

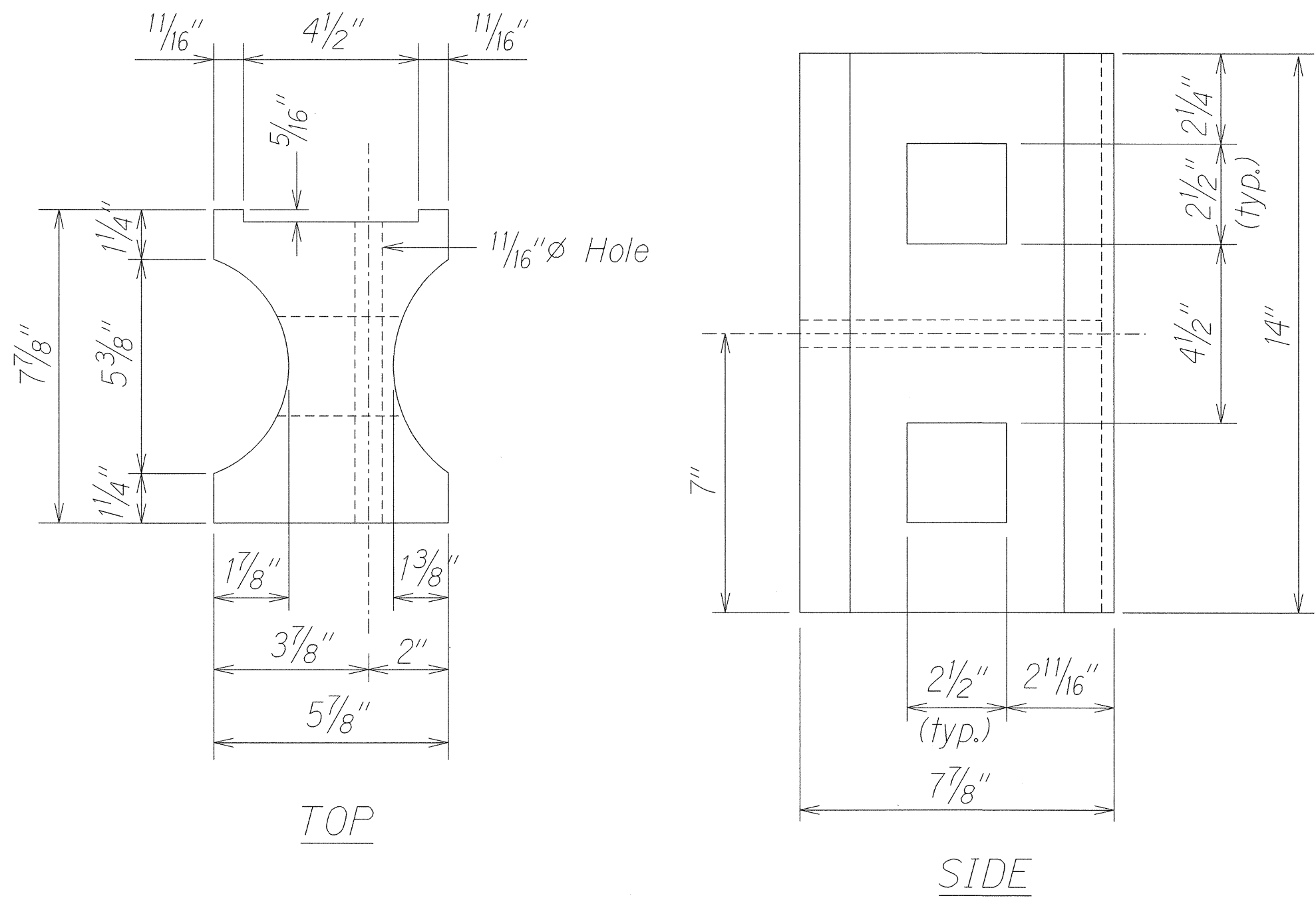
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50b-02-99	2002	15	16

