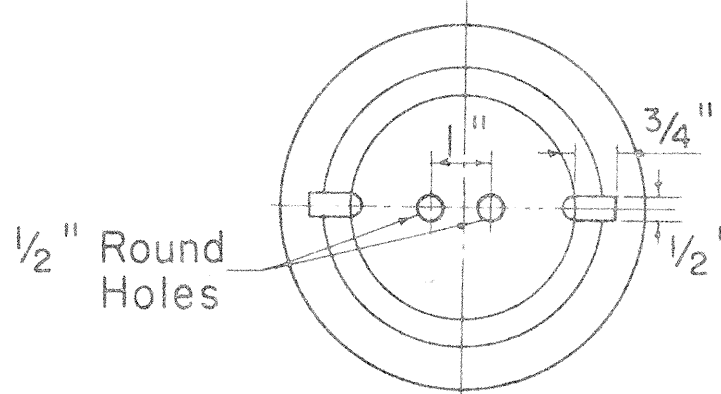
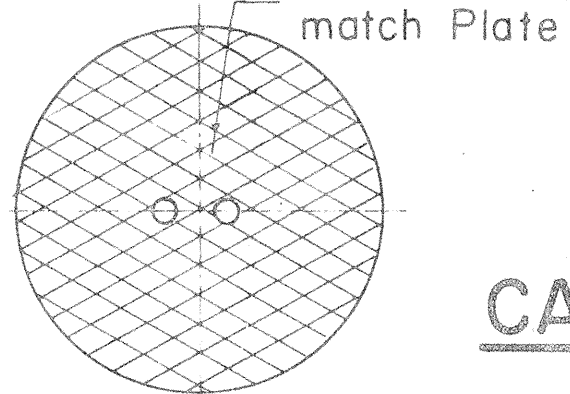


FRAME



INSTALLATION OF VALVE BOX FOR GATE VALVES

Not to Scale

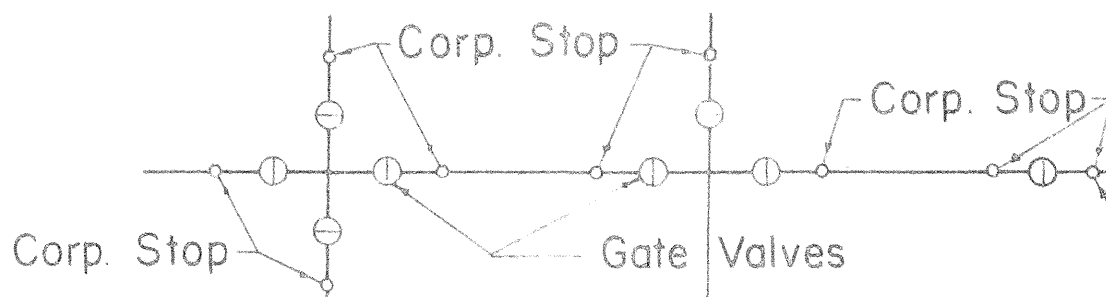


READING COVER

CHECKERED PATTERN

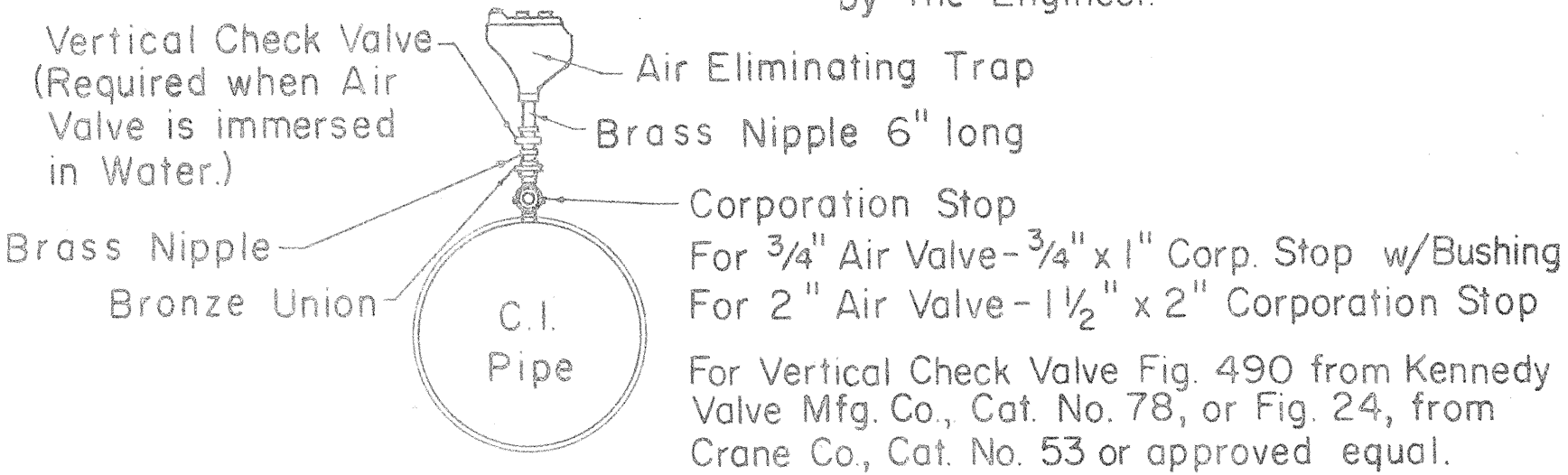
CAST IRON COVER FOR TYPE II FRAME

Not to Scale



CORP. STOP LAYOUT

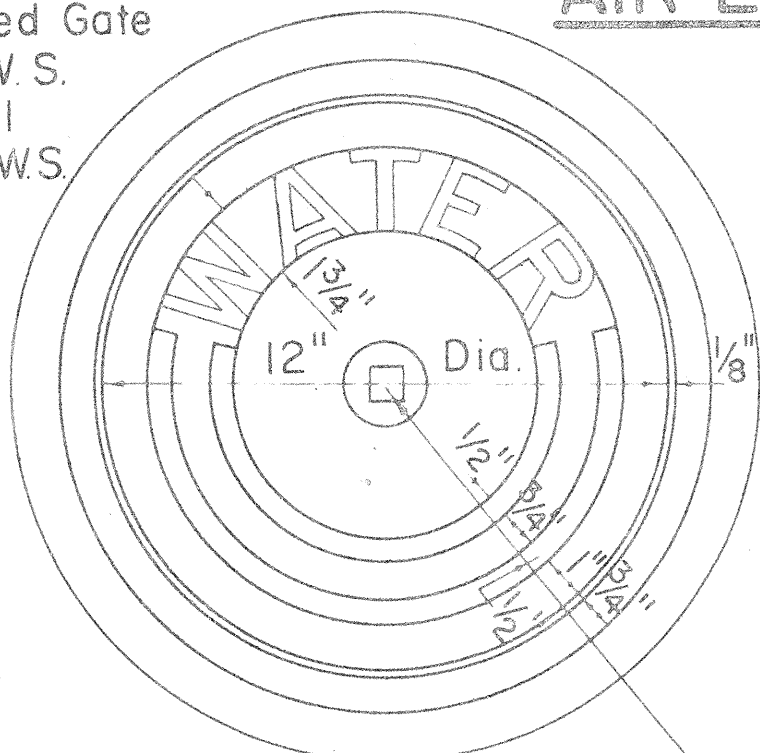
Not to Scale



DETAIL OF CONNECTION FOR AIR ELIMINATING TRAP

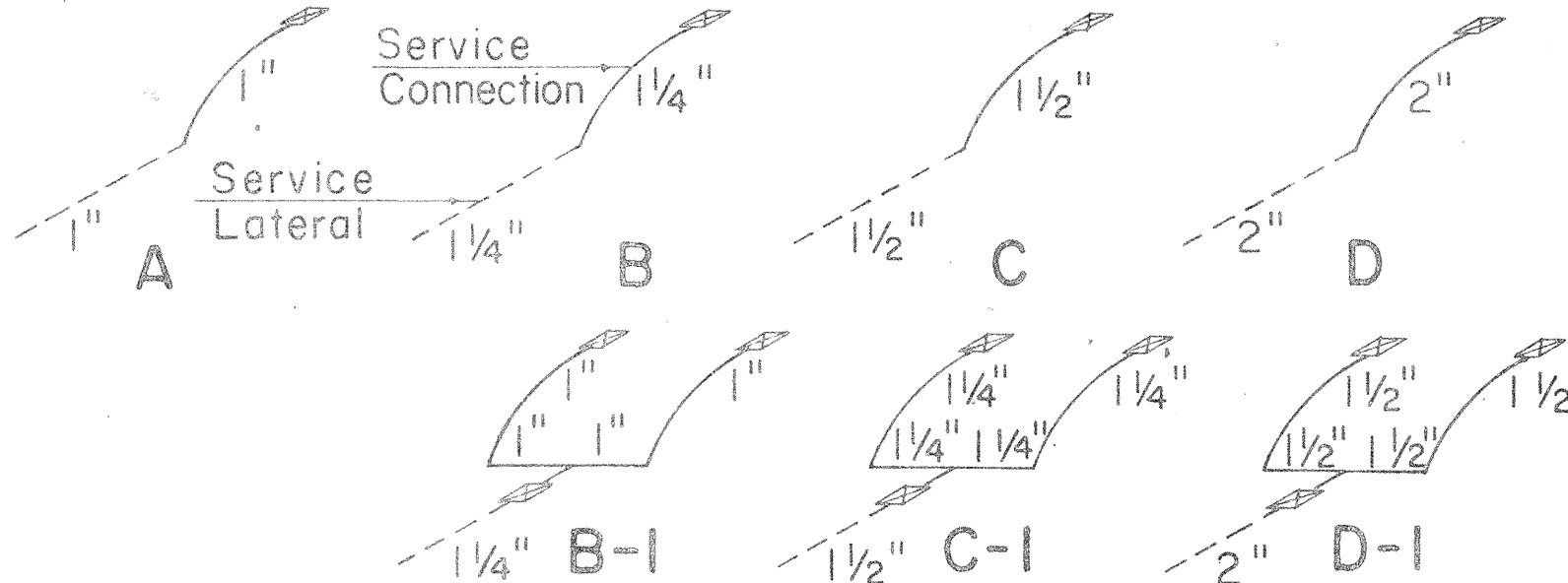
Not to Scale

Offset word "WATER" 1 3/4" high, 1/8" deep



CAST IRON FRAME AND COVER

Scale: 3" = 1'-0"



TYPICAL LAYOUT OF SERVICE LATERALS AND CONNECTIONS

Not to Scale

APPROVED:

J. H. Hawalek 6/9/70
CHIEF, ENGINEERING DIVISION
BOARD OF WATER SUPPLY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
BOARD OF WATER SUPPLY
CITY & COUNTY OF HONOLULU
STANDARD DETAILS

Scale: As Noted

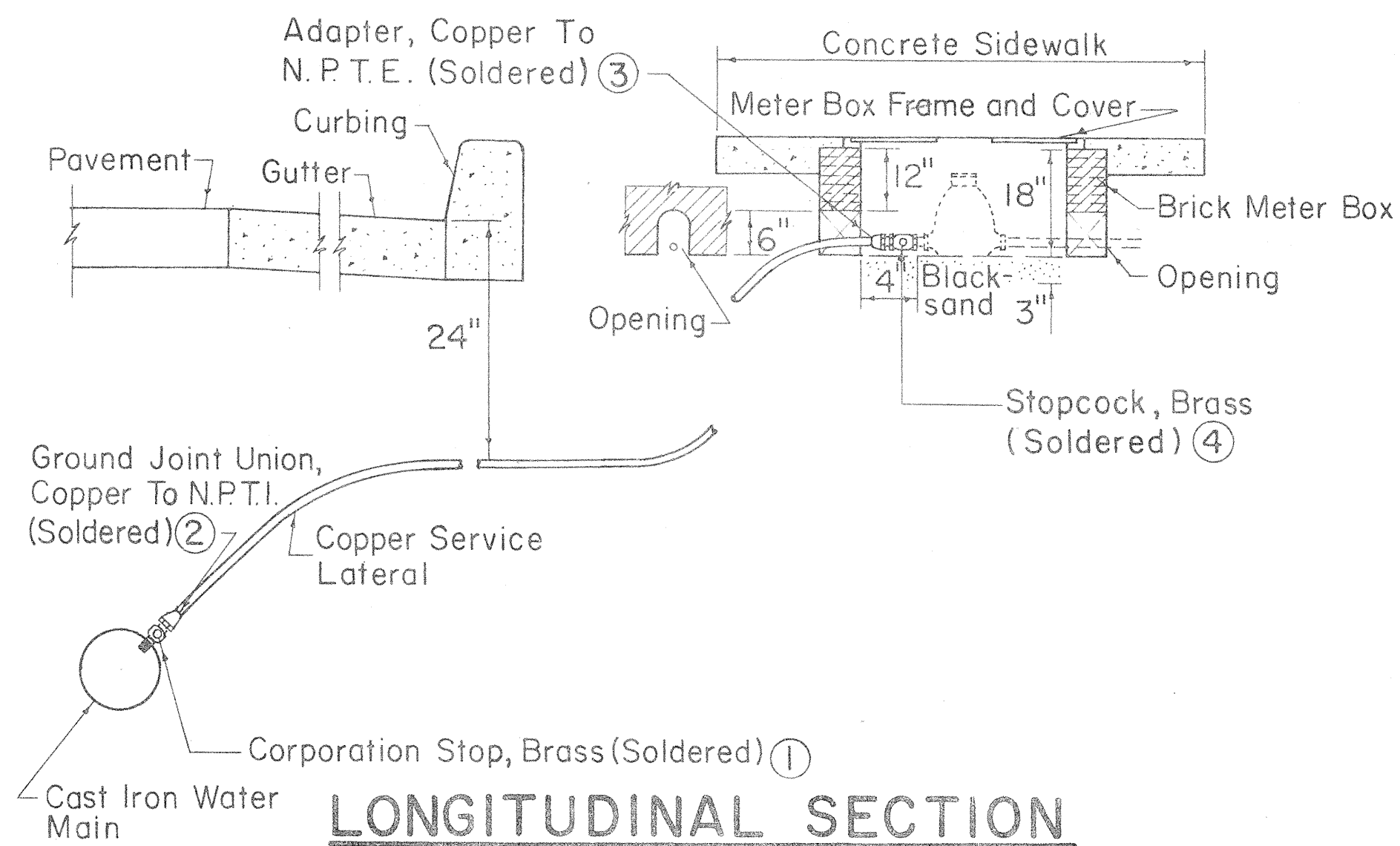
Date

SHEET NO. 4 OF 15 SHEETS

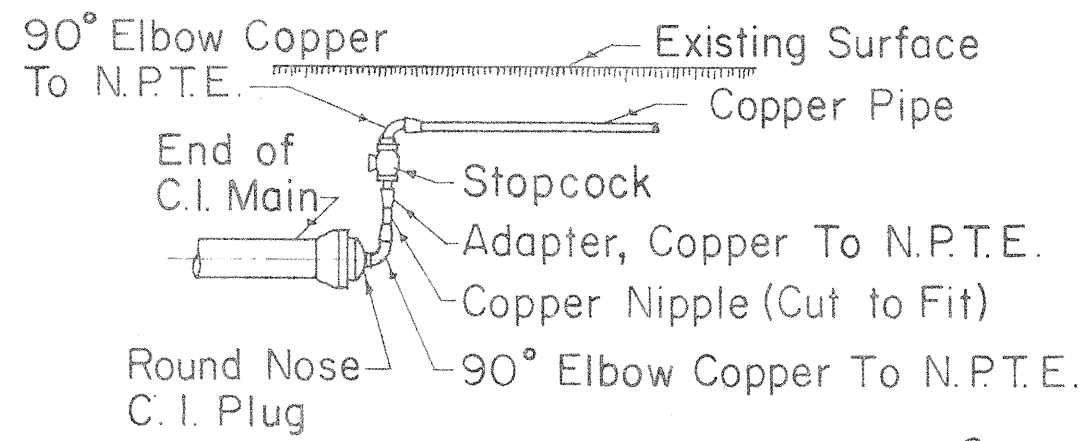
SCHEDULE OF COPPER FITTINGS (SOLDERED JOINT)

ITEM NO.	DESCRIPTION	SINGLE SERVICE CONN.	MULTIPLE SERV. CONN.	
			TWO SERVICES	THREE SERVICES
1	Corporation Stop Brass (H-10003)	1	1	1
2	Ground Joint Union (Style Copper To N.P.T.E. No. C-109)	1	1	1
3	Adapter, Copper To N.P.T.E. (Style No. C-101)	2	1	1
4	Stopcock Brass (BWS Standard)	1	1	1
5	Fitting Adapter, (Style Fitting To N.P.T.E. No. C-104)	—	1	1
6	Tee, Copper To Copper To Copper (Style No. T-300)	—	1	1
7	Bushings, Fitting To Copper (Style No. C-103)	—	2	2
8	90° Elbow, Copper To Copper (Style No. C-200)	—	2	2
9	Adapter, Copper To N.P.T.E. (Style No. C-101)	1	2	3
10	Stopcock Brass (BWS Standard)	1	2	3
11	Reducing Tee, Copper To Copper To Copper (Substitute For Items Number 6 and 7). (Style No. T-300)	—	1	1
12	Tee, Copper To Copper To Copper (Style No. T-300)	—	—	1
13	Bushing, Fitting To Copper (Style No. C-103)	—	—	1
14	Reducing Tee, Copper To Copper To Copper (Substitute For Items Number 12 and 13) (Style No. T-300)	—	—	1

NOTE:
Reference Numbers shown thus (H-10003) are from Mueller Co. Catalog "H" and (Style No. T-300) are from Mueller Brass Co. "Streamline" Catalog S-354. Approved Equal may be used.

