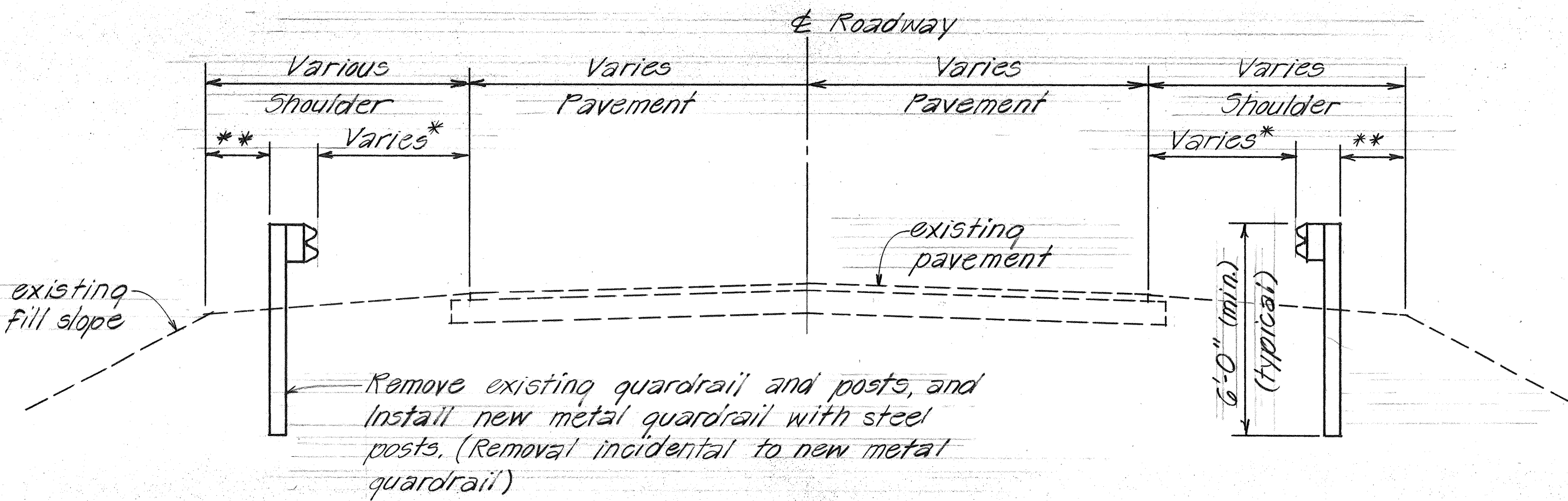
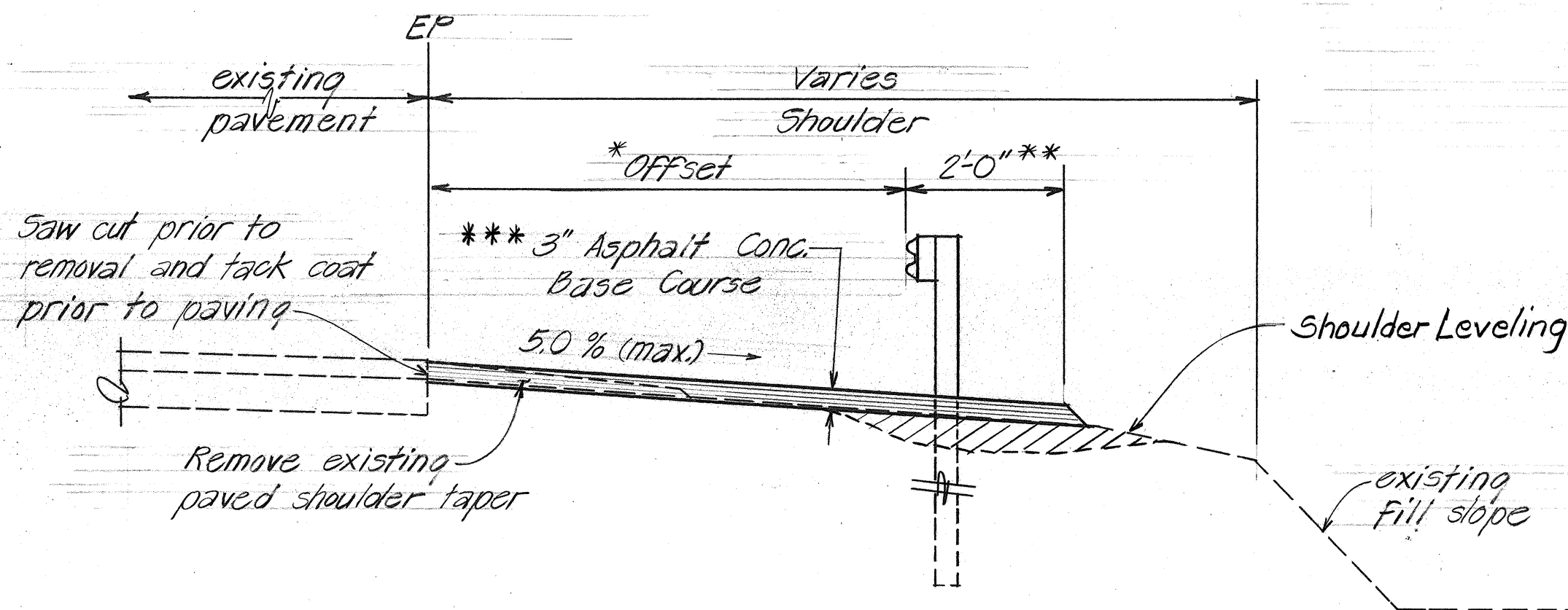


