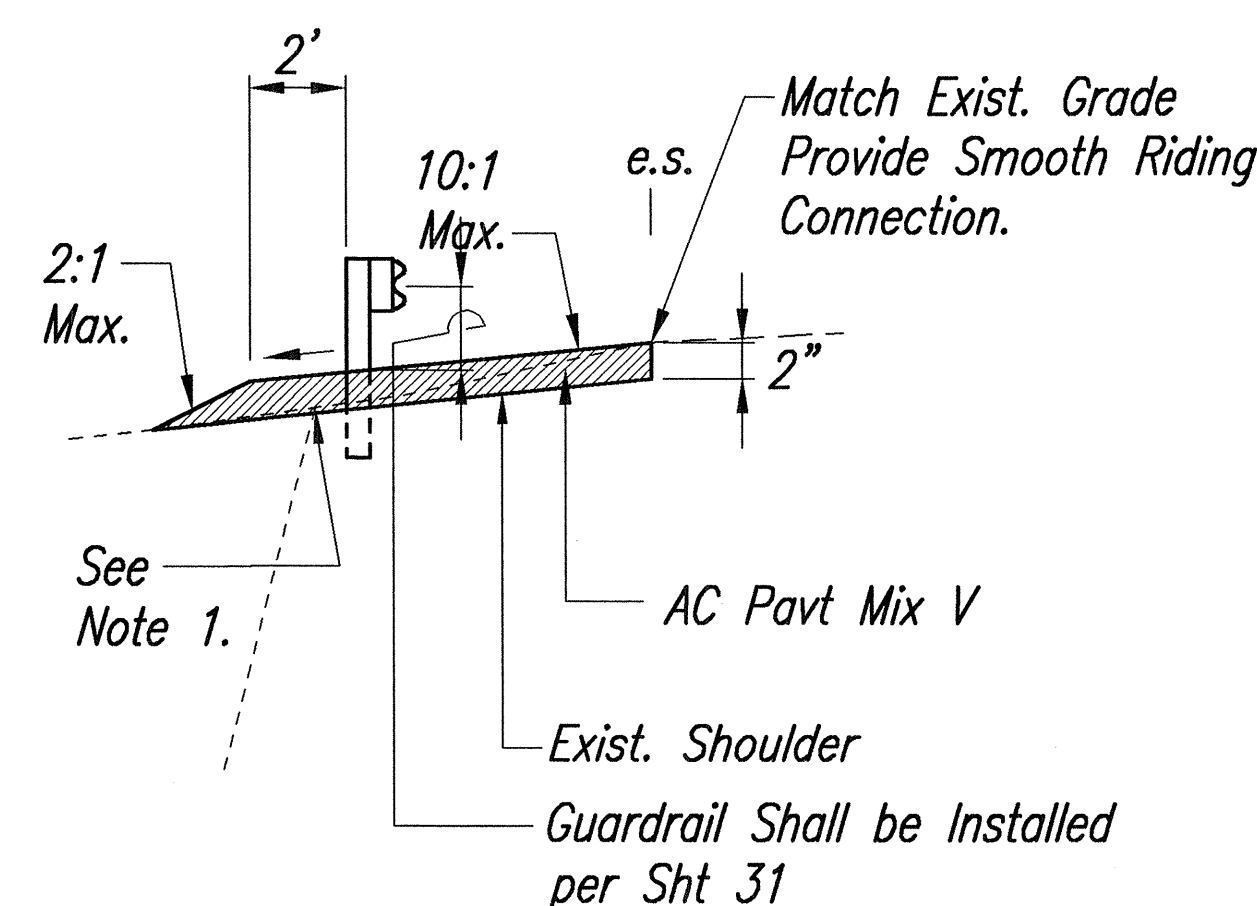
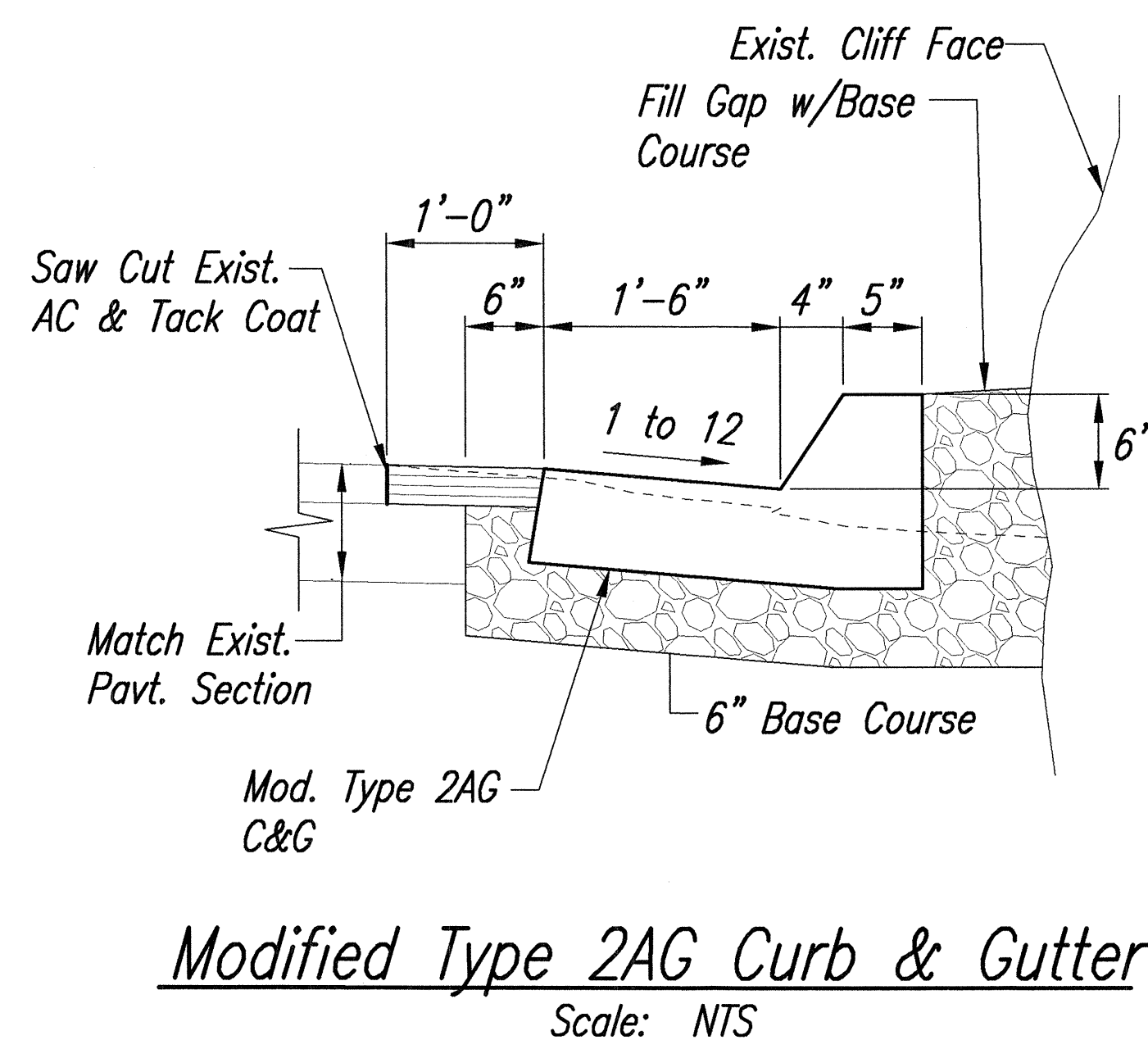
