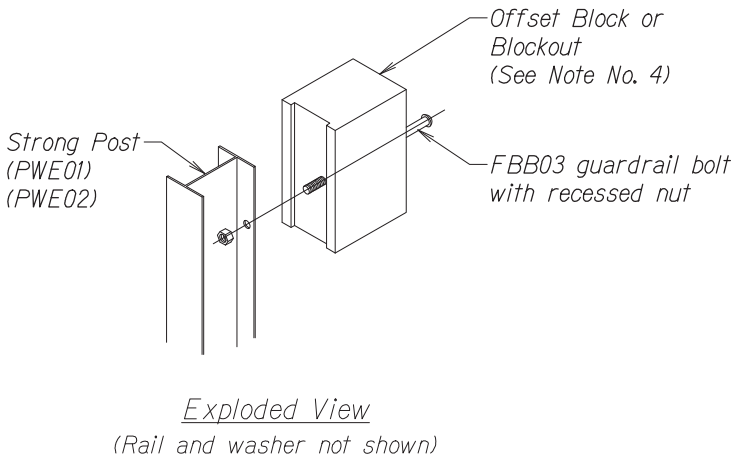
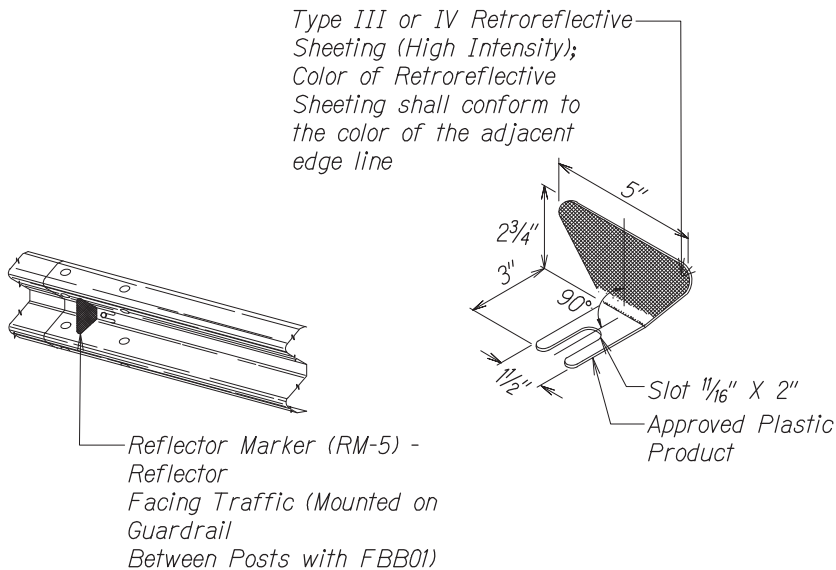


DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	377A-01-22M	2024	13	22

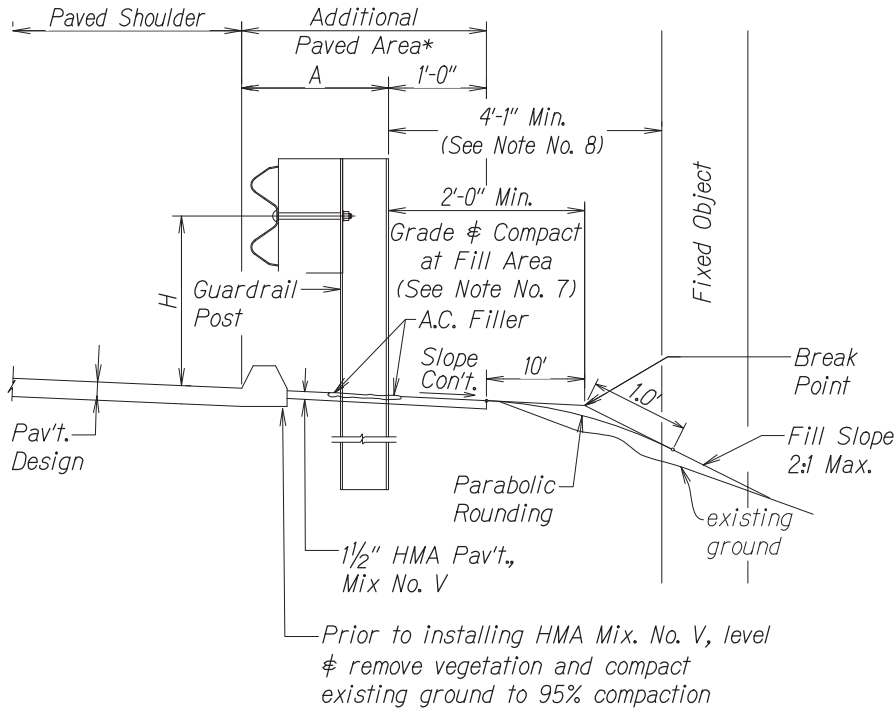
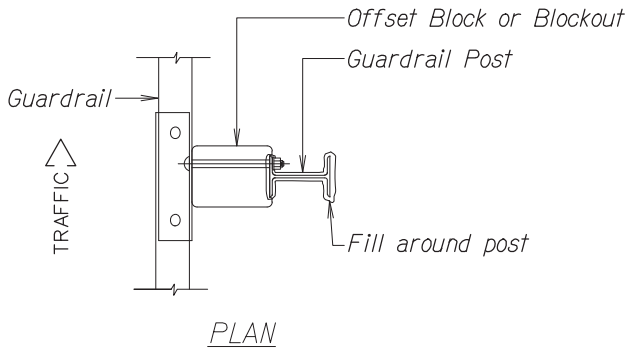


