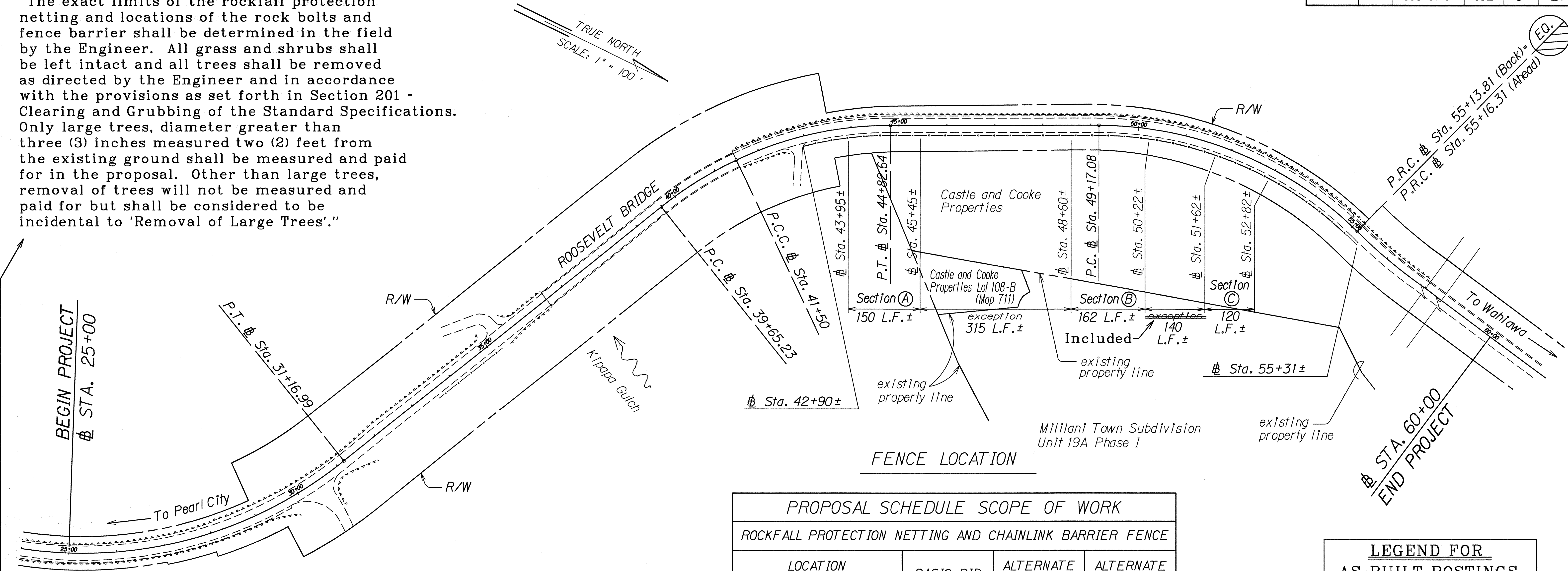


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-91	1992	3	24

"The exact limits of the rockfall protection netting and locations of the rock bolts and fence barrier shall be determined in the field by the Engineer. All grass and shrubs shall be left intact and all trees shall be removed as directed by the Engineer and in accordance with the provisions as set forth in Section 201 - Clearing and Grubbing of the Standard Specifications. Only large trees, diameter greater than three (3) inches measured two (2) feet from the existing ground shall be measured and paid for in the proposal. Other than large trees, removal of trees will not be measured and paid for but shall be considered to be incidental to 'Removal of Large Trees'."



GENERAL NOTES:

1. Scope of work consists of constructing a rockfall netting and chainlink barrier fencing from Kipapa Gulch towards Mililani.
2. At the end of each working day, the contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
3. ~~The exact limits of the rockfall protection netting and locations of the rock bolts and fence barrier shall be determined in the field by the Engineer.~~
4. The contractor's attention is directed to Subsection 107.13- "Public Convenience And Safety" and to Section 645- "Traffic Control of the Special Provisions".
5. Surfaces shown in the Typical Sections are for representational purposes only and not intended to depict any specific location.
6. Stakeout/layout for rockfall protection netting and locations of the rock bolts and fence barrier shall be performed by the contractor at his own expense by a surveyor, licensed in the State of Hawaii.