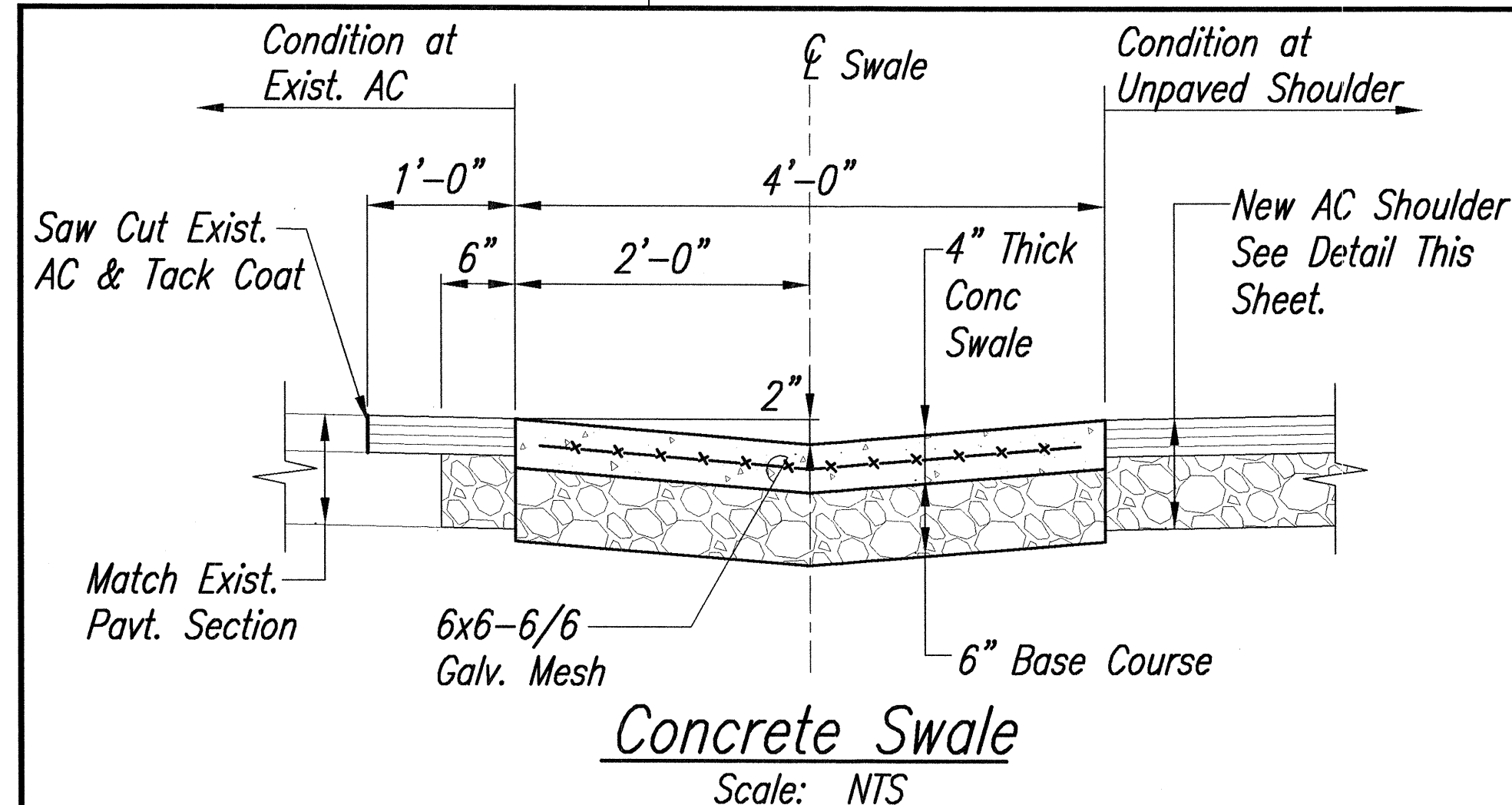
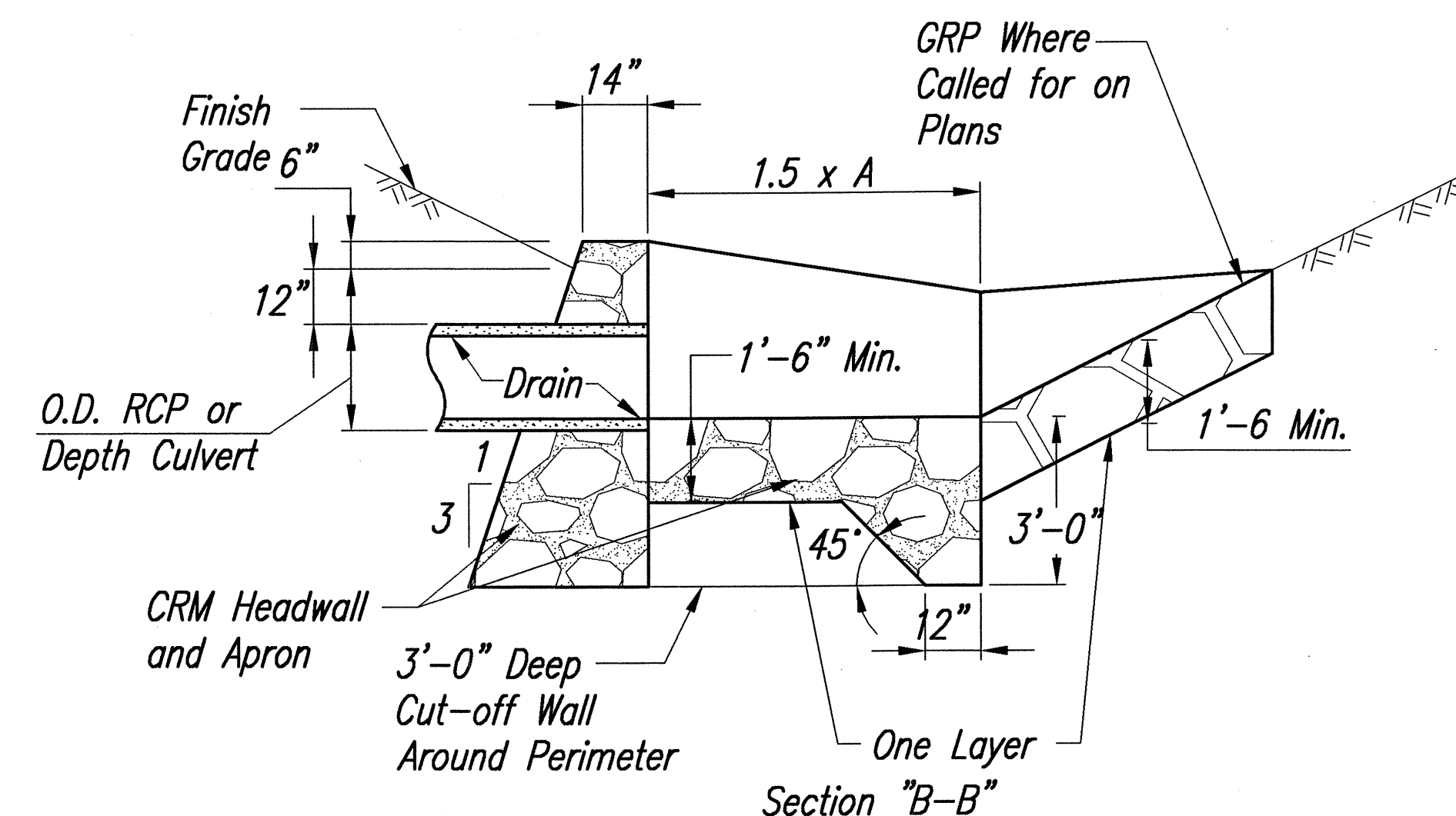
