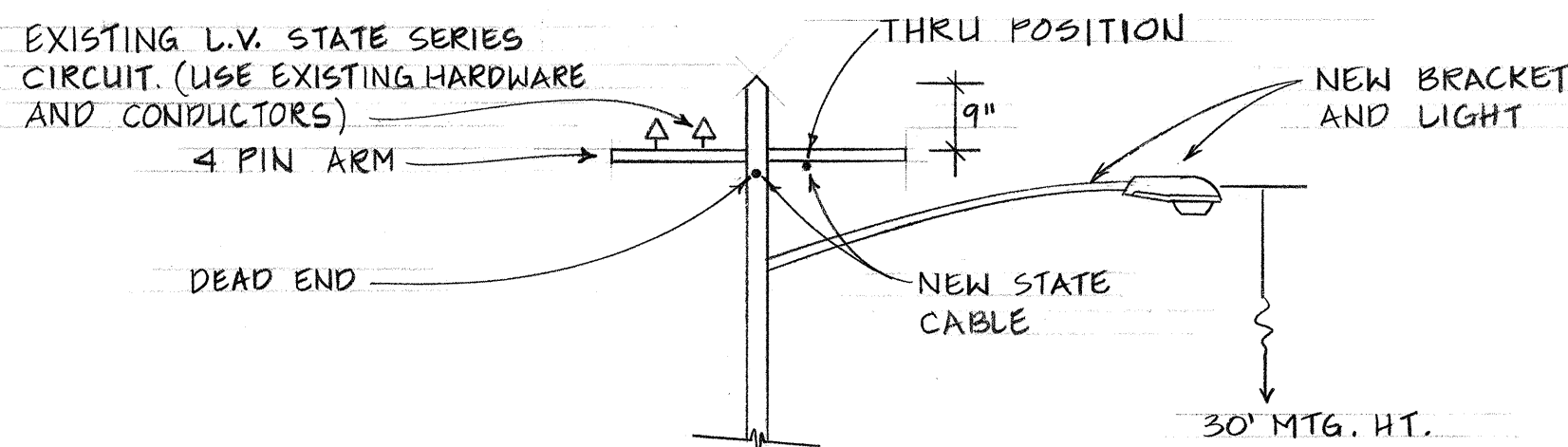
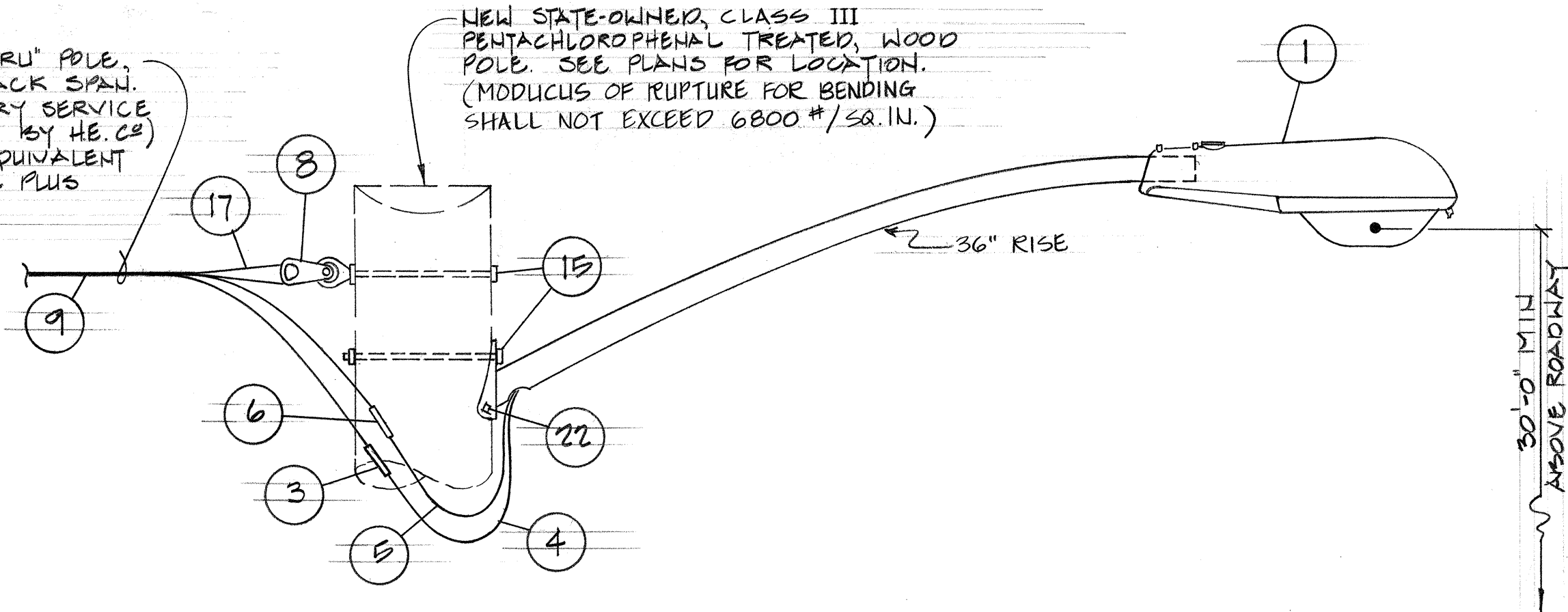


