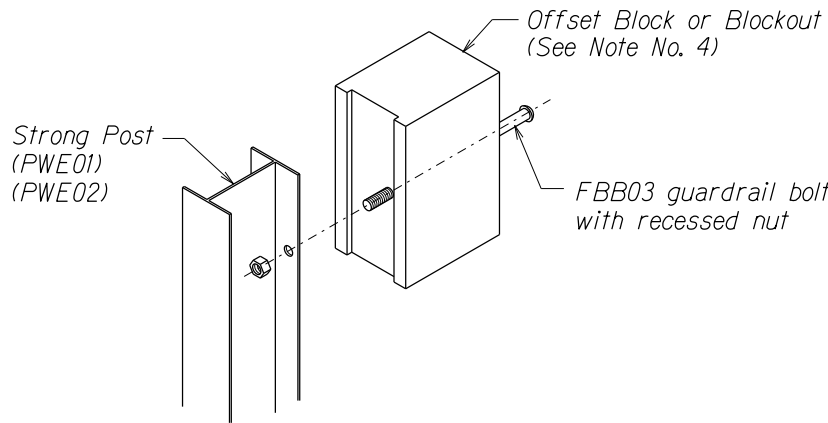


GENERAL NOTES

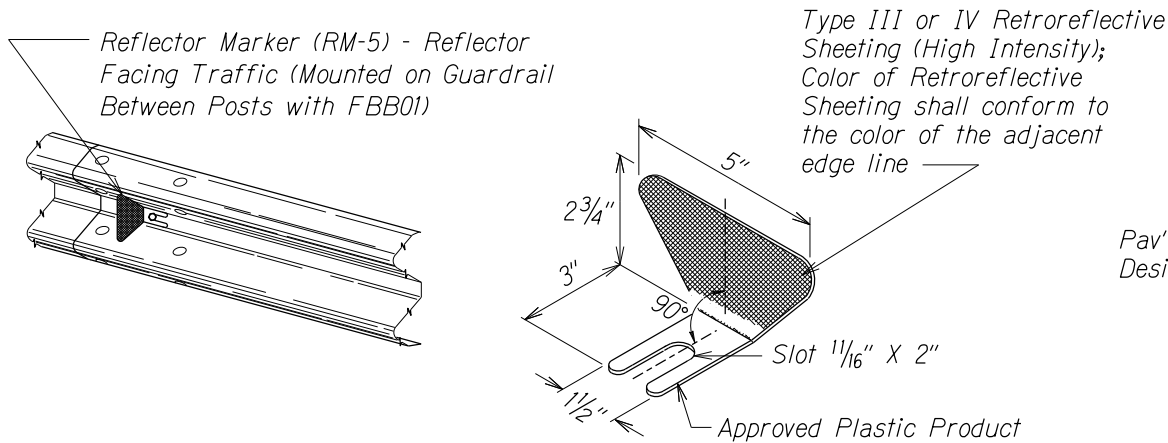
- All hardware, posts and fasteners shall be hot-dip zinc coated galvanized after fabrication. No punching, drilling or cutting will be permitted after galvanizing.
- Where conditions require, special post lengths in increments of 6 inches may be specified by the Engineer.
- All fasteners, posts, and rail elements (i.e. FBB03, PWE01, RWM04b, 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 Blockout 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.
- Minimum working width (clear distance) between back of MGS post to any fixed object is 4'-1" (49").
- New Hot Mix Asphalt (HMA) 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 guardrail system.

GUARDRAIL TYPE	DIMENSION	
	H	A
MGS w/ Standard 8" Offset Block	2'-1"	1'-6"
MGS w/ No Blockout	2'-7/8"	9/4"

