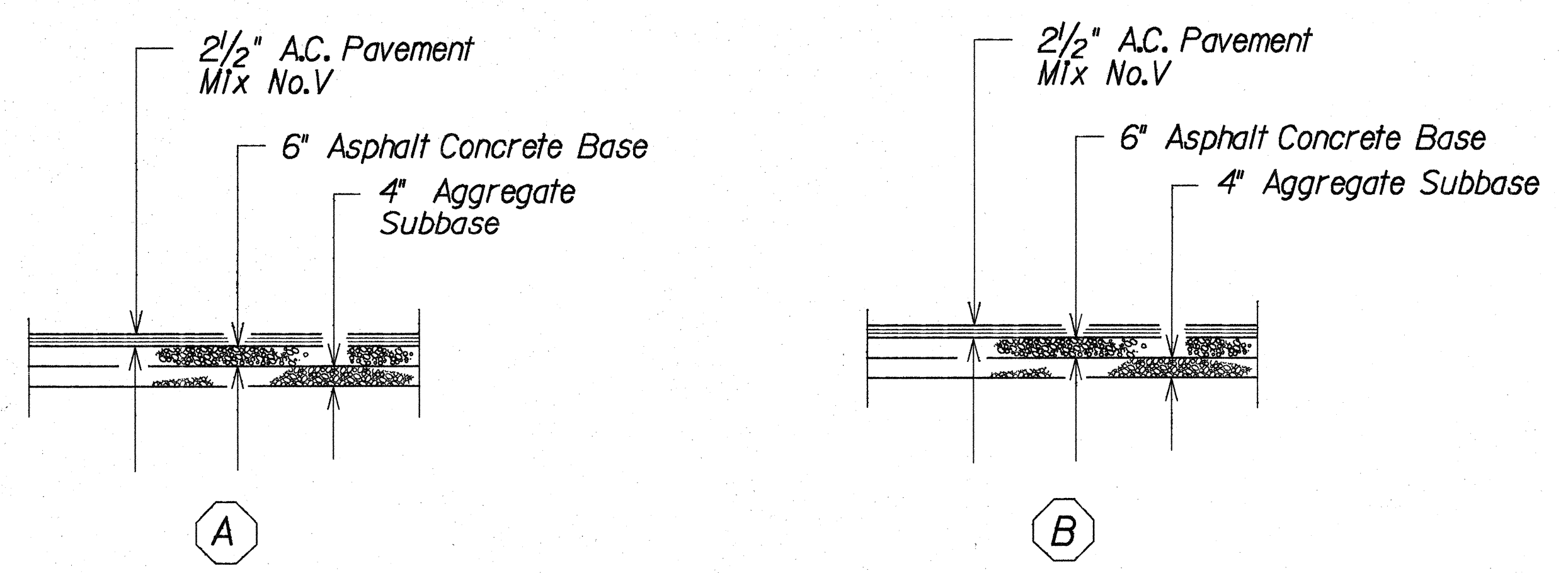
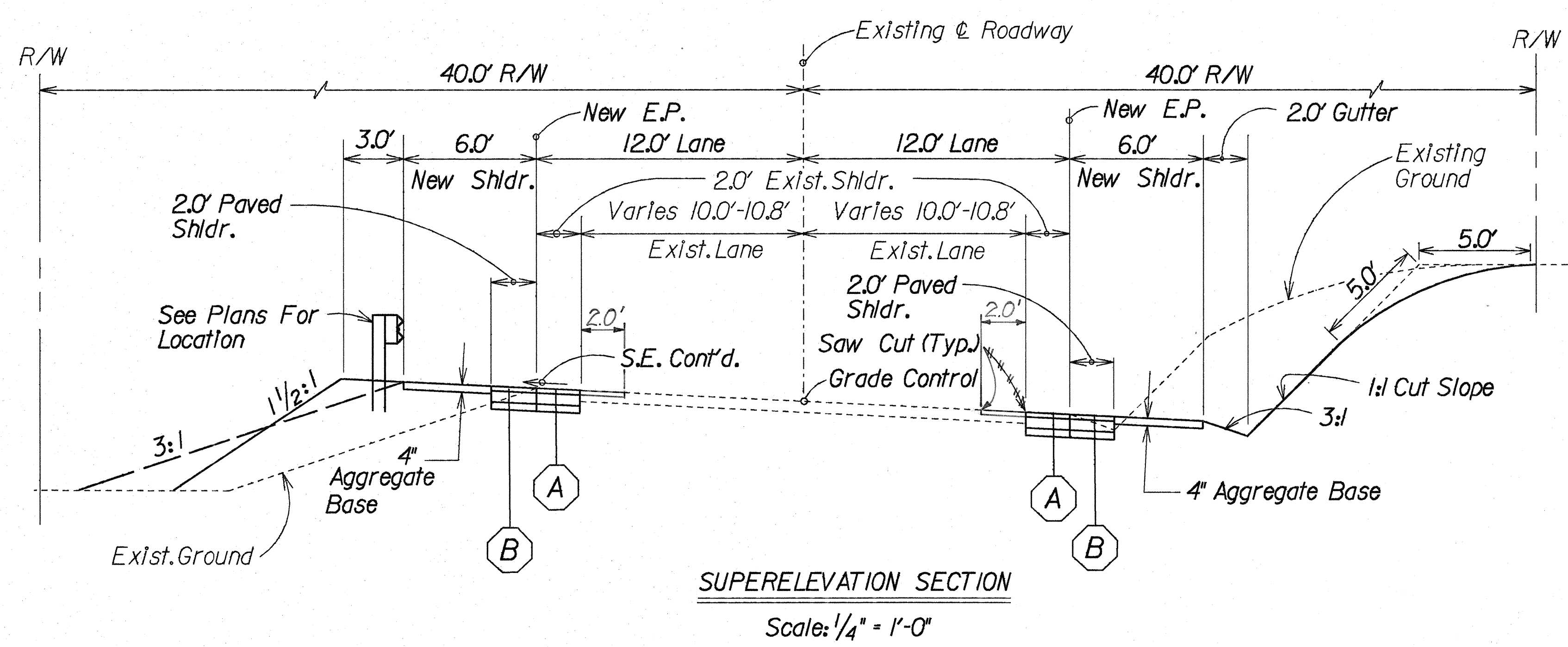
