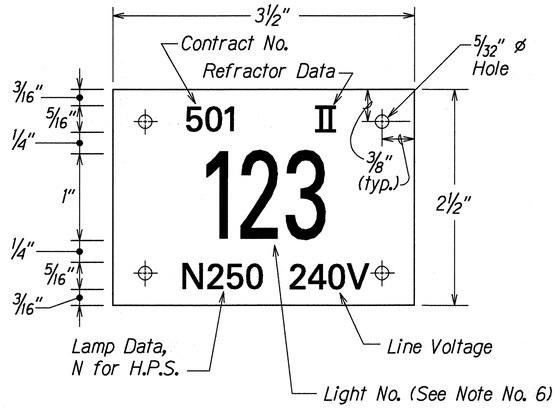
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	27	32



NOTES:

1. Use 3 Ply Laminated Flexible Plastic Black-White-Black Thickness:
   0.010" - Black Cap Sheet
   0.052" - White Base Sheet
   0.010" - Black Base Sheet

2. Light Number Size shall be 1-inch high and engraved 1/8" wide, White in color (Number as required).

3. Nomenclature Size shall be 5/16" high and engraved 1/32" wide, White in color (Contract No., Line Voltage, Lamp Data and Refractor Data as required).

4. Attach to Aluminum and Steel Poles with no. 8 Stainless Steel, 1/2" long Drive Screws in 1/8" drilled hole. Attach to Wood Pole with 4D Aluminum Nails.

5. Numbers are inscribed by cutting through "Black Cap Sheet" to expose "White Letters".

6. Contract Number and Light Number shall be obtained from the State. Use an alphabet suffix to designate lights mounted on the same pole (e.g. 123A & 123B).

HIGHWAY LIGHT POLE TAG DETAIL
UNMETERED SYSTEM
Not to Scale

ELECTRICAL SYMBOLS

New highway light with 8-ft. aluminum ellipical mast arm, 250W HPS luminaire with photo cell, Type III, and Class III wood pole. See sheet (E-4).

New highway light with 15-ft. aluminum truss mast arm, 250W HPS luminaire with photo cell, Type III, mounted on existing utility pole. See sheet (E-4).

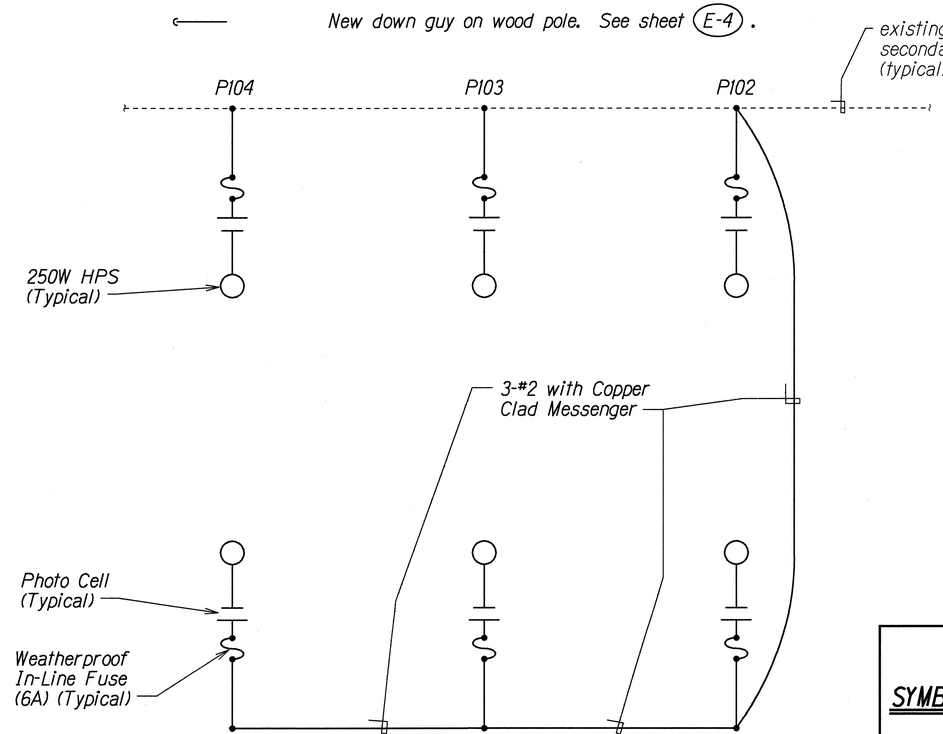
SL — New overhead street light circuit with messenger wire.