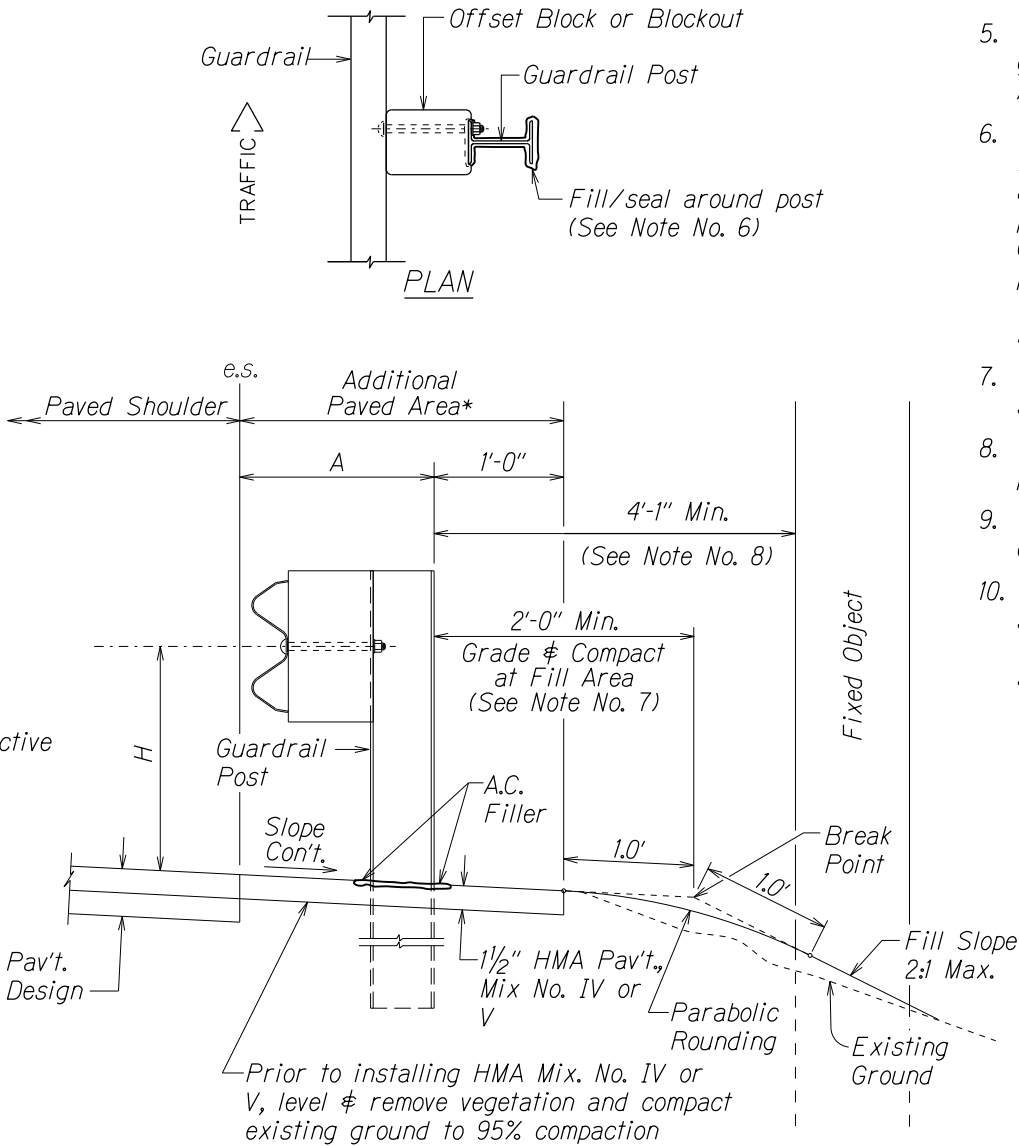


Exploded View
(Rail and washer not shown)

STEEL POST AND BLOCK DETAIL



REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION



ELEVATION

TYPICAL GUARDRAIL INSTALLATION



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

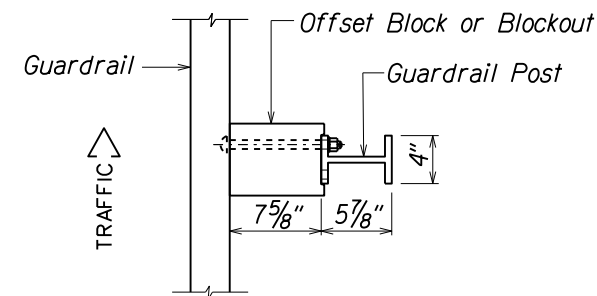
GUARDRAIL DETAILS & NOTES

HANA HIGHWAY
EMERGENCY SLOPE REPAIRS
Vicinity of West Kuiaha Road Intersection
Project No. 36C-01-22M