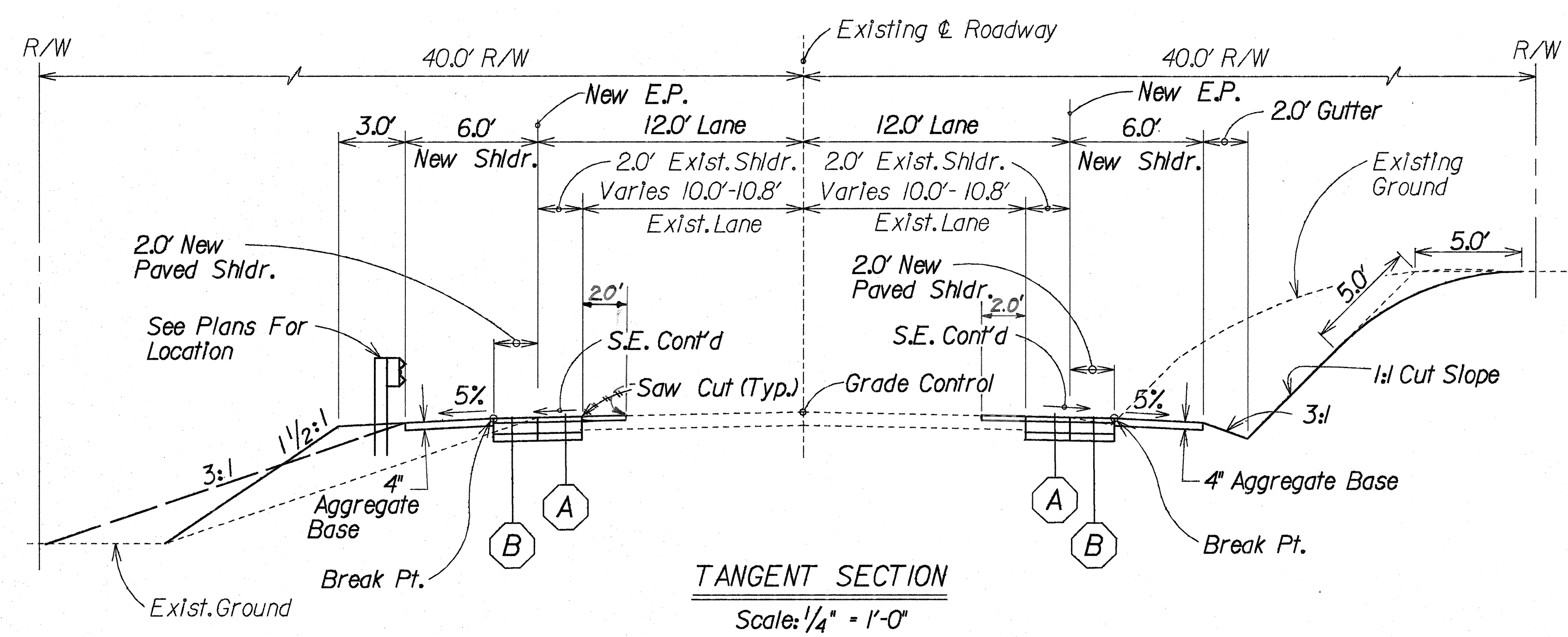