STEEL POST AND BLOCK DETAIL



REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION

GUARDRAIL TYPE	DIMENSION	
	H	A
MGS w/ Standard 8" Offset Block	2'-1"	1'-6"

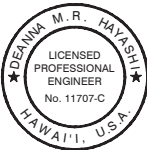


TYPICAL GUARDRAIL INSTALLATION

GENERAL NOTES:

1. All Hardware, Posts And Fasteners Shall Be Hot-dip Zinc Coated Galvanized After Fabrication. No Punching, Drilling Or Cutting Will Be Permitted After Galvanizing.
2. Where Conditions Require, Special Post Lengths In Increments Of 6 Inches May Be Specified By The Engineer.
3. 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.
4. The Blockout Or Offset Block Shall Be Approved By The State.
5. All New Guardrail Systems (System Consists Of Total Length Of Guardrail Including Both End Treatments) Shall Include The Additional Paved Area.
6. 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.
7. When Standards For The Fill Slope Area Cannot Be Met, A Site Specific, Engineer Approved Design May Be Used.
8. Minimum Working Width (Clear Distance) Between Back Of MGS Post To Any Fixed Object Is 4'-1" (49").
9. New Hot Mix Asphalt (hma) Pavement At Guardrails Shall Extend 6 Feet Longitudinally Beyond Terminal Ends.
10. 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.

