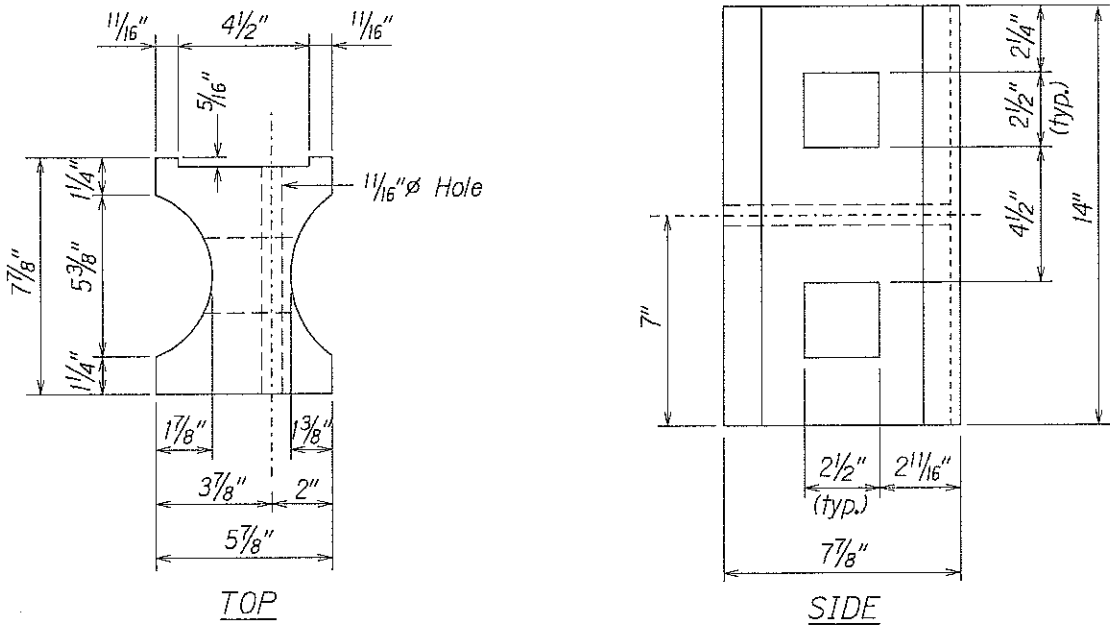
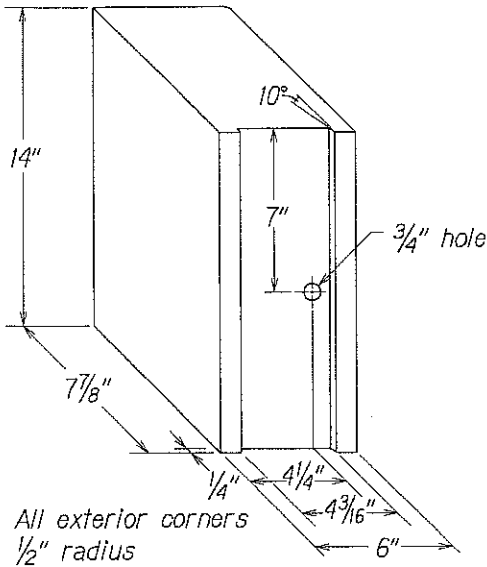


GENERAL NOTES

- 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 fasteners, 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 25 feet. RM-5's shall not be installed on Terminal Sections. Furnishing and installing of each RM-5 shall be considered incidental to the adjacent guardrail system. RM-5 shall be either galvanized steel or plastic.
- Asphalt concrete pavement shall be constructed prior to installation of guardrail.
- Dress and hydro-mulch fill/cut areas and shall be considered incidental to the various contract items.
- Compact finished grade until there is no visible evidence of further consolidation. This work is subsidiary to Item No. 401.0100 - HMA Pavement, Mix No. IV.

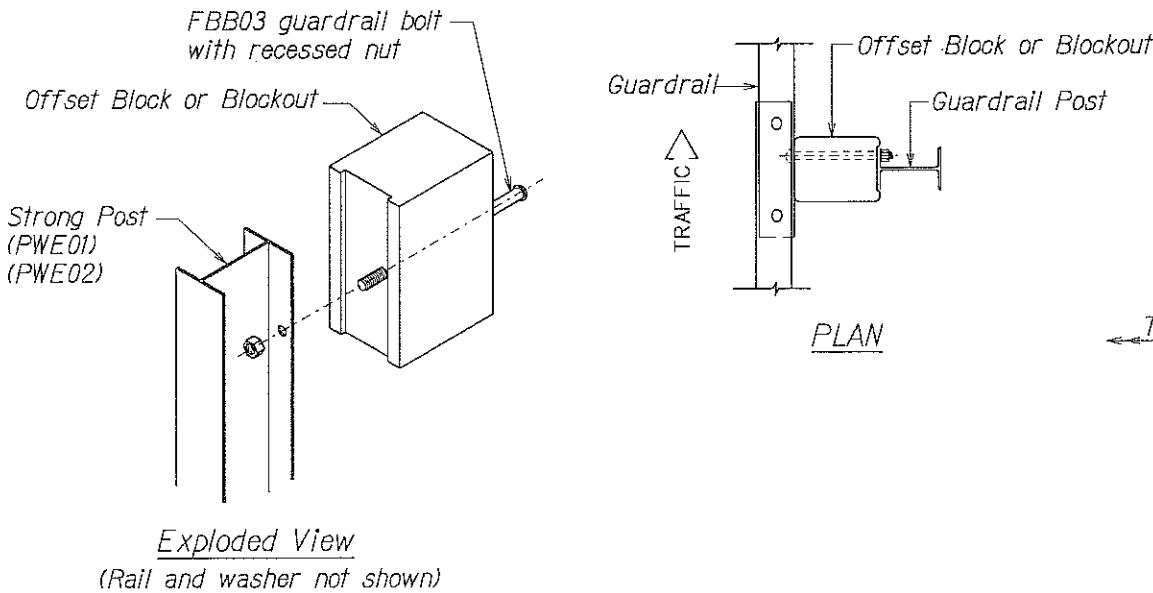


RECYCLED PLASTIC BLOCKOUT (TYPE I)