GENERAL NOTES

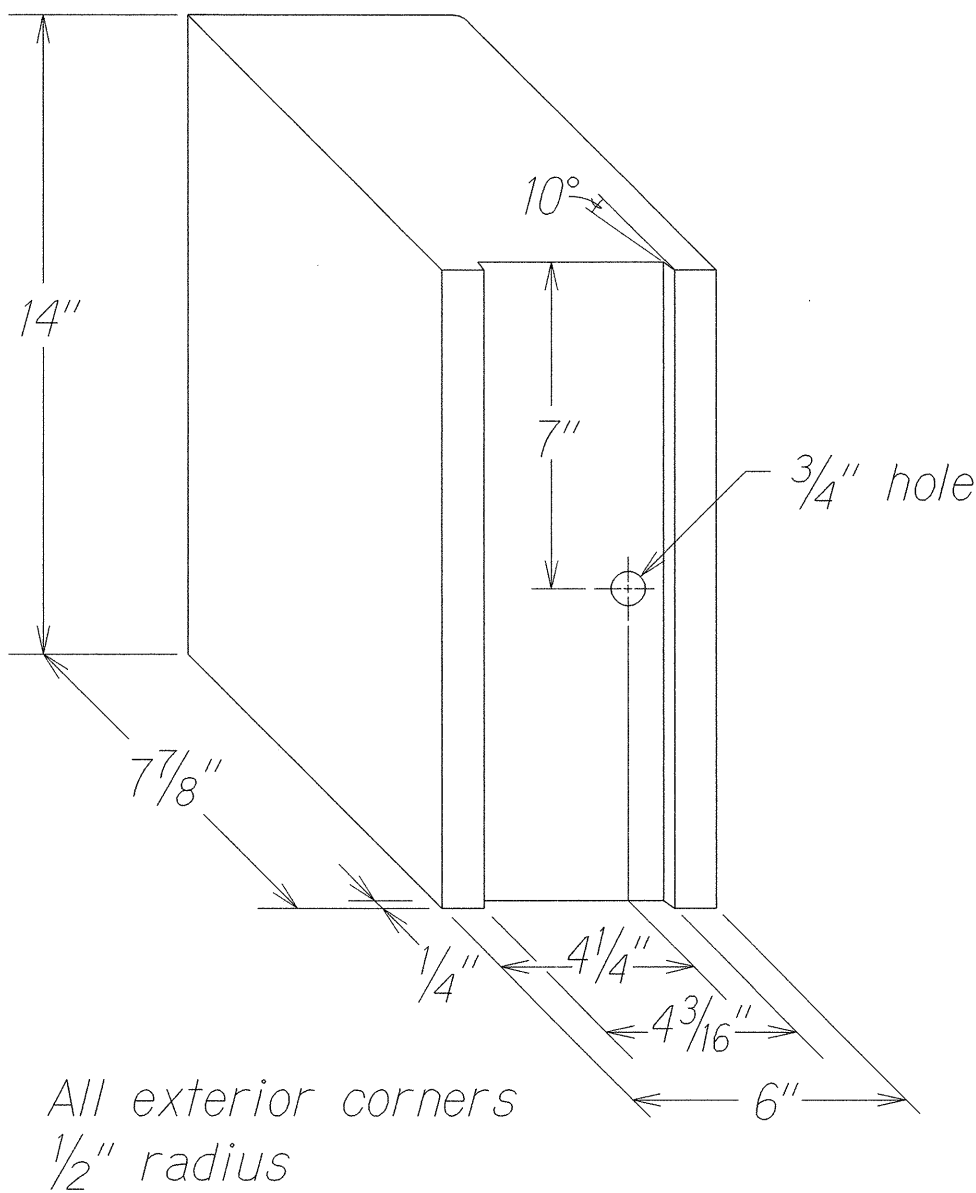
- All hardware, posts and fasteners shall be hot-dip zinc coated galvanized after fabrication. No punching, drilling or cutting will be permitted after galvanizing.
- Where conditions require, special post lengths in increments of 6 inches may be specified.
- All fasteners, posts, and rail elements (i.e. FBB03, PWE01, RWM02a, etc.) 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-AGC-ARTBA Joint Cooperative Committee, Subcommittee On New Highway Materials, Task Force 13 Report. Dimensions of fastners, posts and rail elements have been converted from metric units into their present form.
- The Recycled Plastic Block or Offset Block shall be approved by the State.
- All new guardrail systems (system consists of total length of guardrail including both end treatments) shall include the Additional Paved Area.
- After the guardrail posts are installed in the paved area, the Contractor shall fill/seal around each guardrail post and all cracks in the paved area caused during the guardrail post installation. If required by the inspector/engineer, the Contractor shall tamper the paved area around the guardrail post prior to filling/sealing. All costs associated with this work shall not be paid for separately, but shall be considered incidental to the various guardrail items.
- New A.C. pavement at guardrails shall extend 6' longitudinally beyond terminal ends unless noted otherwise on plans.
- Reflector Markers (RM-5) mounted on guardrails shall be spaced every 100'-0". Spacing of RM-5's on Horizontal Curves shall comply with Table 3D-1 of the MUTCD 2000. RM-5's shall not be installed on Terminal Sections.

