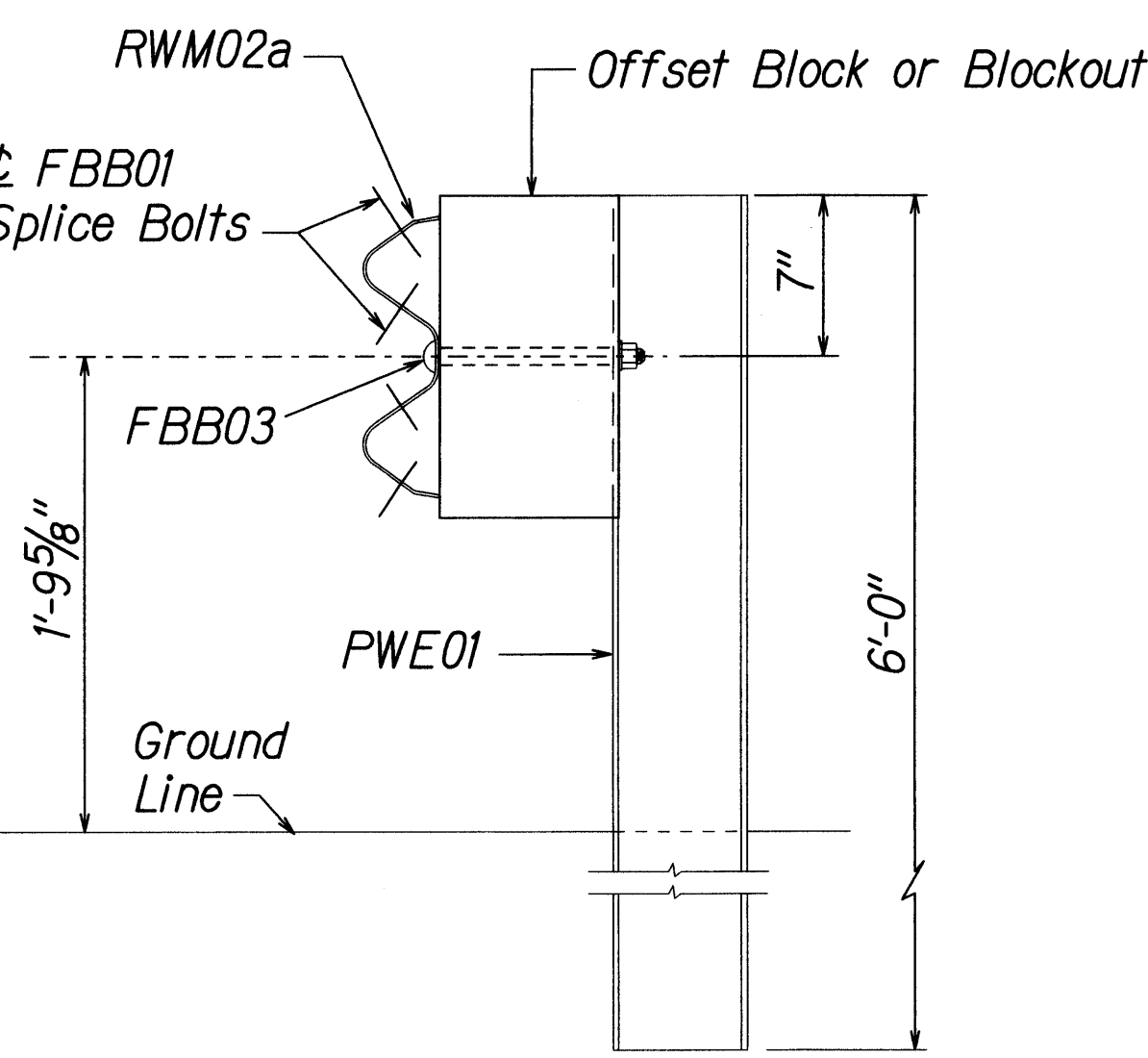
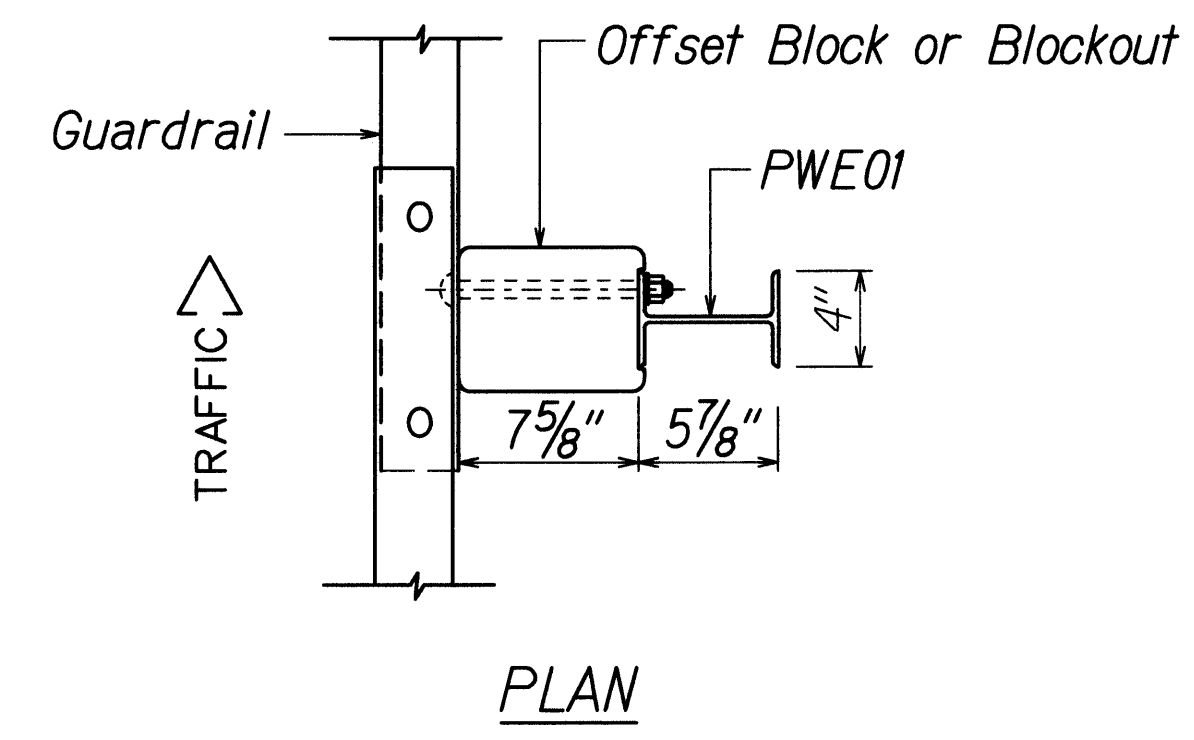