PROPOSAL SCHEDULE SCOPE OF WORK			
ROCKFALL PROTECTION NETTING AND CHAINLINK BARRIER FENCE			
LOCATION Sta. TO Sta.	BASIC BID	ALTERNATE BID I	ALTERNATE BID II
43+25 TO 56+25	X	X	
32+59.14 TO 35+50	X		X

7. All lanes shall be open to traffic during morning peak hours from ~~5:30 A.M. - 8:00 A.M.~~ <sup>6:00 A.M. - 8:30 A.M.</sup>, during afternoon peak hours from ~~3:00 P.M. - 6:00 P.M.~~ <sup>3:30 P.M. - 5:30 P.M.</sup>, and during off work hours. Only one lane of the highway shall be closed at any other time. Failure of the contractor to open all lanes to traffic during the times specified above shall result in assessment of liquidated damages as specified in Section 108.08 of the Special Provision.
8. Section (A), (B), (C):  
Remove existing 10' high fence in section (A), (B), (C) completely and install new 10' high fence in its place. See "Typical Fence Post Details."
9. Removal and disposal of the existing Chain Link Fence and appurtenances including concrete footing as mentioned in the construction notes shall be considered incidental to the various contract items.
10. Structural Excavation and 1:2 Mortar shall be considered incidental to Class "A" Concrete.
11. All Structural Steel shall be in accordance with the requirements of A.S.T.M. A 36.