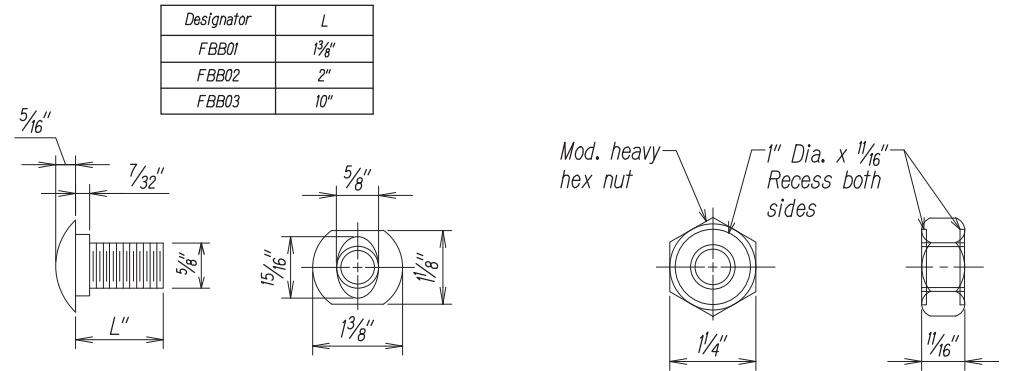
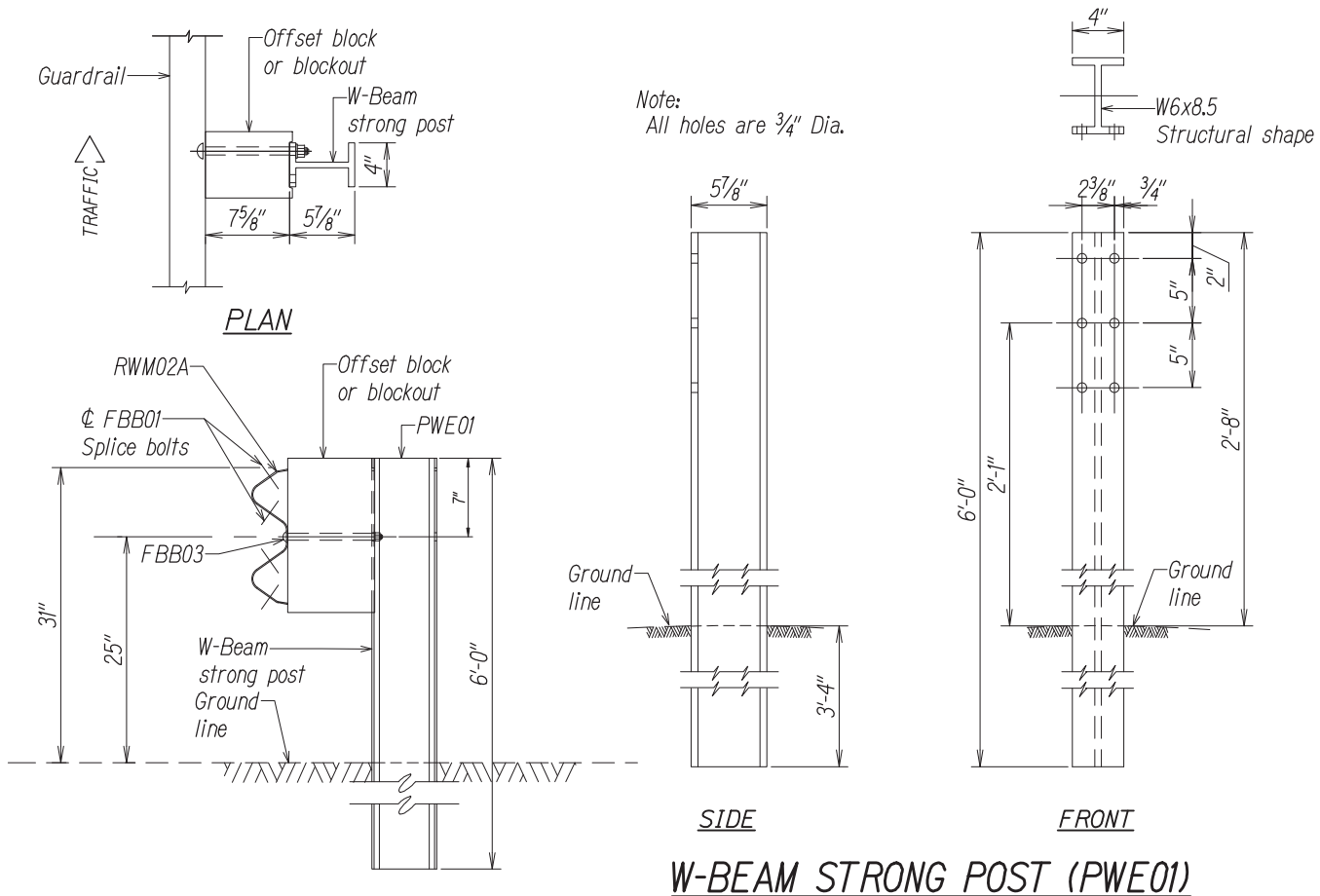
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