Existing metal street light to be removed. Existing street light concrete foundation shall be removed completely from the ground.

Existing underground wiring. Remove all wires and abandon existing conduit in place.

HECO — Existing HECO secondary line.

New down guy on wood pole. See sheet (E-4).



ONE LINE DIAGRAM
Not to Scale

SURVEY PLOTTED BY ____ DATE
DRAWN BY ____
TRACED BY ____
DESIGNED BY ____
QUANTITIES BY ____
CHECKED BY ____
ORIGINAL PLAN
NOTE BOOK
No. ____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

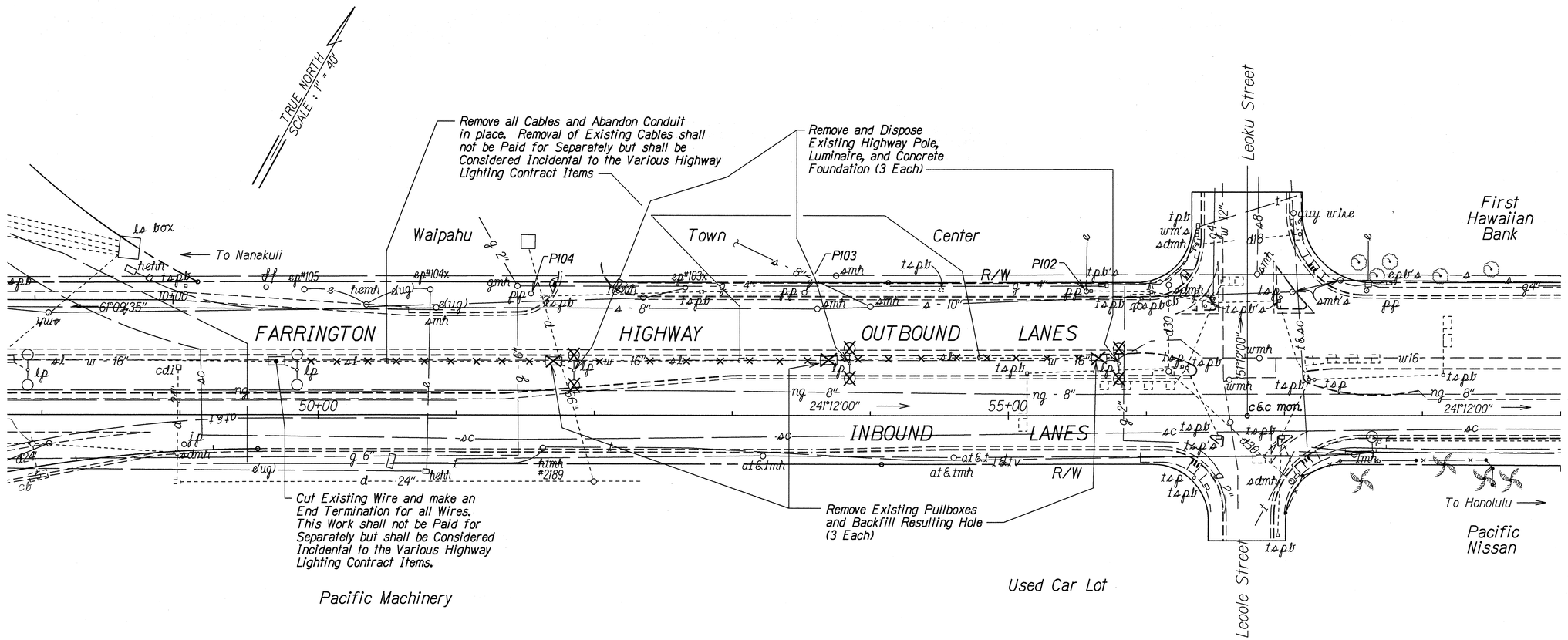