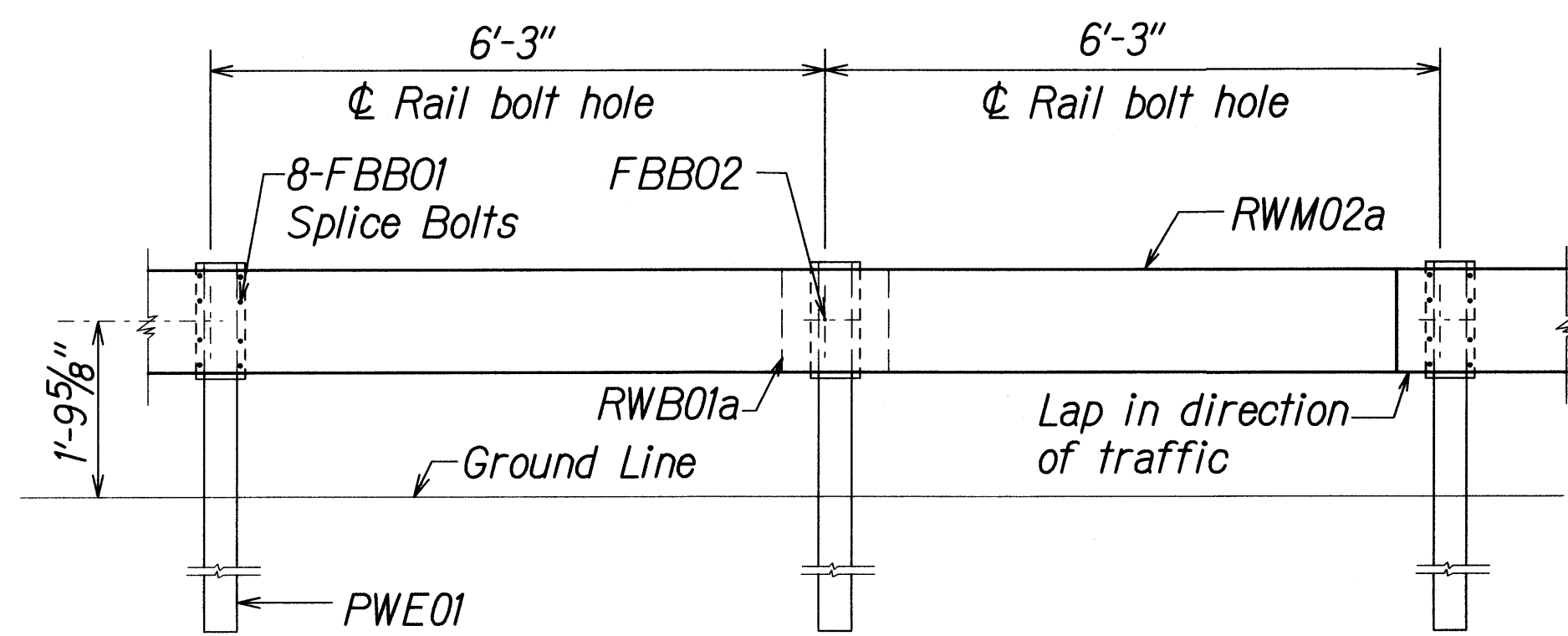




FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-10M	2010	9	25

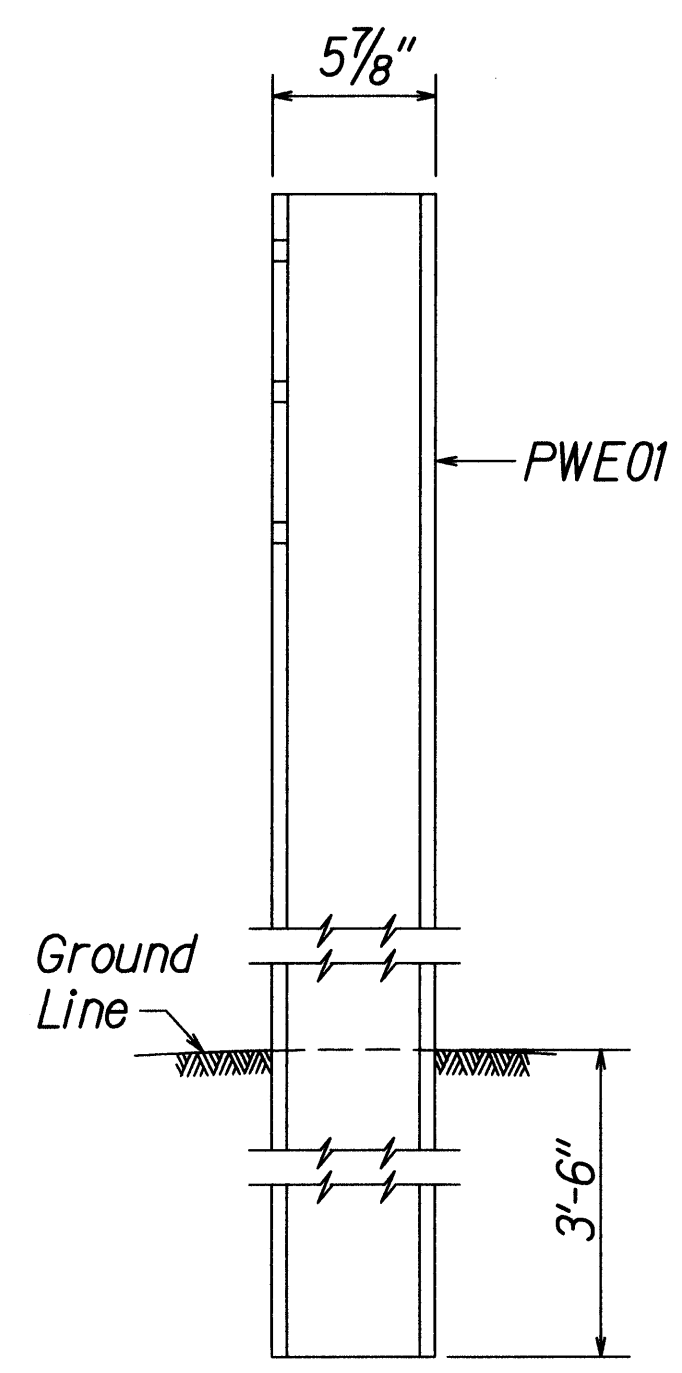


**STRONG POST W-BEAM GUARDRAIL**  
**(SGR04a)**

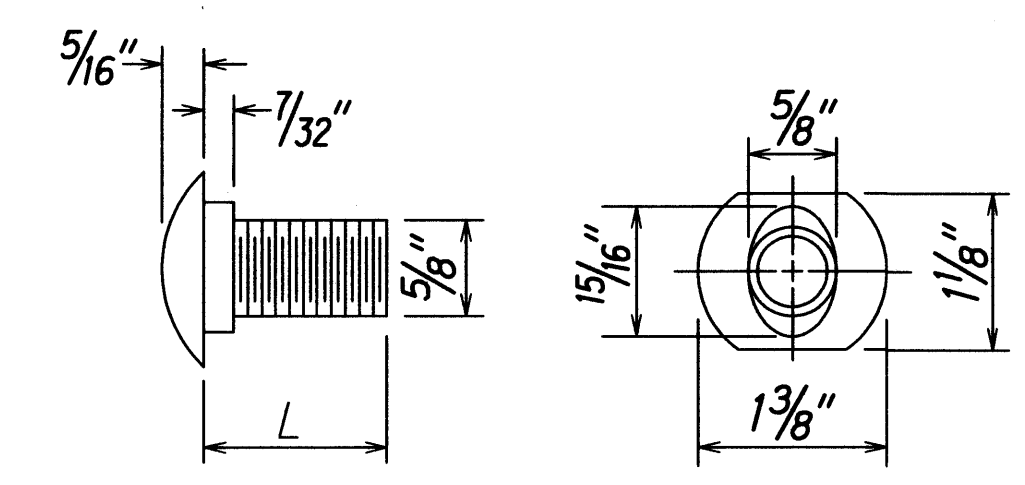