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(19)	1988	3	29



GENERAL NOTES

- The scope of work for this project consists of realignment of existing roadway, revising superelevation rates and curves, widening existing pavement and shoulder, reconstruction of existing roadway, installing guardrails, pavement markings, centerline monuments and striping.
- The Contractor's attention is directed to Subsection 107.13 - Public Convenience and Safety, Section 645 - Traffic Control and Subsection 107.14 barricades and warning signs of the standard specifications and/or special provisions.
- At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic. Stockpiling of materials within the right-of-way is not permitted.
- The existence and location of monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of the work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- The Contractor shall coordinate his operations with Hawaii Volcanoes National Park by contacting Mr. Dan Footer, Maintenance Section at phone no. 967-8133.
- The Contractor shall remove and dispose of all existing raised pavement markers prior to the overlaying of Asphalt Concrete Pavement, Mix No. V. This work will not be paid for separately but shall be considered incidental to Asphalt Concrete Pavement, Mix No. V.
- The Contractor shall coordinate work with the U.S. Geological Survey if any benchmarks are to be relocated.
- Existing pavement section variable. Section indicated here is not intended to represent any specific location.
- Tack coat shall be incidental to Item No. 401.0500, Asphalt Concrete Mix No. V.
- Location of construction warning signs to be determined by the Engineer. Upon completion of this project the contractor shall remove and dispose of construction warning signs at his cost.
- Tack coat shall be incidental to Item No. 401.0500, Asphalt Concrete Mix No. V.
- The exact locations and limits of reconstruction shall be determined in the field by the Engineer.
- All saw cutting work shall be considered incidental to roadway excavation.
- Contractor is responsible to provide mitigating measures for pavement dropoffs within the traveled way and shoulders of the highway and for open excavations adjacent to roadways.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

