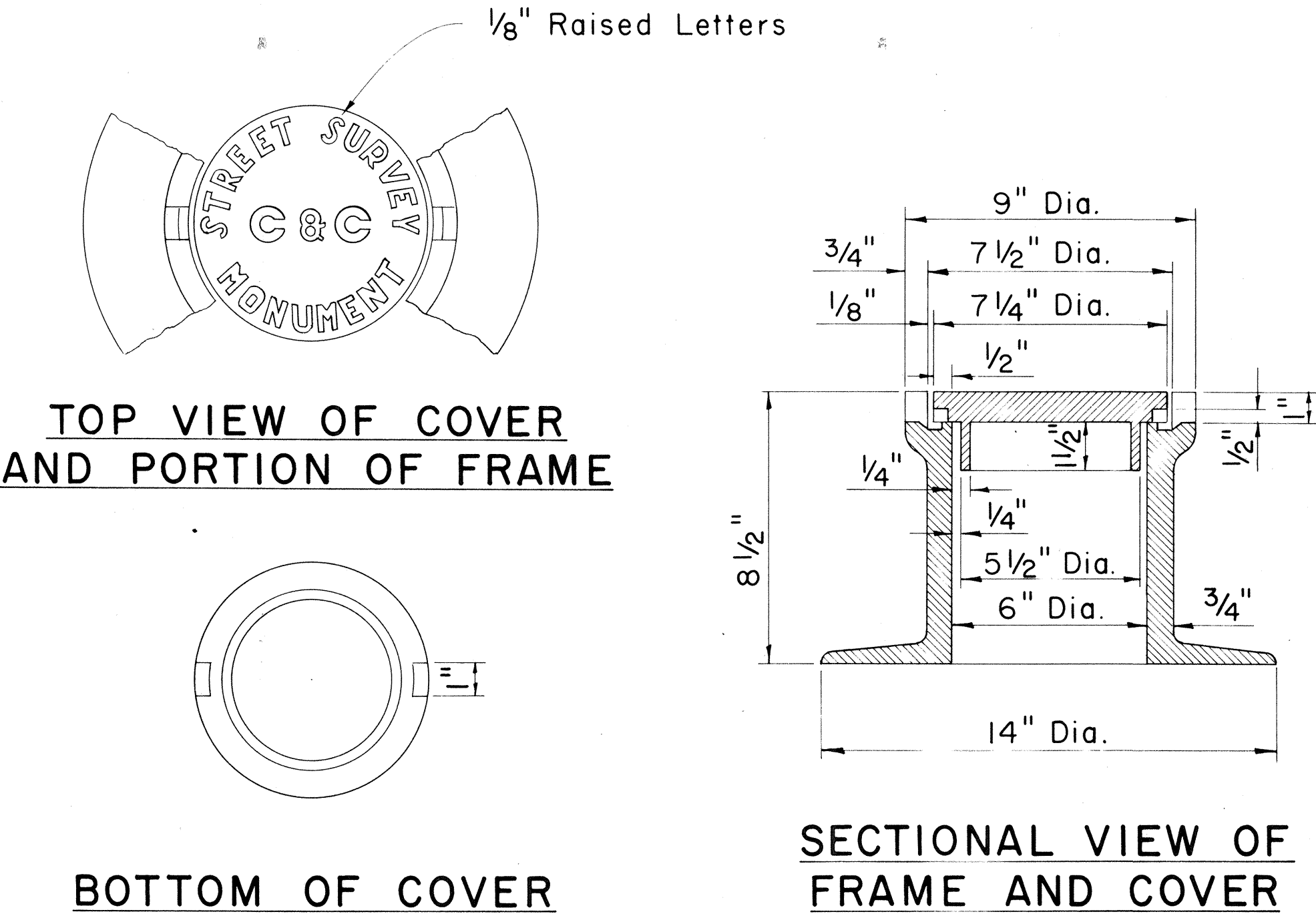
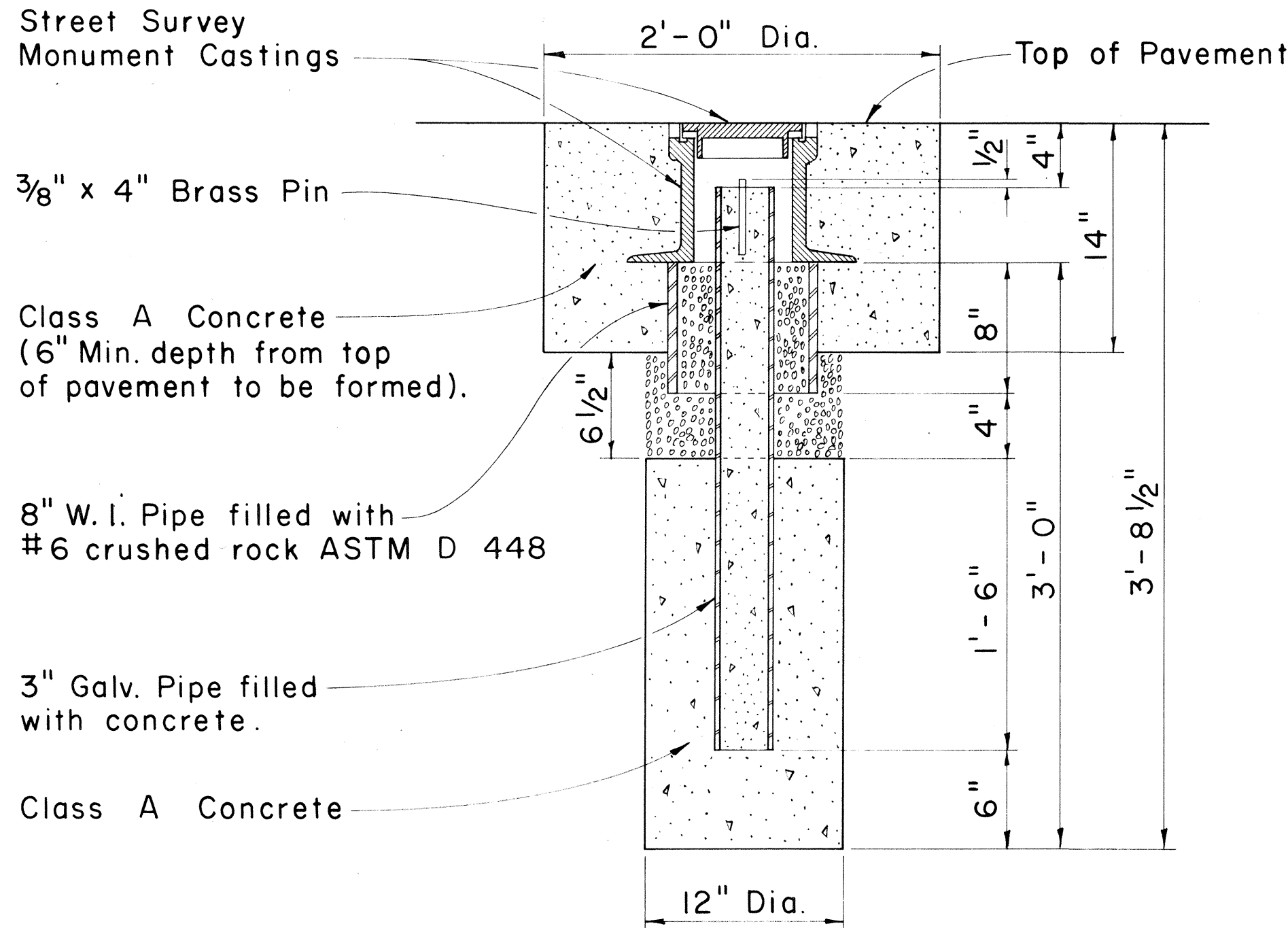


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	10	69



STREET SURVEY MONUMENT CASTINGS

Scale: 3" = 1'-0"



NOTE:

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

STREET SURVEY MONUMENT

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

DETAIL FOR
AND REFERENCE
SURVEY MONUMENT

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

APPROVAL RECOMMENDED:

12-4-69
DATE

APPROVED:

12-10-69
DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

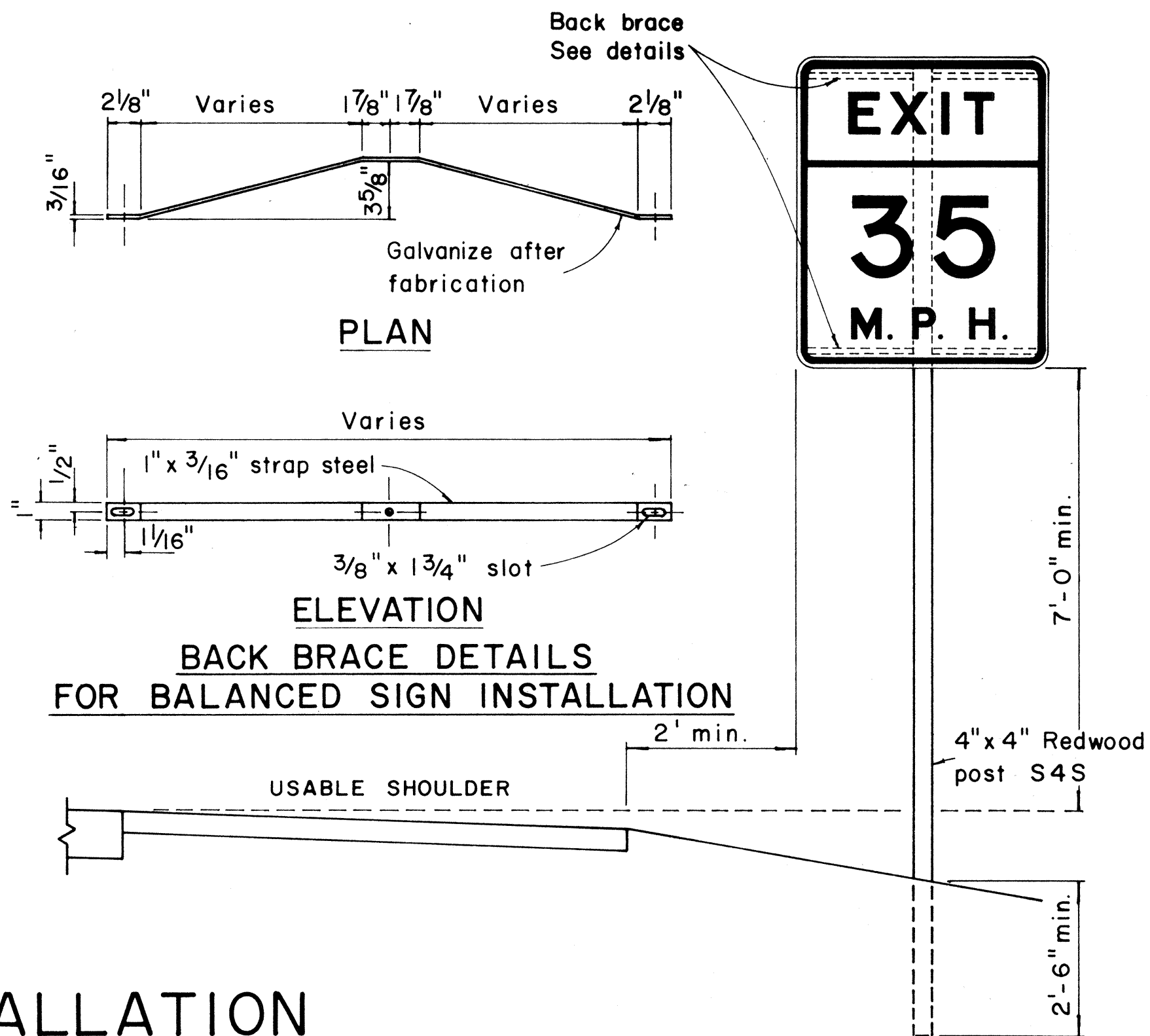
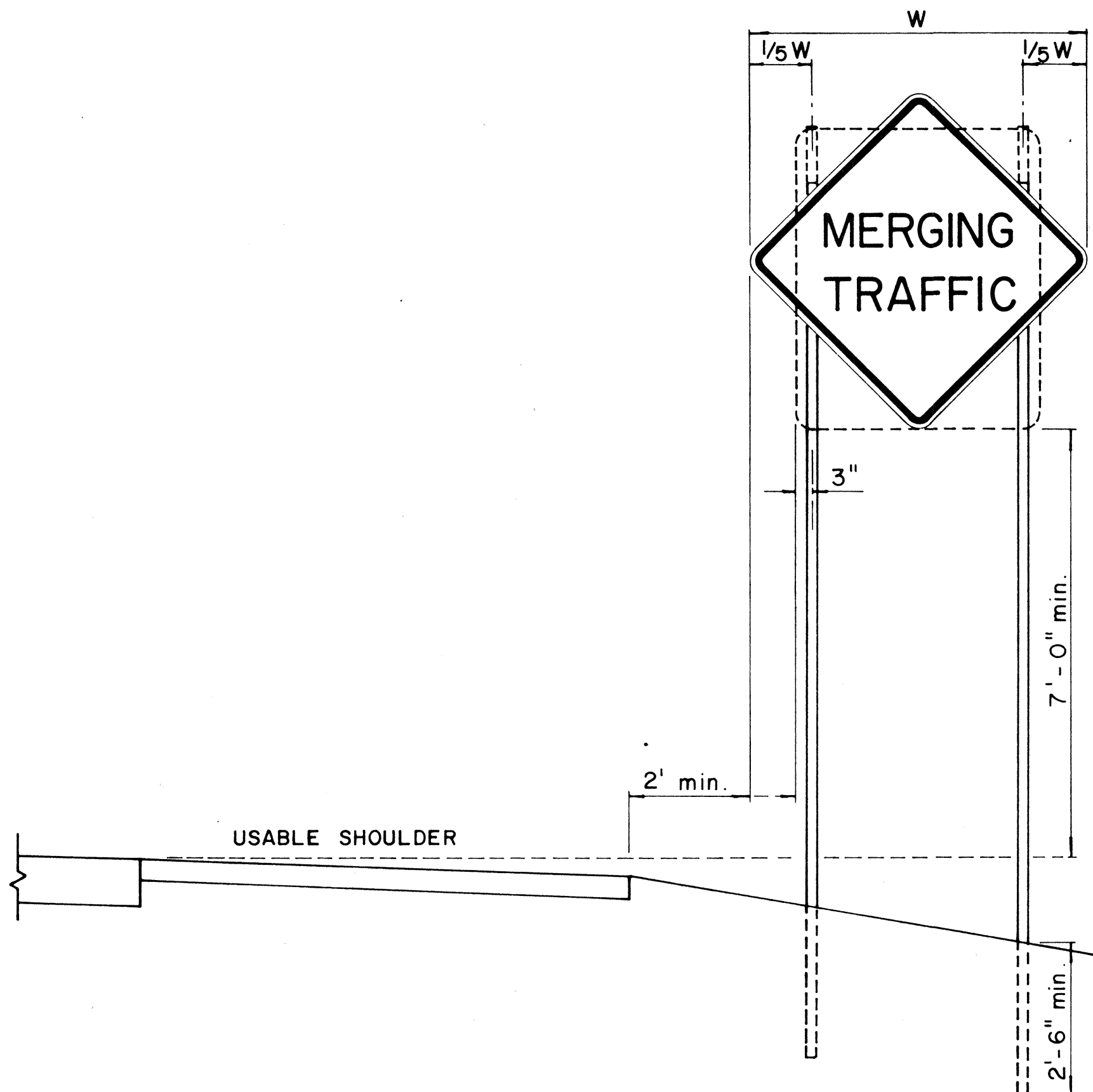
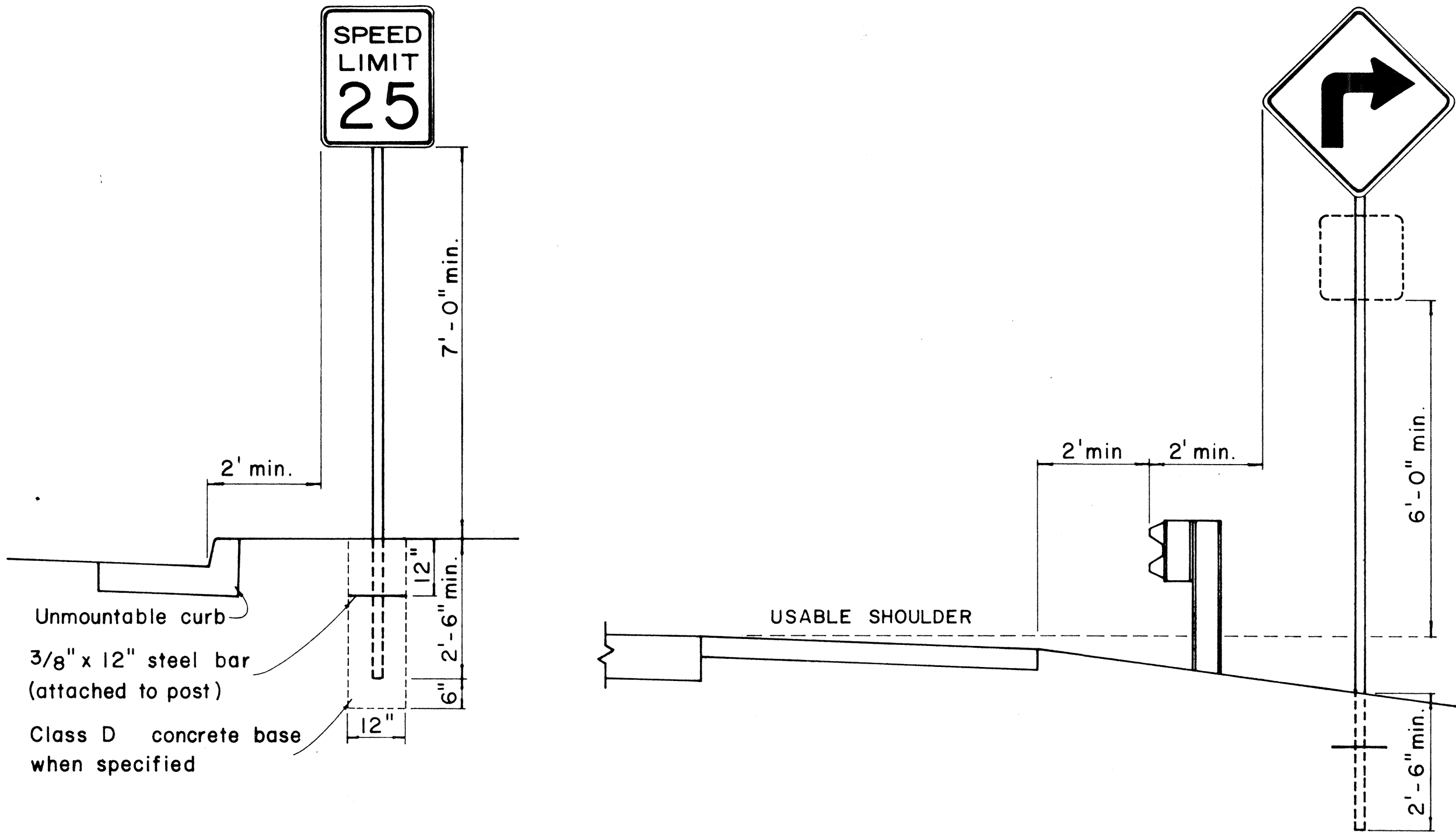
STANDARD DETAILS

