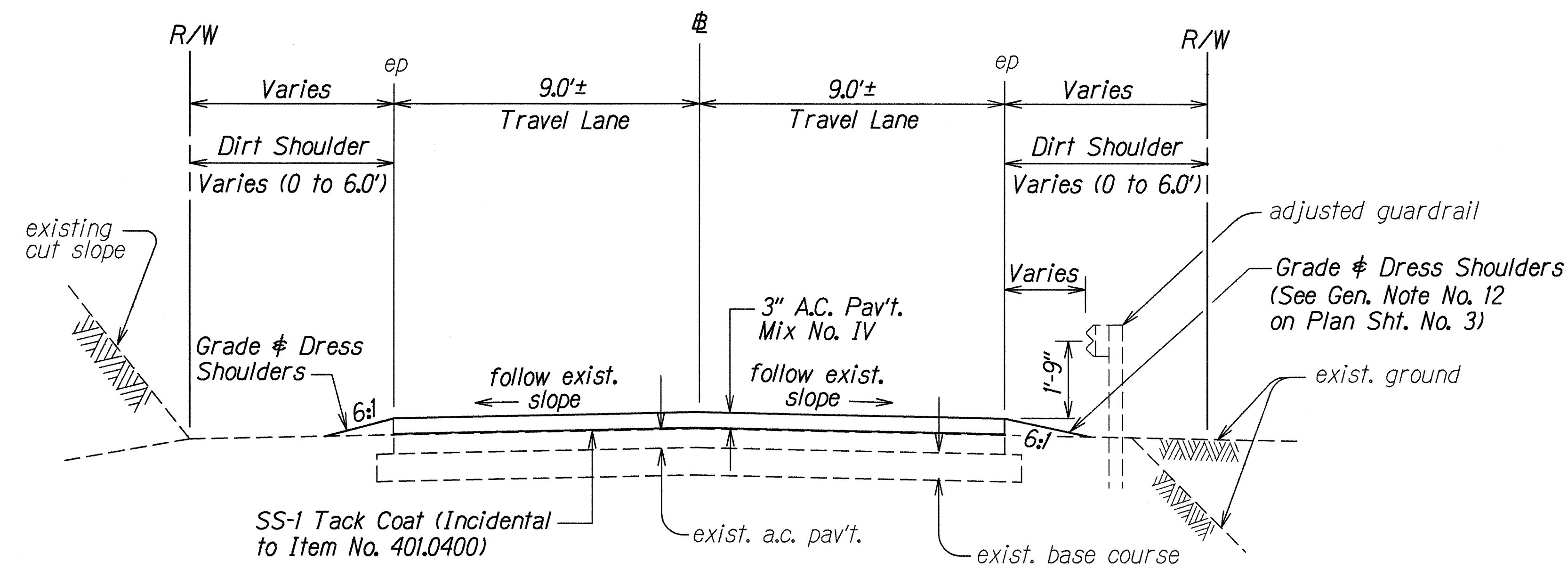
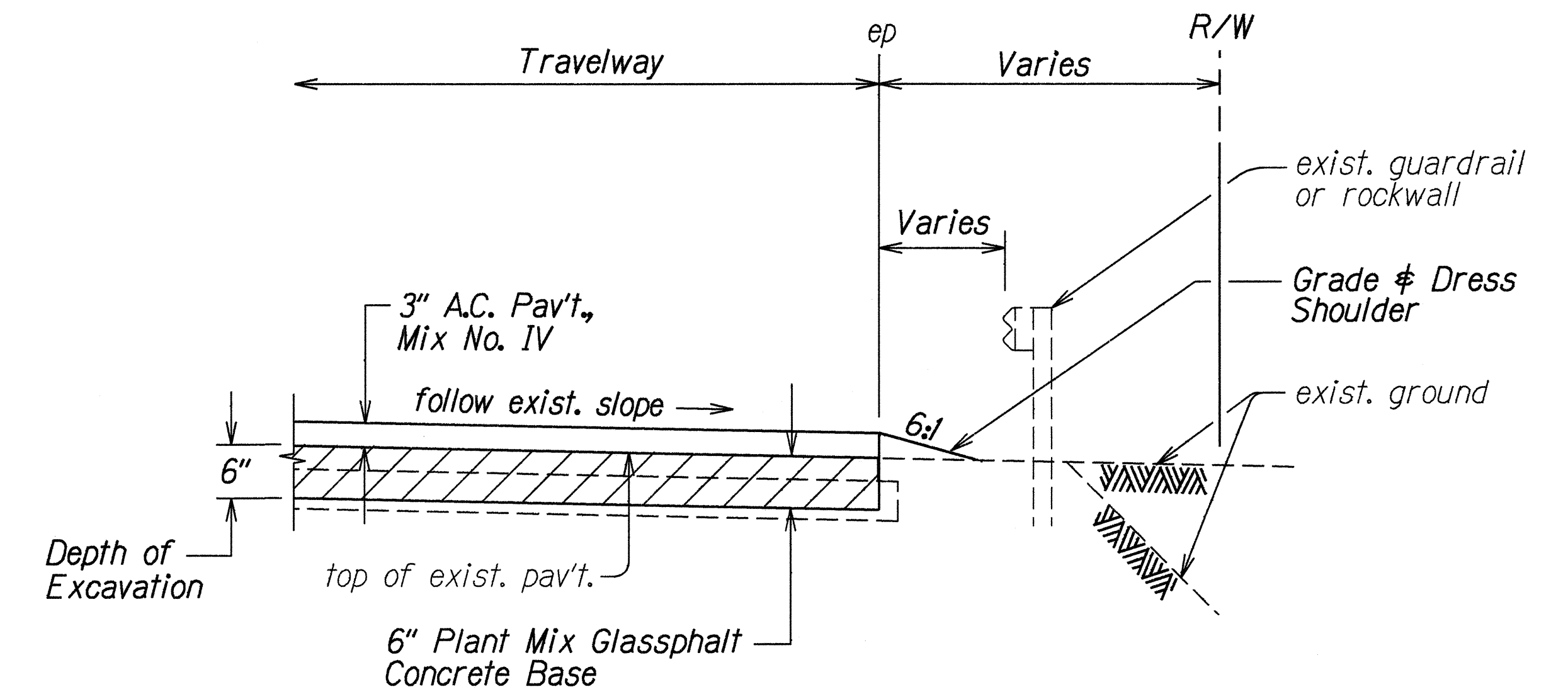


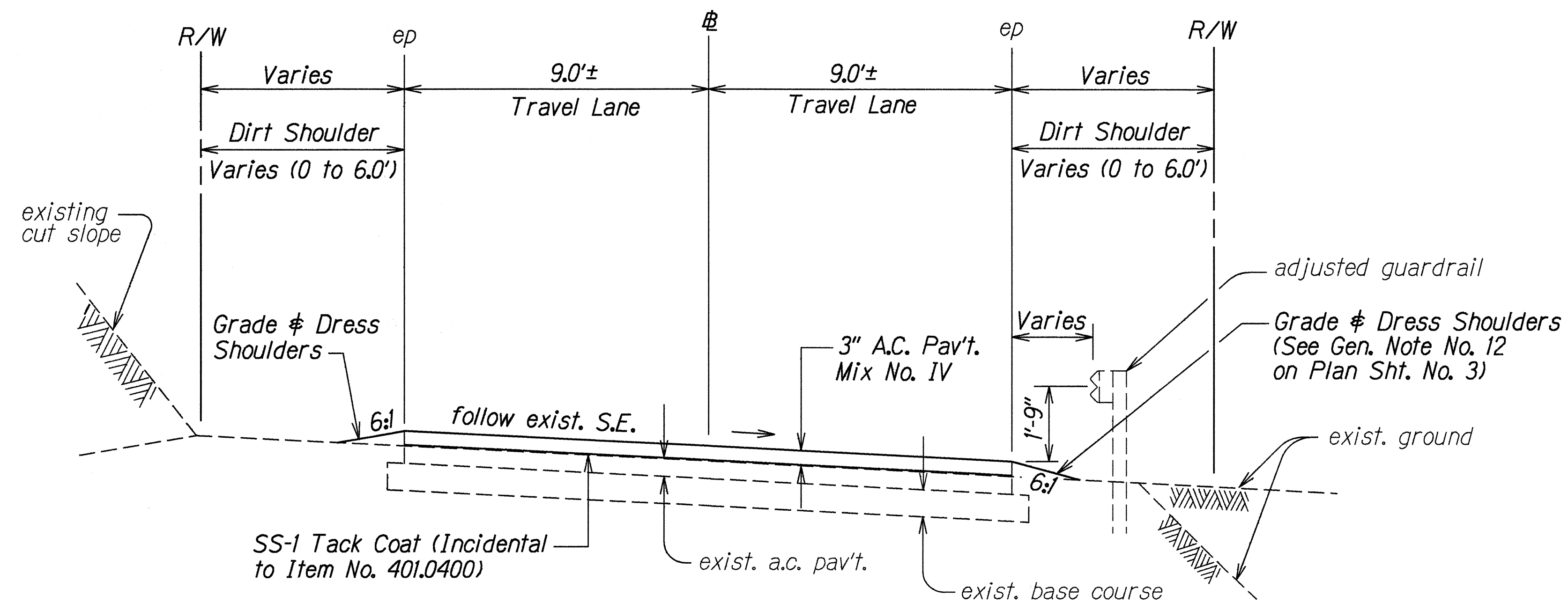
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	560A-01-99M	1999	4	23



