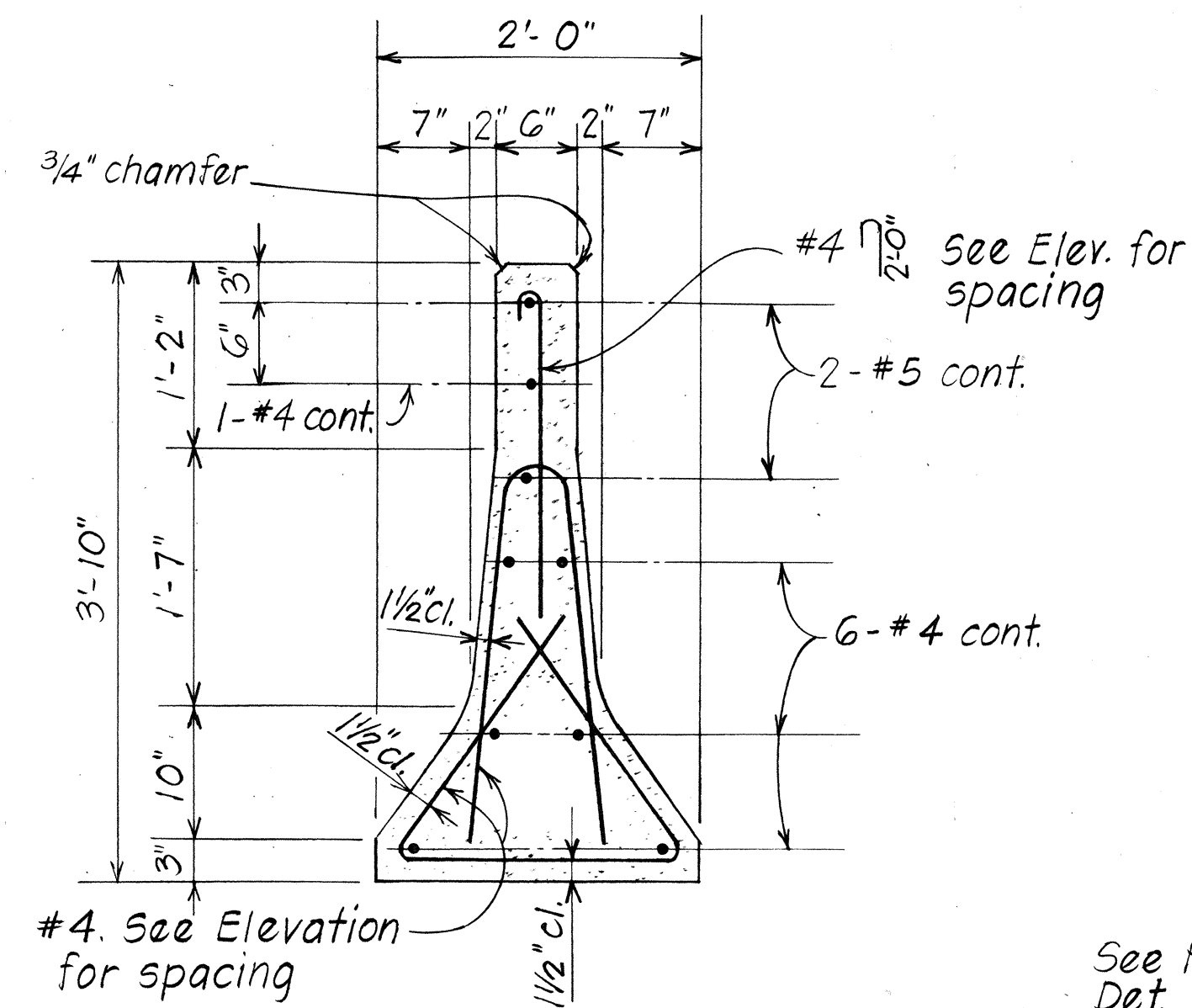
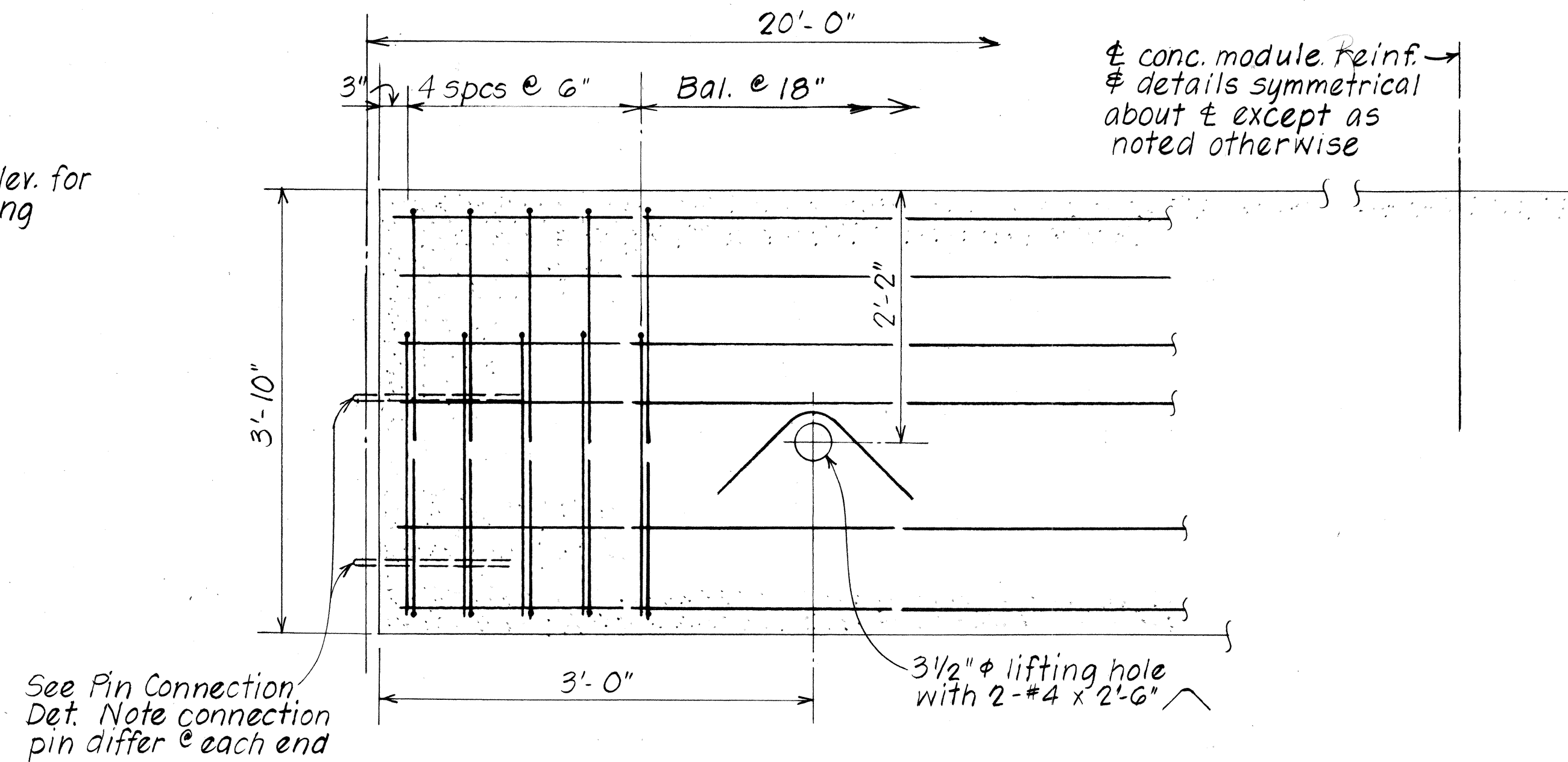