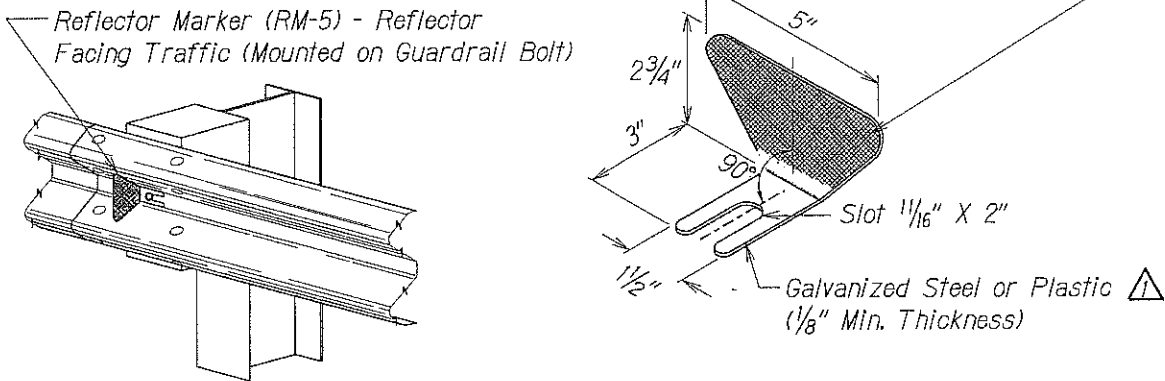


RECYCLED POLYETHYLENE
OFFSET BLOCK (TYPE II)

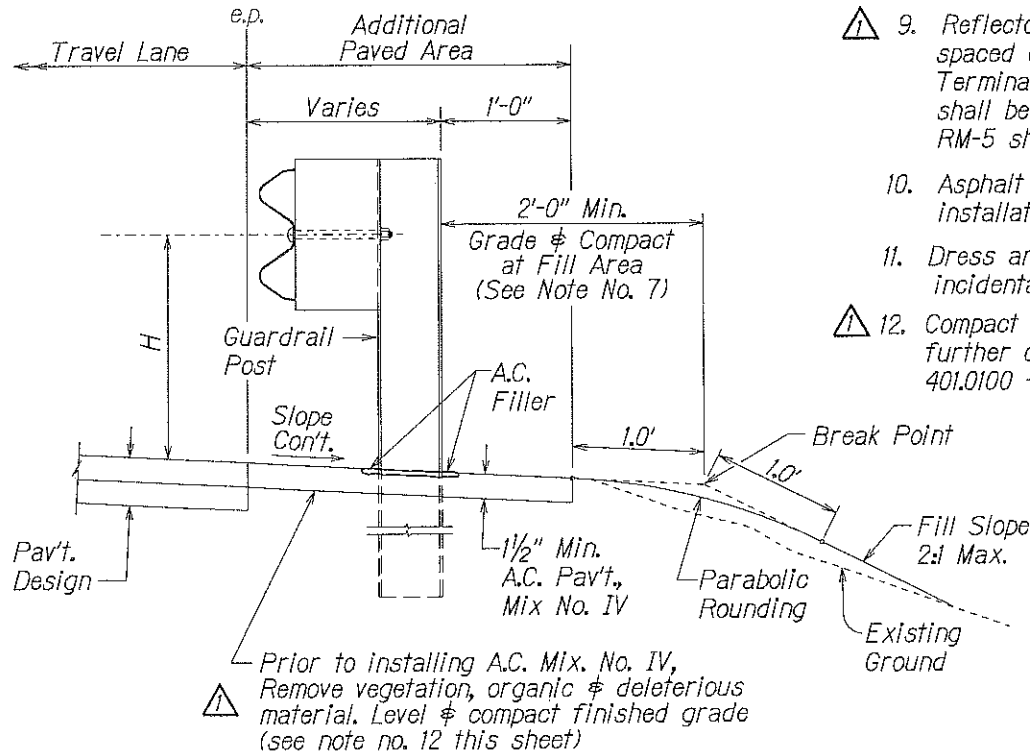
GUARDRAIL TYPE	DIMENSION
	H
Strong Post W-Beam	1'-9 5/8"
Strong Post Rubrail (W-Beam)	2'-0"
Modified or Strong Post Thrie Beam	2'-0"



STEEL POST AND BLOCK DETAIL



REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION



ELEVATION
TYPICAL GUARDRAIL INSTALLATION

12/29/11	△ - Plastic Type (RM-5)
12/29/11	△ - Notes on compaction
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GUARDRAIL DETAILS & NOTES	
MAALO ROAD	
GUARDRAIL AND SHOULDER IMPROVEMENTS	
Mile Post 0.0 to Mile Post 2.95	
Fed-Aid Project No. STP-0583(002)	
Scale: Not to scale	Date: Dec. 2011
SHEET No. 1 OF 8 SHEETS	