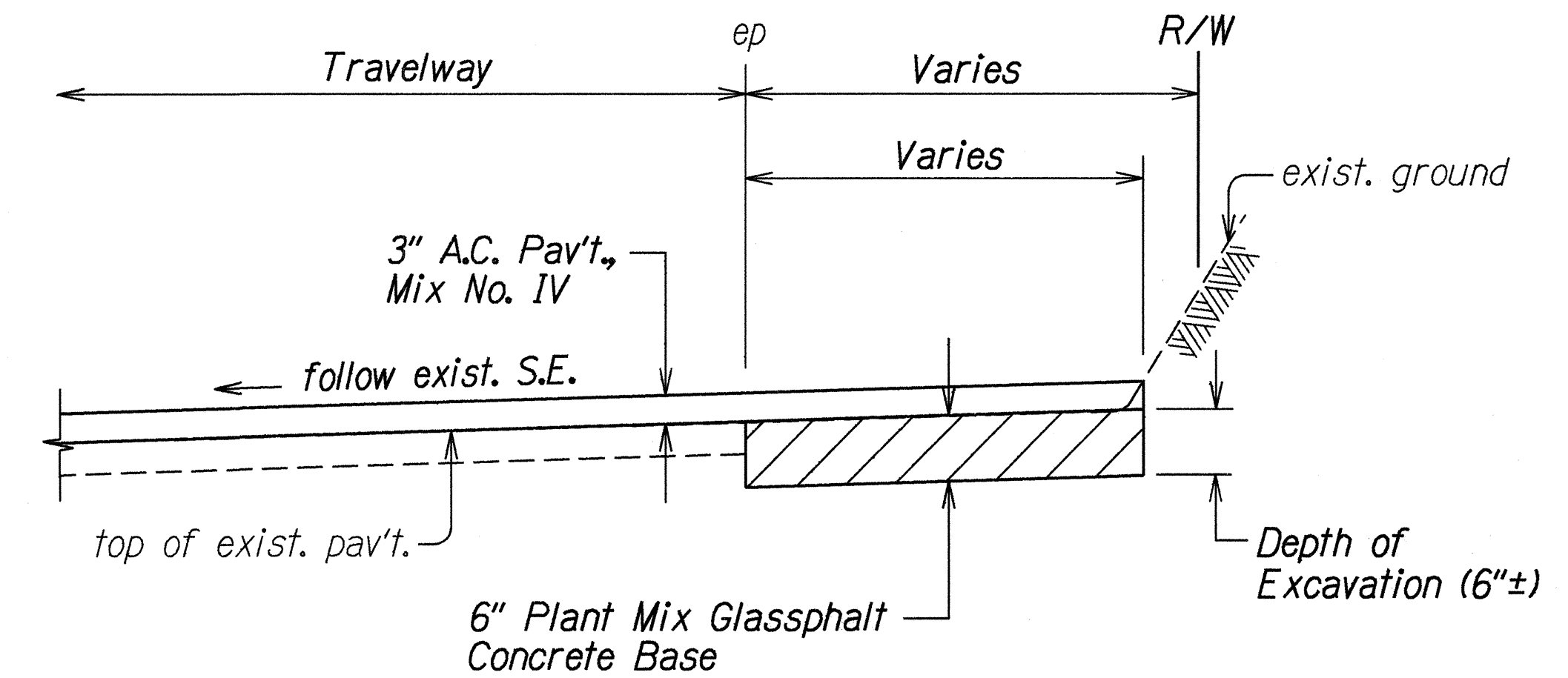
**TANGENT SECTION**  
Scale:  $\frac{3}{8}" = 1'-0"$



**A.C. PAVEMENT RECONSTRUCTION DETAIL**  
Not to Scale



**SUPERELEVATED SECTION**  
Scale:  $\frac{3}{8}" = 1'-0"$



**SHOULDER CONSTRUCTION AT LOOKOUT AREA**  
STA. 156+00± TO STA. 156+50±  
Not to Scale

ORIGINAL PLAN	DATE: 2-09-99
SURVEY PLANNED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