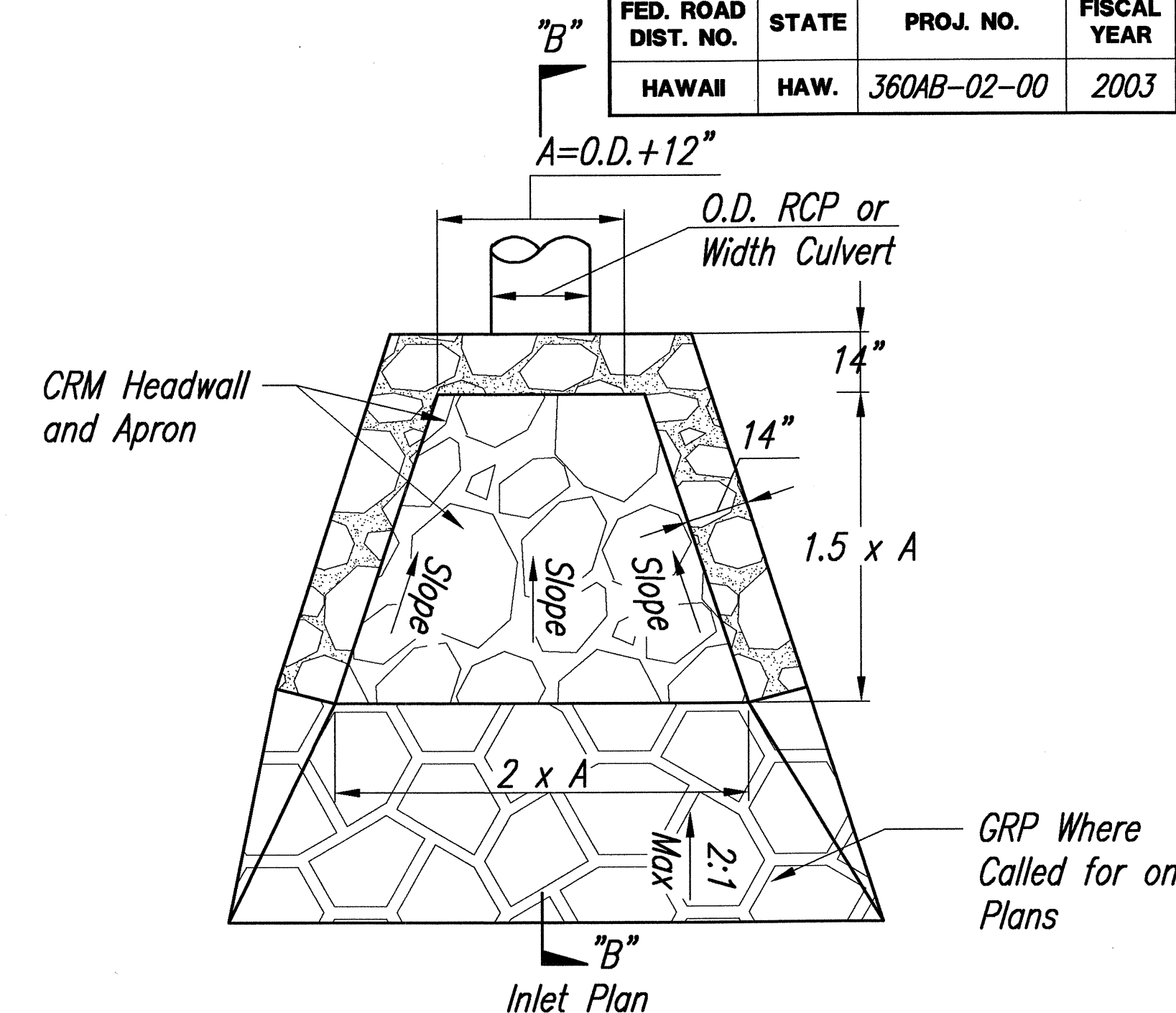
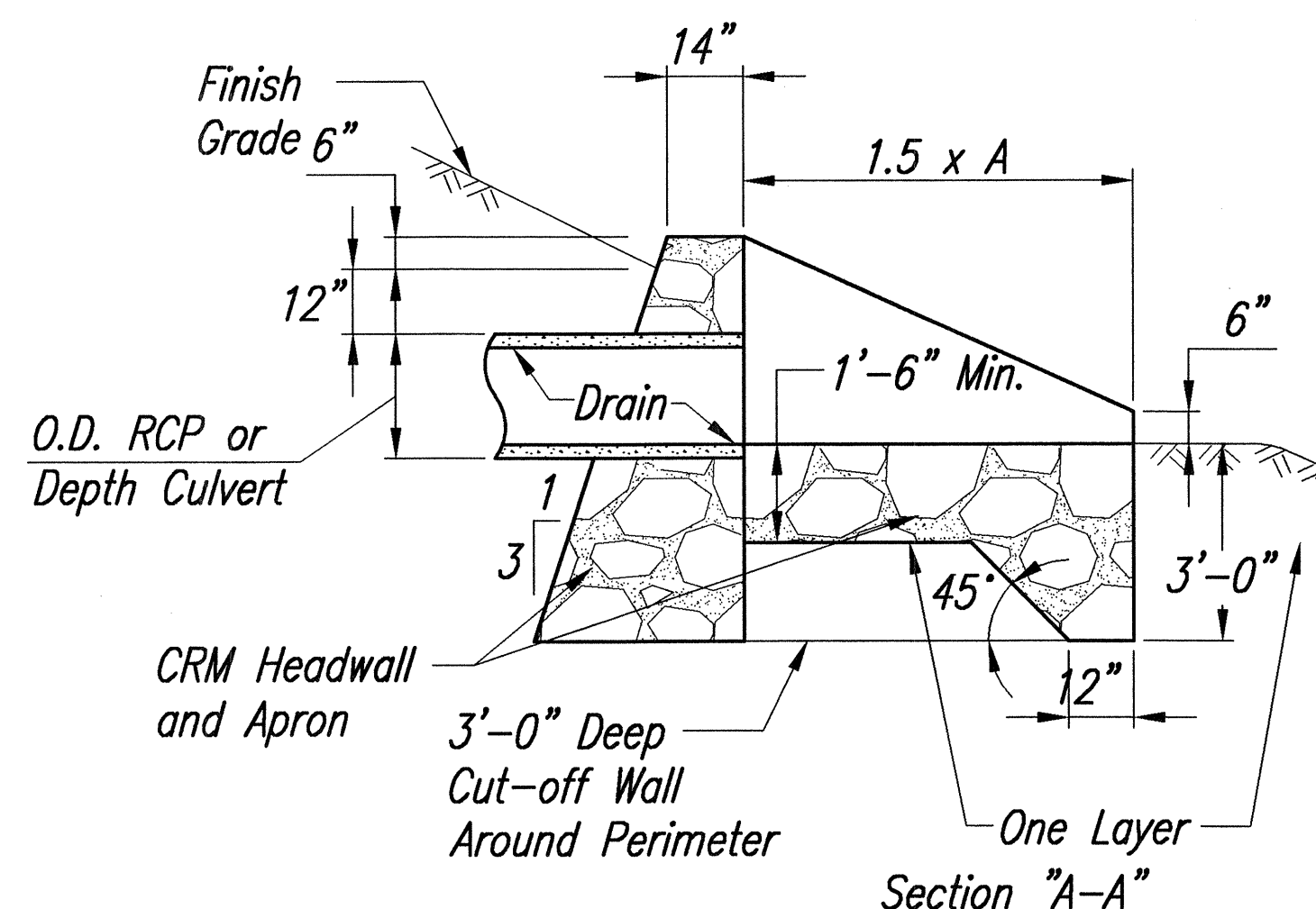