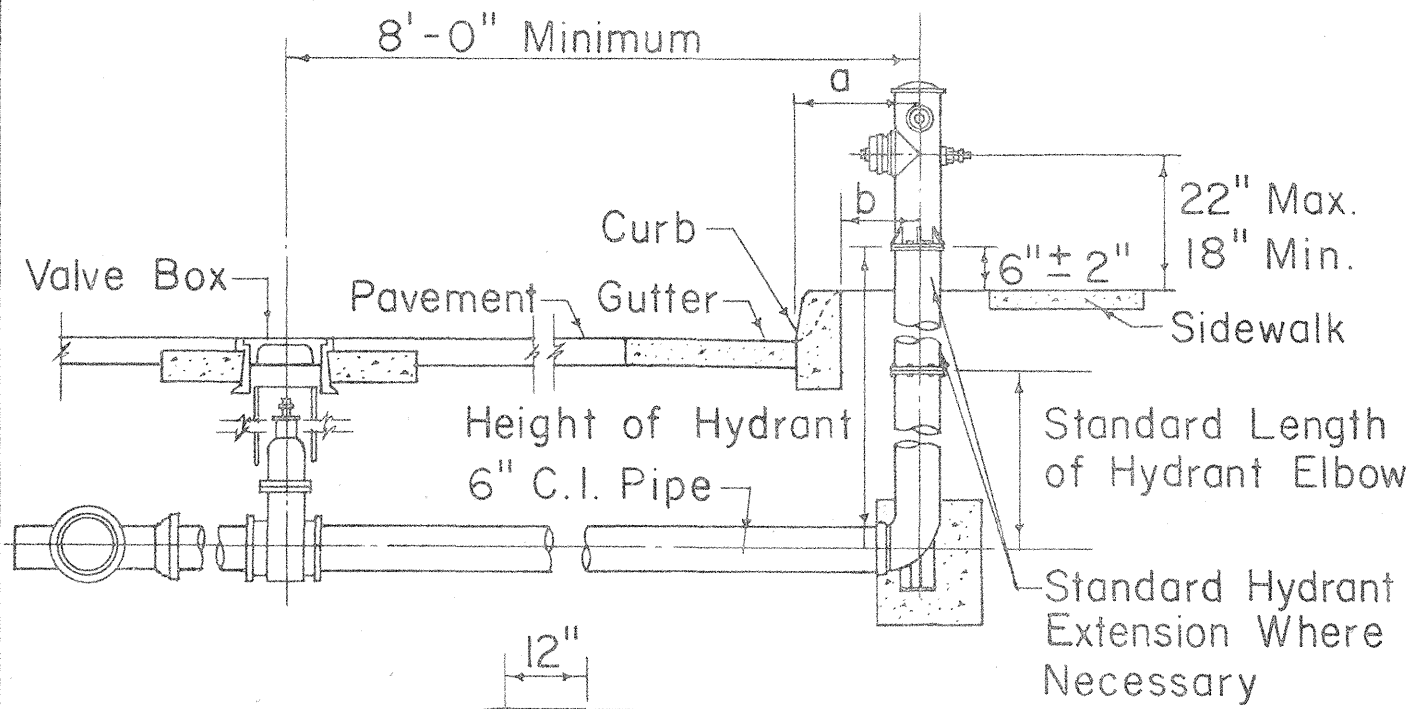


LONGITUDINAL SECTION



SOLDERED JOINT

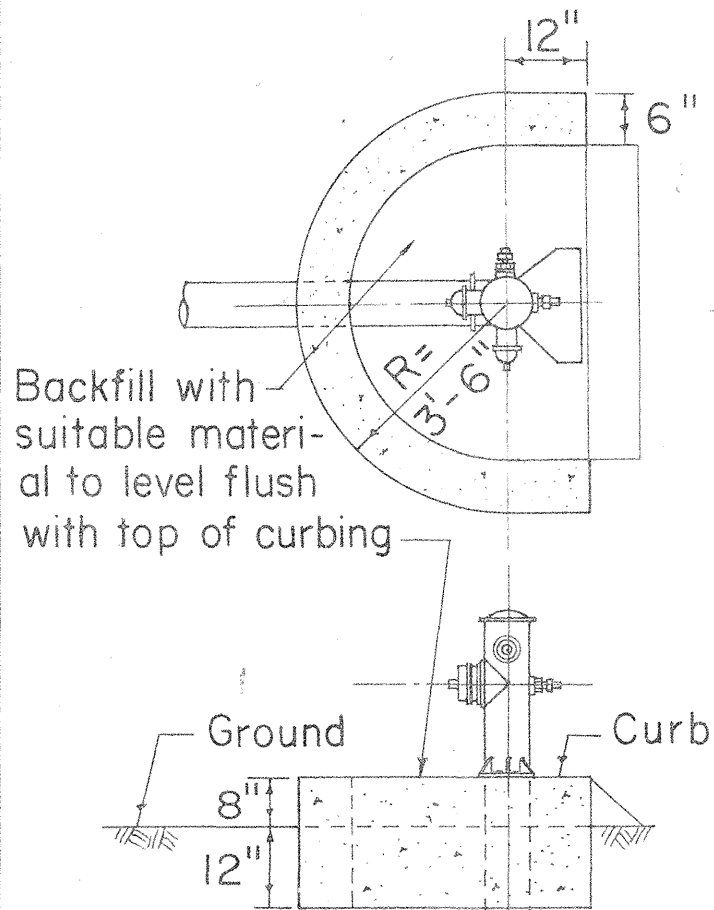
SERVICE LATERAL CONNECTION AT END OF LINE



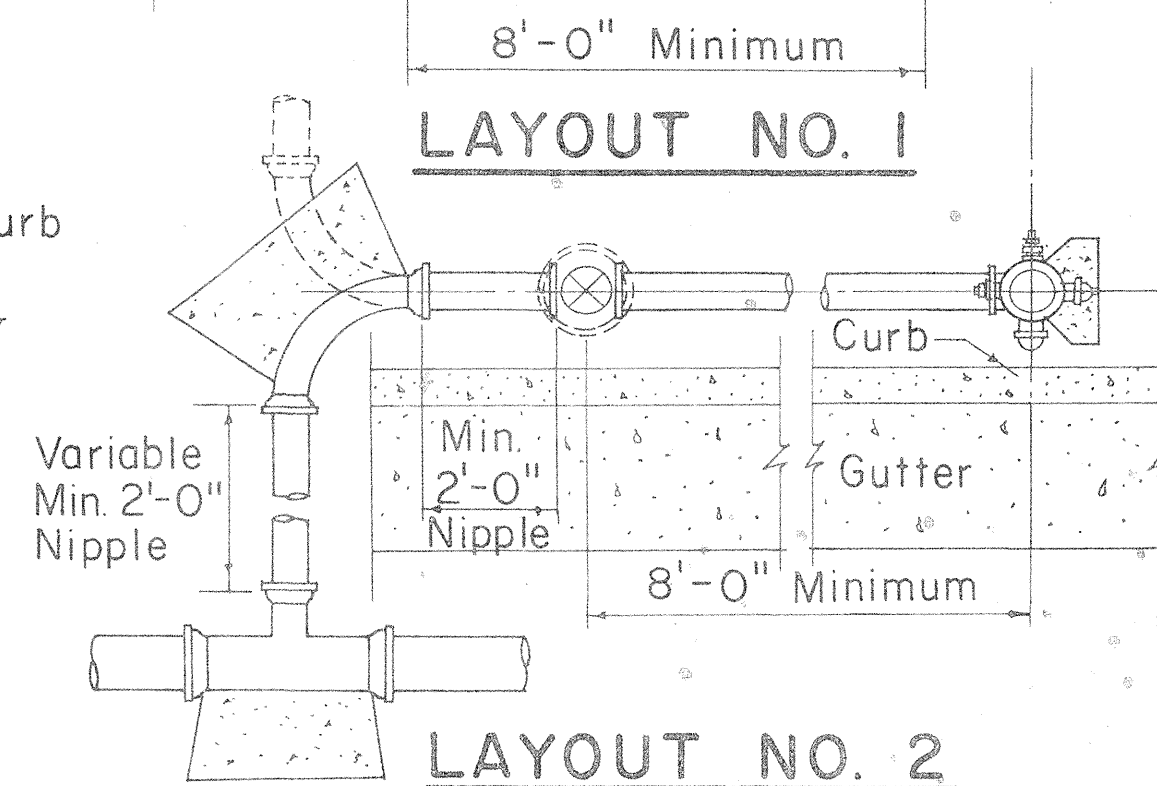
a	20" Min. (Standard Curb)
b	20" Min. (Roll Curb)

NOTE:

Gaskets for flanged joints shall be 1/16 inch duck-inserted rubber packing Garlock No. 19. Bolts shall be 5/8" diameter x 2 3/4" long steel machine bolts with cut threads, American Standard heavy hexagon heads, galvanized. Nuts shall be American Standard heavy cold punched hexagon nuts, galvanized.



**DETAIL OF CURBING
AT HYDRANT
WHERE REQUIRED**

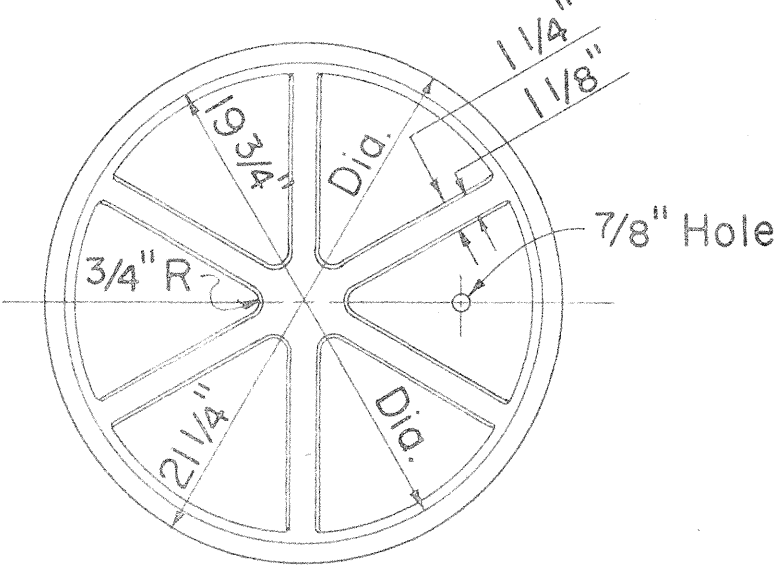


LAYOUT NO. 2

STANDARD FIRE HYDRANT LAYOUT

NOTE:

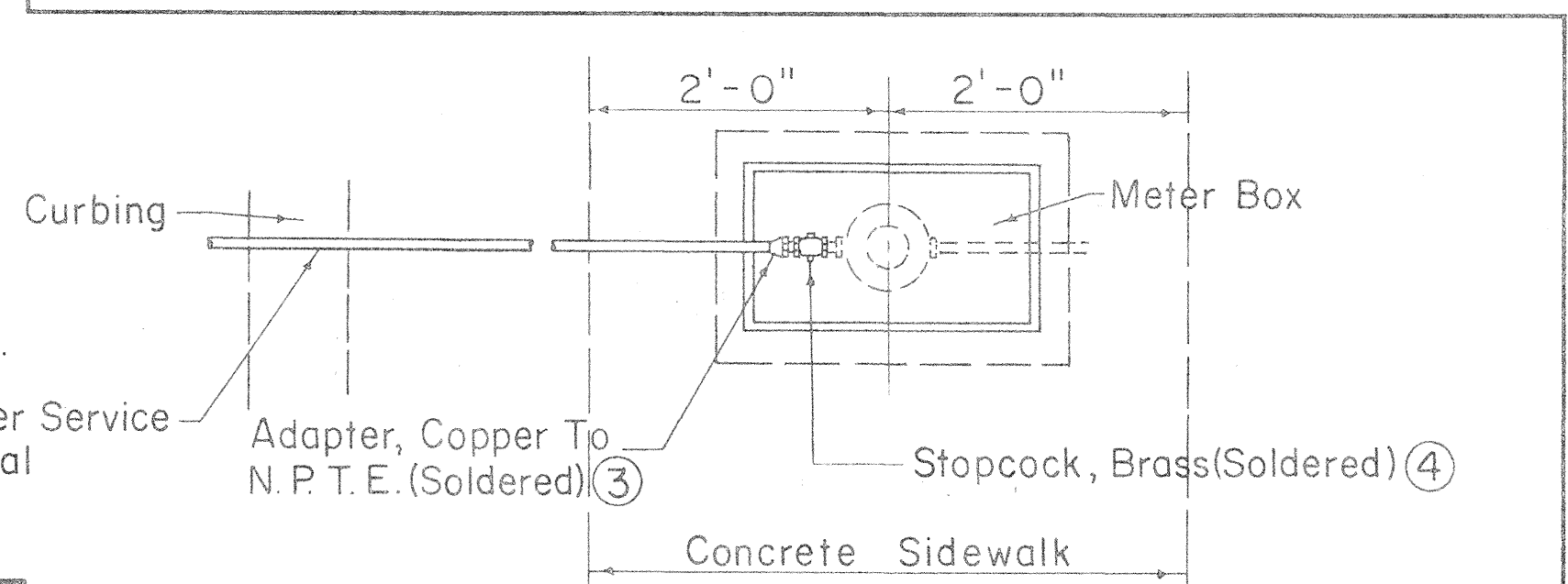
All castings shall be made accurately to the dimensions shown. Seat and cover shall be machined or ground where necessary to secure flat and true surfaces. The cover shall not rattle in any position.



BOTTOM VIEW OF COVER

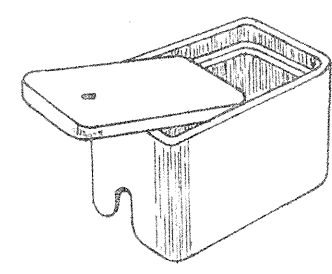
MANHOLE FRAME & COVER CAST IRON, 20" SIZE

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

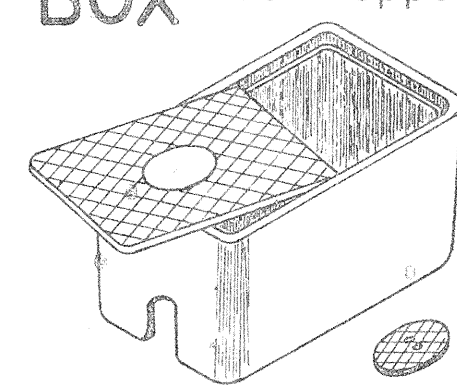


SINGLE SERVICE CONNECTION

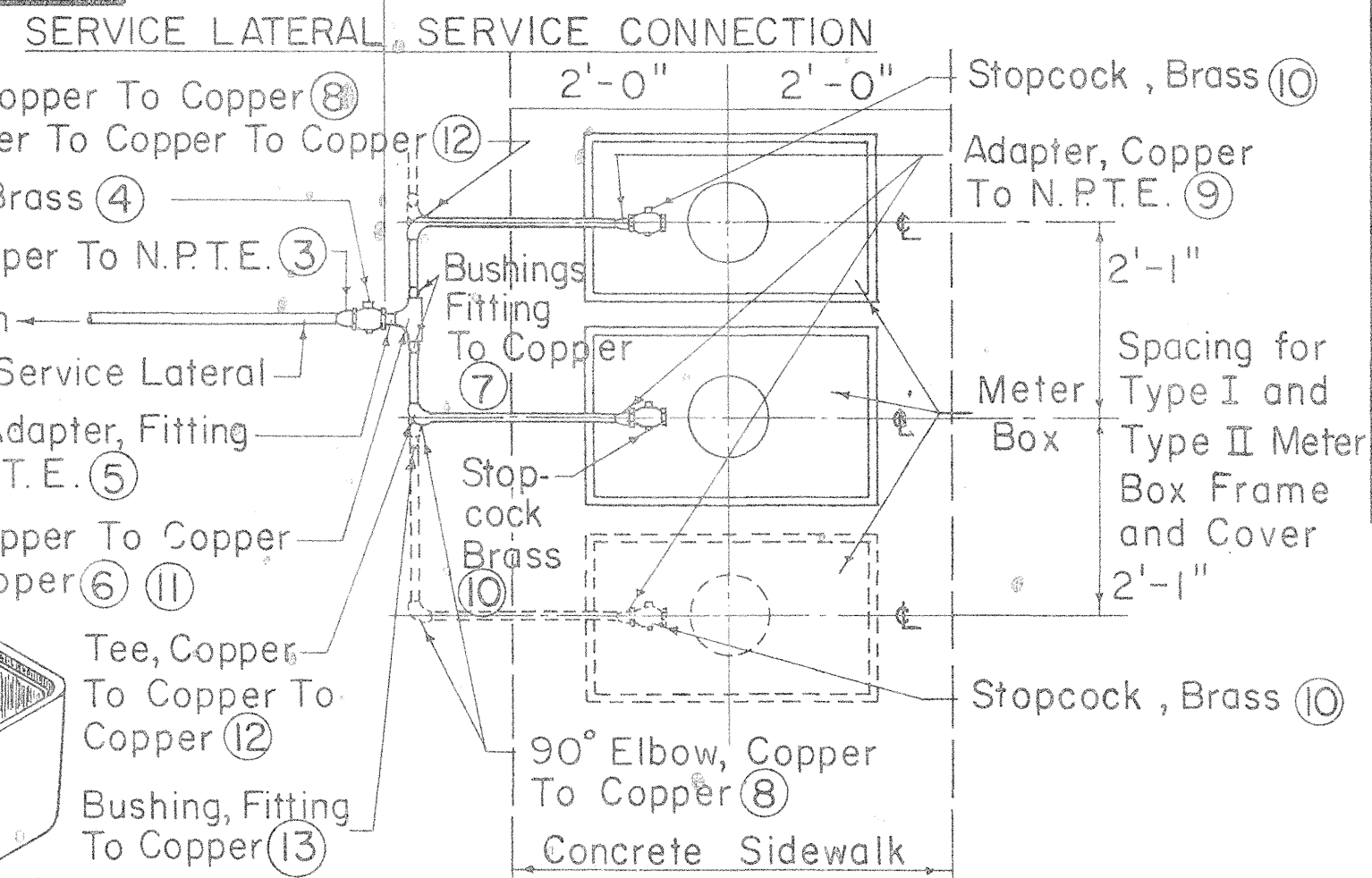
TYPE "A" METER BOX



TYPE "B" METER BOX



TYPE "X" METER BOX



MULTIPLE SERVICE CONNECTION SOLDERED JOINTS

STANDARD LENGTHS FOR HYDRANT ELBOWS	
	30"
	36"
	42"
	48"

Standard Hydrant Extensions are available in the following Lengths:
6 to 30 inches long in increments of 6 inches

METER BOX DATA					
TYPE METER BOX	METER SIZES	OVERALL DIMENSIONS AT BOTTOM	OVERALL DIMENSIONS AT TOP	COMPLETE WEIGHT	OVERALL DIMENSIONS OF LID
A	5/8" or 3/4" Without Valve	7 1/4" x 7 1/4"	10" x 10"	45 lbs.	7 3/8" Dia.
B	5/8" or 3/4"	9 1/2" x 16"	12 1/4" x 18 3/8"	82 lbs.	8 3/4" x 14 1/2"
X		14 1/2" x 23 1/2"	16" x 25"	143 lbs.	13 1/8" x 22 1/8"

APPROVED:

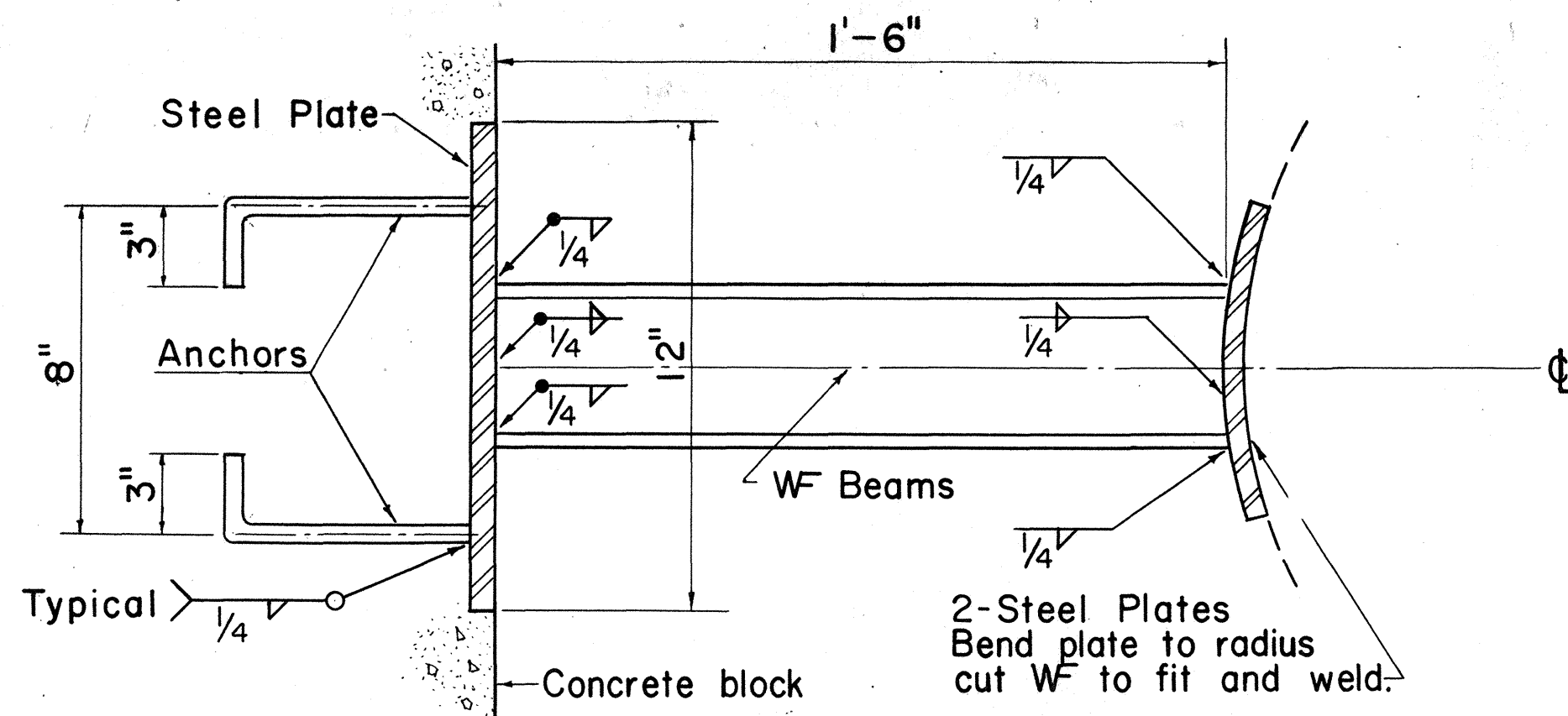
[Signature] 9/9/70
CHIEF, ENGINEERING DIVISION
BOARD OF WATER SUPPLY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
BOARD OF WATER SUPPLY
CITY & COUNTY OF HONOLULU
STANDARD DETAILS