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	930C-01.73 HWY-002.73	1974	6	6



TOP DETAIL FOR NEW STATE POLES (B),(1T),(C), & (D) SHEET 3

WHEN NEXT POLE IS A "THRU" POLE, PROVIDE CABLE FOR SLACK SPAN. WHEN SPAN IS TO SECONDARY SERVICE & JOINT POLE (CONNECTION BY H.E.CO) PROVIDE SLACK CABLE EQUIVALENT TO POLE-TO-POLE DISTANCE PLUS ADDITIONAL 10' MINIMUM. COIL ON STATE POLE

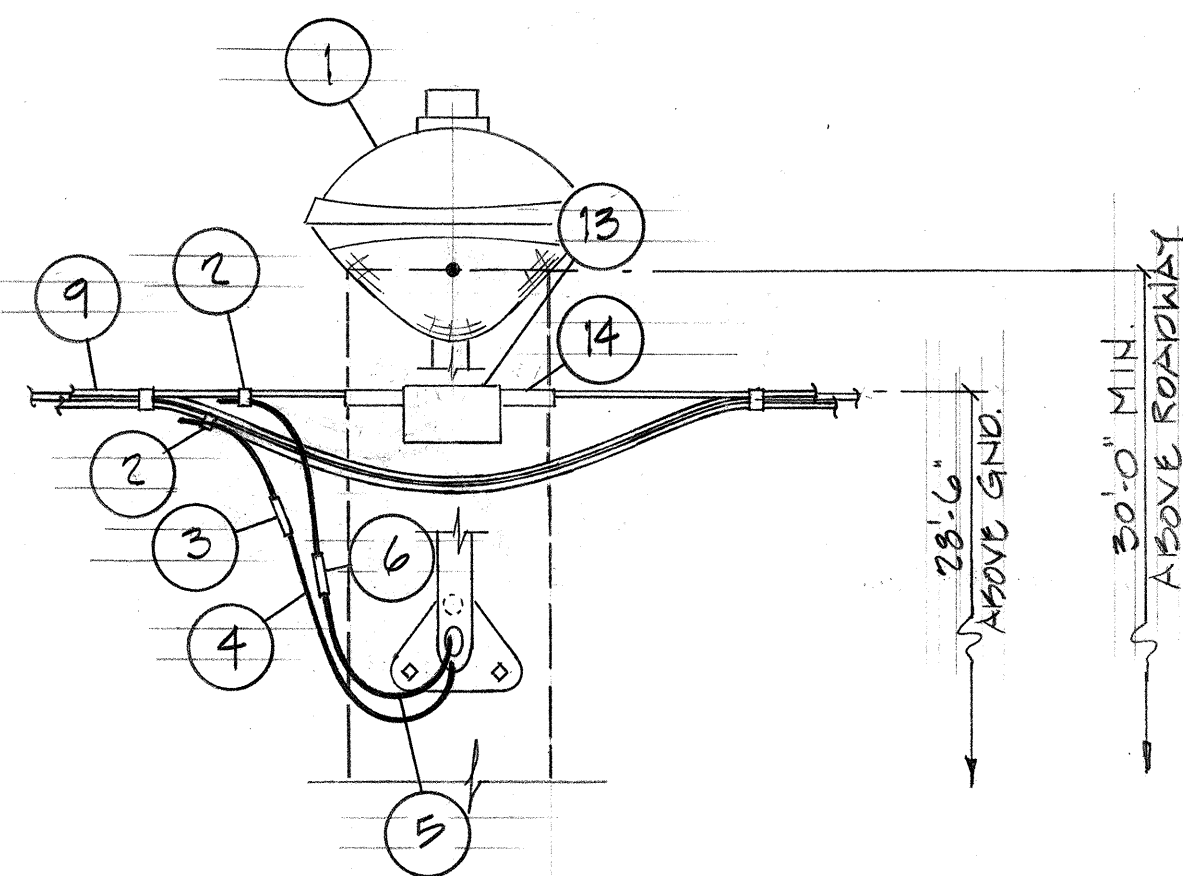


TYPICAL 'END-POLE' LUMINAIRE ATTACHMENT AT STATE-OWNED POLE

N.T.S.

MATERIAL LIST

ITEM NO	DESCRIPTION
1	LUMINAIRE, MERCURY, 400W, TYPE II WITH PHOTO ELECTRIC CONTROL & MAST ARM
2	CRIMP CONNECTOR, ALUM.
3	IN-LINE FUSE HOLDER WITH FUSE
4	WIRE, #10 STRANDED COPPER, TYPE RHW, BLACK
5	WIRE, #10 STRANDED COPPER, TYPE RHW, WHITE
6	CONNECTOR, SEPARABLE, IN-LINE, UNFUSED, INSULATED
7	WIRE, #8 AWG, 7 STRAND ALUMINUM, TYPE RHW
