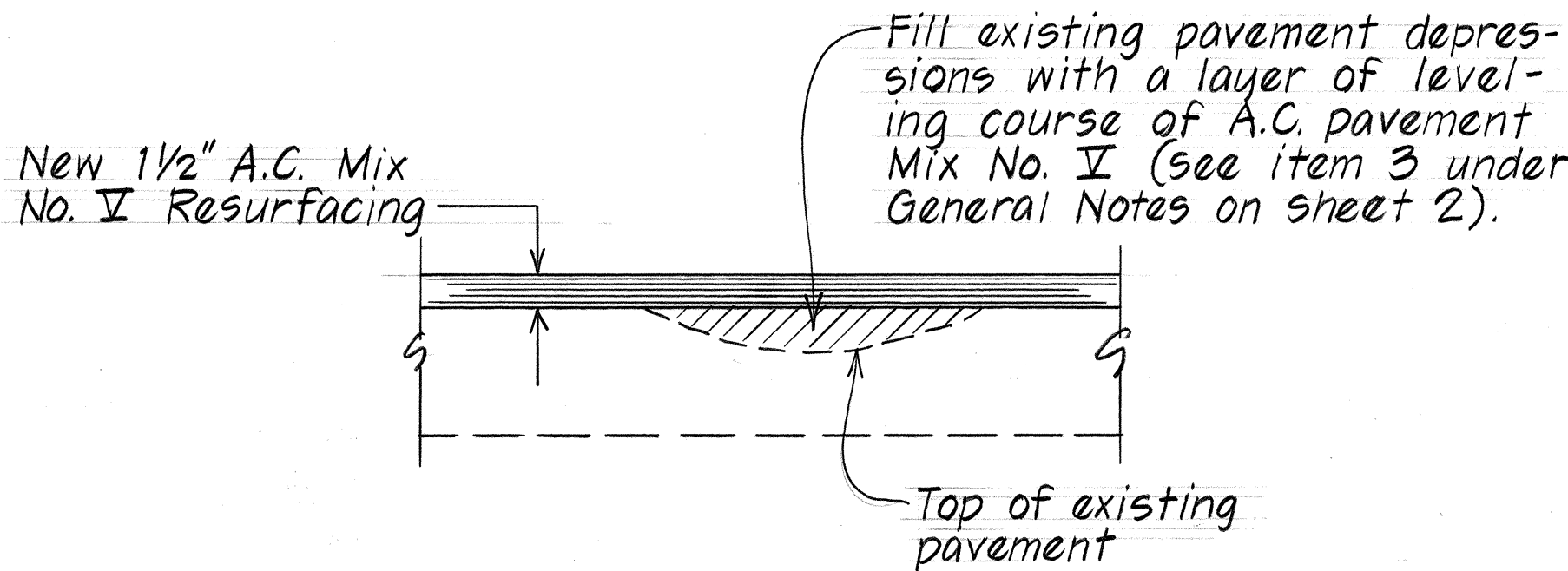


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0900(24)	1986	15	28

GUARD RAIL NOTES

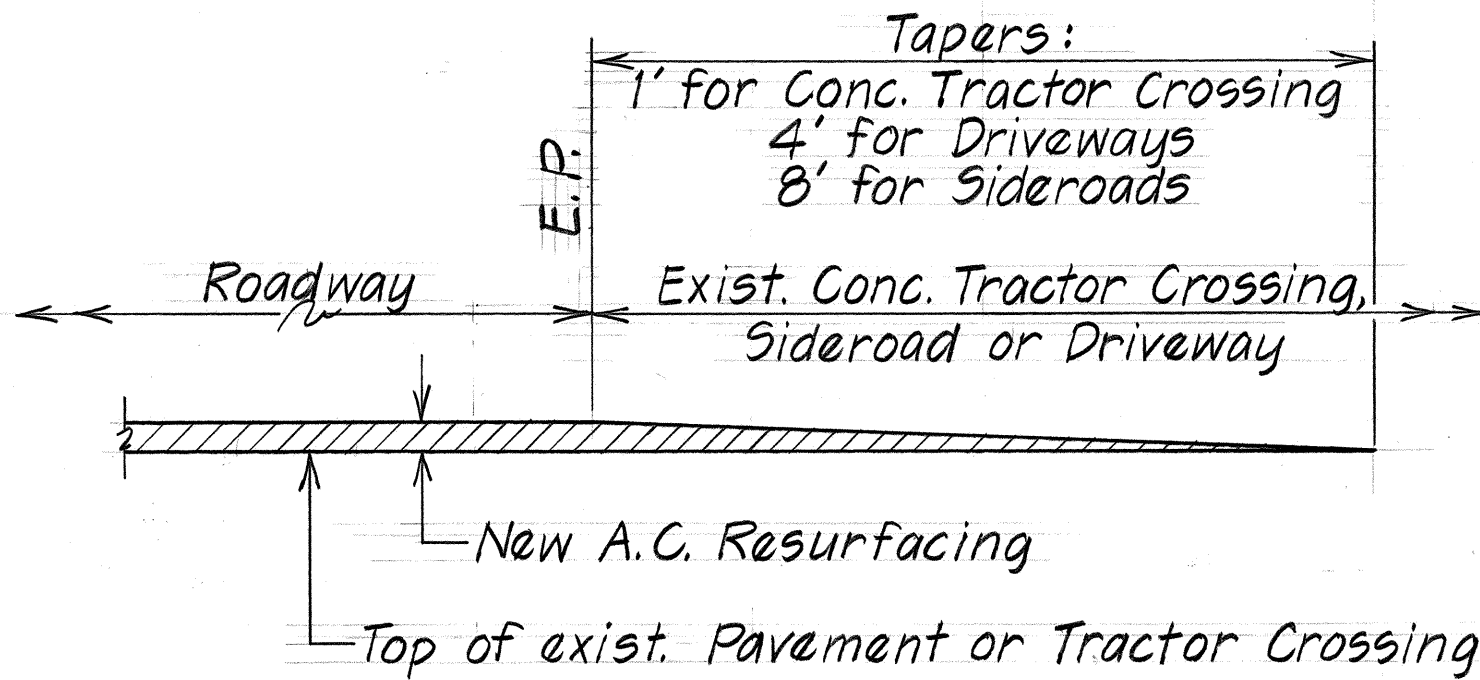
1. Prior to the guard rail installation, the Contractor shall layout the guard rail locations in a manner satisfactory to the Engineer.
2. Removal and/or relocation of existing reflector markers at guard rail locations shall be considered incidental to Item No. 606.3110, Guard Rail, Type 3, Single w/ Steel Post.
3. Sections where guard rails and guide posts have been removed shall not be without portable barriers during non-working hours. Portable barriers shall be installed in conformance with the U.S. Department of Transportation, FHWA, Manual on Uniform Traffic Control Devices for Streets and Highways, 1978 Edition as amended, to physically deter access of vehicles and to delineate the limits and extent of guide posts removed until new guard rails are installed. Removal and disposal of existing guard rails and guide posts shall be incidental to Item No. 606.3110 "Guard Rail, Type 3 - Single with Steel Post."
4. The Contractor shall provide permanent ground cover at all roadside areas exposed or damaged by the Contractor due to his operations during construction. Ground cover shall be indigenous grass or vegetation acceptable to the Engineer. This work shall not be paid for separately but shall be considered incidental to the various contract items.