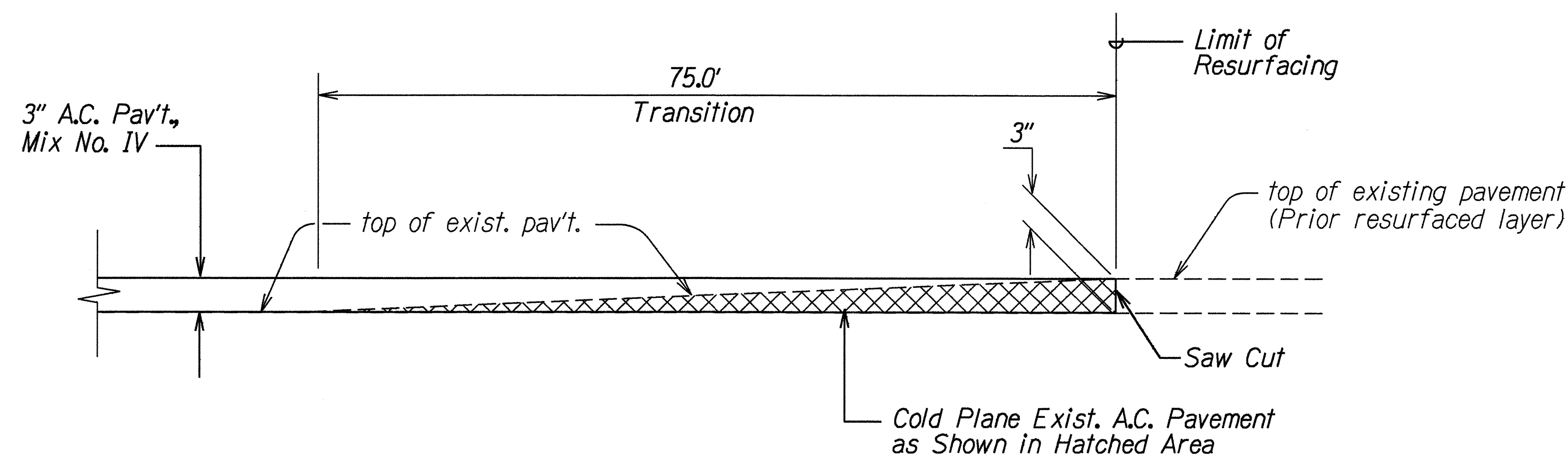
**TYPICAL SECTIONS**

**KUHIO HIGHWAY RESURFACING**  
Vicinity of Lumahai Bridge to Alealea Road  
Project No. 560A-01-99M

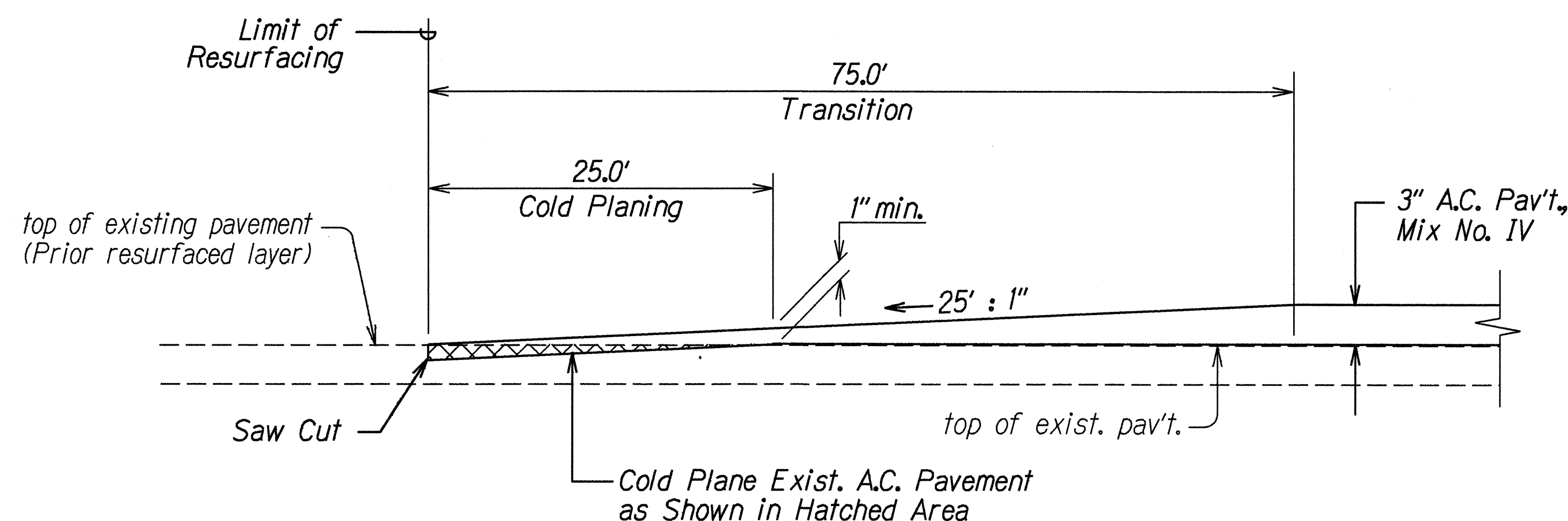
Scale : As Shown Date: February, 1999

SHEET No. 1 OF 5 SHEETS

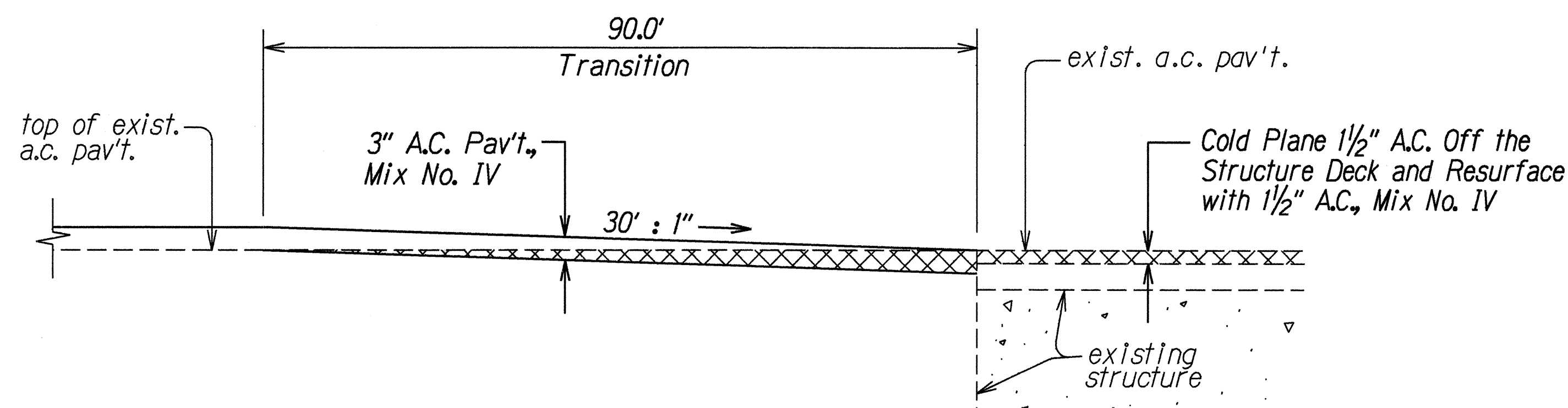
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	560A-01-99M	1999	5	23



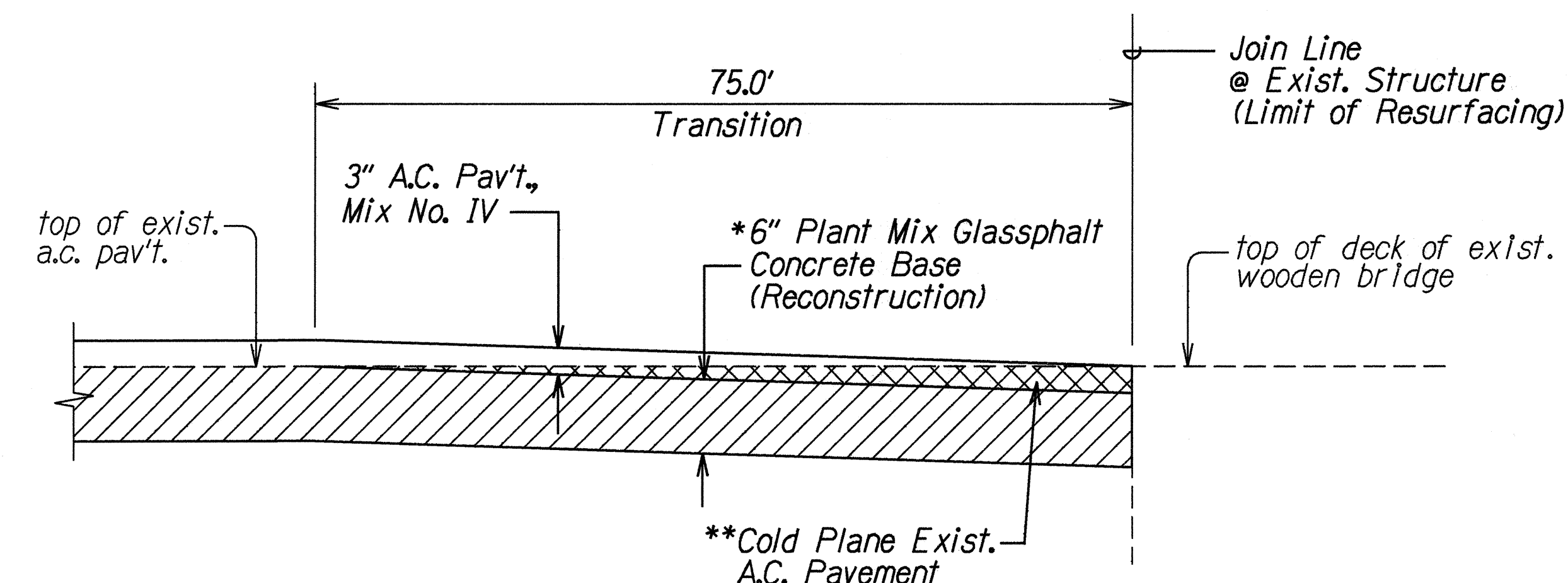
**COLD PLANED TRANSITION TO EXISTING A.C. PAVEMENT  
AT BEGINNING OF PROJECT**  
Not To Scale



**COLD PLANED TRANSITION TO EXISTING A.C. PAVEMENT  
AT END OF PROJECT**  
Not To Scale



**TRANSITION AT HAENA STRUCTURE #1**  
Not To Scale

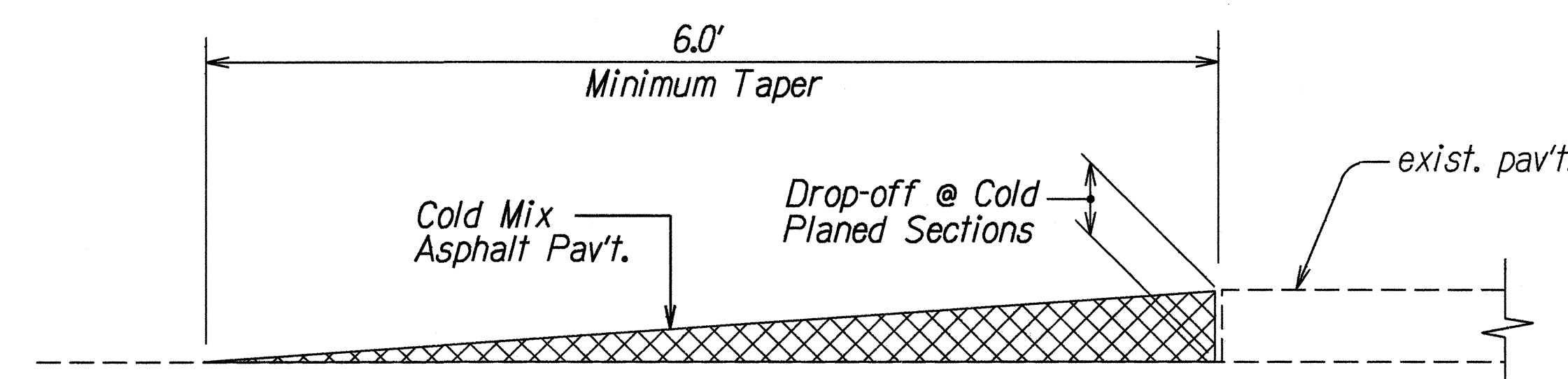


**TRANSITION AT WOODEN STRUCTURE**  
Not to Scale

\*When reconstruction is not shown or noted on the plans, delete detail for reconstruction of weakened pavement area. Work involves cold planing and resurfacing only.

At reconstruction areas, cold planing is not required.

\*\*The pavement section between Wainiha Bridge No. 2 and Bridge No. 3 shall be cold planed and resurfaced as noted in Plan Sht. No. 13. Transition and reconstruction not required.