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

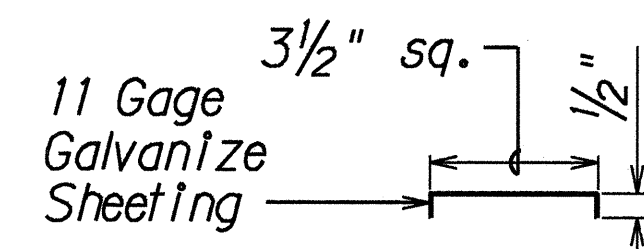
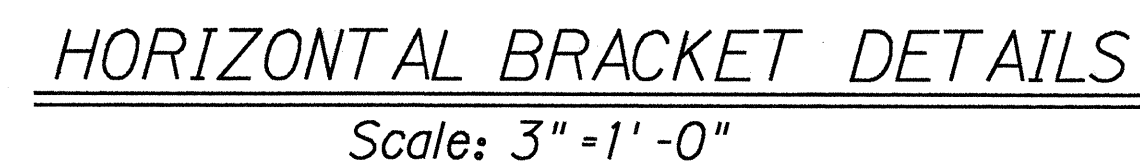
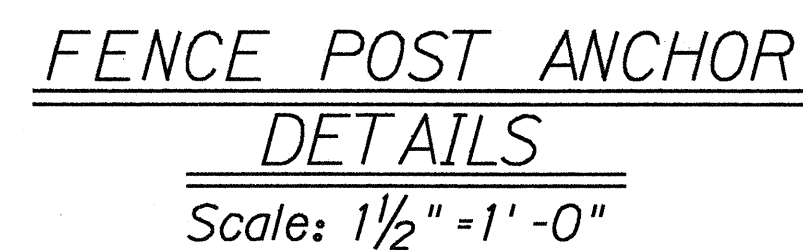
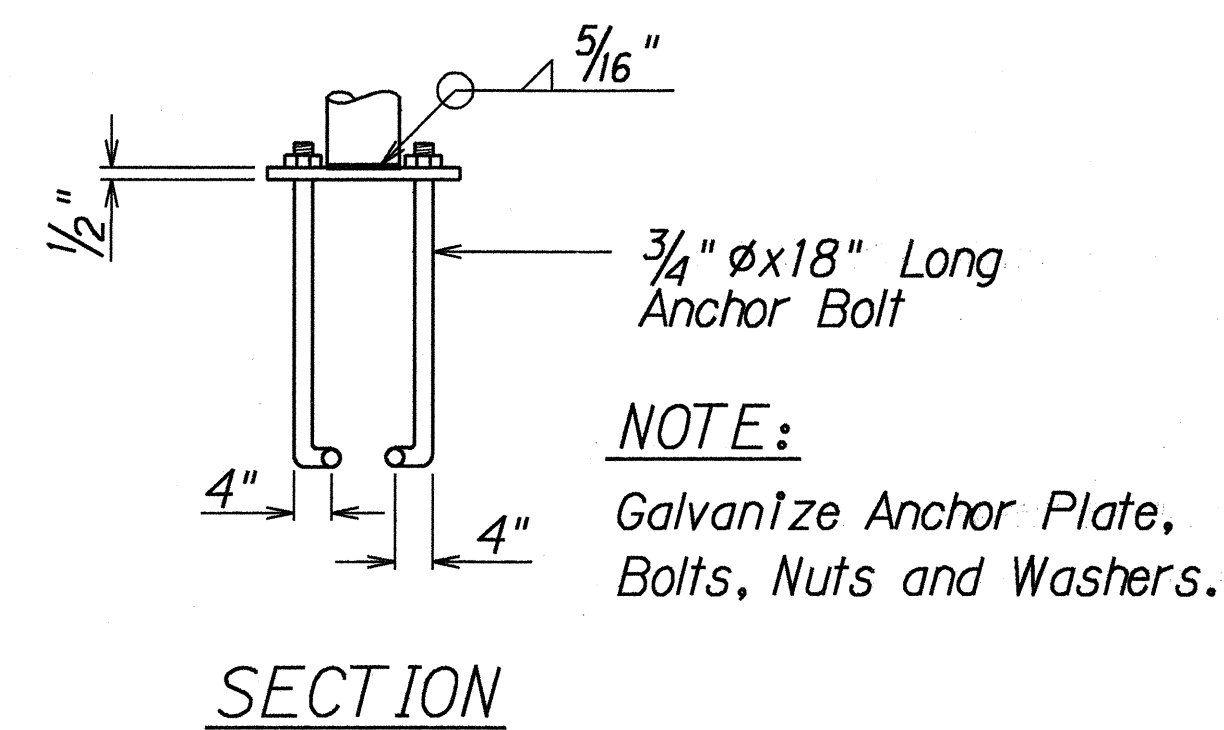
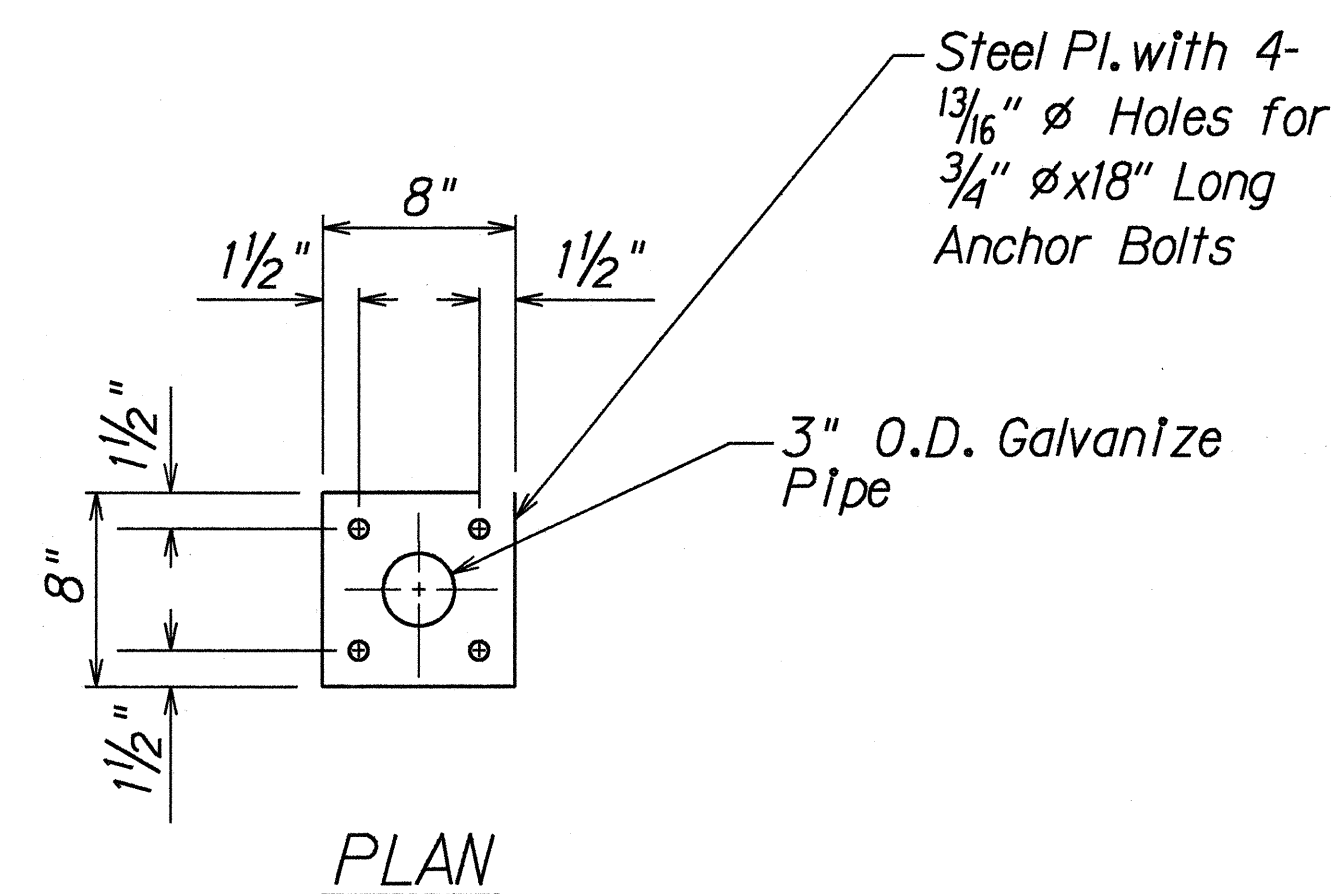