CENTERLINE, REFERENCE SURVEY
AND C & C STREET SURVEY
MONUMENTS

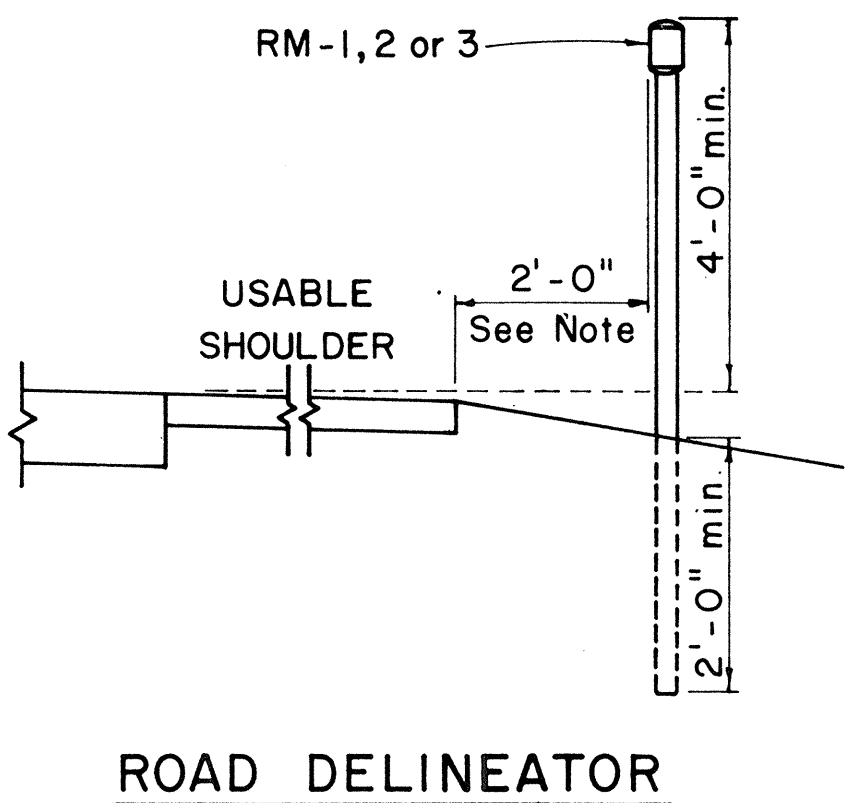
Scale: As Shown

SHEET No. 1 OF 10 SHEETS DD 613.1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	11	67

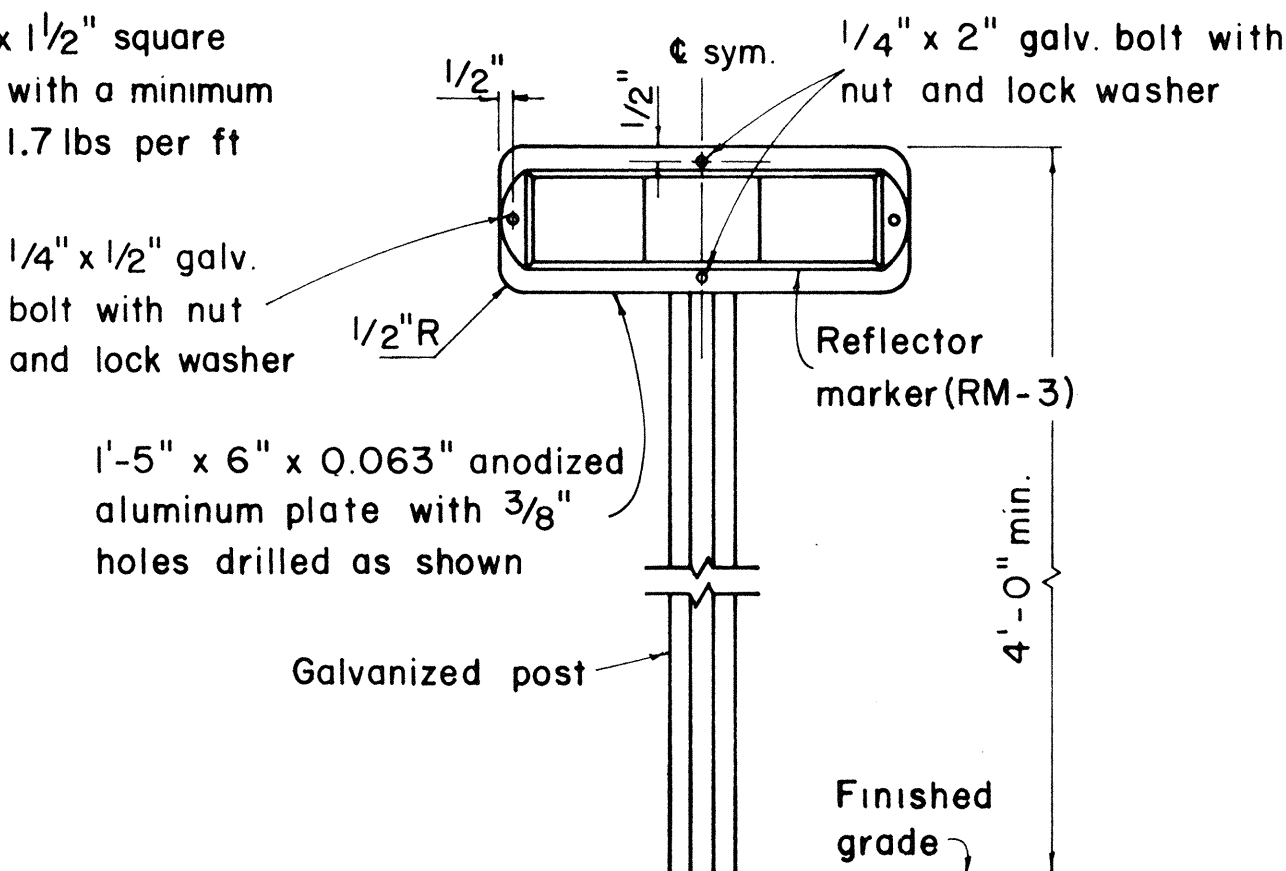
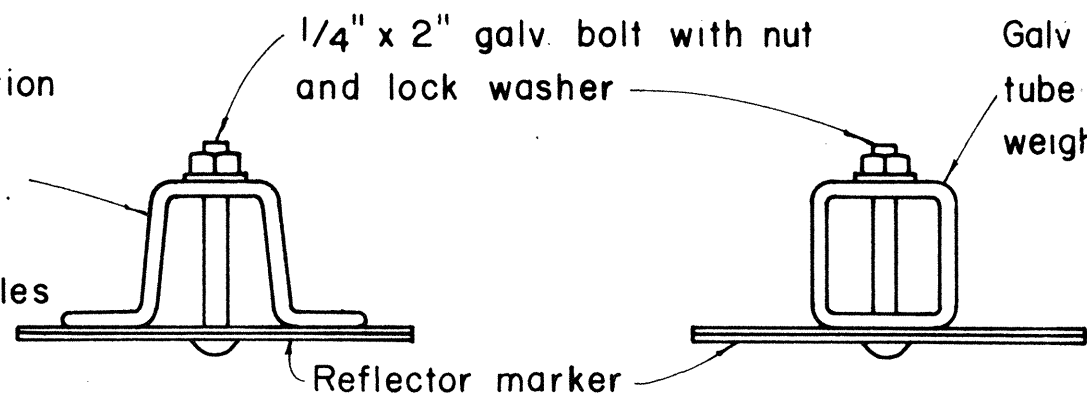


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION

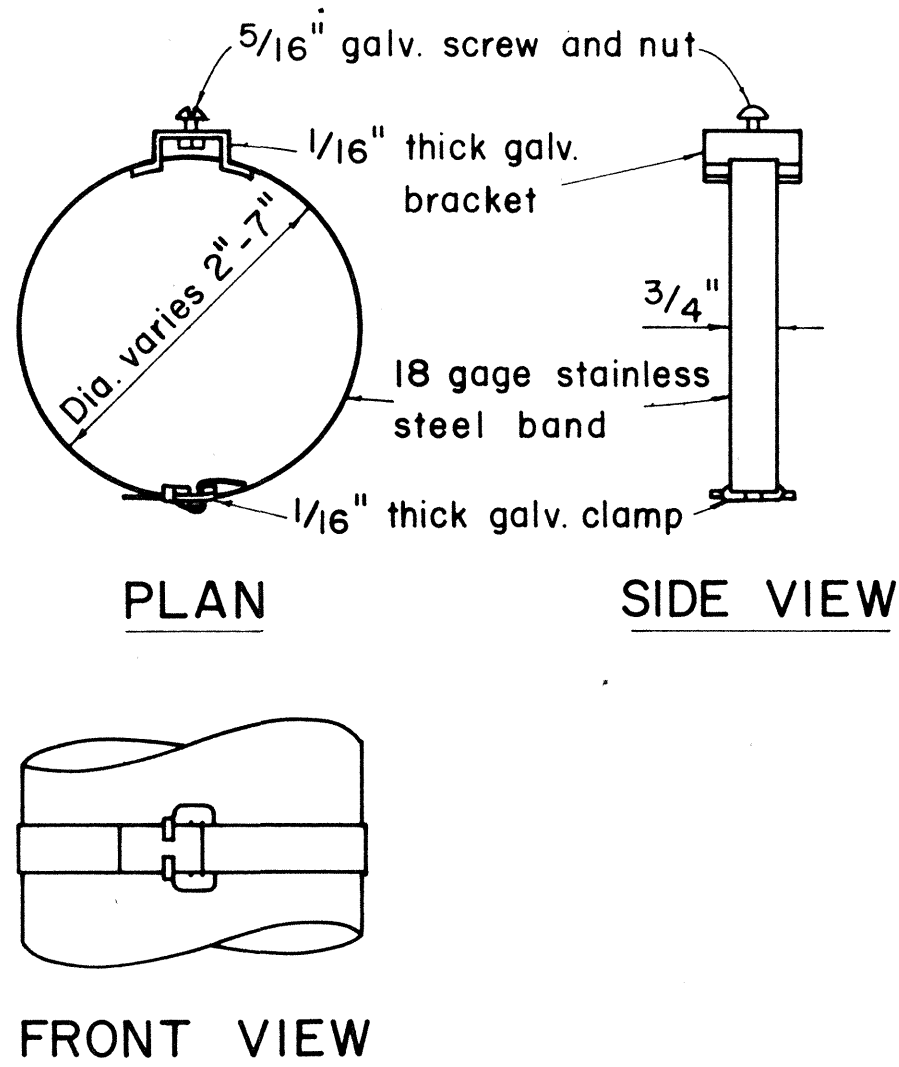


Galv. flanged channel 1/8" x 3/16" rolled section post with a minimum weight of 2 lbs. per ft. Upper 2 ft. shall have a single row of 3/8" holes centered in the web at 1" o.c.

TYPICAL SECTION OF ROAD DELINEATOR



TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM-3H



TYPICAL BAND BRACKET FOR
MOUNTING TRAFFIC SIGNS

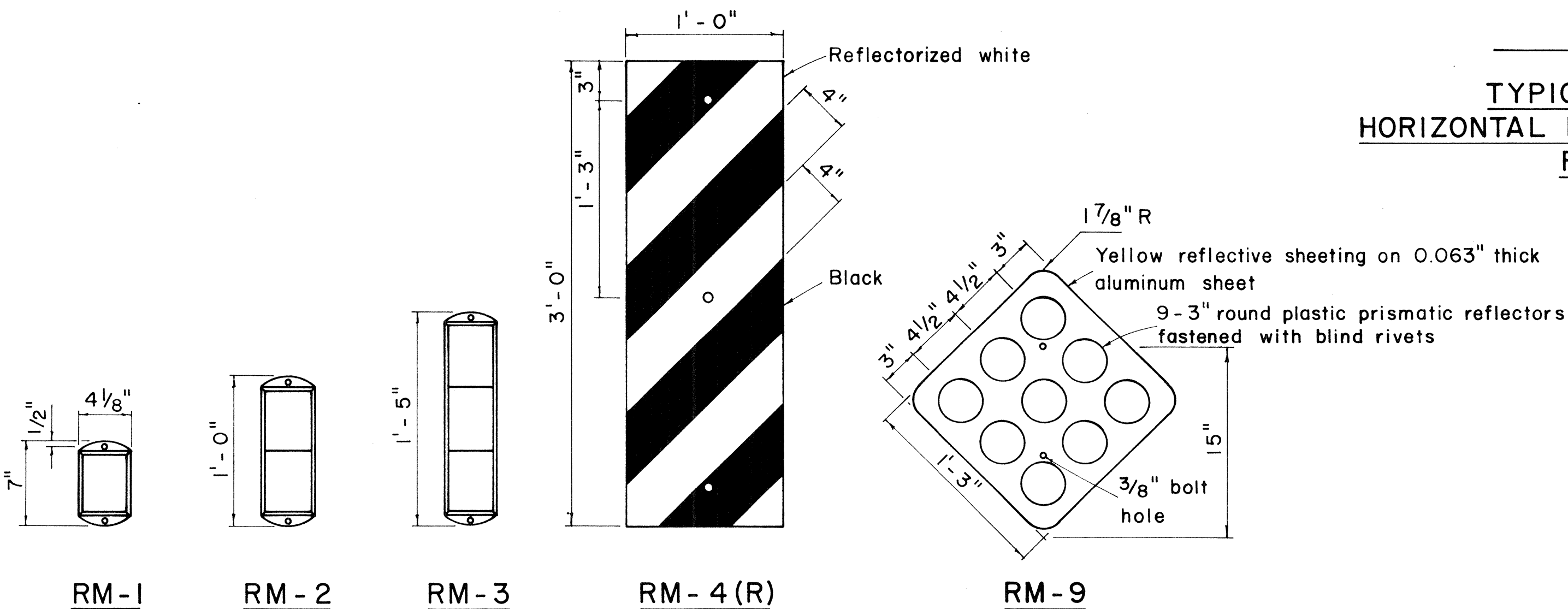
GENERAL NOTES:

- 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.