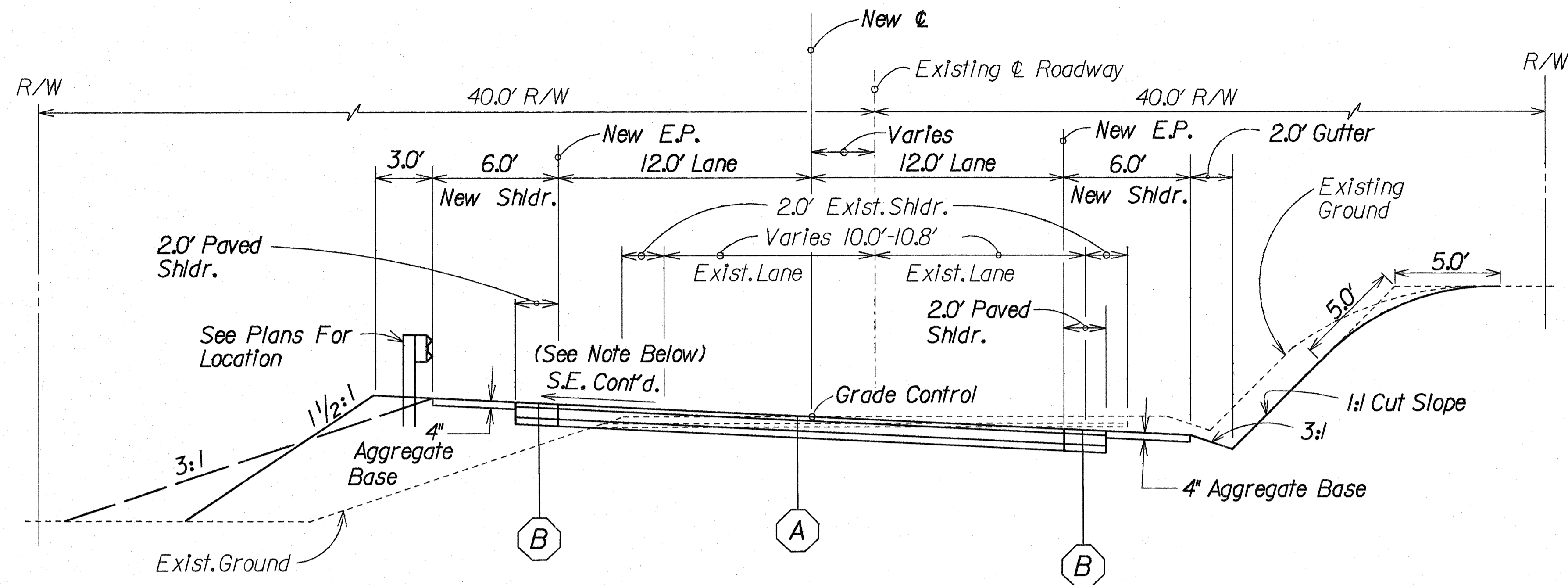
TYPICAL SECTIONS

MAMALAHOA HIGHWAY
VOLCANOES NATIONAL PARK
Mile Post 33.3 to Mile Post 34.7
F.A. PROJ. NO. FLH-011-2(19)

Scale: As Shown Date: April 1989
SHEET No. 1 OF 2 SHEETS

SURVEY PLANNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(19)	1988	4	29



REALIGNED CURVE SECTION

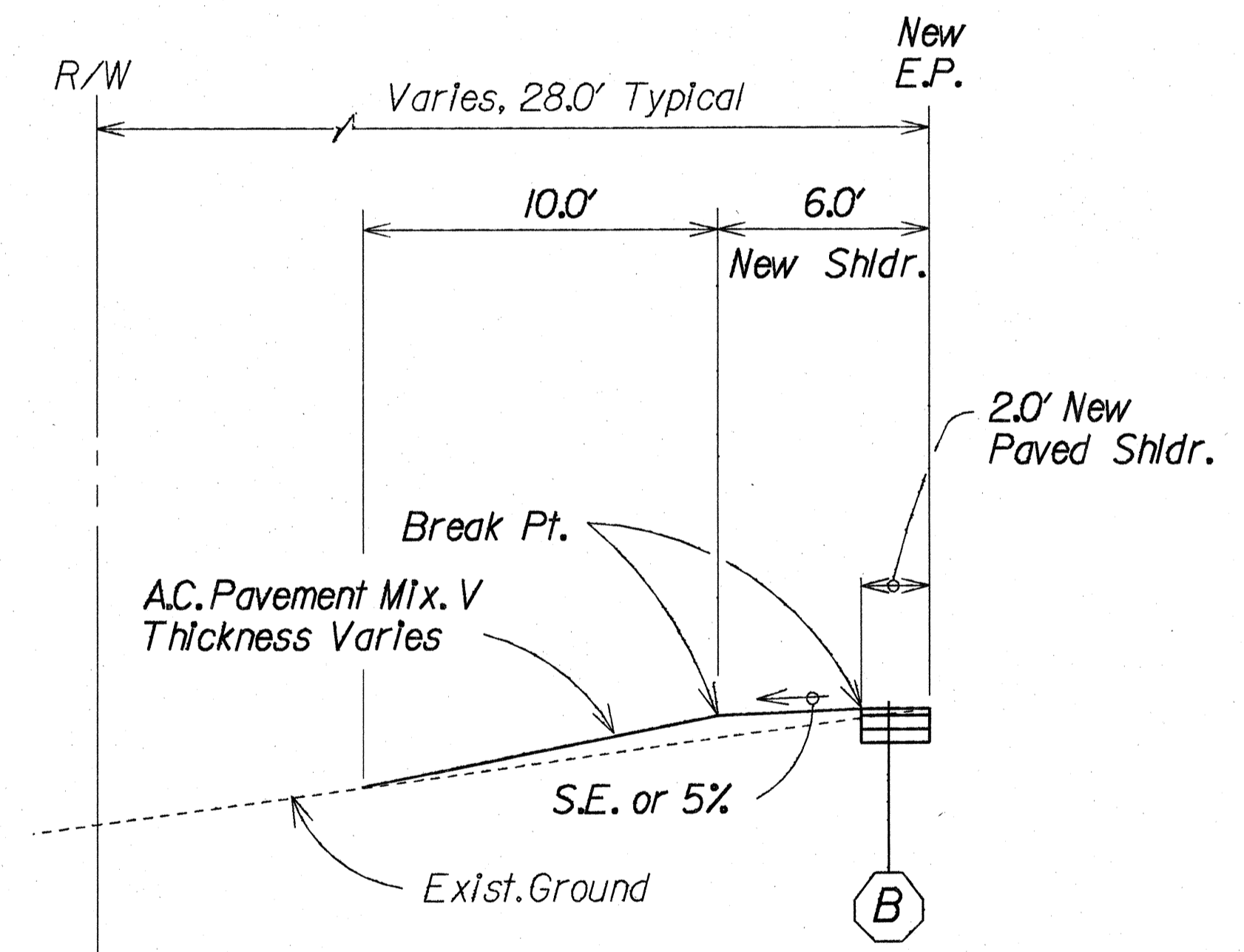
Scale: 1/4" = 1' - 0"

