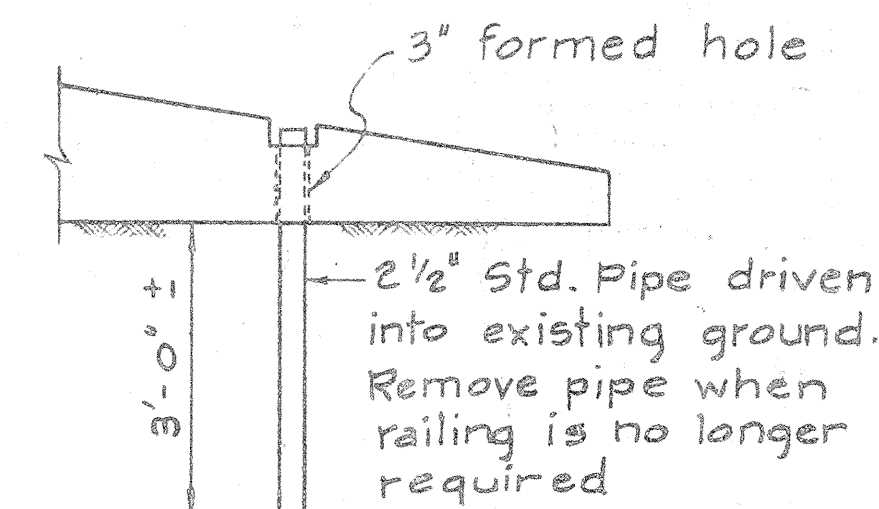
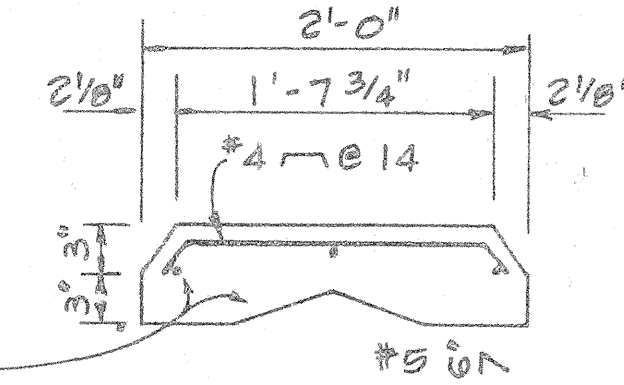