GUARDRAIL TYPE	DIMENSION	
	H	A *
Strong Post w/W Beam	1'-9 ⁵ / ₈ "	1'-6"
Rubrail	2'-0"	1'-6"
Modified Thrie Beam	2'-0"	2'-0"

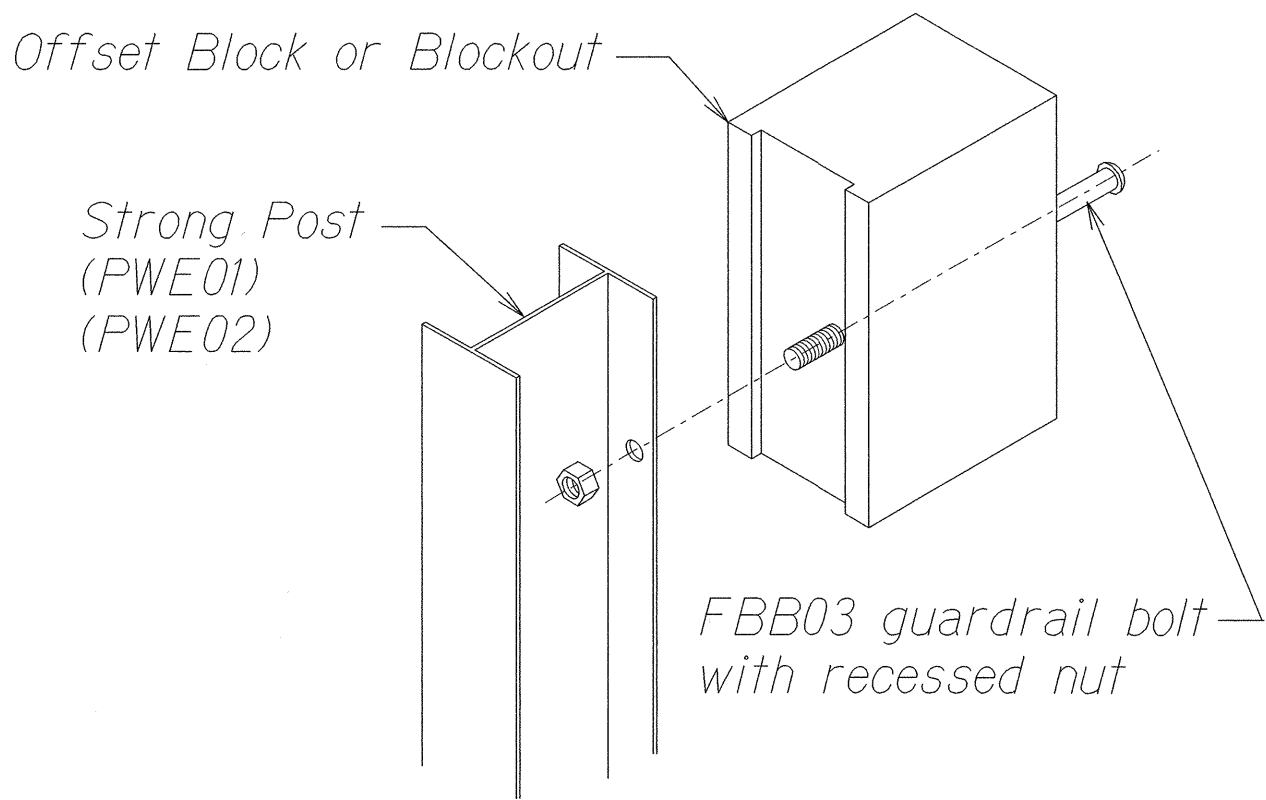
* Unless noted otherwise on plans.