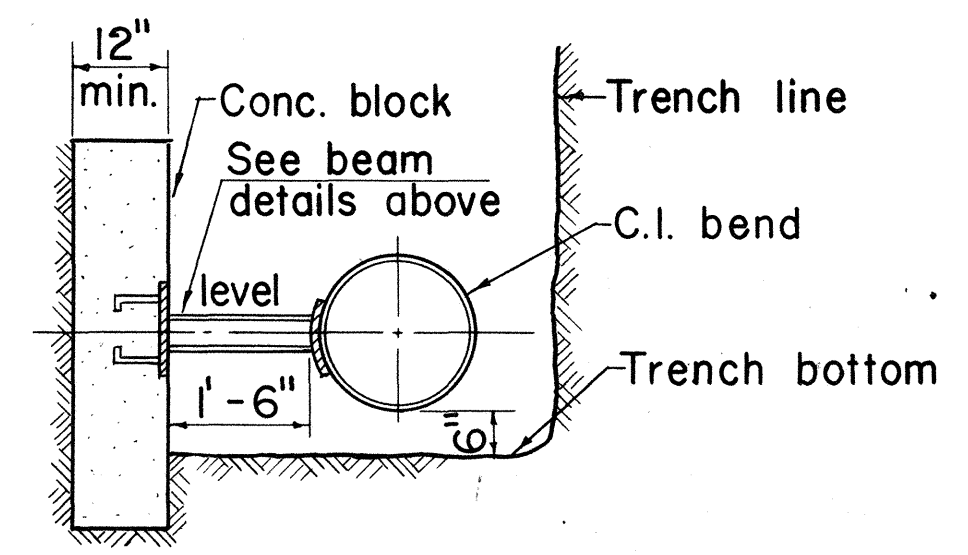
Not to Scale Date

SHEET NO. 5 OF 15 SHEETS

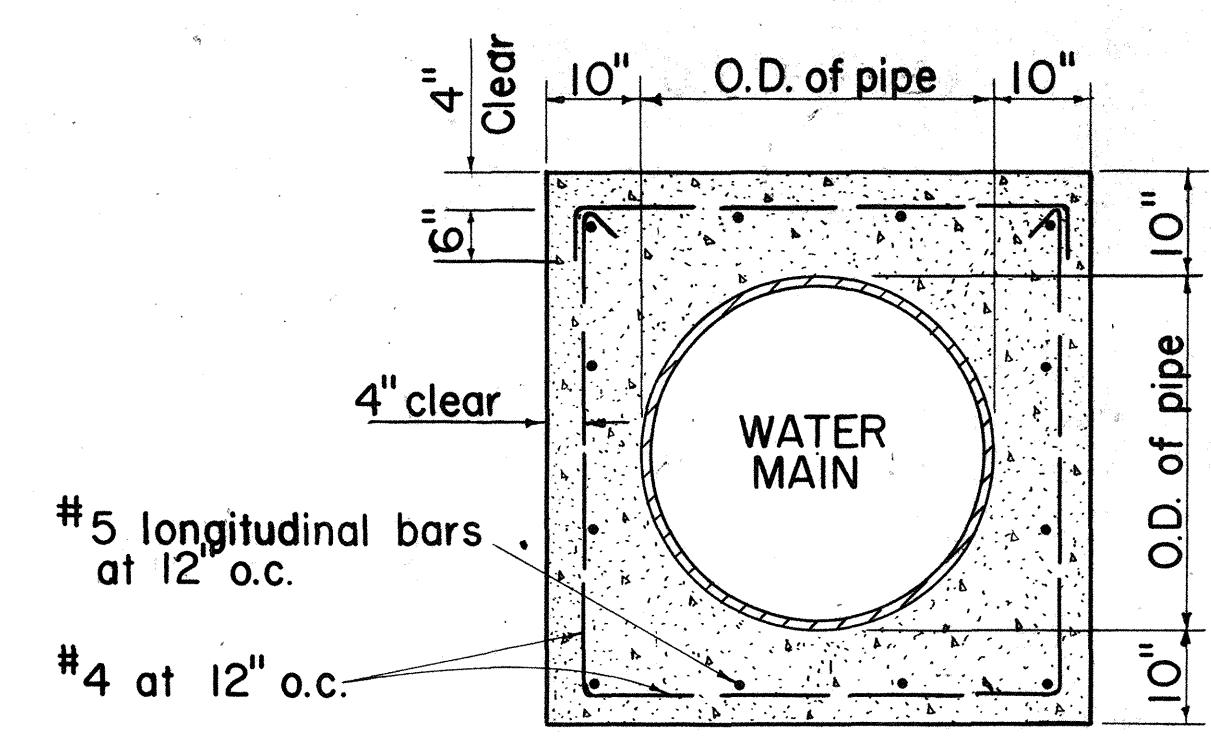
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-032-1(8)	1970	23	41



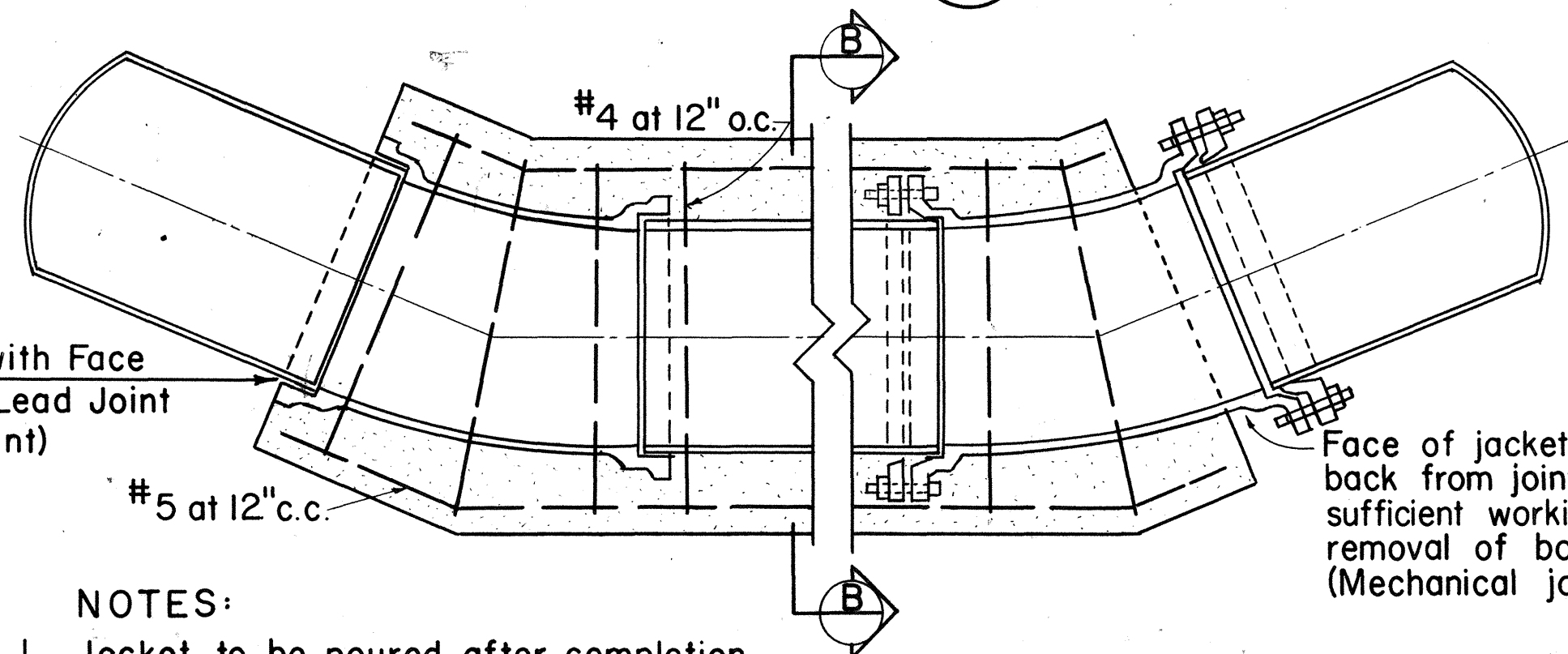
BEAM DETAIL
Scale: 3" = 1'-0"



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



SECTION B

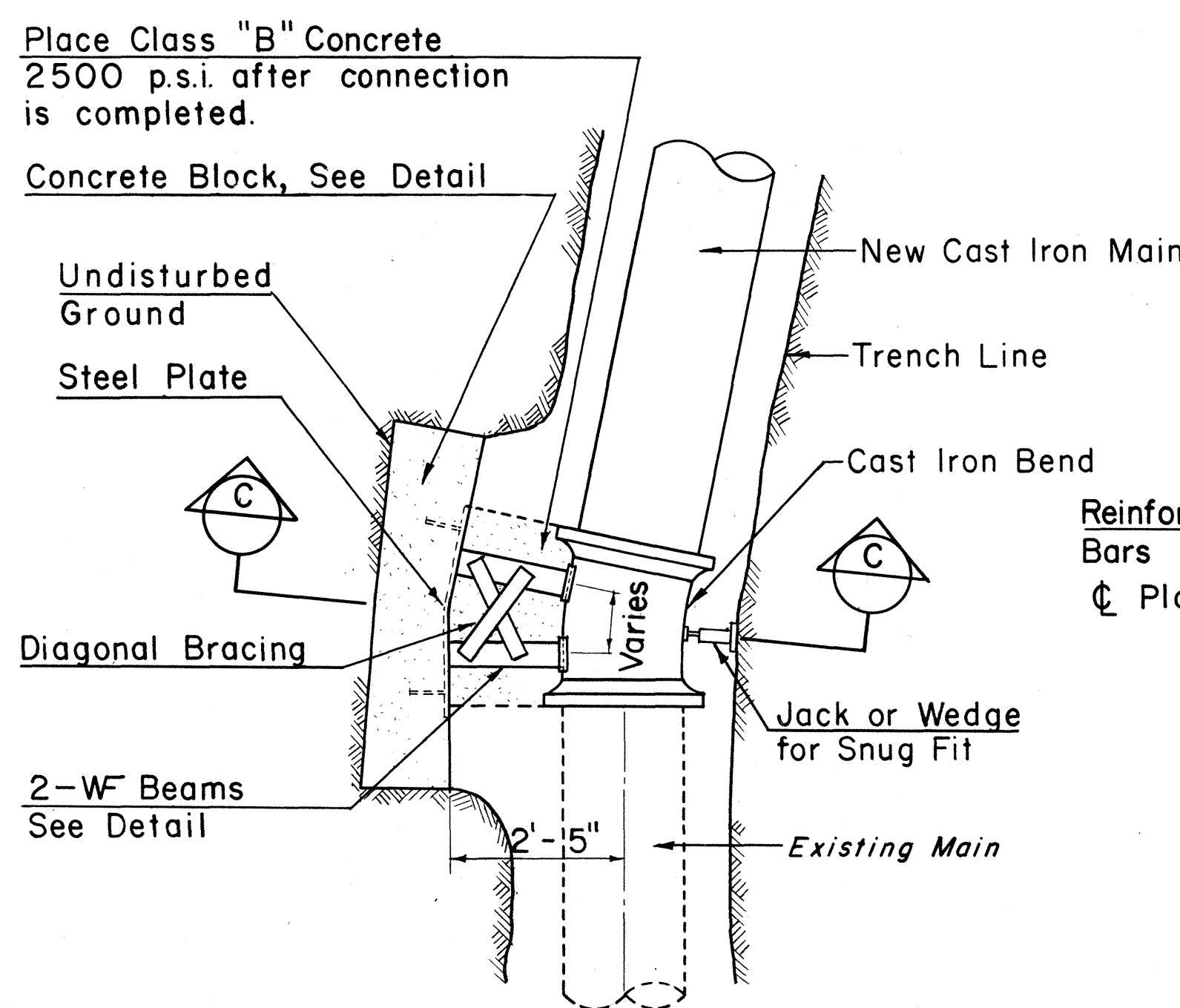


NOTES:

1. Jacket to be poured after completion of test unless otherwise approved by the Engineer.
2. 2 1/2" depth of lead for lead joint pipe required at all embedded joints.
3. Wherever construction joints are required, 6" rubber or neoprene waterstops shall be installed. Waterstops shall be of the type specified and manufactured by the Servicized Products Corporation, Gate Rubber Company or approved equal.

REINFORCED CONCRETE JACKET

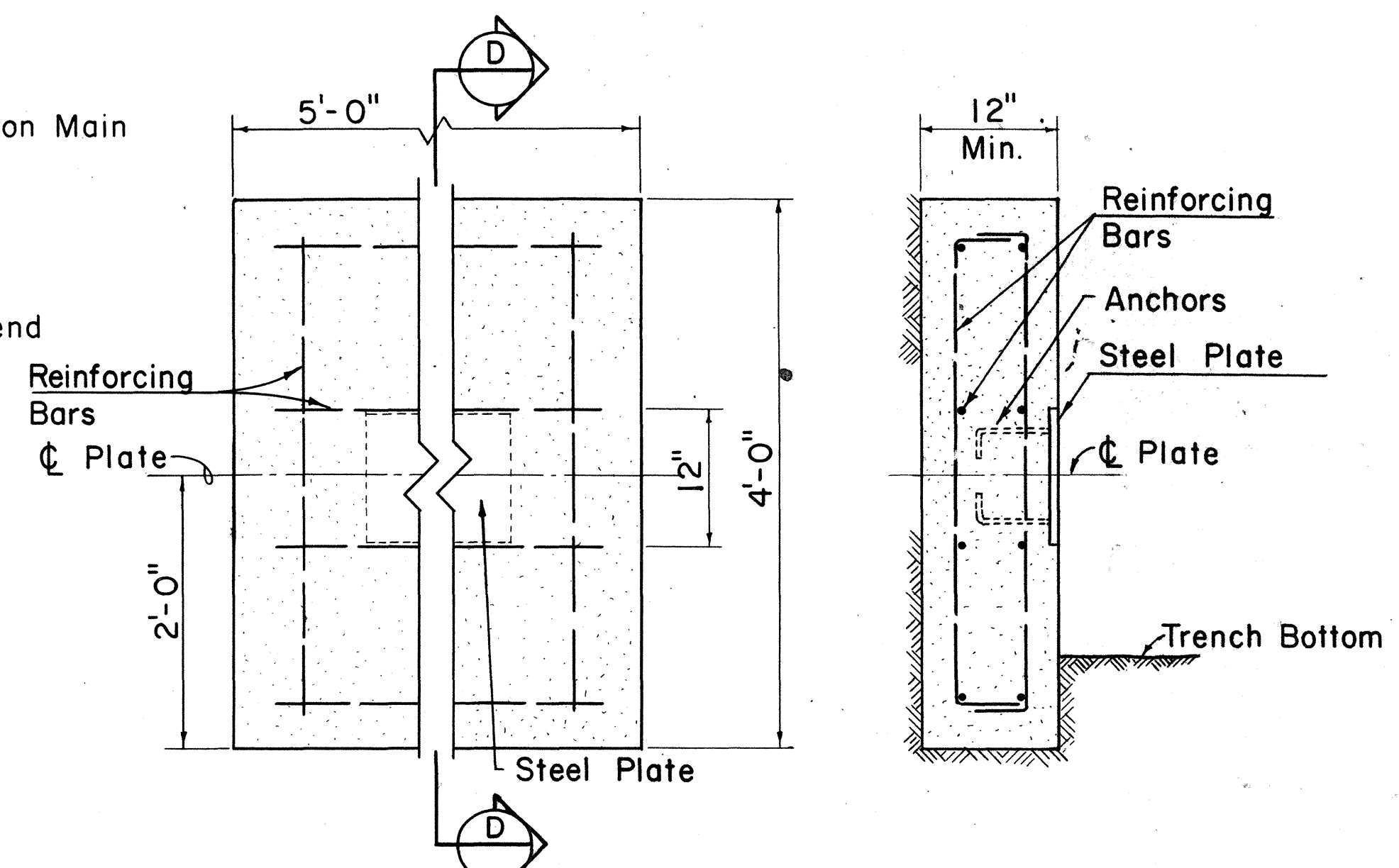
Scale: Not to Scale



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

NOTE:

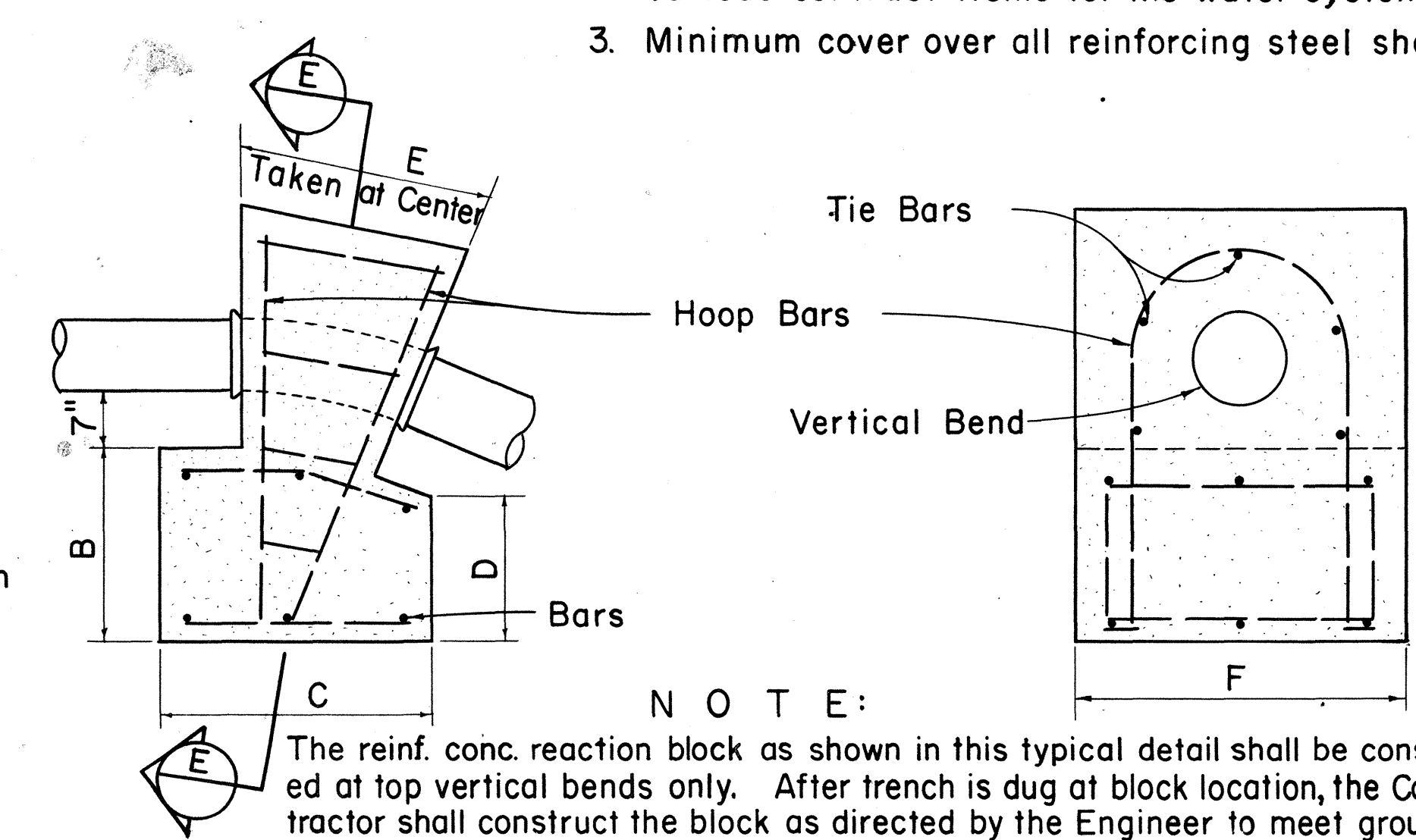
Concrete Block with structural strut shall be used for bends at connections or for tee connections.