SYMBOLS AND ONE-LINE DIAGRAM

FARRINGTON HIGHWAY
Intersection Improvements at Leoku Street
Project No. 7101A-02-99

Scale: None Date: April, 2000

SHEET No. E-1 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	28	32



ELECTRICAL DEMOLITION PLAN

ORIGINAL PLAN	
NOTE BOOK	dd9.xml
SURVEY PLOTTED BY	DATE 10/13/00
DRAWN BY	GA
TRACED BY	KJ & BK
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL DEMOLITION PLAN

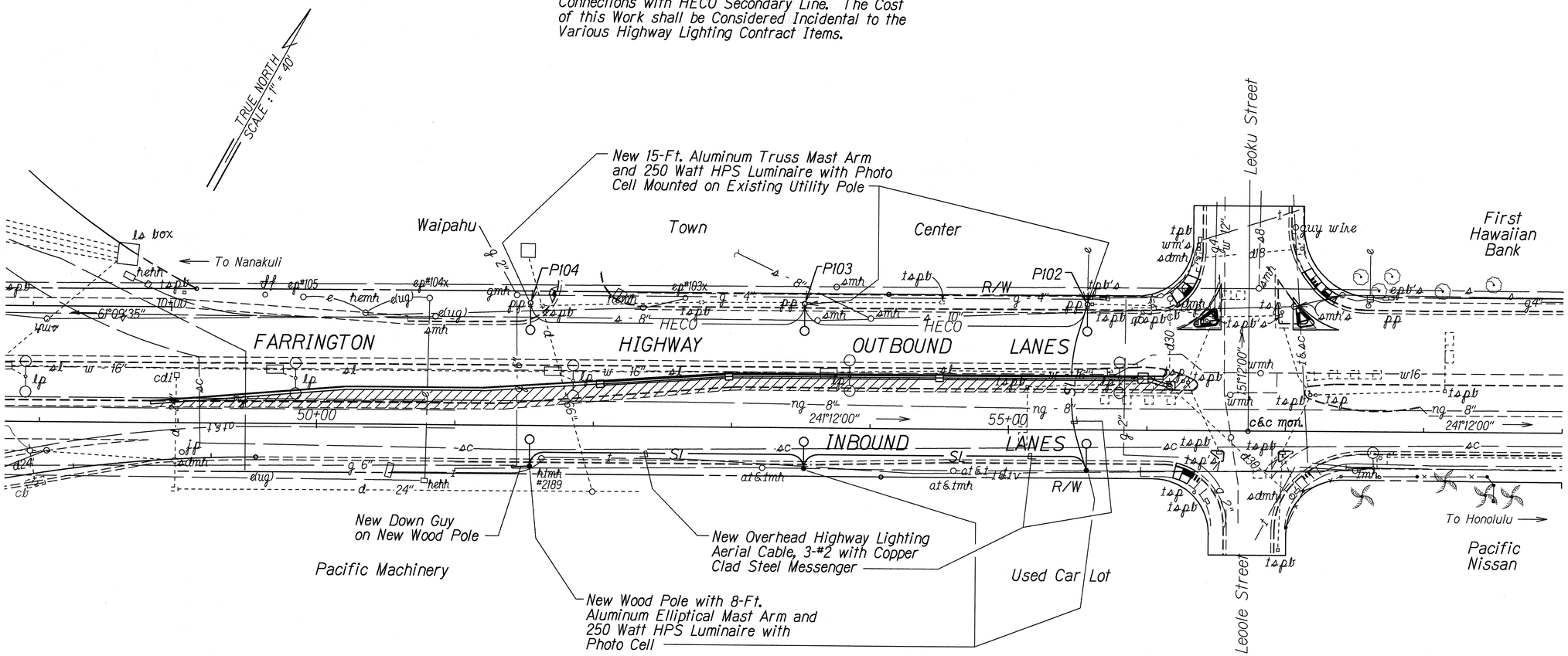
FARRINGTON HIGHWAY
Intersection Improvements at Leoku Street
Project No. 7101A-02-99