5. If any existing posts, traffic signs and markers to remain are affected, they shall be removed and reinstalled. Cost shall be incidental to the various contract items.



LEVELING COURSE DETAIL
Not To Scale

GUARD RAIL SCHEDULE			
INSTALLATION OF NEW GUARD RAIL W/ STEEL POSTS			
Begin Station	End Station	G.R., Type 3 Single (L.F.)	End Treatment
34+00± Lt.	39+10± Lt.	547	Modified "G" Flare & Modified "G" Flare
40+40± Rt.	47+00± Rt.	660	Modified "G" A & F
49+10± Lt.	52+60± Lt.	350	Modified "G" D & Modified "G" Flare
50+50± Rt.	56+50± Rt.	600	C & D Modified "G"
53+20± Lt.	53+50± Lt.	38	Modified "G" Flare & tie into exist. metal G.R.
54+40± Lt.	55+50± Lt.	110	Tie into exist. metal G.R. & A
		Total : 2,305 L.F.	Modified "G"

Delete Type "A" & "D" Flare



TYPICAL SECTION - CONC. TRACTOR CROSSINGS,
SIDEROADS, & DRIVEWAY CONNECTIONS
Scale: 1" = 1'-0"

REMOVAL SCHEDULE			
EXIST. WOOD GUARD RAIL & CONC. GUIDE POST			
Begin Station	End Station	Rail W/ Conc. Post (L.F.)	Conc. Guide Post (Ea)
34+00± Lt.	39+00± Lt.	500	-
40+60± Rt.	41+20± Rt.	-	4
49+60± Lt.	52+60± Lt.	300	-
51+75± Rt.	54+90± Rt.	315	-

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

A.C. DETAILS, GUARD RAIL
SCHEDULES & NOTES

MAUNALOA HIGHWAY & KALAE
HIGHWAY RESURFACING
Proj. No. RS-0900(24)

Scale: As Noted Date: April 15, 1986

SHEET No. 1 OF 1 SHEETS

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