

PANEL "L"			277/480 VOLTS, 3 PHASE, 4 WSN 3P100A MAIN BREAKER SURFACE MOUNTED 14,000 MIN. AIC.					
CKT. No.	CKT. POLE	BKR. AMPS	USE	CONN LOAD (KVA)			WIRE SIZE	GND SIZE
				A	B	C		
1	3	50	HIGHWAY LIGHTS	2.9	2.9	2.9	2	6
2	3	50	HIGHWAY LIGHTS	2.9	2.9	2.9	2	6
3	3	50	HIGHWAY LIGHTS	2.7	2.7	2.7	2	6
4	3	50	HIGHWAY LIGHTS	2.7	2.7	2.7	2	6
5	3	50	HIGHWAY LIGHTS	2.7	2.7	2.7	2	6
6	3	50	HIGHWAY LIGHTS	2.7	2.7	2.7	2	6
7	1	20	CONTROL	0.1			12	12
8	1	---	PFB	---			---	---
9	1	---	PFB		---		---	---
10	1	---	PFB		---		---	---
11	1	---	PFB			---	---	---
12	1	---	PFB			---	---	---

ELECTRICAL SYMBOL LIST	
(ALL ITEMS ARE NEW UNLESS OTHERWISE NOTED)	
SYMBOL	DESCRIPTION
	EXISTING STREET LIGHTING LUMINAIRES (TWIN HEAD) ON METAL STANDARD
	EXISTING STREET LIGHTING LUMINAIRE ON METAL STARNARD
	NEW STREET LIGHTING LUMINAIRES (TWIN HEAD) ON METAL STANDARD
	CONCEALED CONDUIT BELOW GRADE
	EQUIPMENT AS INDICATED ON PLANS
	STREET LIGHTING PULLBOX
	ELECTRICAL SERVICE EQUIPMENT
	PAD MOUNTED TRANSFORMER
	DUCT SECTION INDICATOR
	NOTE INDICATOR
	DETAIL INDICATOR: TOP HALF DENOTES DETAIL, BOTTOM HALF DENOTES SHEET NUMBER

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-02-90	1991	3	13

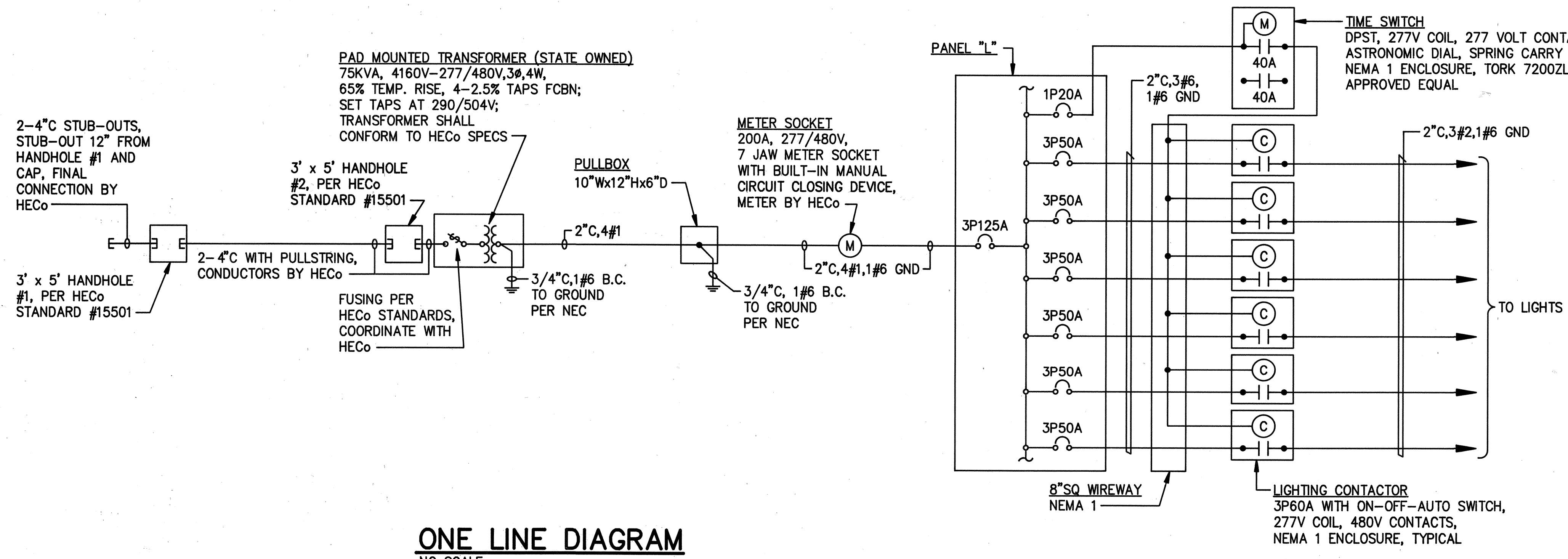
GENERAL NOTES:

- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT ARE NOT GUARANTEED AS TO ACCURACY, OR THAT OTHER OBSTACLES MAY NOT BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN THE CONSTRUCTION IS IN CLOSE PROXIMITY OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO THE EXISTING UTILITIES.