Scale: 1"=40' April, 2000

SHEET No. E-2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	29	32

NOTE:
The Contractor shall arrange the Power Source Connections with HECO Secondary Line. The Cost of this Work shall be Considered Incidental to the Various Highway Lighting Contract Items.



NEW ELECTICAL PLAN

SURVEY PLOTTED BY _____ DATE
DRAWN BY C.K. 3/14/00
TRACED BY _____
DESIGNED BY K.J. B.J.
QUANTITIES BY _____
CHECKED BY _____
ORIGINAL PLAN
NOTE BOOK dated
No. attached

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

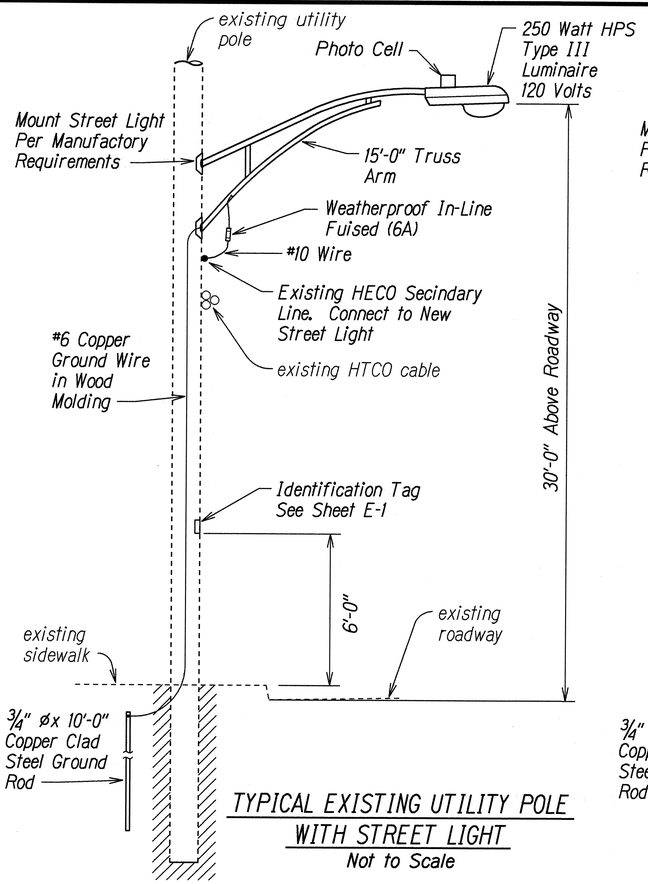
NEW ELECTICAL PLAN

FARRINGTON HIGHWAY
Intersection Improvements at Leoku Street
Project No. 7101A-02-99