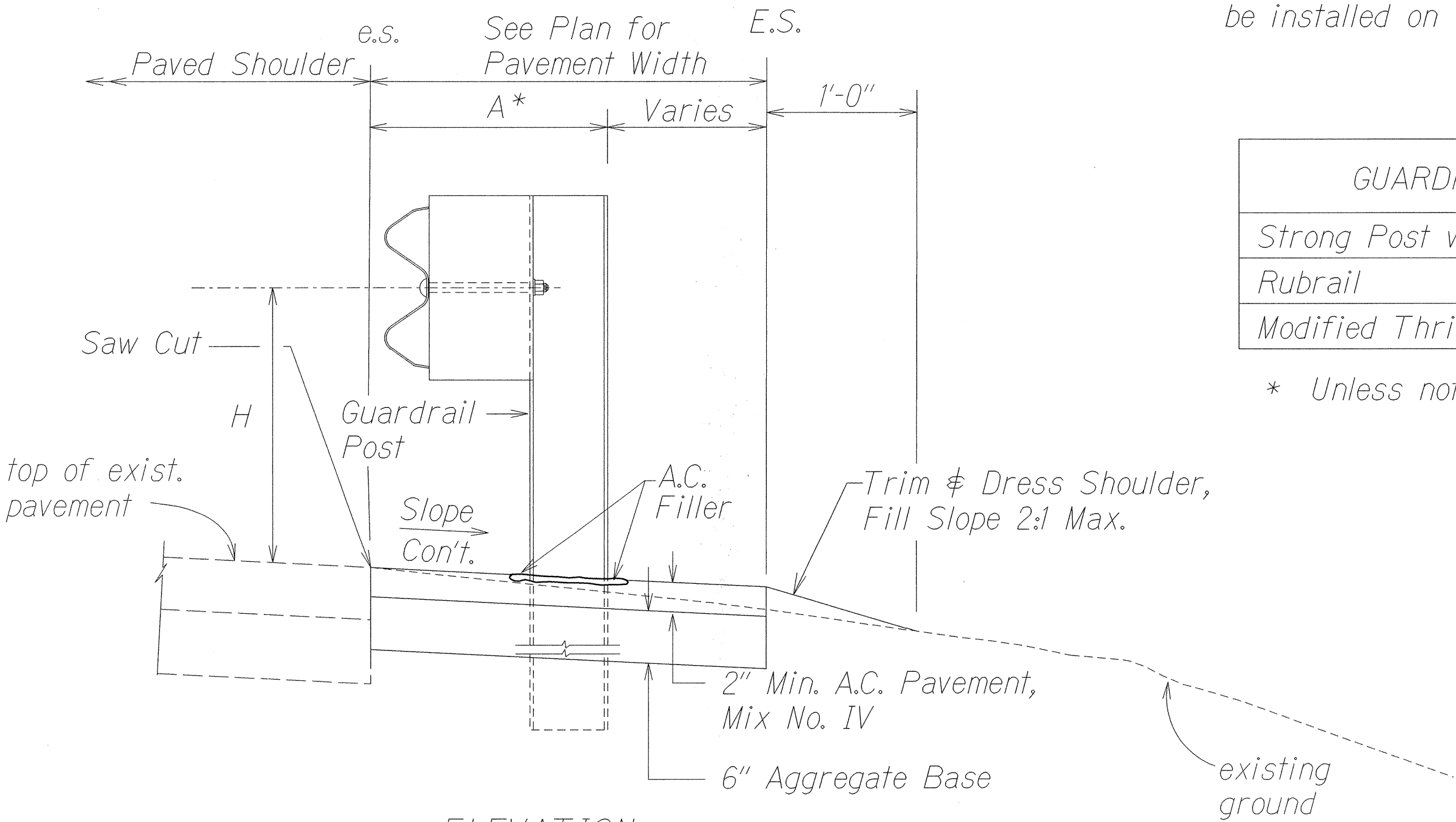
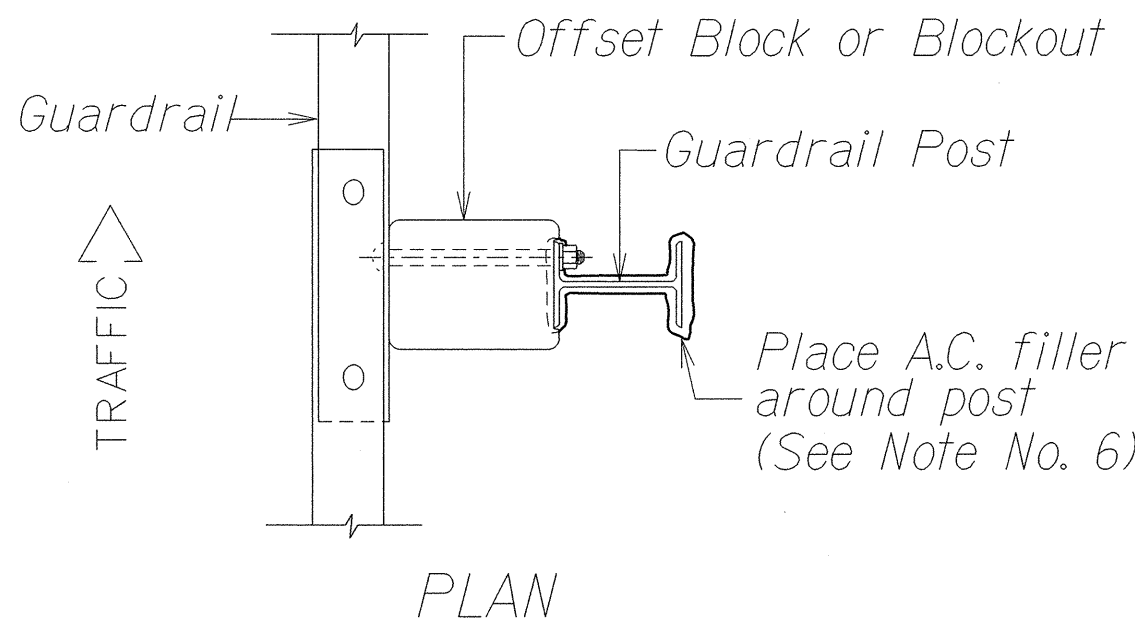
RECYCLED PLASTIC BLOCKOUT (TYPE I)