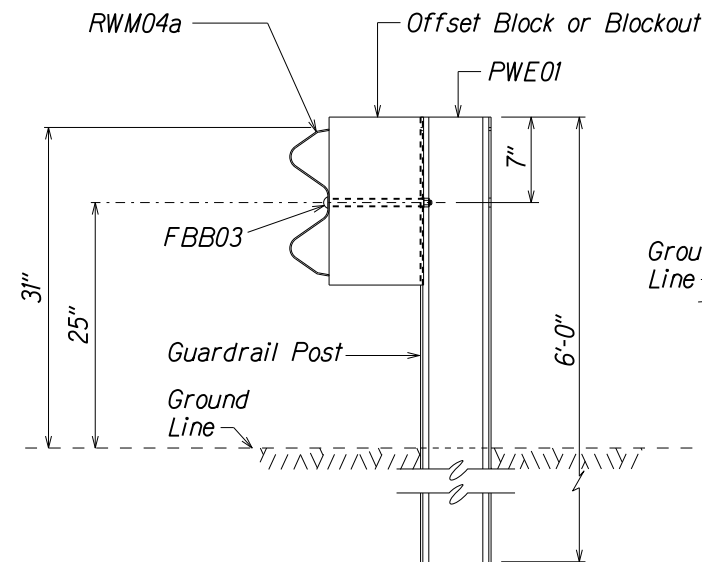
Scale: NTS Date: October, 2022

SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	36C-01-22M	2022	10	14

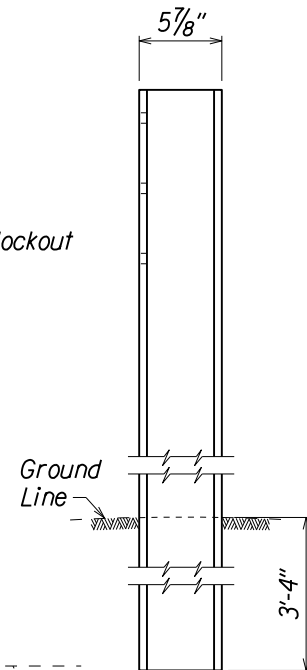


PLAN

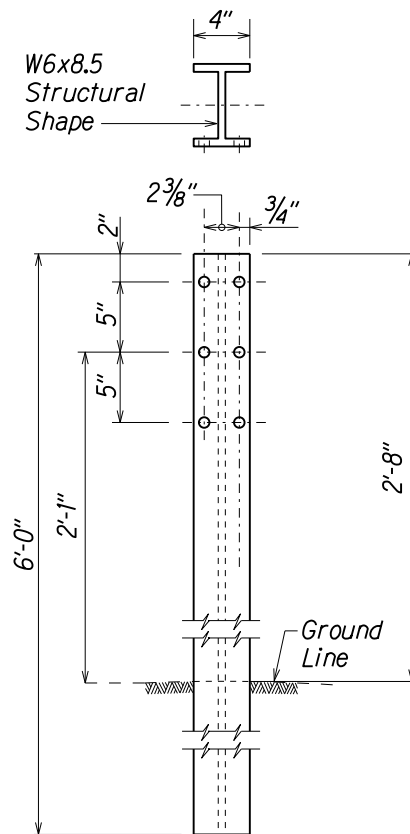


SECTION A-A

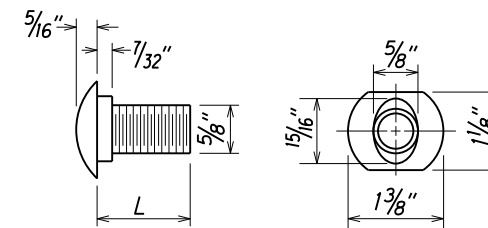
NOTE:
All Holes are
3/4" Dia.