ELEVATION

DETAILS OF CONCRETE BLOCK

Scale: 1" = 1'-0"



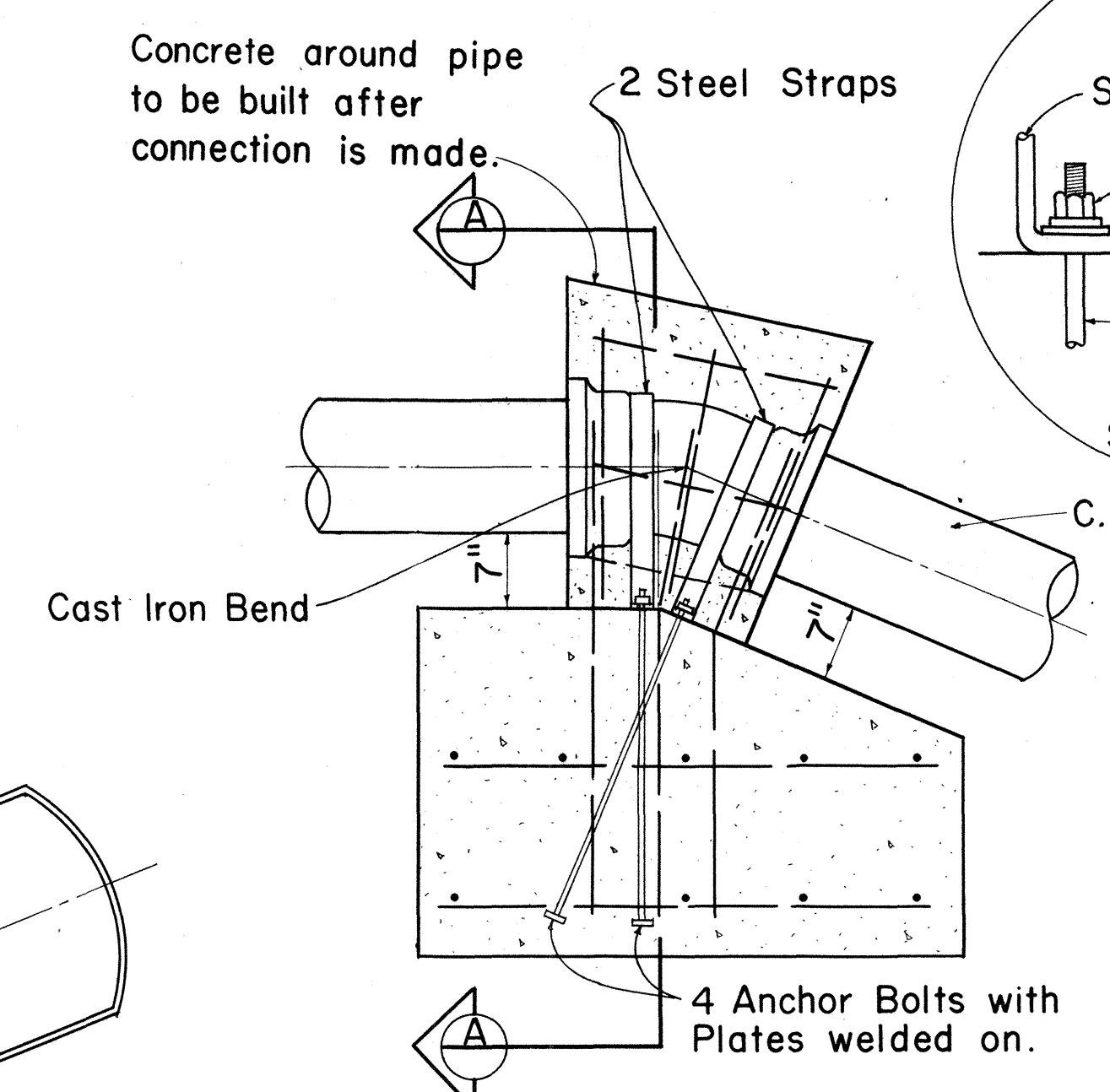
ELEVATION

TYPICAL DETAIL OF REINFORCED CONCRETE REACTION BLOCK FOR TOP VERTICAL BENDS

Scale: Not to Scale

NOTE:

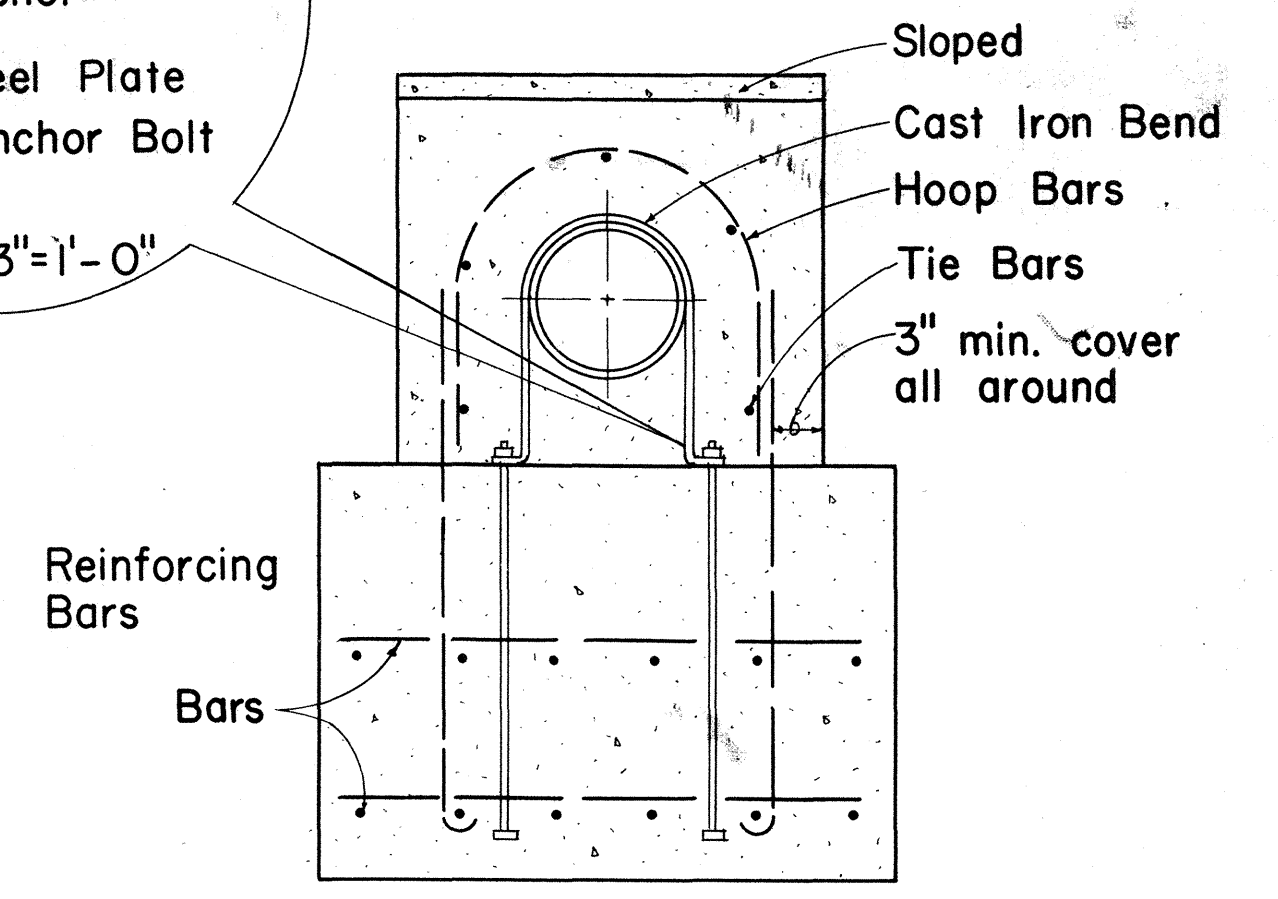
The reinf. conc. reaction block as shown in this typical detail shall be constructed at top vertical bends only. After trench is dug at block location, the Contractor shall construct the block as directed by the Engineer to meet ground conditions. Actual size of Reaction Block shall also be determined by the Engineer.



ELEVATION

TYPICAL DETAIL OF CONCRETE REACTION BLOCK WITH STRAPS

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



SECTION A

GENERAL NOTES:

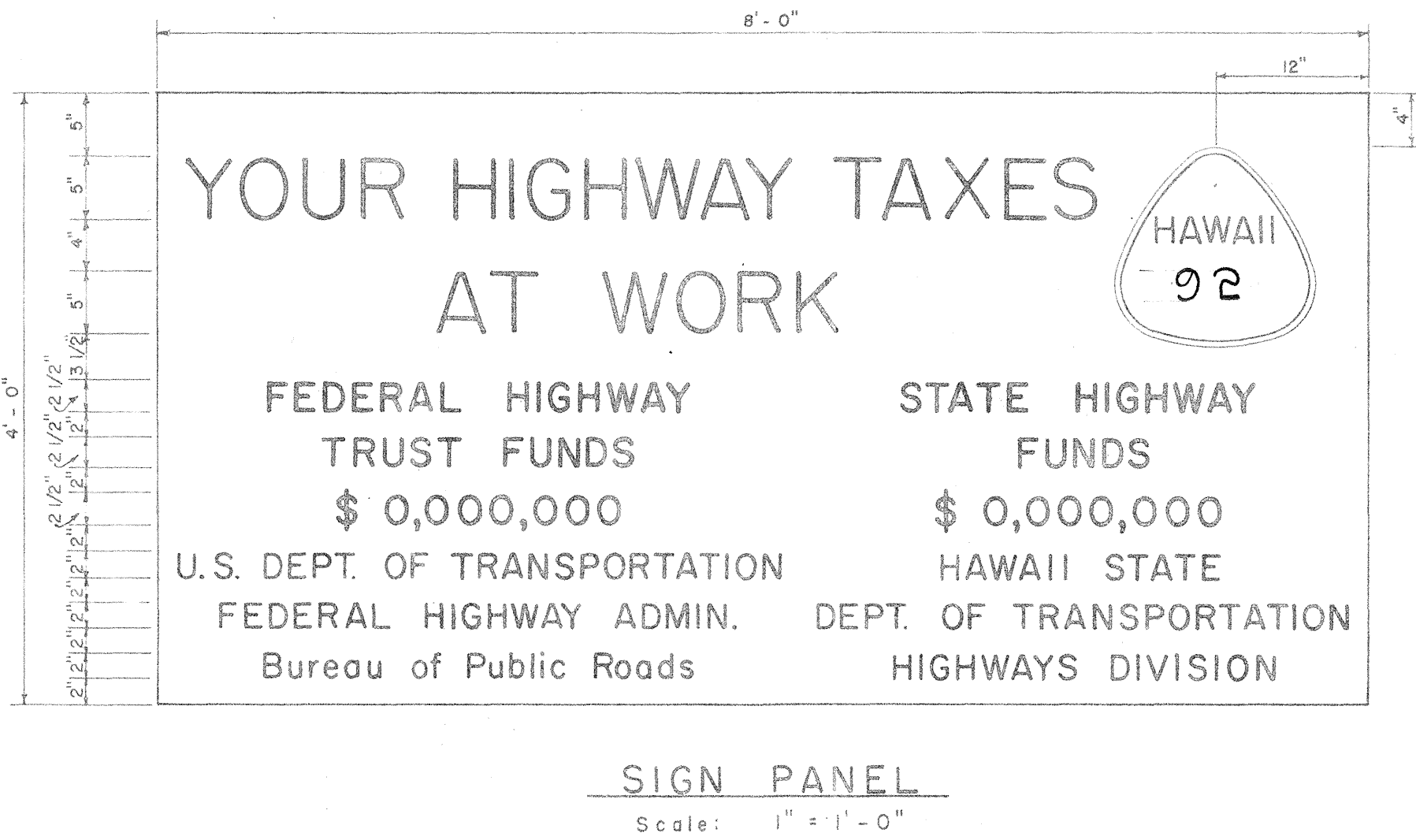
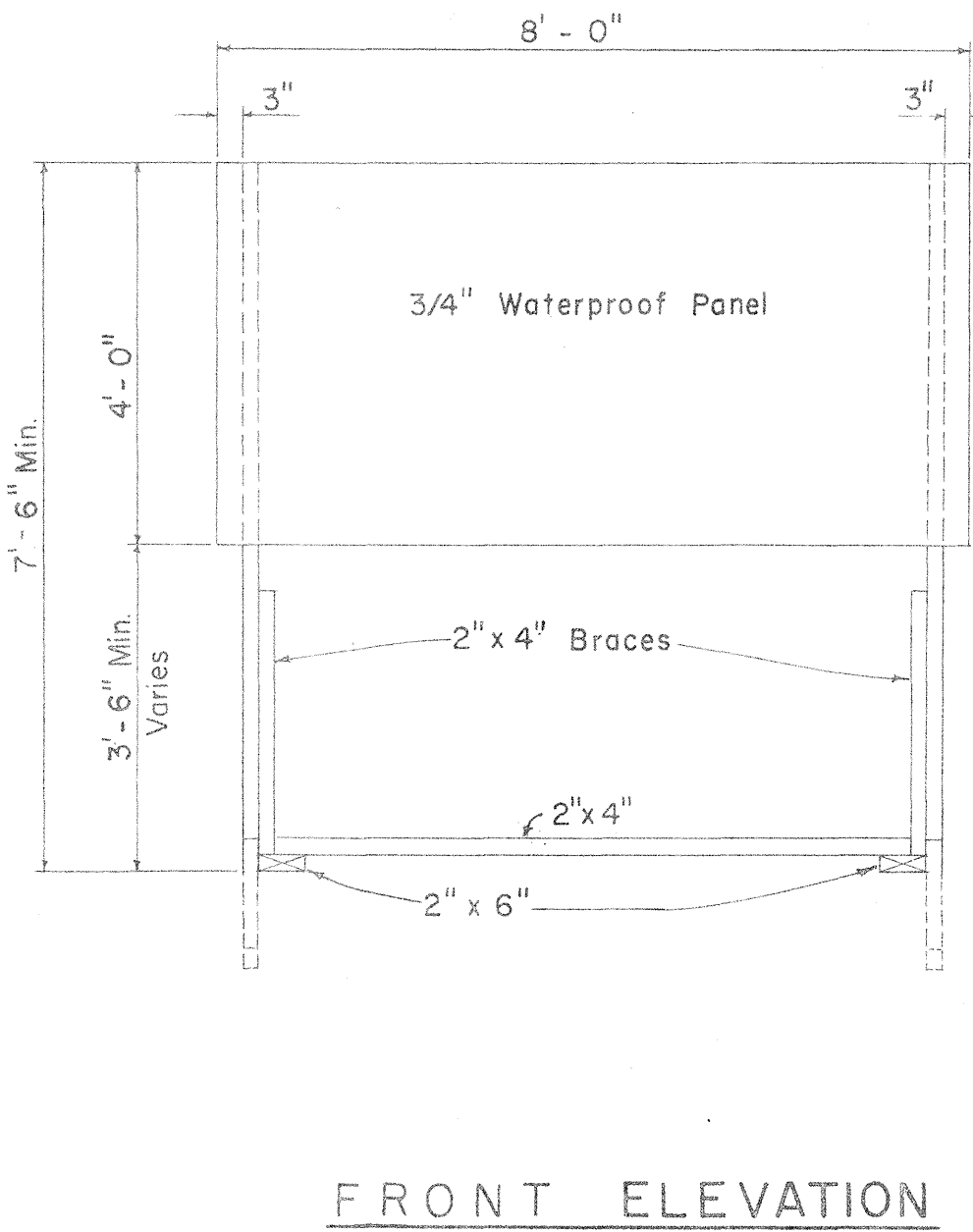
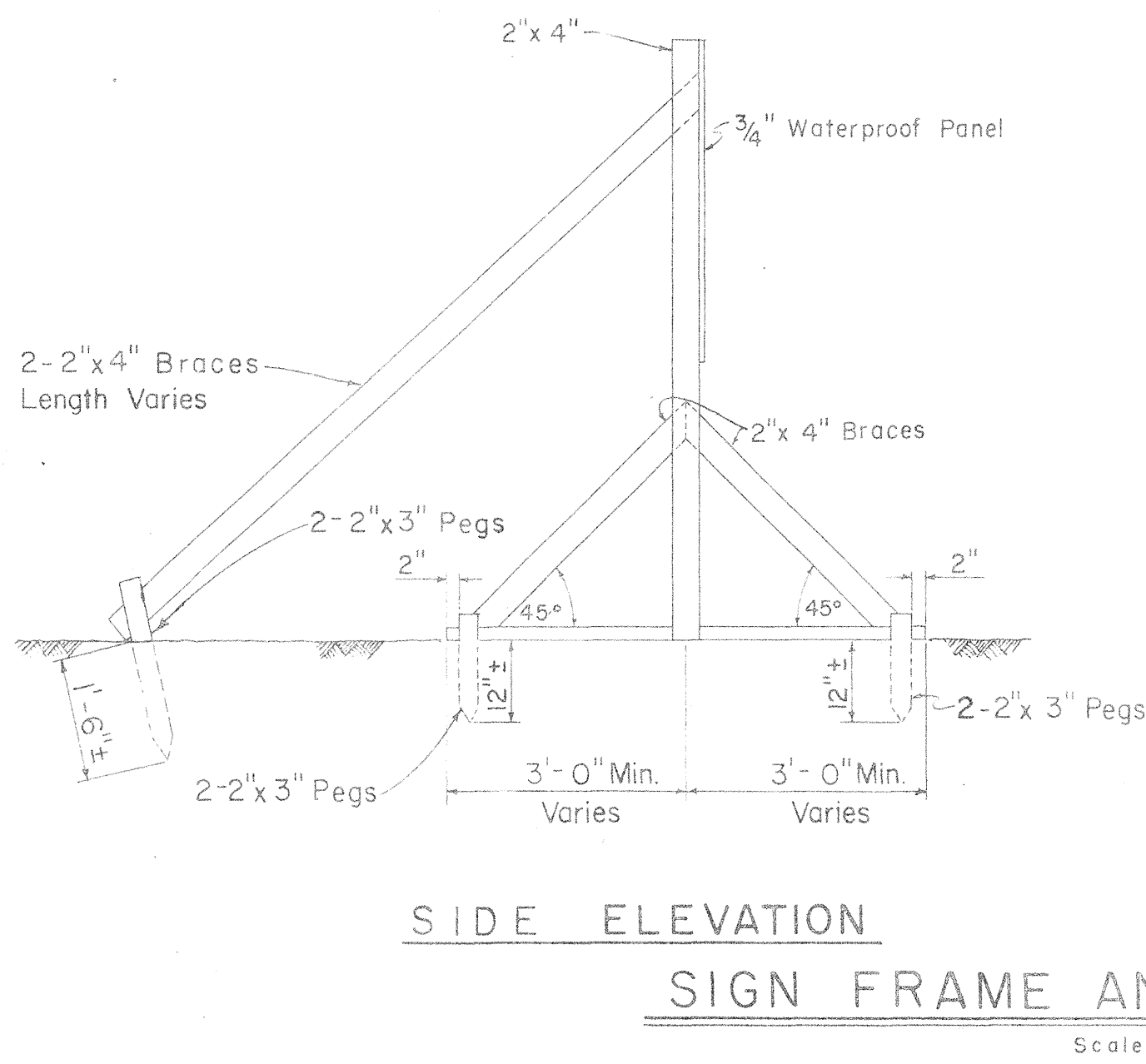
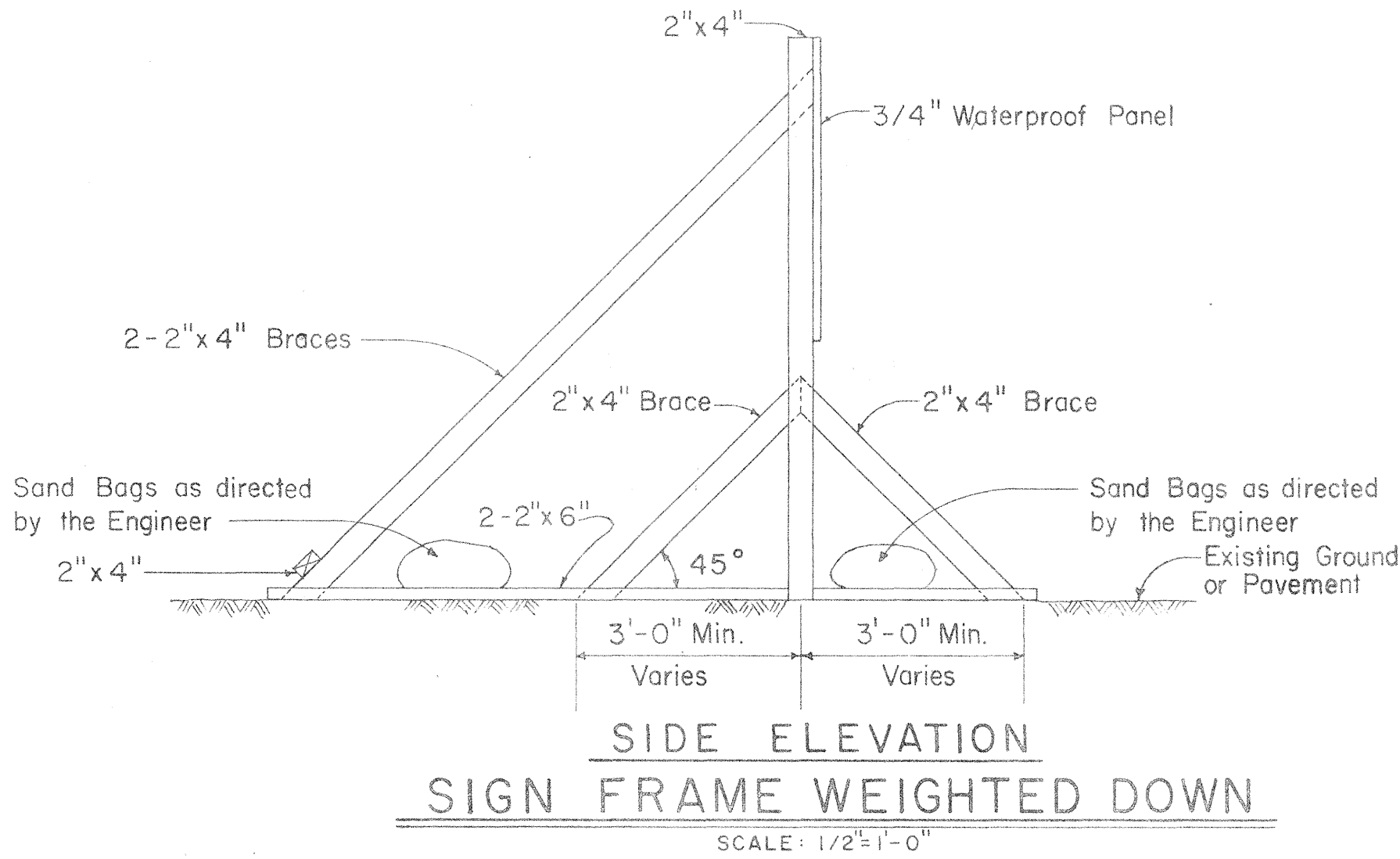
1. Detail drawings of actual blocks to be used, shall be furnished during construction by B.W.S. and or State.
2. Steel straps, anchor bolts, nuts, washers, etc., furnished and installed by the Contractor will not be paid for directly, but shall be considered incidental to the various contract items for the water system.
3. Minimum cover over all reinforcing steel shall be 3 inches.