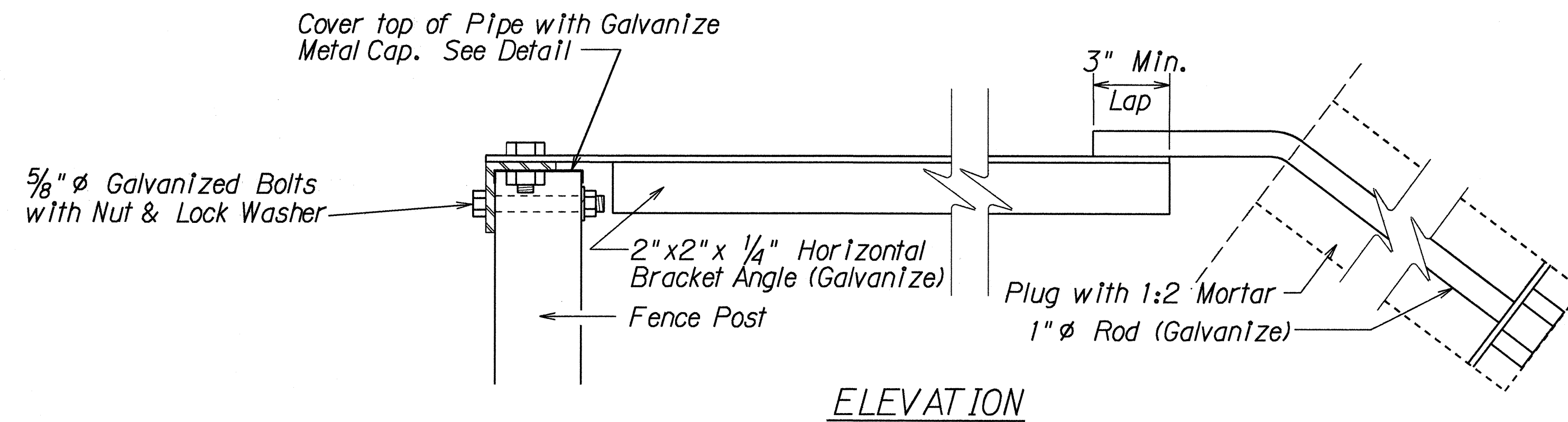
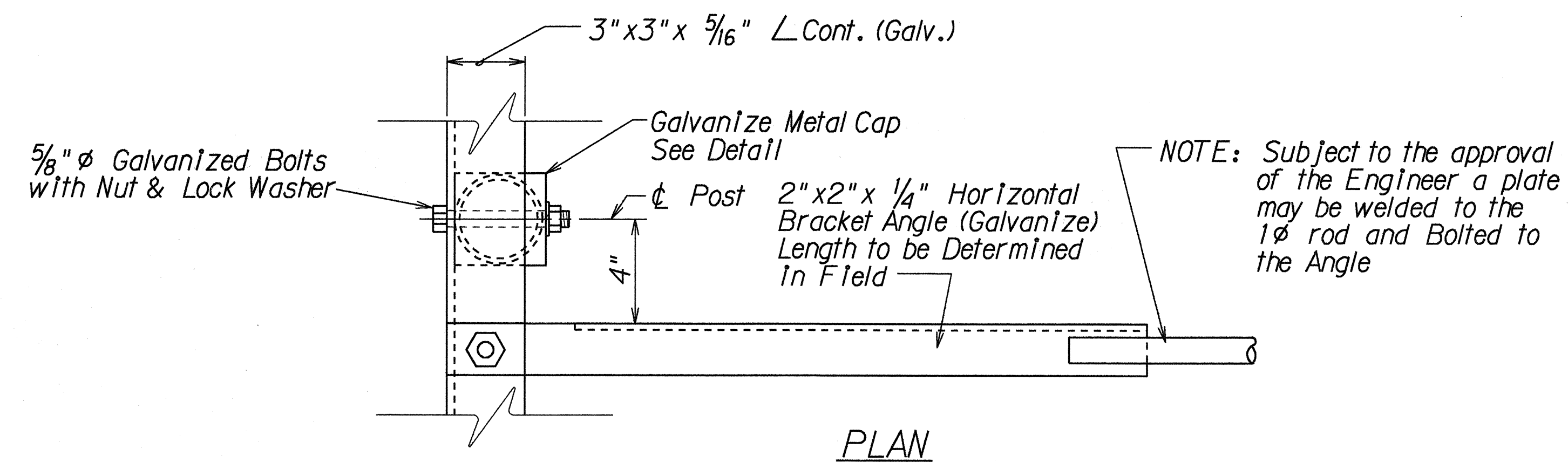
**SAFETY IMPROVEMENT  
DETAILS**