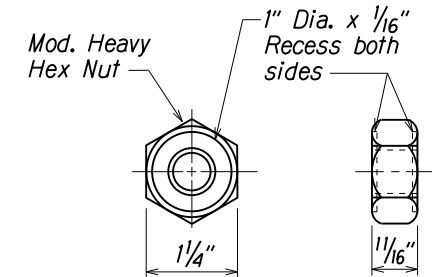
SIDE



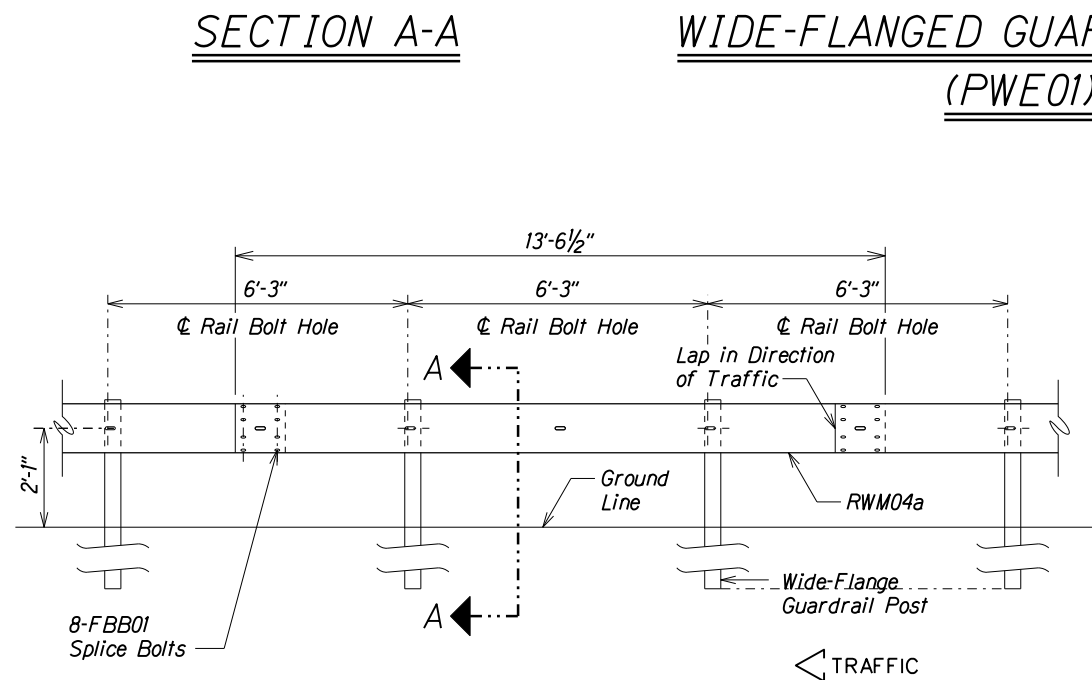
FRONT



DESIGNATOR	L
FBB01	1 $\frac{3}{8}$ "
FBB02	2"
FBB03	10"