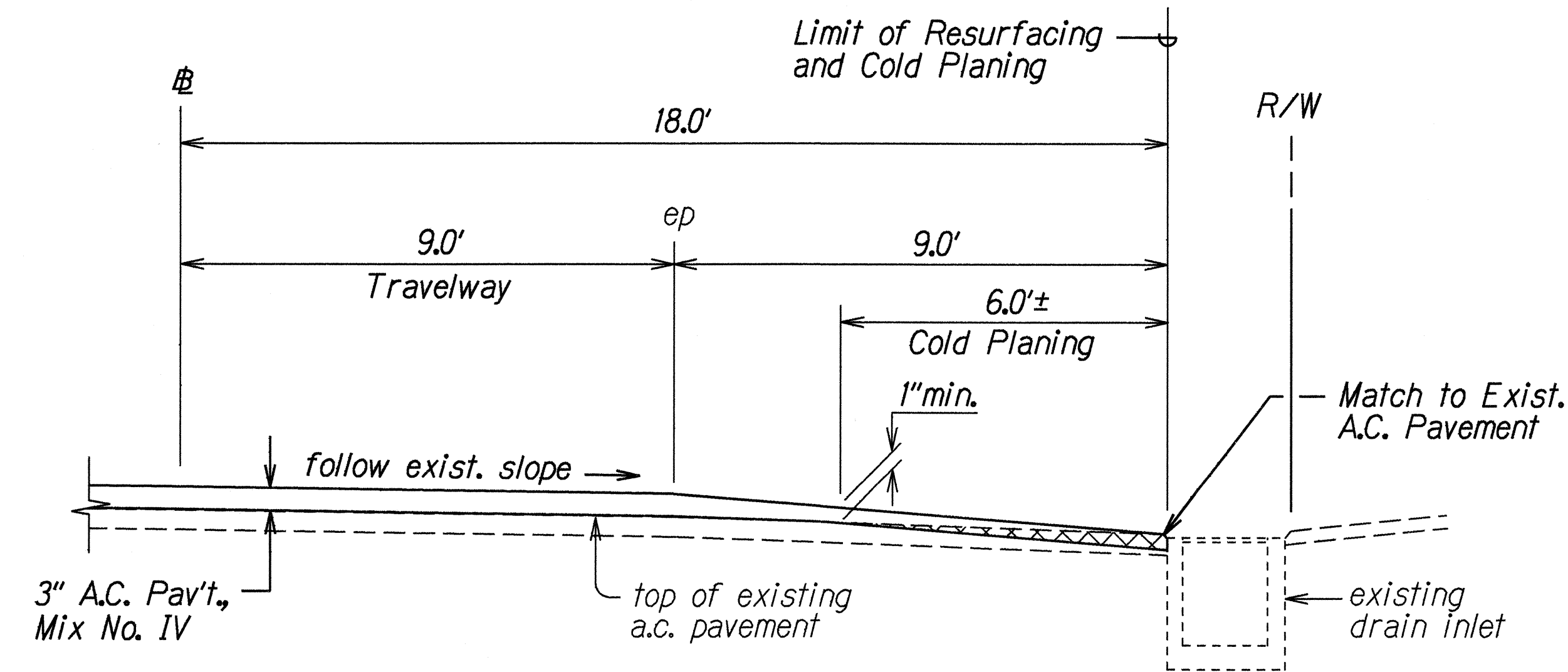
**TEMPORARY TRANSITION AT  
COLD PLANED AREAS**  
Not to Scale

**Note:** Contractor shall construct temporary pavement taper to prevent sharp pavement drop-offs at all cold planed sections. Prior to final A.C. Mix No. IV placement, temporary pavement taper shall be removed.

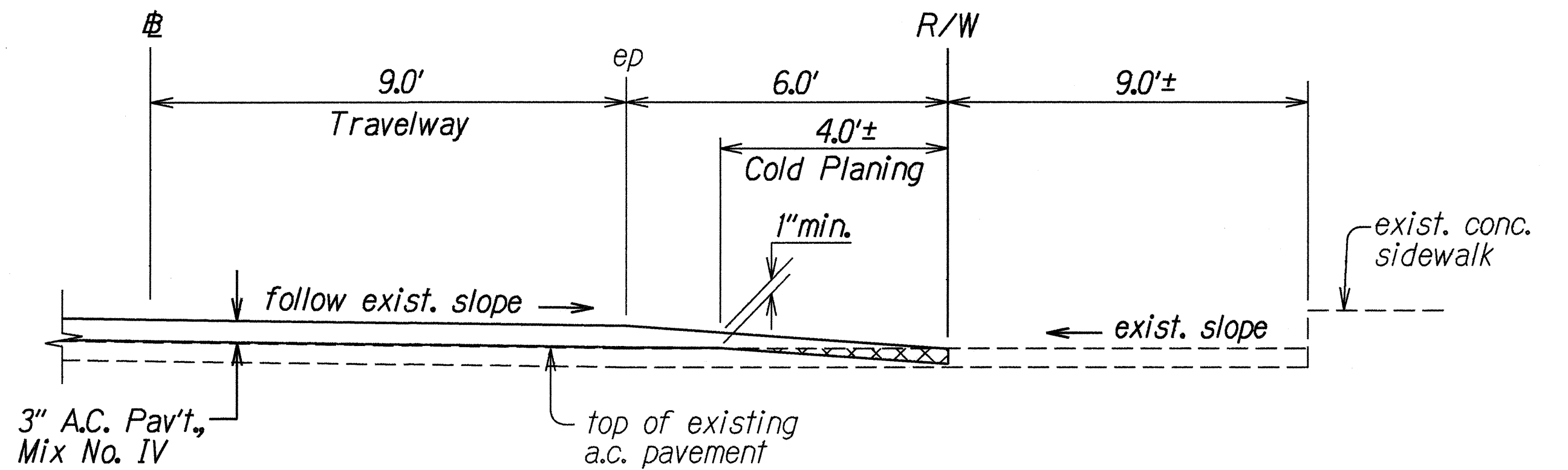
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>TYPICAL SECTIONS</b>	
KUHIO HIGHWAY RESURFACING Vicinity of Lumahai Bridge to Alealea Road Project No. 560A-01-99M	
Scale: As Shown	Date: February, 1999
SHEET No. 2 OF 5 SHEETS	



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	560A-01-99M	1999	6	23



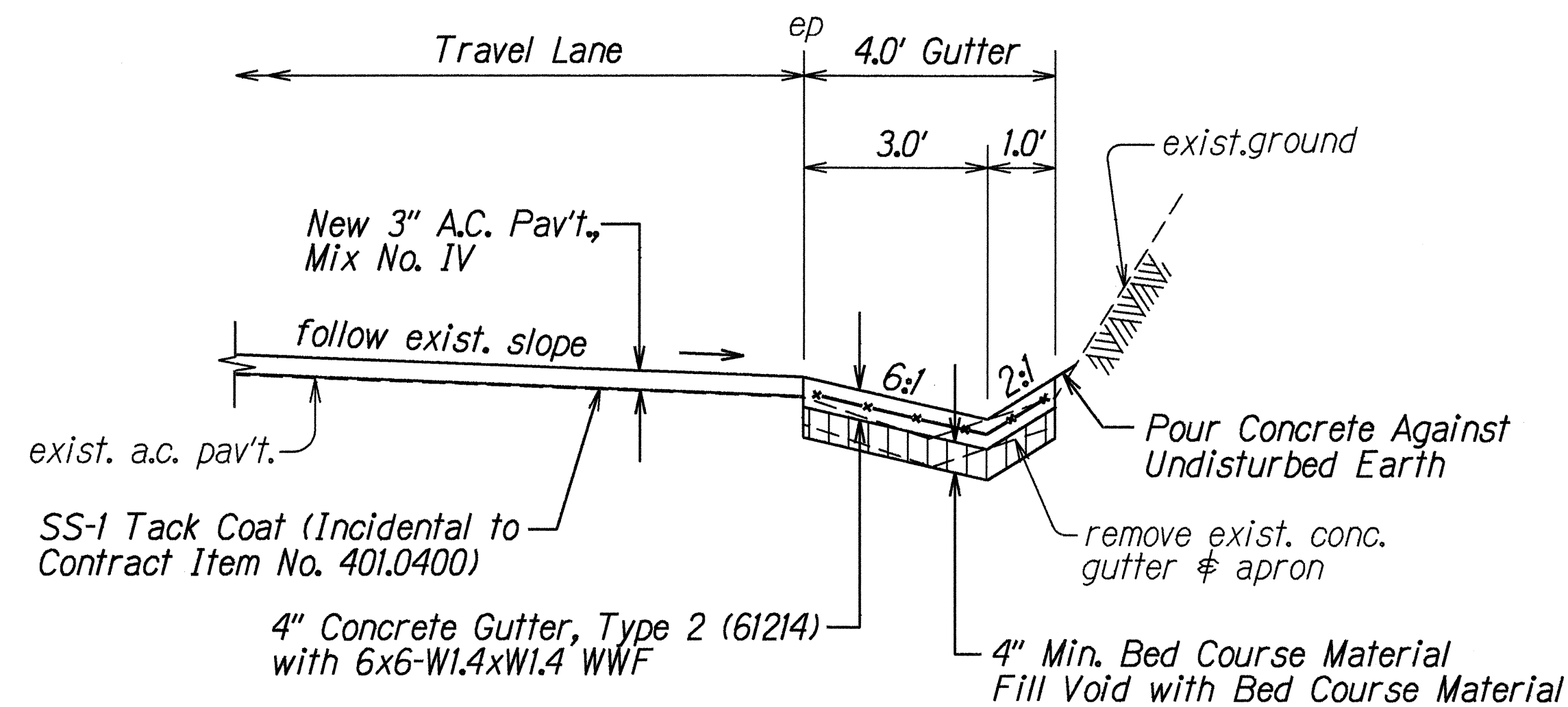
A. C. RESURFACING AT KUHIO HIGHWAY-  
POWERHOUSE ROAD INTERSECTION  
Not To Scale



A. C. RESURFACING AT STA. 185+00± TO STA. 186+10± o/s Rt.  
Not To Scale

NOTES FOR PORTABLE PHYSICAL BARRIERS:

1. Installation of portable concrete barriers shall conform to Manufacturer's recommendations.
2. Physical barriers shall be required whenever guardrails have been removed and will not be reinstalled at the end of the work day. See General Note No. 21 on Plan Sht. No. 3.
3. Physical barriers shall be either portable concrete barriers or portable water-filled barriers. Installation of portable water-filled barriers shall conform to Manufacturer's recommendations as dictated by design speed and field conditions.
4. Providing, transporting, placing, maintaining, relocating and removing physical barriers shall be considered incidental to the various items of work. See Section 645, TRAFFIC CONTROL DEVICES of the Special Provisions.
5. Ends of portable barriers shall be protected with Inertial Barriers. Installation of inertial barriers shall conform to Manufacturer's recommendations and approved by the Engineer. Furnishing and installing inertial barriers shall be considered incidental to the various contract items.
6. Furnishing and installing reflector markers (RM-3) over the portable barriers shall be considered incidental to the various contract items.