APPROVAL RECOMMENDED:
TRAFFIC ENGINEER
APPROVED:
ASSISTANT CHIEF, ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
MISCELLANEOUS SIGN DETAILS
Not to scale
March, 1968
SHEET No. 2 OF 10 SHEETS

NO.	REVISION	APPROVED BY	DATE

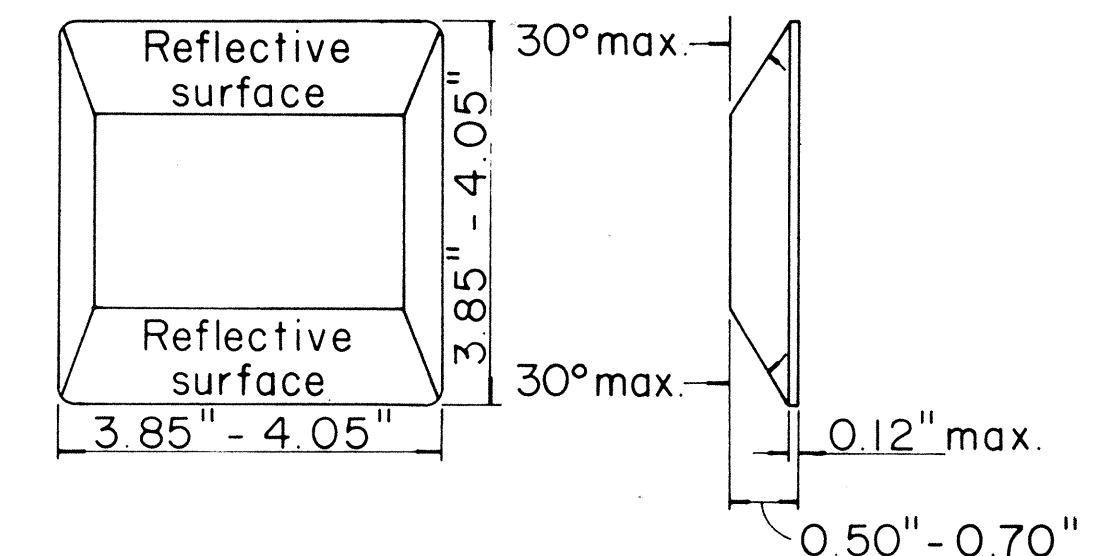
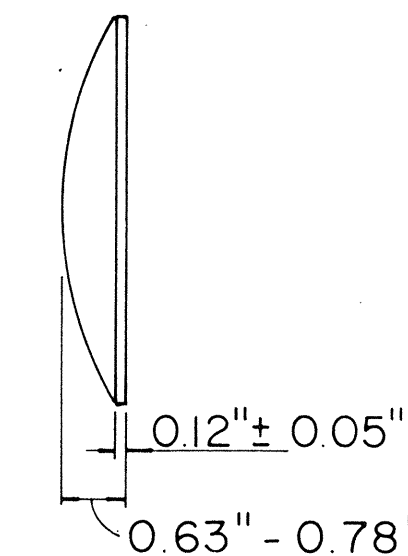
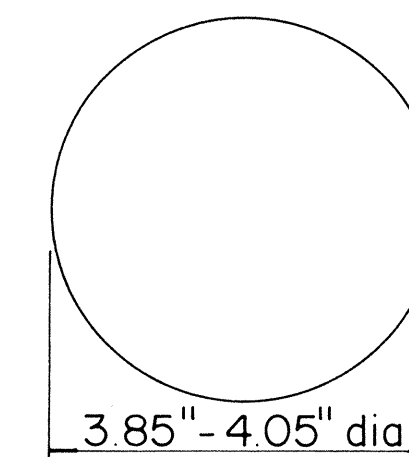
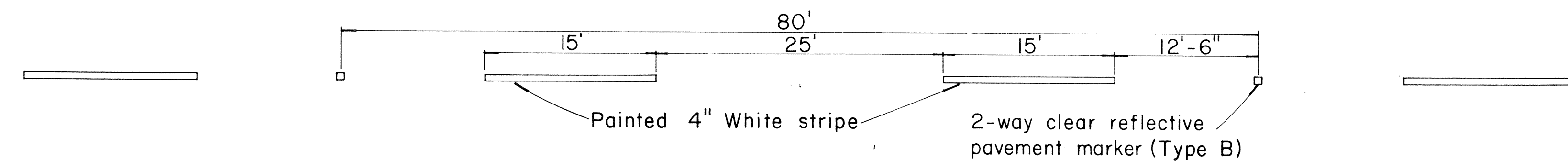


REFLECTOR MARKERS

DATE	NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	12	69

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



TYPE A

Non - reflective white marker

TYPE B

2-way clear reflective surface

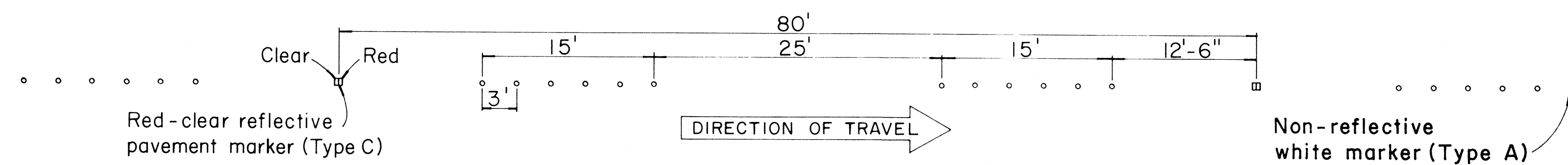
TYPE J

Non - reflective yellow marker

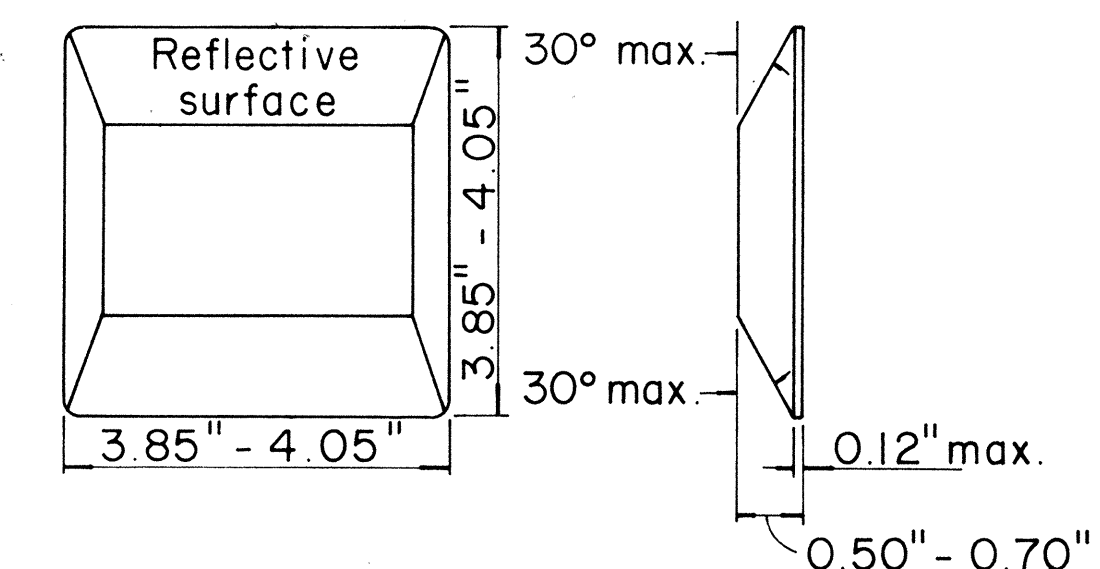
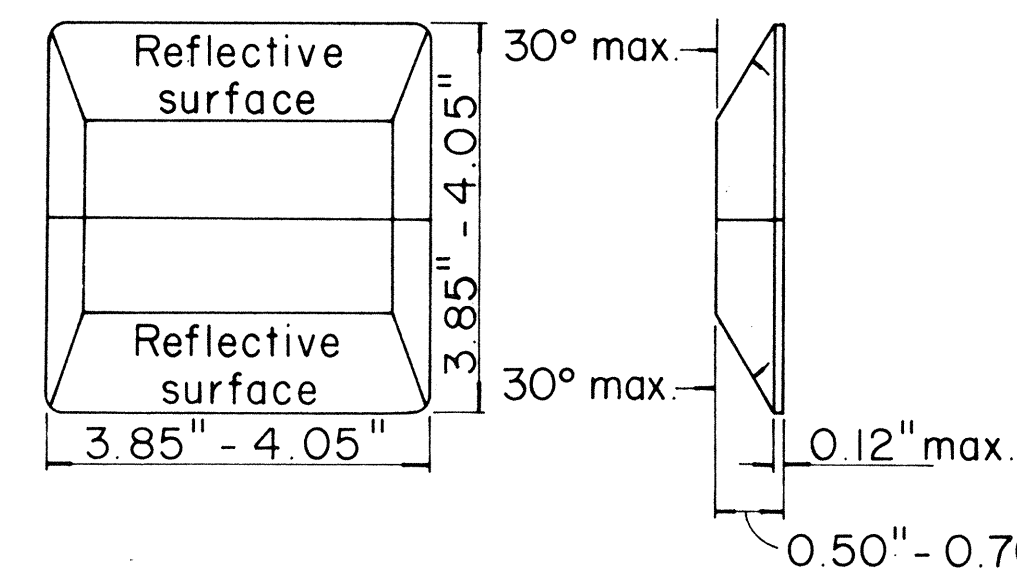
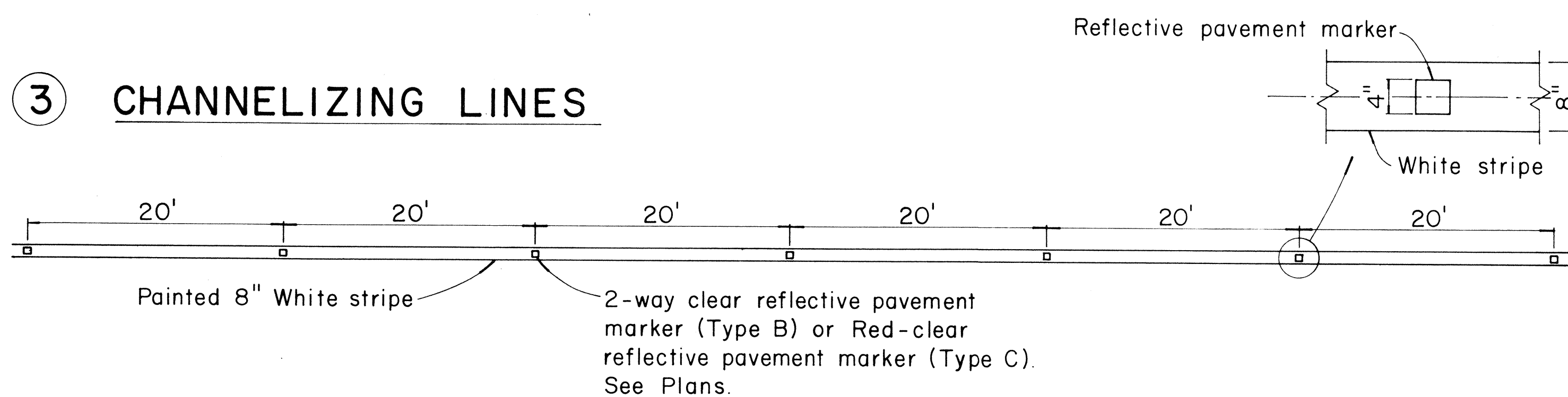
TYPE D

2-way yellow reflective surface

2 LANE LINES



3 CHANNELIZING LINES



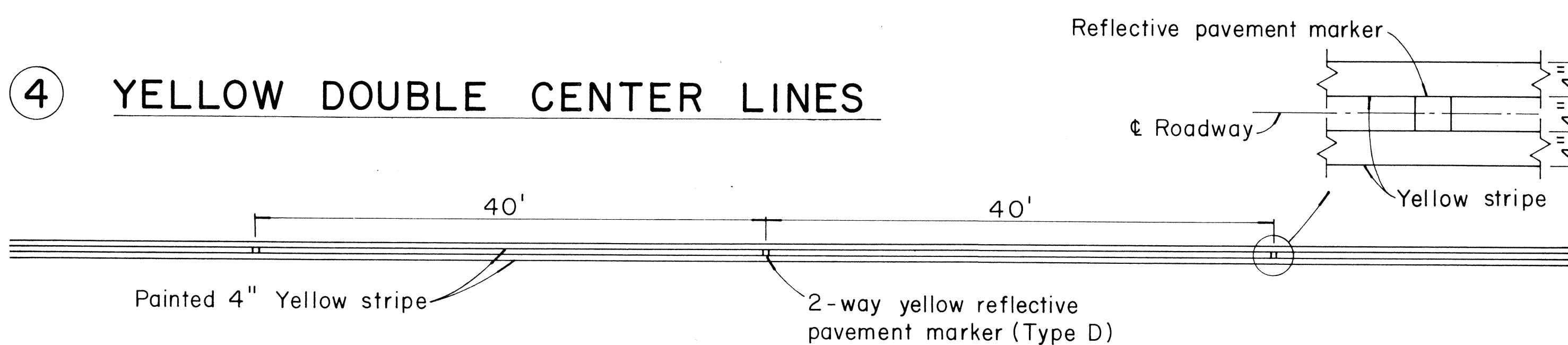
TYPE C

Red - clear reflective surface

TYPE H

One - way yellow reflective surface

4 YELLOW DOUBLE CENTER LINES



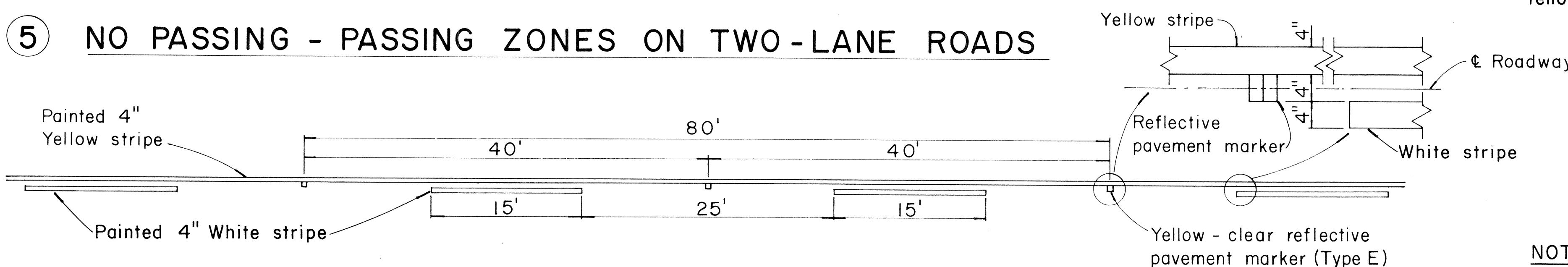
TYPE E

Yellow - clear reflective surface

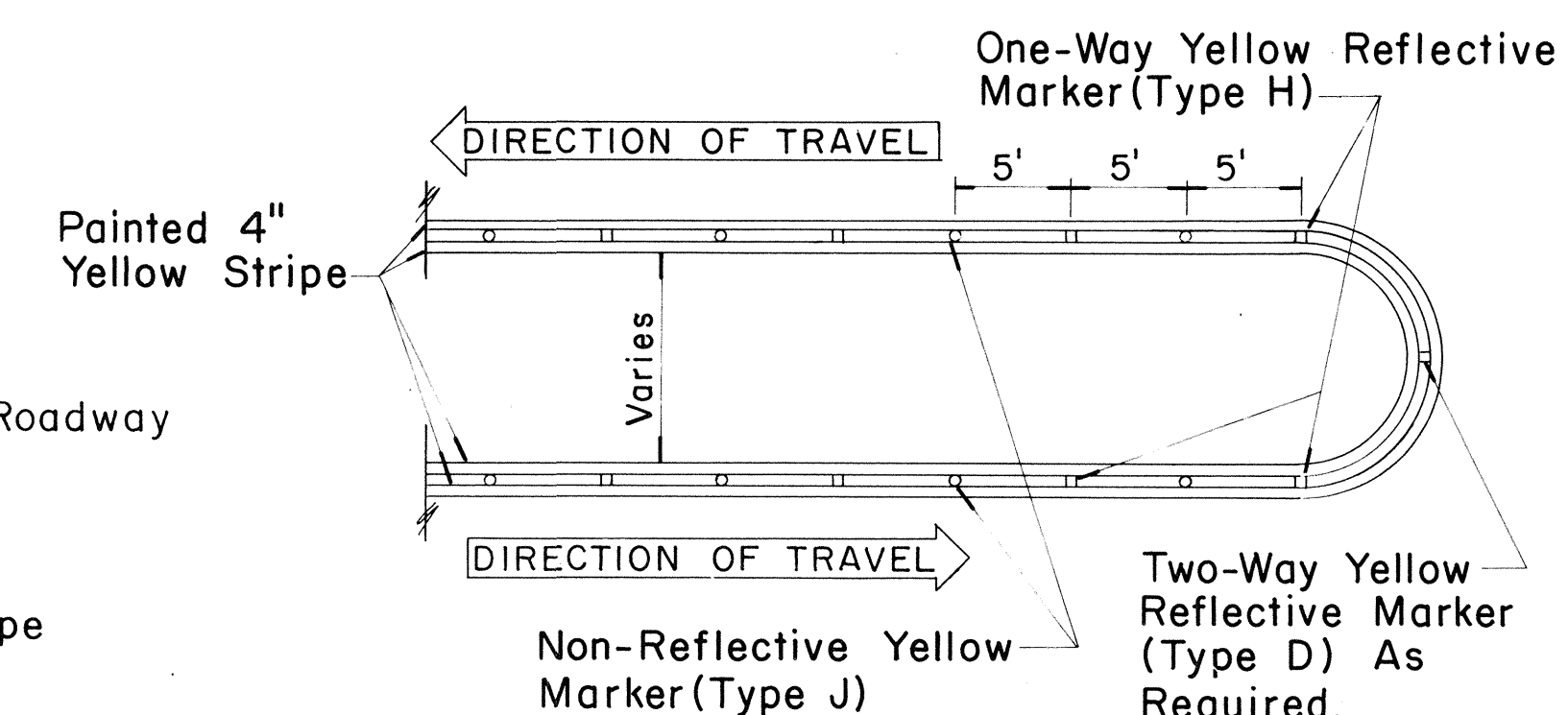
TYPE G

One - way clear reflective surface

5 NO PASSING - PASSING ZONES ON TWO-LANE ROADS



6 MEDIAN NOSE DELINEATION



NOTE

Painted stripes to be done by State forces.