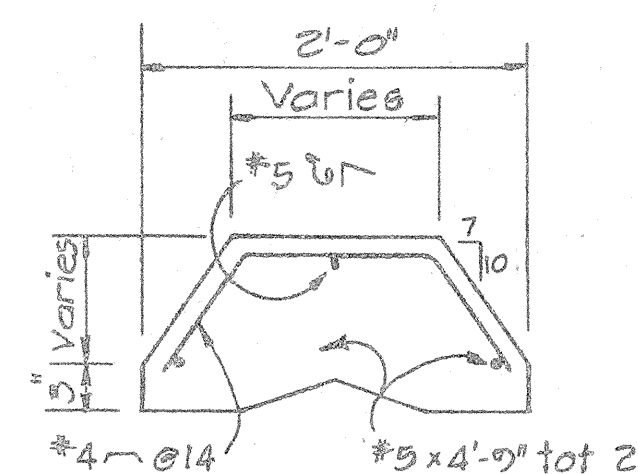
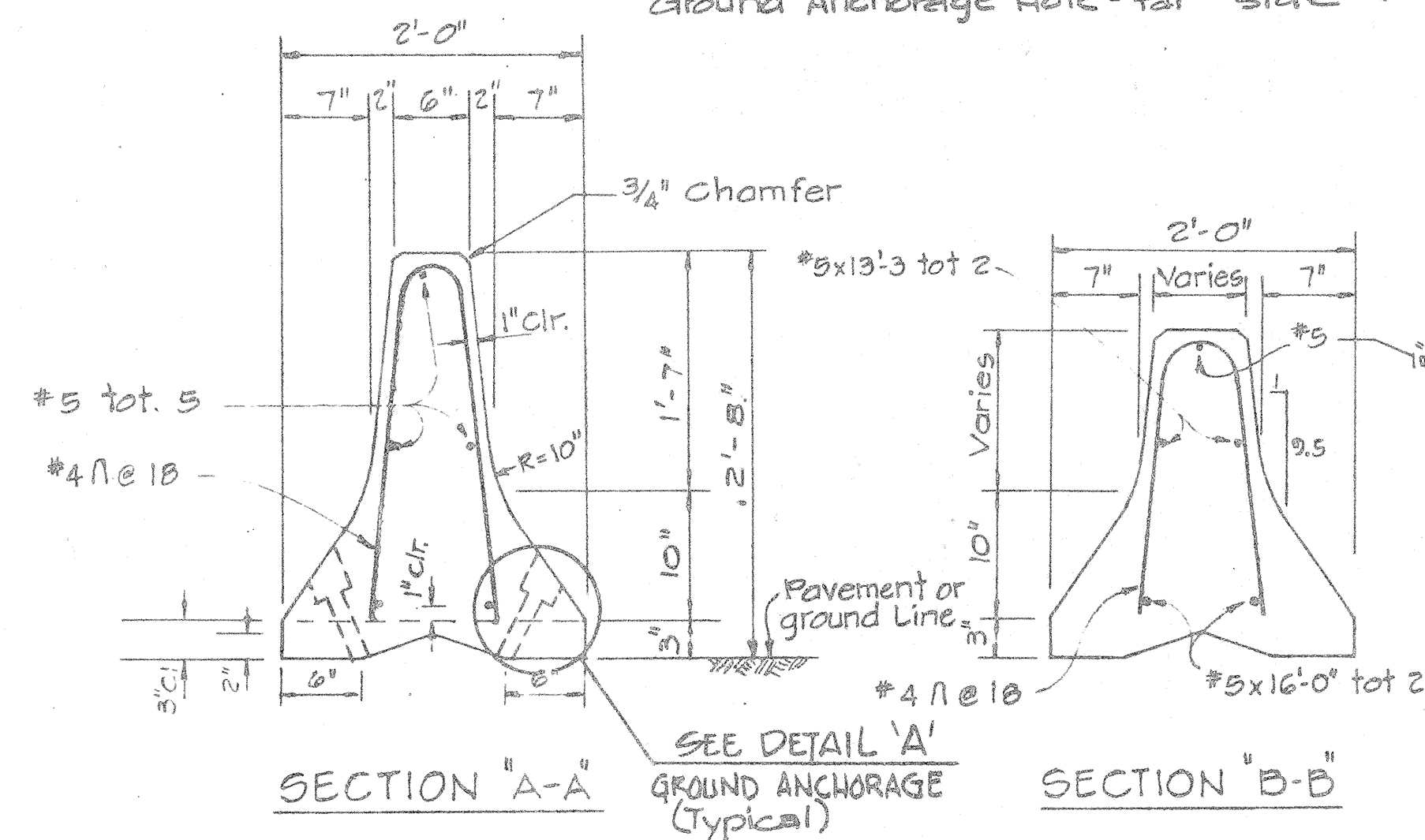
