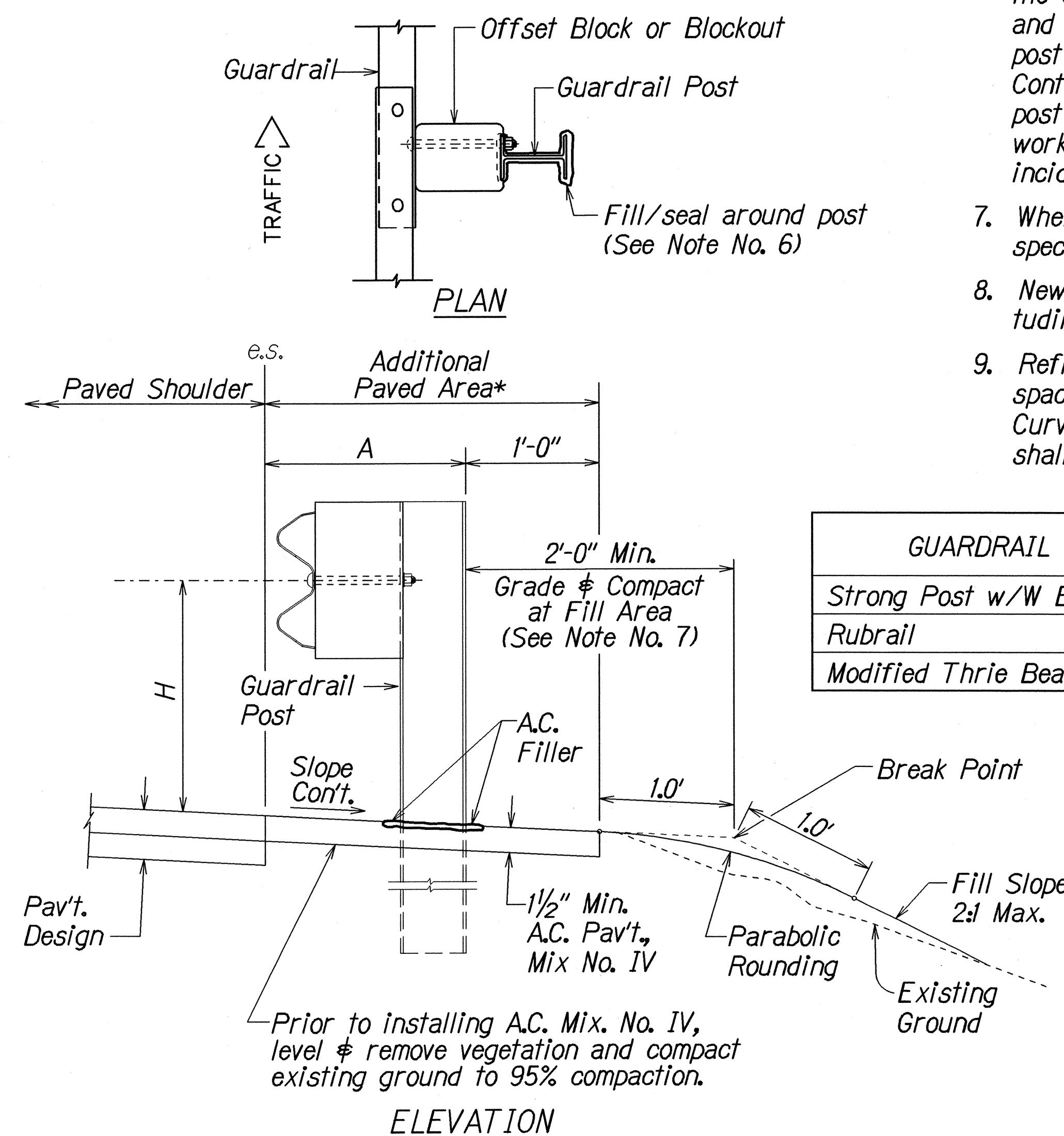
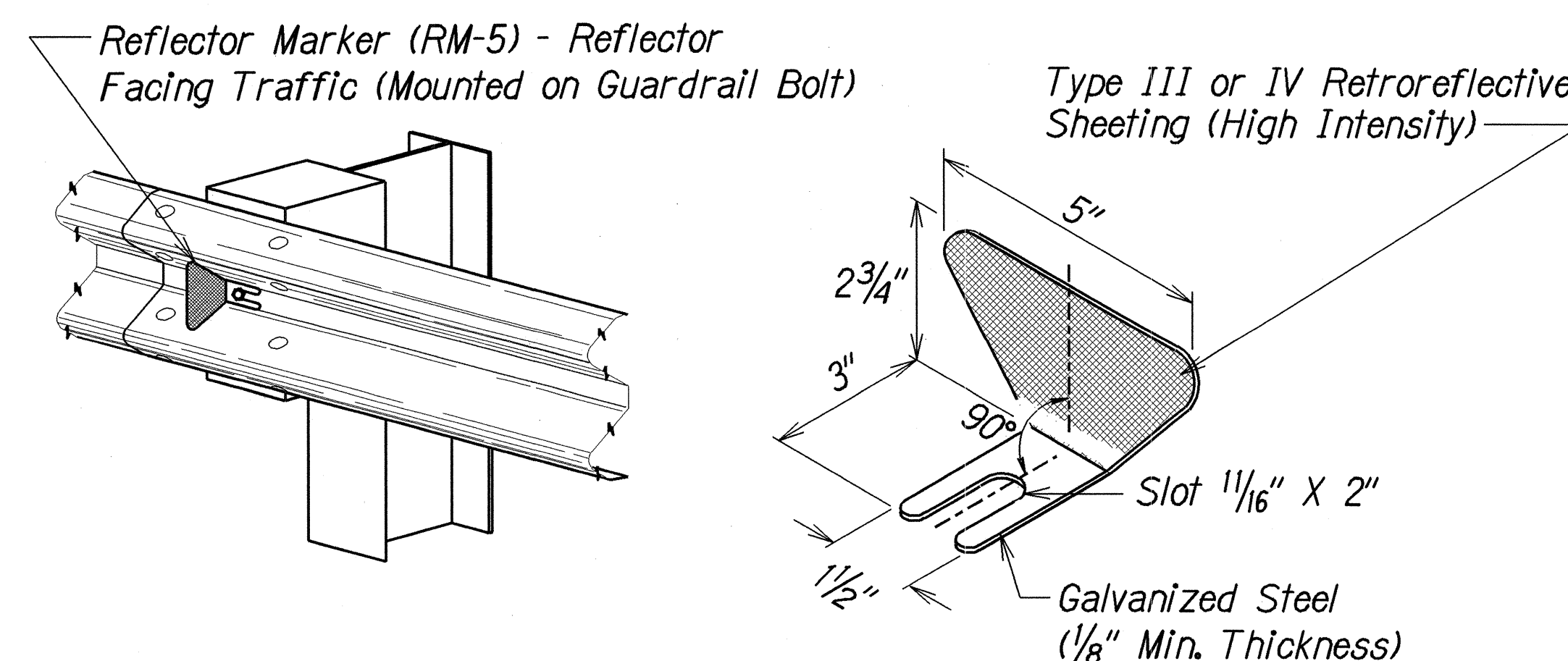
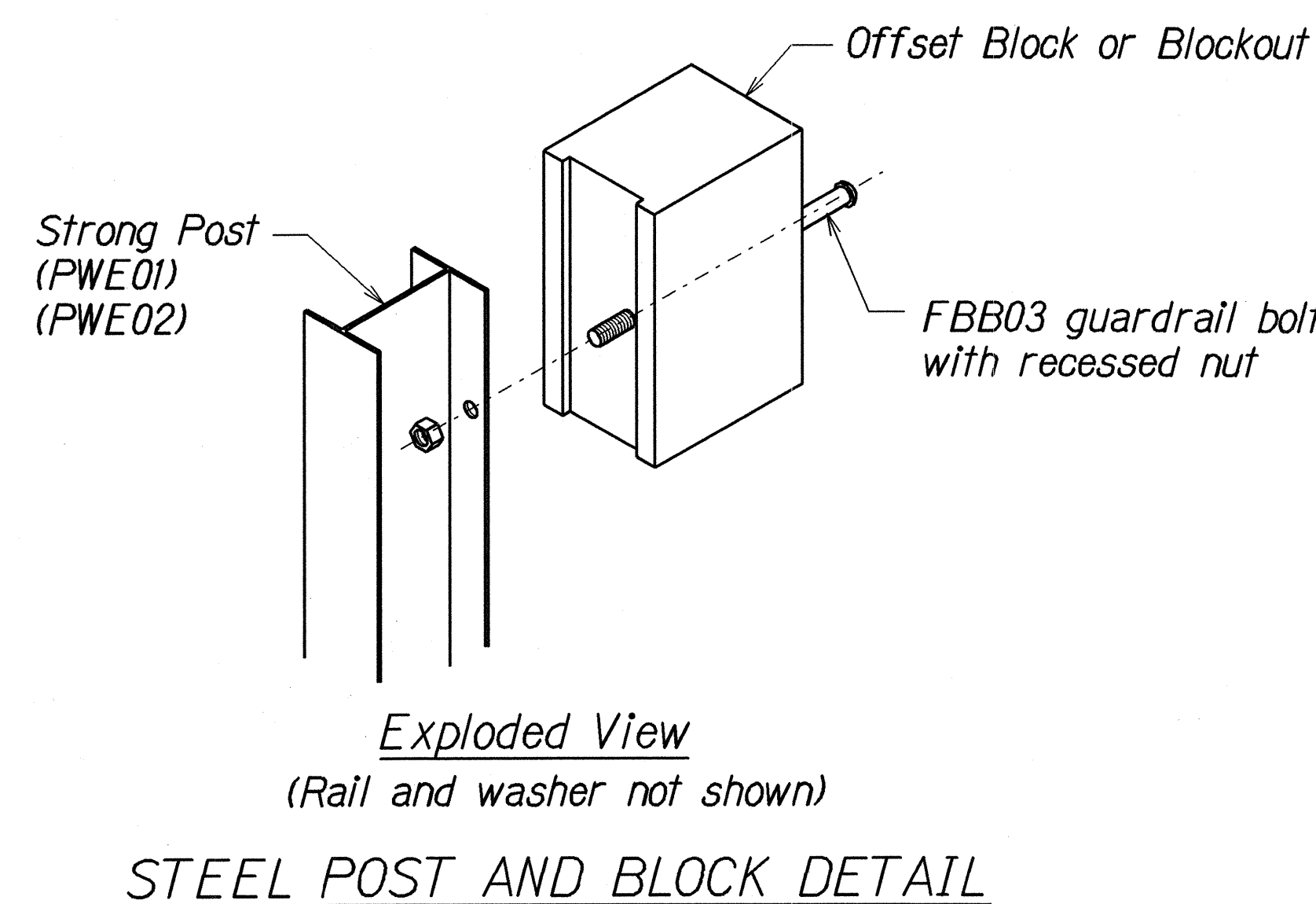
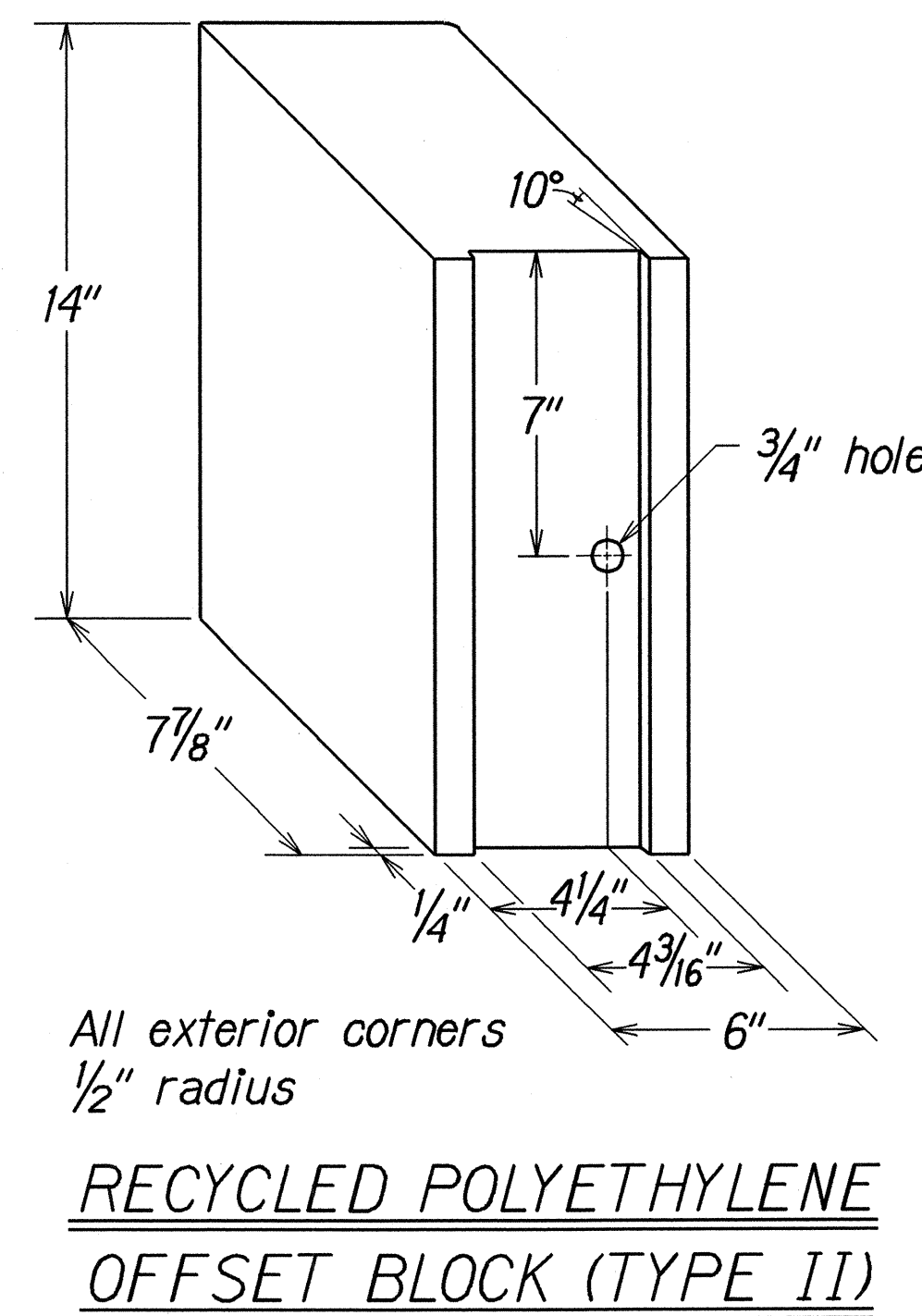
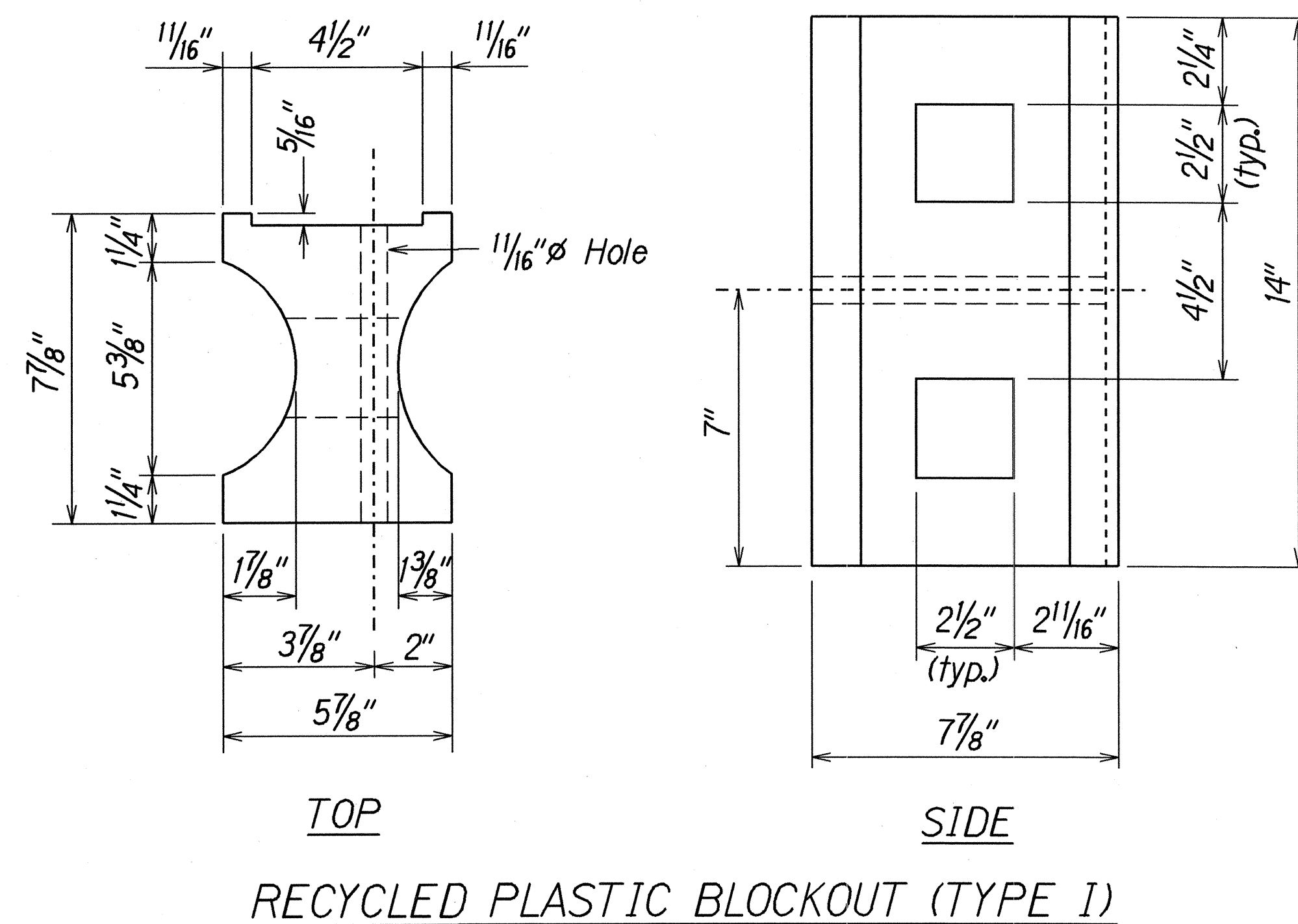


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(29)	2001	20	37

# 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, RWM02b, 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.
- When standards for the fill slope area cannot be met, a site specific, engineer approved design may be used.
- New A.C. pavement at guardrails shall extend 6 feet longitudinally beyond terminal ends.
- Reflector Markers (RM-5) mounted on guardrails shall be spaced every 200 feet. Spacing of RM-5's on Horizontal Curves shall comply with Table III-1 of the MUTCD. RM-5's shall not be installed on Terminal Sections.

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



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
2001	
2001	

6/13/01 142001 Guardrail/Revised.dgn (Standard plan TE-50 709/01/00)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GUARDRAIL DETAILS & NOTES**  
  
**KAWAIIHAE ROAD**  
**GUARDRAIL AND SHOULDER IMPROVEMENTS**  
**KAWAIIHAE TOWARDS WAIMEA**  
**F.A. PROJECT NO. NH-019-1(29)**  
Scale: NTS Date: Aug., 2001

SHEET No. 1 OF 1 SHEETS