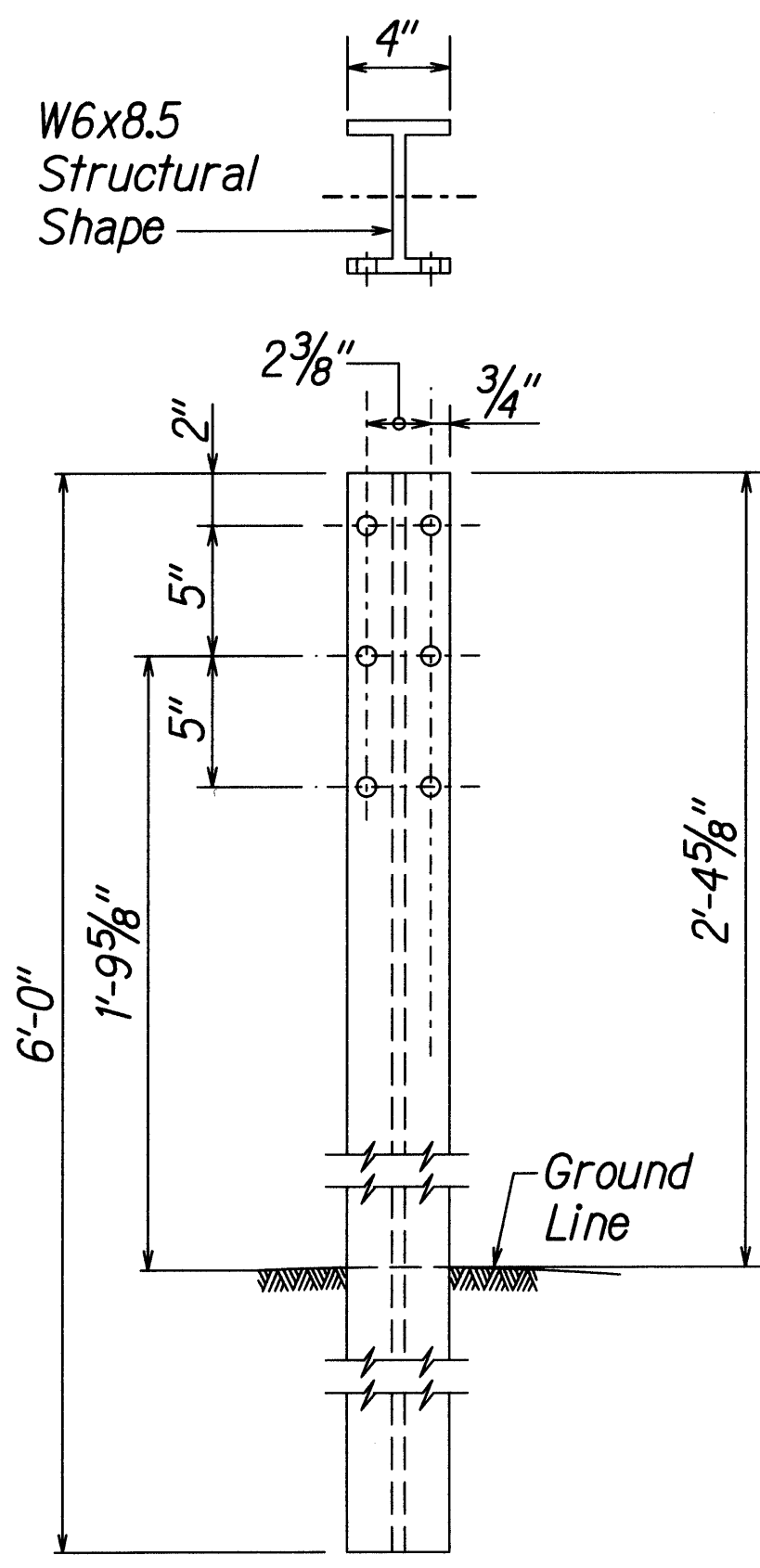


**STRONG POST W-BEAM GUARDRAIL WITH**  
**RECYCLED OFFSET BLOCK OR PLASTIC BLOCKOUT**

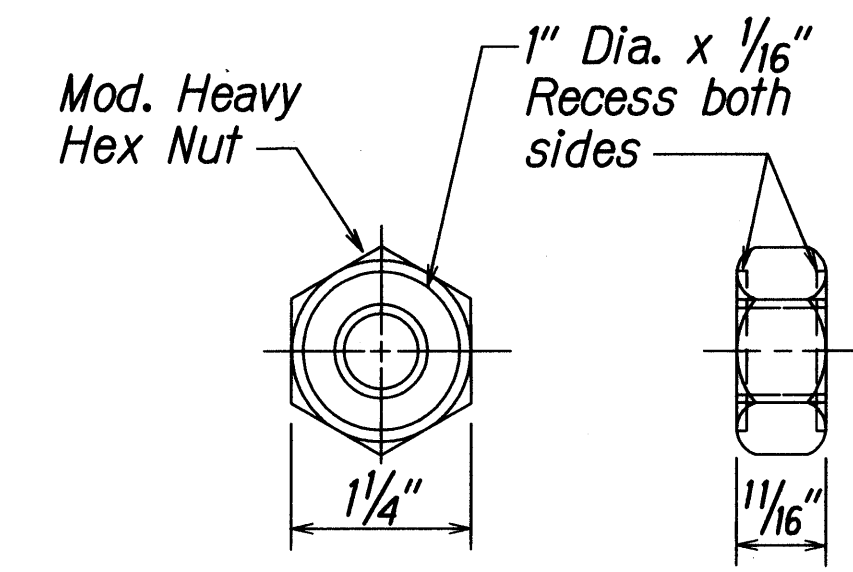
NOTE:  
All Holes are  
3/4" Dia.