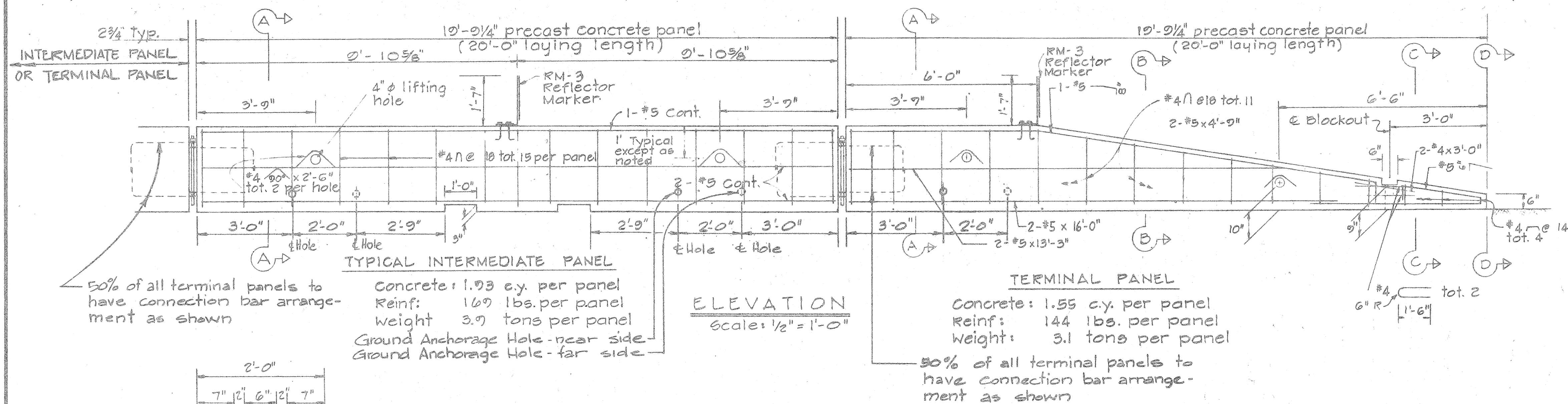
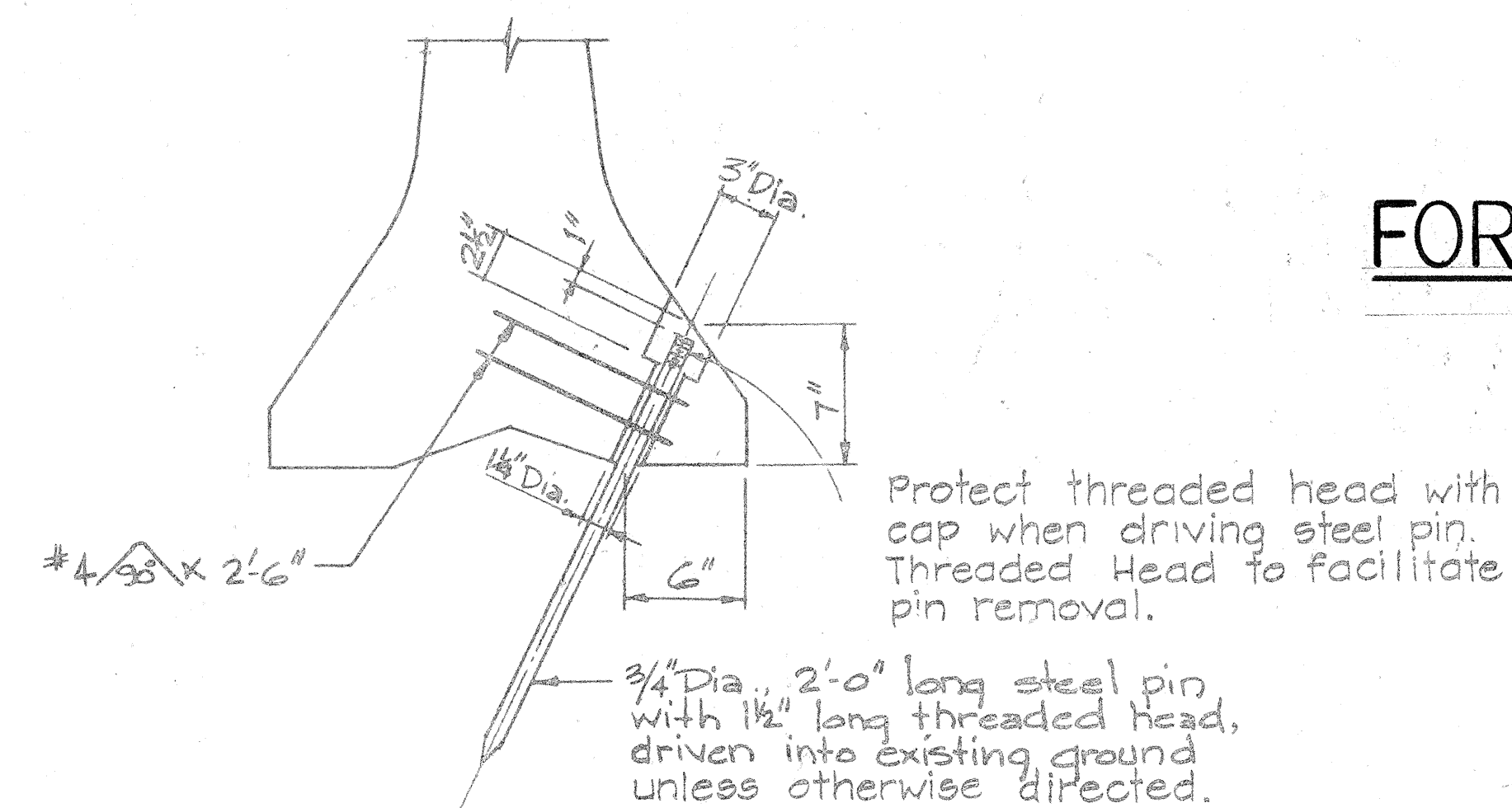
