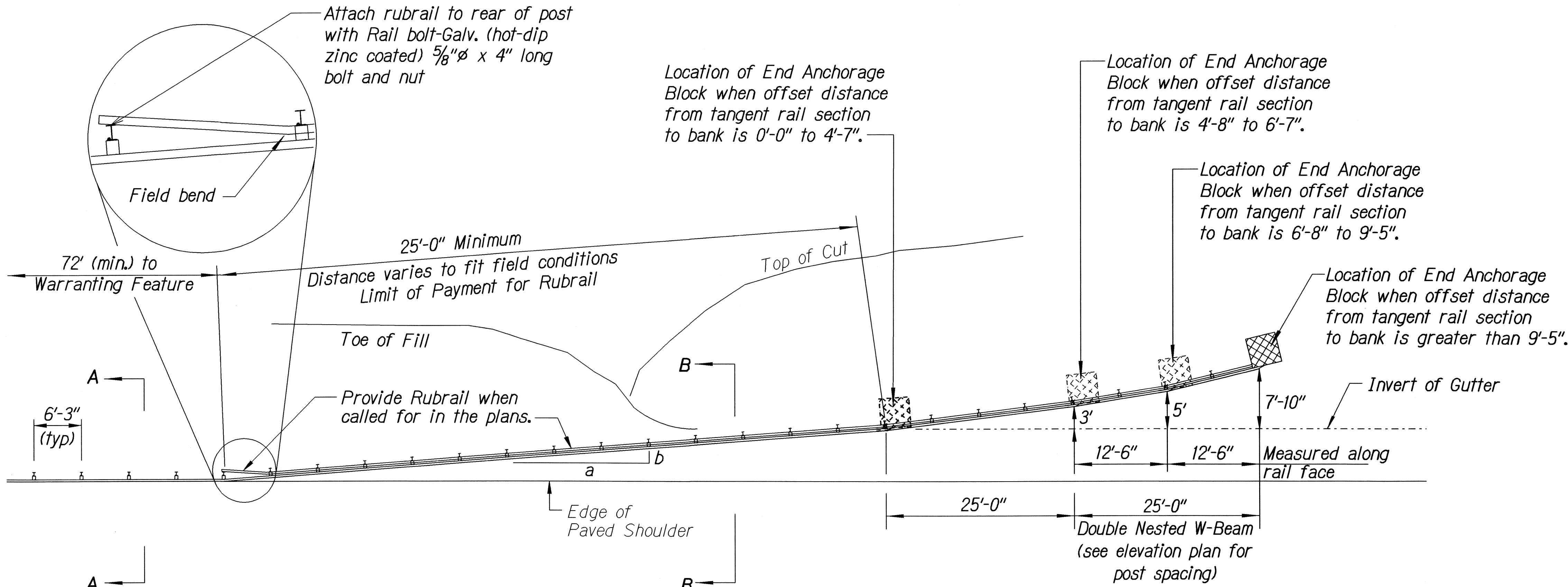


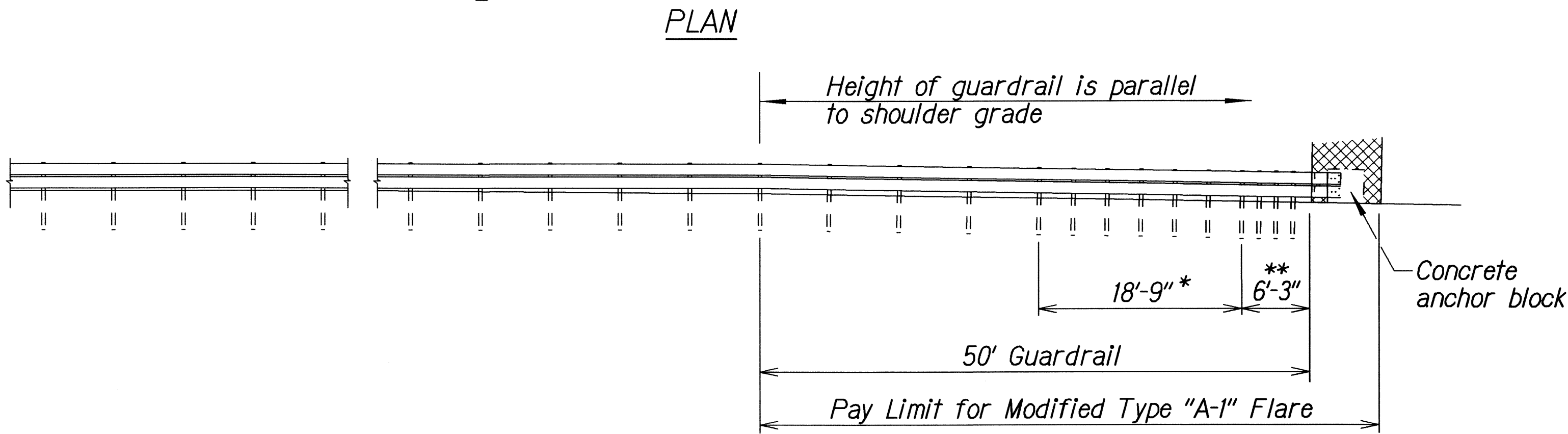
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-08M	2008	18	30