8	CLEVIS, THIMBLE, ALUMINUM ALLOY W/ALUM. ALLOY EYELET
9	3/8" #4 AAC, CROSSLINK, POLYETHYLENE INSULATED, BARE NEUTRAL
10	PRE-FORMED GUY GRIP
11	GUY WIRE, 3/8" COMMON GRADE GALV. (2500*MIN. BREAKING STRENGTH)
12	HOOK, ANCHOR GUY, W/ 3/4" DIA. THRU BOLT & 2 1/4" SQ. WASHER
13	MESSENGER HANGER, CAST ALUMINUM W/ 9/8" ALUM. ALLOY THRU BOLT & 2 1/4" ALUM. ALLOY SQ. WASHER
14	ALUMINUM LINE GUARD (AROUND MESSENGER)
15	9/8" ALUM. ALLOY THRU BOLT W/ 2 1/4" SQ. ALUM. ALLOY CURVED WASHER, LENGTH AS REQ'D. (ADJUST FOR DOUBLE BRACKET)
16	ALUM. ALLOY SUSPENSION CLAMP WITH LINE GUARD AND ALUM. ALLOY EYELET
17	ALUM. ALLOY PRE-FORMED DEADEND
18	ANCHOR ROD, 5/8" DIA. x 8', GALV.
19	CONCRETE DEADMAN, 18" DIA. W/GALV. SQ. WASHER
20	GUARD, GUY WIRE, ACRYLIC MODIFIED PVC, 7', YELLOW
21	INSULATOR, PORCELAIN
22	LAG SCREW



TYPICAL "THRU-POLE" LUMINAIRE ATTACHMENT

N.T.S.