A. C. RESURFACING AT STA. 192+70± TO STA. 194+20± o/s Rt.  
Not to Scale

NOTES:

1. Removing and disposing of existing concrete gutter and apron shall be paid under Contract Item No. 202.0100 - Removal of Concrete Gutter.
2. Pouring concrete against undisturbed earth shall be considered incidental to Contract Item No. 609.2214 - Gutter, Type 2 (61214).
3. Bed Course material for concrete gutter shall be considered incidental to Contract Item No. 609.2214 - Gutter, Type 2 (61214).

DESIGNED BY	DATE
DRAWN BY	2/08/99
CHECKED BY	
IN CHARGE	
APPROVED BY	
REVISIONS	
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE

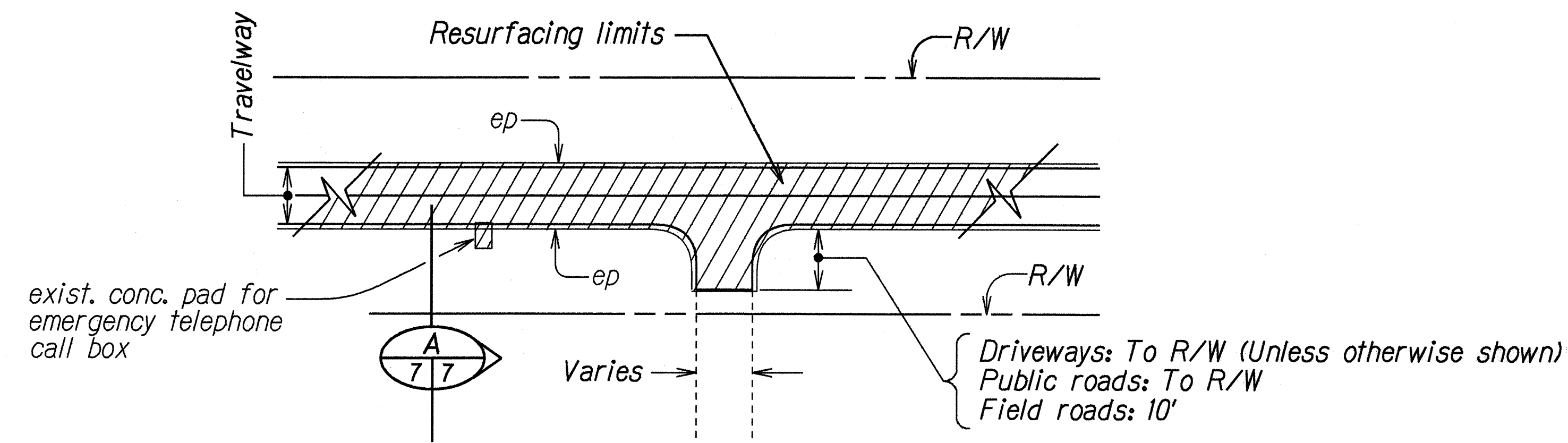
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS**  
  
**KUHIO HIGHWAY RESURFACING**  
Vicinity of Lumahai Bridge to Alealea Road  
Project No. 560A-01-99M

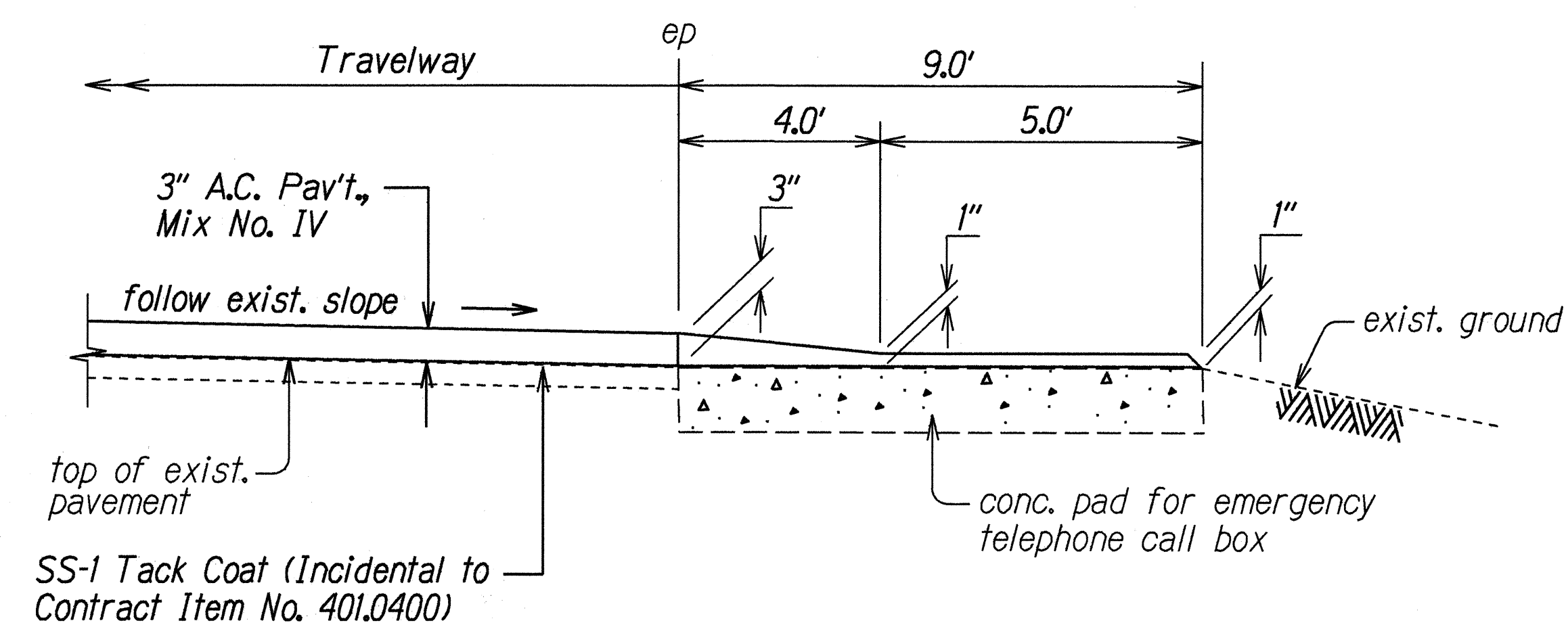
Scale: As Shown  
Date: February, 1999

SHEET No. 3 OF 5 SHEETS

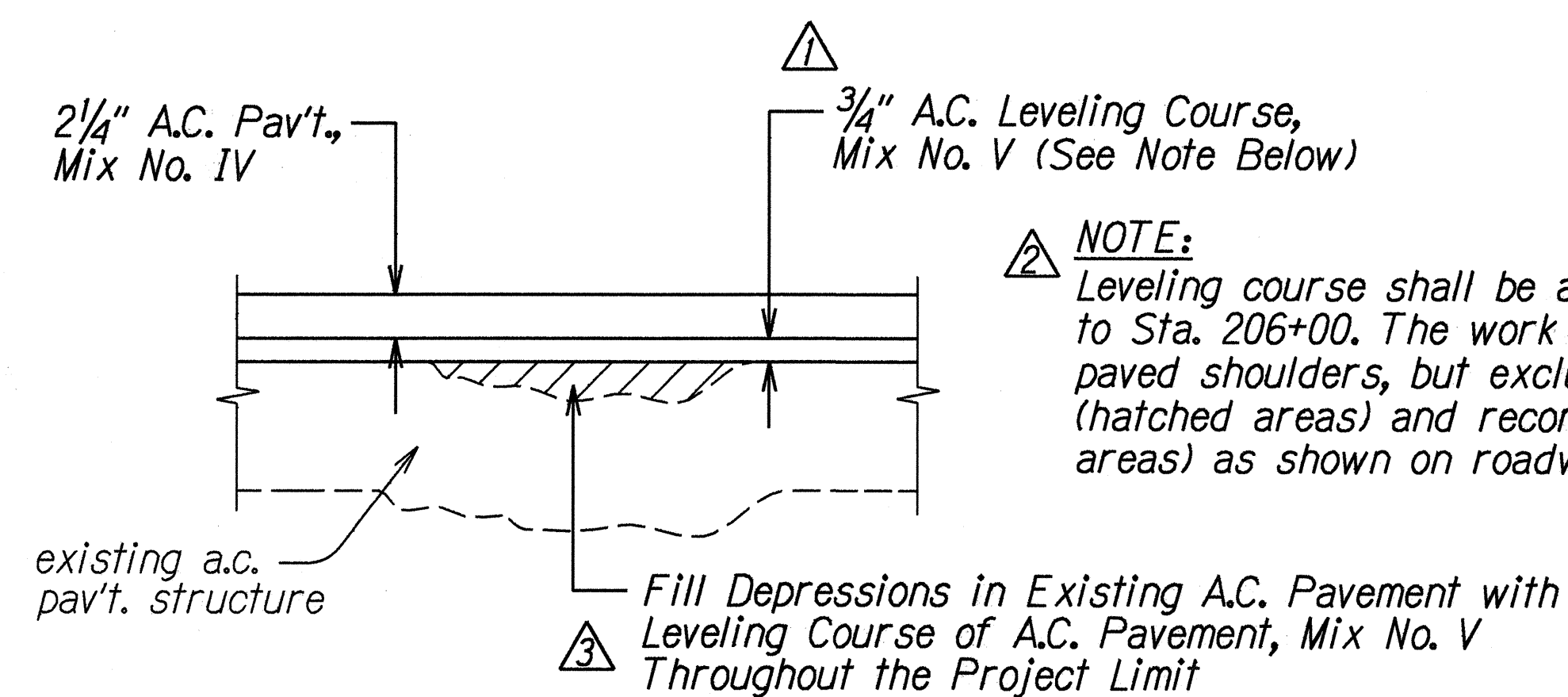
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	560A-01-99M	1999	ADD. 7	23