NO.	REVISION	APPROVED BY	DATE

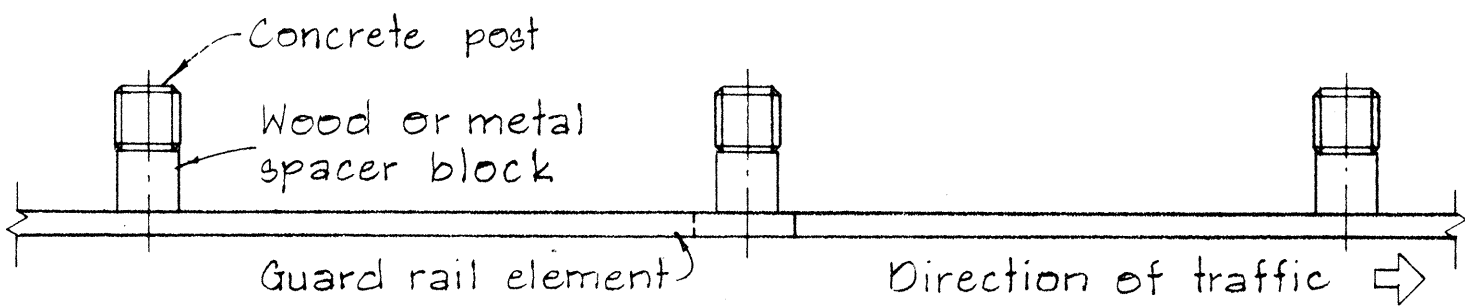
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS

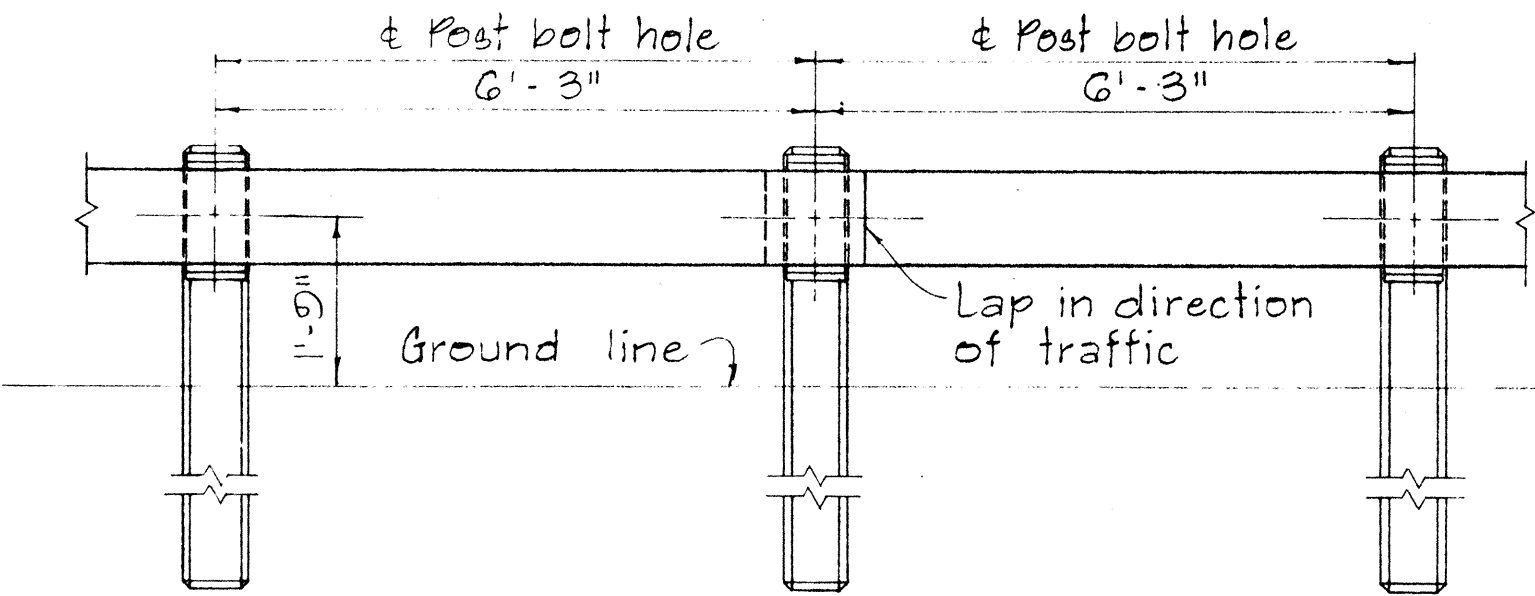
Not to Scale Sept., 1967

SHEET No. 3 OF 10 SHEETS DT 300

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	13	69



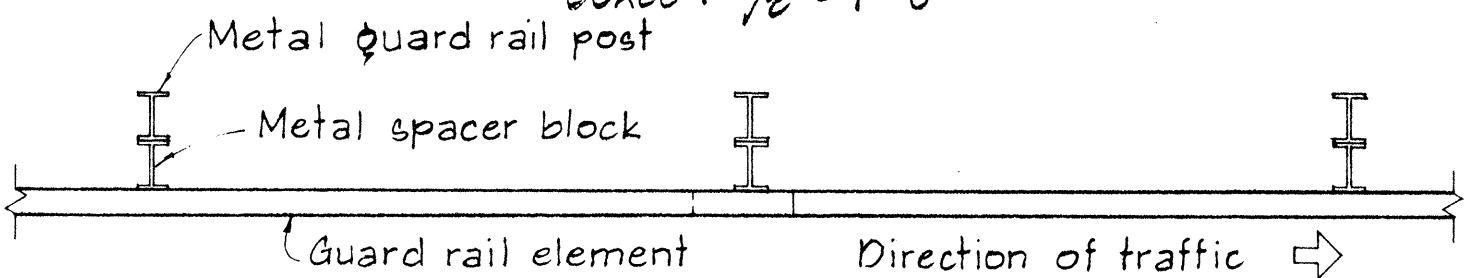
PLAN



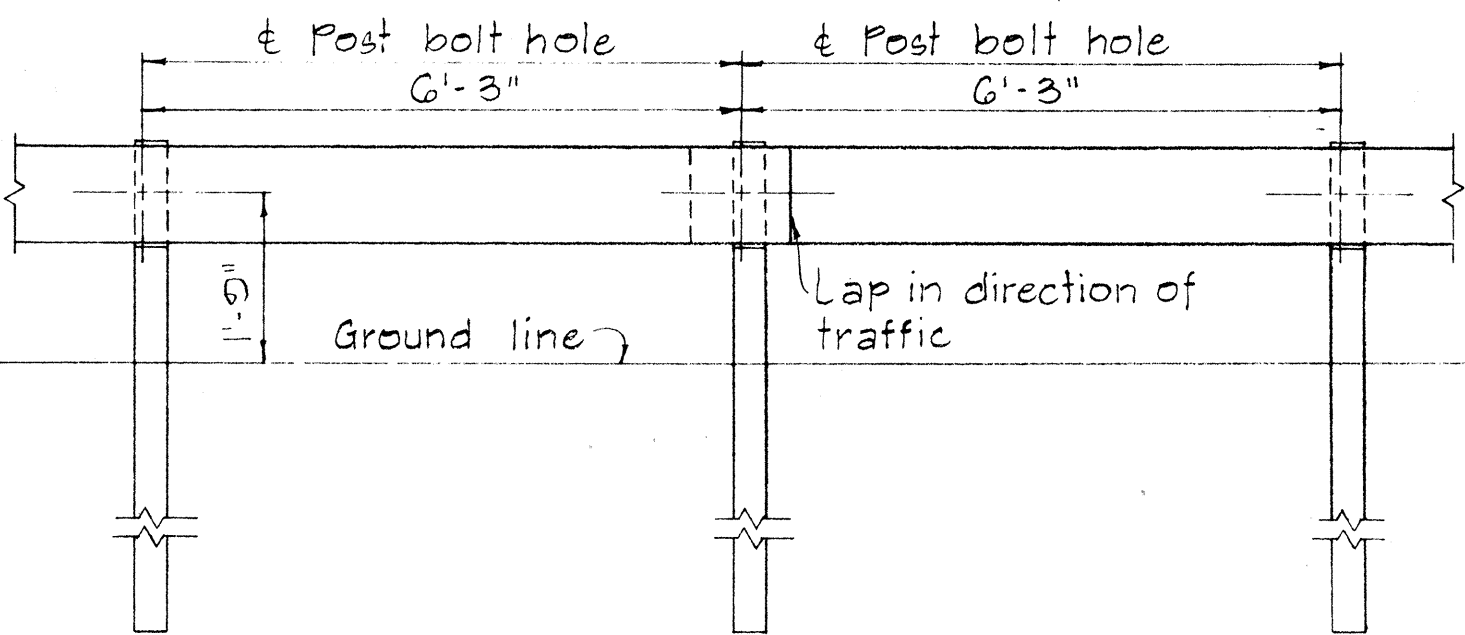
ELEVATION

METAL GUARD RAIL ON CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

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



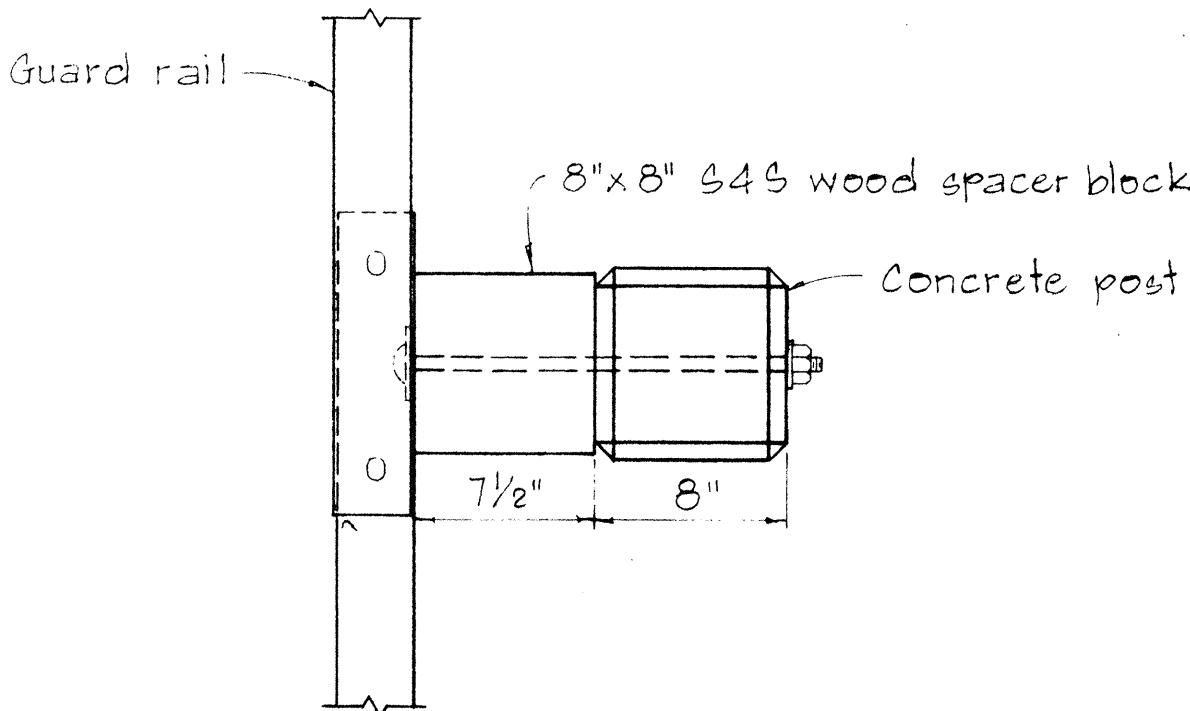
PLAN



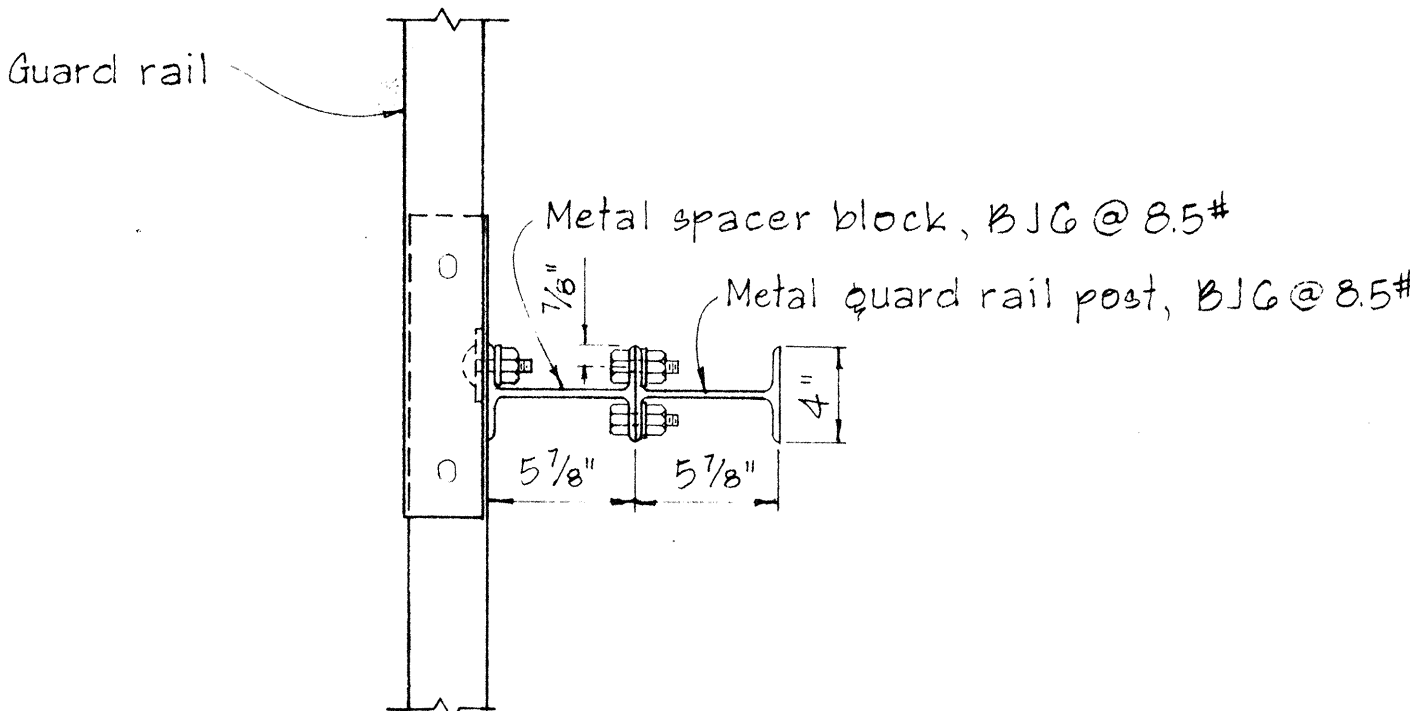
ELEVATION

METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

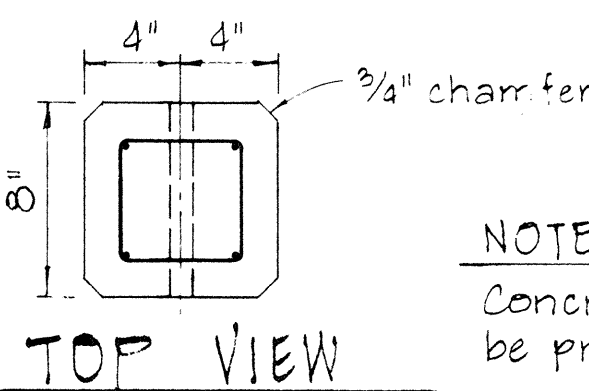
SCALE: 1/2" = 1'-0"