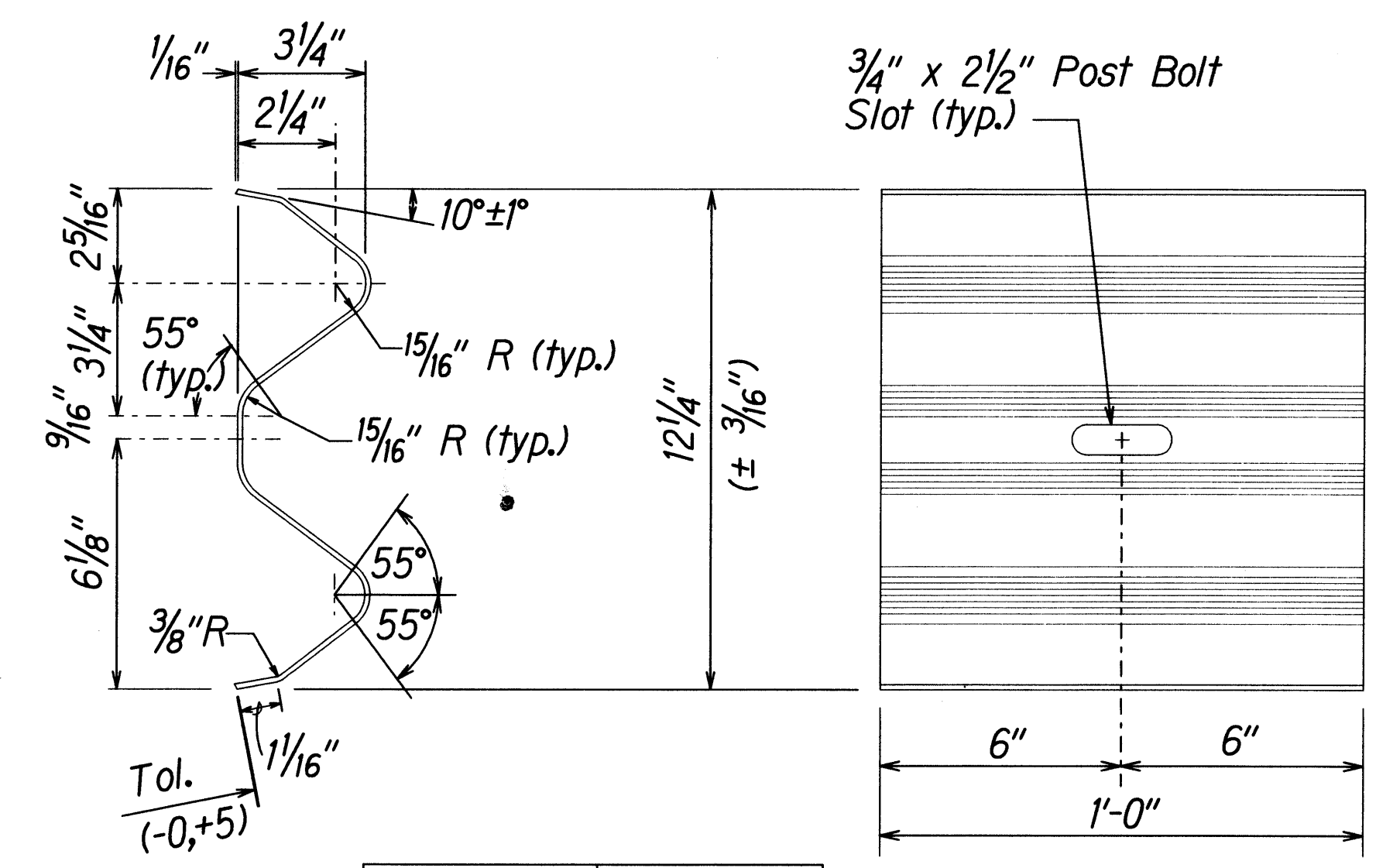
**W-BEAM STRONG POST (PWE01)**



DESIGNATOR	L
FBB01	1 3/8"
FBB02	2"
FBB03	10"

