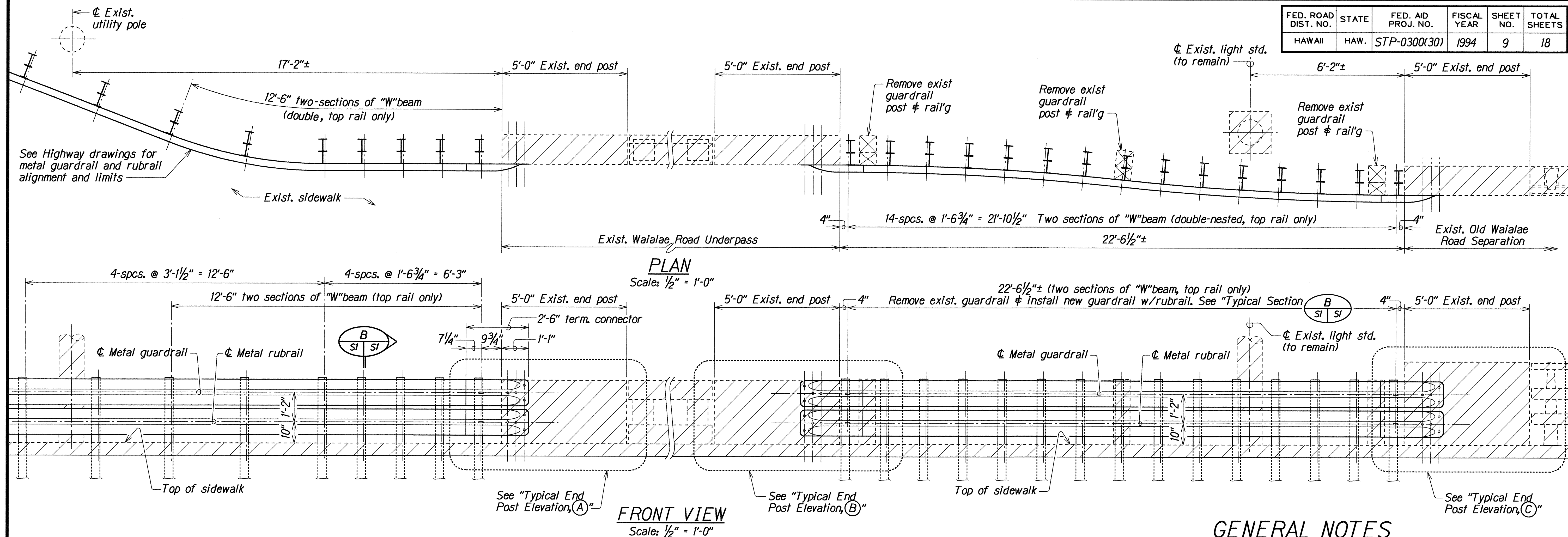