PLAN

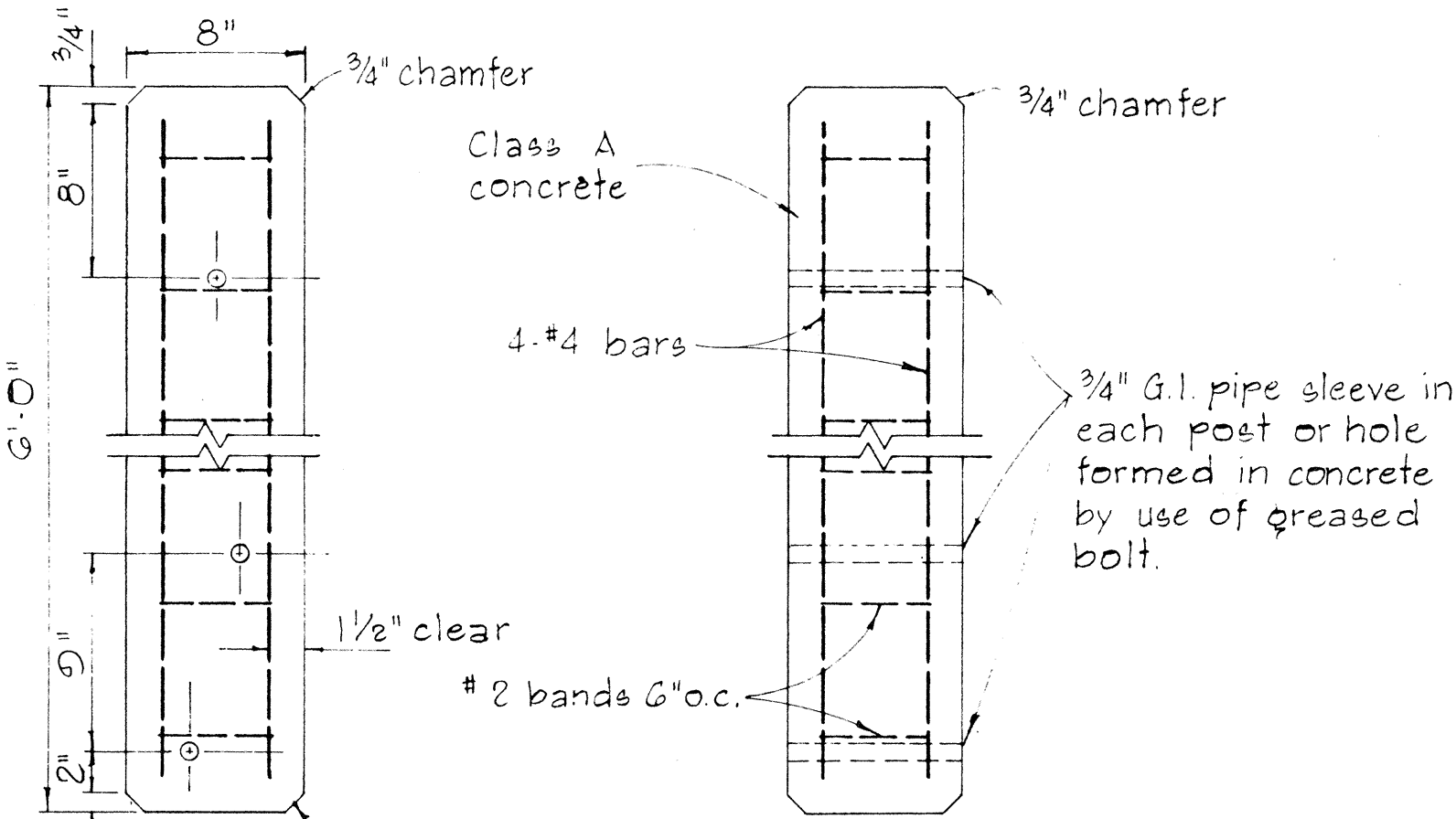


PLAN



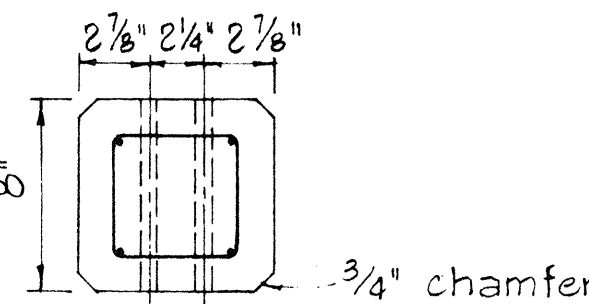
TOP VIEW

NOTE:
Concrete post shall be precast



FRONT VIEW

SIDE VIEW



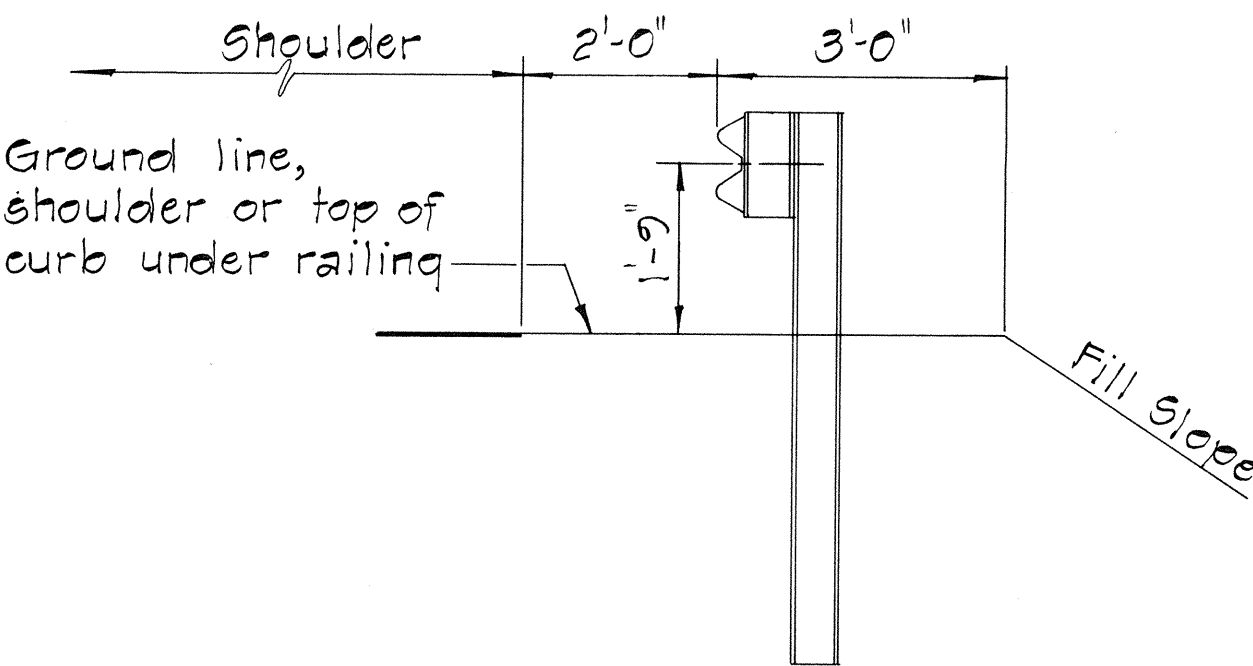
BOTTOM VIEW

DETAIL OF CONCRETE POST

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

SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

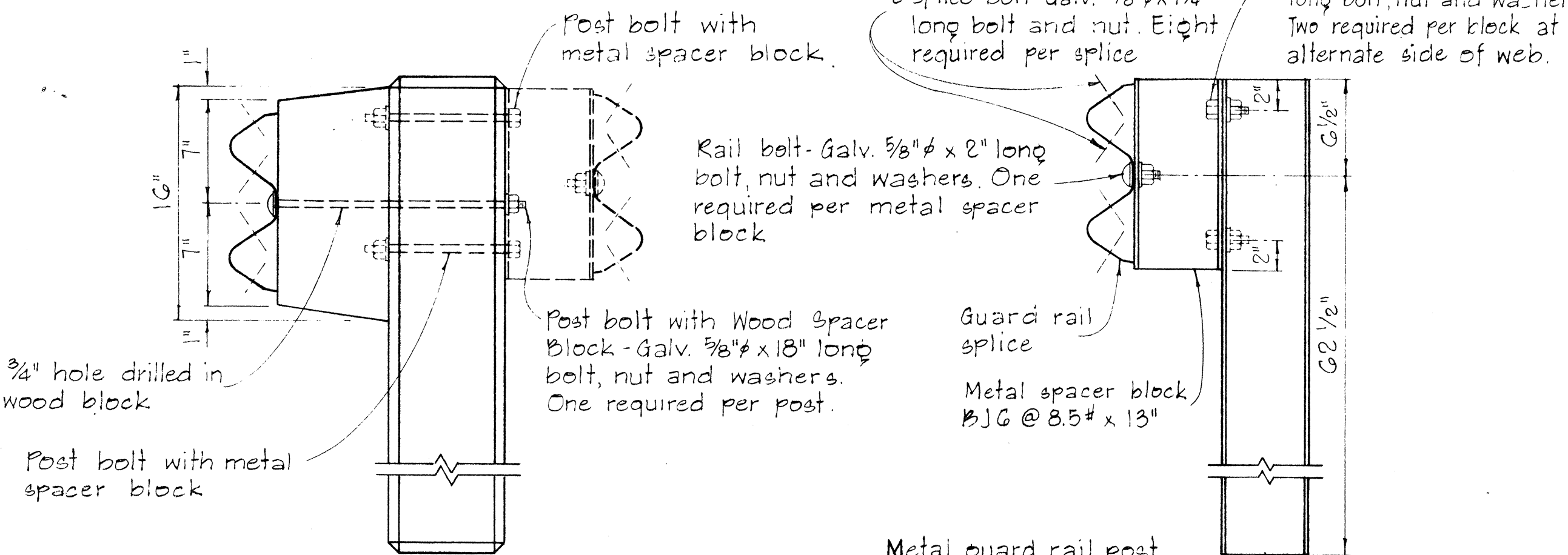
SCALE: 1 1/2" = 1'-0"



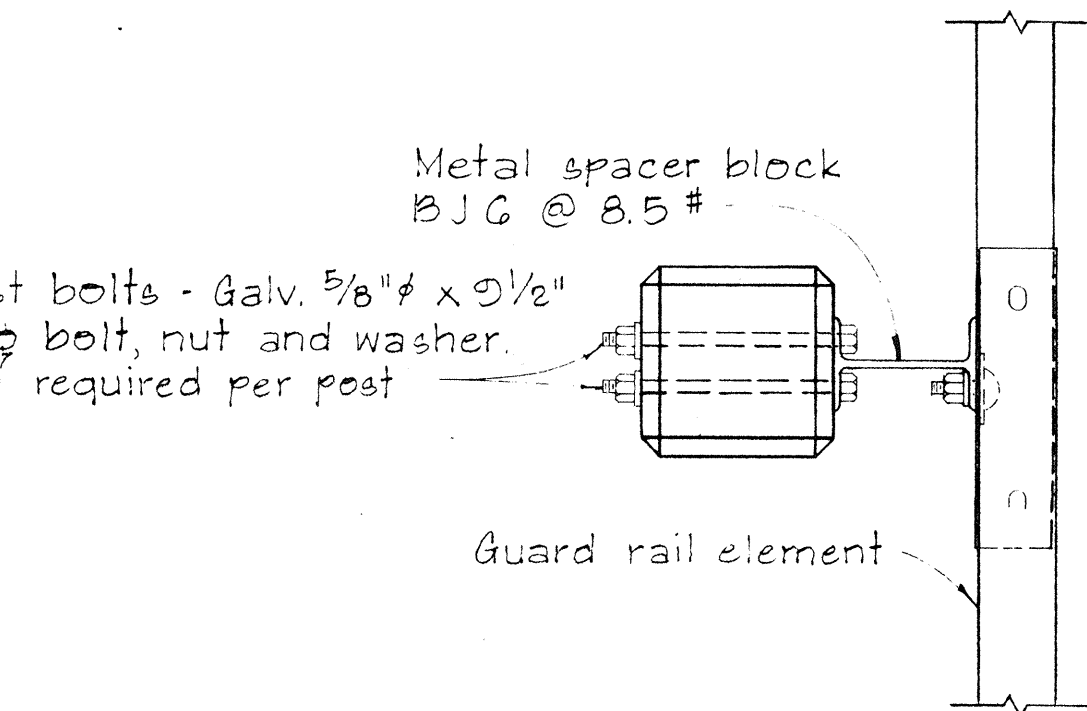
AT SHOULDER SECTION

TYPICAL METAL GUARD RAIL DETAIL