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-06-24	1994	3	7



TYPICAL SECTION

Not to Scale



TYPICAL SECTION ~ RECONSTRUCTED SHLDR

Not to Scale

NOTES

1. The contractor shall stake-out guardrail locations for approval by the engineer prior to installation.
2. Contractor shall provide new edge of pavement striping and type 'C' markers as necessary. Payment shall be incidental to reconstruction of shoulder areas.
3. Backfill and dress shoulders using excavated materials. Any additional fill quantities needed to level shoulder areas shall be paid for under Item No. 305.1210 -Aggregate Subbase for shoulder. Exact limits and locations for additional fill areas shall be determined by the Engineer in the field.

- * See Guardrail Schedule
- ** If less than 2', post length to be 8'-0" minimum.
- *** Asphalt Concrete Base Course shall be either Plant Mix Asphalt Concrete Base Course, Recycled Plant Mix Asphalt Concrete Base Course or Plant Mix Glassphalt Concrete Base Course (See Subsection 106.14 of the Special Provisions.)

GENERAL NOTES

1. Improvements consist of removing existing guardrails, posts, and guide posts, installing new metal guardrails, posts, and end treatments, constructing paved shoulders, and installing reflector markers.
2. The contractor is reminded of the requirements of subsection 108.01 - 'Subletting of Contract,' which requires him to perform work amounting to not less than 50 percent of the contract cost less deductible items. Non-compliance with this subsection may be grounds for rejection of bid.
3. The contractors attention is directed to the following sections of the Special Provisions: Subsection 107.13 - 'Public Convenience and Safety'; and Section 645 - Traffic Control.
4. 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.
5. The encountering of underground utilities and other obstacles during the course of the work is possible. The contractor shall be held liable for any damages incurred to existing facilities and/or improvements as a result of his operations.
6. The locations and limits of guardrails as shown on the plans are approximate. The exact limits and locations will be determined in the field by the engineer.
7. For all Type 'G' end treatments:
 - a) Provide a curve radius to extend the flare away from the travelway
 - b) Use the 'Rounded End Section' in lieu of the 'Flared End Section' (Refer to Standard Plan sheet TE-51).
8. The contractor shall notify the State in writing two(2) weeks prior to starting shoulder paving operations.
9. Contractor shall provide for access to and from all existing side streets at all times.
10. Contractor shall repair and/or replace any striping or signs damaged by his operations at no cost to the State.
11. Longitudinal drainage along the highway shall be maintained.
12. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the engineer.
13. All lanes shall be opened to traffic during morning peak hours from 6:30 a.m. to 8:30 a.m. and during afternoon peak hours from 3:30 p.m. to 5:30 p.m. and during off-work hours or as directed by the engineer. Only one lane of the highway shall be closed during work hours.
14. All concrete posts and wooden guardrails shall be removed and disposed off by the Contractor at no cost to the State. This work shall be considered incidental to the contract Item No. 606.3110 Guardrail Type 3 - Single with Steel Post.
15. Removal and reinstallation of existing signs for the purpose of guardrail removal and installation shall be incidental to item no. 606.3110 - 'Guardrail, Type 3 - Single with Steel Post.'
16. The contractors attention is called to the number of work days allowed in the bid proposal. Contractor is responsible for scheduling of work crews, equipment, and subcontractors to complete the project on time.
17. Unless otherwise noted all Guardrail Rail Elements shall be 12'-6" nominal length.
18. Due to hard, irregular subsurface conditions on Route 190 and Route 250, Guardrail Posts and Rails shall be installed prior to shoulder paving of Site 1 to Site 20.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL SECTIONS

& GENERAL NOTES

GUARDRAIL AND SHOULDER IMPROVEMENTS

AT VARIOUS LOCATIONS ON HAWAII

PROJECT NO. HWY-H-06-24

Scale: As Noted Date: May 1994

SHEET No. 1 OF 1 SHEETS

3

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