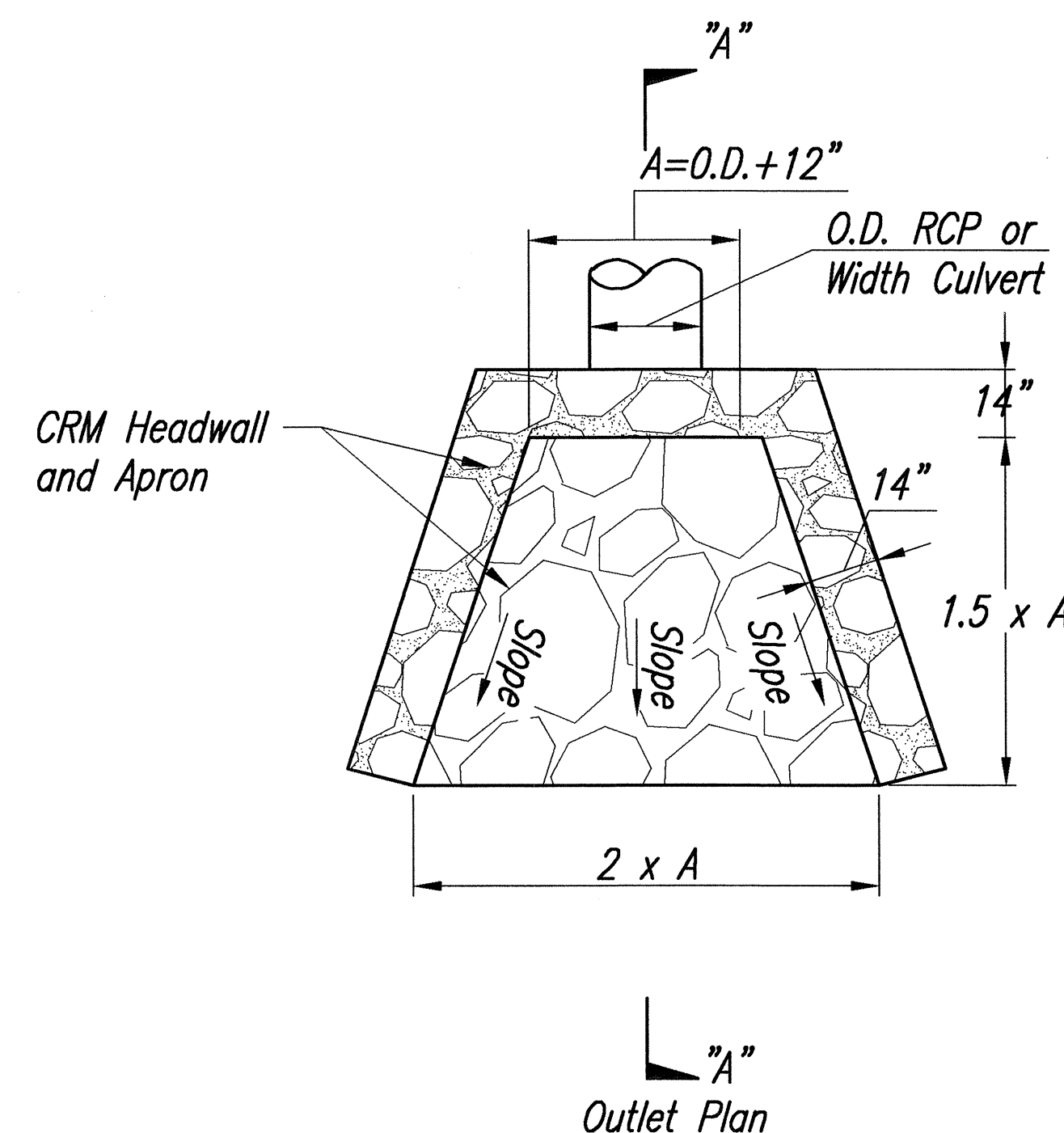
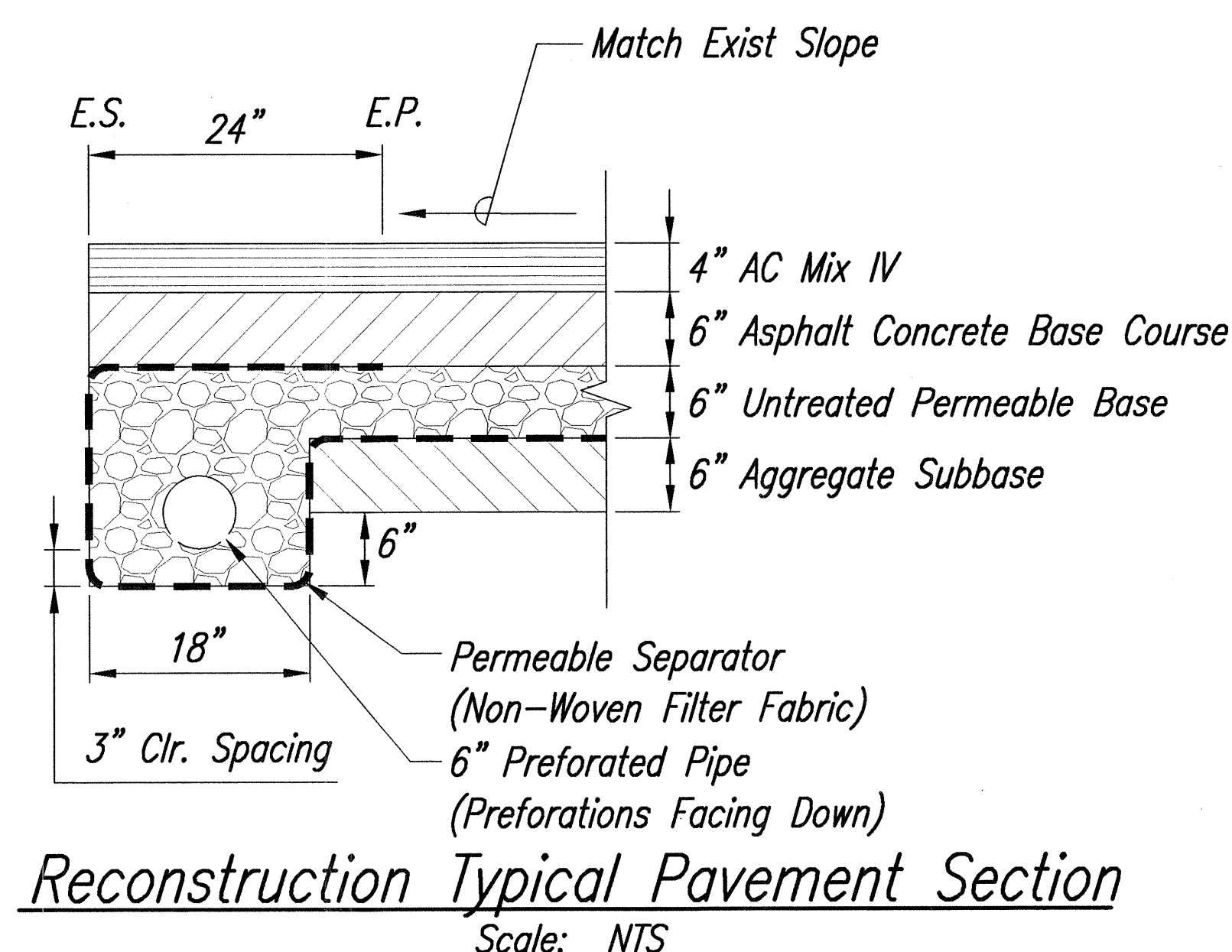