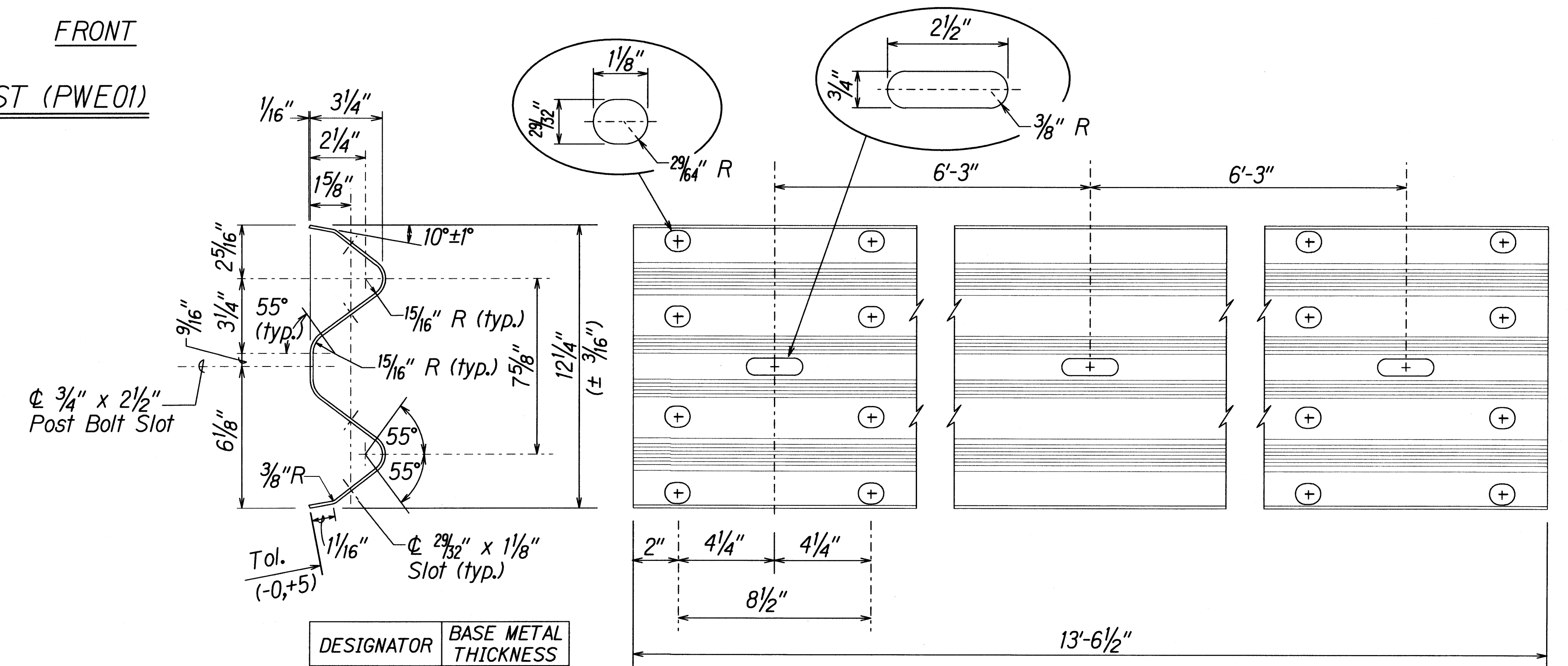


**GUARDRAIL BOLTS AND**  
**RECESSED NUT**



DESIGNATOR	BASE METAL THICKNESS
RWB01a	12 Gauge

**W-BEAM BACK-UP-PLATE (RWB01a)**



DESIGNATOR	BASE METAL THICKNESS
RWM02a	12 Gauge

**2 SPACE W-BEAM GUARDRAIL (RWM02a)**

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STRONG POST W-BEAM GUARDRAIL**  
  
**HANA HIGHWAY RESURFACING**  
**Huelo to Koea**  
**Project No. 360A-01-10M**  
Scale: NTS  
Date: April, 2010

SURVEY PLOTTED BY  
DATE  
DESIGNED BY  
CHECKED BY  
NOTE BOOK  
QUANTITIES BY

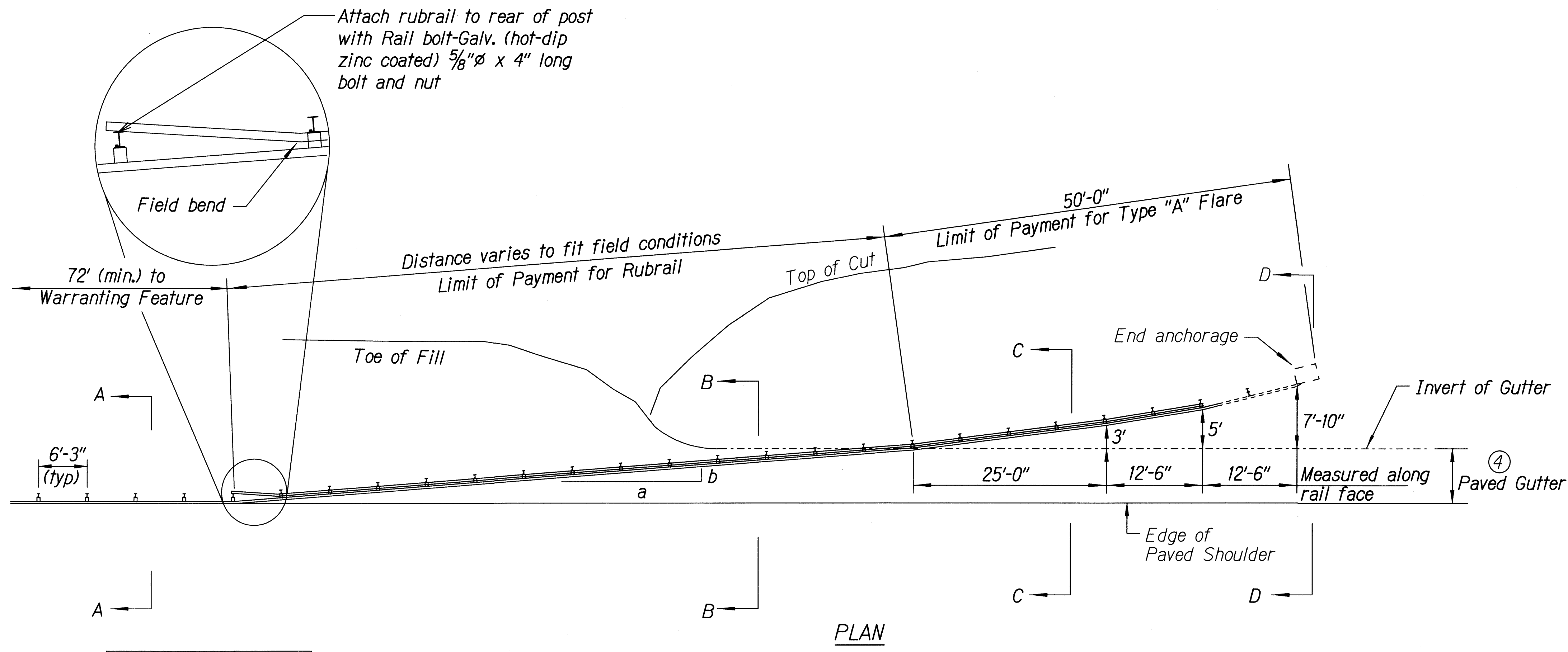
12/13/01  
12/13/01  
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12/13/01