FUSES AT GROUP OF LIGHTS
2 KW OR BELOW AT 240V-20A

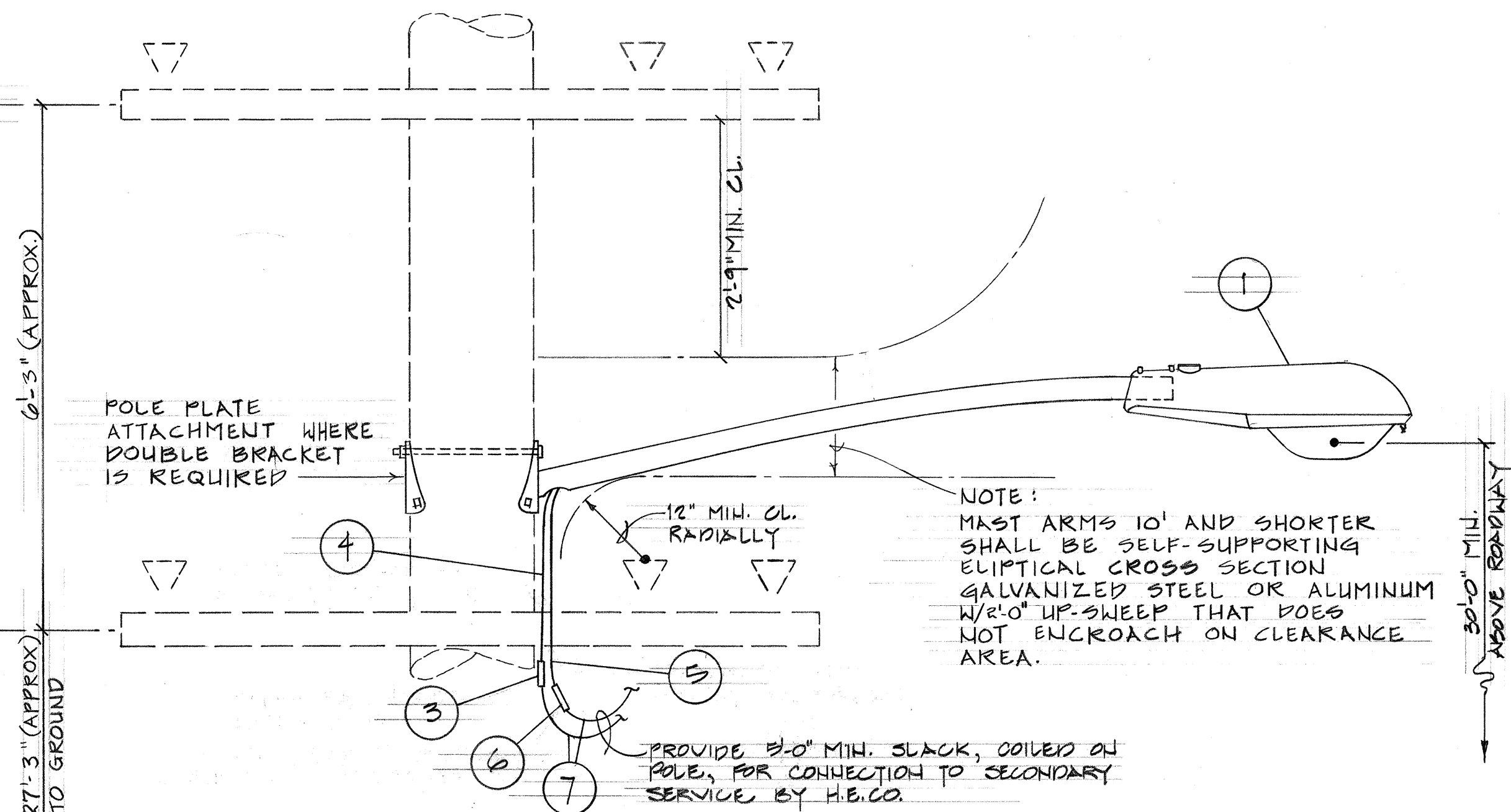
FUSE AT EACH
120V LIGHT=10A

ONE LINE DIAGRAM

NOTE: BALANCE LOAD
ON EACH LEG.

EXIST'G H.E.CO.
PRIMARY

EXIST'G H.E.CO.
SECONDARY



TYPICAL LUMINAIRE ATTACHMENT AT JOINT POLE

(CROSS-ARM MOUNTED SECONDARY SHOWN. THIS IS TYPICAL FOR ALL POLES MARKED JP THAT ARE NOT FURTHER EXPLAINED BY "SPECIAL FRAMING" OR DETAIL (C) - [HECO SECONDARY CABLE ATTACHMENT])