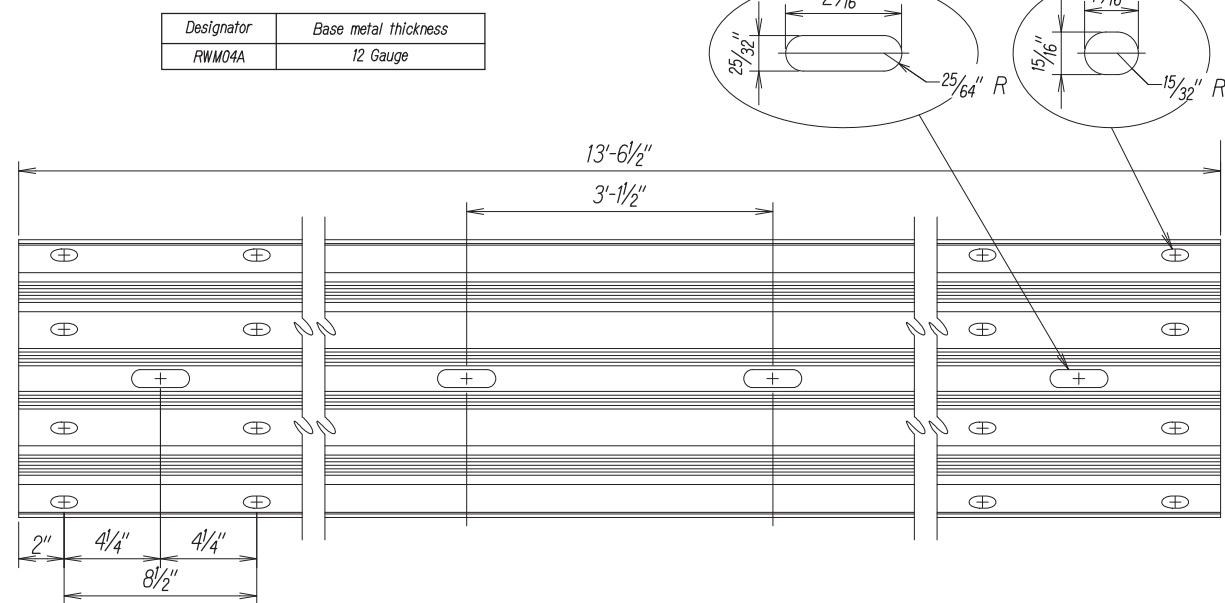
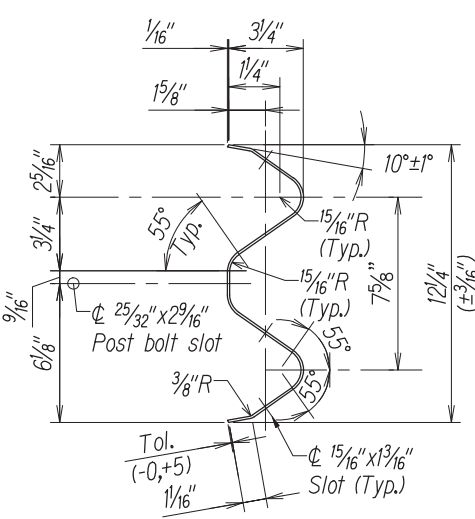
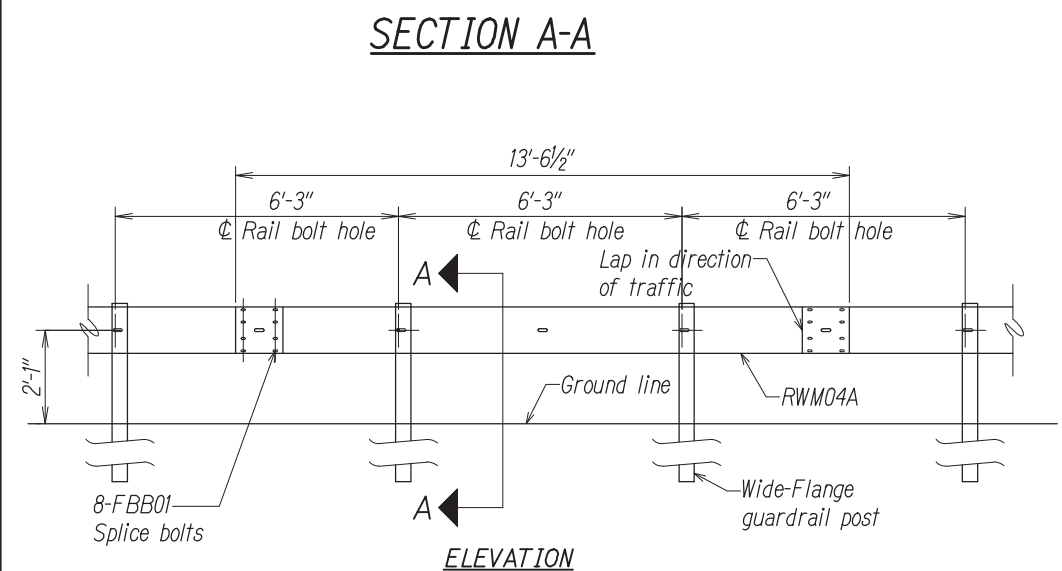
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ME OR UNDER MY SUPERVISION.
Denana M.R. Hayashi
APRIL 30, 2024
U.C. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**GUARDRAIL DETAILS
AND NOTES-1**
*Haleakala Hwy. Slope and Shoulder Repair
Vicinity of Ainakula Road to Kulalani Drive
Project No. 377A-01-22M*
Scale: As Noted Date: March 2024
SHEET No. 1 OF 3 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	377A-01-22M	2024	14	22



