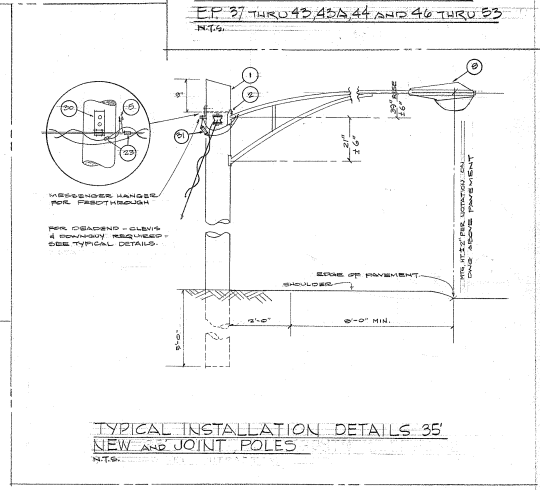
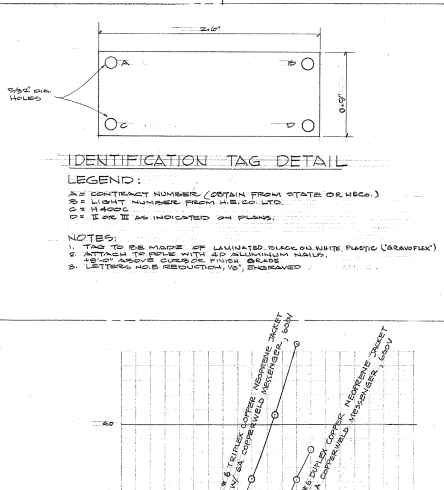
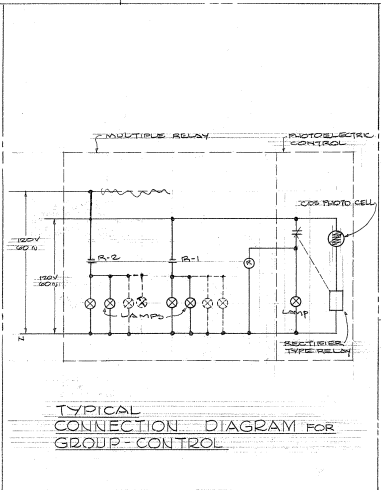
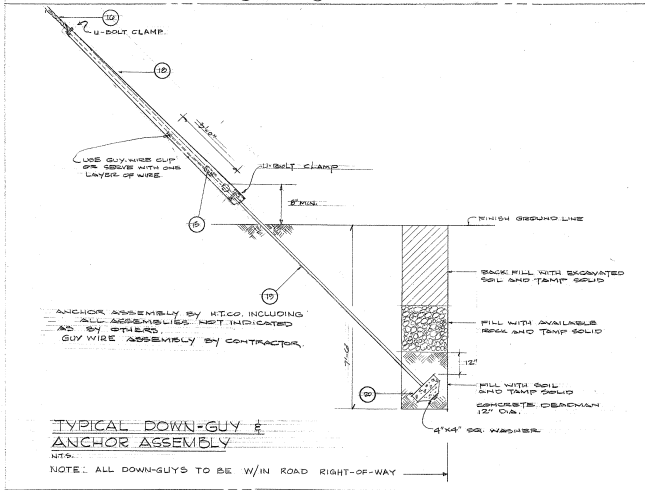
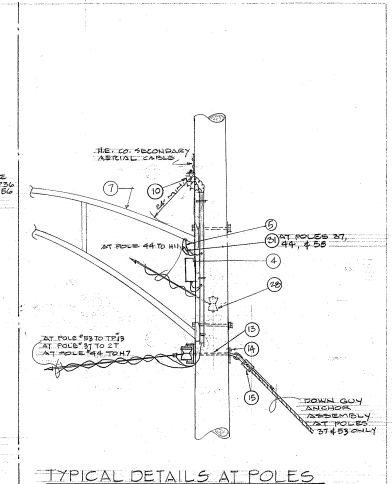
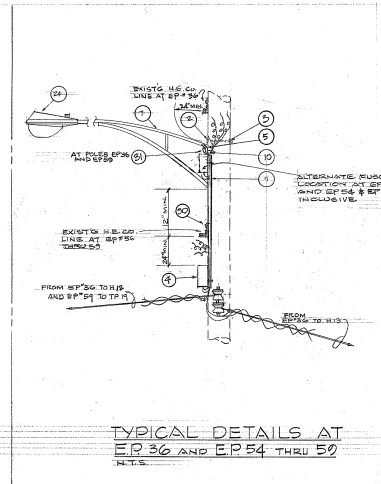
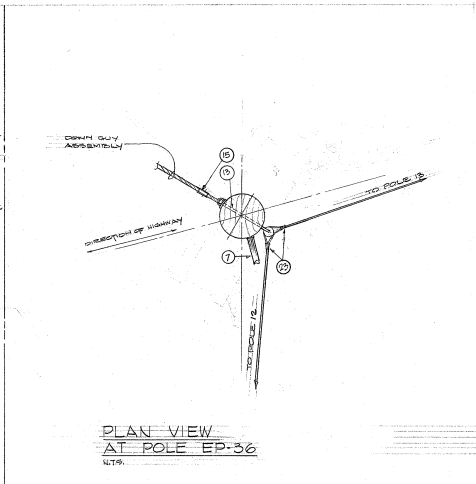
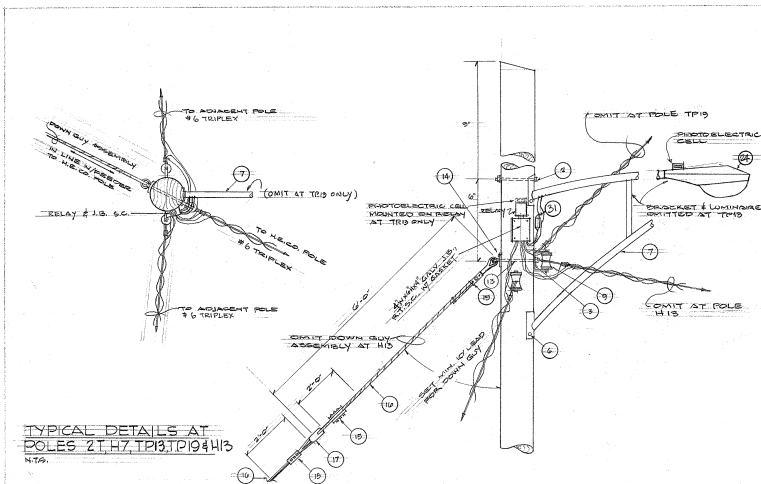
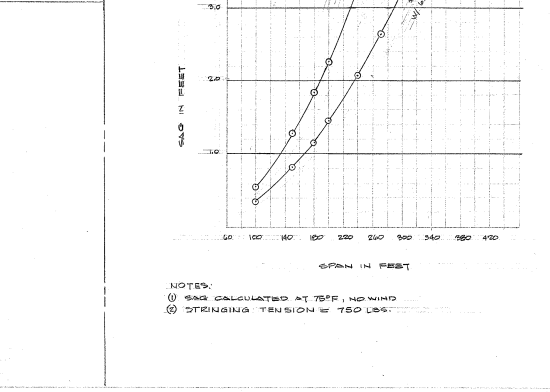