General Notes

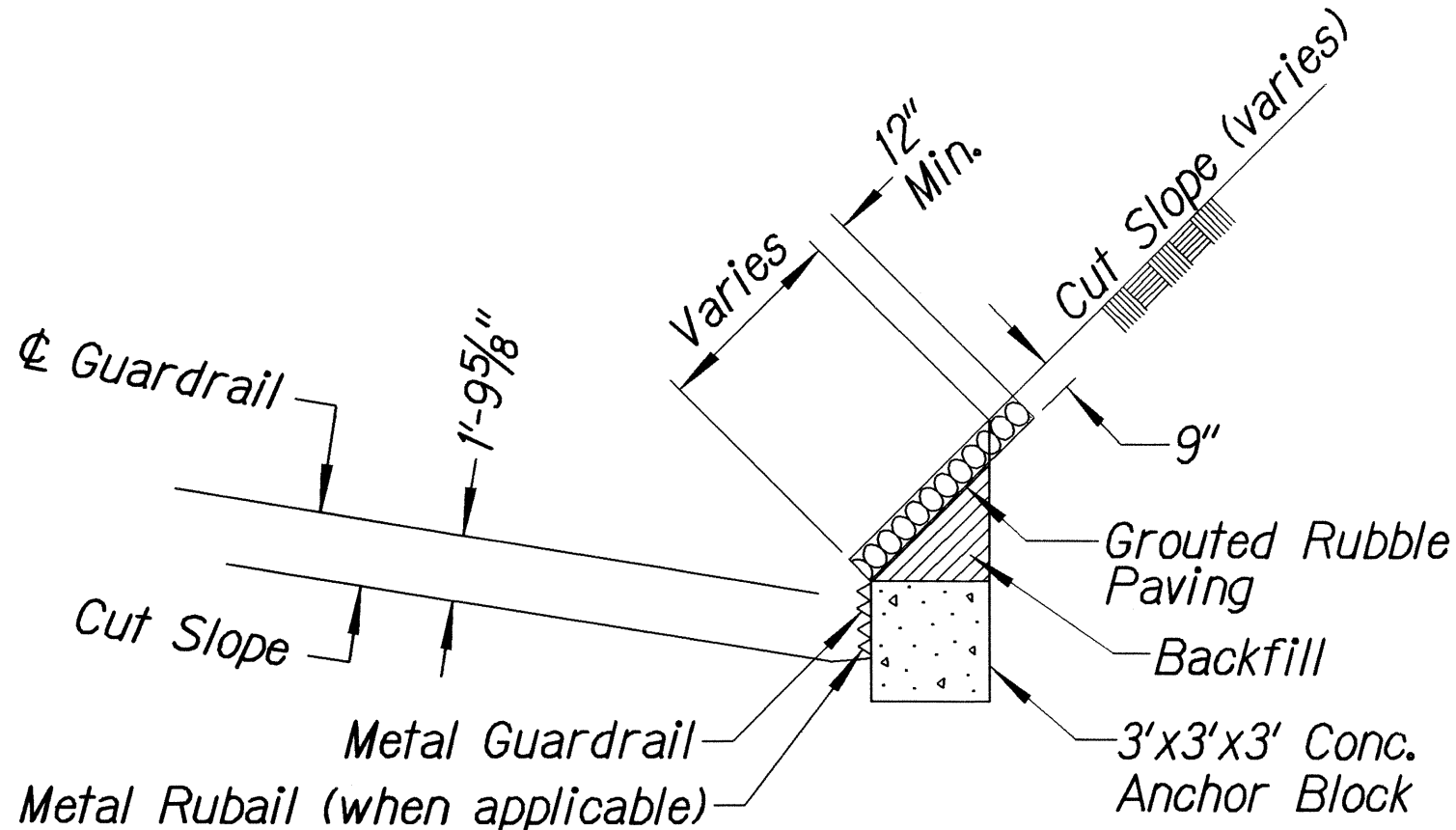
1. All posts are 6'-0" in length within the 50'-0" pay limit for the Modified Type "A-1" Flare without rubrail.
2. Whenever swales or a change in grade is encountered within the 50'-0" pay limit for the Modified Type "A-1" Flare, a rubrail shall be installed and all posts shall have a minimum embedment of 4'-0". Post lengths shall be adjusted to provide the minimum embedment.
3. All fasteners, posts, blocks and rail elements shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware", a report prepared and approved by the AASHTO-AGCARTBA Joint Cooperative Committee and HDOT's Statewide Guideline for Permanent Highway Safety Hardware.
4. Limit of payment for Modified Type "A-1" Flare shall be 50'-0" from End Shoe including Rubrail (when applicable), Anchor Block and GRP work.
5. Excavation, Anchor Block, Backfill and GRP work shall be considered incidental to the Modified Type "A-1" Flare.



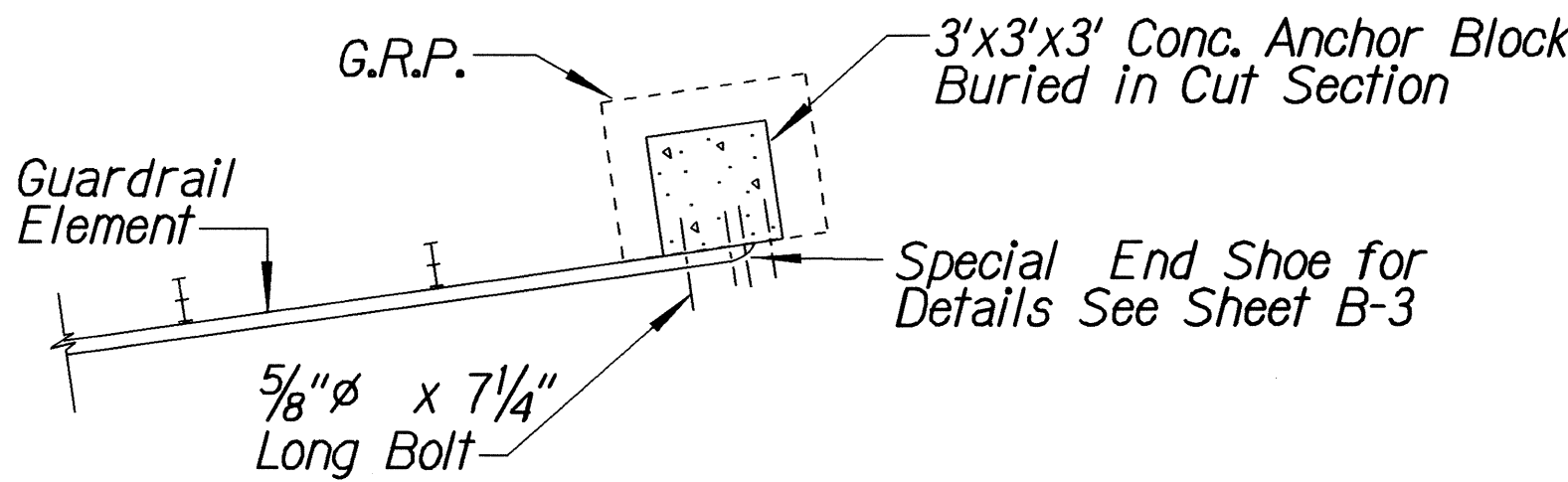
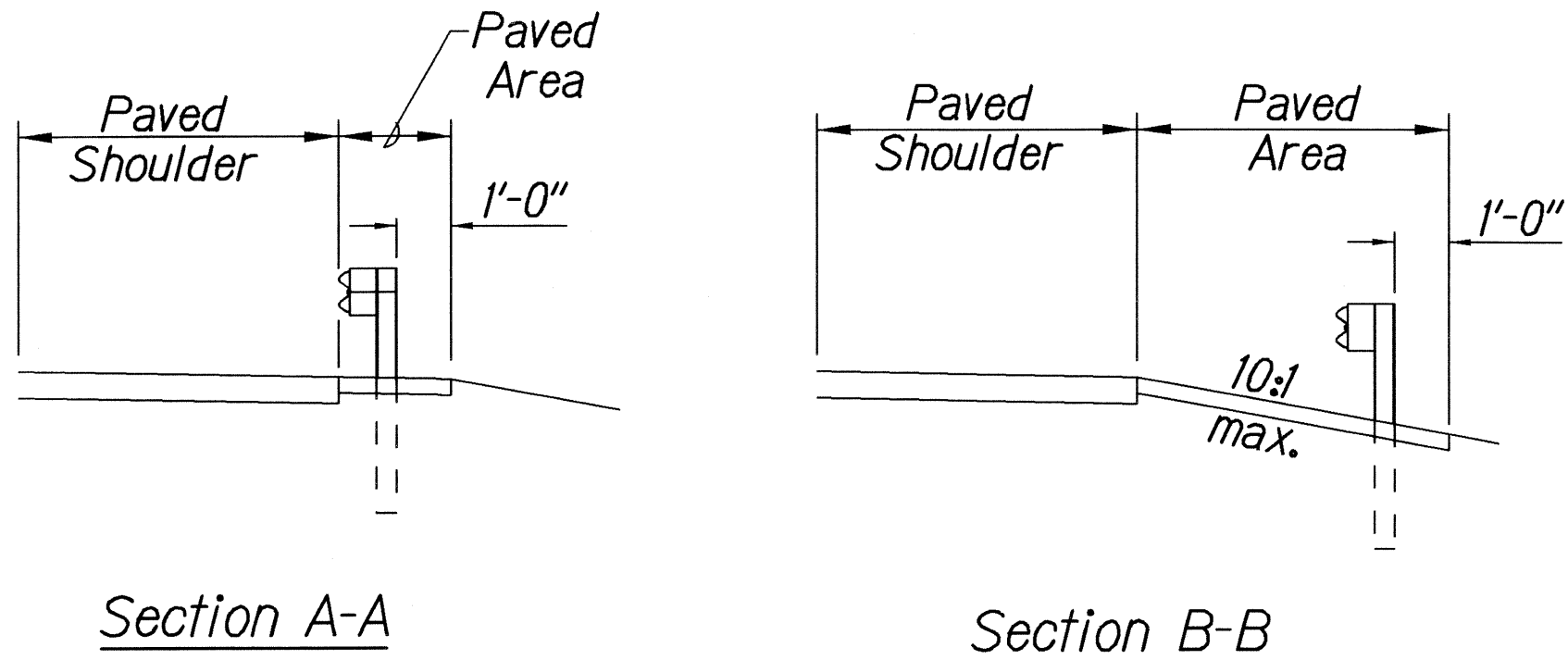
Design speed mph	a:b
68	15:1
62	13:1
56	12:1
50	11:1
43	10:1
37	9:1
31	7:1