Kamehameha Highway  
Kipapa Gulch towards Mililani  
Project No. 99C-01-91

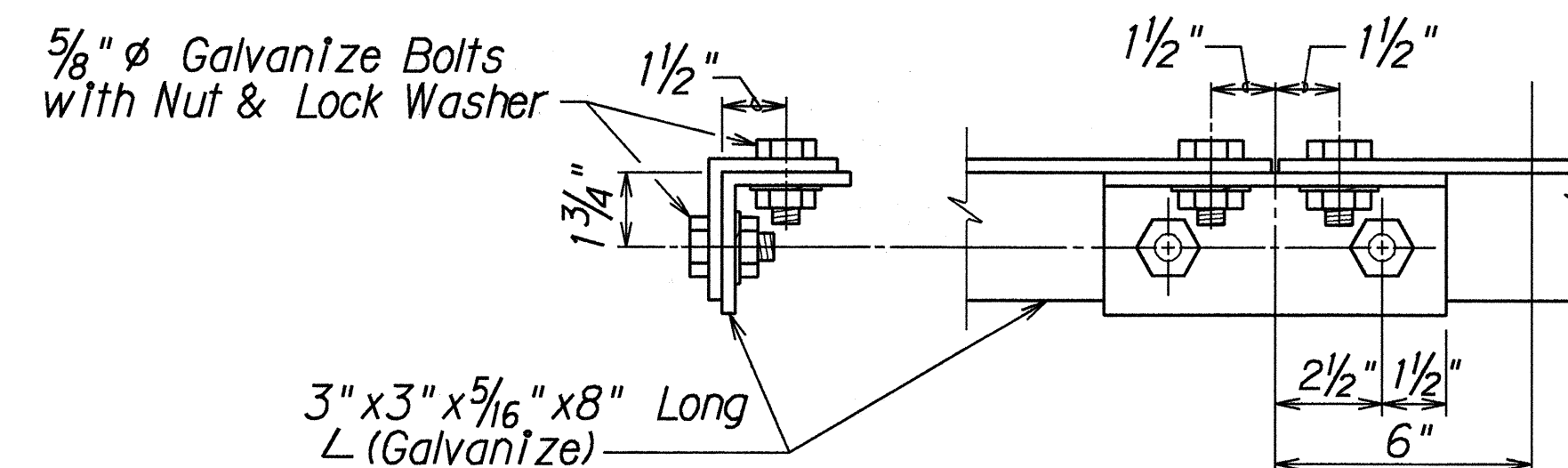
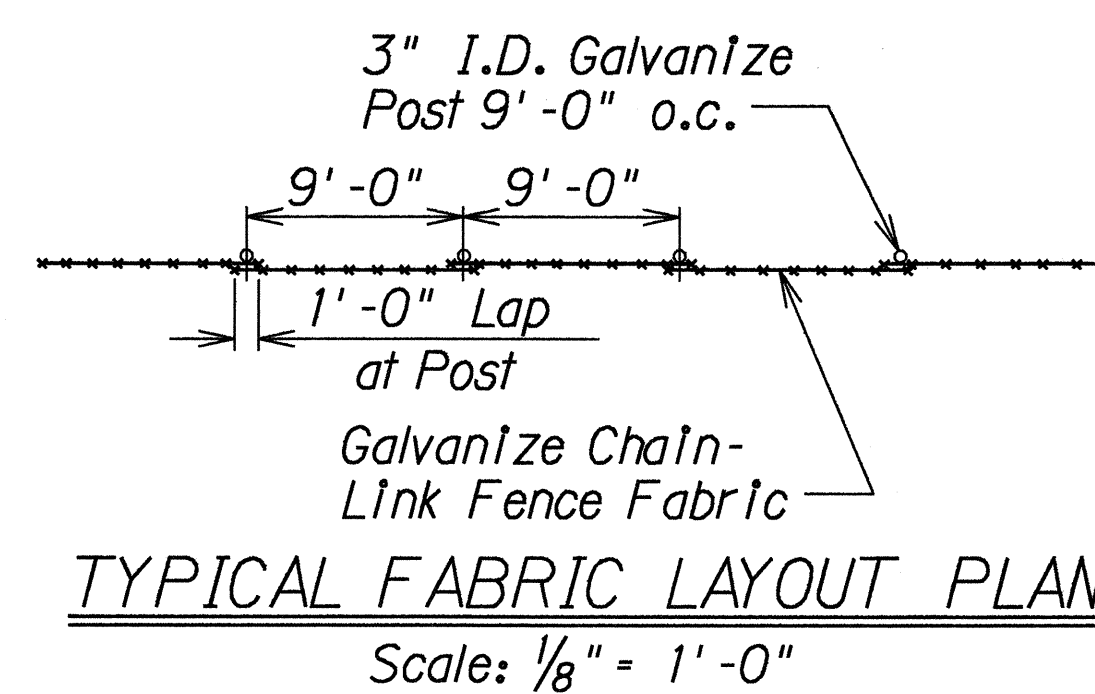
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SHEET No. 1 OF 2 SHEETS

"AS-BUILT"