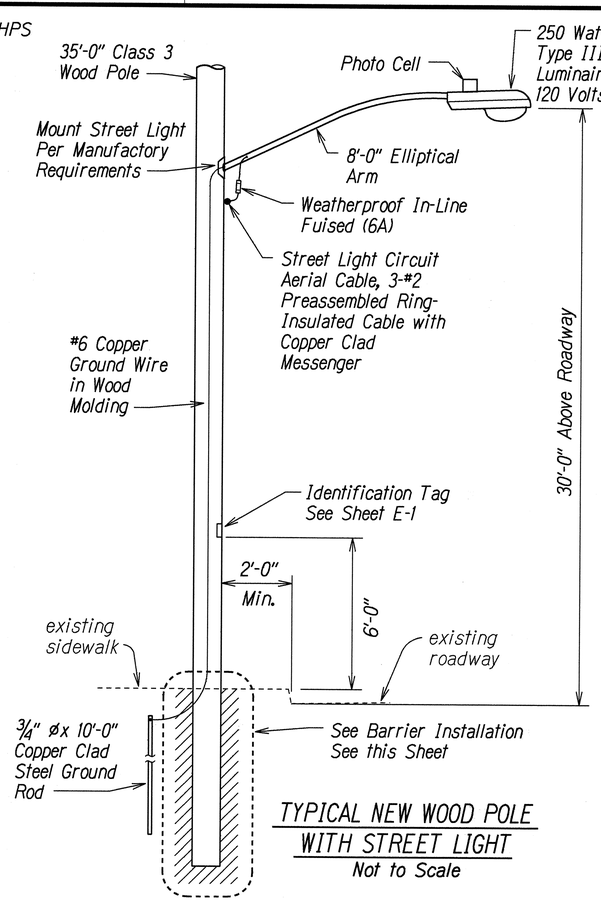
Scale: 1"=40' April, 2000

SHEET No. E-3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	30	32



TYPICAL EXISTING UTILITY POLE WITH STREET LIGHT
Not to Scale

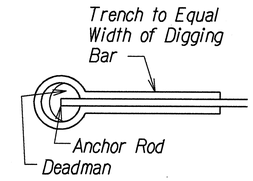


TYPICAL NEW WOOD POLE WITH STREET LIGHT
Not to Scale

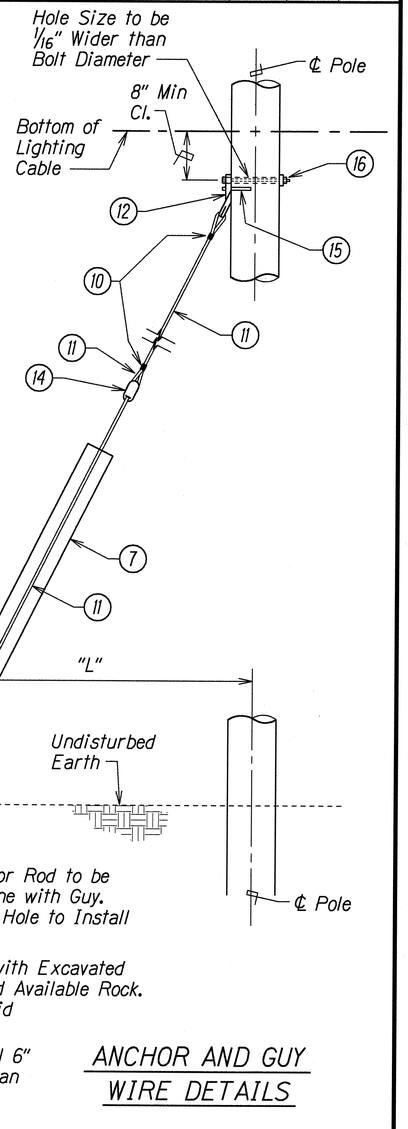
ITEM NO.	DESCRIPTION
1.	Luminaire 250 W HPS and Bracket as Shown
2.	Concrete Deadman 1'-6"ø with Galv. Sq. Washer
3.	In Line Fuse Holder with 6A Fuse
4.	Wire #10 AWG Stranded Copper, Type RHW Black
5.	Wire #10 AWG Stranded Copper, Type RHW Red
6.	In Line Unfused, Insulated Separable Connector
7.	Guy Wire Guard, Galv.
8.	Thimble Clevis with Eyelet
9.	Wires, 2-#2 XHHW Copper with Copper Clad Messenger
10.	Preformed Guy Grip
11.	Guy Wire, 3/8" EHS, Galv.
12.	Anchor Guy Hook with 3/4"ø Thru Bolt ¢ 2 1/4" Sq. Washer
13.	Messenger Hanger, 5/8"ø Thru ¢ 2 1/4" Sq. Washer
14.	Insulator, Porcelain
15.	Lag Screw (Size As Required)
16.	5/8"ø Galv. Thru Bolt with 2 1/2" Sq. Galv. Washer (Length as Required)
17.	Performed Deadened
18.	Anchor Rod 1"øx8'-0" Copper Clad