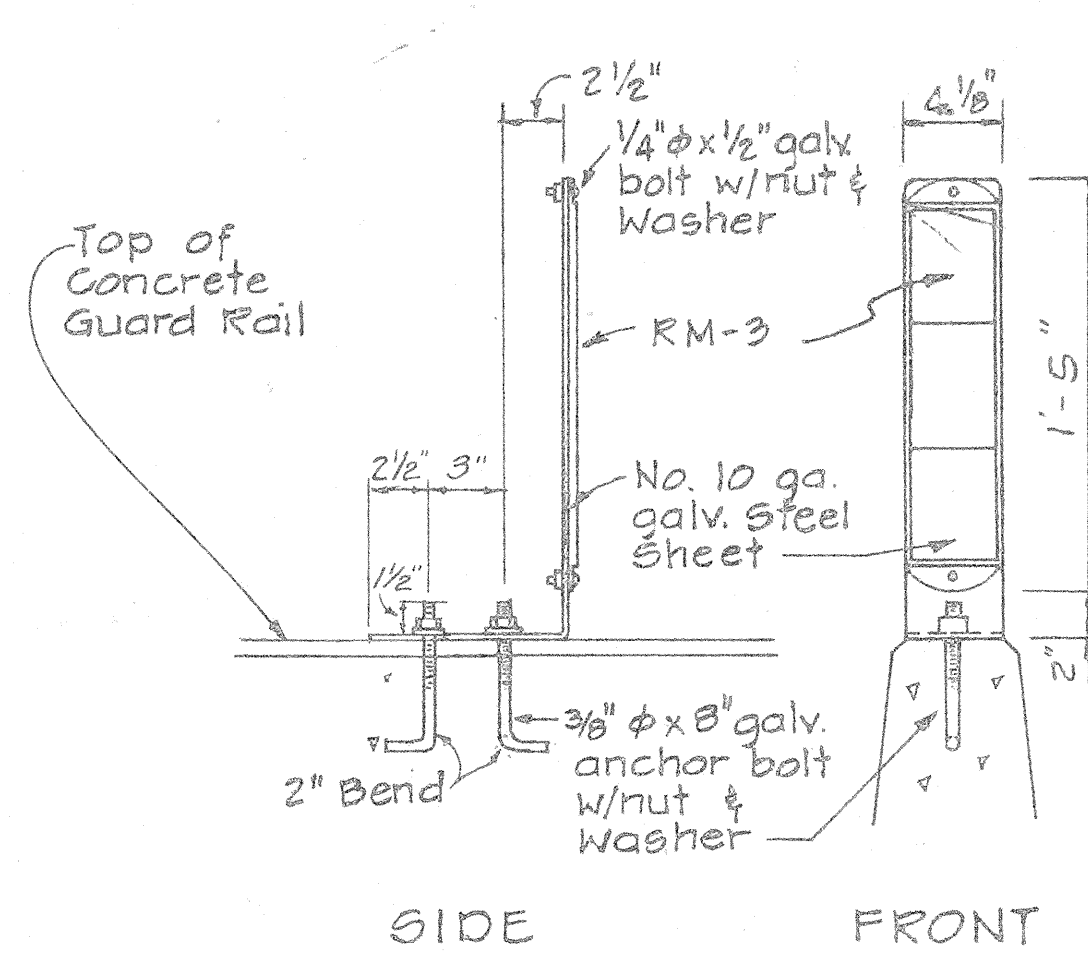
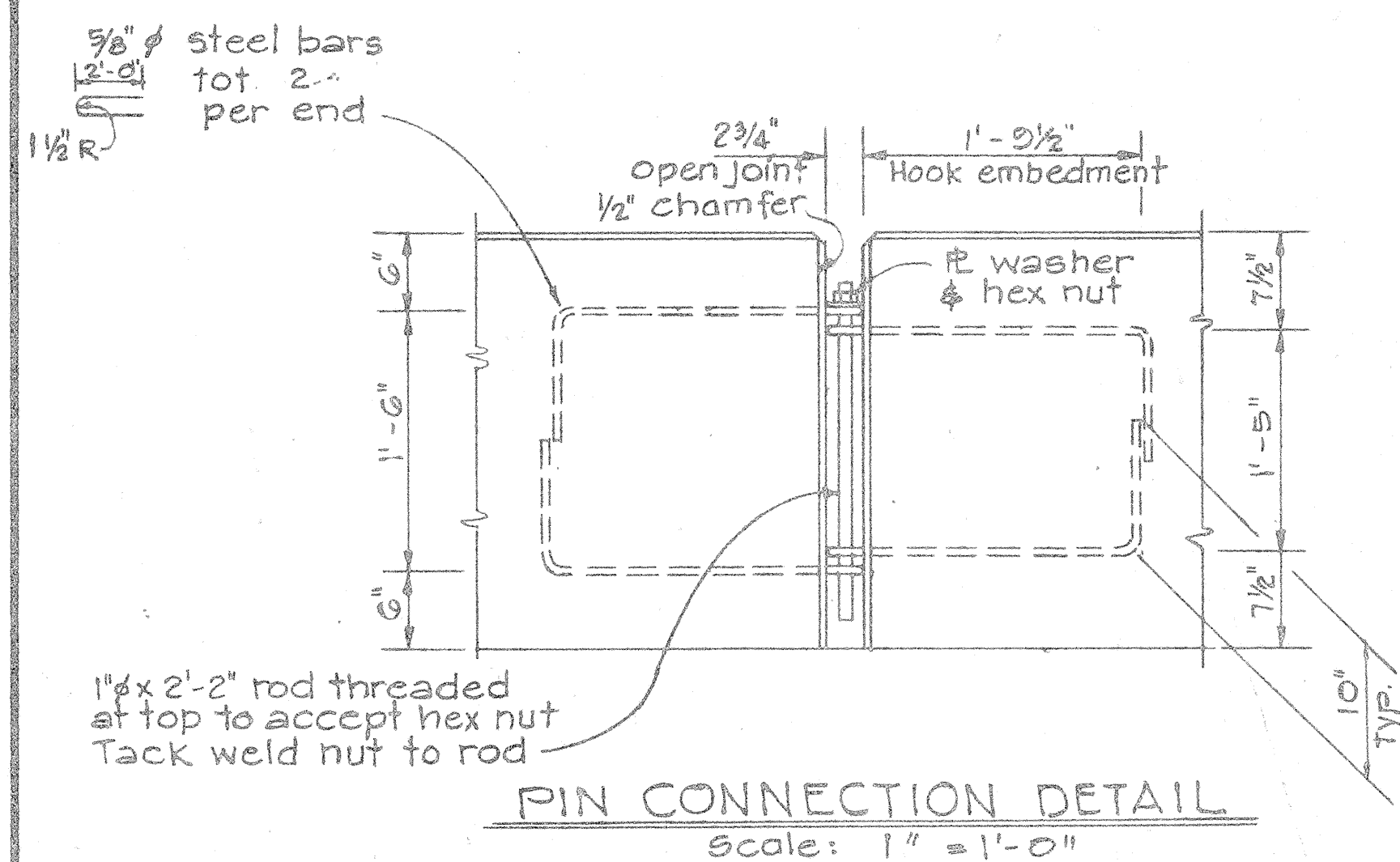


| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| HAWAII                 | HAW.  | FHH(075):16           | 1983           | 31           | 191             |



- ### 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.

SECTIONS  
Scale: 1" = 1'-0"



FOR INFORMATION ONLY

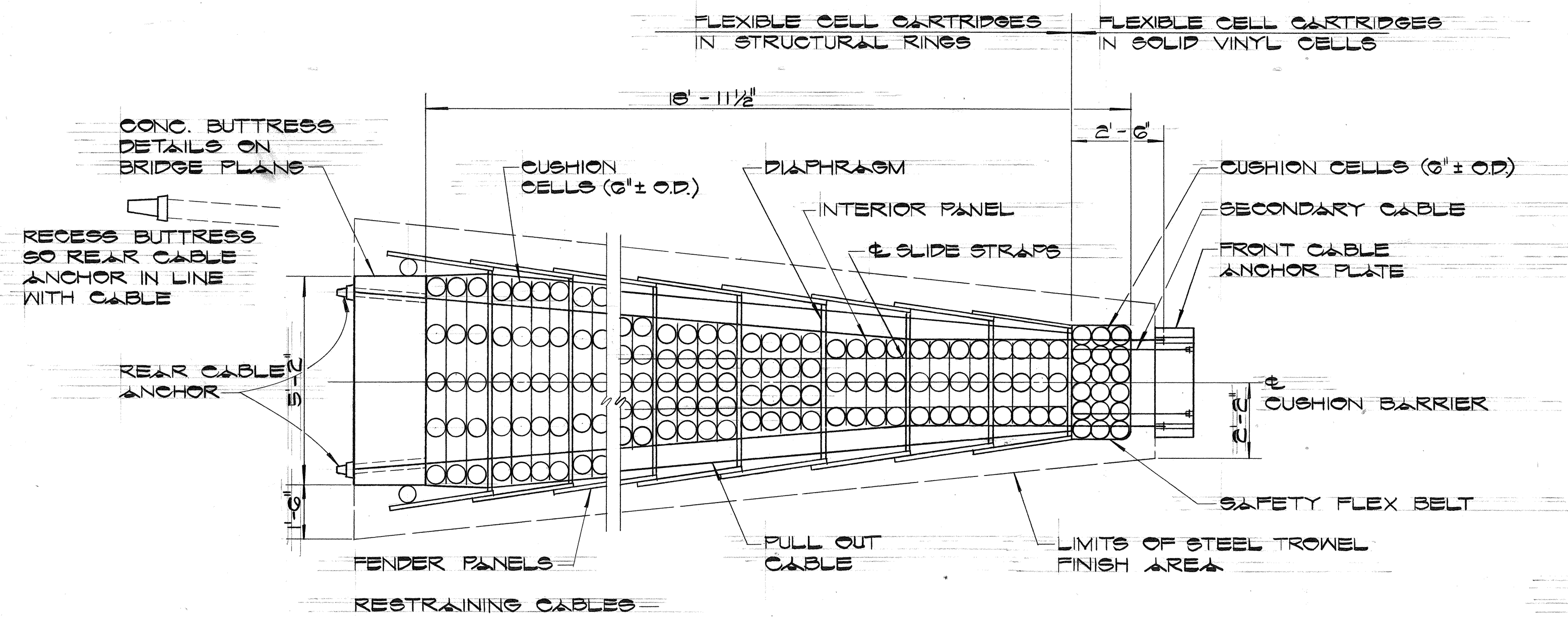
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PORTABLE CONCRETE GUARD  
RAIL TYPICAL DETAILS

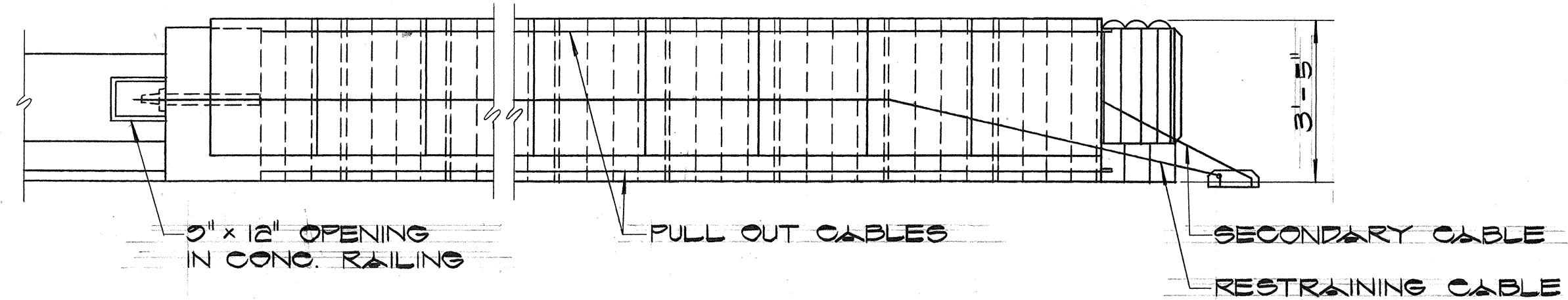
Scale: As Noted      Date: \_\_\_\_\_

**SHEET No.      OF      SHEETS**

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 1-HI-1(175):16     | 1983        | 32        | 191          |