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-02-00	2003	28	33

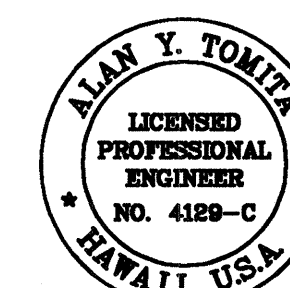
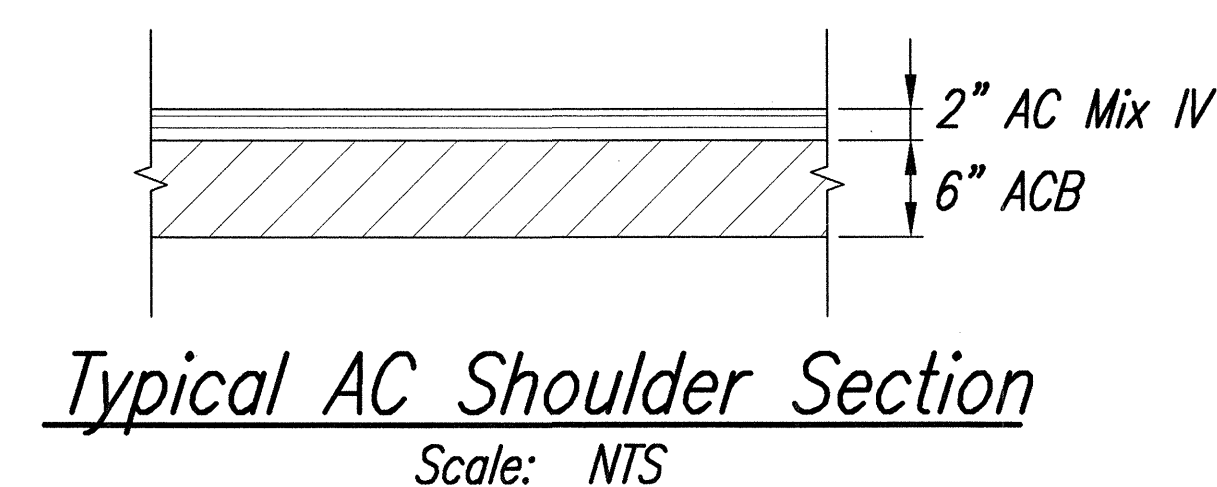


- Notes:
- Where the Exist. Guardrail Does Not Have the Minimum 2'-0" Flat Clearance Behind the Guardrail, Paving Shall End at the Hinge of Flat Surface.
 - Clearing & Grubbing Shall be Provided for Shoulder Areas to be Improved. The Cost Shall be Incidental to Paving Work.



DRAINAGE OUTLET/INLET DETAIL

Scale: NTS



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Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS - 1