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(1976)	1986	6	22



TYPICAL SECTION



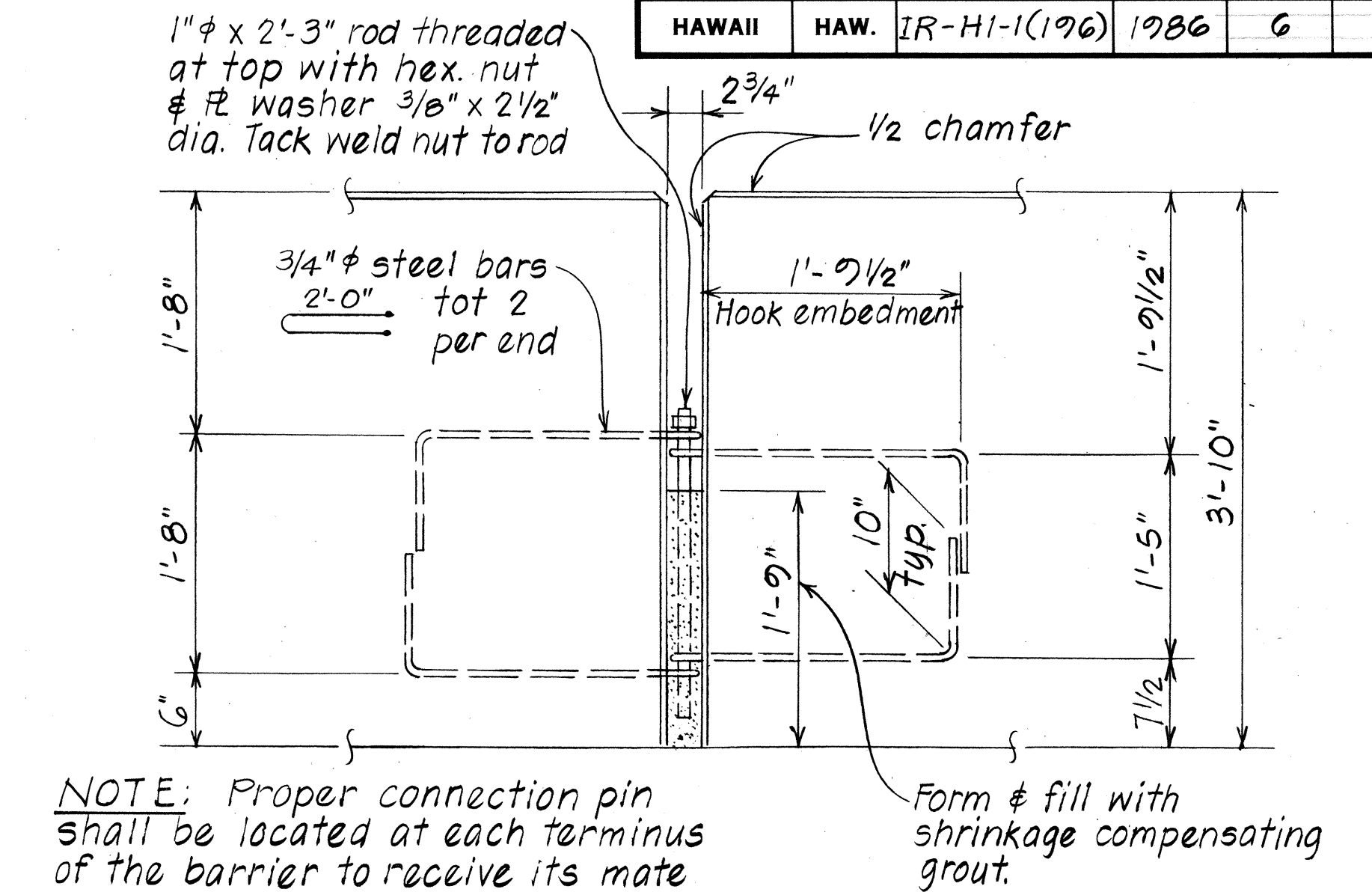
PART ELEVATION - PRECAST CONC. MODULE

TYPICAL PERMANENT PORTABLE CONCRETE BARRIER DETAILS

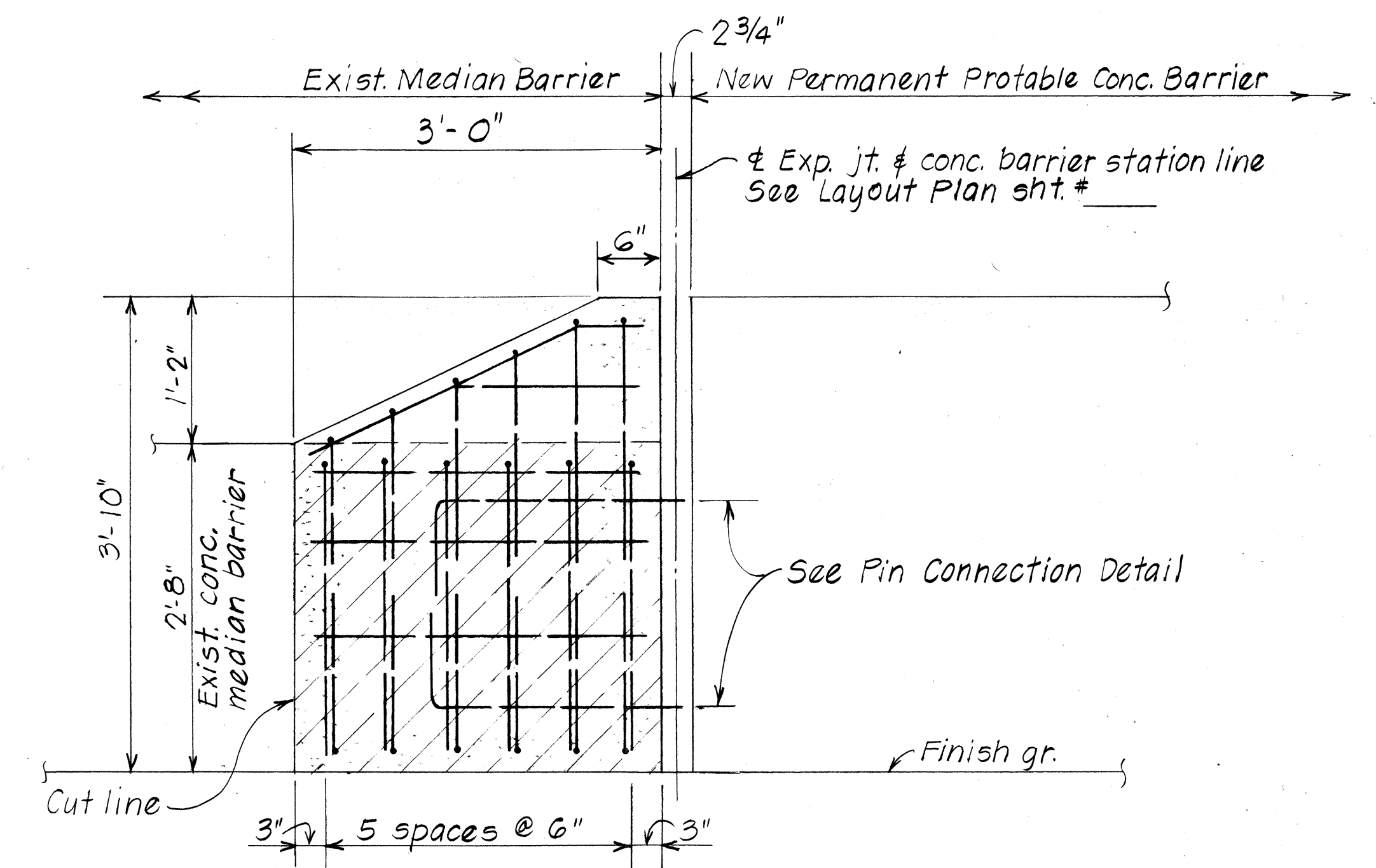
Scale: 1" = 1'-0"

NOTE:

1. Remove 3' of median barrier (hatched area) beyond the theoretical end limits of the permanent portable barrier and rebuild as shown and noted to match adjacent sections.
2. Where portions of barrier is to be removed, or saw cut is called for, the line of separation between the portions that is to remain and be removed, shall be saw cut to a minimum depth of 1 1/2 inches.
3. Existing horizontal reinforcement in the section to be rebuilt shall be cut, cleaned and incorporated in the new pour.
4. No payment will be made for the above work but shall be considered incidental to Item No. 606.5000-Permanent Portable Concrete Barrier.



PIN CONNECTION DETAILS



CAST-IN-PLACE & PORTABLE CONC. BARRIER JOINT DETAIL

Scale: 1" = 1'-0"

STATE OF HAWAII	
DEPARTMENT OF TRANSPORTATION	
HIGHWAYS DIVISION	
PERMANENT PORTABLE CONCRETE BARRIER	
STA. 221+90 ± TO STA. 223+10 ±	
INTERSTATE ROUTE H-1, HALAWA I.C.	
F.A.I. Proj. No. IR-HI-1(1976)	
Scale: As shown	Date: Sept. 1985
SHEET NO. 1 OF 4 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(196)	1986	C.O.G.S-1	22

$\pm$ Light standard @ Sta. 223 + 25.5

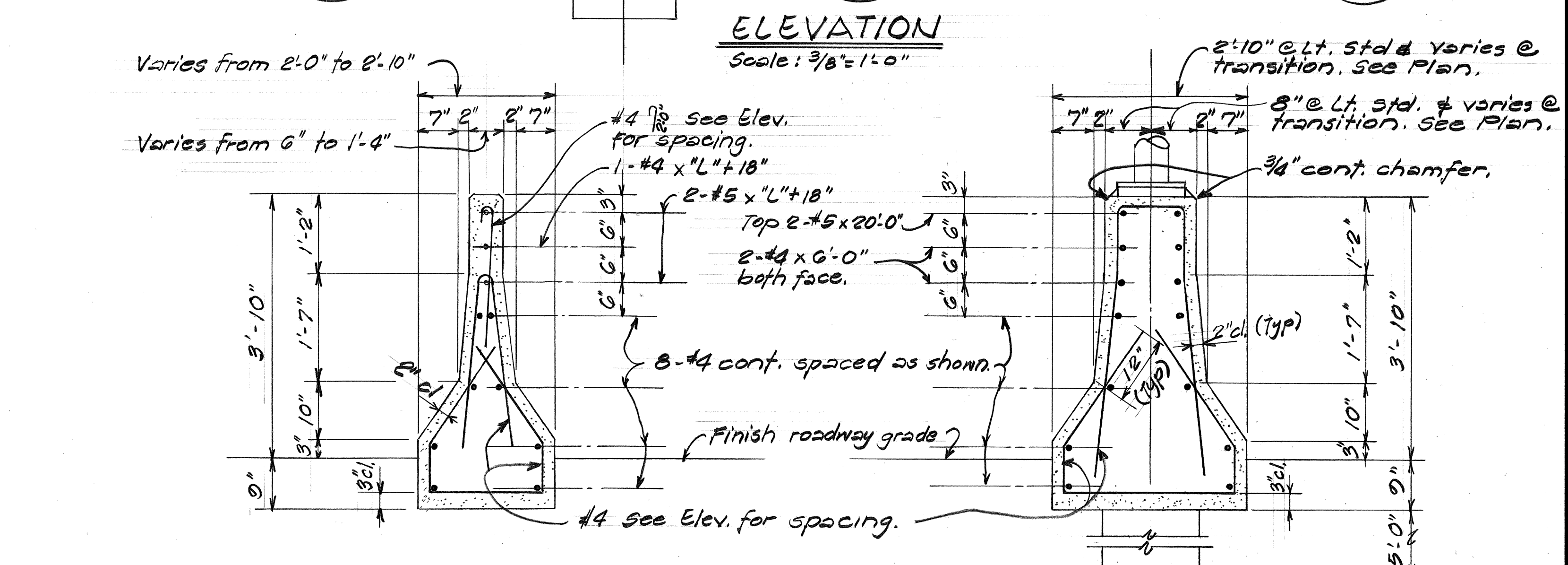
37'-0" $\pm$ New type 4 concrete median barrier

11'-0" transition 1'-6" 1'-6" 23'-0" transition

Pin connection see Note.

Note:
See Contract Plan sht #6
 $\pm$ 12.5' 1'-11" 4'-11"

Pin connection see Note.



SECTION (B)
Scale: $\frac{3}{4}" = 1'-0"$

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONCRETE BARRIER DETAILS
CHANGE ORDER No. 4
CHANGE ORDER No. 5
INTERSTATE ROUTE H-1 HALAWA I.C.
F.A.I. Proj. No. IR-41-1(106)
Scale: As shown Date: Nov. 1986

SHEET No. 1A OF 4 SHEETS

SHEET No. 1A OF 4 SHEETS

See Plan sheet no. 6, for portable zone barrier joint.

3'-0"

2'-0"

25'-0"

1'-6"

Remove & reconstruct barrier transition

Existing barrier to remain.

SAN CUT

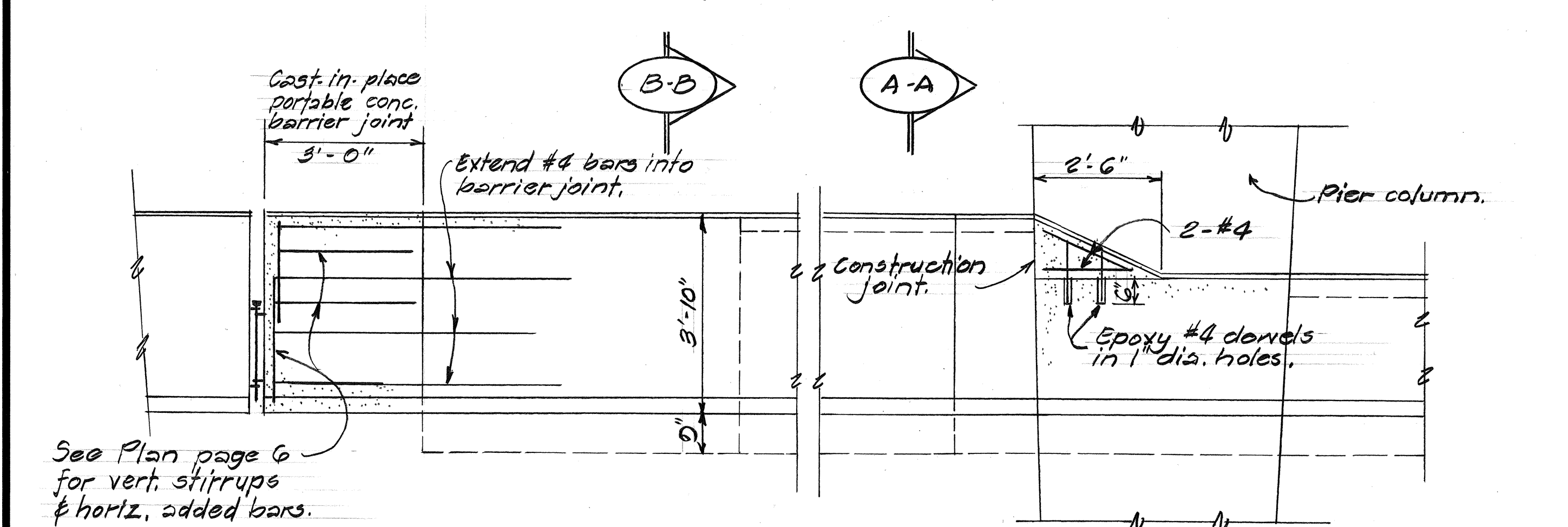
Existing reinforcement to be cleaned and incorporated into new pour.