PLAN



ELEVATION

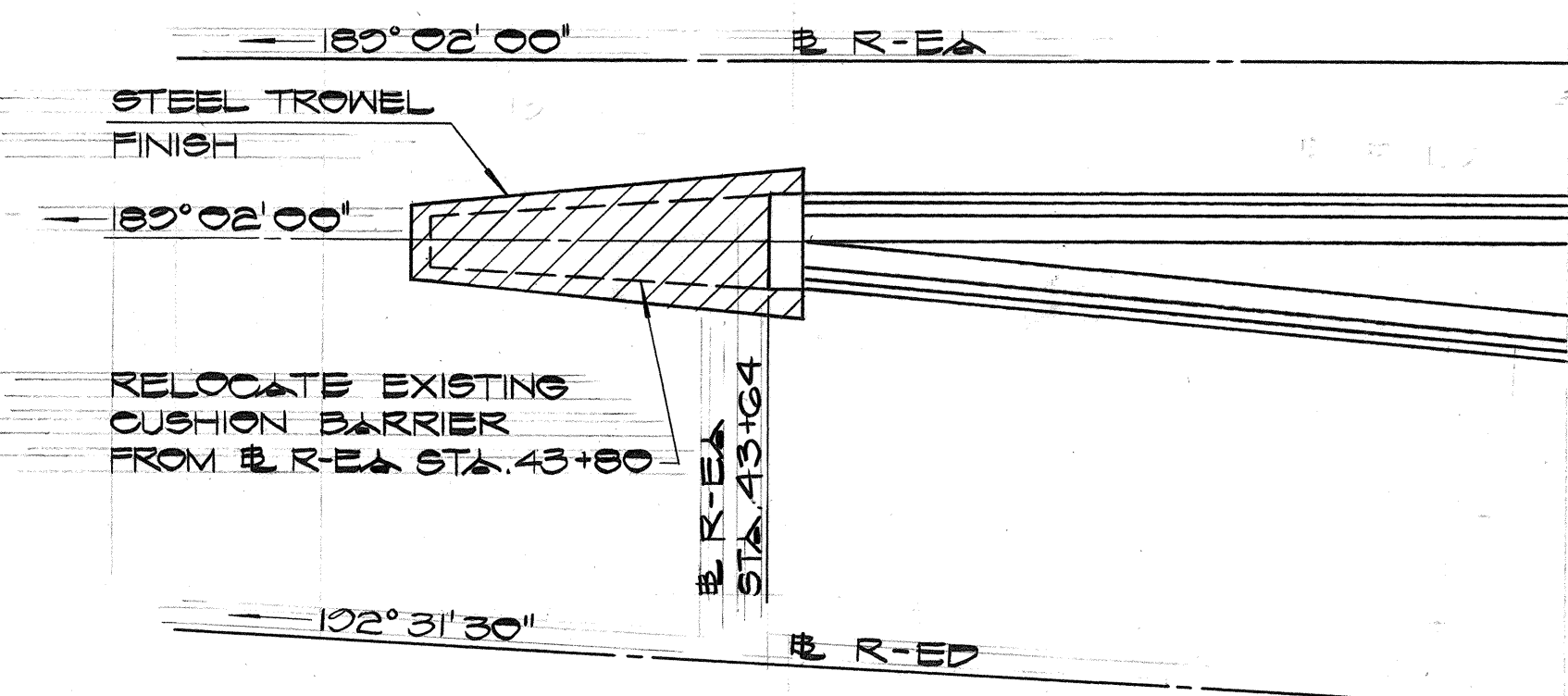
# CUSHION BARRIER LAYOUT

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

RESET CUSHION BARRIER - PAY ITEM 677.0100

## NOTES:

1. STEEL TROWEL FINISH AREA SHALL BE IN ONE PLANE.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. FRONT CABLE ANCHORAGE MOUNTING STRAPS AND CONCRETE ANCHOR BOLTS SHALL BE INCIDENTAL TO CUSHION BARRIER AND NOT BE PAID FOR SEPARATELY.
4. ALL STRUCTURAL STEEL SHALL BE GALVANIZED AFTER FABRICATION.
5. THE INSTALLATION OF THE CONCRETE ANCHOR BOLTS TO SECURE FRONT CABLE ANCHOR PLATE SHALL NOT REDUCE THE AREA OF REINFORCING STEEL IN THE CONCRETE DECK BELOW THE ALLOWABLE DESIGN LIMITS.
6. FRONT END ANCHORAGE DETAILS AND BUTTRESS CONNECTION DETAILS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
7. LEVEL BARRIER INSTALLATION AREA WITH NON-SHRINK GROUT - #4 @ 12" BOTH WAYS.