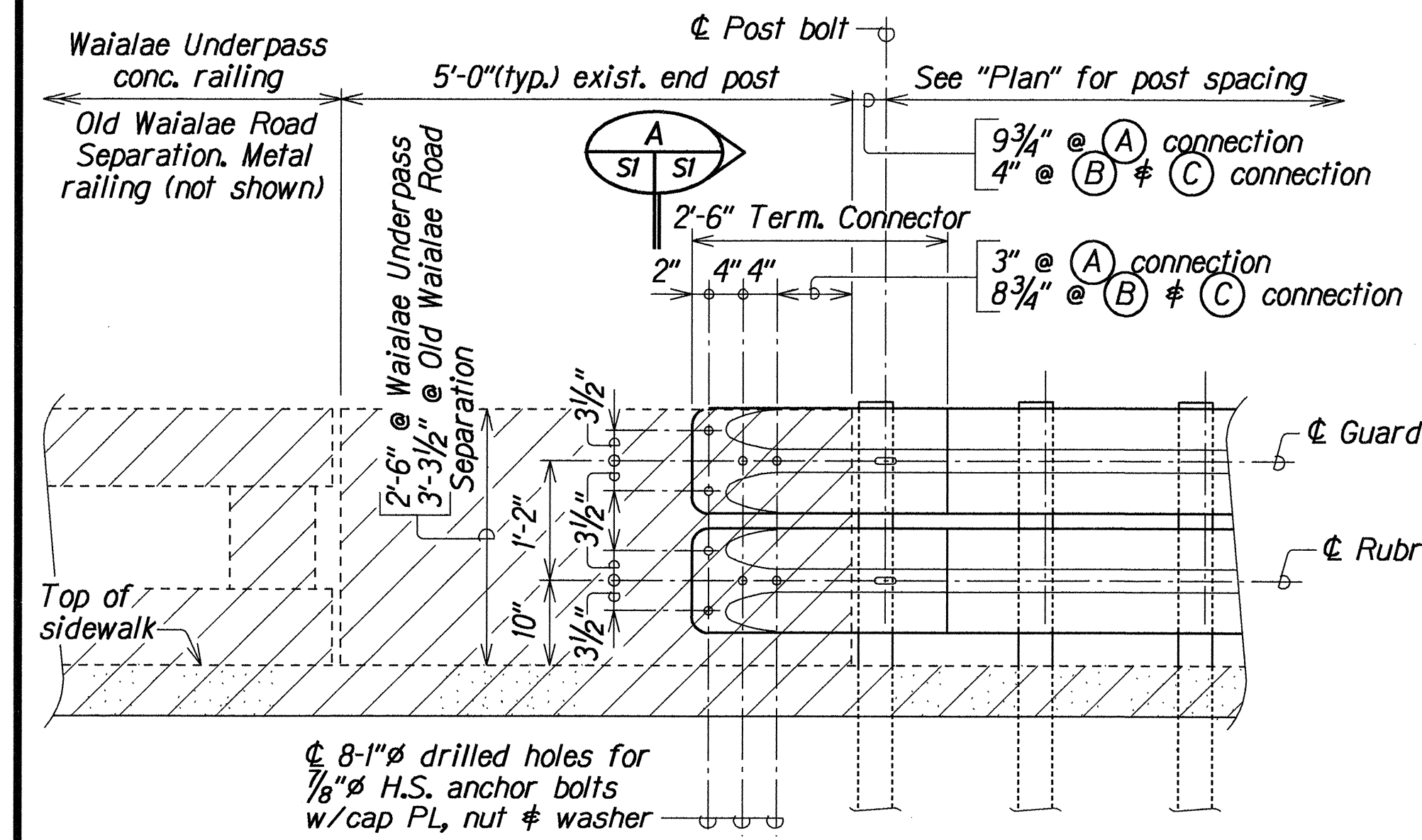