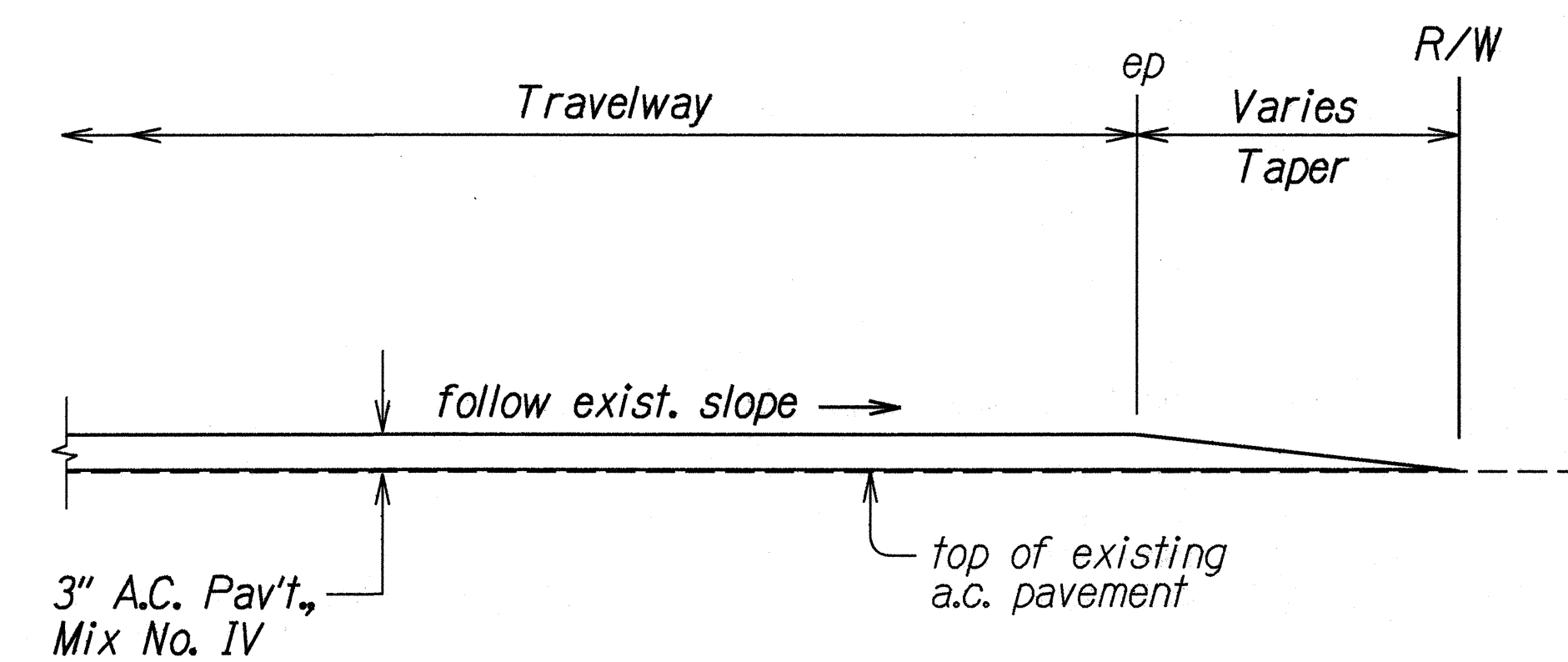
PLAN  
TYPICAL RESURFACING LIMITS  
Not To Scale