(New) 4" 5/26

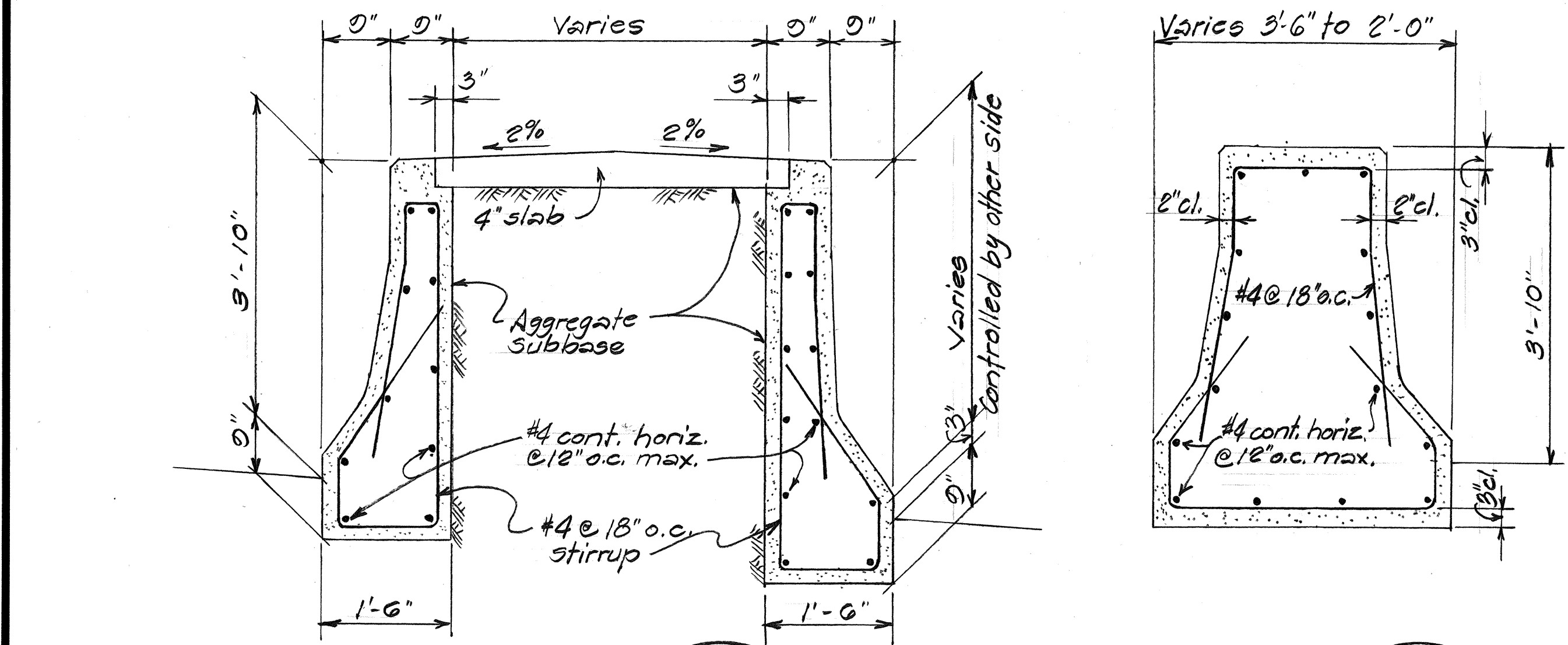
Begin split barrier where dimension is.

PLAN

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



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



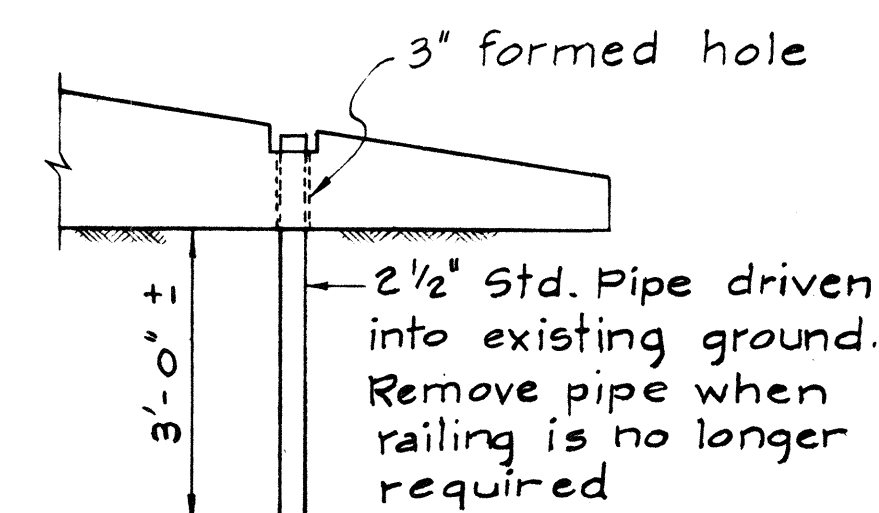
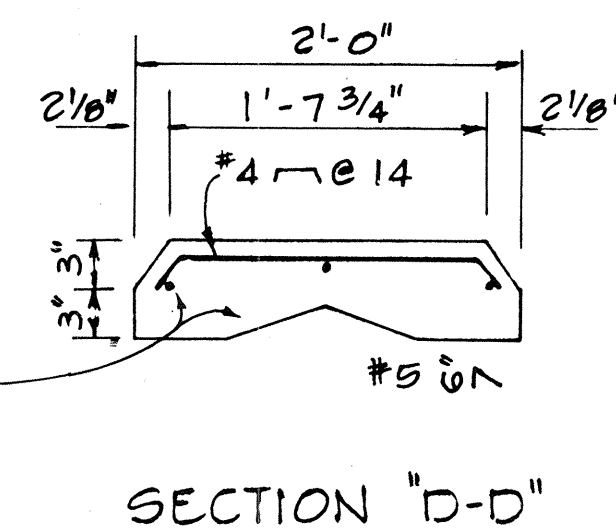
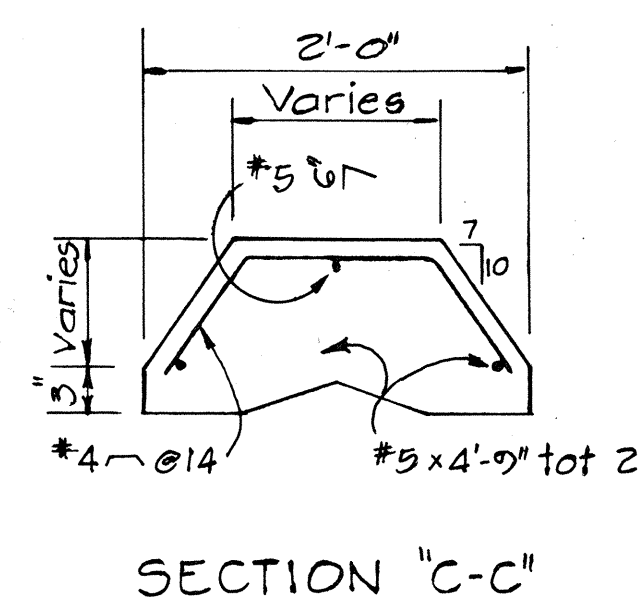
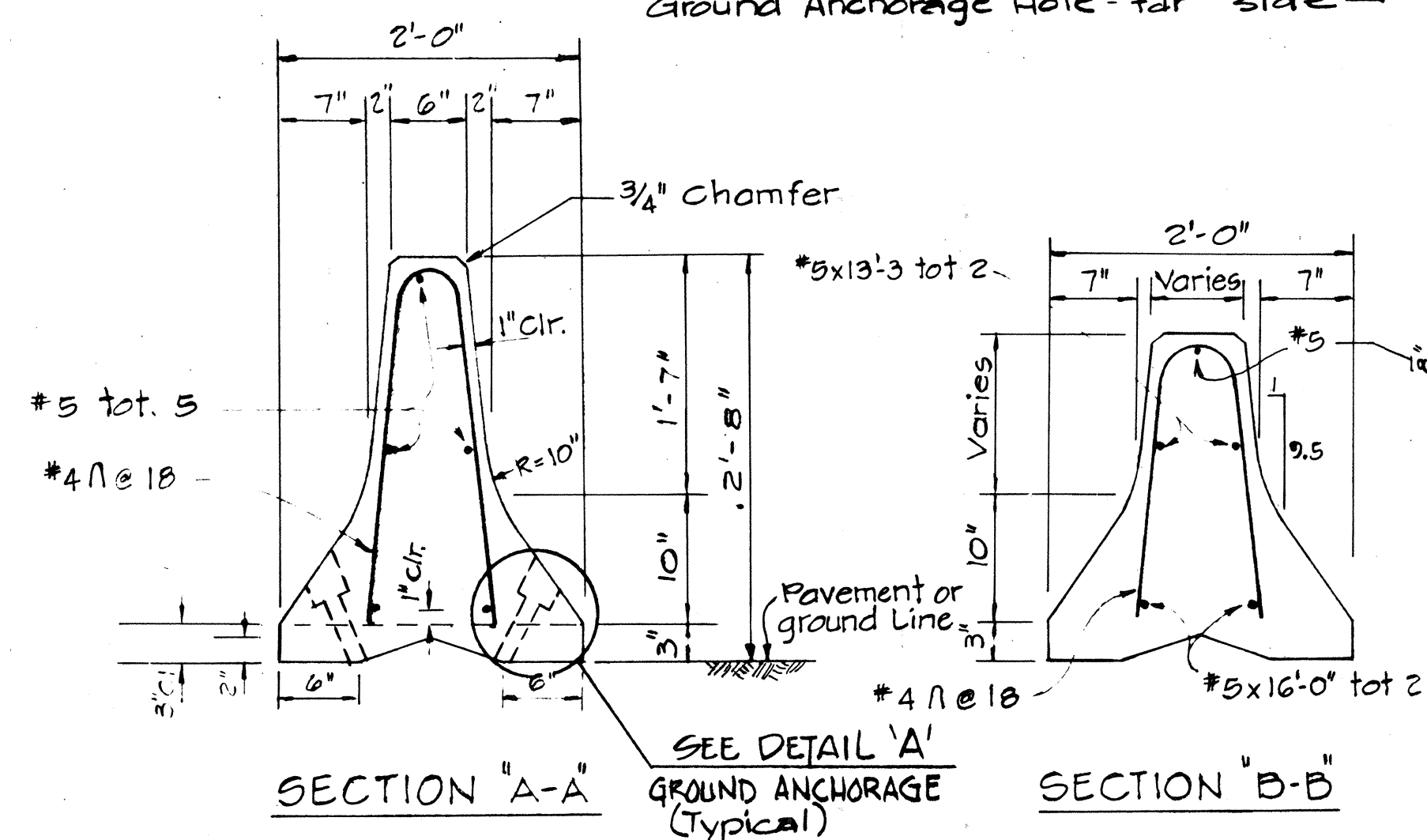
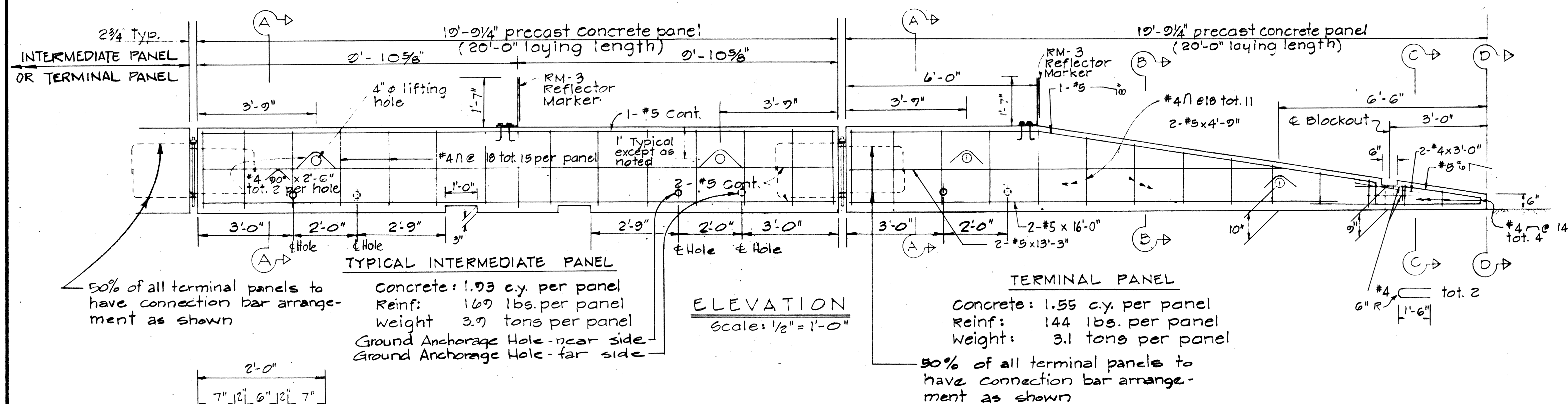
SECTION (A-A)
Scale: $\frac{3}{4}" = 1'-0"$