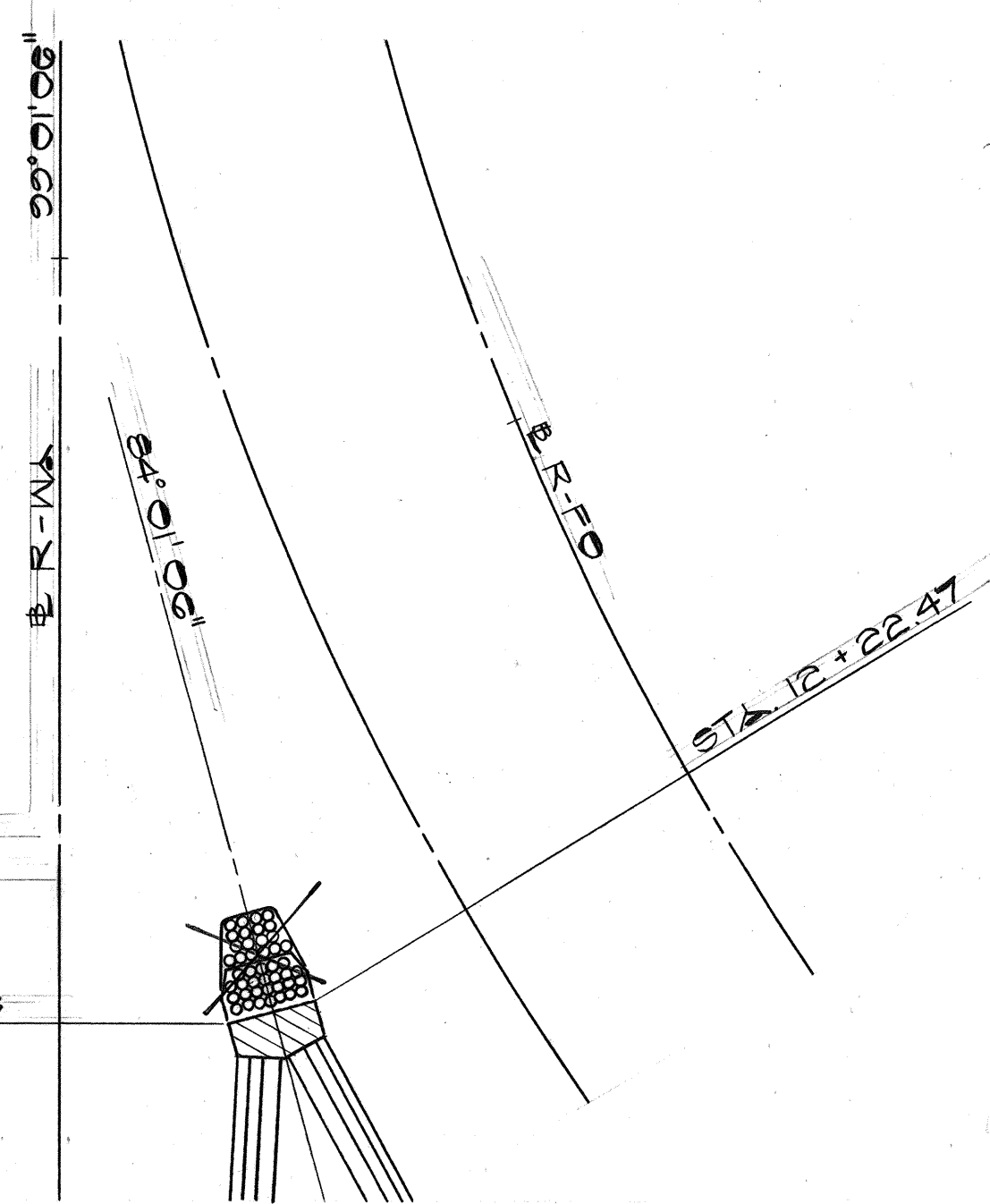
# LOCATION PLAN

R-EA & R-ED

SCALE: 1" = 10'-0"