Note: Use superelevation rate for realigned curve and tangent section as shown on sheet nos. 15 & 16.

Station - Station	New Striping			Dist. (L.F.)	New Markers			Comments
	4" Yellow (L.F.)		4" White E.P. (L.F.)		Type "D"	Type "H"	Type "J"	
	Double	Single						
42+35.74 - 47+31.20	---	4965	---	495.5	#213	#214	#215	One Way Passing
47+31.20 - 54+47.60	686	---	---	686.4	#3536	---	---	No Passing
54+47.60 - 58+57.24	---	440	---	439.6	#110	#118	#119	One Way Passing
81+80.36 - 87+51.42	571	---	---	571.1	#2930	---	---	No Passing
94+47.34 - 101+22.14	705	---	---	704.8	35	---	---	No Passing
30+27.02 - 102+73.24	---	---	14492	---	---	---	---	Edge Striping
29+00 - 104+00	Total	1962	9365	14492	186	49	96	
30+27.02 - 32+80						6	24	
57+63.77 - 58+57						2	---	
64+70 - 72+30						12	---	

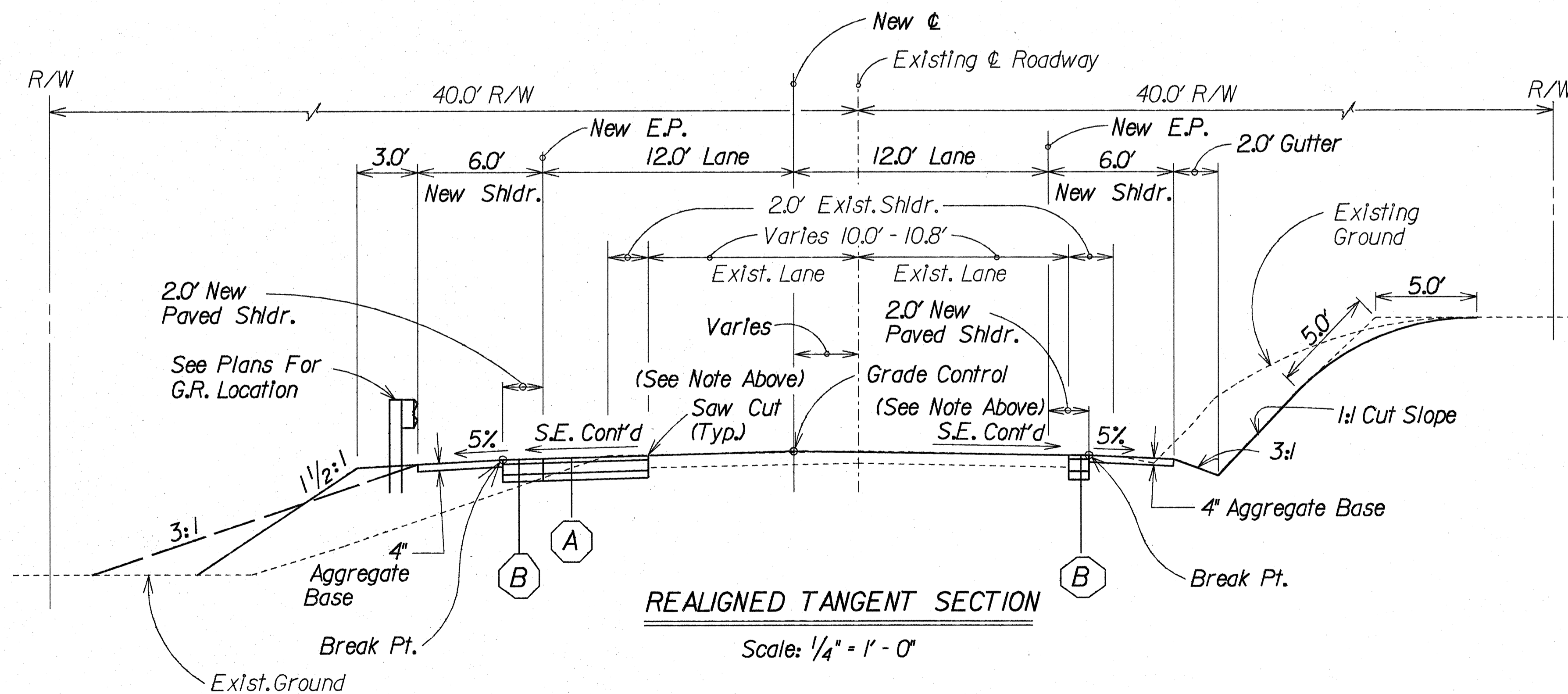
Note:

Existing Pavement Markers and striping to Remain Unless Otherwise Noted.



SIDE ROAD

Scale: 1/4" = 1' - 0"



REALIGNED TANGENT SECTION

Scale: 1/4" = 1' - 0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

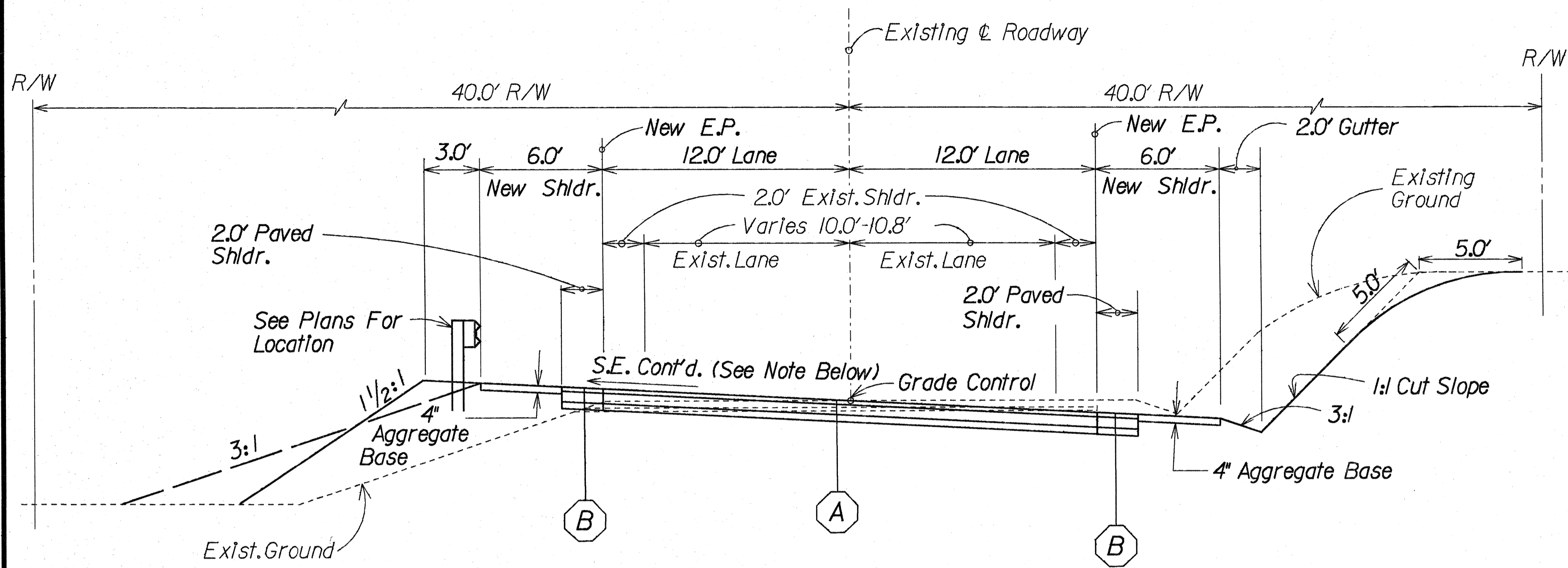
MAMALAHOA HIGHWAY
VOLCANOES NATIONAL PARK
Mile Post 33.3 to Mile Post 34.7
F.A. PROJ. NO. FLH-011-2(19)