- * Posts at 3'-1 1/2" o.c.
- ** Posts at 1'-6 3/4" o.c.



ANCHOR BLOCK IN CUT SECTION



PLAN - ANCHOR BLOCK IN CUT SECTION

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

MODIFIED TYPE "A-1" FLARE

KULA HIGHWAY FLOOD DAMAGE REPAIRS

AT VARIOUS LOCATIONS

Project No. 37CDE-01-08M

Scale: None

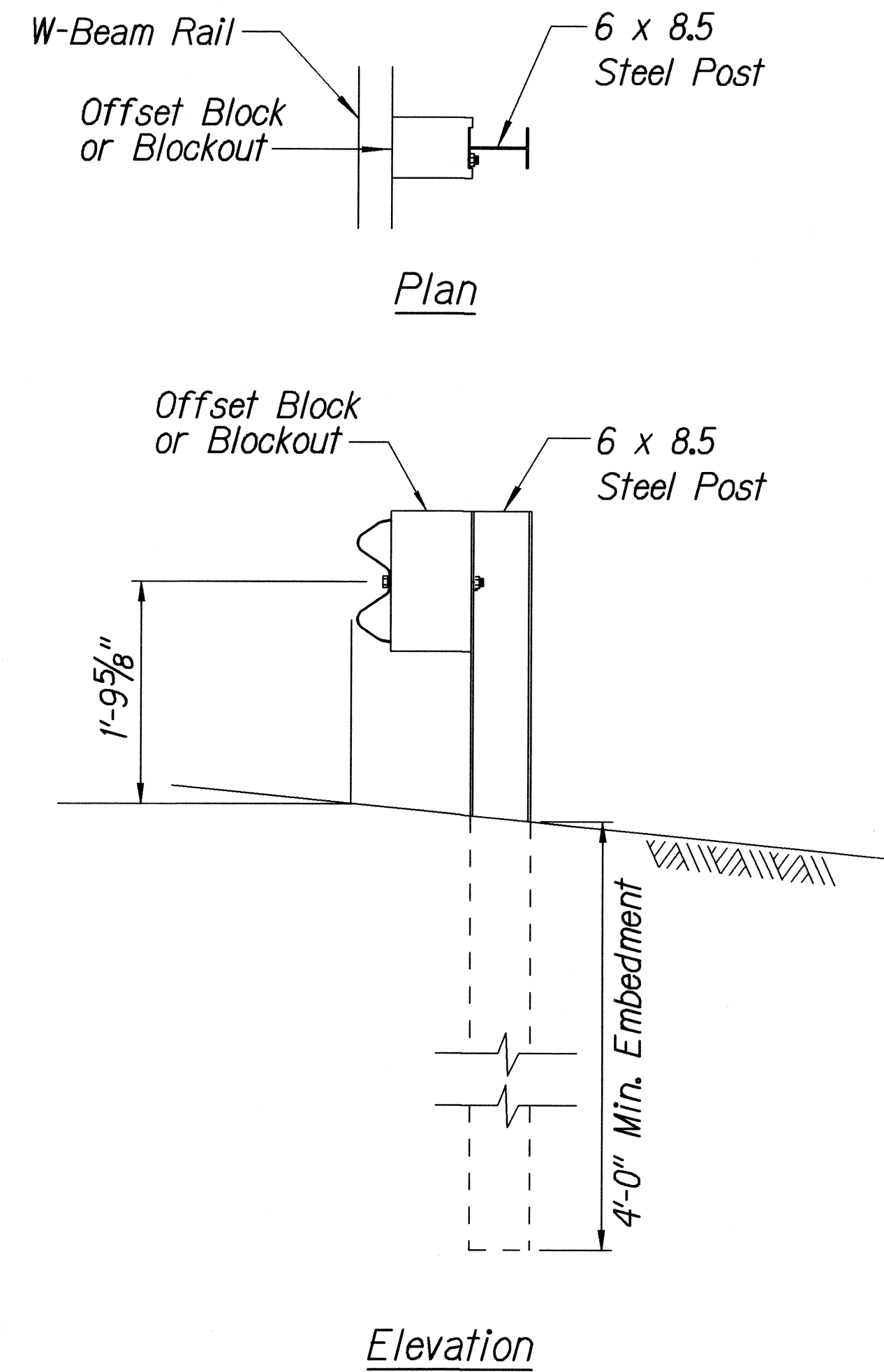
Date: April, 2008

SHEET No. 1 OF 3 SHEETS

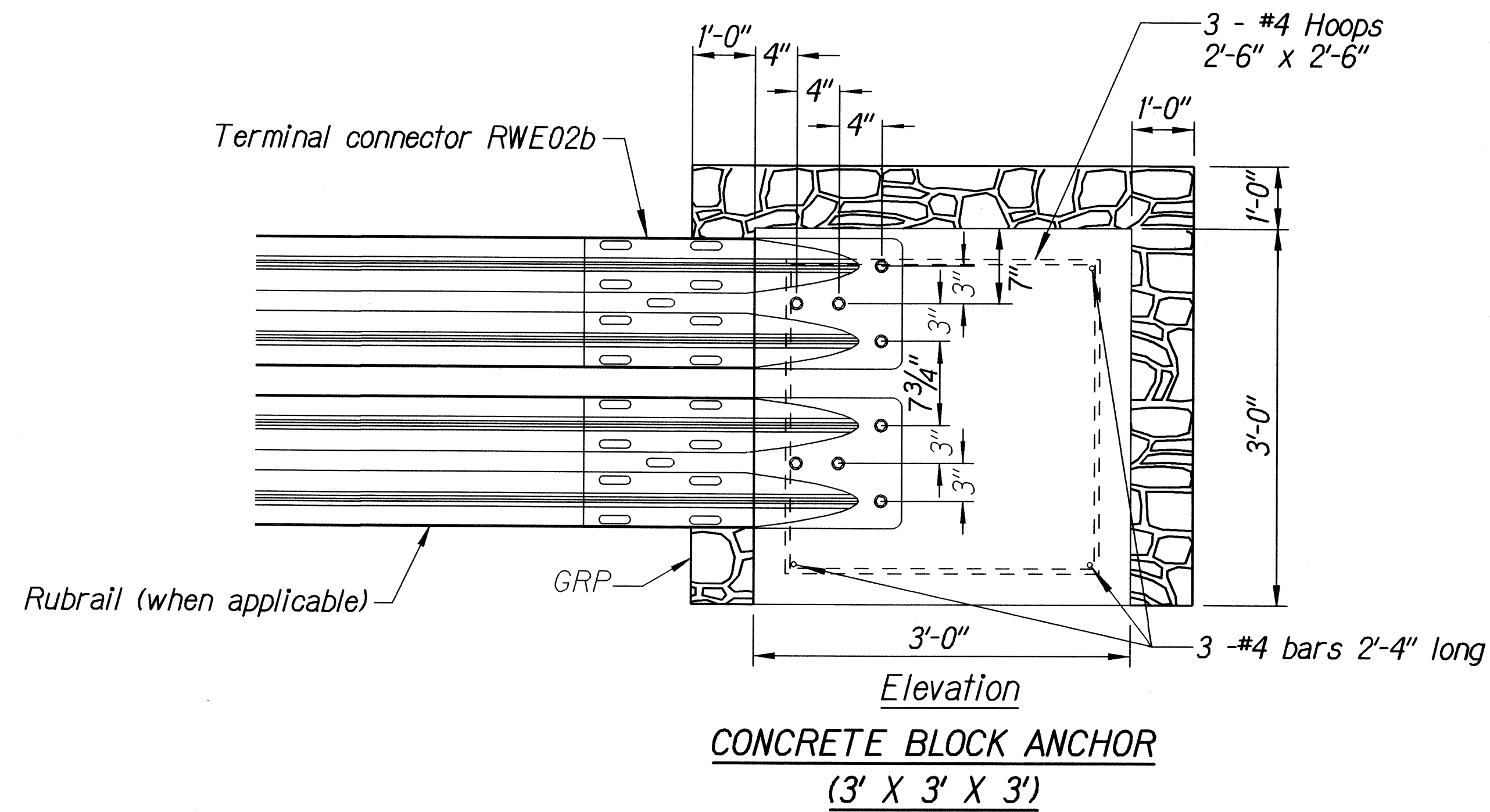
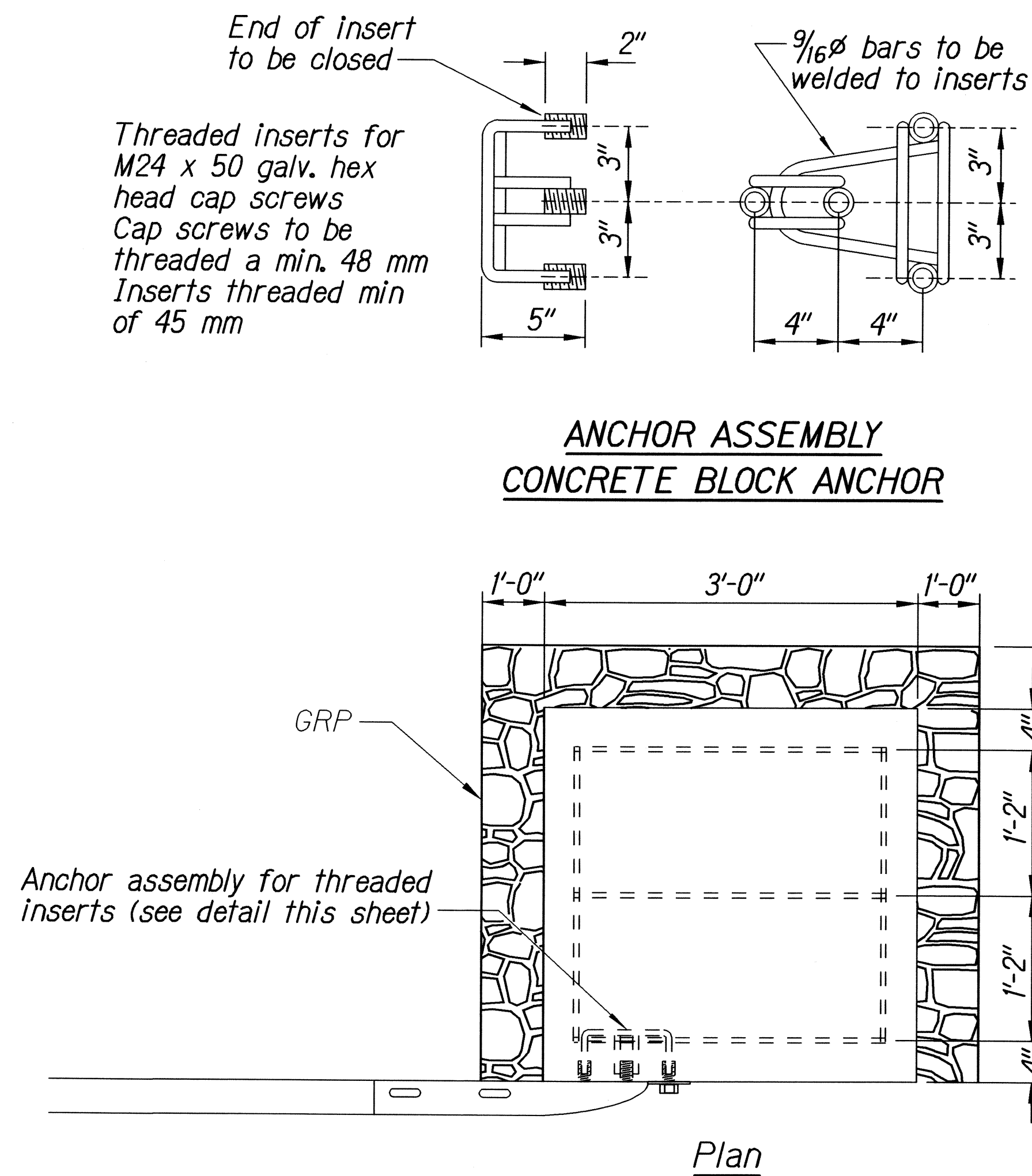
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
DATE	