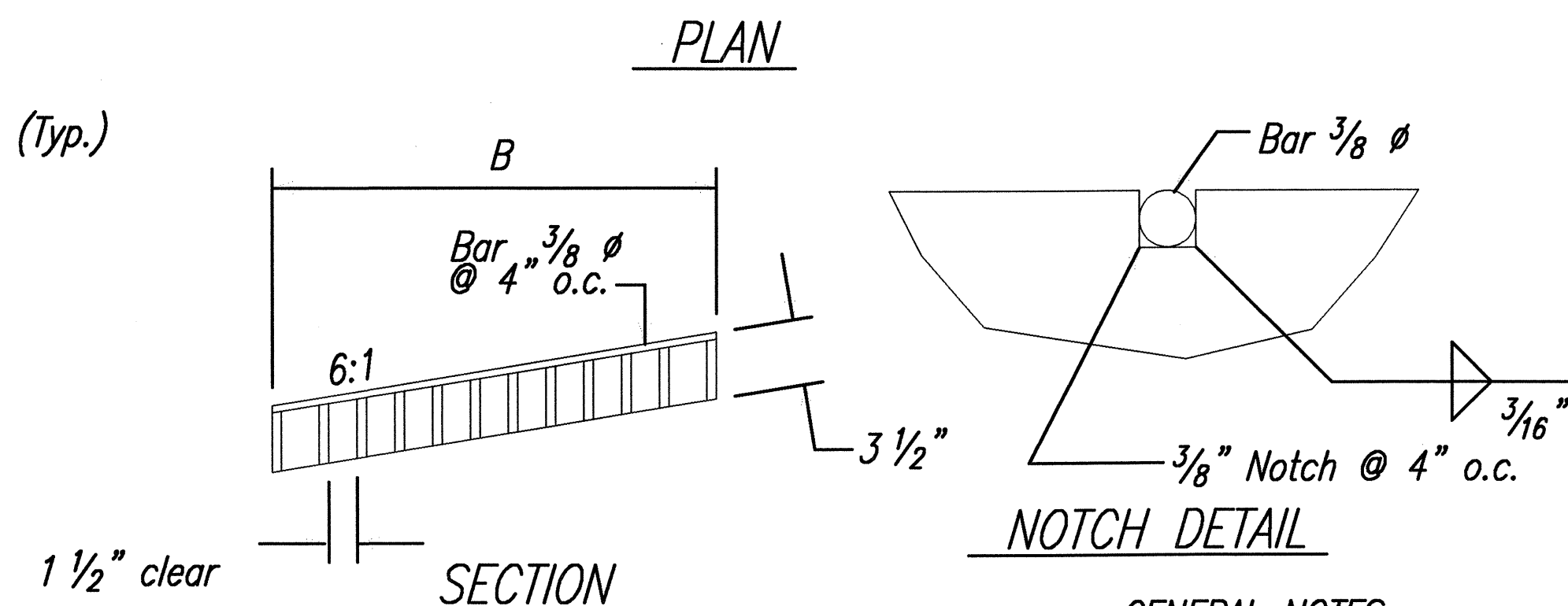
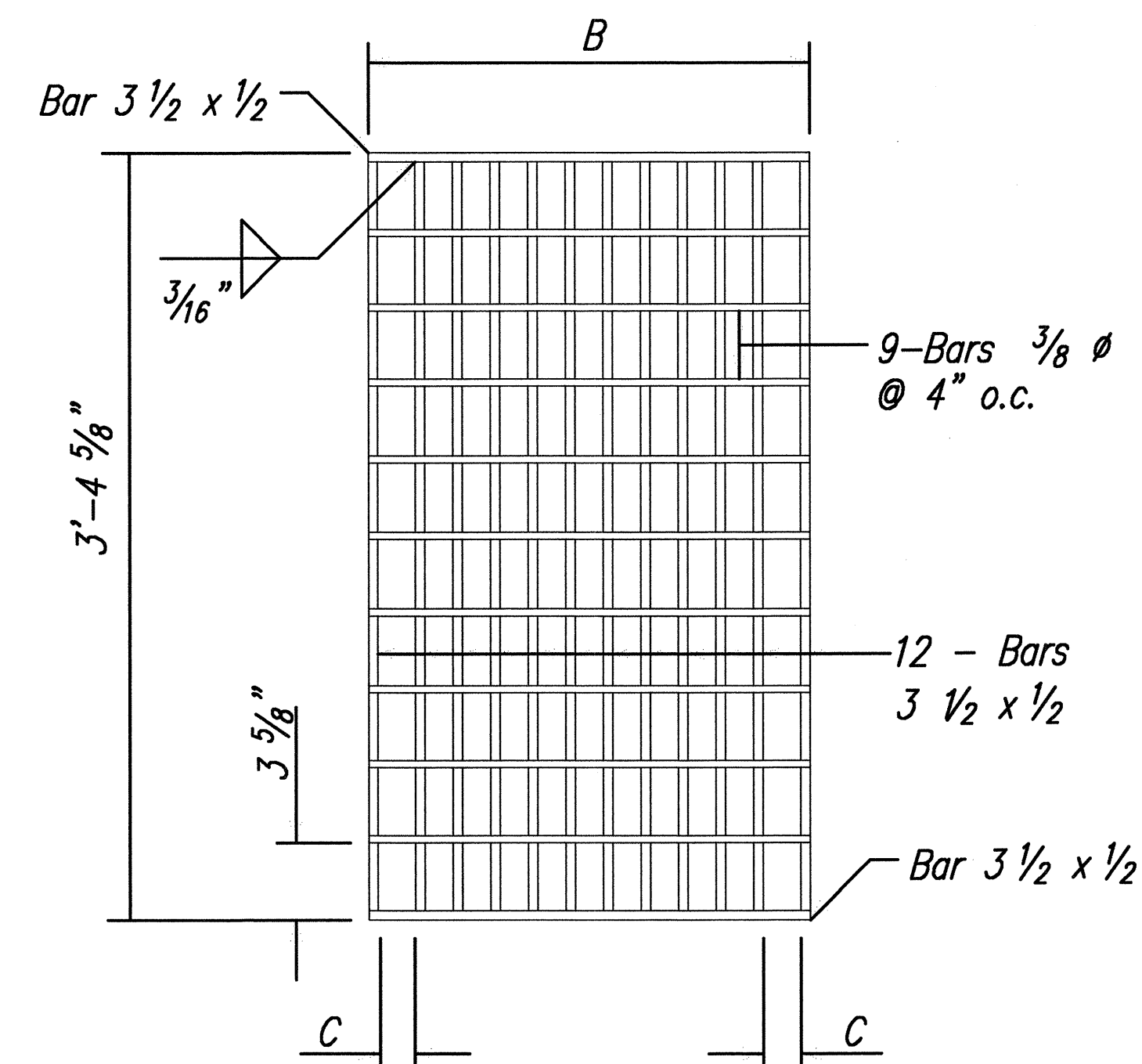
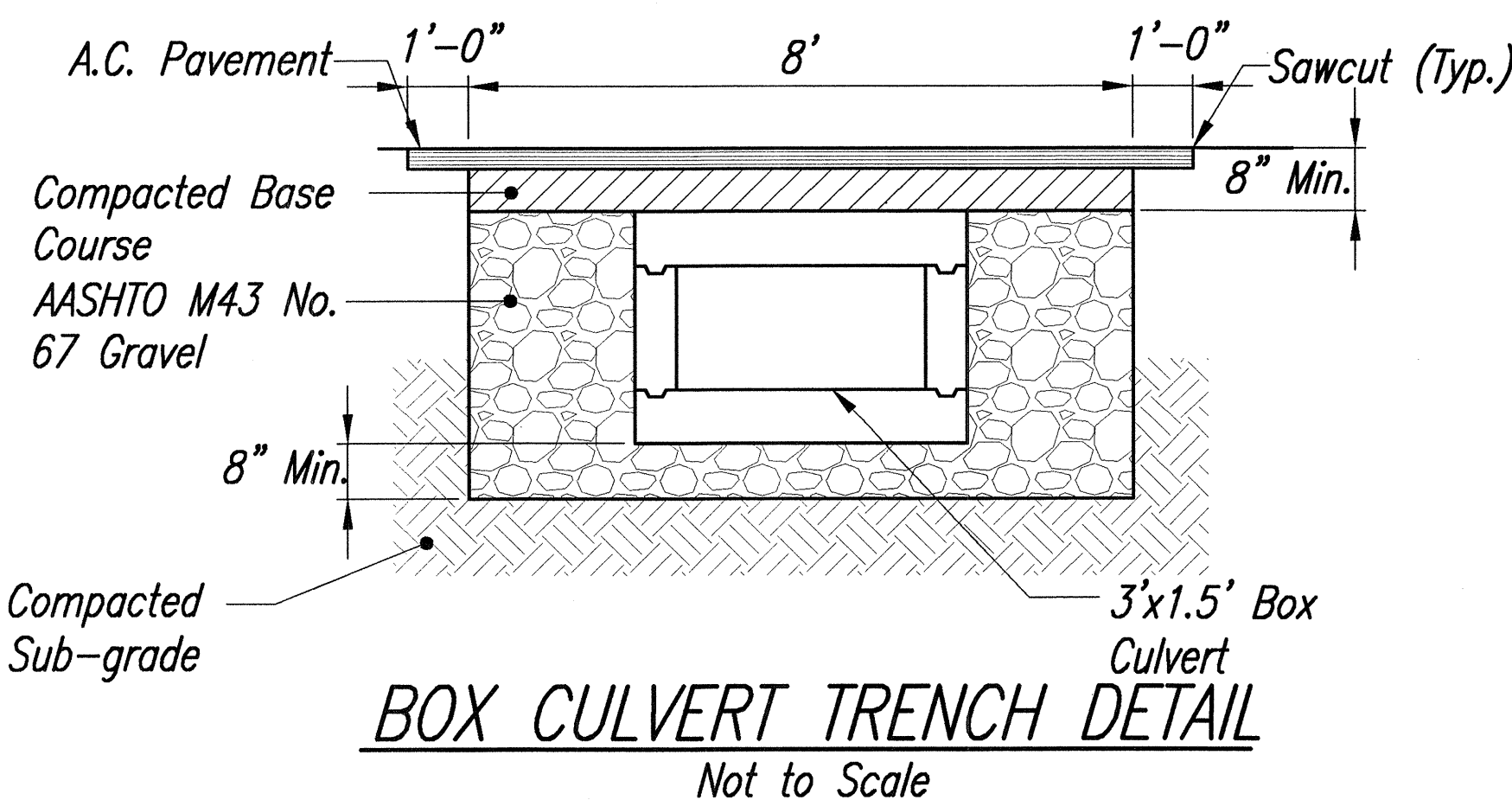
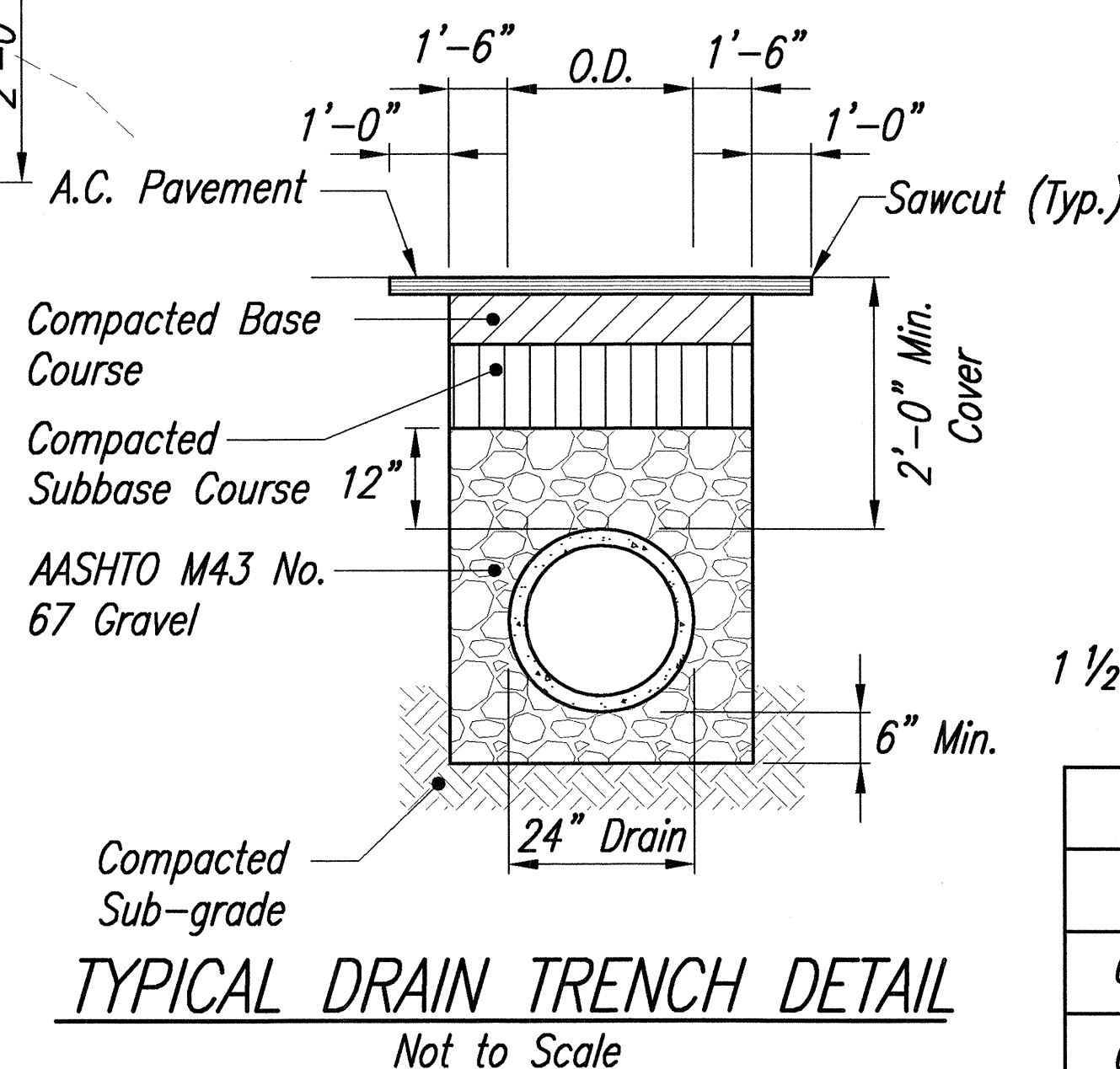