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



METAL GUARD RAIL POST
BJC @ 8.5# x 5'-0" long min.



PLAN

SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

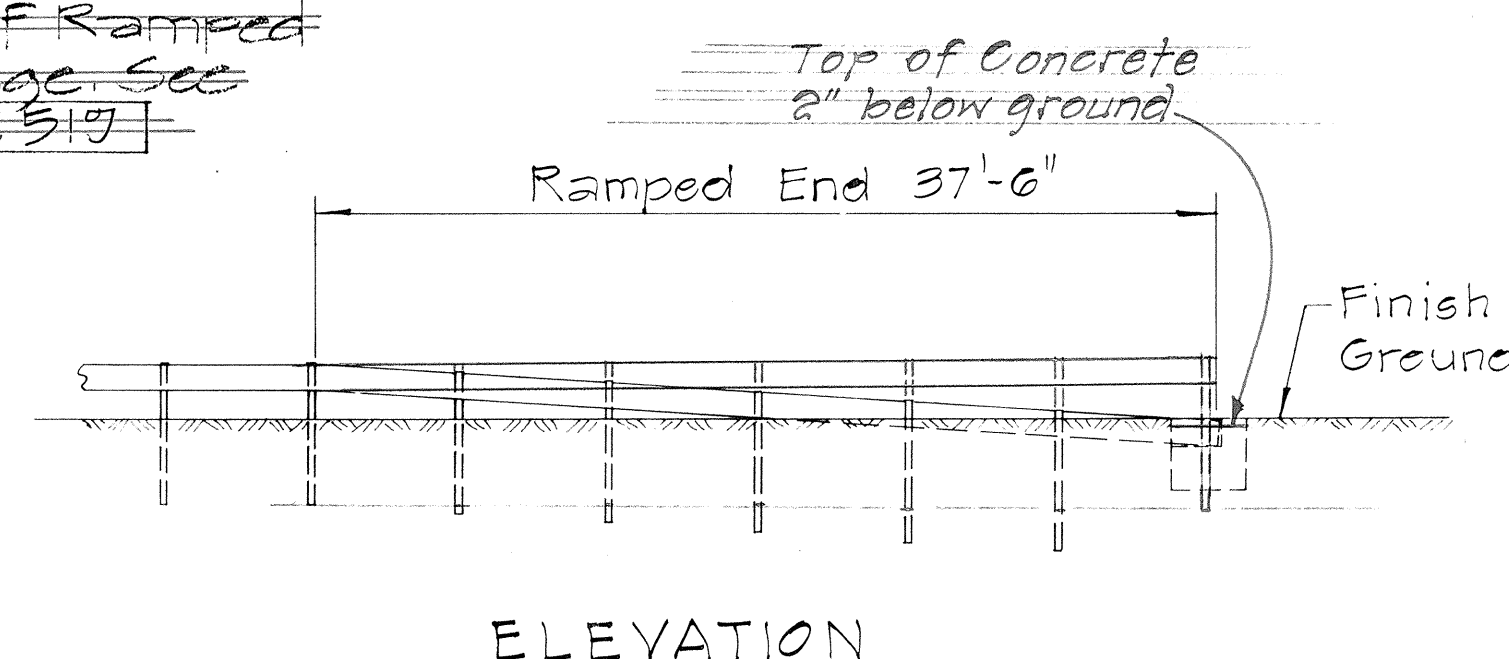
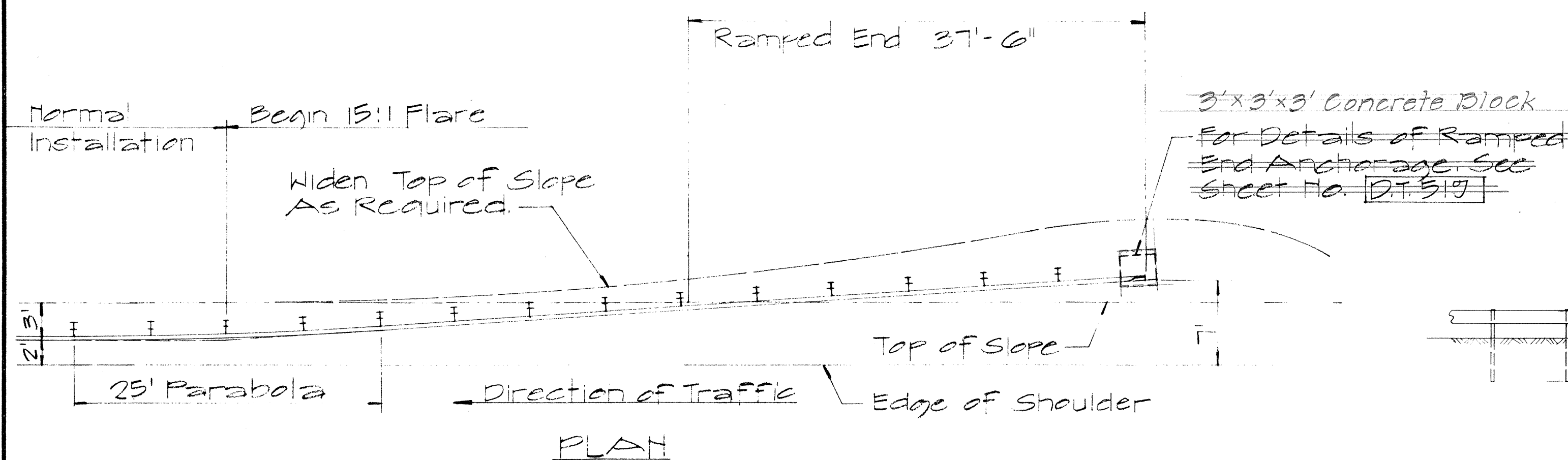
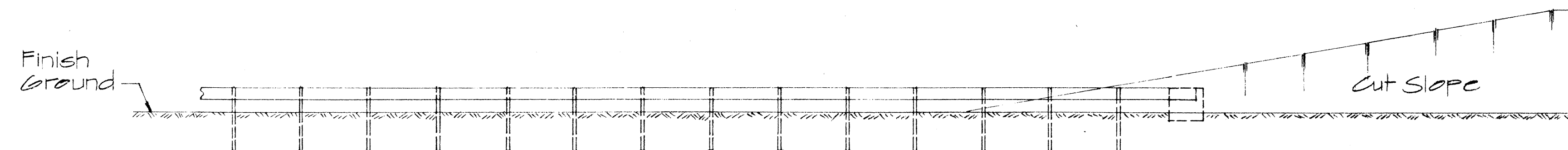
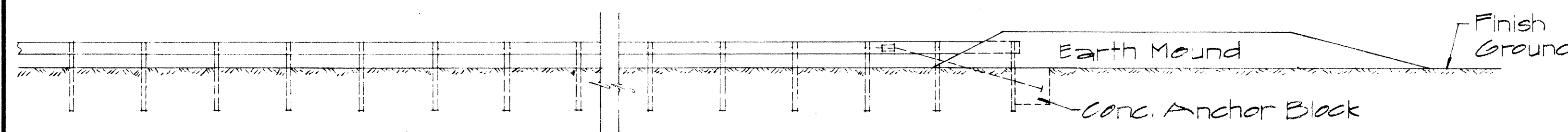
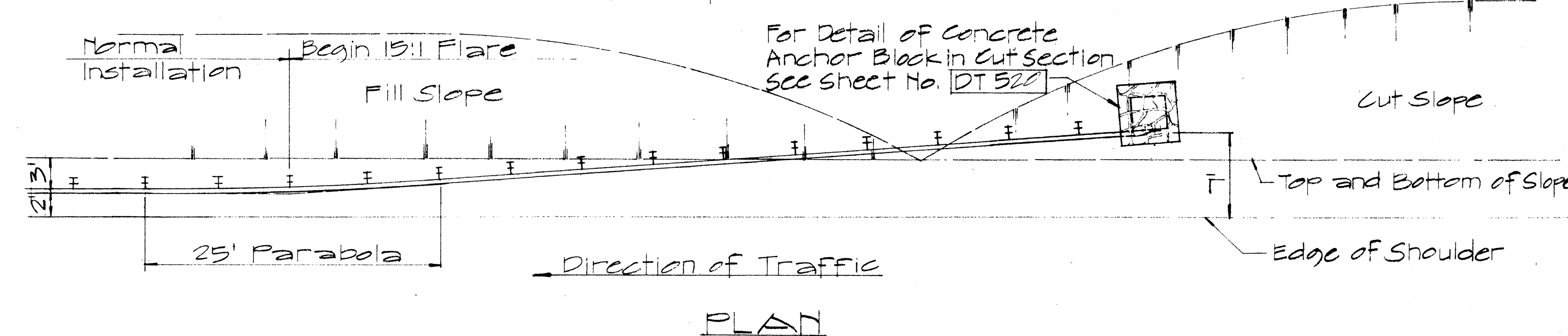
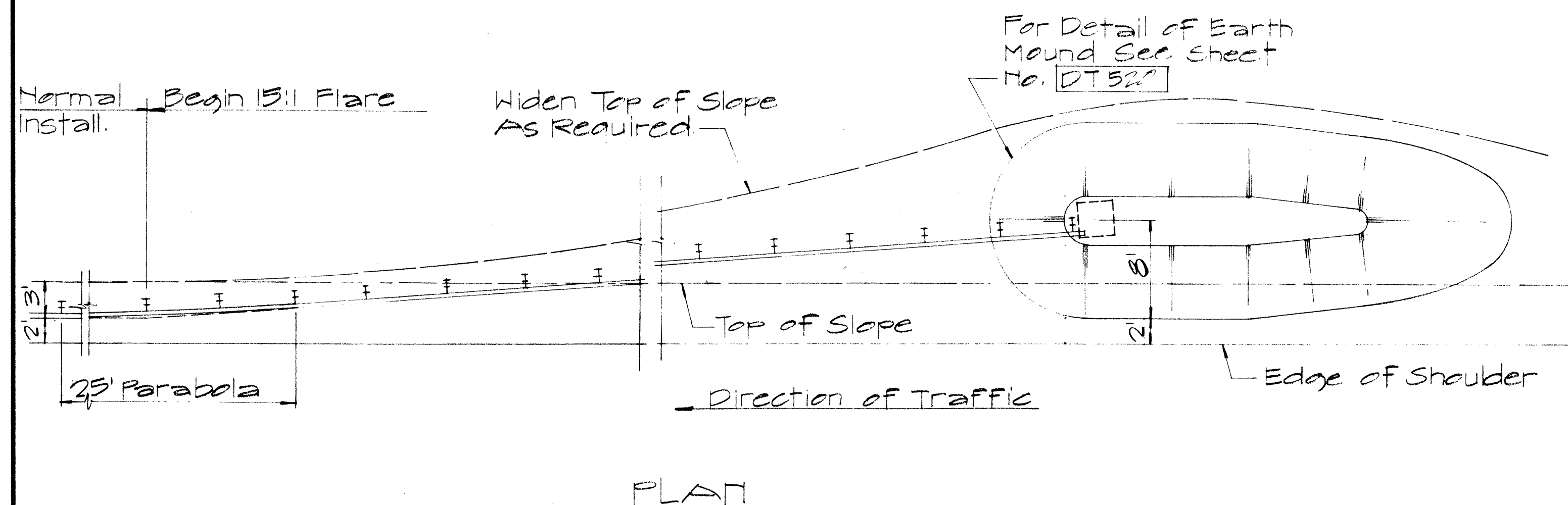
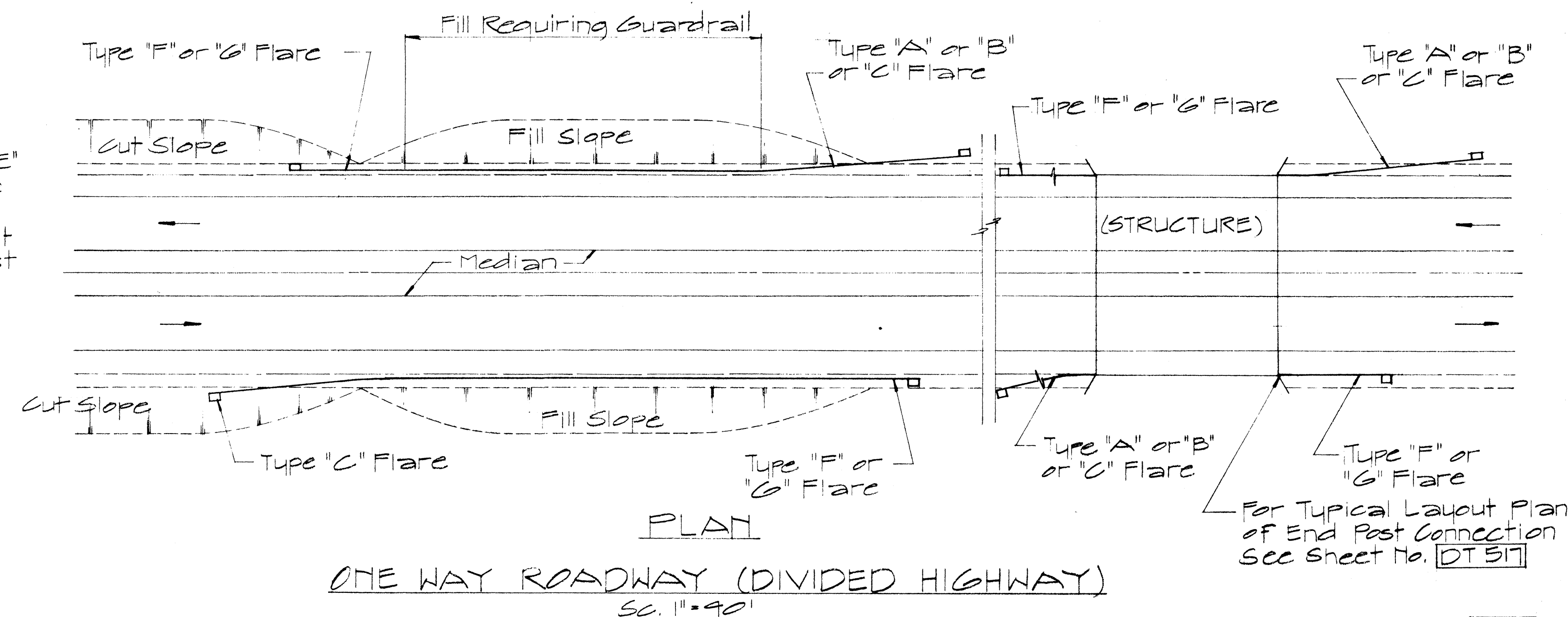
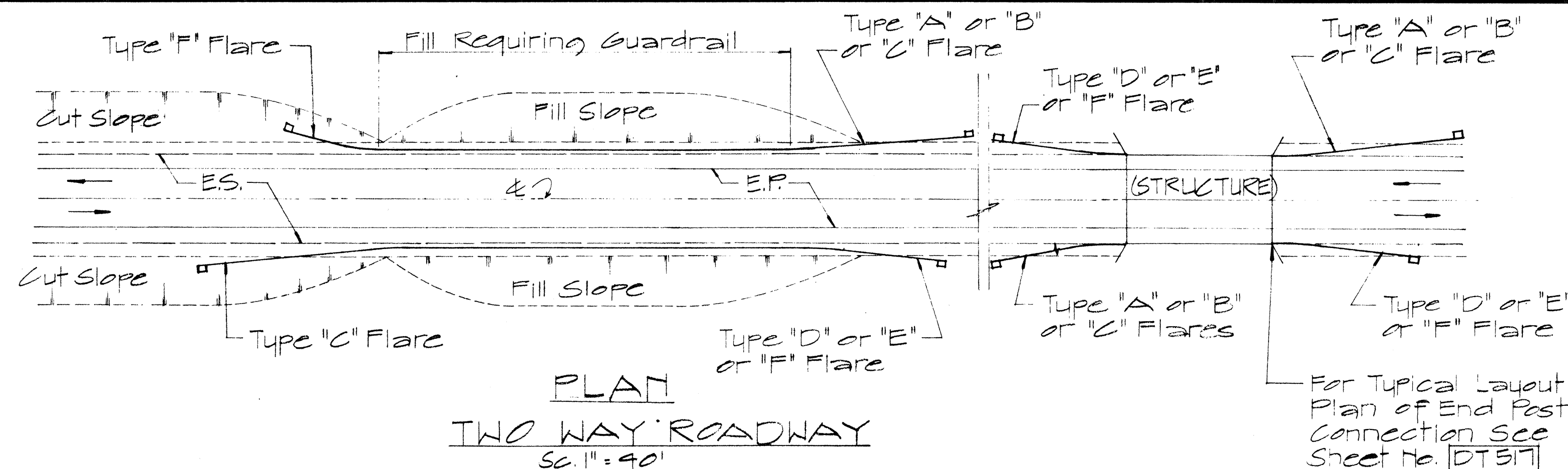
STANDARD DETAILS
METAL GUARD RAIL