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(30)	1994	9	18

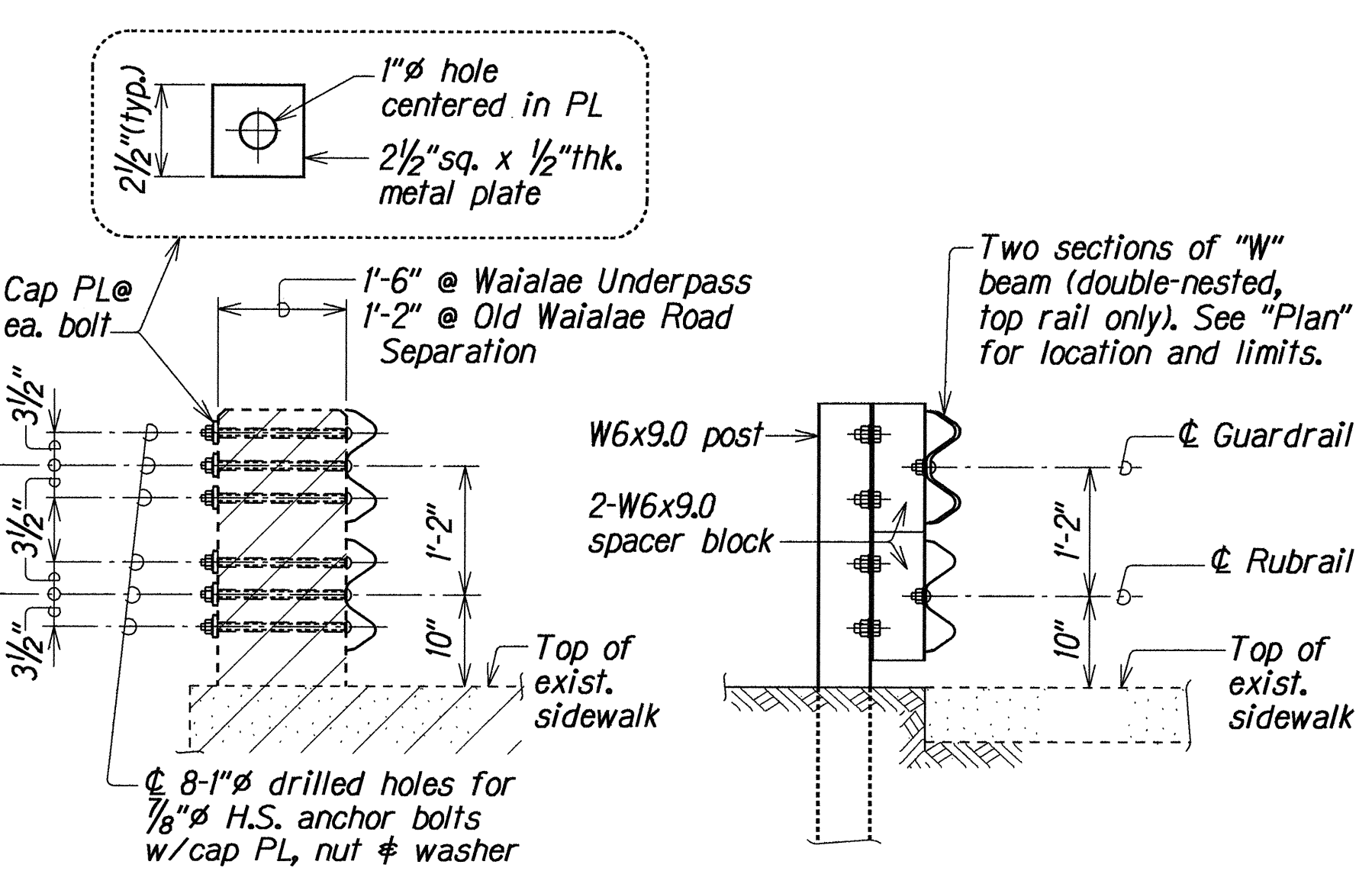


GENERAL NOTES

1. See Standard Specifications for Road & Bridge Construction, (Hawaii, 1985) & Special Provisions.
2. See State of Hawaii, D.O.T. Standard Plans; Sht.#TE-50 and TE-51 for metal guardrail and "terminal connector" details.
3. All anchor bolts shall be high strength bolts conforming to the requirements of ASTM A325.
4. "Terminal Connector" shall be fabricated from 10 gauge steel conforming to the requirements of AASHTO M 180.
5. "Terminal Connector", including all anchor bolts, cap PL's, nuts and washers, shall be hot-dip galvanized after fabrication.
6. Anchor bolt length shall be such that a snug fit of the elements and full thread engagement plus 1/4"(max) is attained.
7. Existing bridge structure and sidewalk shown by hatched area. Drilling of thru holes shall be done in such a manner that will prevent cone puncturing of the daylighting end.
8. Large impacting or vibratory type of equipment will not be permitted in the removal operation of the designated items nor for drilling of holes.
9. Any damage to the existing structures due to the Contractor's operation shall be repaired at his expense, to the satisfaction of the Engineer.
10. The Contractor shall verify all dimensions in the field before commencing with work.
11. The Contractor shall verify the location of all existing utility lines near structures and notify their respective owners before commencing with work.
12. The work necessary to connect guardrail to concrete and post shall include all labor, materials, tools, equipment and incidentals necessary to complete the work and shall be incidental to the metal guardrail and will not be paid for separately.