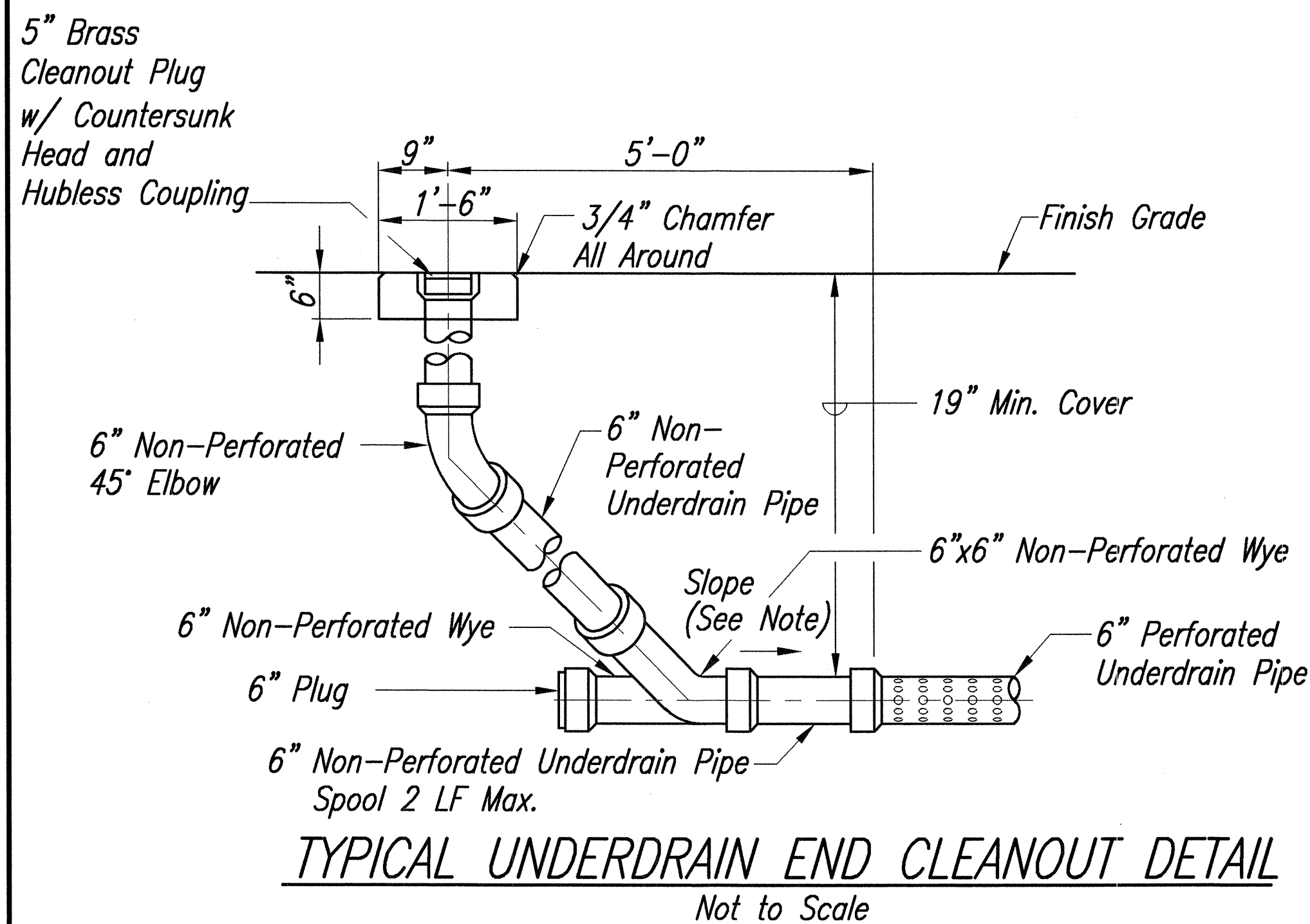
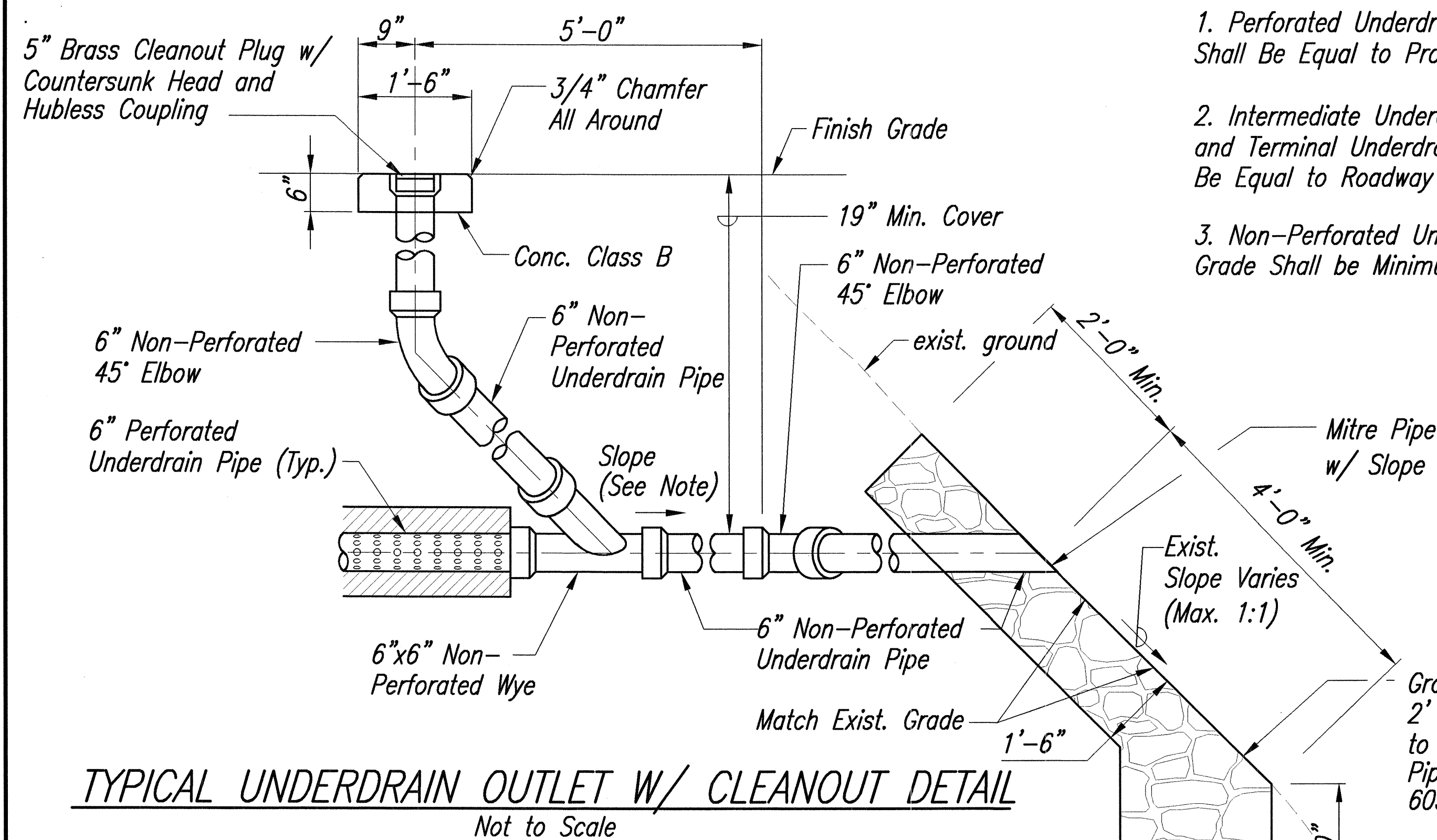
HANA HIGHWAY IMPROVEMENTS
Huelo To Hana
Project No. 360AB-02-00