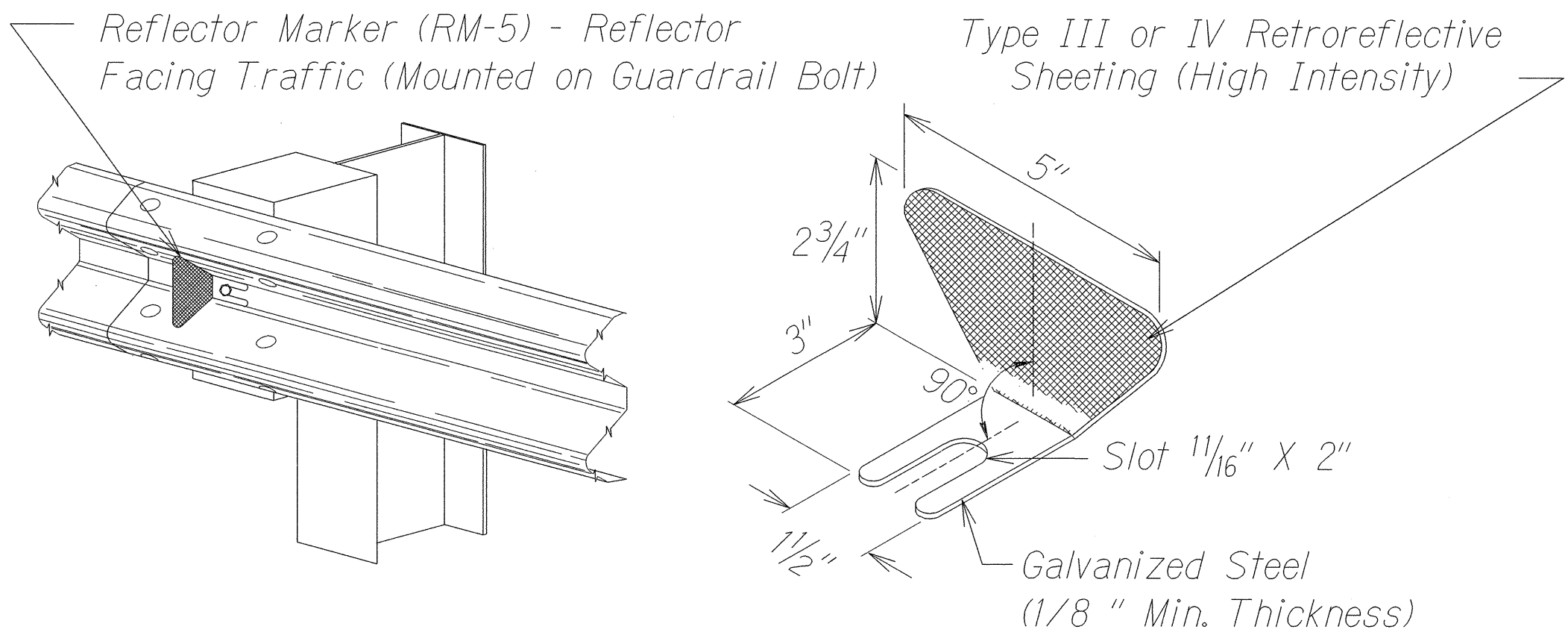
RECYCLED POLYETHYLENE OFFSET BLOCK (TYPE II)



STEEL POST AND BLOCK DETAIL



TYPICAL GUARDRAIL INSTALLATION



REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION

ORIGINAL PLAN	DATE	NO. 2001
SURVEY PLOTTED BY		
DRAWN BY		
TRACED BY		
NOTED BY		
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS & NOTES
KAUMUALII HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of M.P. 22.0
Project No. 50B-02-99

Scale: NTS
Date: August 2001

SHEET No. 1 OF 1 SHEETS