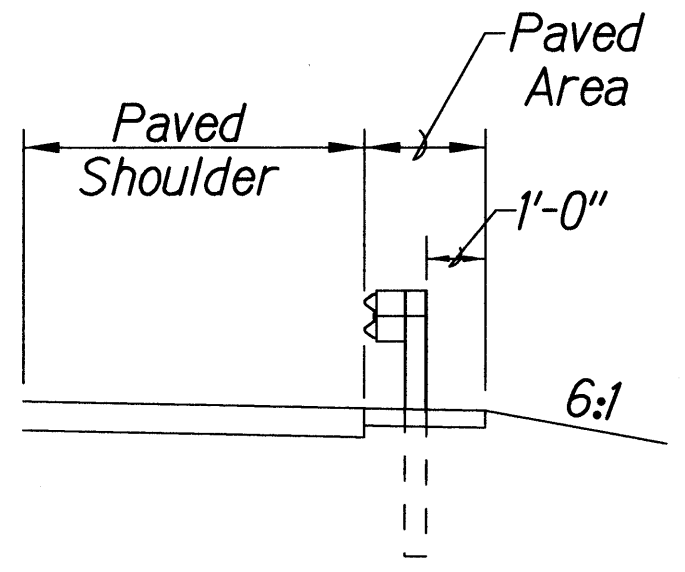
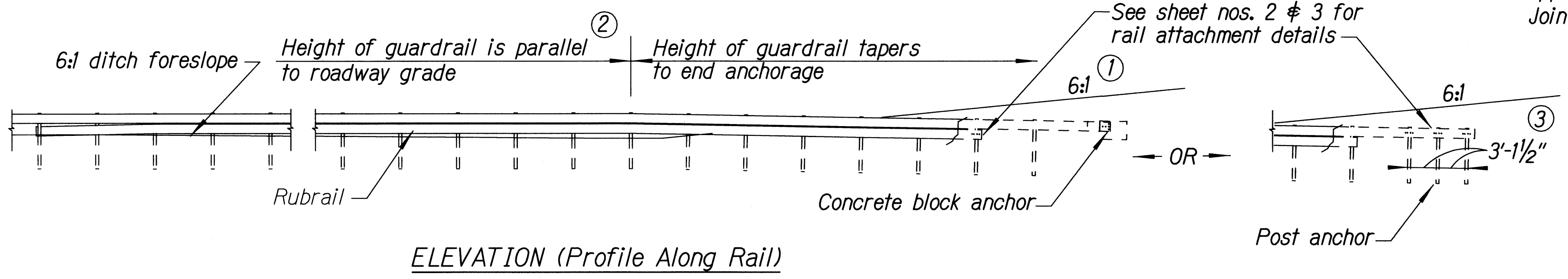
Standard plan TE-50 (03/06/87)

General Notes

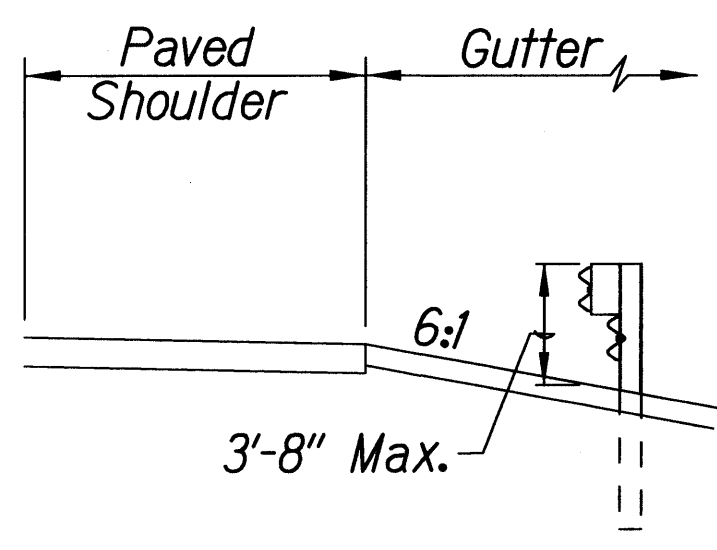
1. A 6:1 or flatter slope is desirable. However, a steeper or flatter existing slope may be used.
2. Height of guardrail may be tapered down in elevation to maintain 3'-8" maximum height.
3. All posts are 8'-0" in length from where the guardrail flares away from the shoulder back to the post anchor. Posts for the post anchor are 6'-0" long.
4. Variable Paved Gutter offsets may be used to fit field conditions.
5. The Guardrail Posts shall be located away from the gutter/swale invert.
6. 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.