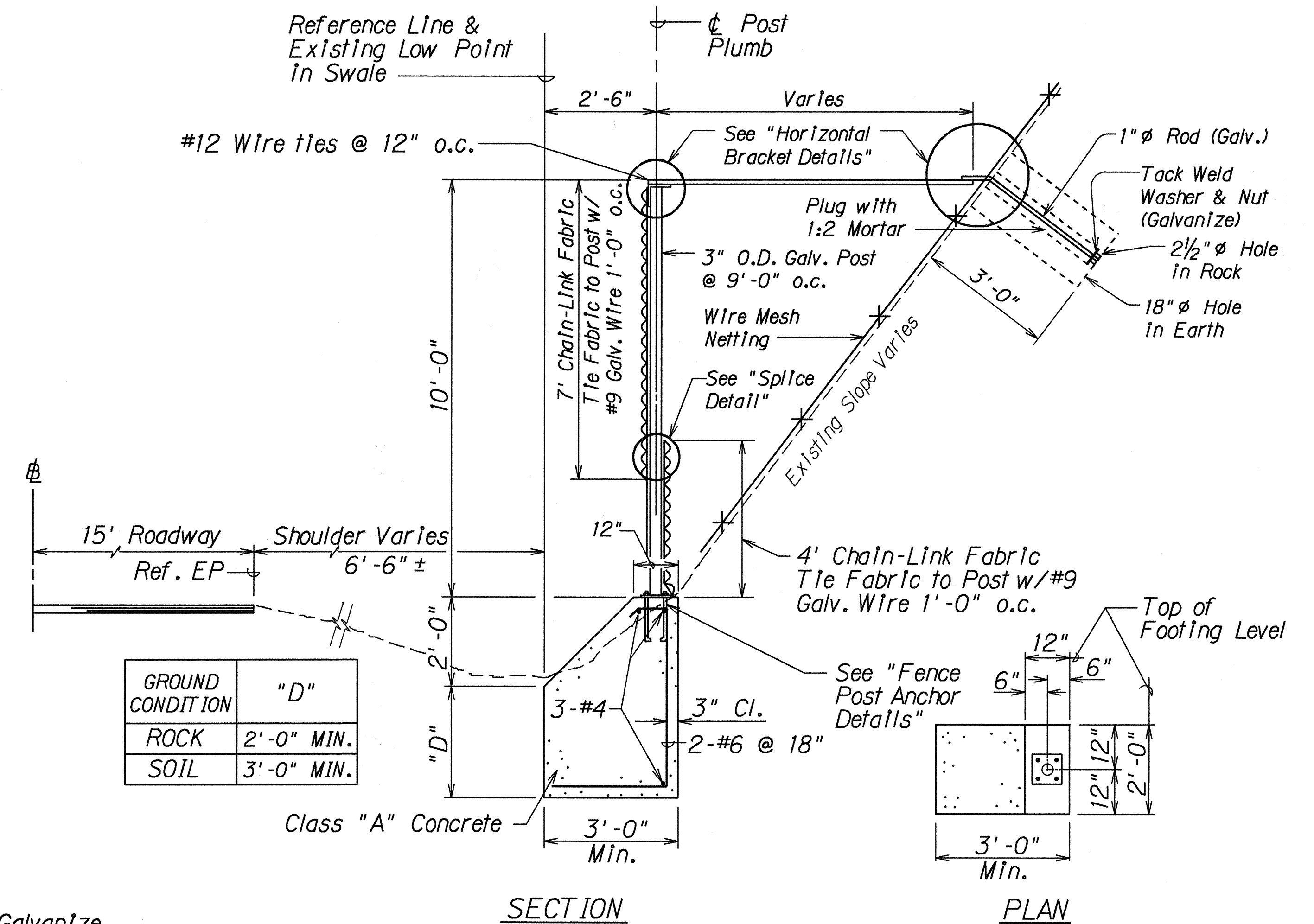
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-91	1992	4	24