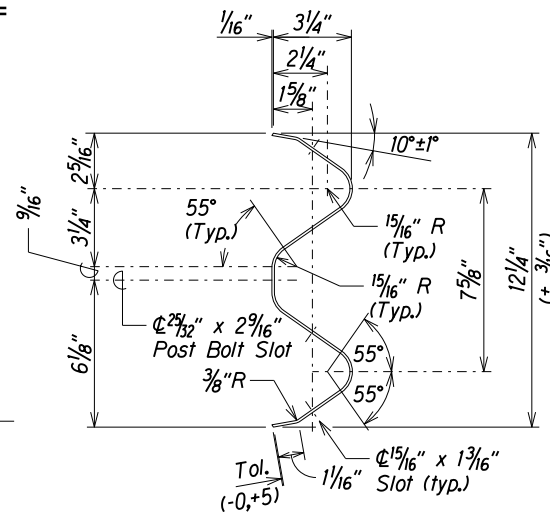


GUARDRAIL BOLTS AND RECESSED NUT

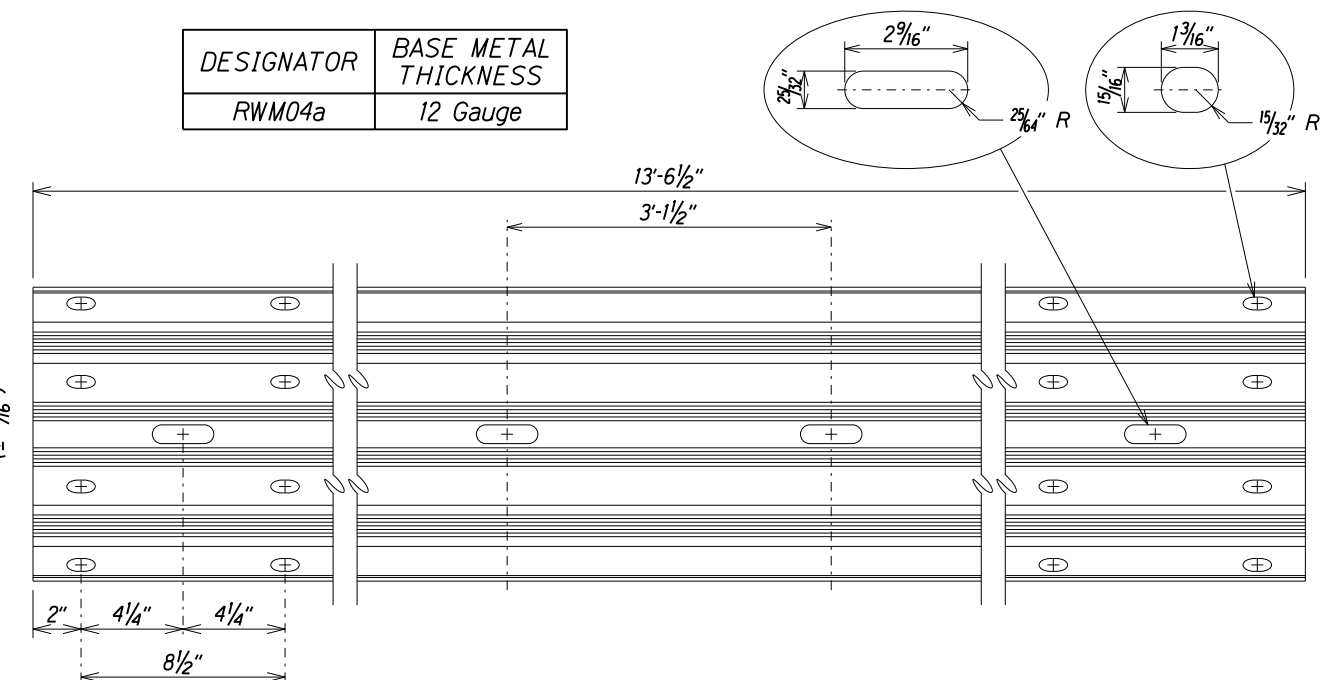


ELEVATION

WIDE-FLANGED GUARDRAIL POST
(PWE01)



DESIGNATOR	BASE METAL THICKNESS
RWM04a	12 Gauge

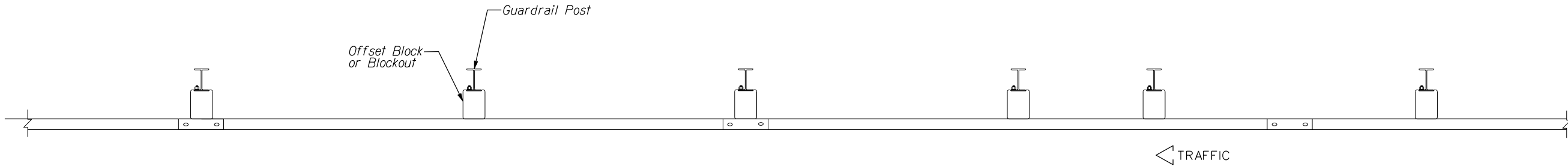


4 SPACE W-BEAM GUARDRAIL (RWM04a)

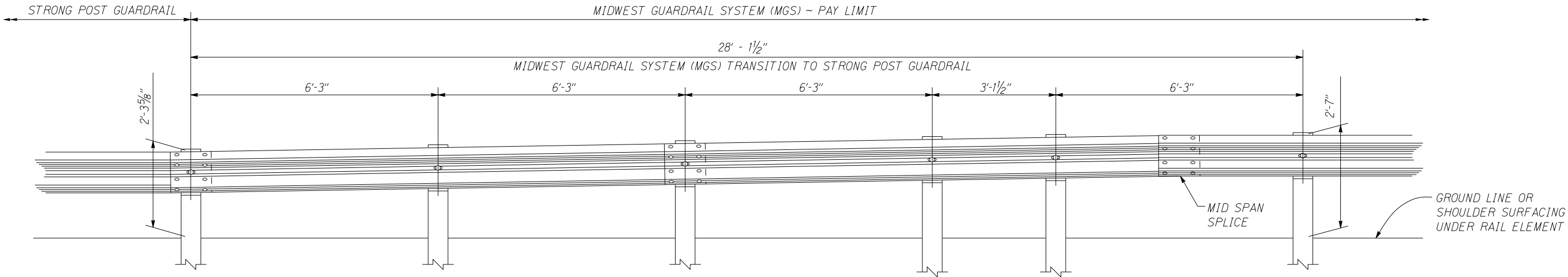


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
31" W-BEAM GUARDRAIL WITH
STANDARD 8" OFFSET BLOCK
HANA HIGHWAY EMERGENCY SLOPE REPAIRS
Vicinity of West Kuiaha Road Intersection
Project No. 36C-01-22M
Scale: NTS Date: October, 2022
SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	36C-01-22M	2022	11	14



PLAN



ELEVATION

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	10/22
ddx	DESIGNED BY	
Xdgn	QUANTITIES BY	
N	CHECKED BY	

r09/06/16 D:\st2\Ernest\standards\Traffic Guardrail Standards\ml7_midwest.dgn

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**MGS TRANSITION TO
STRONG POST GUARDRAIL**
HANA HIGHWAY EMERGENCY SLOPE REPAIRS
Vicinity of West Kuiaha Road Intersection
Project No. 36C-01-22M
Scale: NTS Date: October, 2022
SHEET No. 3 OF 3 SHEETS