SECTION  
Not to Scale

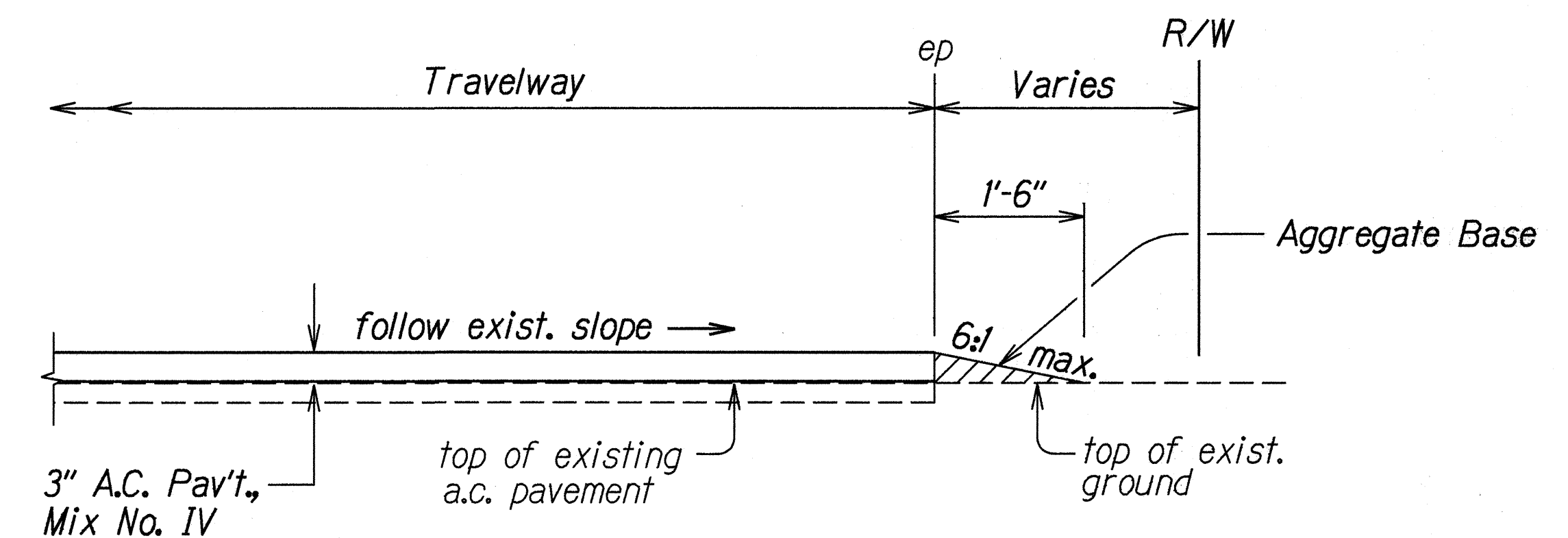


LEVELING COURSE DETAIL  
Not To Scale



A. C. RESURFACING AT PAVED SIDEROAD  
OR PAVED DRIVEWAY DETAIL  
Not To Scale

**NOTE:** When shown on the plans, driveways and/or public roadways shall be cold planed prior to resurfacing.



A. C. RESURFACING AT UNPAVED SIDEROAD  
OR UNPAVED DRIVEWAY DETAIL  
Not To Scale

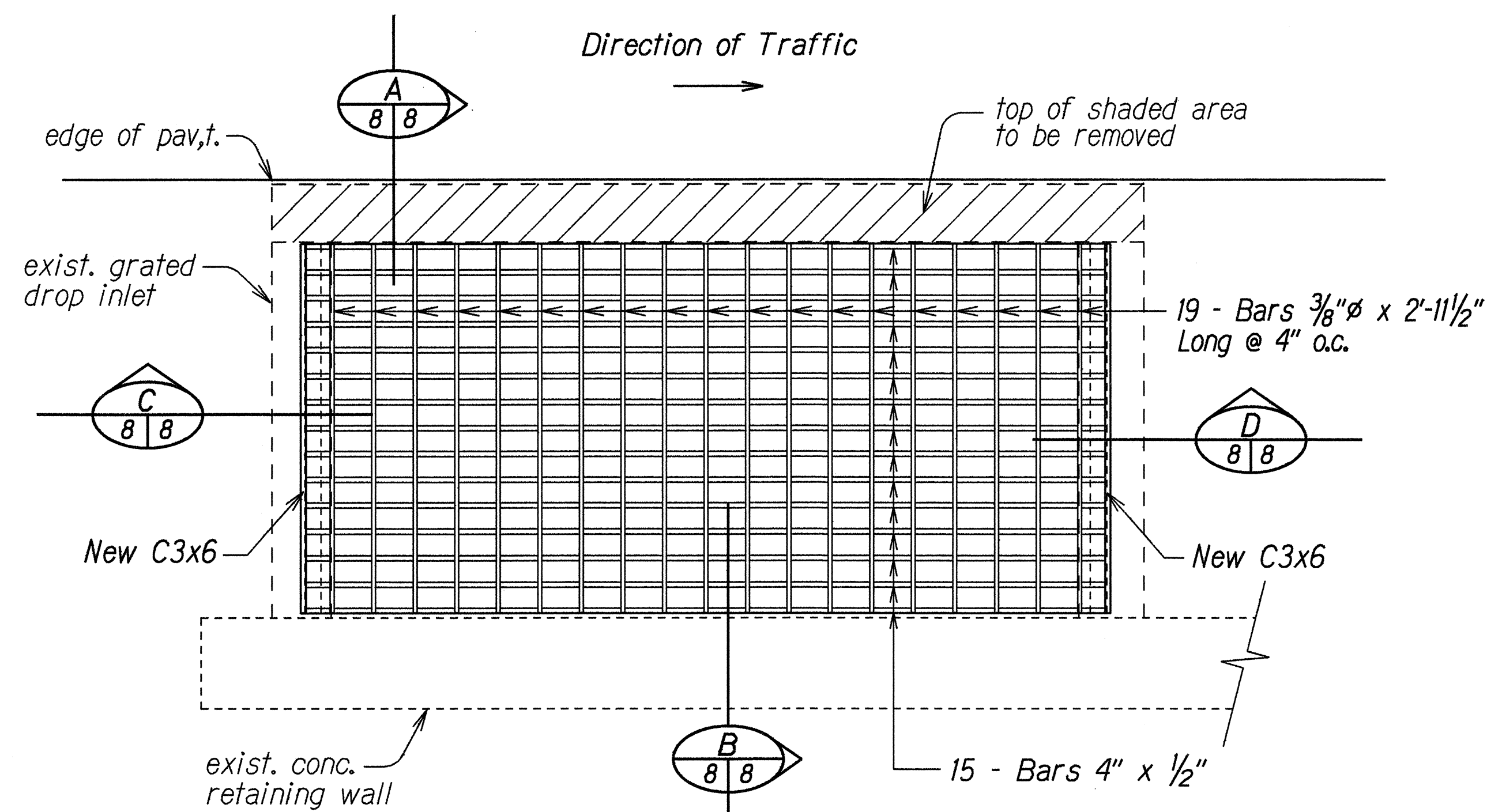
**NOTE:** Aggregate Base Course for unpaved sideroads and driveways shall not be paid for separately, but shall be considered incidental to Contract Item No. 401.0400 - Asphalt Concrete Pavement, Mix No. IV.

6/08/99	Revised Callout for A.C. Leveling Course
	Added Note for A.C. Leveling Course
	Revised Callout for Depressions in Existing Pavement

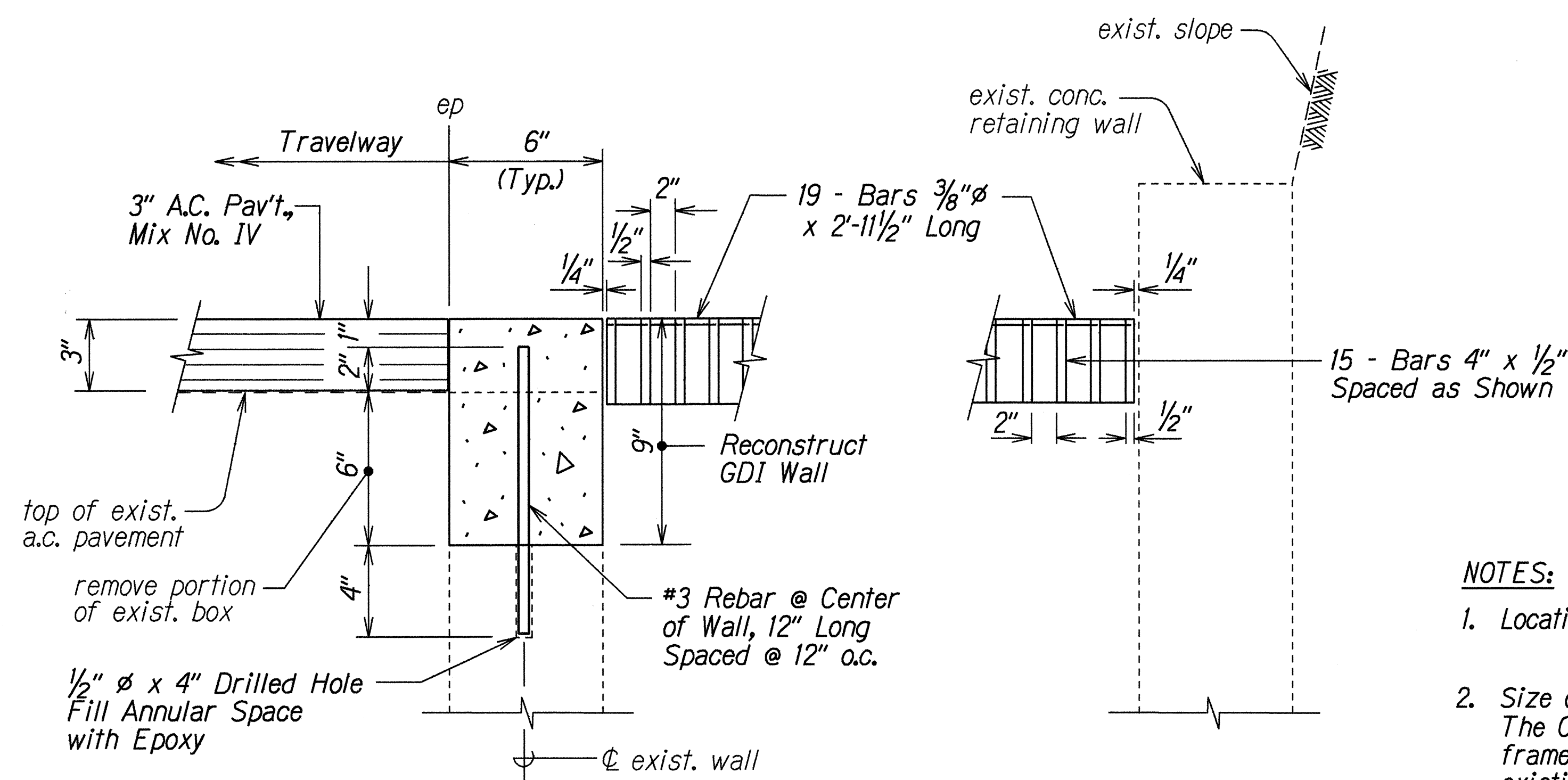
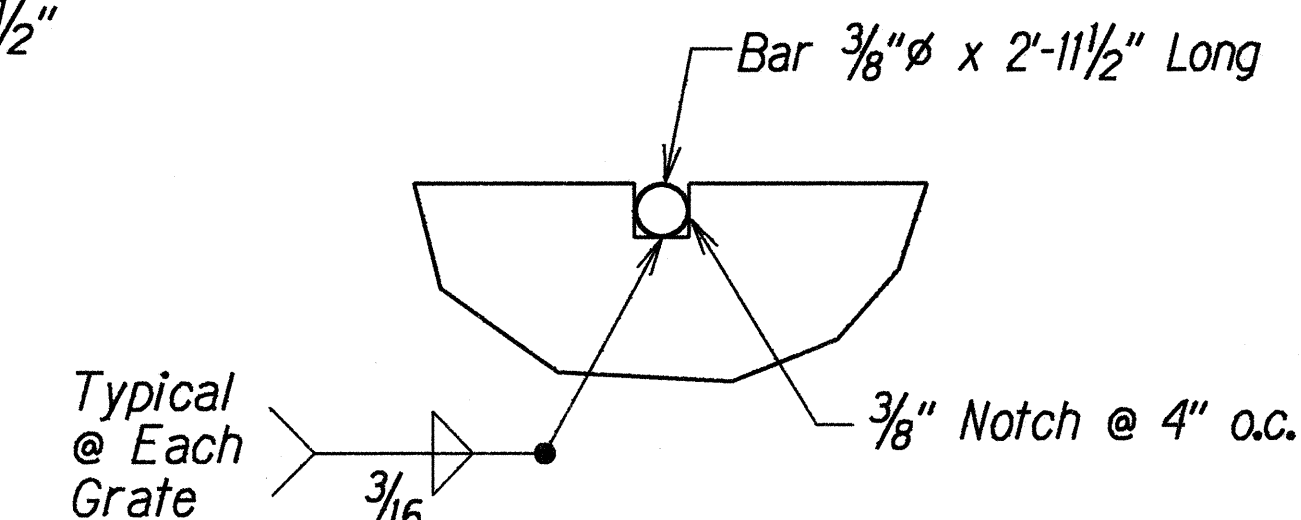
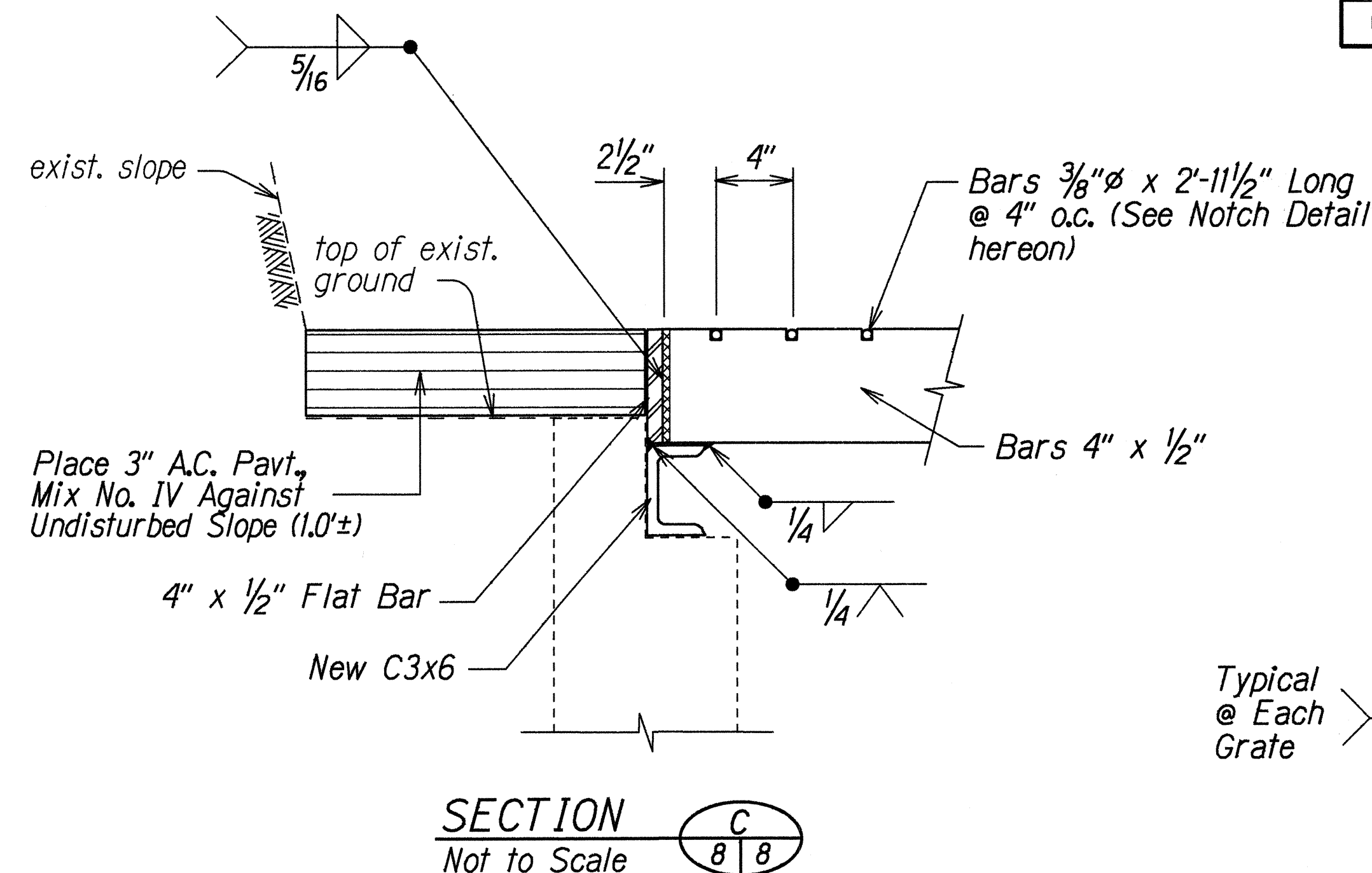
DATE	REVISION
	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
	<b>TYPICAL SECTIONS</b>
	<b>KUHIO HIGHWAY RESURFACING</b>
	<b>Vicinity of Lumahai Bridge to Alealea Road</b>
	<b>Project No. 560A-01-99M</b>
Scale: As Shown	Date: February, 1999
SHEET No. 4	OF 5 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	560A-01-99M	1999	8	23