8/21/01 1d1-00y/guardrail/flare.dwg 1d1-59 1d1-03/289 # TF-50 07/01/08

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-08M	2008	19	30



STRONG POST W-BEAM GUARDRAIL



BACKSLOPE ANCHOR TERMINAL END ANCHORAGE DETAILS MODIFIED TYPE "A-1" FLARE

Note:

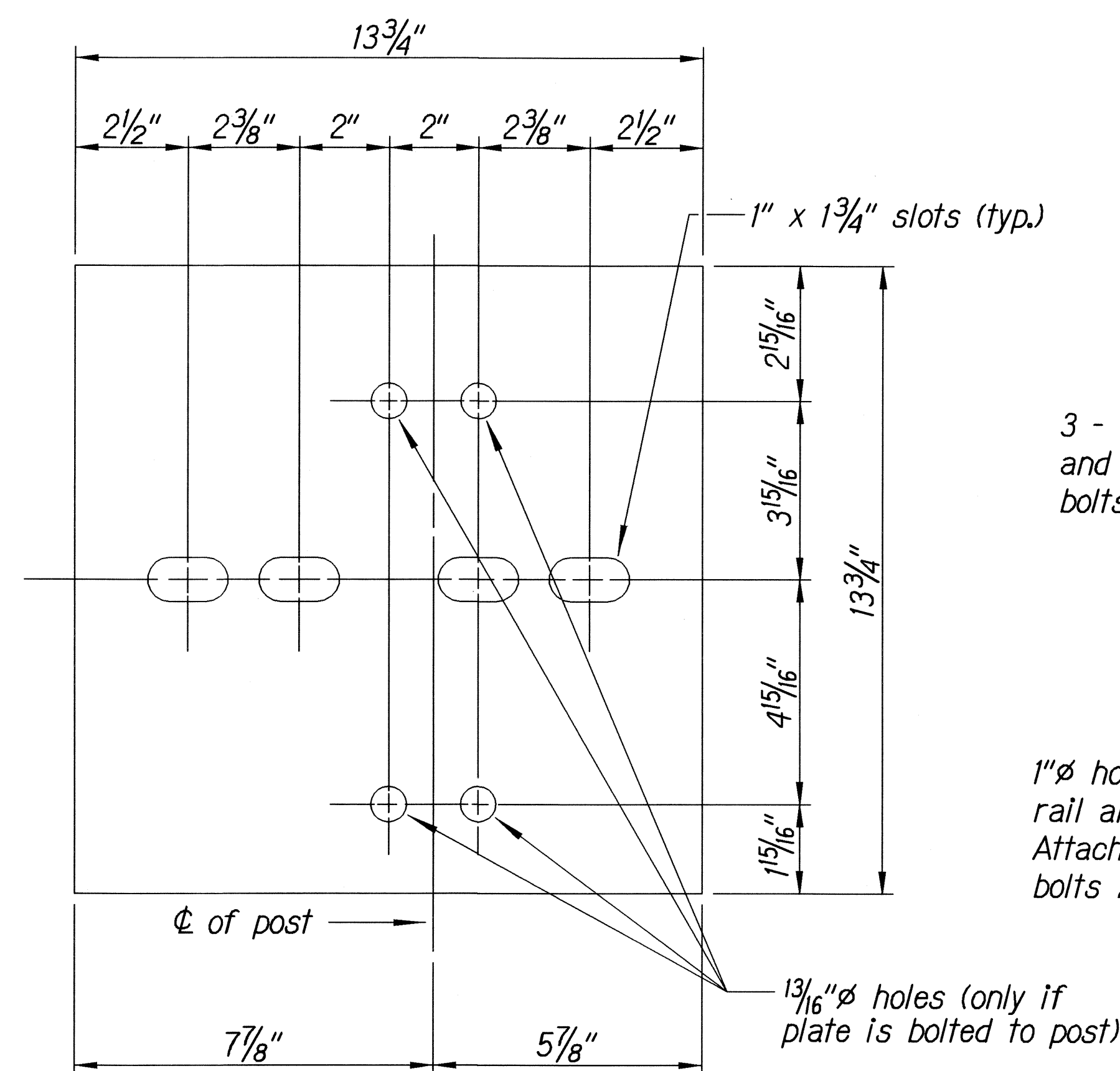
All fasteners, posts, blocks and rail elements shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware," a report prepared and approved by the AASHTO-AGCARTBA Joint Cooperative Committee and HDOT's Statewide Guideline for Permanent Highway Safety Hardware.