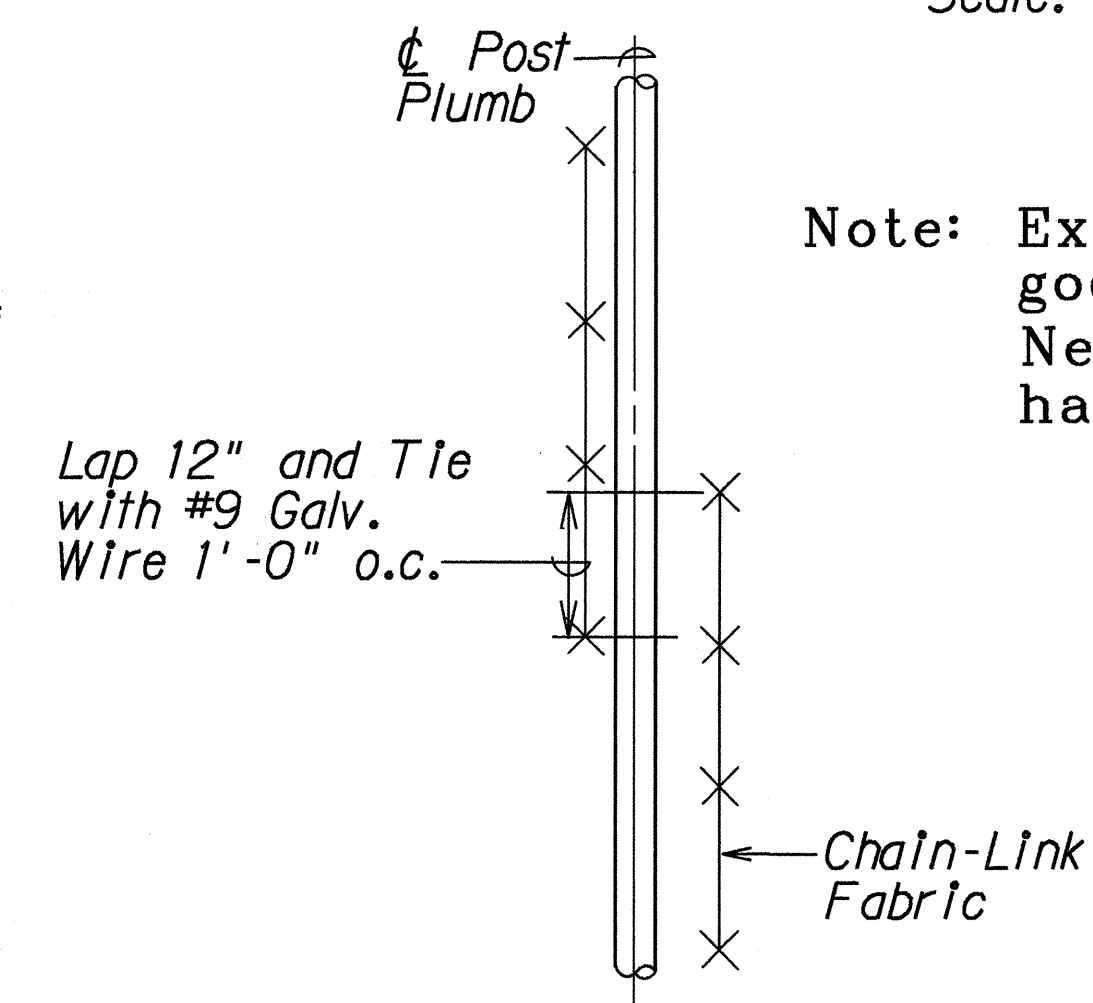
GALVANIZED METAL  
CAP DETAIL  
Scale: 3" = 1'-0"



SPLICE DETAIL FOR 3" x 3" x 5/16" ANGLE  
Scale: 3" = 1'-0"




TYPICAL FENCE POST DETAILS  
Scale: Not To Scale



SPLICE DETAIL  
Scale:  $\frac{3}{4}" = 1' - 0"$

Note: Existing concrete footings were in good condition so remained in-place. New anchor plates, bolts and hardware installed on the footings.

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
<del>100.00</del>	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SAFETY IMPROVEMENT  
DETAILS  
Kamehameha Highway  
Kipapa Gulch towards Mililani  
Project No. 99C-01-91

Scale: As Shown      Date: Dec., 1991

SHEET No. 2 OF 2 SHEETS

## "AS-BUILT"