SECTION (B-B)
Scale: $\frac{3}{4}" = 1'-0"$

DETAILS FOR CONTRACT CHANGE ORDER N° 4

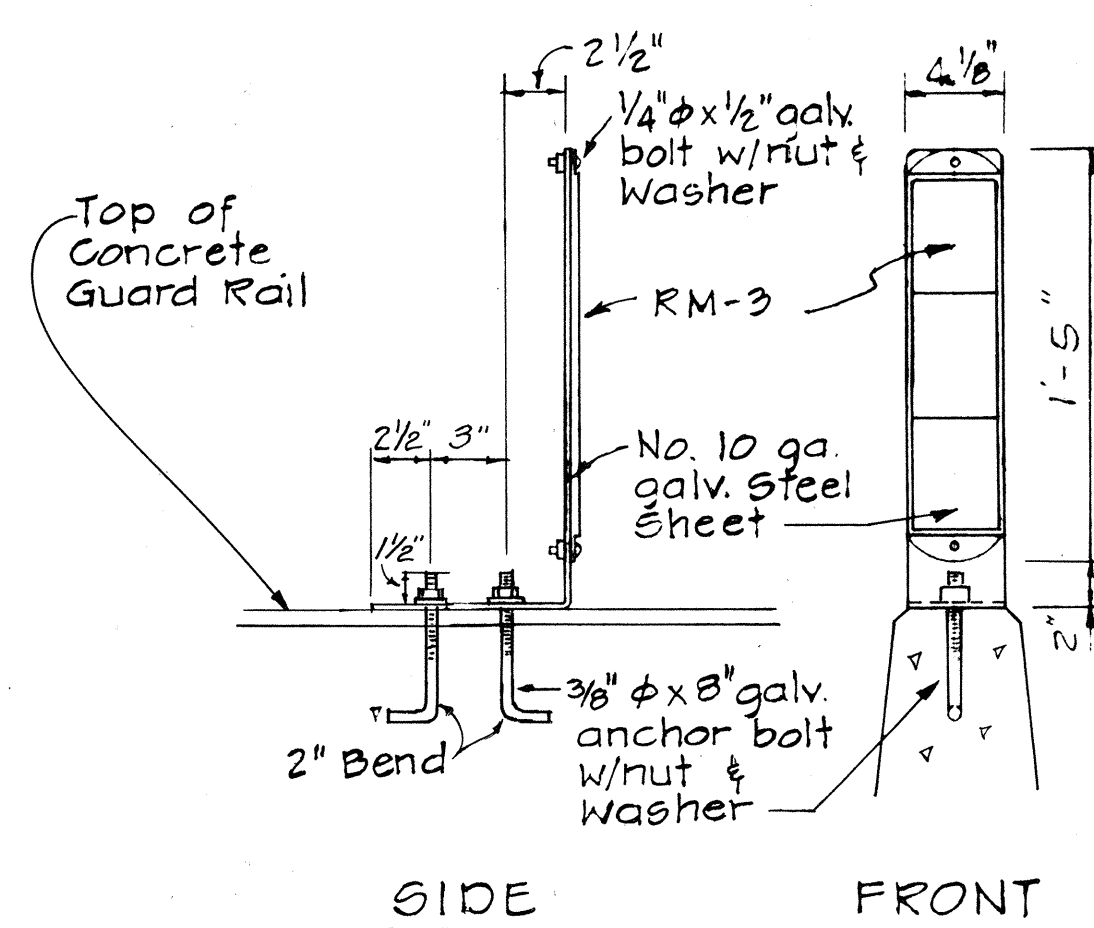
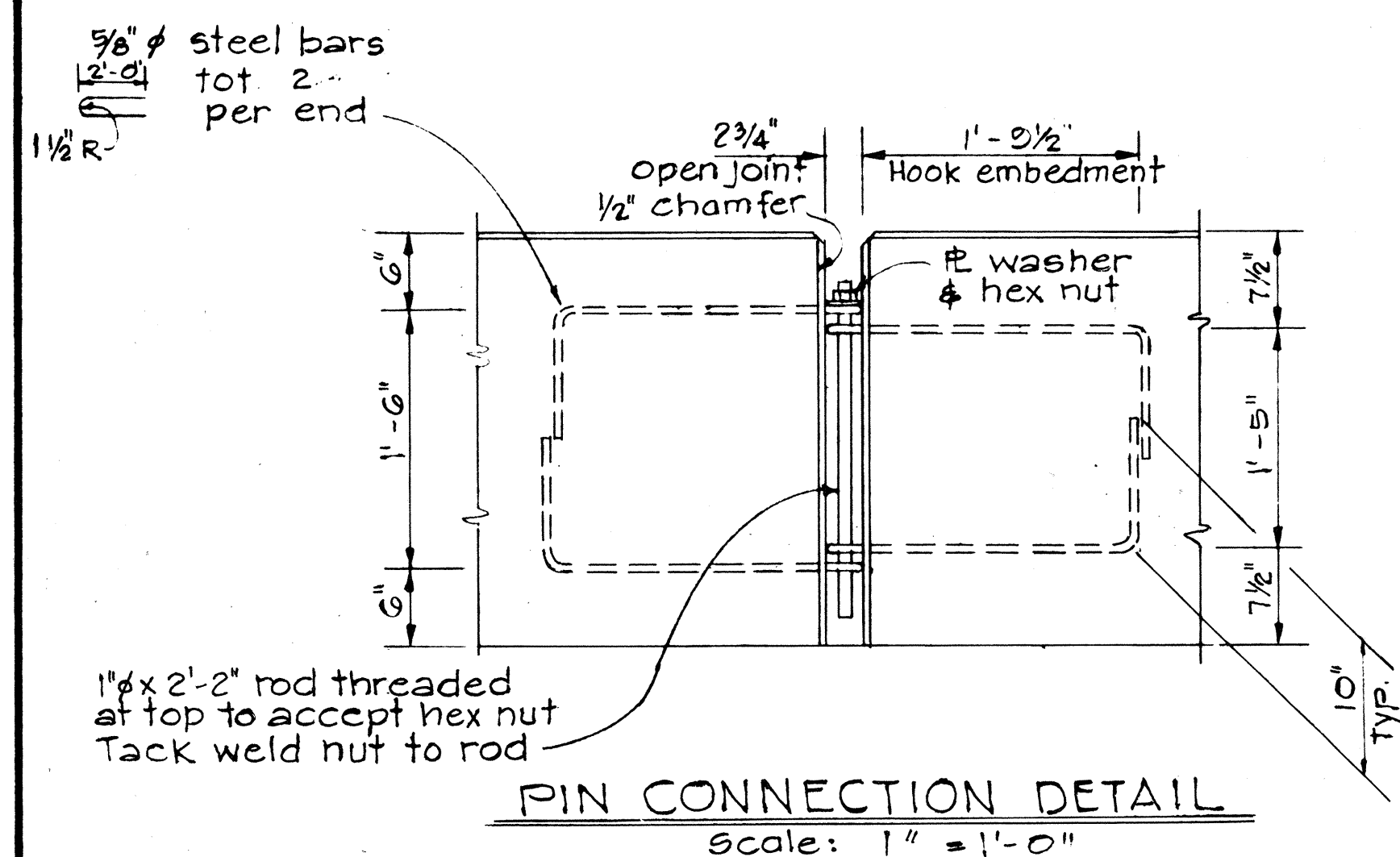
ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	_____
	DESIGNED BY _____	_____
	QUANTITIES BY _____	_____
	CHECKED BY _____	_____
No. _____		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(196)	1986	7	22

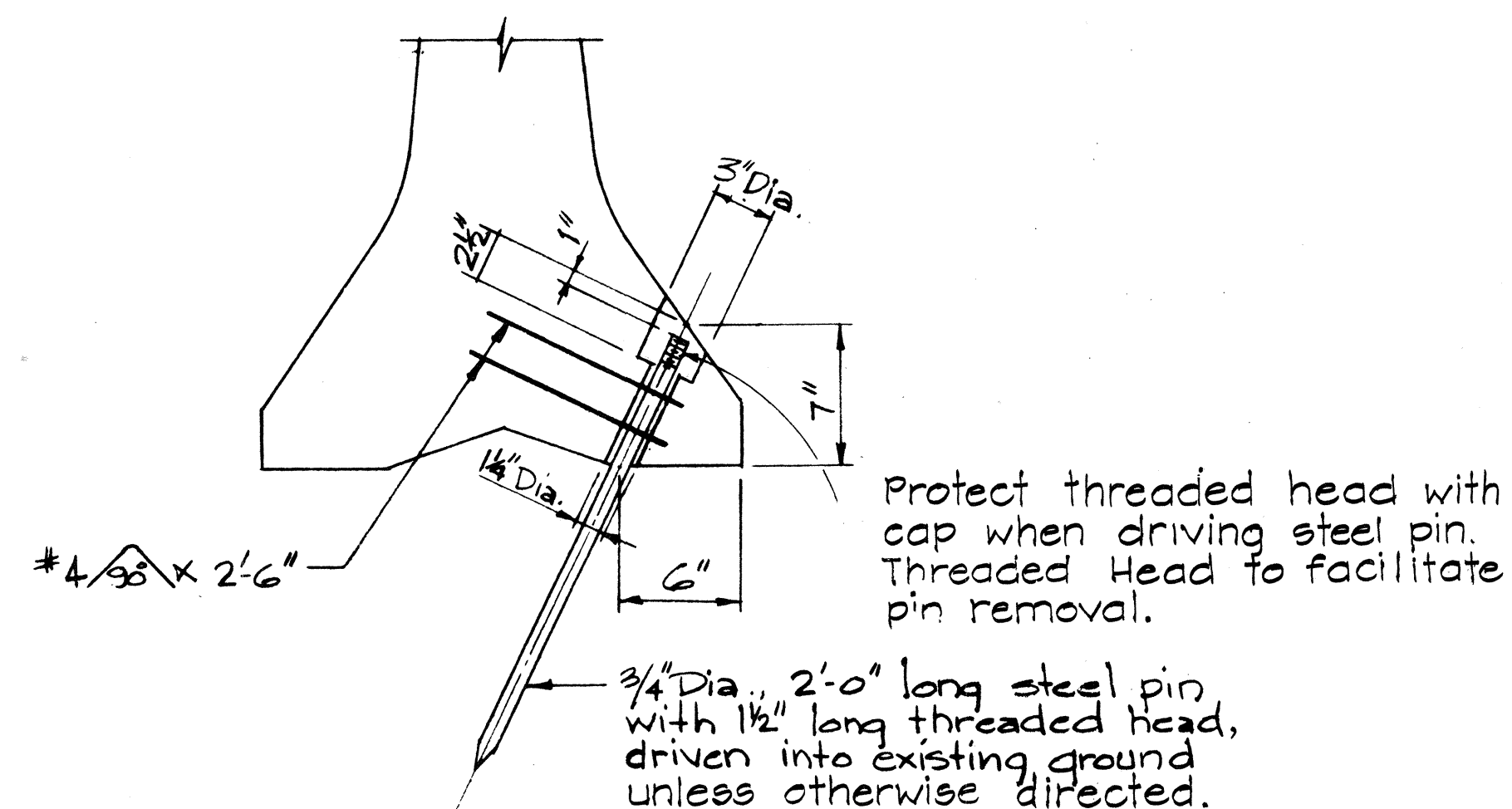


- ### NOTES
1. For details not shown in Sections BB, C-C, & D-D, see Section A-A
 2. Reflector Marker shall not be paid for separately but shall be considered incidental to "Portable Concrete Guard Rail."
 3. Concrete shall be Class "A".
 4. All bolts to have cut washers unless otherwise noted.
 5. Placement of ground anchorage spikes shall be placed in the temporary median barrier at the discretion of the Engineer.