Note:
All Hardware shall be Hot Dipped Galv. Steel

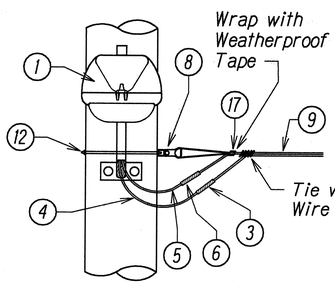
ANCHOR ROD ¢ DEADMAN DIM.		
"L" C Pole to Anchor Rod Eye	"W" C Hole to Anchor Rod Eye	"D" Vertical Depth
20'-0"	4'-8"	5'-6"
15'-0"	4'-0"	6'-1"
10'-0"	3'-0"	6'-7"
5'-0"	1'-8"	7'-1"



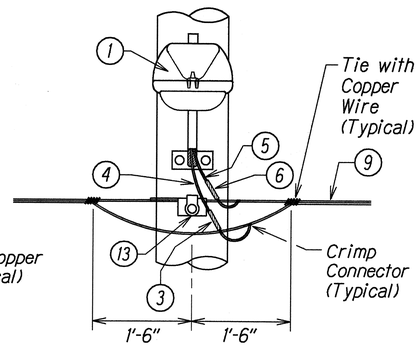
TRENCH PLAN



ANCHOR AND GUY WIRE DETAILS



DEADEND POLE DETAIL "C"
Not to Scale

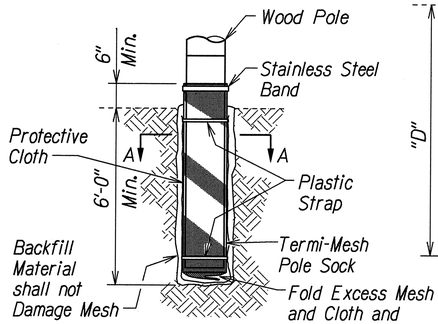


THRU POLE DETAIL "D"
Not to Scale

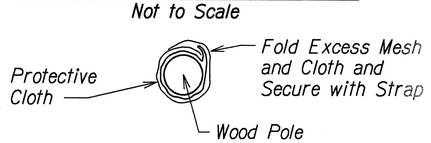
GENERAL NOTES:

Termi-Mesh is a Physical Barrier System that Prevents Ground Termites from Attacking Wood Poles Below Grade. Careful Installation is Essential to Insure Effective Termite Protection.

Termi-Mesh is a Preformed Stainless Steel Mesh Sock that is Installed Over the Butt of the Pole. The Sock is Tightly Secured to the Pole with all Excess Mesh Folded Over to Prevent Termites from Penetrating Through Voids or Checks in the Wood. The Sock Covers the Butt of the Pole up to 6 Inches Above Grade to Prevent Termites from Forming Mud Tunnels Over the Barrier.



TYPICAL BARRIER INSTALLATION
Not to Scale



SECTION "A-A"
Not to Scale

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL DETAILS

FARRINGTON HIGHWAY
Intersection Improvements at Leoku Street
Project No. 7101A-02-99

Scale: None
Date: April, 2000

SHEET No. E-4 OF 4 SHEETS