(C.C.O. NO. 8)  
DELETED  
NEW CUSHION BARRIER

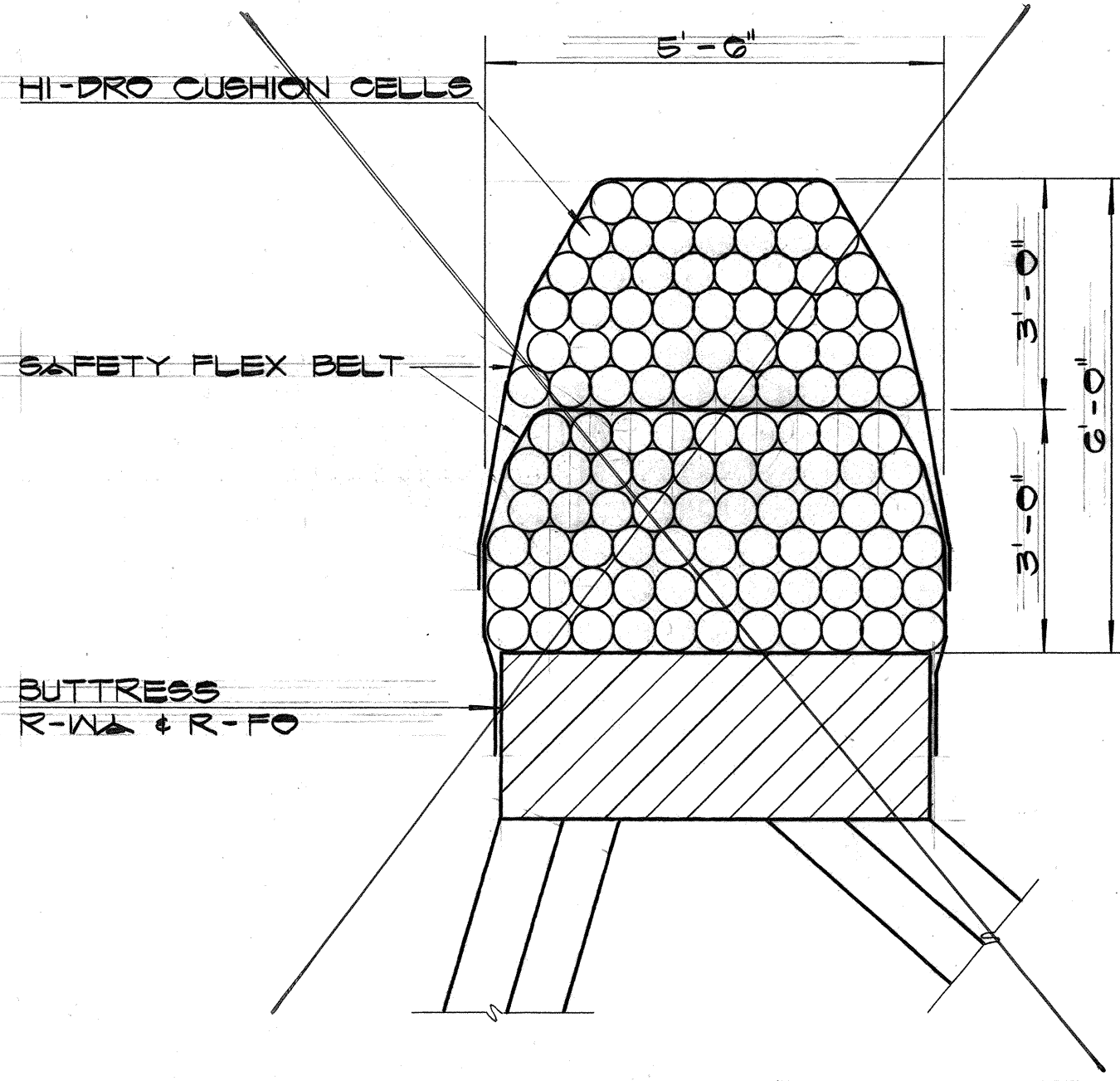
STA. 73+42.45



# LOCATION PLAN

R-WA & R-FO

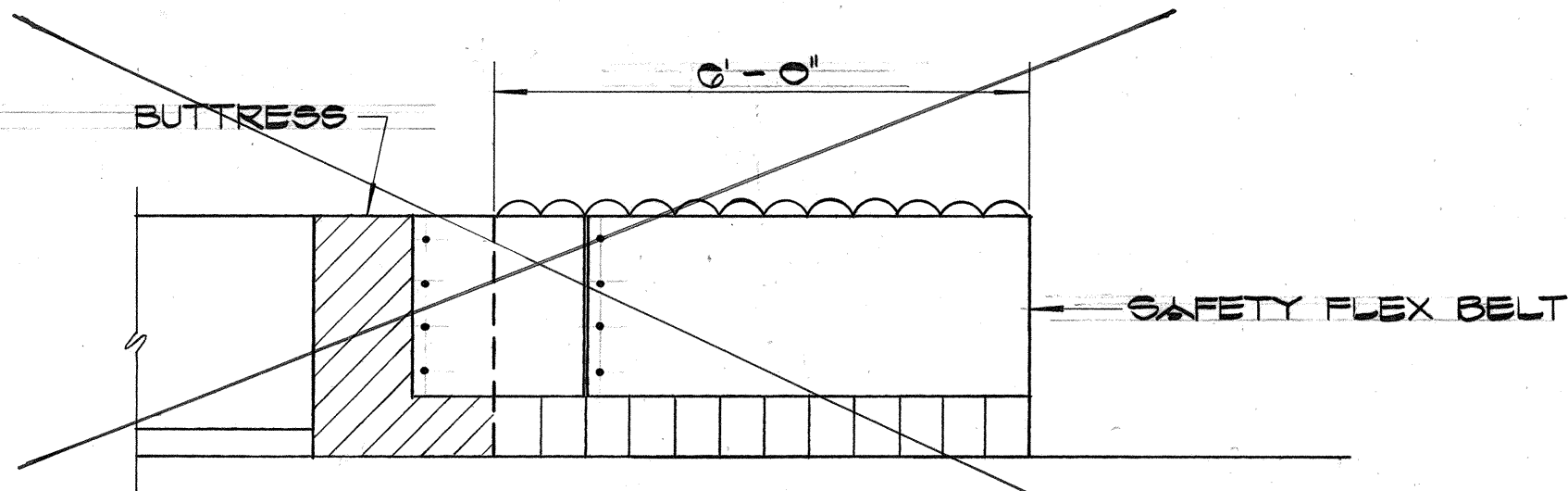
SCALE: 1" = 10'-0"



PLAN

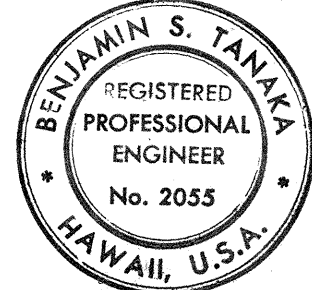
# NEW CUSHION BARRIER

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



ELEVATION

(C.C.O. NO. 8)  
DELETED



Benjamin S. Tanaka  
THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

| 1230-83 | BUTTRESS LOCATION AREA REVISED. ADDED NOTE 7. |
|---------|-----------------------------------------------|
| DATE    | REVISION                                      |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

## CUSHION BARRIER

AIRPORT INTERCHANGE  
P.A.I. PROJ. NO. 1-HI-1(175):16

SCALE: AS SHOWN DATE: SEPT. 1982

SHEET NO. OF SHEETS