SCALE: AS SHOWN

NOV. 1957

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	15	69

NOTE:
Metal guard rail connection to structures requires End Post Connection. See structure plans.



ELEVATION
TYPE "C" FLARE
SC. 1/8" = 1'-0"

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Erich Tanaka 12/29/69
TRAFFIC ENGINEER DATE

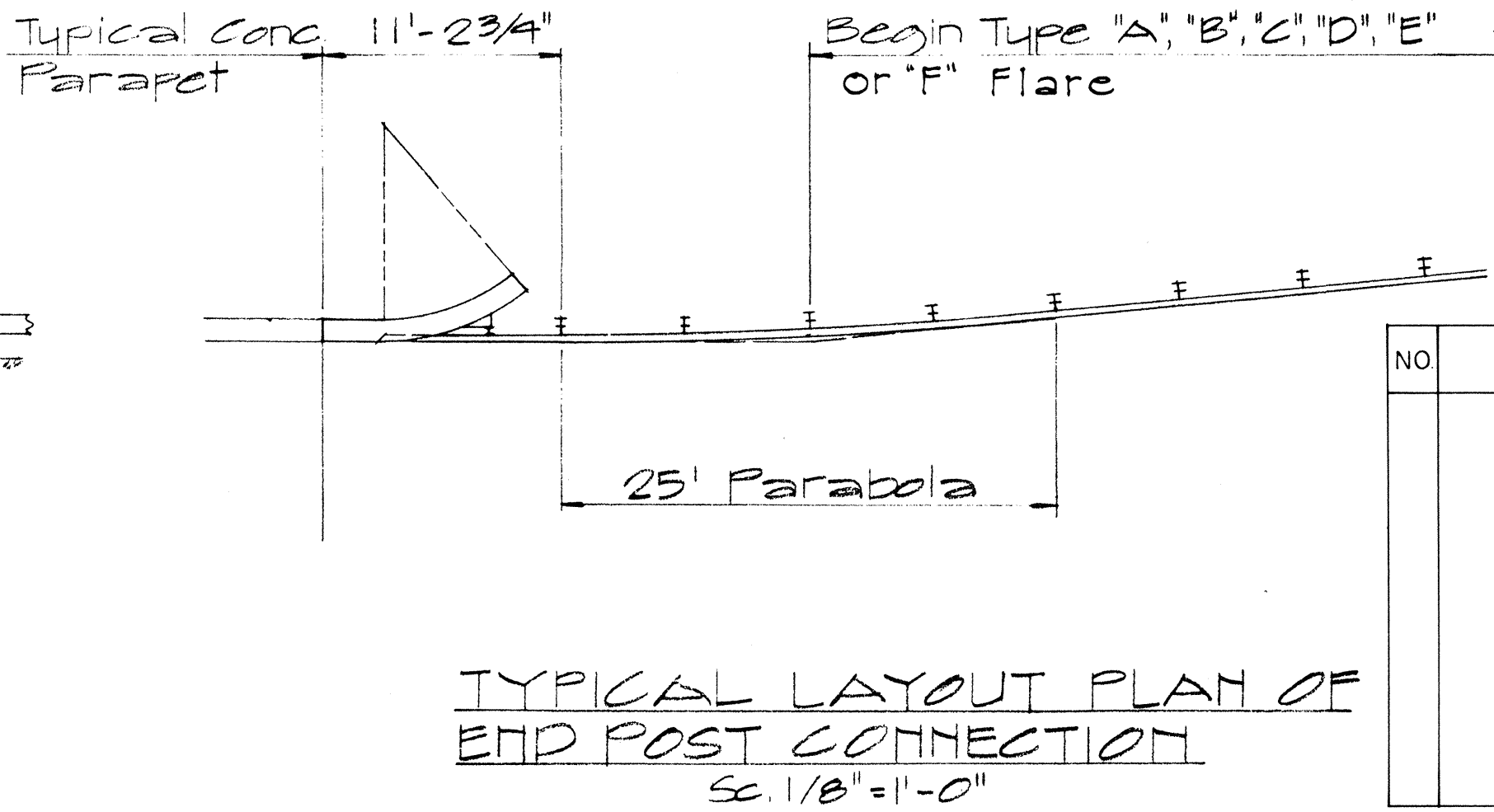
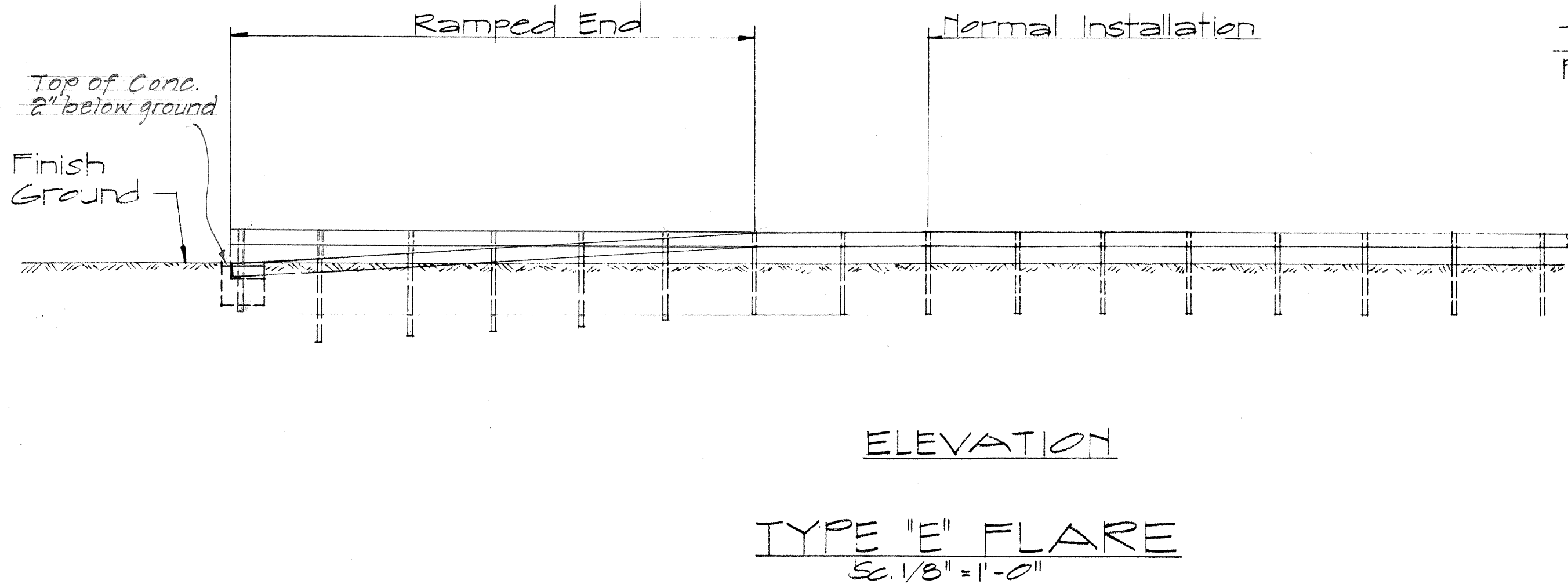
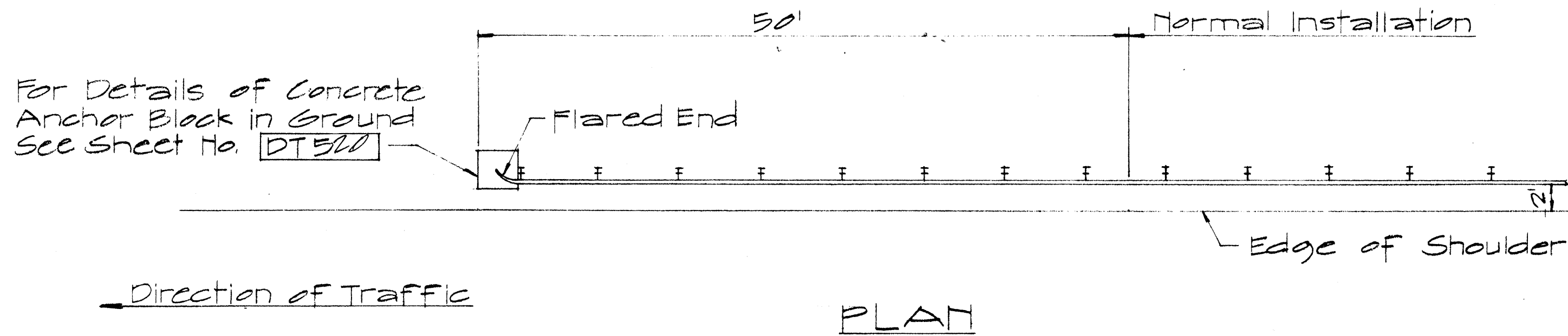
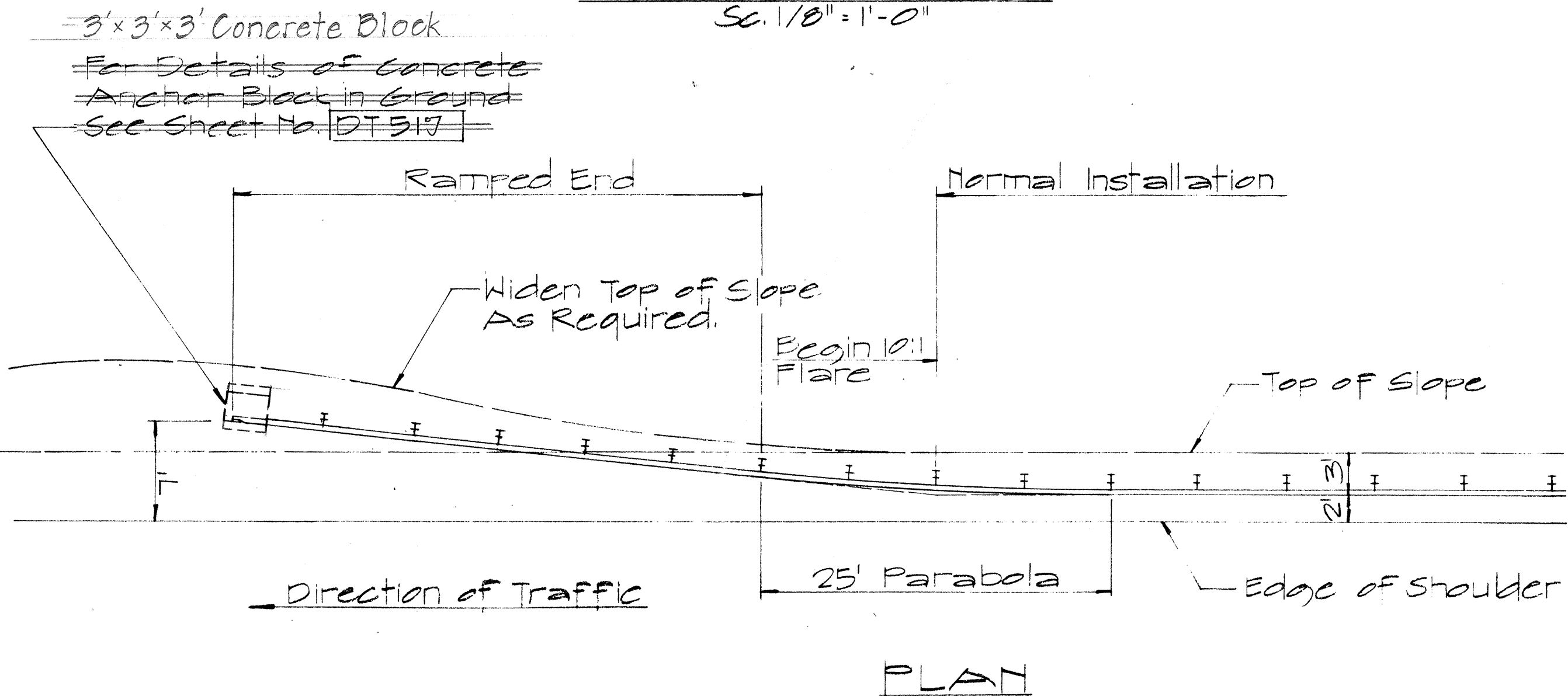
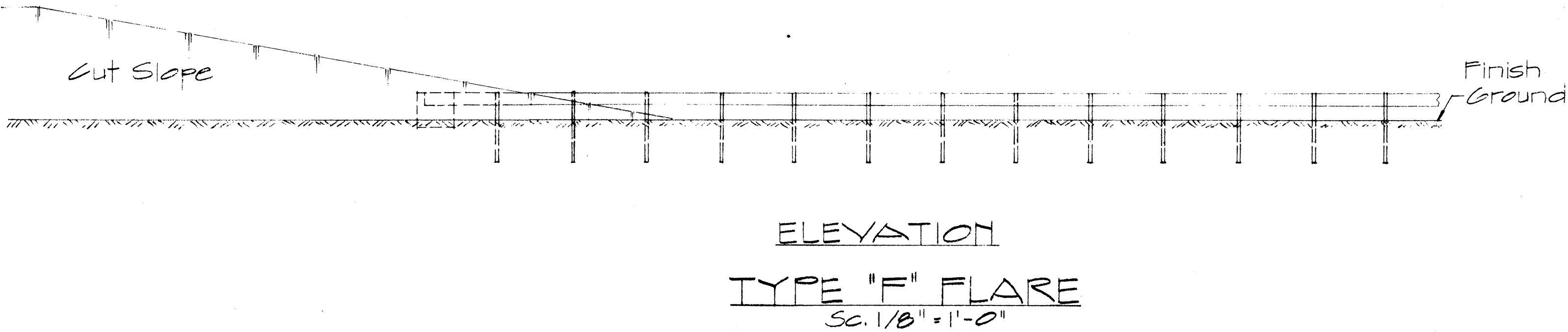
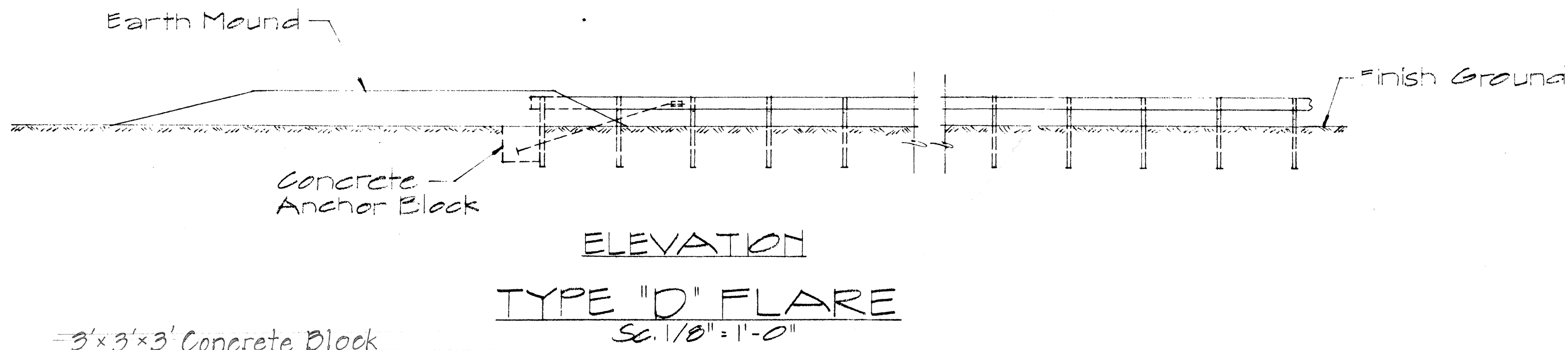
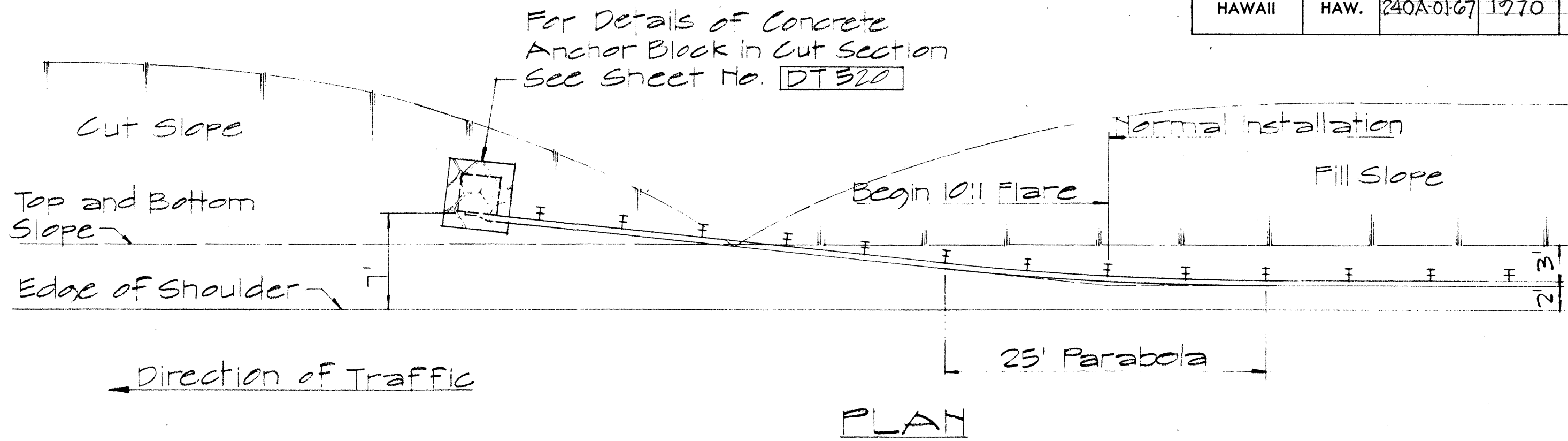
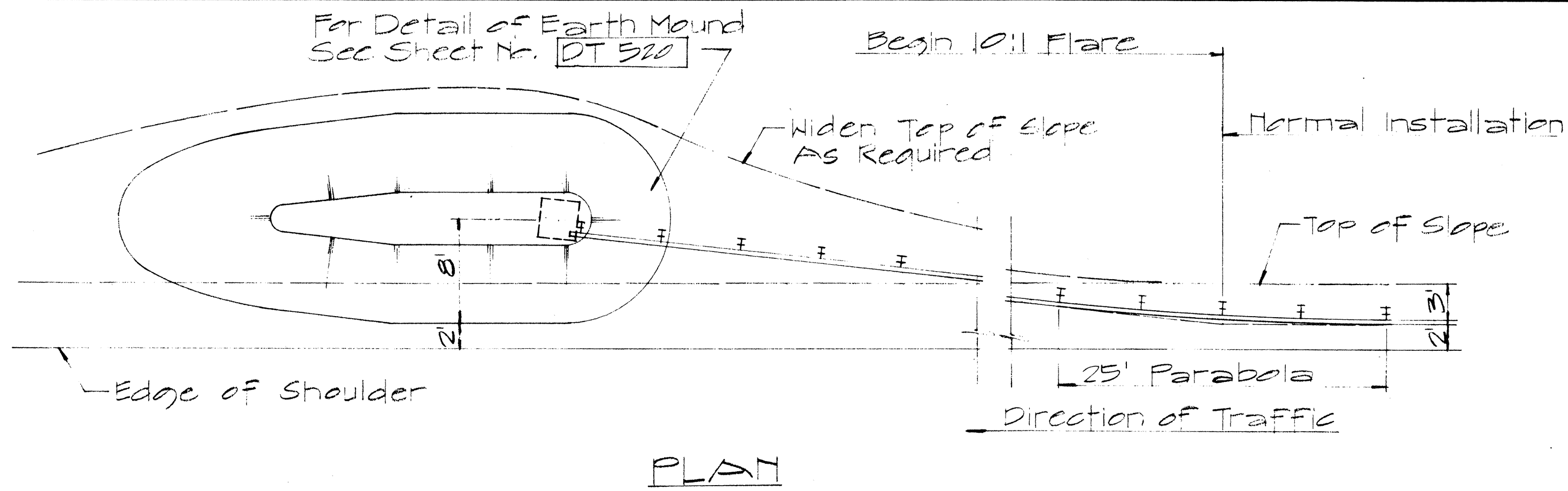
APPROVED:
W. S. S. S. 12-30-69
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
OF APPROACH END
FLARE - ONE & TWO
WAY ROADWAY

SC. As Noted April 1969
SHEET No. 6 OF 10 SHEETS DT 516

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	16	69



NO	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:

Euske Tanaka 12/23/69
TRAFFIC ENGINEER DATE

APPROVED:

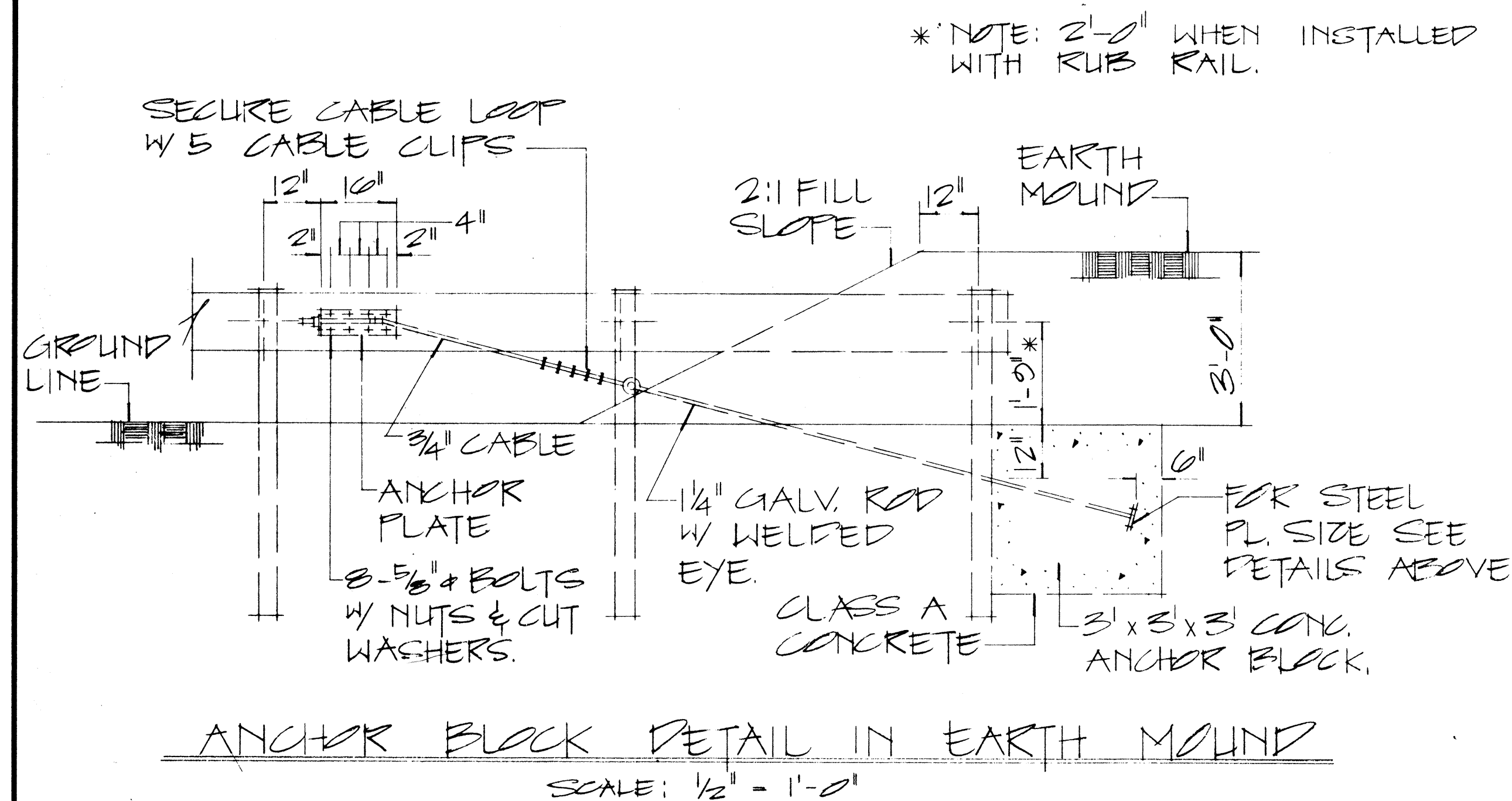
Wm. J. Sal. 12-30-69
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
OF TRAILING END
FLARE - ONE & TWO
WAY ROADWAY

Sc. As Noted April 1969

SHEET No. 7 OF 10 SHEETS DT 517



EITHER FULL PENETRATION WELD OR BEND TO FIT

$\frac{1}{2}'' \times 3'' \times 2\frac{3}{4}''$ PLATE

$\frac{1}{4}''$ WELD ALL AROUND

HEX. NUT

1" DIA. STUD

$\frac{1}{16}''$ DIA. HOLE IN $\frac{1}{2}''$ PLATE

STANDARD SWAGED CONNECTION FOR $\frac{3}{4}''$ CABLE.