SECTIONS
Scale: 1" = 1'-0"



REFLECTOR MARKER
MOUNTING DETAIL
Scale: $1\frac{1}{2}" = 1'-0"$



DETAIL A - GROUND ANCHORAGE
scale: $1\frac{1}{2}" = 1'-0"$

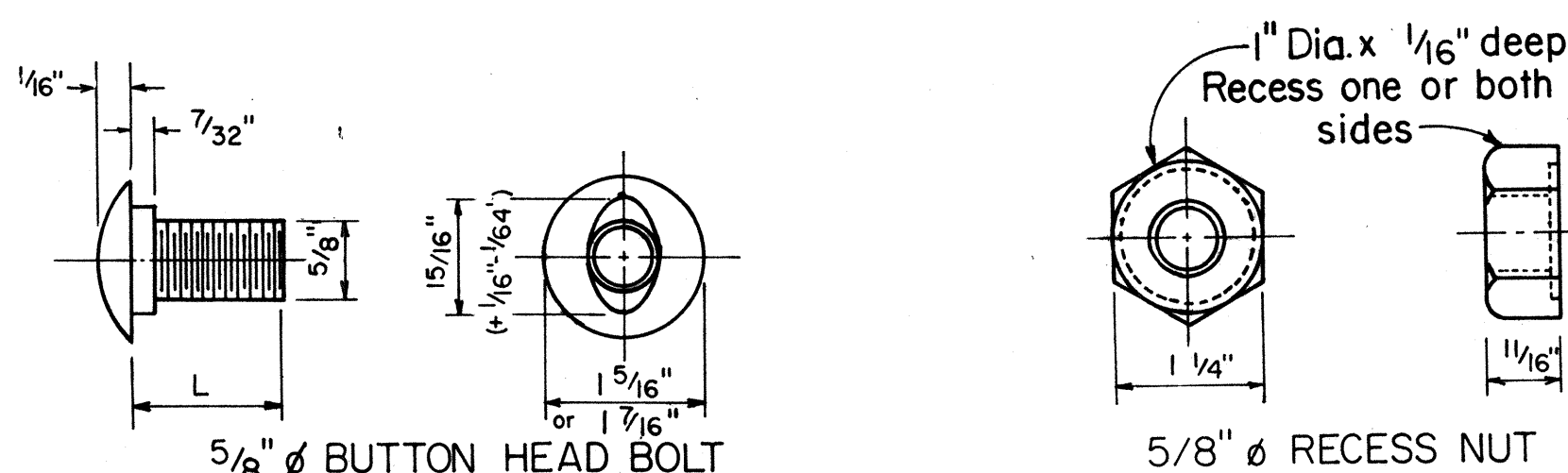
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PORTABLE CONCRETE GUARD
RAIL TYPICAL DETAILS

Scale: As Noted Date:

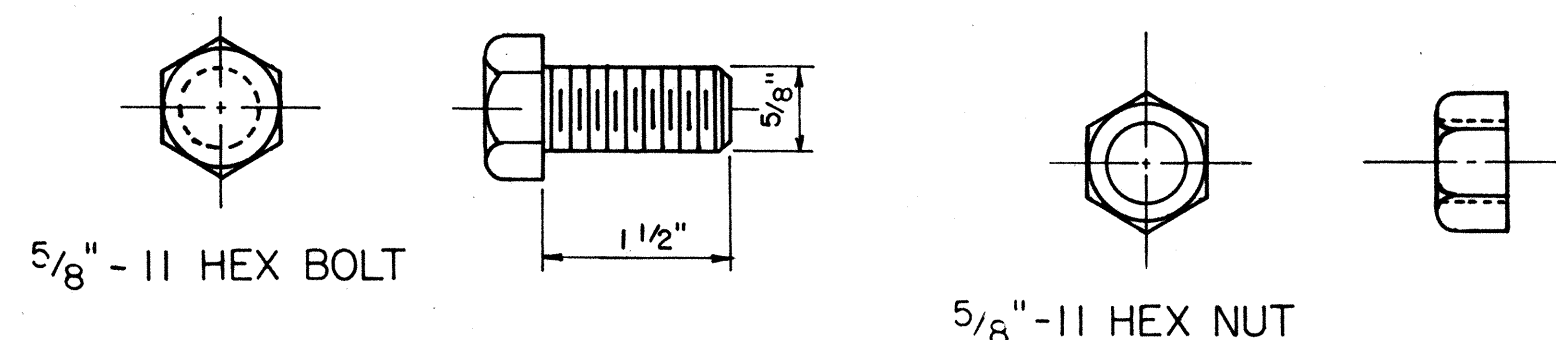
SHEET No. 2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(196)	1986	8	22

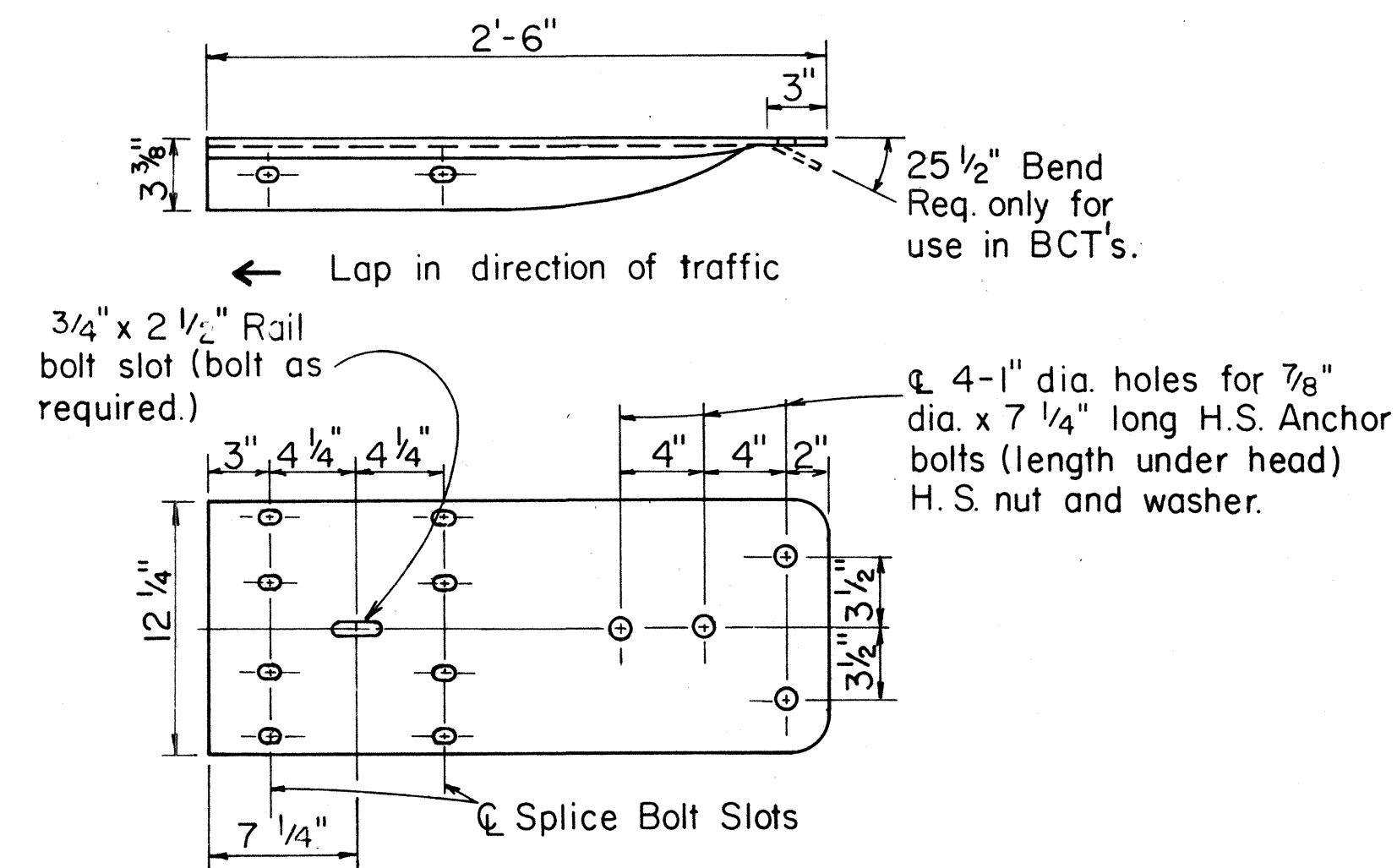


L	Thread Length	Intended Use
1 1/4"	Full length thread	Splice rail elements
2"	1 1/2" min. thread len.	Fasten rails to posts

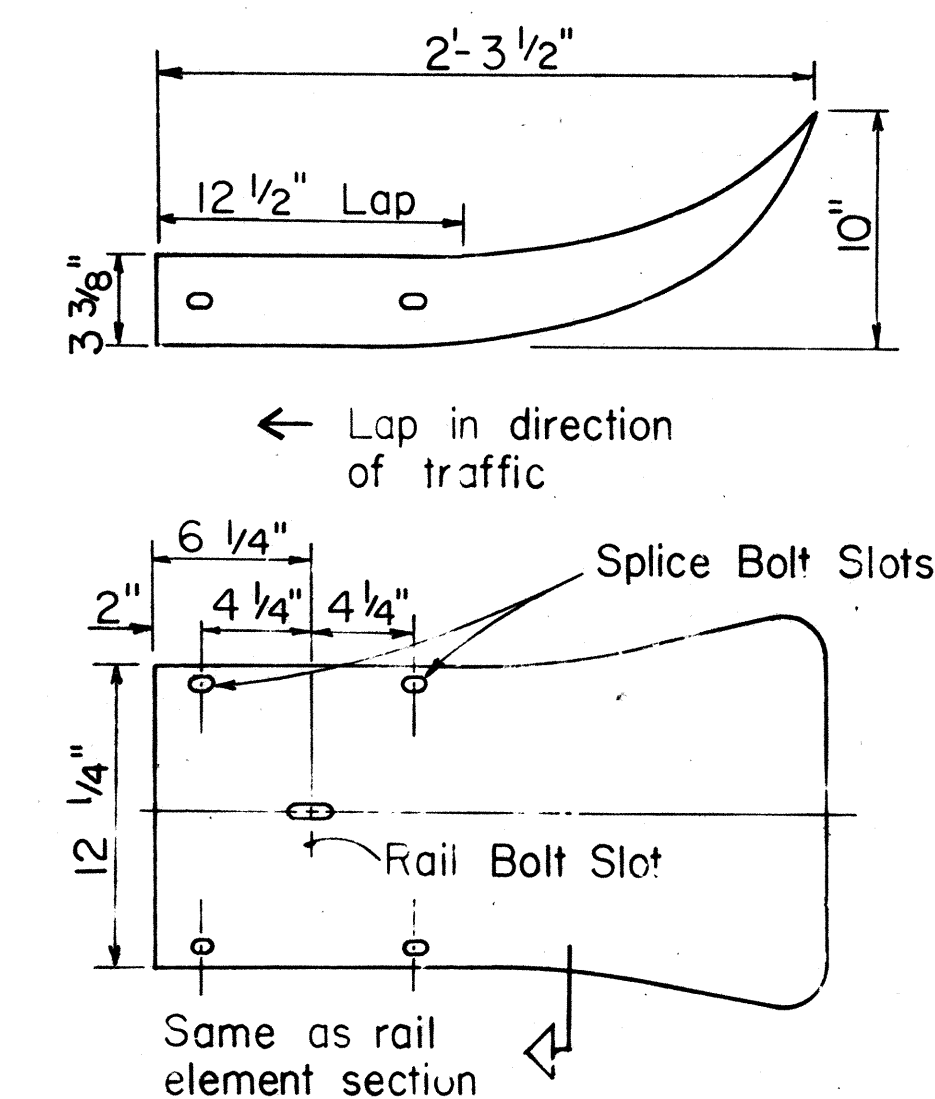
**5/8" BUTTON HEAD BOLT
AND RECESS NUT**
Scale: NTS