ORIGINAL PLAN	DATE
DESIGNED BY	DATE
TRACED BY	DATE
NOTE BOOK	DATE
QUANTITIES BY	DATE
CHECKED BY	DATE

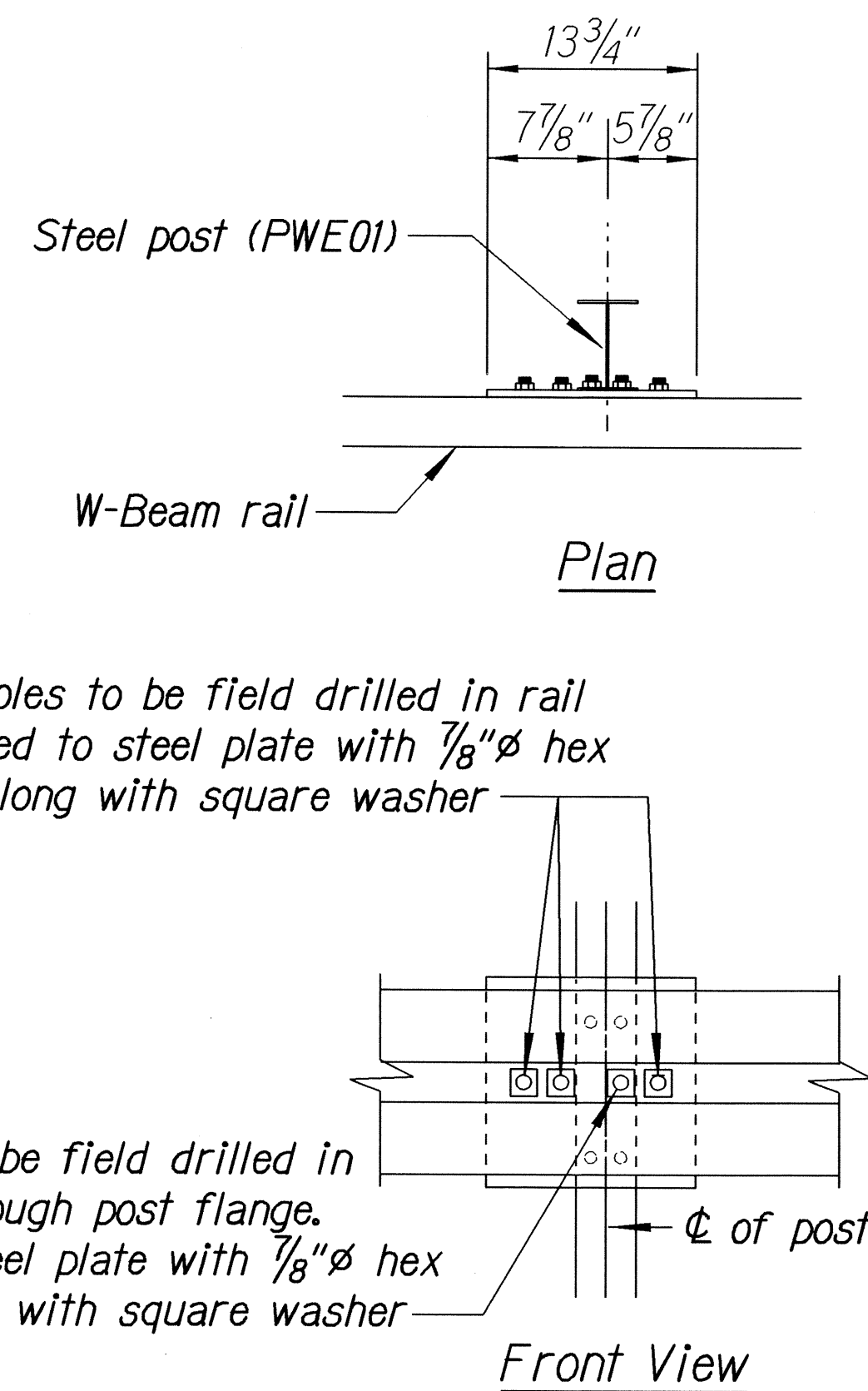
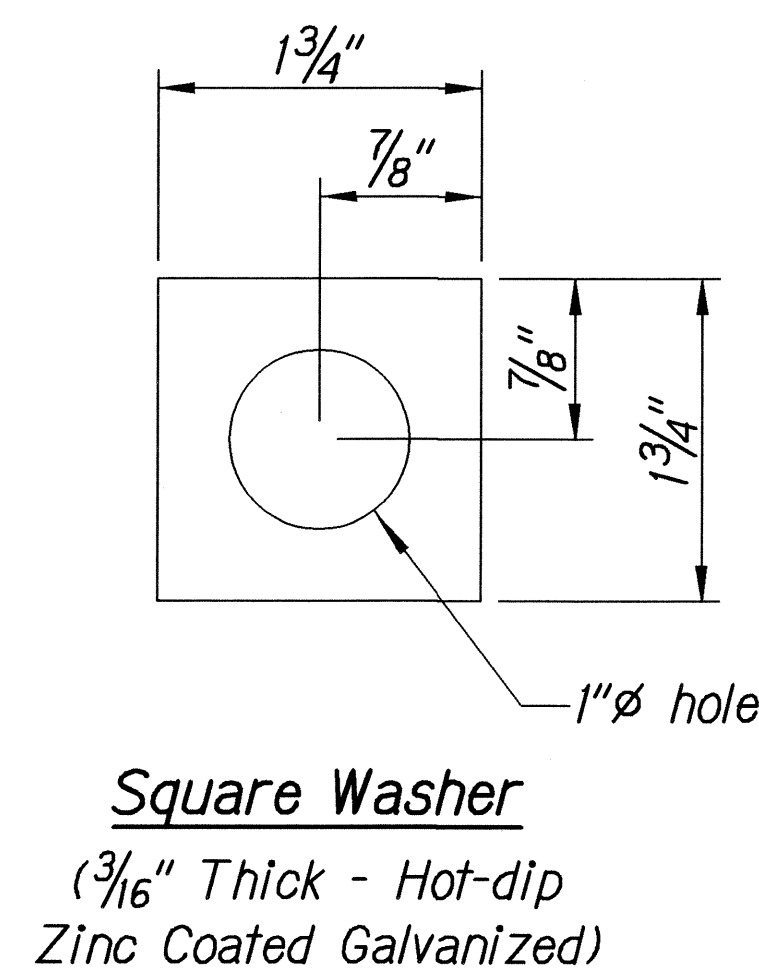
15/2/01 tdi/cub/guardrail/flare-a1-2.dgn TE-58 07/01/06 TE-59 11/03/09 & TE-60 07/01/06

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
MODIFIED TYPE "A-1" FLARE
KULA HIGHWAY FLOOD DAMAGE REPAIRS AT VARIOUS LOCATIONS Project No. 37CDE-01-08M
Scale: None Date: April, 2008
SHEET No. 2 OF 3 SHEETS