HEX. NUT FOR $\frac{5}{8}''$ BOLT

METAL GUARD RAIL ELEMENT

$\frac{1}{4}''$ WELD

$\frac{1}{4}''$ PLATE

$\frac{5}{8}''$ MACHINE BOLT & CUT WASHER ON FRONT FACE

1 1/2"

1 1/2"

2 3/4"

1 1/2"

2 3/4"

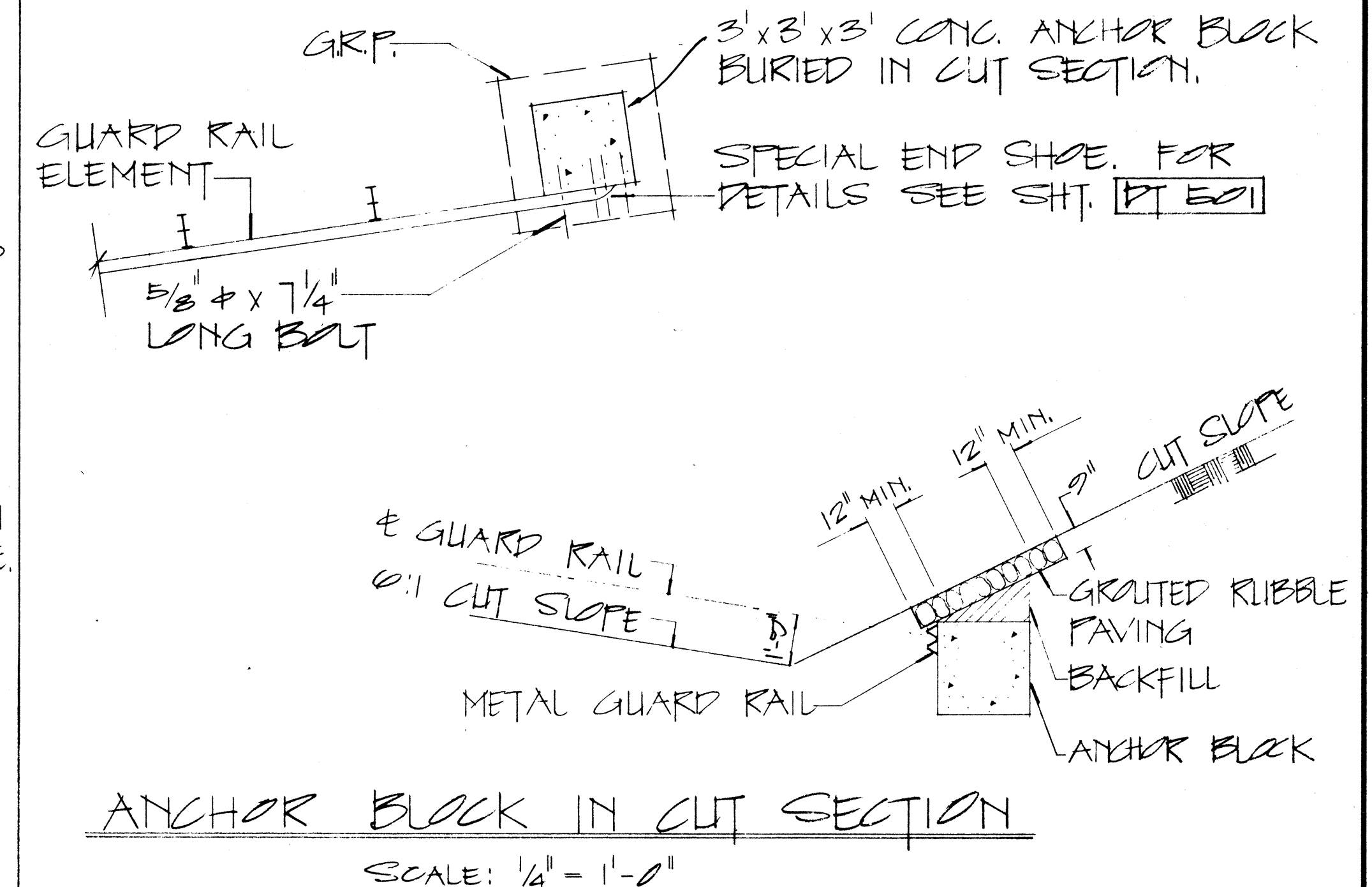
1 1/2"

2 3/4"

1 1/2"

2 3/4"

SCALE: 1" = 3"

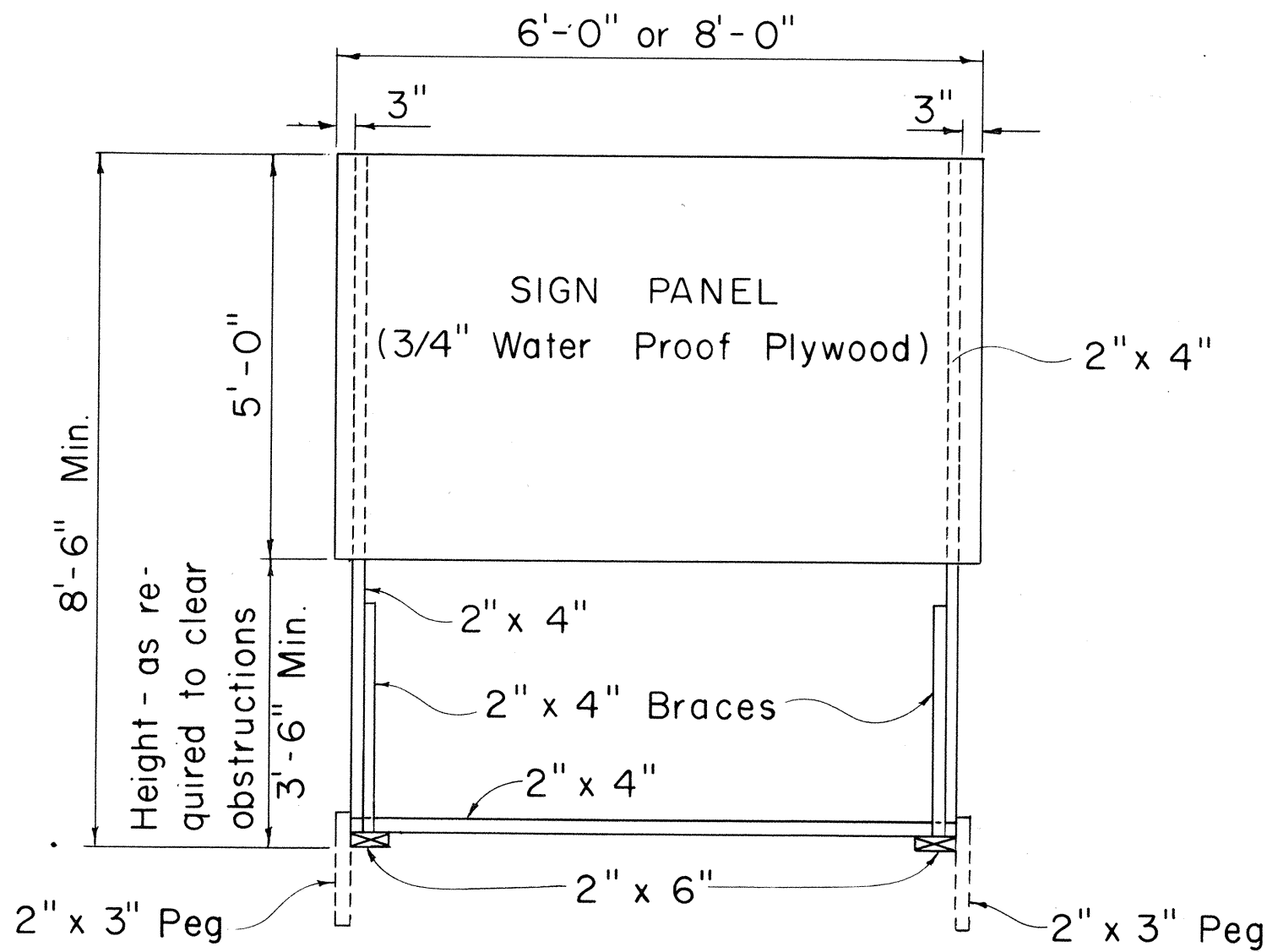


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

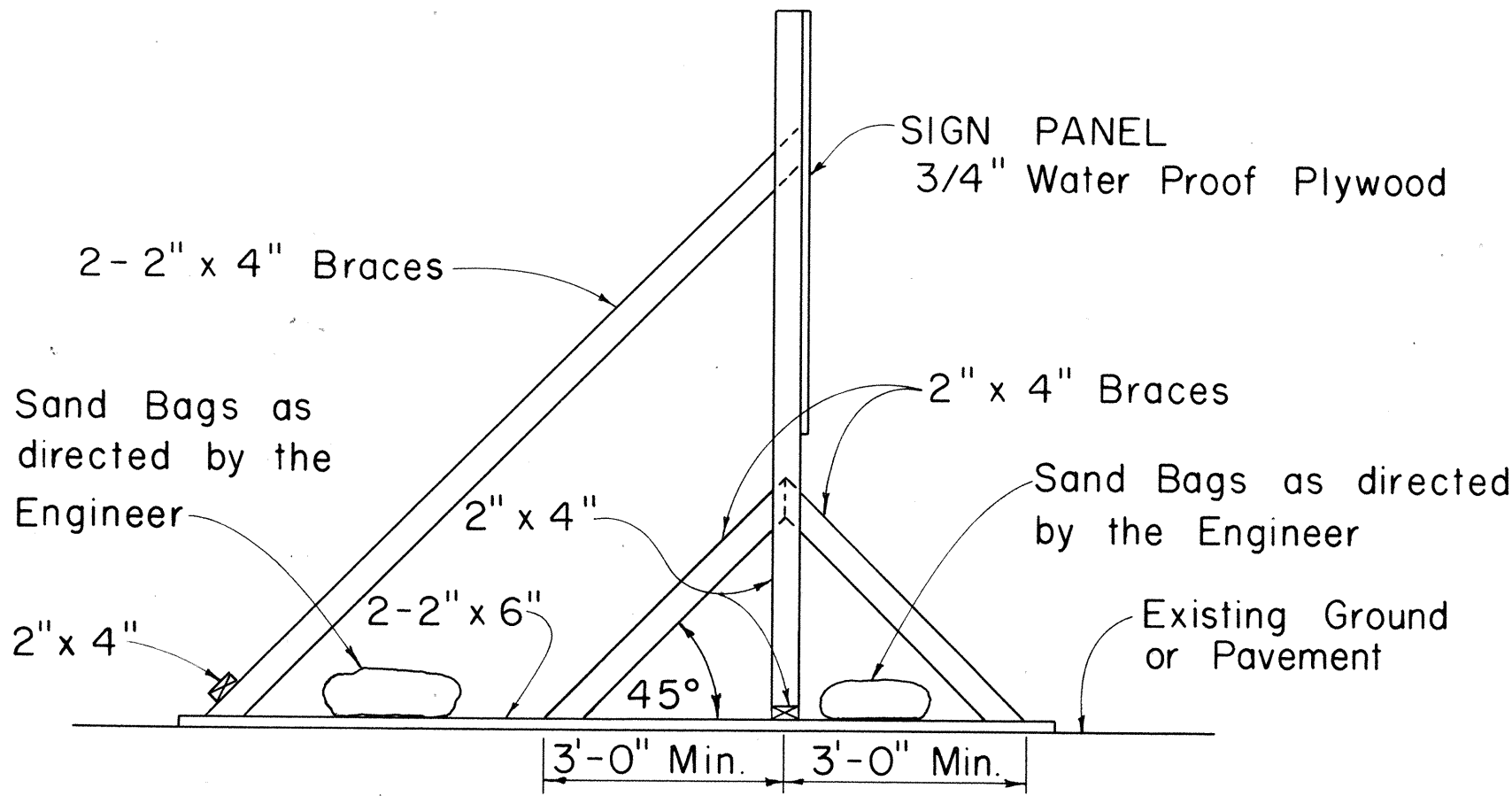
STANDARD DETAILS
EARTH MOUND AND
ANCHOR BLOCK DETAILS

K^oE CRYSTALENE® LA 2920
TRACING PAPER

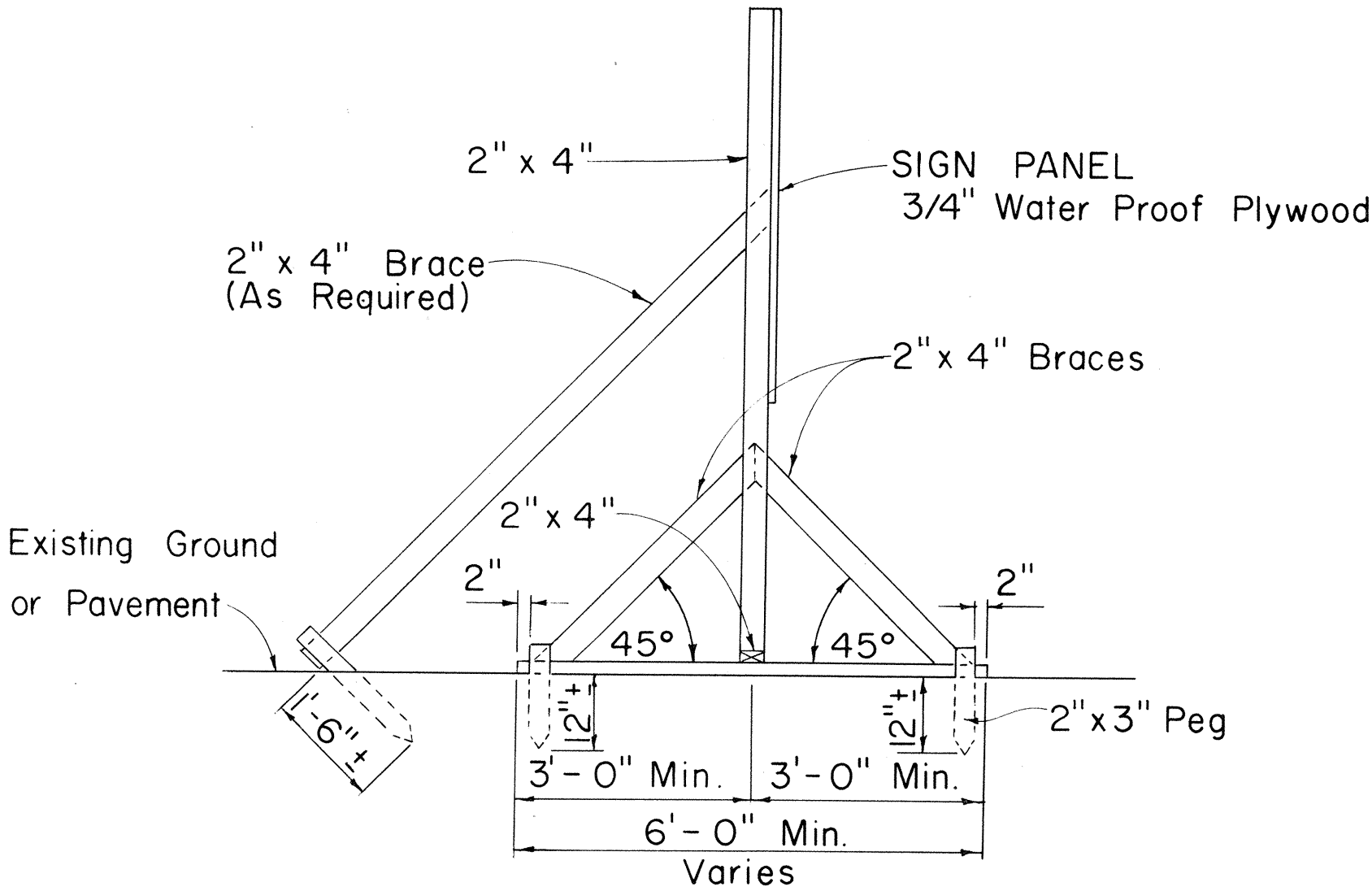
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	240A-01-67	1970	19	69



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

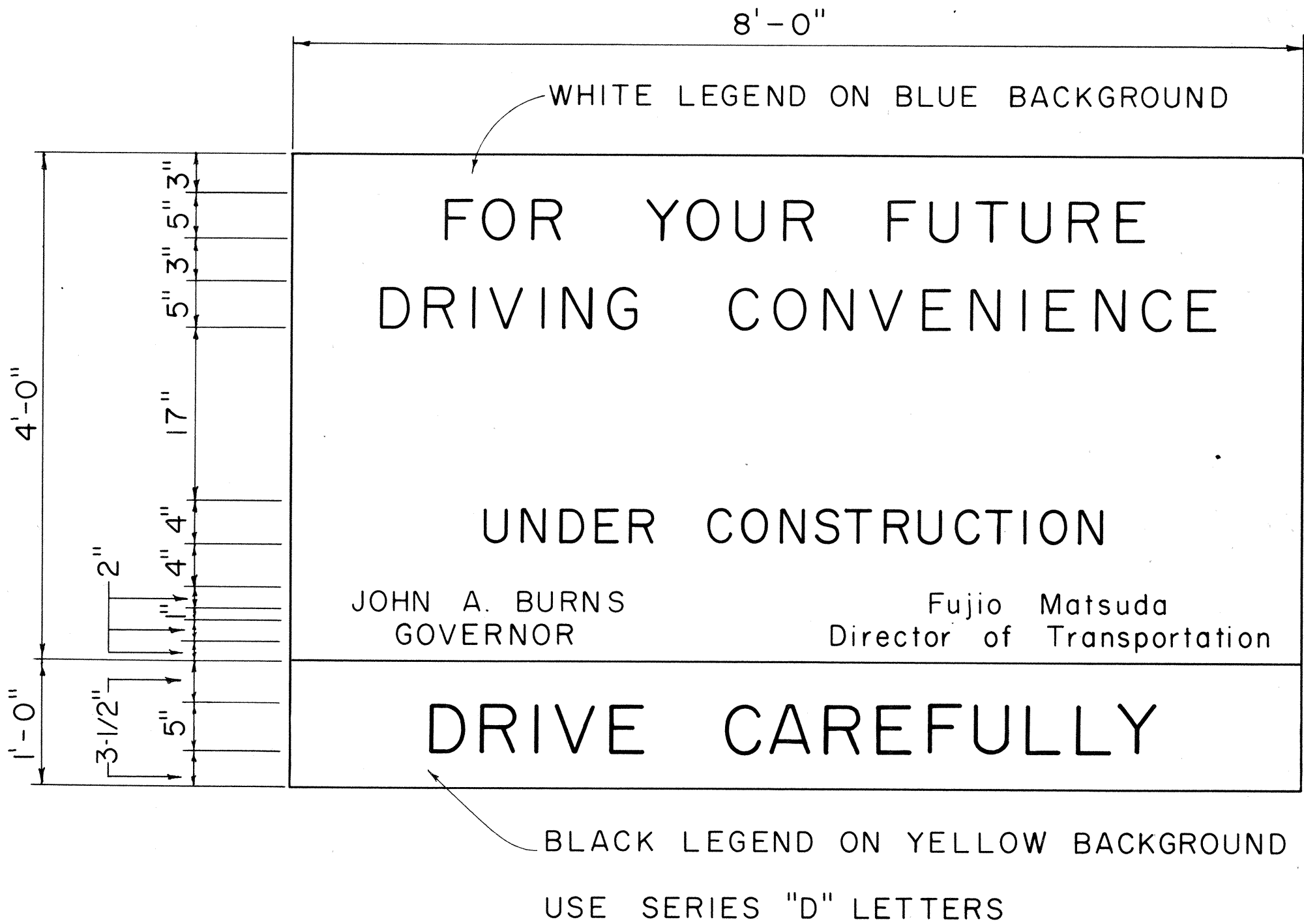


SIDE VIEW
(SIGN SUPPORT AND FRAME WEIGHTED DOWN)
Scale: 1/2" = 1'-0"



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

SIGN SUPPORT AND FRAME
Scale: As Shown



GENERAL NOTES

- 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.
- 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.
- 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 10 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	"
NOTED BY	"
CHECKED BY	"
ORIGINAL PLAN	"
NOTE BOOK	"
NO.	"