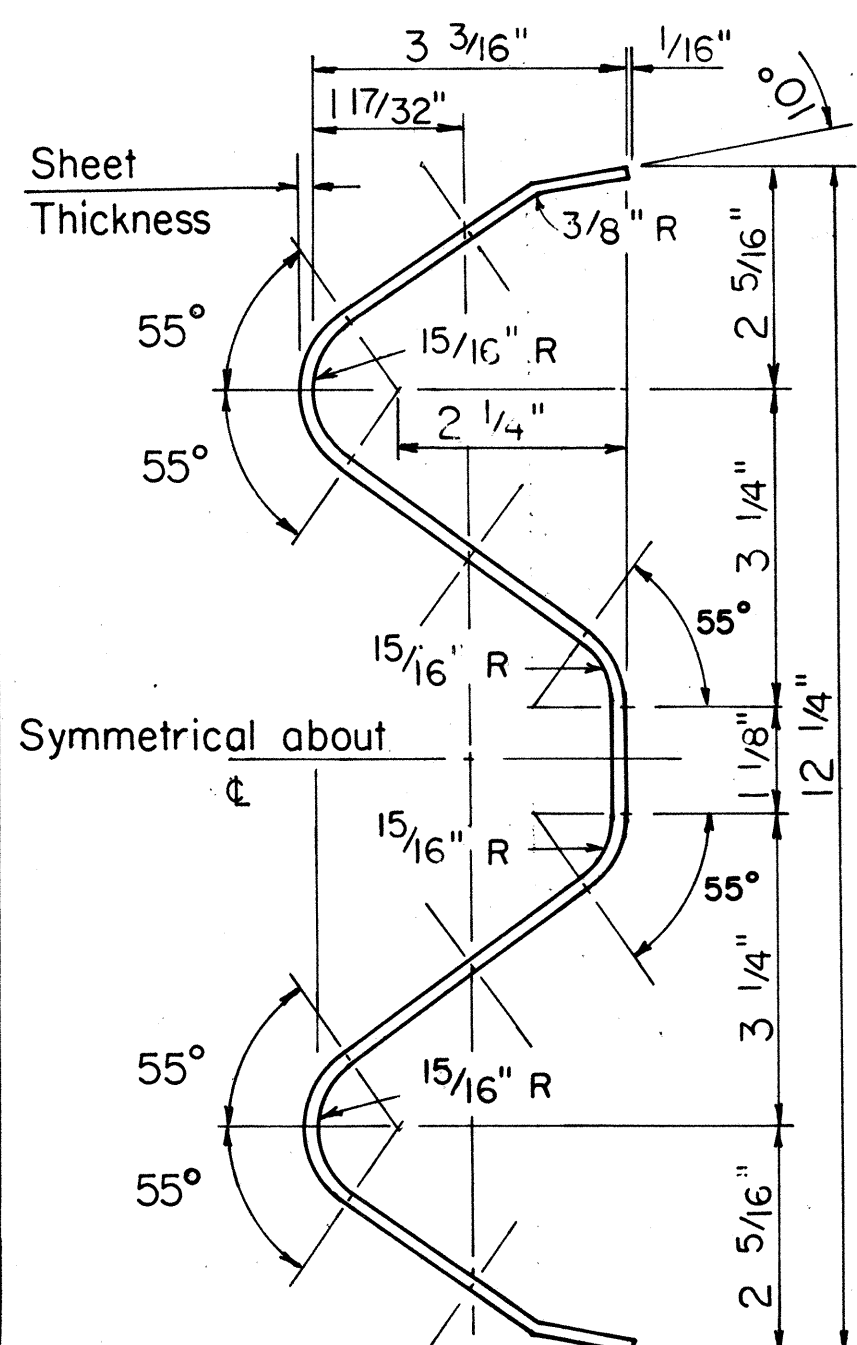
5/8" HEX POST BOLT AND NUT
Scale: N.T.S.



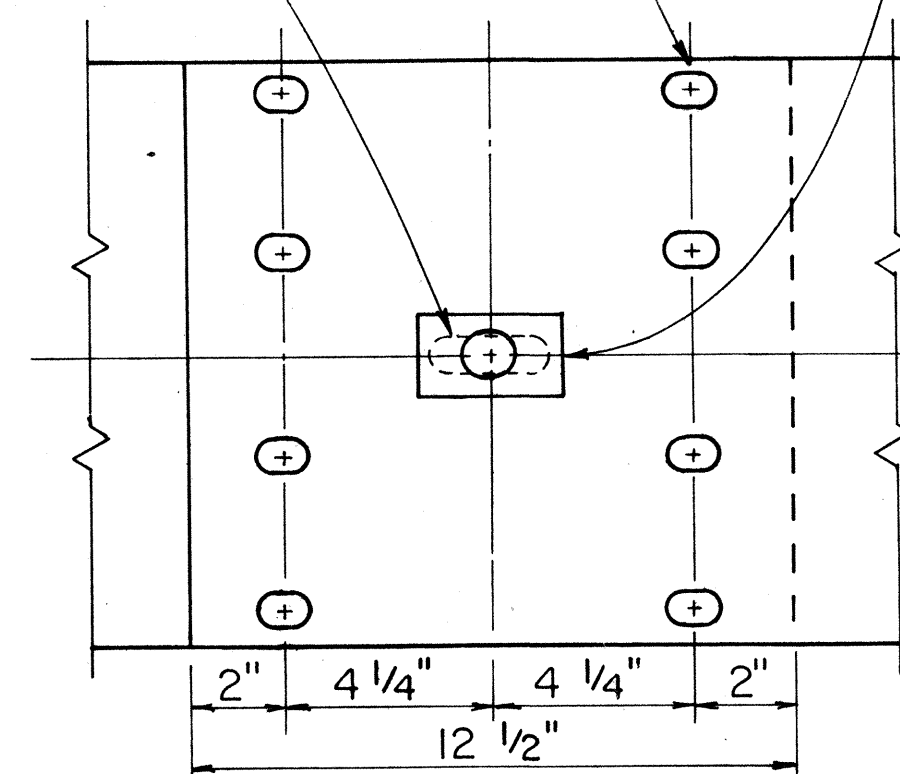
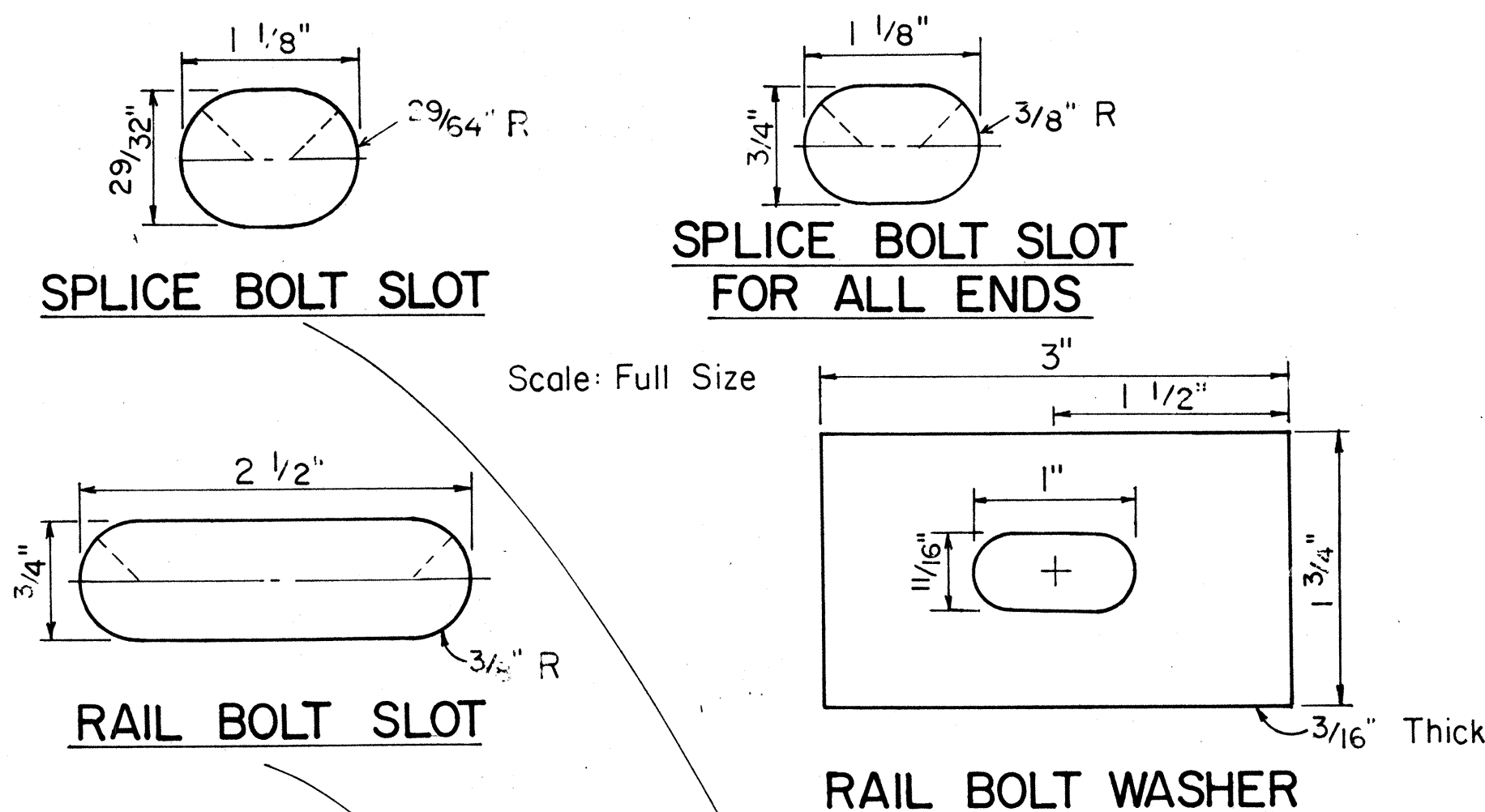
W BEAM TERMINAL CONNECTOR
Scale: 1 1/2" = 1'-0"
Lap in direction of traffic



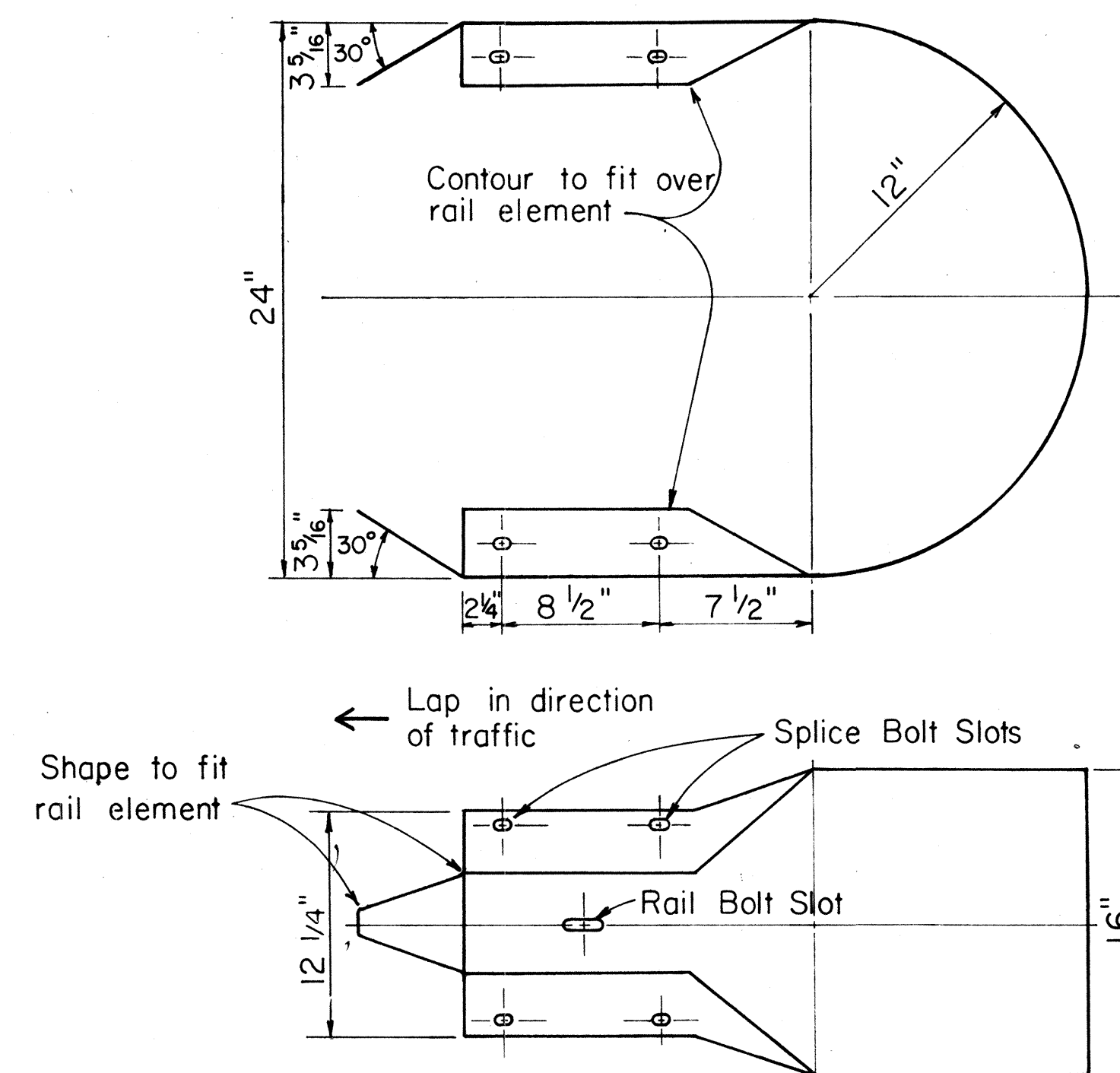
W BEAM END SECTION (FLARED)
Scale: 1 1/2" = 1'-0"