SECONDARY
CABLE ATTACHMENT

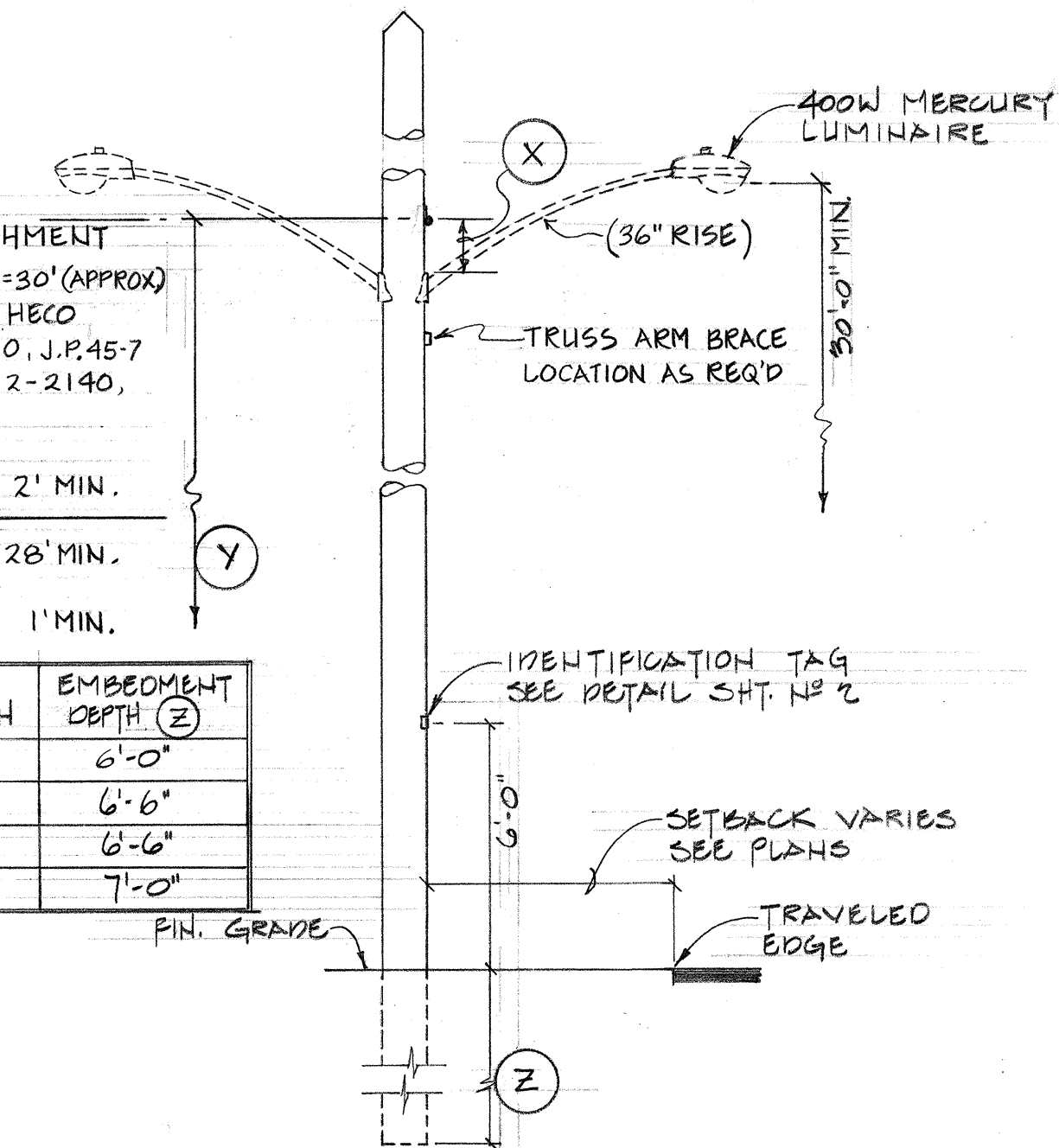
ON JOINT POLES (Y) = 30' (APPROX)
IN ACCORDANCE WITH HECO
DWG. SHT. 3 OF 2-2120, J.P. 45-7
HECO DWG. SHT. 2 OF 2-2140,
J.P. 50-4

ON JOINT POLES (X) = 2' MIN.

ON STATE POLES (Y) = 28' MIN.

ON STATE POLES (X) = 1' MIN.