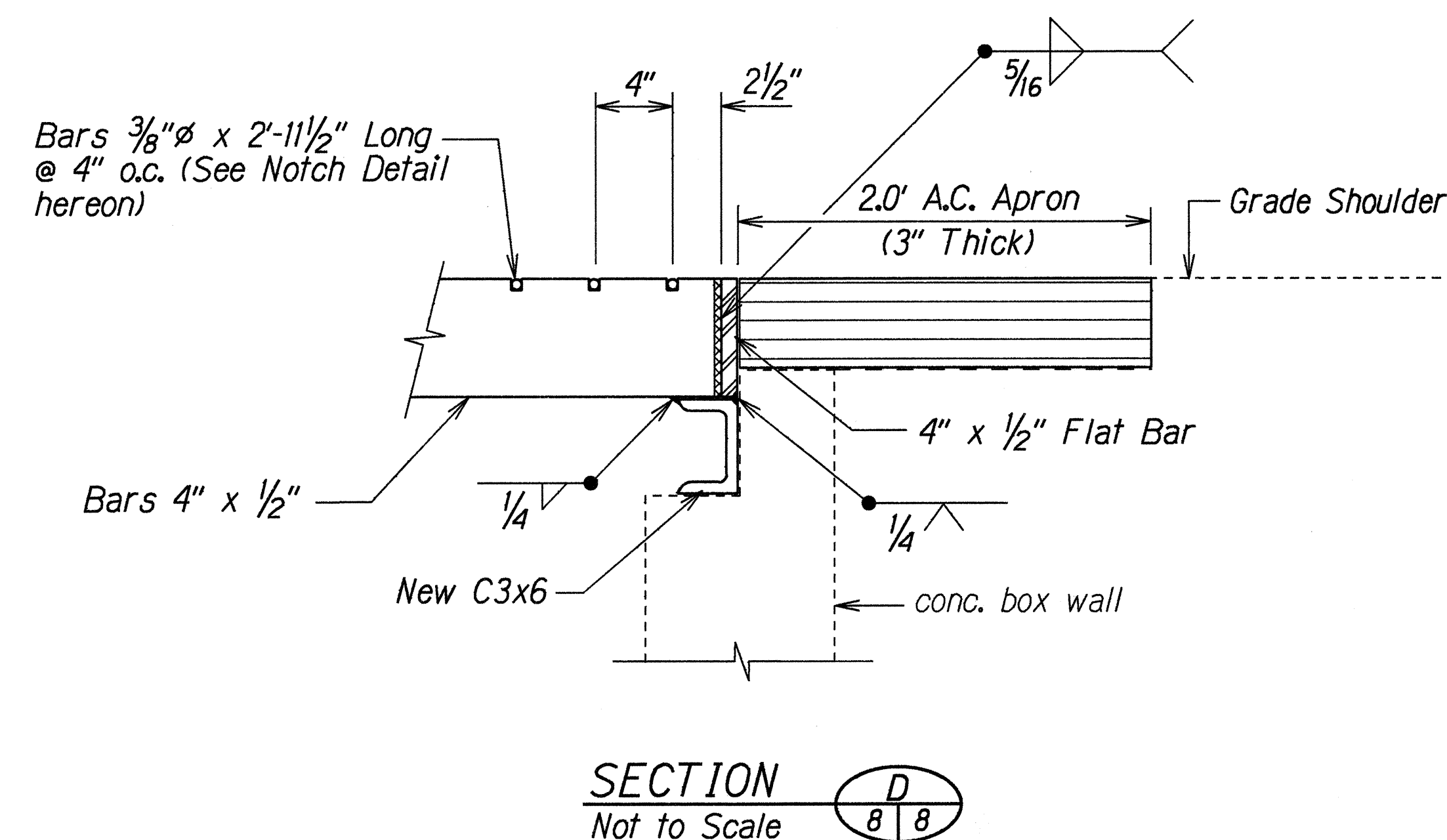


PLAN - EXISTING GRATED DROP INLET (TYP.)  
Not to Scale



SECTION A  
Not to Scale

SECTION B  
Not to Scale



NOTES:

- Location of existing grated drop inlet : Sta. 192+70 $\pm$  o/s Rt.  
# Sta. 198+30 $\pm$  o/s Rt.
- Size of existing steel frame : 6.5 ft. x 3.0 ft. (typ.)  
The Contractor shall verify in the field the exact dimensions of the frames to be replaced. Length of steel bars may change depending on existing frame dimensions. Spacing of bars shall remain as shown.
- All steel items shall be hot-dip galvanized after fabrication.
- Apply two layers of zinc coating to all welded areas after installation.
- Removing and disposing of existing steel frames, grates and concrete boxes or any portions thereof, and furnishing and installing new steel frames, grates, structural sections, concrete and reinforcing steel shall be considered incidental to Contract Item No. 604.4240 - Adjusting Grated Drop Inlet for Storm Drain.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL SECTIONS**

**KUHIO HIGHWAY RESURFACING**  
Vicinity of Lumahai Bridge to Aleale Road  
Project No. 560A-01-99M

Scale: As Shown Date: February, 1999

SHEET No. 5 OF 5 SHEETS