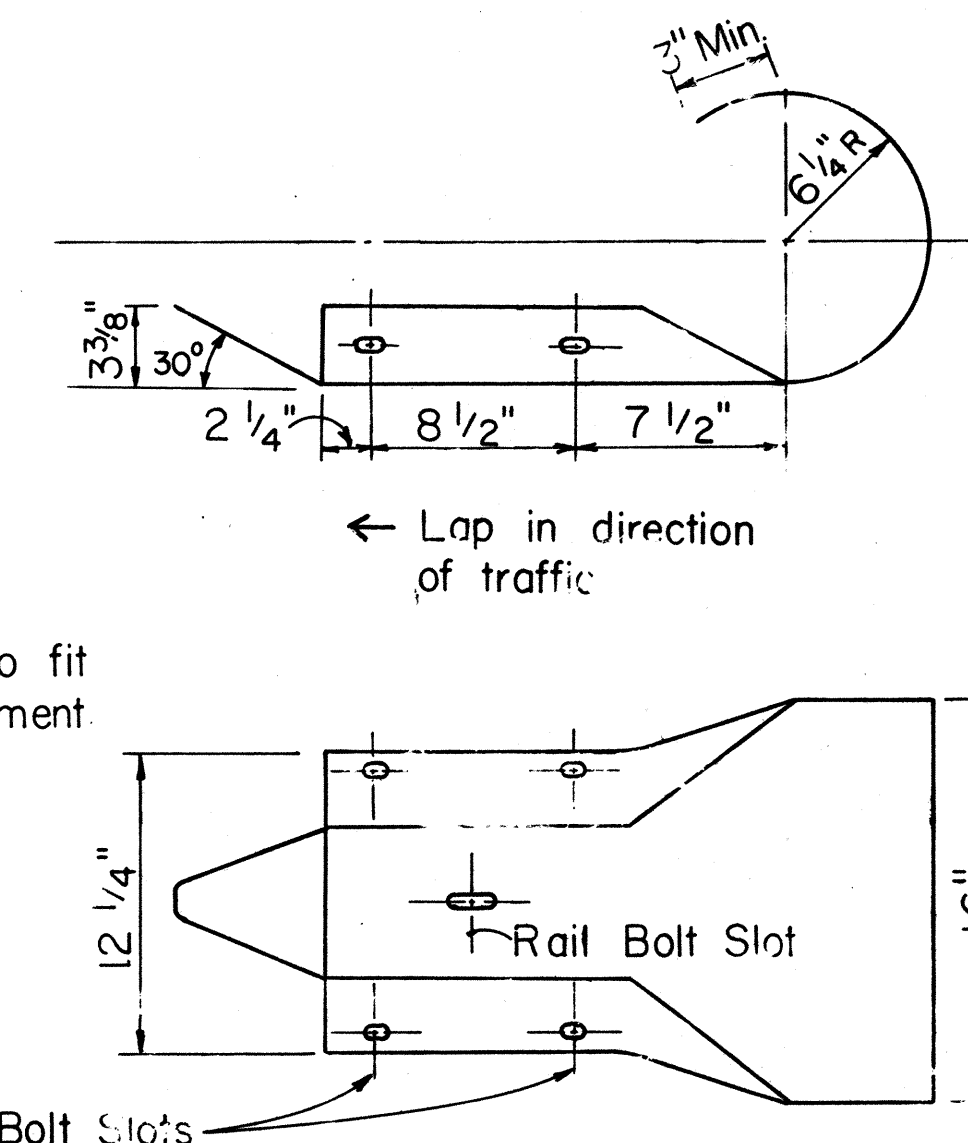
RAIL ELEMENT SECTION
Scale: 6" = 1'-0"



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



W BEAM END SECTION (BUFFER)
Scale: 1 1/2" = 1'-0"



W BEAM END SECTION (ROUNDED)
Scale: 1 1/2" = 1'-0"

APPROVAL RECOMMENDED:
Erich Tanaka 9/20/82
TRAFFIC ENGINEER DATE

APPROVED:
Robert Selich 9/22/82
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes sht. DT 501 approved 12/30/69	Hf.	9/22/82

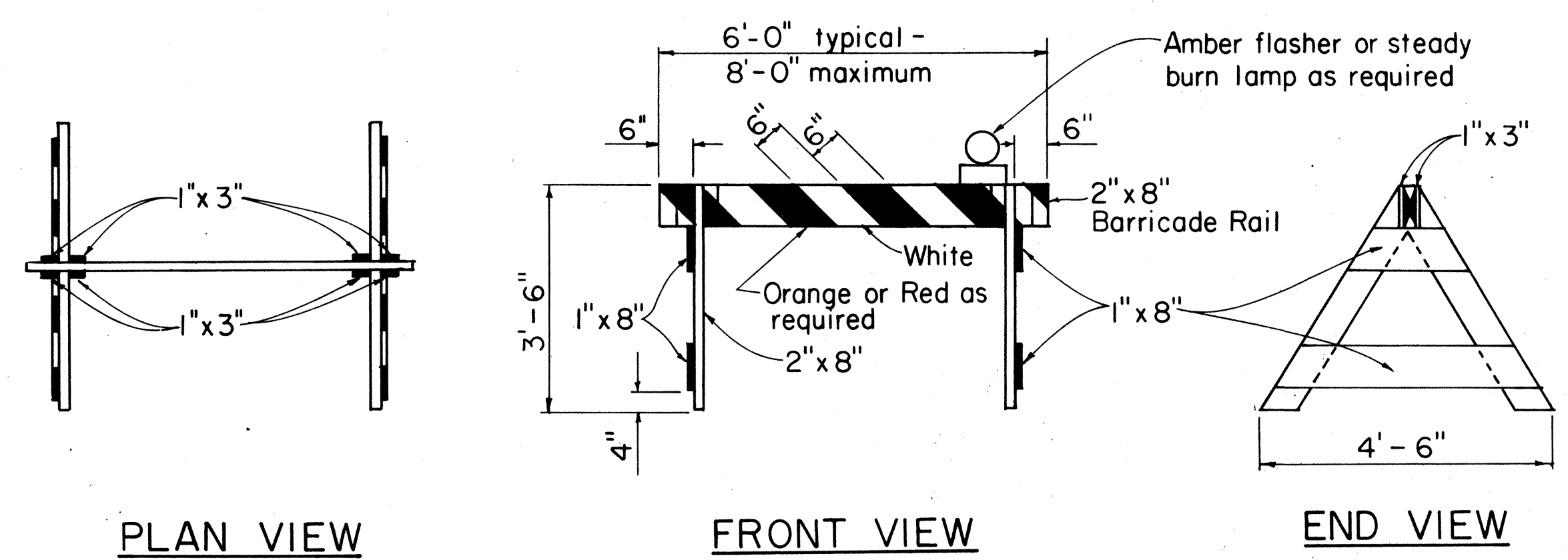
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
METAL GUARDRAIL

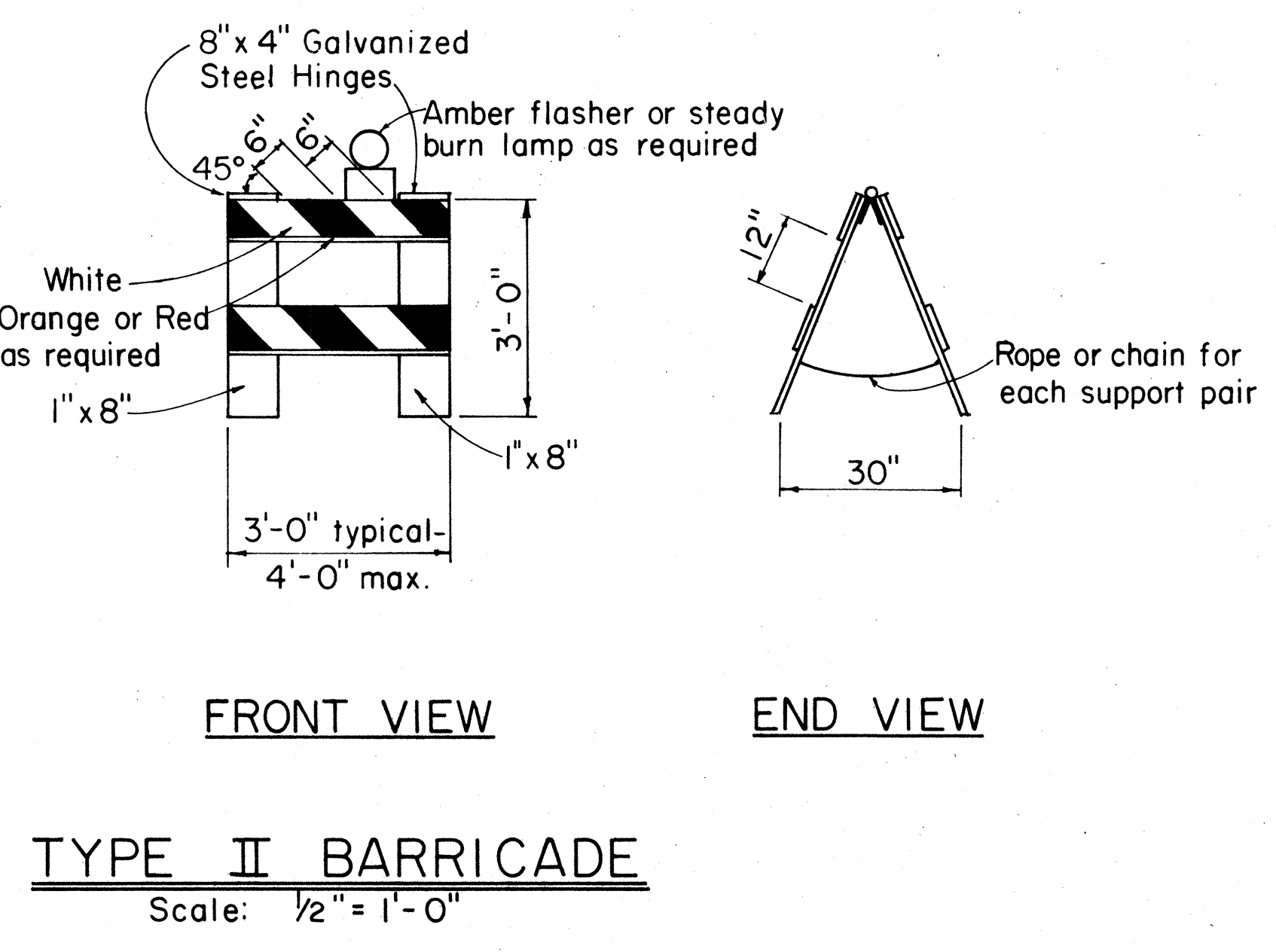
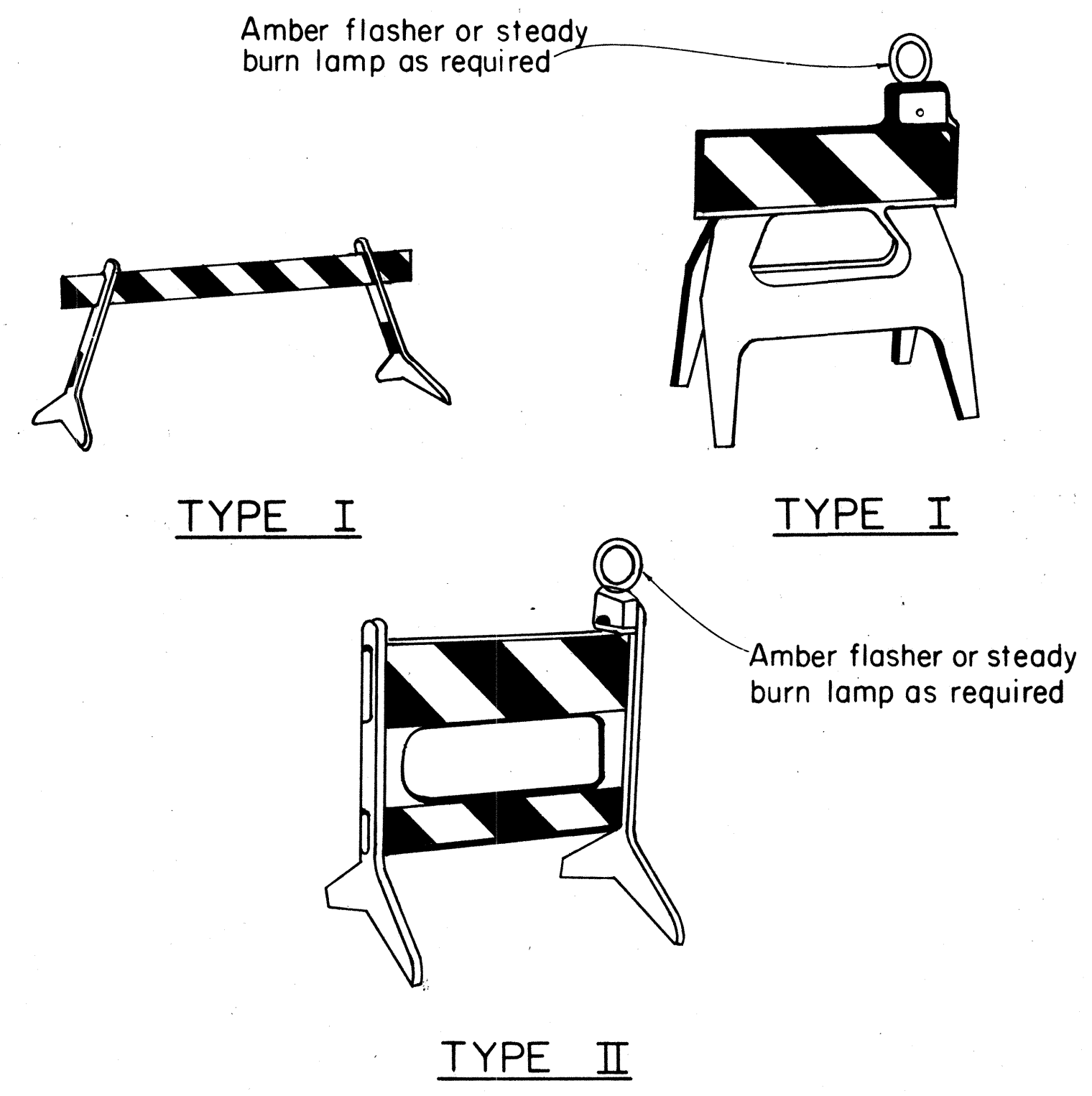
Scale: As Noted July, 1982
SHEET NO. 3 OF 4 SHEETS DT 501