APPROVED:
[Signature] 4/9/70
CHIEF, ENGINEERING DIVISION
BOARD OF WATER SUPPLY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
BOARD OF WATER SUPPLY
CITY & COUNTY OF HONOLULU
STANDARD DETAILS

Scale: As Shown
SHEET No. 7 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	24	41



PRIMARY AND SECONDARY SYSTEMS CONSTRUCTION IDENTIFICATION SIGN

NOTE:

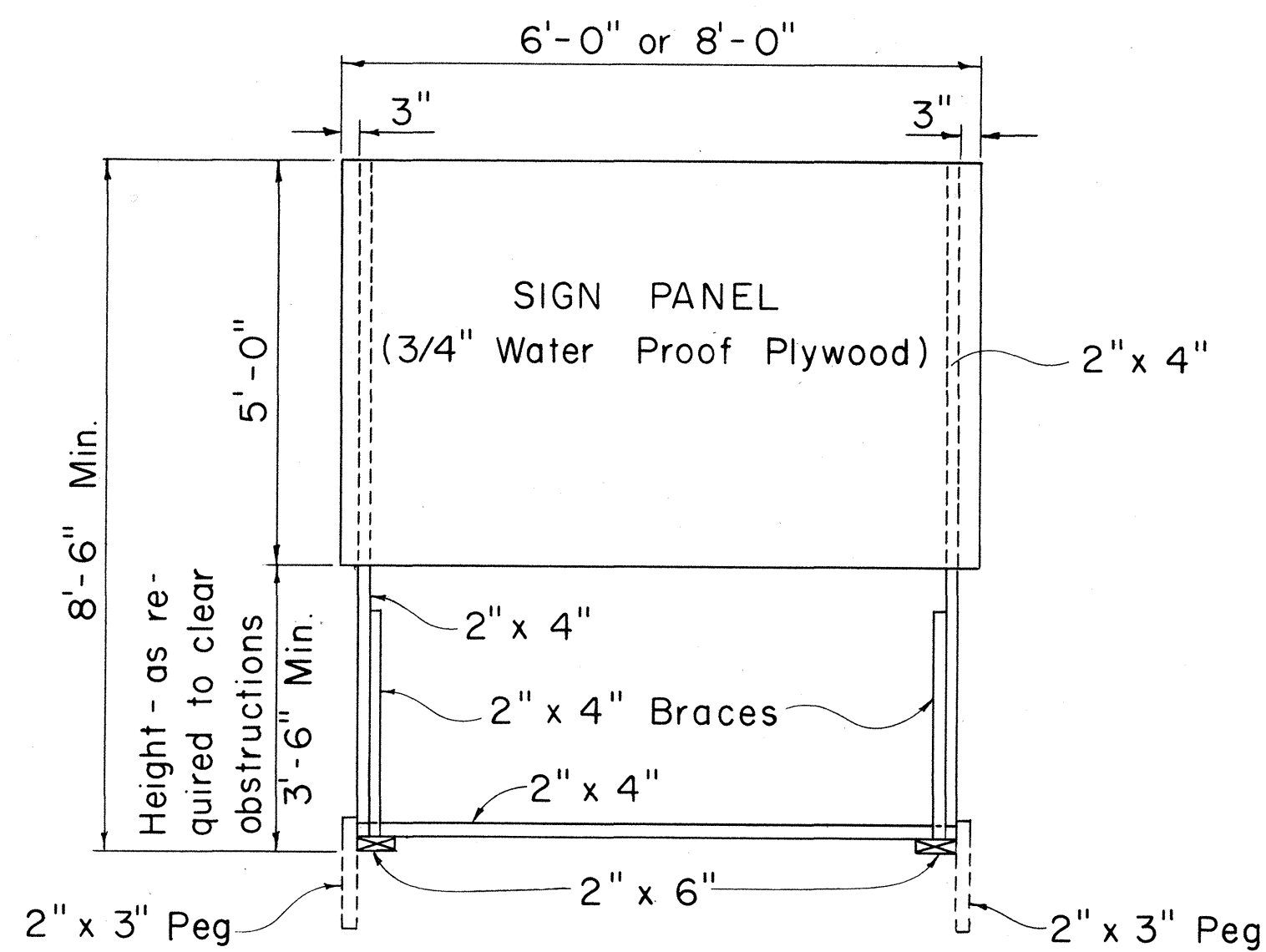
On projects financed entirely with State Funds, the above sign detail shall be modified by deleting the State Route Marker, and references to Federal funds, and centering the remaining legend on a 4'-0" x 6'-0" panel..

CONSTRUCTION IDENTIFICATION SIGN NOTES

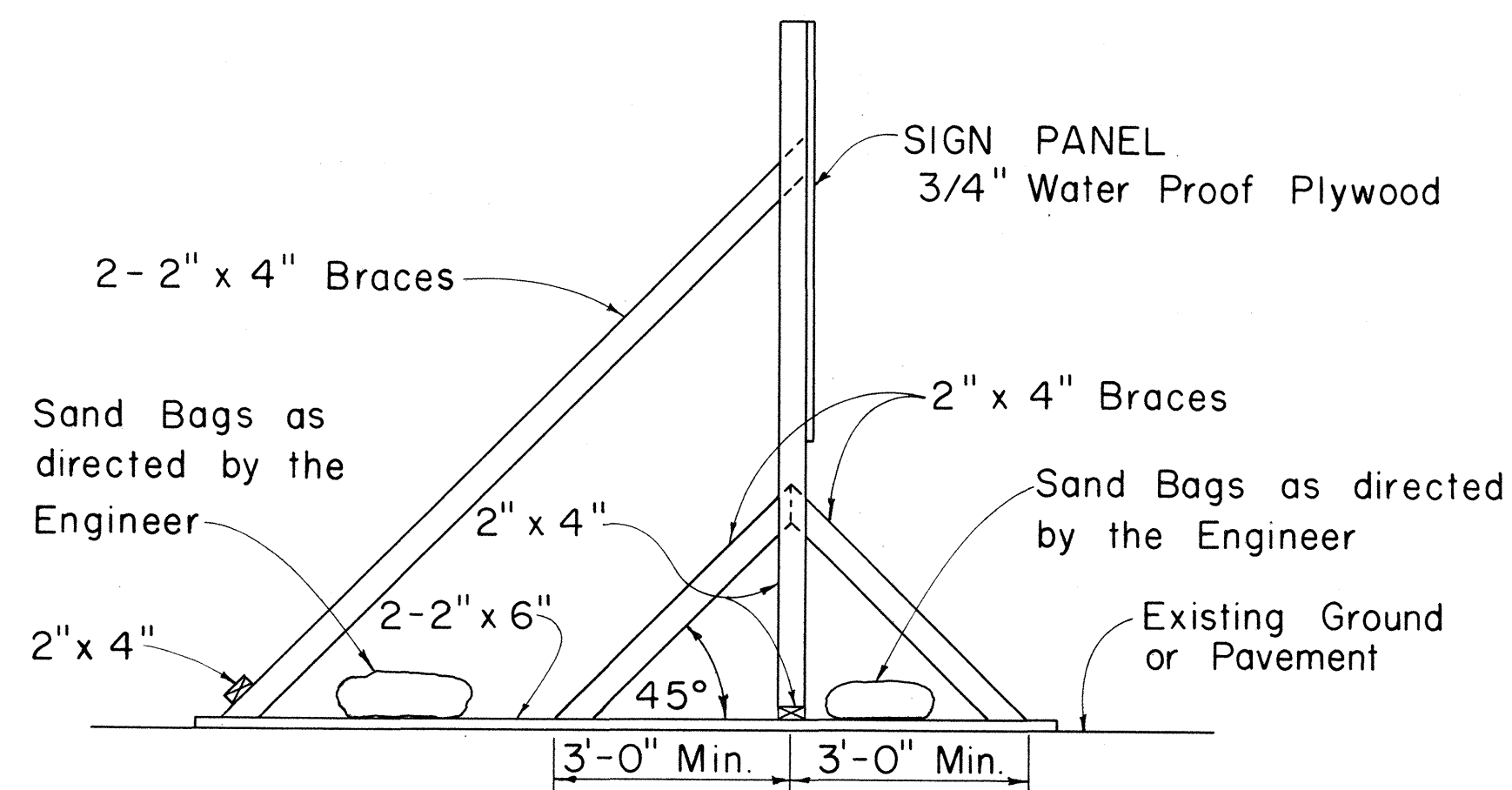
1. The Contractor shall construct, install and maintain the Construction Identification Signs, at the locations shown on the plans and as ordered by the Engineer.
2. All costs incurred in the construction, installation and maintenance of the Construction Identification Signs, will not be paid for separately, but shall be considered as included in the unit price paid for the various items in the proposal.
3. The Construction Identification Signs shall be removed upon completion of the project and are to become the Contractor's property.
4. The exact figures for the various funds involved will be furnished to the Contractor for the incorporation in the Construction Identification Signs.
5. The legend shall be black on white background unless otherwise specified.
6. Refer to Sheet No. 25 for details on the exact shape and size of the State route marker to be shown on these Construction Identification Signs.
7. 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
PRIMARY AND SECONDARY SYSTEMS
CONSTRUCTION IDENTIFICATION SIGNS

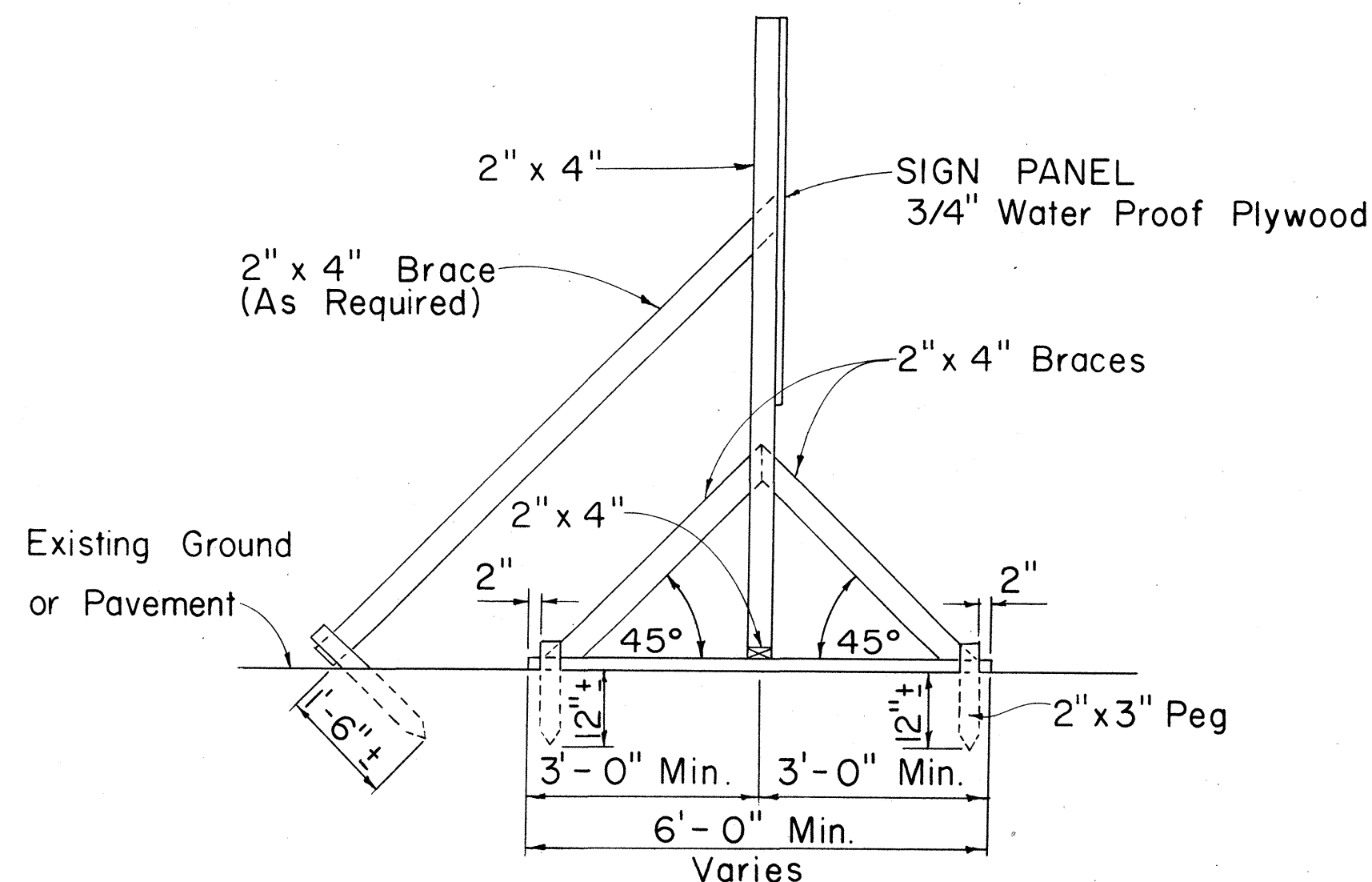
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	26	41