GUARDRAIL BOLTS AND RECESSED NUT



MIDWEST GUARDRAIL SYSTEM WITH STANDARD 8" OFFSET BLOCK (SGR47)

4 SPACE W-BEAM GUARDRAIL (RWM04A)

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



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Deanna M.R. Hayashi

APRIL 30, 2024
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

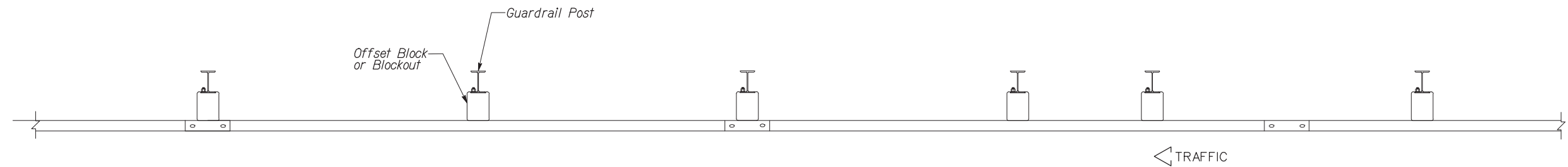
GUARDRAIL DETAILS-2

Haleakala Hwy. Slope and Shoulder Repair
Vicinity of Ainakula Road to Kulalani Drive
Project No. 377A-01-22M

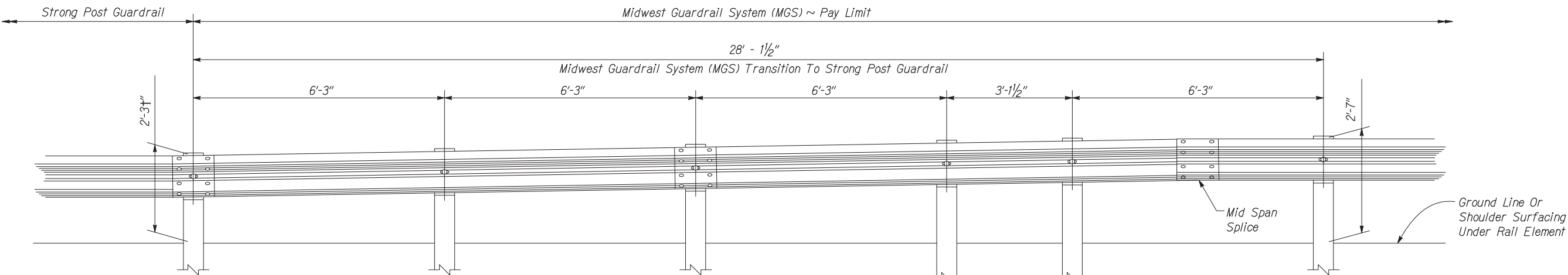
Scale: As Noted Date: March 2024

SHEET No. 2 OF 3 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	377A-01-22M	2024	15	22



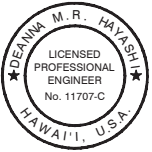
PLAN



ELEVATION

MIDWEST GUARDRAIL SYSTEM (MGS)
TRANSITION TO STRONG POST GUARDRAIL

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	NOTED BY	
NOTE BOOK	QUANTITIES BY	
	CHECKED BY	
	No.	



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APRIL 30, 2024
U.C. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS-3
*Haleakala Hwy. Slope and Shoulder Repair
Vicinity of Ainalakula Road to Kulalani Drive
Project No. 377A-01-22M*

Scale: As Noted Date: March 2024

SHEET No. 3 OF 3 SHEETS