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	LR-HI-1 (196)	1980	9	22

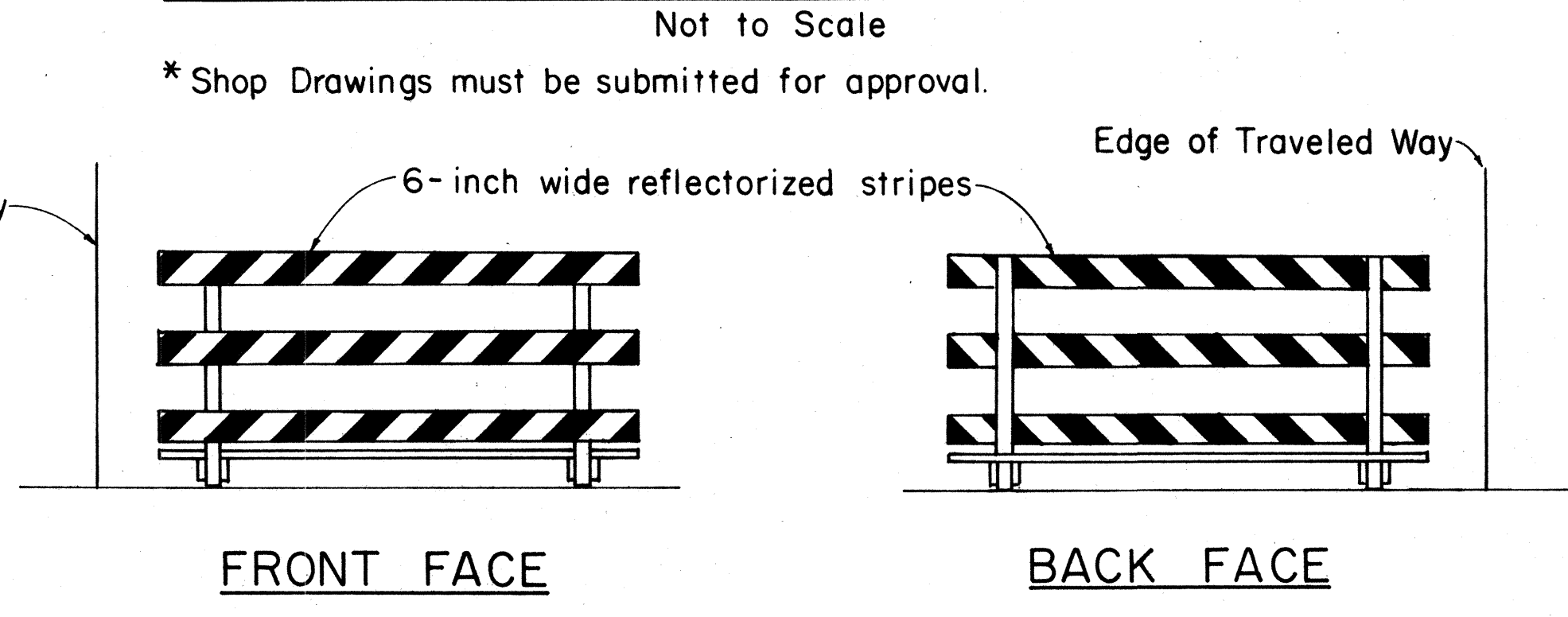


TYPE I BARRICADE
Scale: 1/2" = 1'-0"



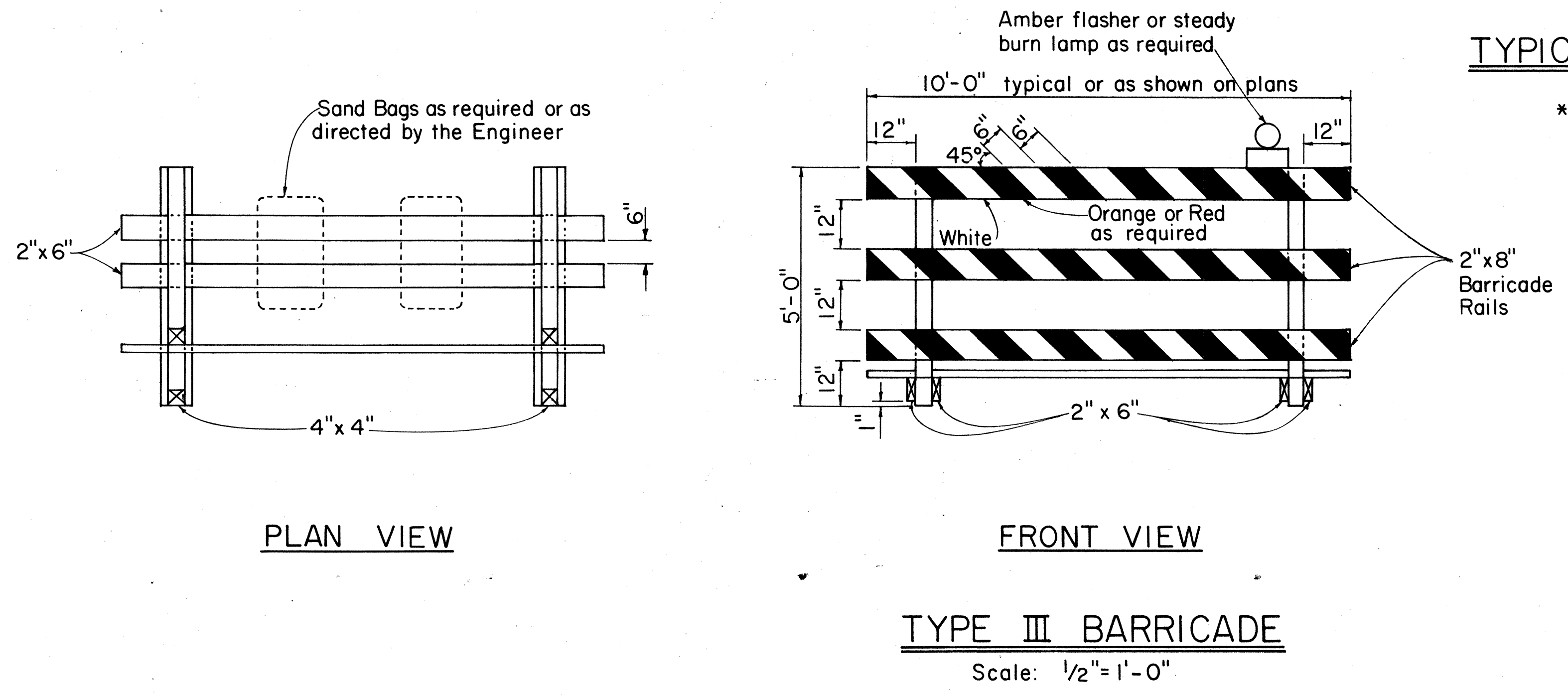
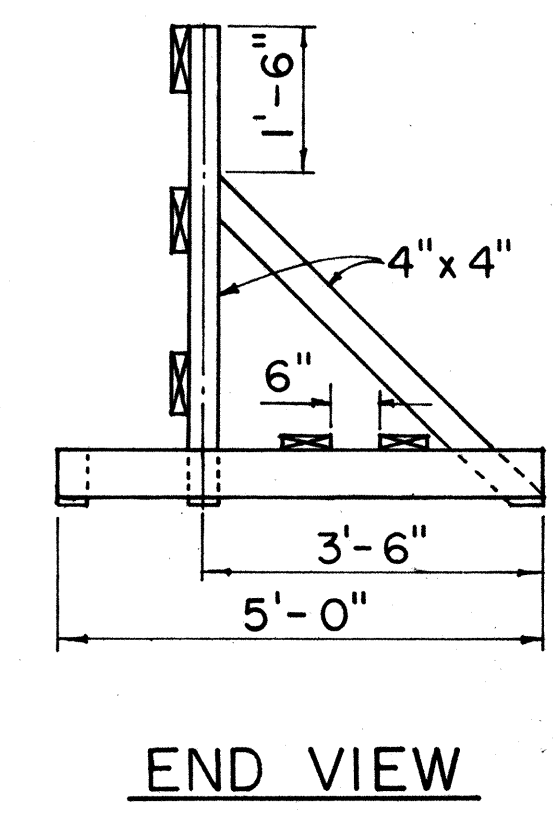
TYPE II BARRICADE
Scale: 1/2" = 1'-0"

PLASTIC MOLDED BARRICADE OPTIONS*



TYPICAL BARRICADE STRIPING DETAILS**

Not to Scale
** Similar for Types I & II



TYPE III BARRICADE
Scale: 1/2" = 1'-0"

GENERAL NOTES

- The front and back faces of each barricade rail shall be reflectorized with stripes sloping downward toward the same side (traveled way) of each barricade.
- Contractor may submit alternate barricade designs for approval.
- Sandbags or other approved weights shall not be placed on top of any striped rail.
- The Contractor is directed to Section 626.

APPROVAL RECOMMENDED:
Eishi Tanaka
TRAFFIC ENGINEER 10/21/81
DATE

APPROVED:
Shunroku S. Sato
ASSISTANT CHIEF, ENGINEERING 10/23/81
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes DT 800 Approved 12/30/69	H.T.	10/23/81

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
BARRICADES

SCALE: As Shown

SHEET NO. 4 OF 4 SHEETS DT 800

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