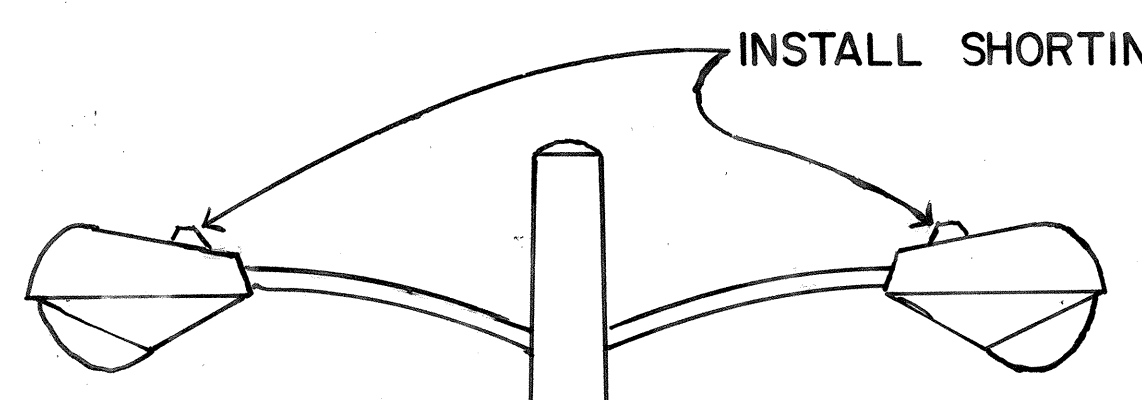
TELEPHONE/ CATV LINES: CONTRACTOR TO OBTAIN EXCAVATION CLEARANCE 3 WORKING DAYS PRIOR TO ANY EXCAVATION WORK. USE EXTREME CAUTION DURING EXCAVATION.

WATER LINES: CONTRACTOR TO CALL BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU FOR FIELD LOCATIONS OF WATER MAINS AND APPURTENANCES A MINIMUM OF 48 HOURS BEFORE STARTING PROJECT EXCAVATION.

SEWER LINES: CONTRACTOR TO CALL DIVISION OF SEWERS, CITY AND COUNTY OF HONOLULU FOR FIELD LOCATIONS OF SEWER LINES AND LATERALS A MINIMUM OF 48 HOURS BEFORE STARTING PROJECT EXCAVATION.
- THE MINIMUM CLEARANCE BETWEEN FIRE HYDRANTS AND UTILITY POLES OR LIGHT STANDARDS SHALL BE 3'-0".
- THE CONTRACTOR SHALL TRIM OR REMOVE ALL TREES, SHRUBS, BUSHES, ETC. ENCRDACHING UPON THE NEWLY INSTALLED HIGHWAY LIGHTING STANDARDS. FOLIAGE SHALL BE TRIMMED SO AS NOT TO INTERFERE WITH THE LUMINAIRE'S LIGHT DISTRIBUTION PATTERN.
- DESIGN ILLUMINATION LEVEL = 1.0 FOOTCANDLE AVERAGE MAINTAINED.
DESIGN UNIFORMITY RATIO (AVE./MIN.) = 3:1 MAX.
DESIGN MAINTENANCE FACTOR = 0.65.



*NOTE: SHORTING CAPS WERE INSTALLED ON HIGHWAY LIGHTS INSTEAD OF PHOTO CELLS AT THE REQUEST OF HWY-OM ELECTRICIAN SUPERVISOR.



TYPICAL HIGHWAY LIGHT STANDARDS
STA. 99+50± to 221+47±
N.T.S.



This work was prepared by me or under my supervision
EQS INC.
By *Lemox K. Nishimura*
Its PROJECT ENGINEER
Date SEPT. 28, 1990

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL SYMBOL LIST, ONE-LINE DIAGRAM, GENERAL NOTES

LIKELIKE HIGHWAY - HIGHWAY LIGHTS
WILSON TUNNEL TO VALLEY VIEW ROAD
PROJECT NO. 63A-02-90

SCALE: NO SCALE DATE: SHEET No. 3 OF 13 SHEETS