Scale: Date: March, 2003

SHEET No. 1 OF 2 SHEETS

NOTES:

1. Perforated Underdrain Pipe Grade Shall Be Equal to Profile Grade.
2. Intermediate Underdrain Trench and Terminal Underdrain Grade Shall Be Equal to Roadway Cross Slope.
3. Non-Perforated Underdrain Pipe Grade Shall be Minimum 0.5%.



NOTCH DETAIL

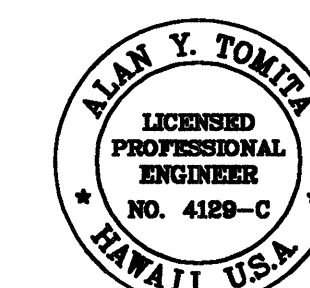
GENERAL NOTES

1. Steel frame details for grates shall be the steel frames shown on Standard Plan H-13.
2. Grates shall be hot dip galvanized after fabrication.
3. Use in locations off the road bed on all types of highways. (Pedestrian safe)

DIMENSIONS			
TYPE	NO. BARS	B	C
61614P	12	1'-11 1/2"	2"
61616P	18	2'-11 3/8"	1 15/16"

TYPE 61614P & 61616P STEEL GRATES

Not to Scale



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Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS - 2

HANA HIGHWAY IMPROVEMENTS

Huelo To Hana

Project No. 360AB-02-00

Scale: Date: March, 2003

SHEET No. 2 OF 2 SHEETS