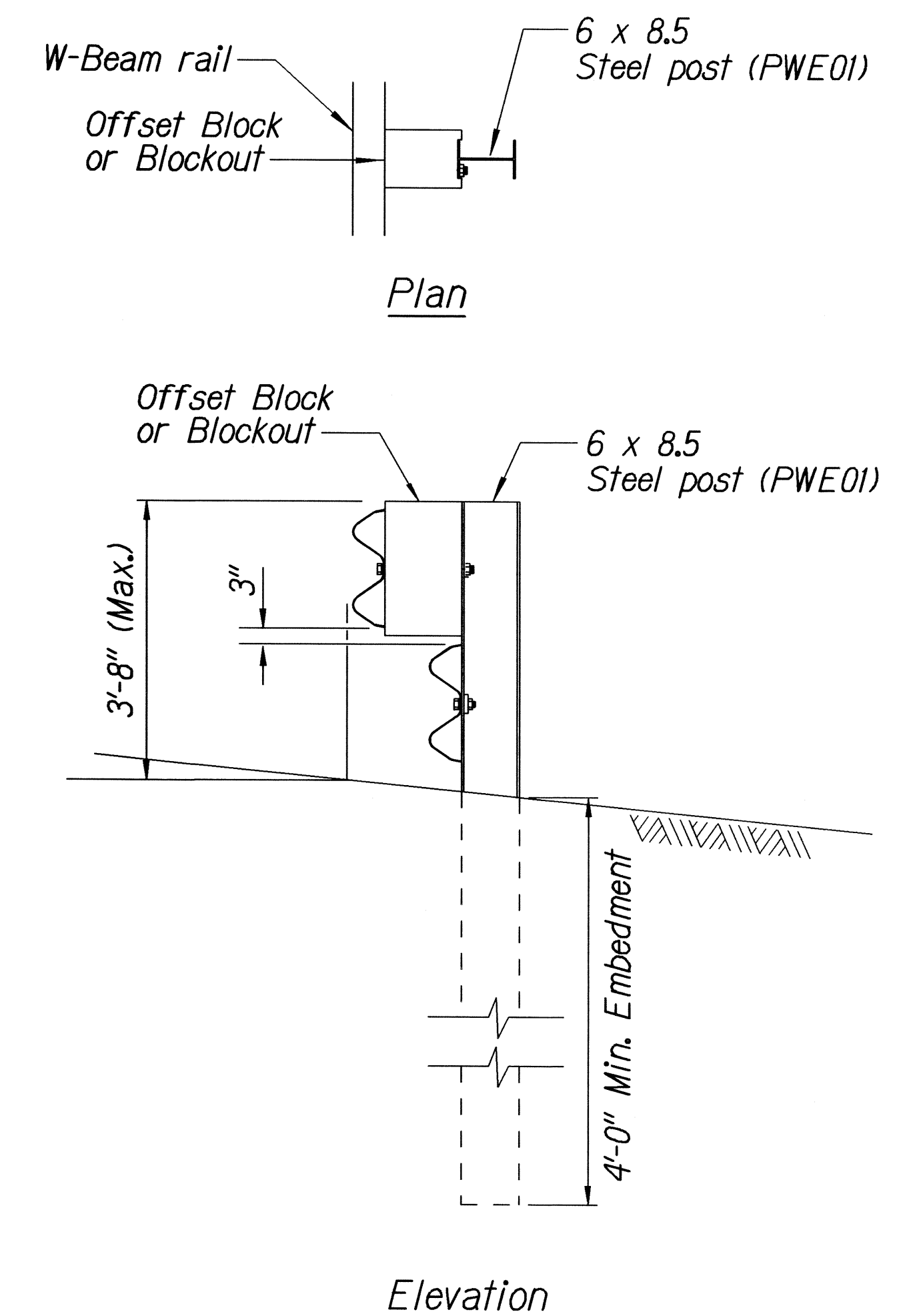
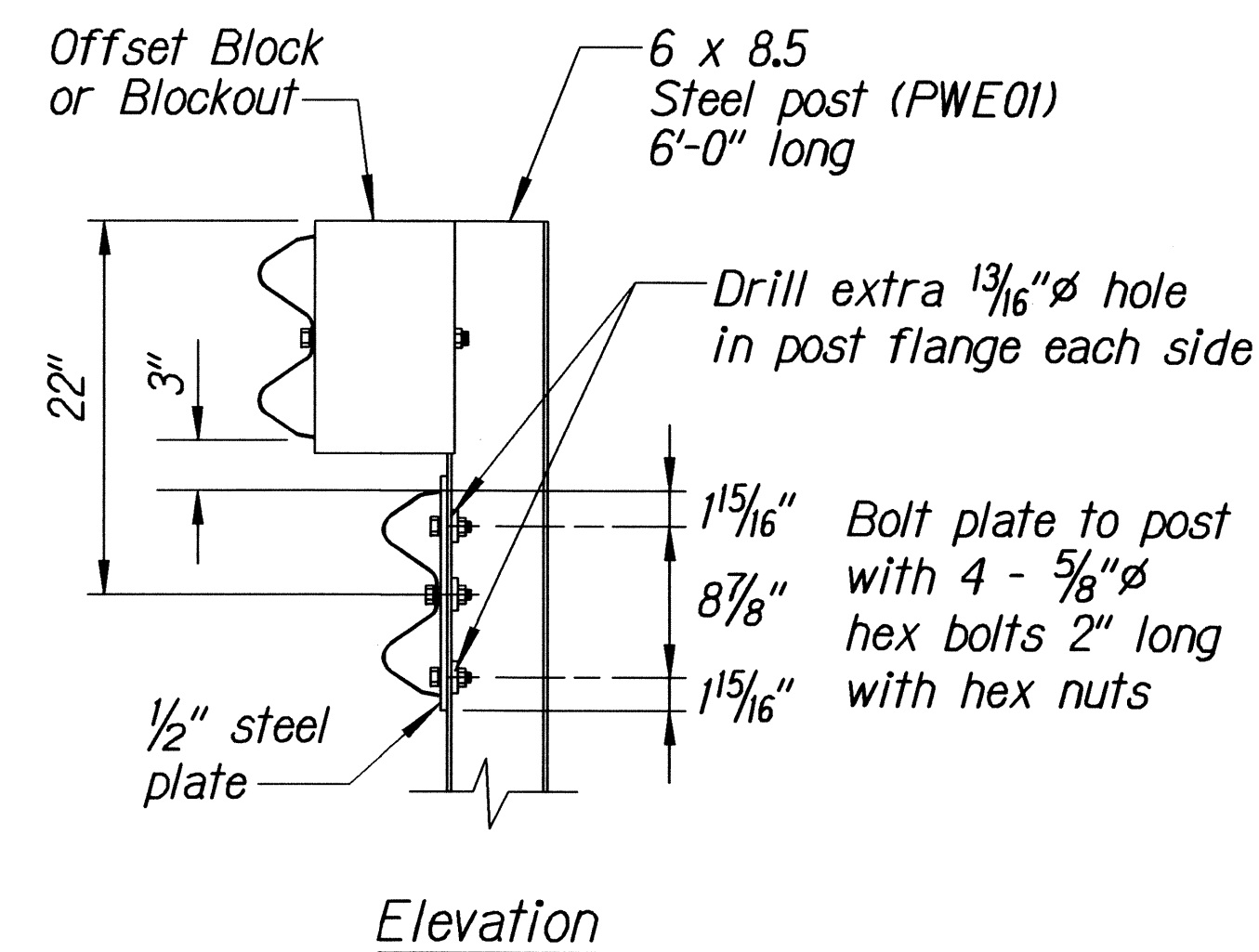
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-08M	2008	20	30



Steel Plate - 1/2"
(Hot-dip Zinc Coated Galvanized-
Welded or Bolted to Post)