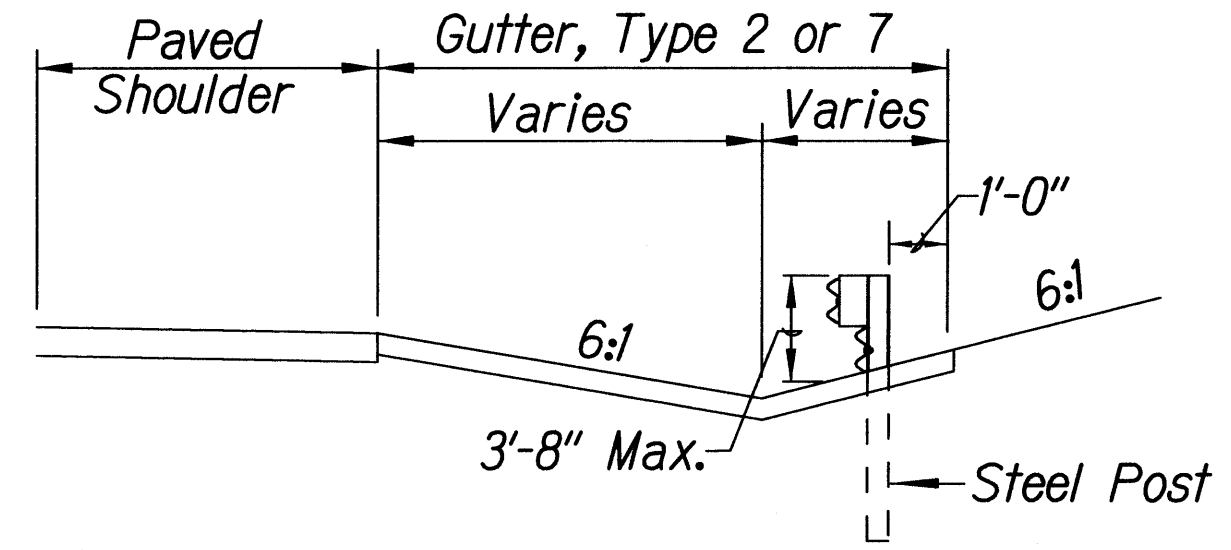
Design speed mph	a:b
68	15:1
62	13:1
56	12:1
50	11:1
43	10:1
37	9:1
31	7:1



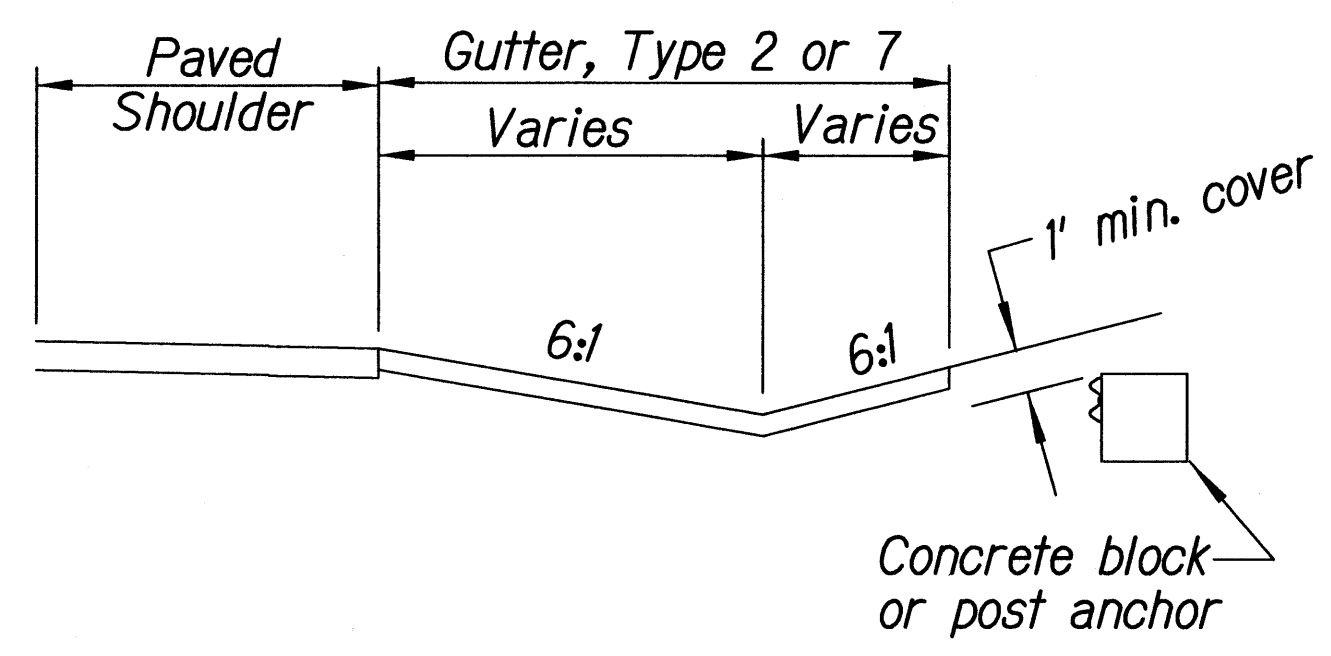
Section A-A



Section B-B  
(With Rubrail)



Section C-C  
(With Rubrail)



BACKSLOPE ANCHOR TERMINAL (WITH 6:1 PAVED GUTTER AND TYPE "A" FLARE)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPE "A" FLARE**

HANA HIGHWAY RESURFACING

Huelo to Kulea

Project No. 360A-01-10M

Scale: NTS      Date: April, 2010

SHEET No. 3 OF 5 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN  
NOTE BOOK  
DESIGN  
No. 1000

12/21/01 H:\rubrail\guardrail\backslopeanchor.dgn Standard Plan TE-58 07/01/86, TE-59 11/03/89 & TE-60 07/01/86