Scale: As Shown Date: April 1989

SHEET No. 2 OF 2 SHEETS

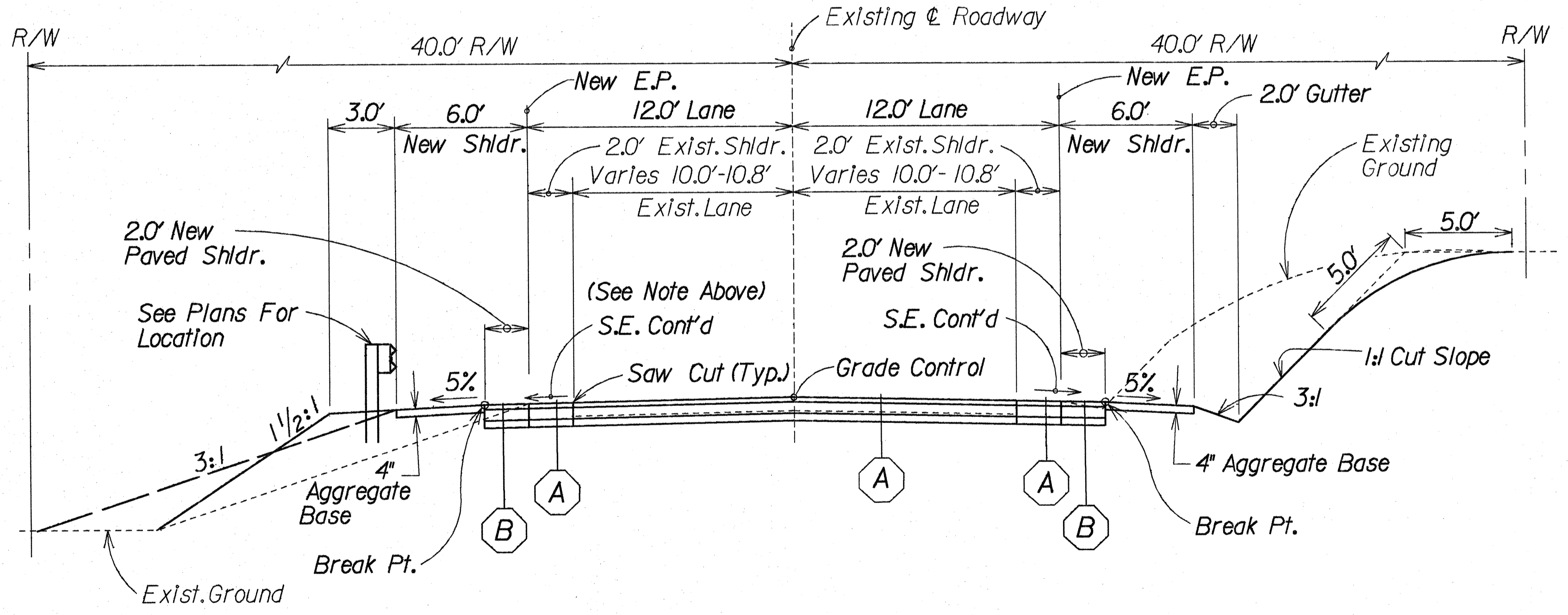
SURVEY PLOTTED BY _____ DATE _____
 DESIGNED BY _____
 CHECKED BY _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 N. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(19)	1988	4	29



RECONSTRUCTED CURVE SECTION
Scale: 1/4" = 1'-0"

Note: Use superelevation rate for reconstructed curve and tangent section as shown on sheet nos. 15 & 16



RECONSTRUCTED TANGENT SECTION
Scale: 1/4" = 1'-0"

DESIGNED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL SECTIONS
MAMALAHOA HIGHWAY
VOLCANOES NATIONAL PARK
Mile Post 33.3 to Mile Post 34.7
F.A. PROJ. NO. FLH-011-2(19)
Scale: As Shown Date: April 1989
SHEET No. 2 OF 2 SHEETS