TYPICAL END POST ELEVATION
Scale: 3/4" = 1'-0"



TYPICAL SECTION A
Scale: 3/4" = 1'-0"

TYPICAL SECTION B
Scale: 3/4" = 1'-0"

METAL GUARDRAIL TO EXISTING CONCRETE END POST DETAIL

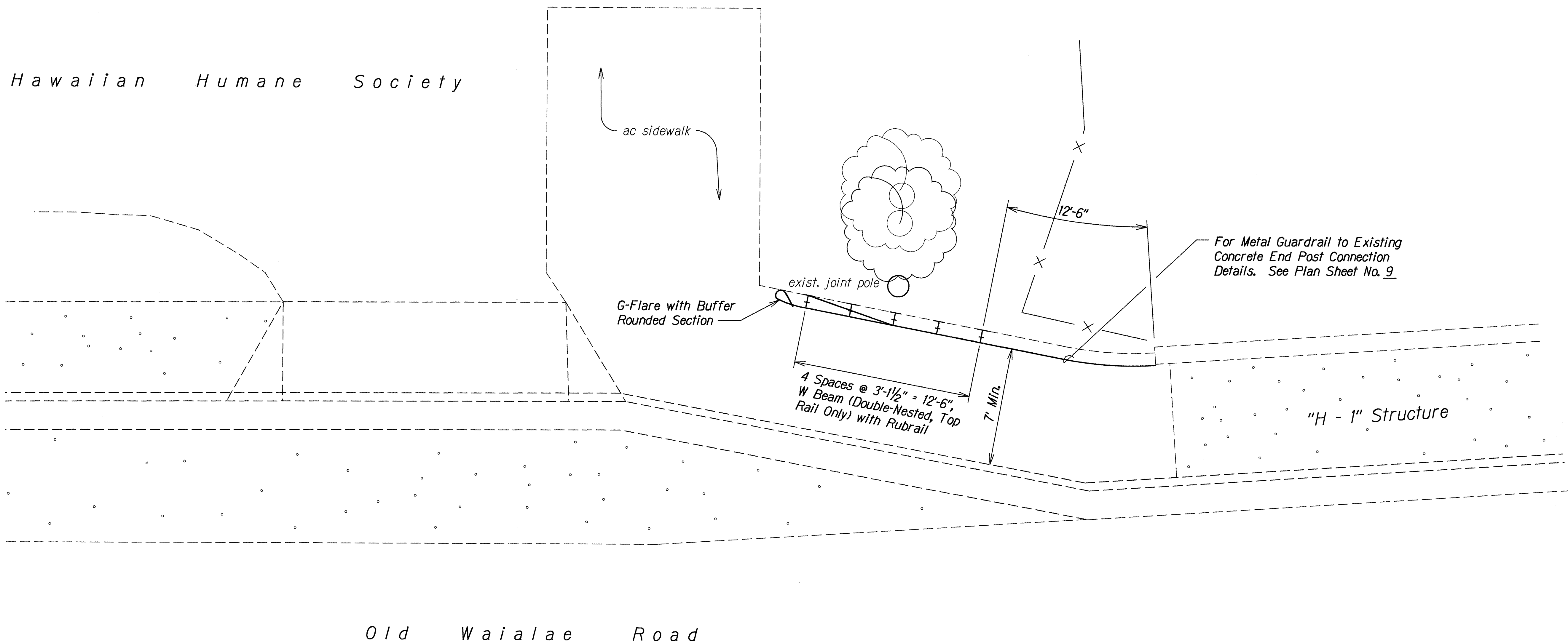
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

METAL GUARDRAIL TO EXISTING CONCRETE
END POST CONNECTION DETAILS

H-1 Kapiolani Interchange Ramps and Old Waialae Road Resurfacing
F.A.P. No. STP-0300(30)

Scale: As Noted
Date: Mar, 1994

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(30)	1994	10	18



Old Waialae Road

METAL GUARDRAIL DETAIL

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

- Note: 1. The work necessary to install guardrail and post shall include all labor, materials, tools, equipment and incidentals necessary to complete the work and shall be incidental to the metal guardrail and will not paid for separately.
2. End Post Connection and Buffer End Section shall be incidental to Guardrail, Type 3 (Double-Nested Top Rail Only) with Rubrail on Steel Post.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY G. HIRABARA	12-24-94
DESIGNED BY R. HIRABARA/K. TATSUNOCHI		
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

METAL GUARDRAIL DETAIL
H-1 KAPIOLANI INTERCHANGE RAMPS
AND
OLD WAIALAE ROAD RESURFACING
Federal Aid Project No. STP-0300(30)
Scale: As Shown
Date: Mar., 1994

SHEET No. 1 OF 1 SHEETS