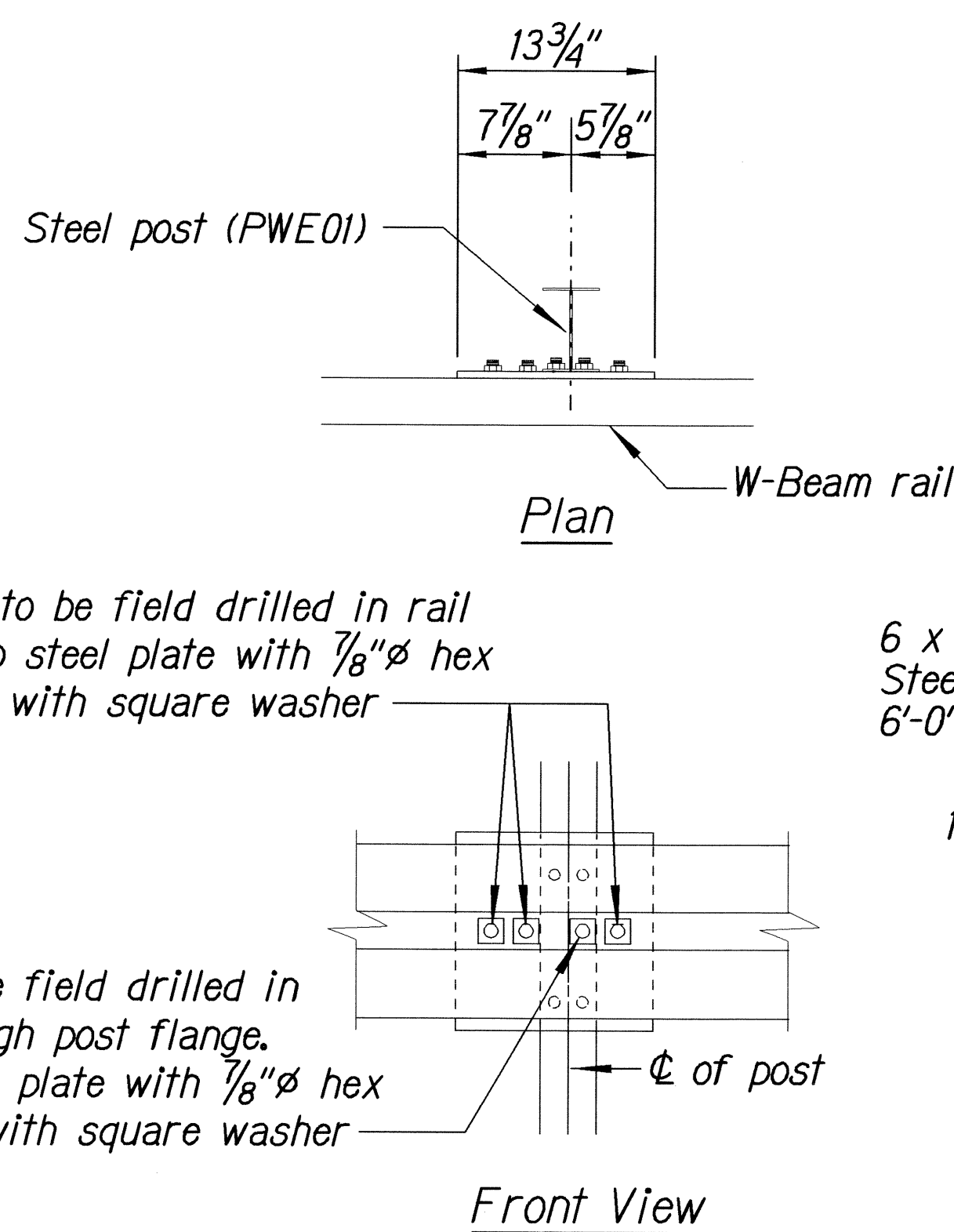
RUBRAIL ANCHOR DETAILS



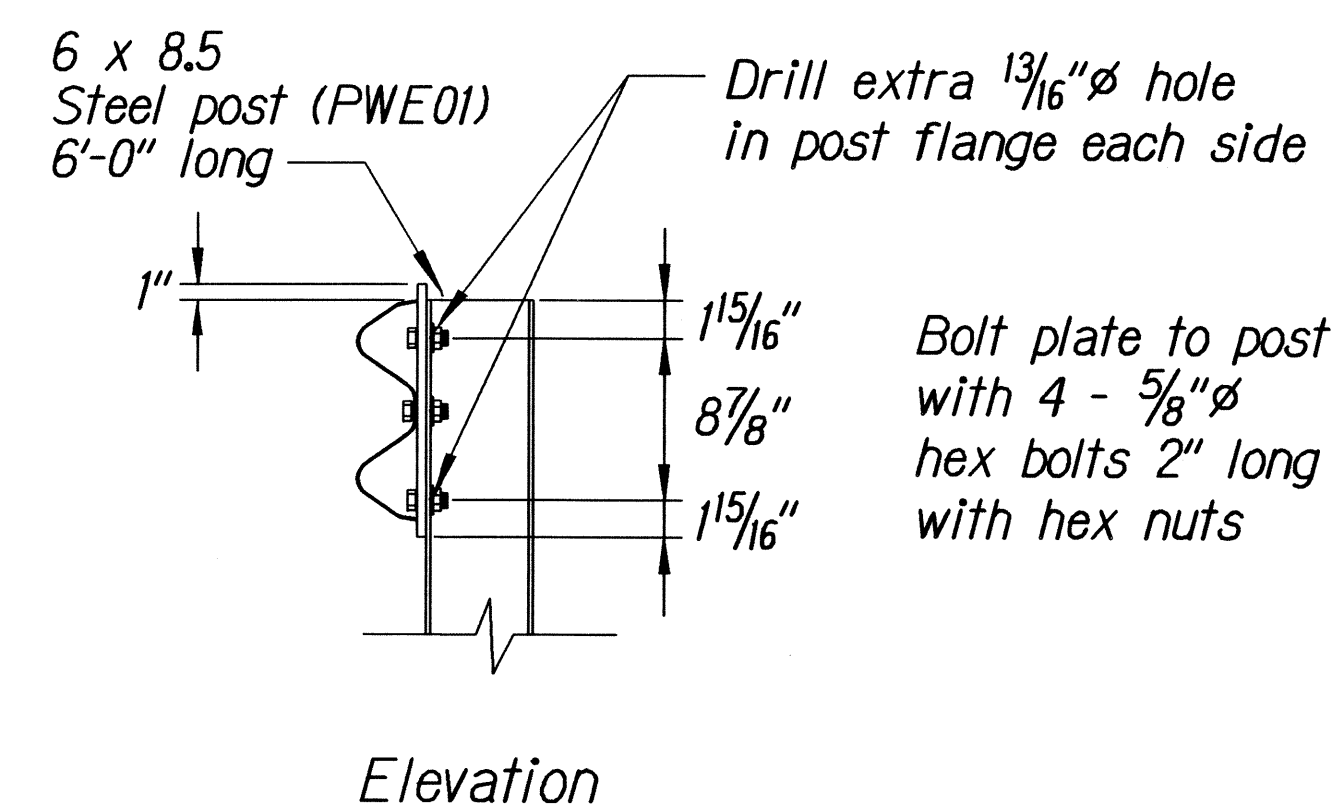
STEEL POST GUARDRAIL
WITH RUBRAIL

Note:

All fasteners, posts, blocks and rail elements shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware", a report prepared and approved by the AASHTO-AGCARTBA Joint Cooperative Committee.



POST ANCHOR DETAILS



RUBRAIL DETAIL FOR MODIFIED TYPE "A-1" FLARE
(WHEN CALLED FOR IN PLANS)

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____	
NOTE BOOK	DRAWN BY λ	TRACED BY _____	
	λ λ λ	DESIGNED BY λ	QUANTITIES BY _____
		CHECKED BY _____	_____
		_____	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MODIFIED TYPE "A-1" FLARE
RUBRAIL DETAILS
KULA HIGHWAY FLOOD DAMAGE REPAIRS
AT VARIOUS LOCATIONS
Project No. 37CDE-01-08M

Scale: None Date: April, 2008

SHEET No. 3 OF 3 SHEETS