POLE LINE MATERIALS				
ALL HARDWARE HOT-DIP GALV. EEL SPEC. TO-1; BOLT LENGTHS APPROX.				
KEY	DESCRIPTION	(State)	KEY	
1	POLE, 95' CLASS 30,000 LBS. WEIGHTED BY PRESSURE W/ H-10	21 ea.	16	GUY WIRE, 3/8" STRAND GALV., HIGH-STRENGTH
2	BOLT, MACHINE, 3/8" DIA.		17	INSULATOR, STRAIN, EEL-HEMA CLASS 54-5
3	WASHER, CUPPED, 3/8" X 3/4", 1/4" HOLE		18	GUY GUARD GALV., 1/8" DIA. STREET 18 ea. (14 on State Poles)
4	FUSE HOLDERS, 1/2" CARTRIDGE FUSES IN GALV. SHEET METAL BOX	23 ea.	19	GUY ROD, 3/8" X 8'-0" W/ TWIN THUMB-EYE
5	BRACKET CABLE, 2" CONDUCTORS, SEE SPEC.		20	DEADMAN, CONCRETE, 12" DIA. THICK
6	BOLT, LAG, 3/4" X 5"		21	PHOTOELECTRIC CONTROL DEVICE 32 ea. One each on Relays TP13 & EP 33
7	BRACKET, ALUM., 1/2" X 1/2" X 1/2" SEE SPEC.		22	BOLT, MACHINE, 1/2" X 1/2"
8	LUMINAIRE MOUNTING, WITHOUT PHOTO-ELECTRIC CONTROL, SEE SPEC.	31 ea.	23	CONDUCTOR, OPTIC, COPPER, COPPER OR COPPER-TO-ALUM. SEE SPEC.
9	STEEL & WOOD, 1/2" X 1/2" X 1/2" INSULATOR, SEE SPEC.		24	LUMINAIRE, MULTIPLE, WITH PHOTO-ELECTRIC CONTROL, SEE SPEC. 30 ea.
10	CONDUCTORS, 1/2" X 1/2" X 1/2" ALUMINUM OR COPPER, 1/2" X 1/2" X 1/2" IDENTIFIED MULT.		25	WASHER, FLAT, 3/8" X 3/4" X 1/4" HOLE
11	INS. CONDUIT, 1/2" DIA. W/ SINGLE PIPE CLAMP, SCHEDULE 80		26	GRAFFIX, BLACK, 1/4" X 3/8" X 1/4"
12	LIFT PLATE, 3/8" X 1/2" X 1/2" STEEL PLATE		27	CORRUGATED GALV., 3/8" X 1/2"
13	ANGLE THUMB-EYE BOLT, 3/8" X 1/2"		28	BRASSING, GALV., 1/2" DIA. W/ INSULATOR, 1/2" DIA. W/ 1/2" DIA. GALV.
14	SCREEN, LAG, FETTER DRIVE, 1/2" X 1/4"		29	GRAFFIX, BLACK, 1/4" X 3/8" X 1/4"
15	CLAMP, GUY WIRE, 3/8" X 1/2"		30	WASHER, GALV., 1/2" X 1/2" X 1/2"
To use pre-formed				
8	Brackets 3 ea.		31	WATER-TIGHT FUSE HOLDERS
9	Bracket 1 ea.			
10	Brackets 33 ea.			
11	Brackets 10 ea.			
12	Brackets 14 ea.			
Total 61 luminaires				



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

HIGHWAY LIGHTING PLAN
POLE & MISCELLANEOUS DETAILS

FARRINGTON HIGHWAY PROJ. NO. A-90-01-63

SHEET NO. 5 OF 5 SHEETS

W. M. NAKAMURA
REGISTERED PROFESSIONAL ENGINEER
No. 573
HAWAII, U.S.A.

PRINTED AND BOUND BY
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