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

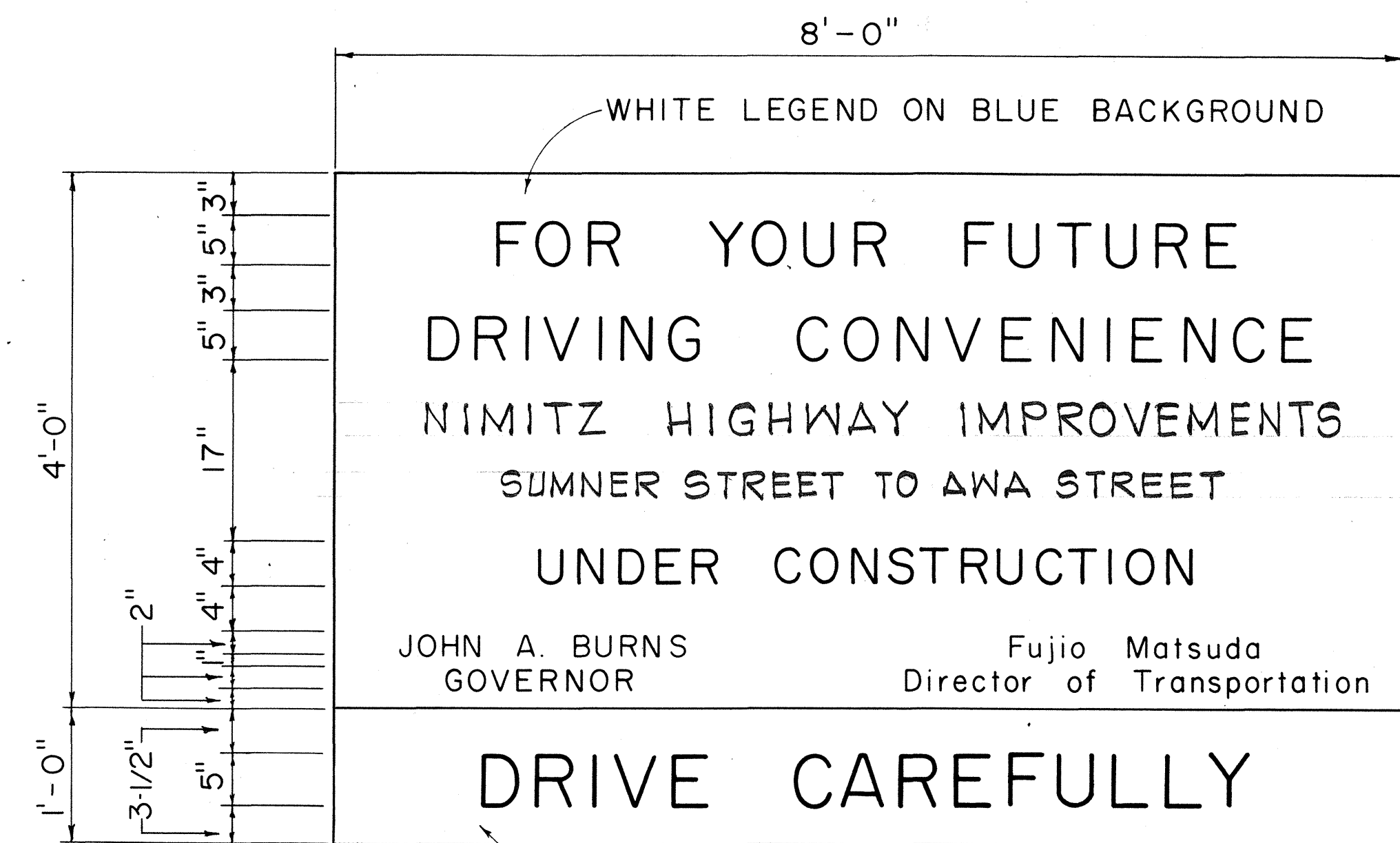


SIDE VIEW
(SIGN SUPPORT AND FRAME WEIGHTED DOWN)
Scale: 1/2" = 1'-0"



SIDE VIEW
(SIGN SUPPORT AND FRAME ANCHORED IN GROUND)
Scale: 1/2" = 1'-0"

SIGN SUPPORT AND FRAME
Scale: As Shown



BLACK LEGEND ON YELLOW BACKGROUND
USE SERIES "D" LETTERS

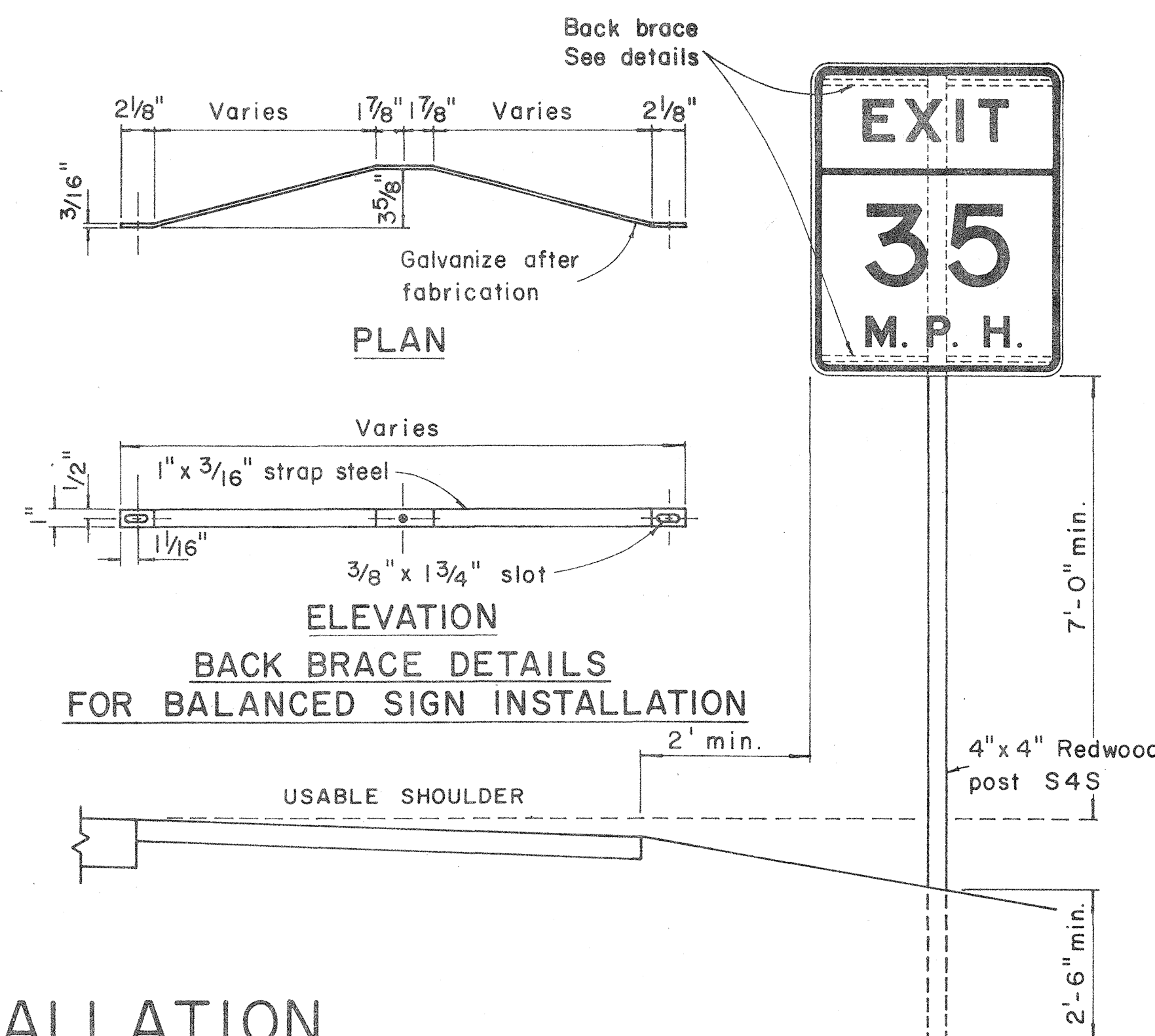
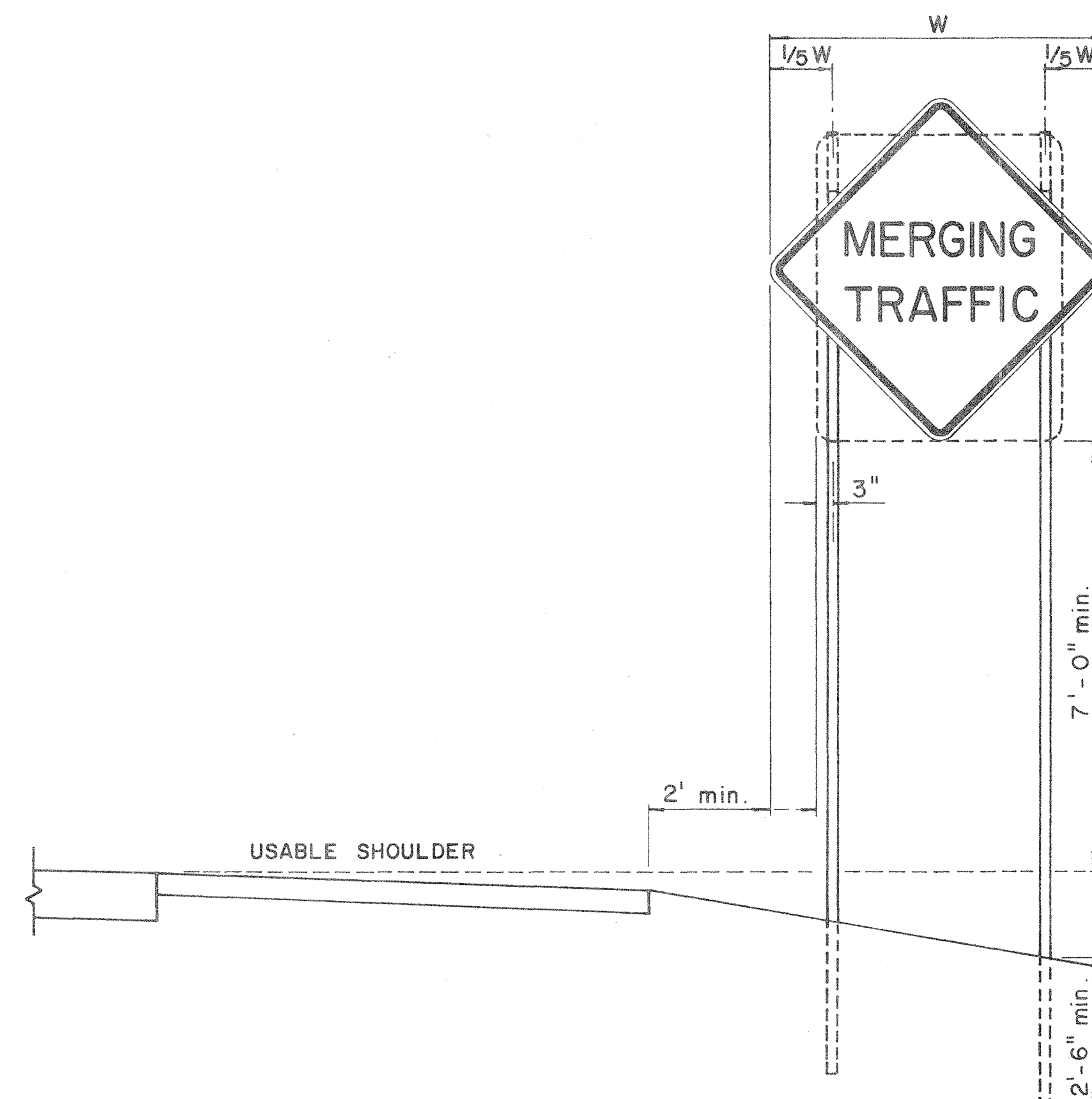
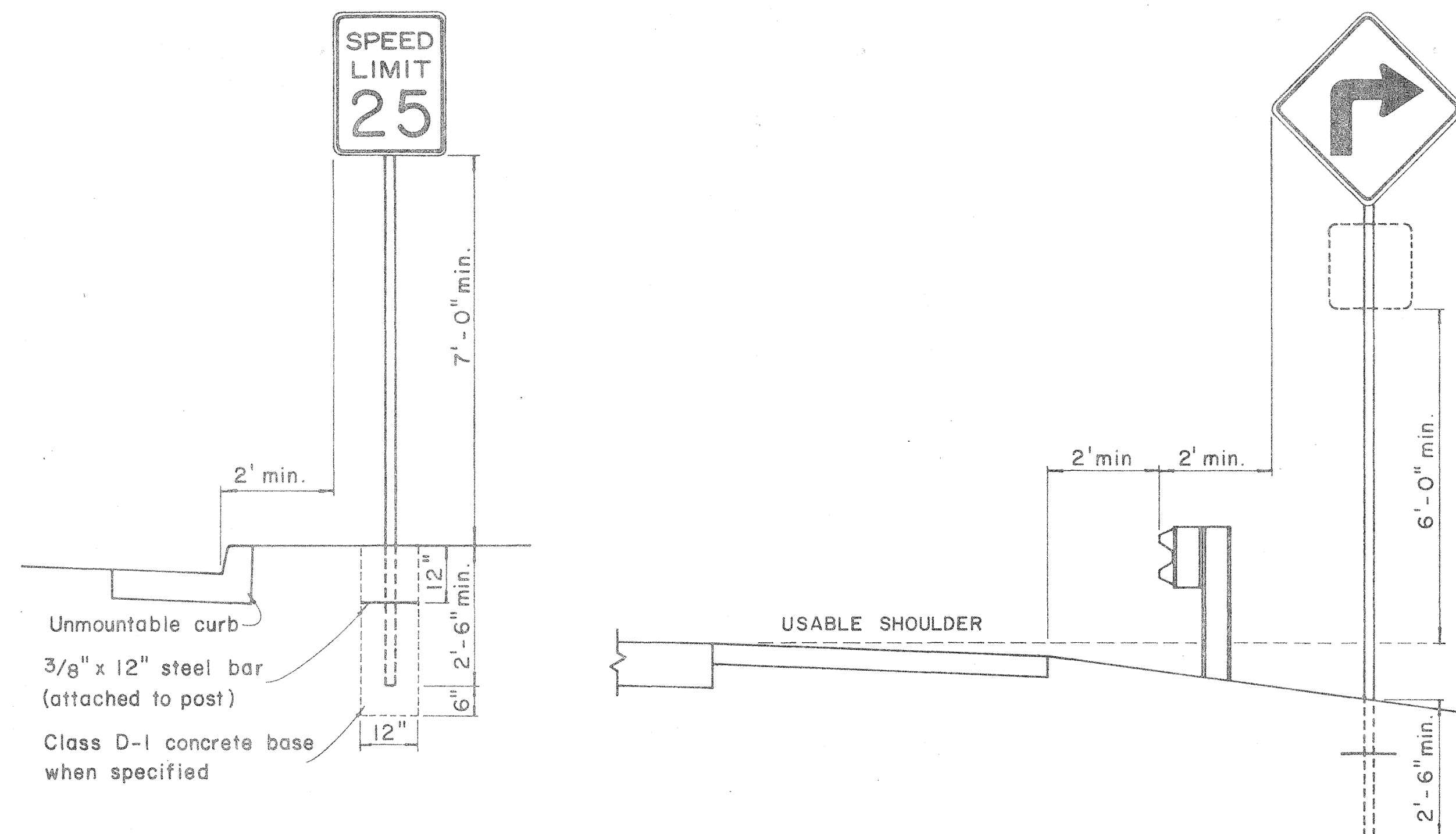
GENERAL NOTES

1. The sign panels will be constructed by the State and will be available for pick up by the Contractor from the State Highway Maintenance Yard.
2. The Contractor shall construct the sign supports and frames and install the sign panels at the locations shown on the plans and as ordered by the Engineer.
3. At the end of construction the Contractor shall remove the sign panels and return it to the State Highway Maintenance Yard. Sign supports and frames shall be removed and cleared from the project site.

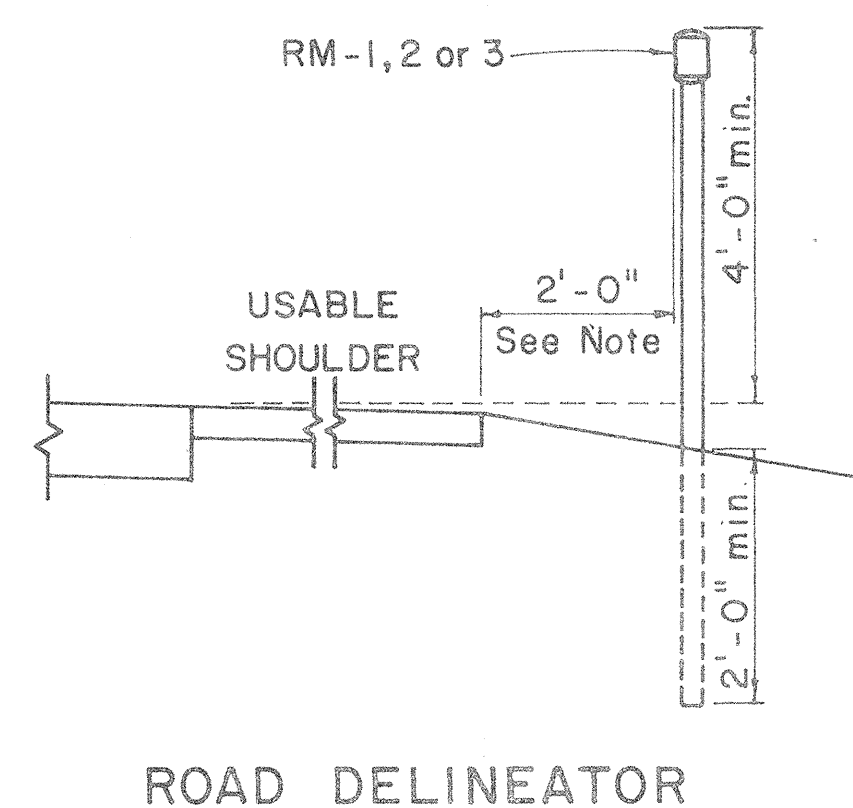
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL DETAILS
PROJECT INFORMATION SIGN
Scale: As Shown
SHEET No. 10 OF 15 SHEETS

26

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	27	41

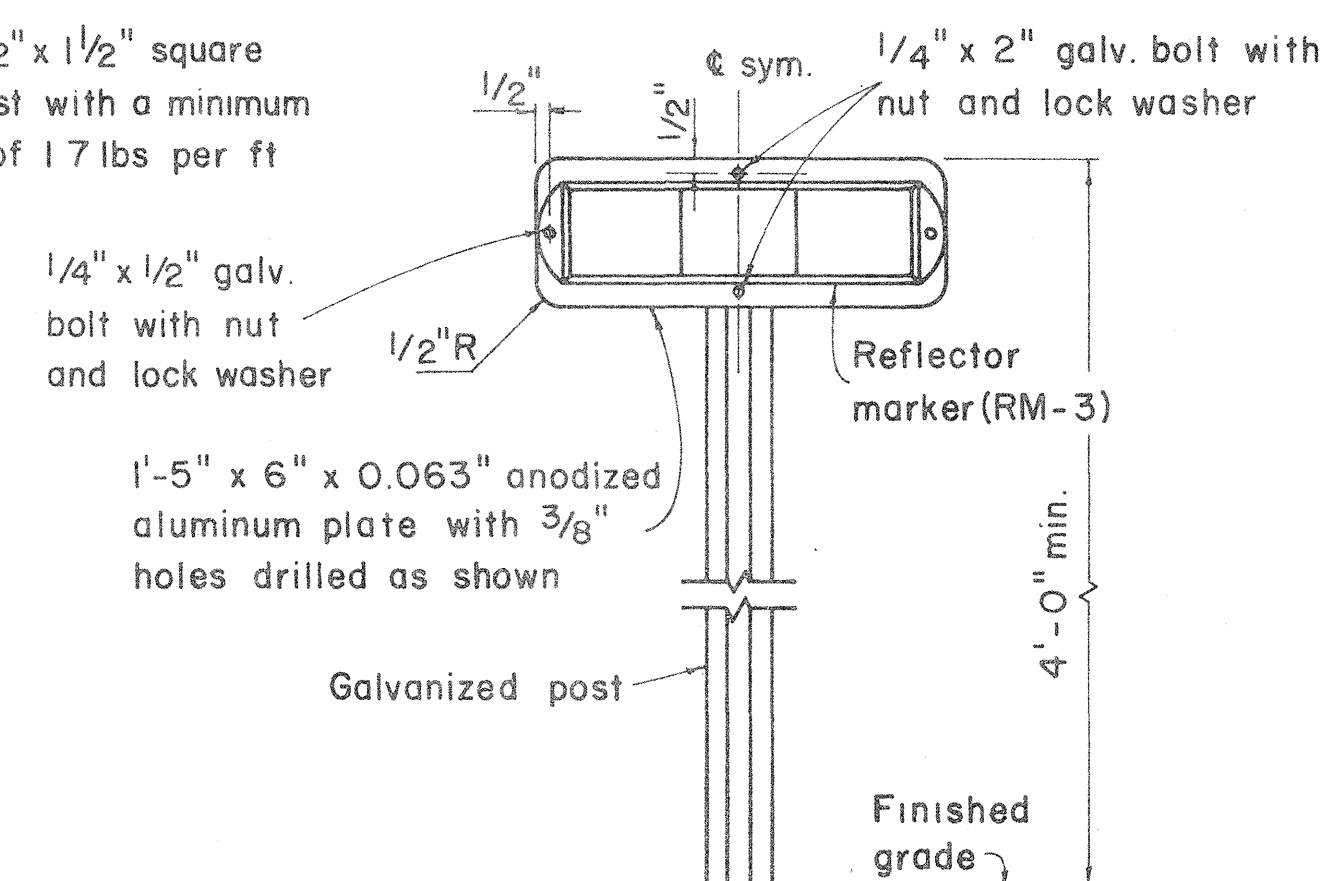
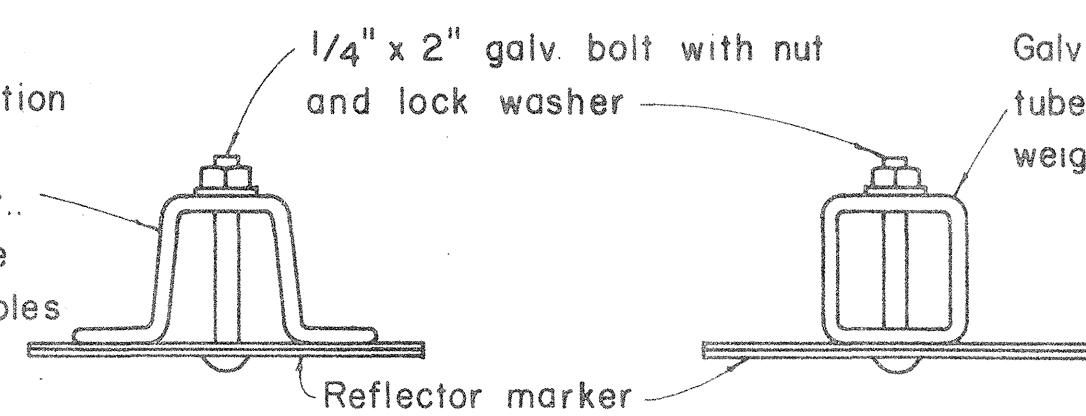