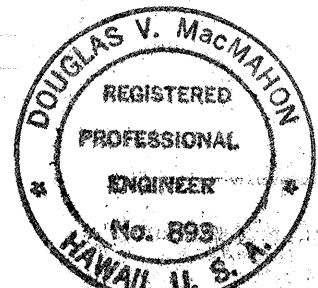
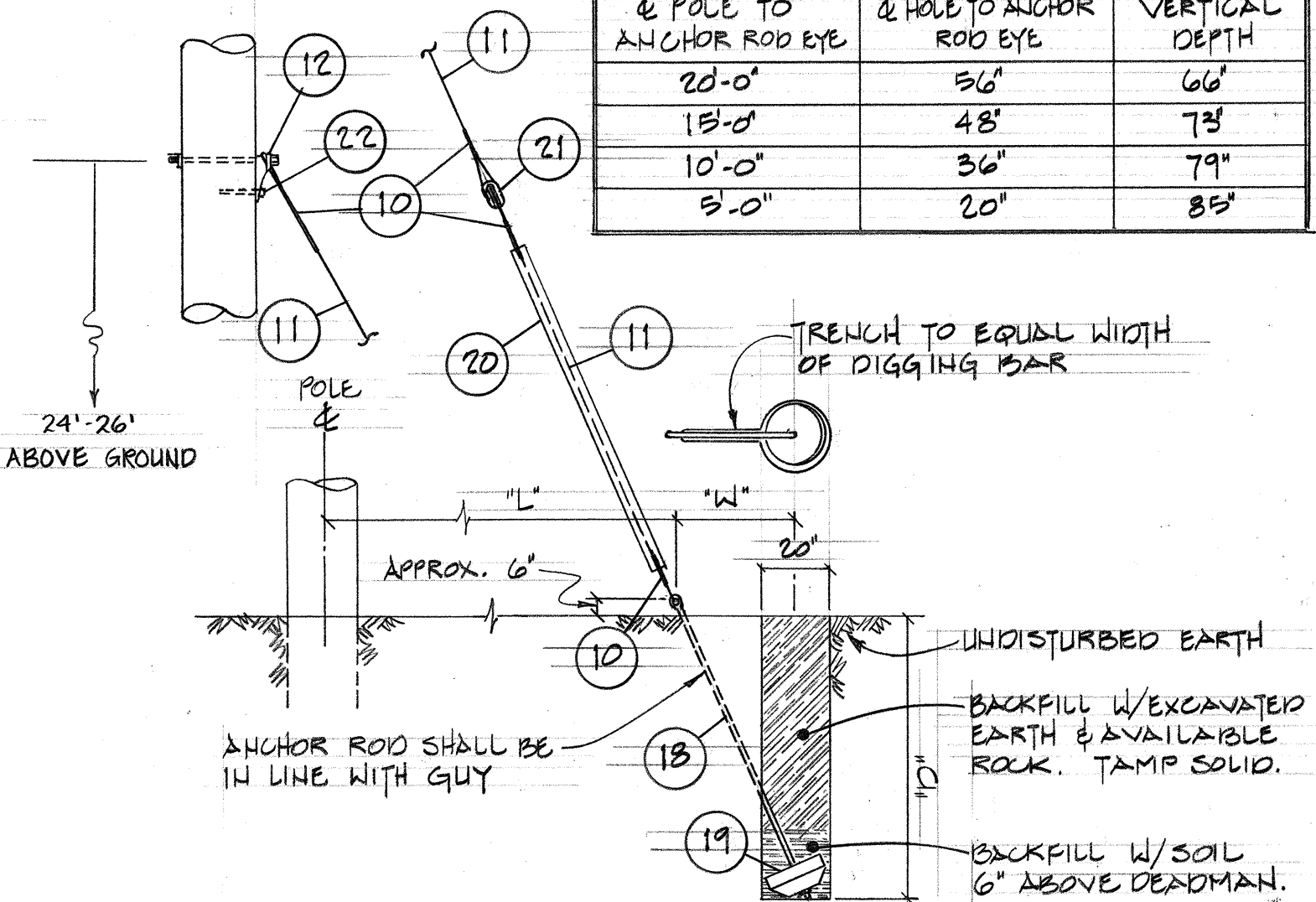
POLE LENGTH	EMBEDMENT DEPTH (Z)
35'	6'-0"
40'	6'-6"
45'	6'-6"
50'	7'-0"



WOOD POLE INSTALLATION DETAIL

N.T.S.

LEAD & DEPTH		
"L" & POLE TO ANCHOR ROD EYE	"W" & HOLE TO ANCHOR ROD EYE	"D" & VERTICAL DEPTH
20'-0"	56"	66"
18'-0"	48"	73"
10'-0"	36"	79"
9'-0"	20"	85"



Douglas V. MacMahon

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM
MISCELLANEOUS DETAILS
FARRINGTON HIGHWAY NEAR
WAILUA HIGH SCHOOL
AND WEEP JUNCTION
PROJECT No's 930C-01.73 & HWY-0.02.73

SHEET NO. 6 OF 6 SHEETS