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION

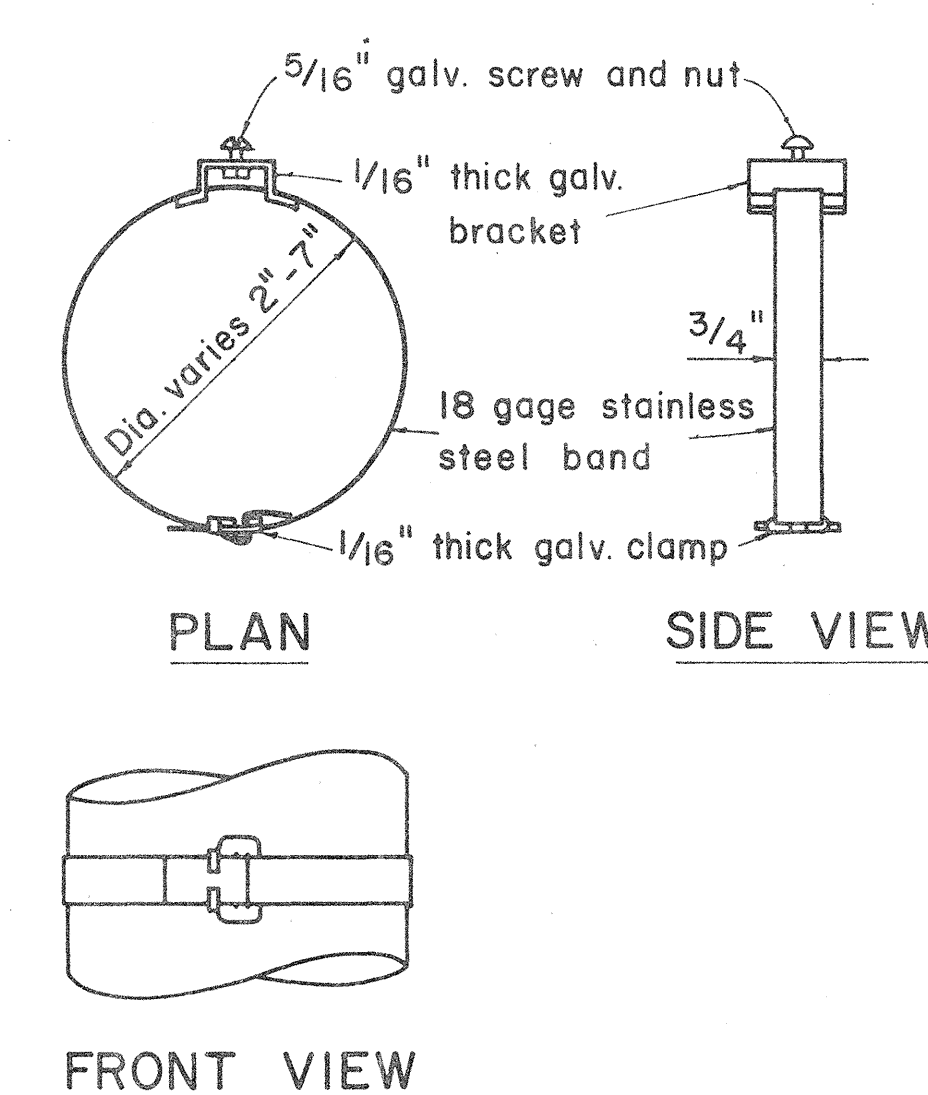


Galv. flanged channel
1/8" x 3 1/16" rolled section
post with a minimum
weight of 2 lbs. per ft.
Upper 2 ft shall have
a single row of 3/8" holes
centered in the web at
1" o.c.

TYPICAL SECTION OF ROAD DELINEATOR



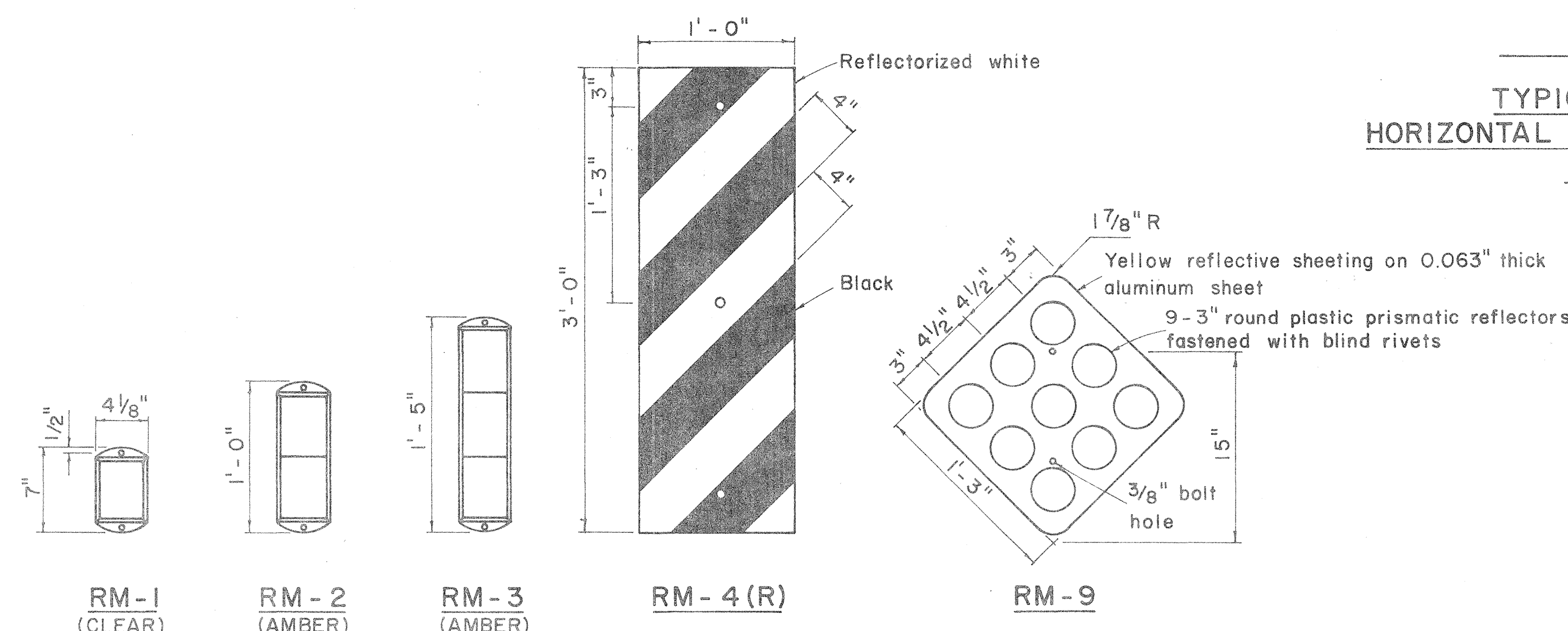
TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM-3H



TYPICAL BAND BRACKET FOR
MOUNTING TRAFFIC SIGNS

GENERAL NOTES:

- Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 2" galv. standard pipe or two 2" x 2" galv. sq. tube post or 4" x 4" redwood post S4S.
- Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06 stainless steel washers with neoprene rubber gasket.
- Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
- 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.
- Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
- (R) or (L) indicates right or left and shall be as shown on the plans.



REFLECTOR MARKERS

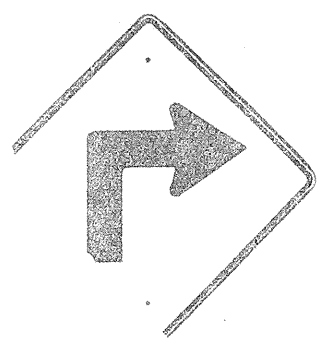
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS MISCELLANEOUS SIGN DETAILS

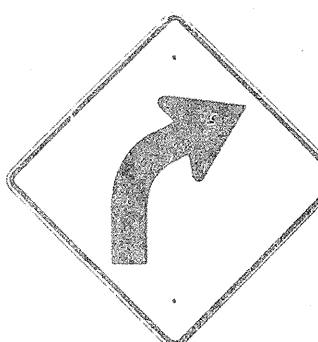
Not to scale March, 1968

SHEET NO. 27 OF 15 SHEETS DT 100

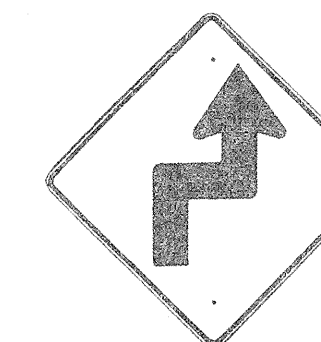
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	29	41



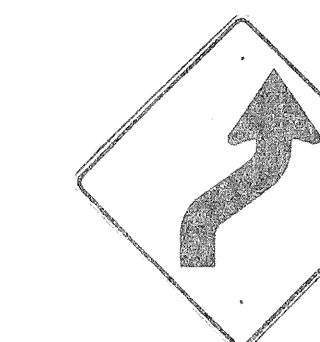
WI-1(R) 30" x 30"



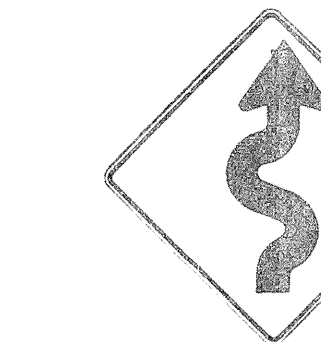
WI-2(R) 30" x 30"



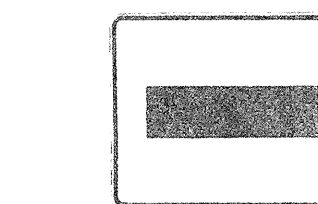
WI-3(R) 30" x 30"



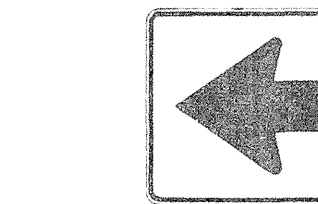
WI-4(R) 30" x 30"



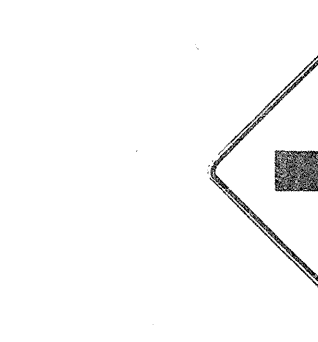
WI-5(R) 30" x 30"



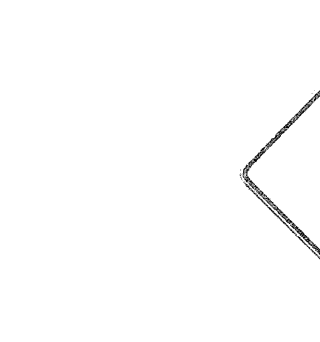
WI-6 48" x 24"



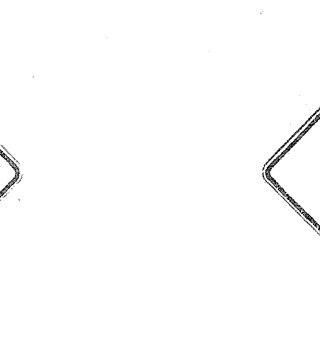
WI-7 48" x 24"



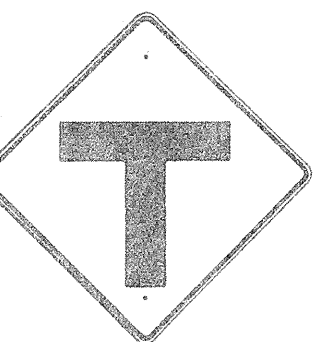
W2-1 30" x 30"



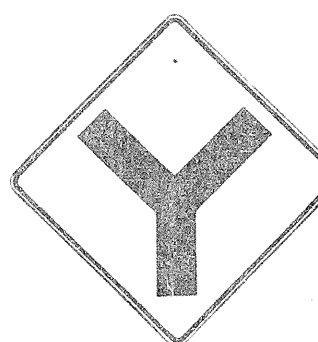
W2-2 30" x 30"



W2-3(R) 30" x 30"



W2-4 30" x 30"



W2-5 30" x 30"



W3-1 30" x 30"



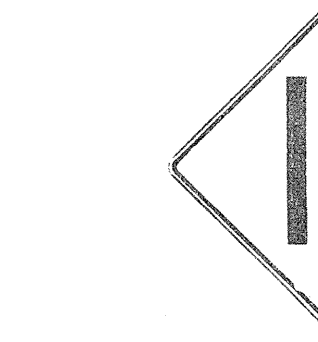
W3-2 30" x 30"



W3-3 36" x 36"



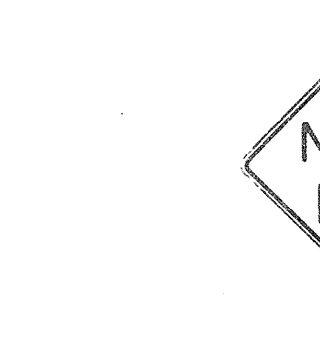
W4-1 30" x 30"
W4-1-E 36" x 36"
W4-1-I 48" x 48"



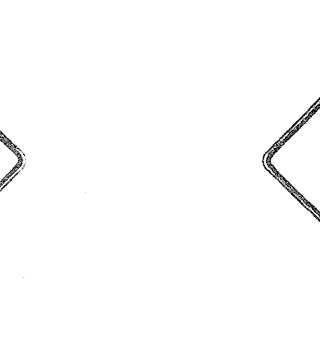
W4-2 30" x 30"
W4-2-E 36" x 36"



W5-1 30" x 30"
W5-1-E 36" x 36"



W5-2 30" x 30"



W5-3 30" x 30"



W6-1 36" x 36"



W6-2 36" x 36"



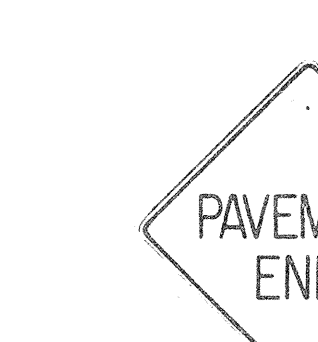
W7-1 30" x 30"



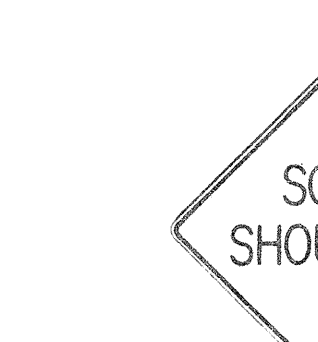
W8-1 30" x 30"



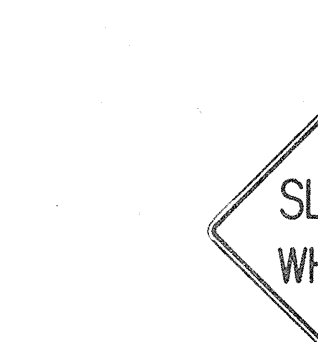
W8-2 30" x 30"



W8-3 30" x 30"



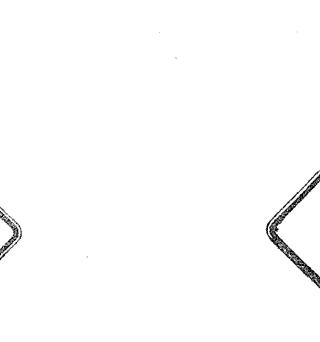
W8-4 30" x 30"



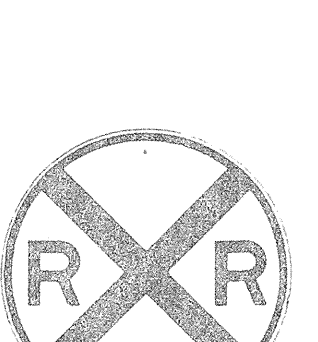
W8-5 30" x 30"



W9-1 30" x 30"



W9-2 30" x 30"



W10-1 36" DIAMETER



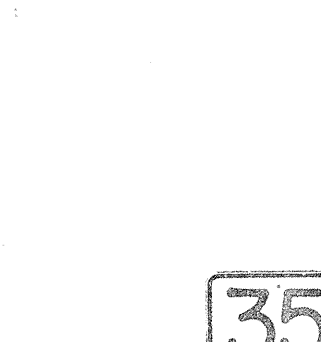
W11-1 30" x 30"



W11-5 30" x 30"



W12-2 36" x 36"



W13-1(35) 18" x 18"
W13-1(35)-E 24" x 24"



W13-2(25) 12" x 18"



W13-3(25) 48" x 60"

- 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 warning signs shall be reflectorized unless otherwise specified.
 - All warning signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise noted.
 - (R) or (L) indicates right or left and shall be as shown on the plan.
 - The suffix "E" denotes Expressway signs and "I" denotes Interstate signs.
 - For W13 sign, number in () indicates speed and shall be as shown on the plans.

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

REVISED: September 26, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE

SHEET No. 13 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	30	41



W7-2 48" x 48"



W8-7 30" x 30"



W14-1 30" x 30"



W20-1a 48" x 48"



W20-2d 48" x 48"



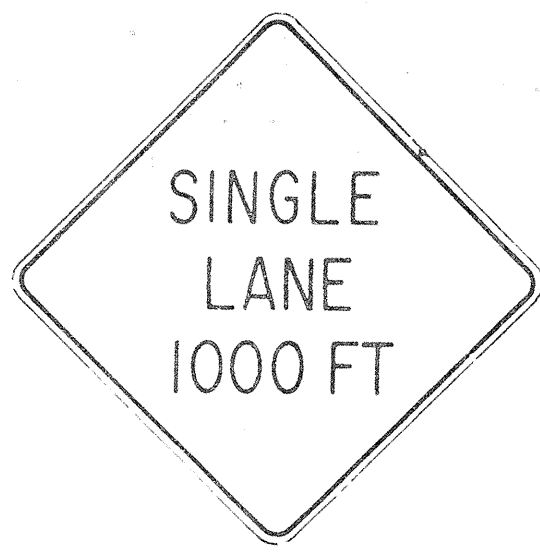
W20-3b 48" x 48"



W20-4d 48" x 48"



W20-5d(L) 48" x 48"



W20-6b 48" x 48"



W20-7c 48" x 48"



W21-1 30" x 30"



W21-2 24" x 24"



W21-3 36" x 36"



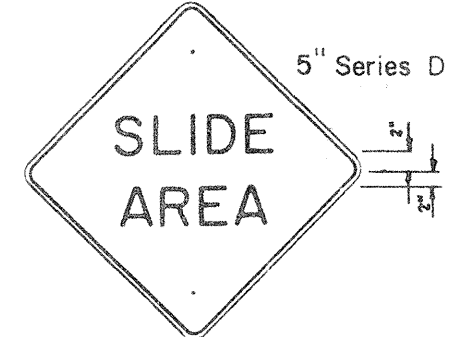
W21-4 30" x 30"



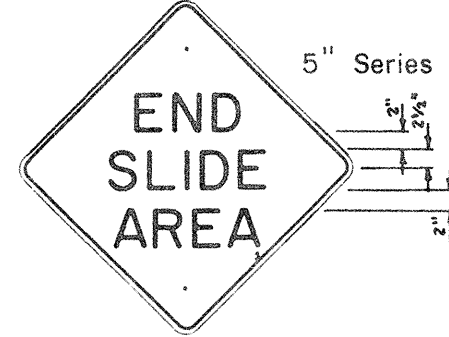
W21-5 30" x 30"



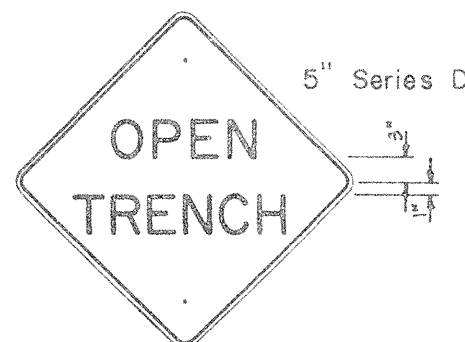
W21-6 30" x 30"



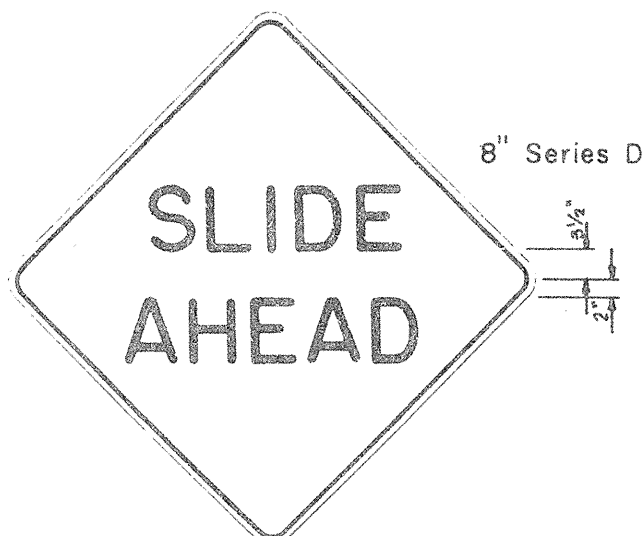
W22-1 30" x 30"



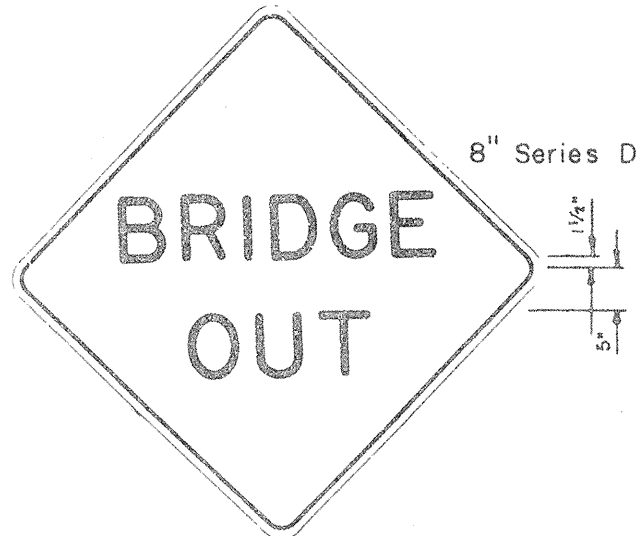
W22-2 30" x 30"



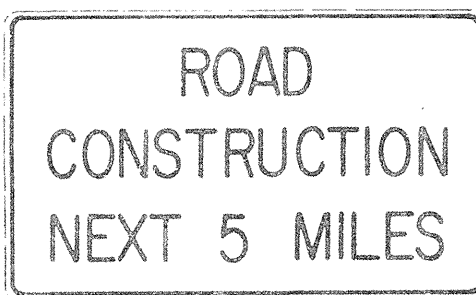
W22-3 30" x 30"



W22-4 48" x 48"



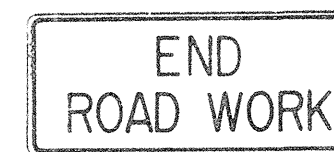
W22-5 48" x 48"



G20-1(5) 60" x 36"



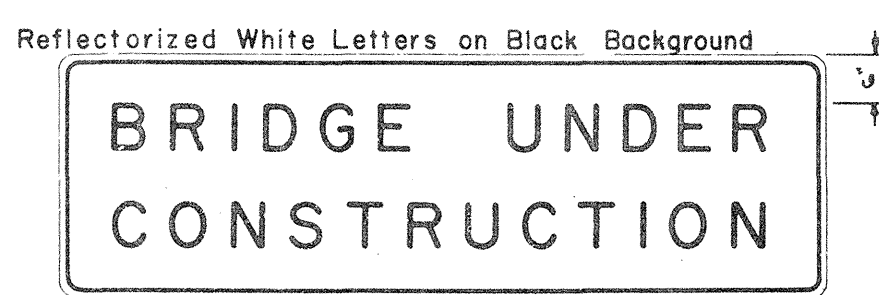
G20-2 60" x 24"



G20-3 42" x 18"



M5-7(L) 48" x 18"



CW-1 96" x 30"

- 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 $\frac{3}{8}$ " 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.
 - Number in () indicates miles and shall be as shown on the plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

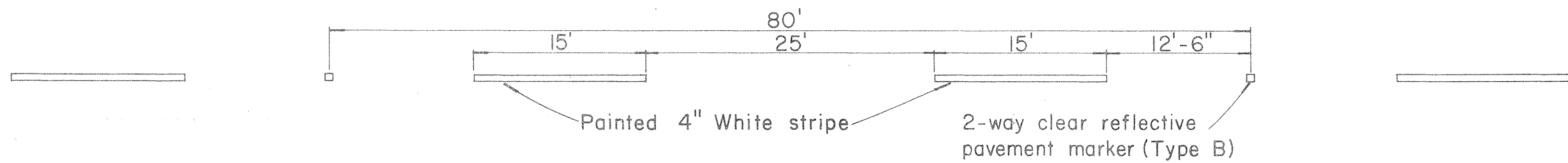
CONSTRUCTION SIGNS

NOT TO SCALE

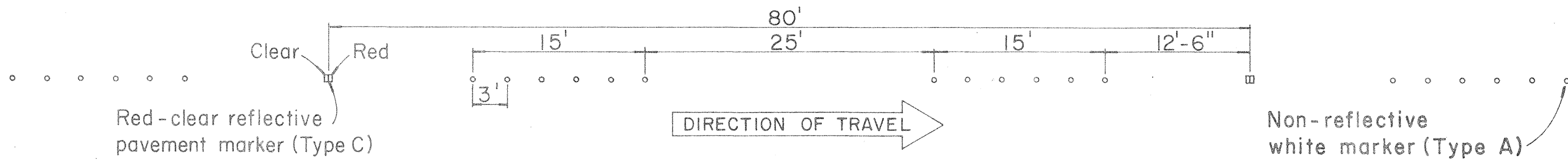
SHEET No. 14 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-092-1(8)	1970	31	41

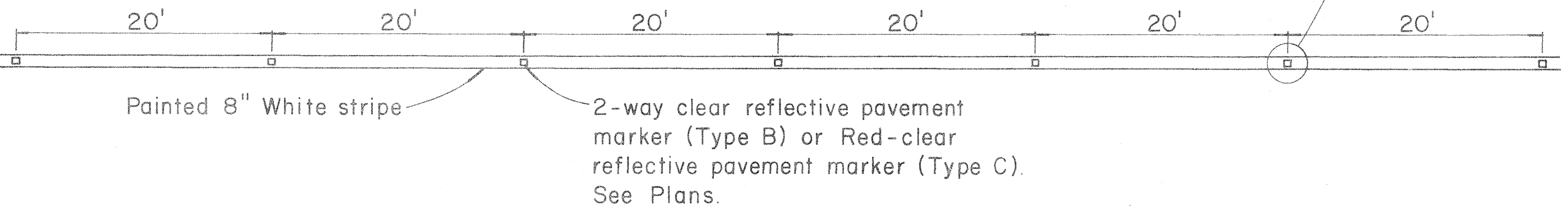
① CENTER LINES ON TWO - LANE RURAL ROADS AND CITY STREETS



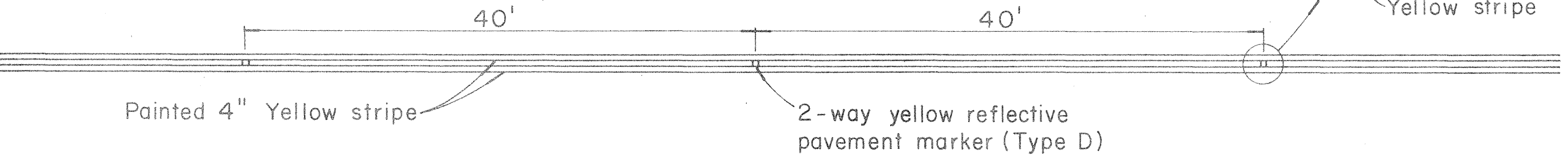
② LANE LINES



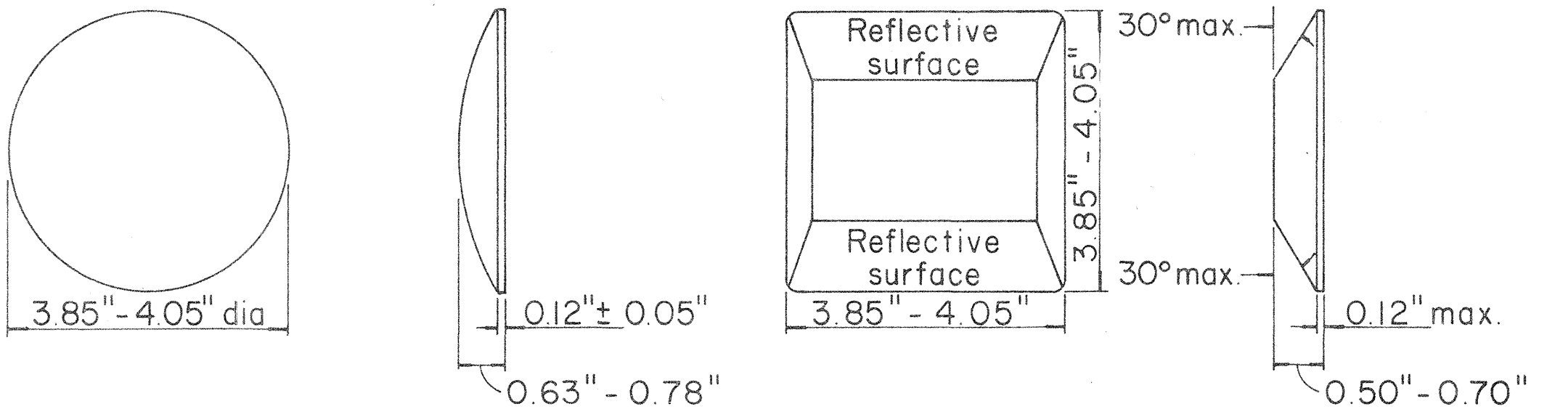
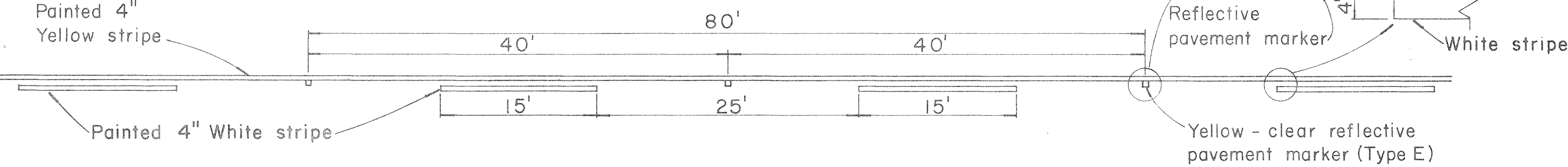
③ CHANNELIZING LINES



④ YELLOW DOUBLE CENTER LINES



⑤ NO PASSING - PASSING ZONES ON TWO-LANE ROADS

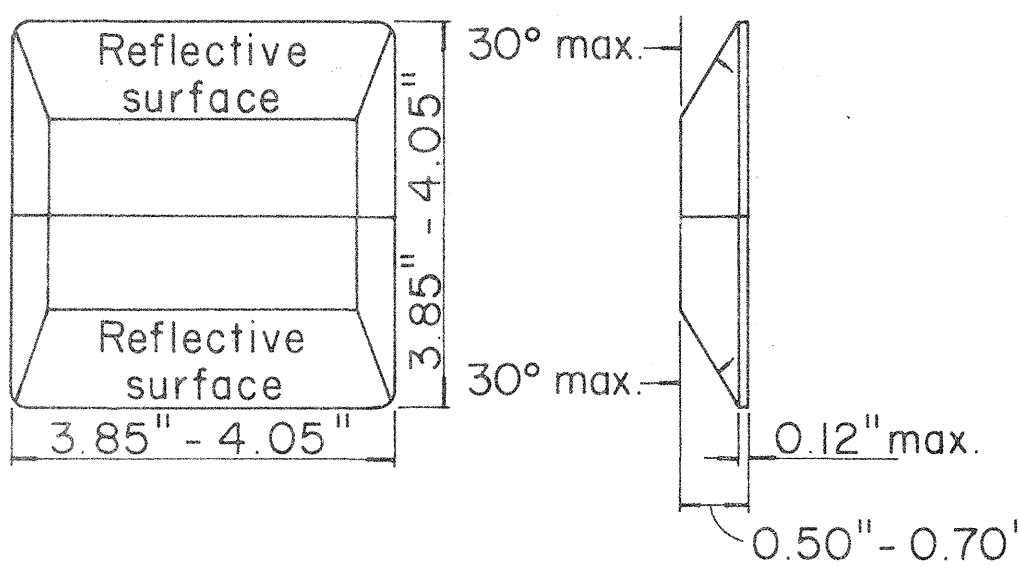


TYPE A
Non-reflective white marker

TYPE B
2-way clear reflective surface

TYPE J
Non-reflective yellow marker

TYPE D
2-way yellow reflective surface



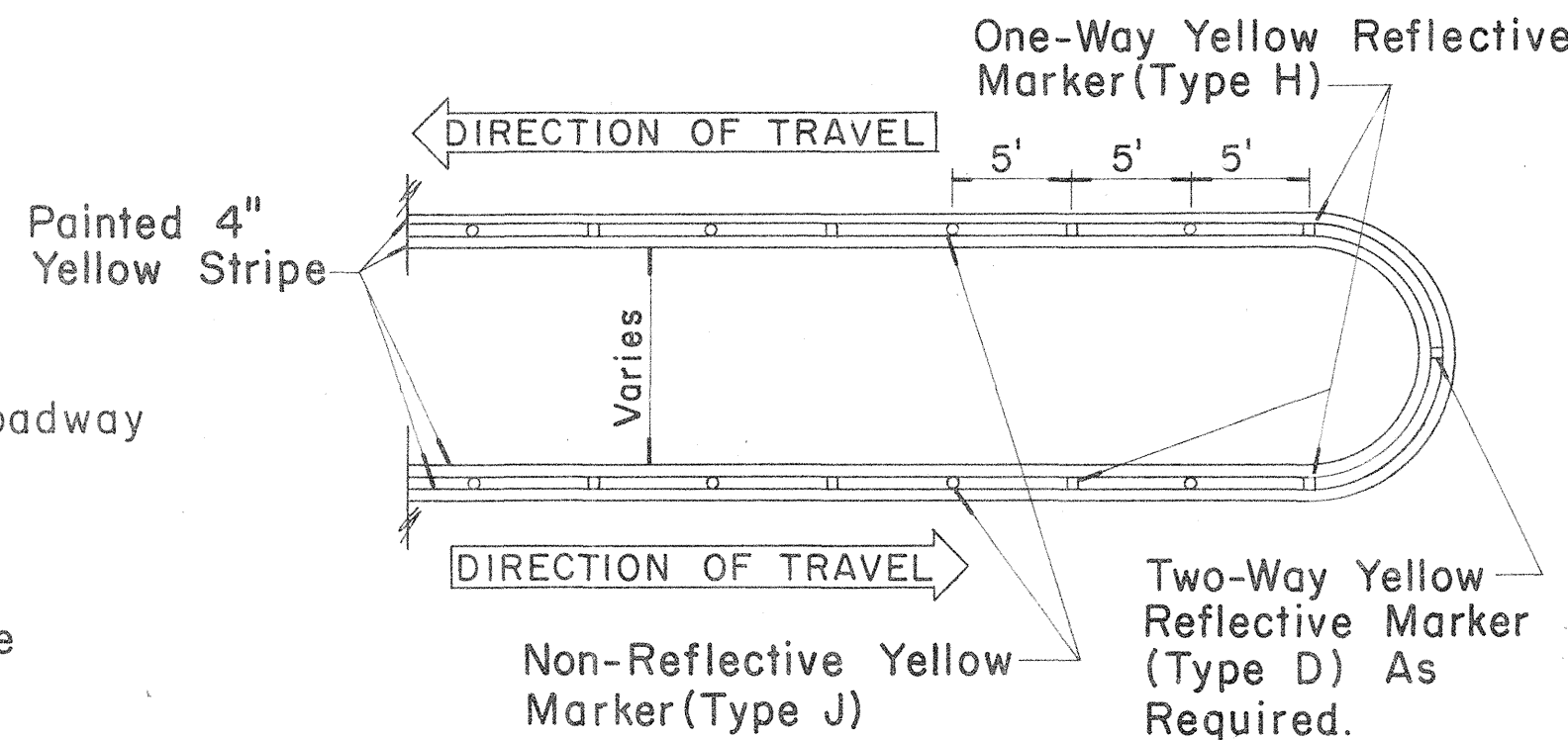
TYPE C
Red-clear reflective surface

TYPE H
One-way yellow reflective surface

TYPE E
Yellow-clear reflective surface

TYPE G
One-way clear reflective surface

⑥ MEDIAN NOSE DELINEATION



NOTE
Painted stripes to be done by State forces.

June 23, 1969
REVISED: Aug. 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS

Not to Scale

Sept., 1967

SHEET No. 15 OF 15 SHEETS