	A.I.C.	AMPERE INTERRUPTING CAPACITY	K	KVA	KILOVOLT — AMPERES KILOVOLT
	AMP/A	AMPERES		KW	KILOWATT
	AUX.	AUXILIARY			
А	AWG.	AMERICAN WIRE GAUGE	<u> </u>	 	LICHT
	APPROX.	APPROXIMATE BREAKER AMPERE TRIP	1	LT.	LIGHT LIGHTING
	A/F	BREAKER AMPERE FRAME	*** **** **** ************************	LDCTR.	LOADCENTER
• '	AM	AMPLITUDE MODULATED			
	100	DADE CORRED			NAINTINALINA
	BC. BKR.	BARE COPPER BREAKER	 - M	MIN.	MINIMUM MANUFACTURER
	BLDG.	BUILDING		MTD.	MOUNTED
В	BFF.	BELOW FINISHED FLOOR		MTG.	MOUNTING
	:	,		MCM	THOUSAND CIRCULAR MILS
				MOV	METAL OXIDE VARISTOR
	CAR	CARINET			
	CAB.	<u>CABINET</u> CIRCUIT		NF	NON-FUSIBLE
	Ę.	CENTERLINE	 N	N.I.C.	NOT IN CONTRACT
	COMM.	COMMUNICATION		NO.	NUMBER
	CONTR.	CONTRACTOR		N.O.	NORMALLY OPEN
	CONC.	CONCRETE CURRENT LIMITING FUSE (S)		N.C.	NORMALLY CLOSED
	CLF.	CURRENT LIMITING FUSE (S) CEILING		NL. NEMA	NIGHT LIGHT NATIONAL ELECTRICAL
	CMH	COMMUNICATIONS MANHOLE		INCINI	ANUFACTURER'S ASSOCIATION
	CU.	COPPER			
	CLR.	CLEAR OR CLEARANCE		OH.	OVERHEAD
] 0	O.C.	ON CENTER
		DIDECT DUDIED	<u> </u>	DD	DUCUDUTTON
	D.B. DISC.	DIRECT BURIED DISCONNECT	-	PB. PRIM.	PUSHBUTTON PRIMARY
	DISTRIB.	DISTRIBUTION		PFB	PROVISION FOR FUTURE
	DWG.	DRAWING	1		BREAKER
D	D	DEEP OR DEPTH]_	R	PLATE
	DIAG.	DIAGRAM	1 P	PNL.	PANEL
	DN.	DOWN		PVC.	POLYVINYLCHLORIDE
				4	POLE PHASE
	EA.	EACH	1		THASE
•	ELEC.	ELECTRICAL		;	
	ЕМН	ELECTRIC MANHOLE		RECEP.	RECEPTACLE
	ENCL.	ENCLOSE OR ENCLOSURE		REQ'D.	REQUIRED
_	EQUIP.	EQUIPMENT	R	RM.	ROOM PECONNECTED
E	EXST.	EXISTING EXTERIOR		RECONN.	RECONNECT OR RECONNECTED RADIO FREQUENCY
	ELEV.	ELEVATION			INTERFERENCE
	EES	EARTH ELECTRODE SYSTEM		RLA	RATED LOAD AMPERES
•				-	
	FA.	FIRE ALARM		SCHED.	SCHEDULE
	FIN.	FINISH	-mi	SHT.	SHEET
	FDR.	FEEDER		SPEC.	SPECIFICATION
	FLR.	FLOOR		SQ.	SQUARE
F	FXTR.	FIXTURE		STD.	STANDARD
1	FCBN	FULL CAPACITY BELOW NORMAL		STL. SW.	STEEL SWITCH
•	FCAN FLUOR.	FULL CAPACITY ABOVE NORMAL FLUORESCENT		SEC.	SECONDARY
* grand	F M	FREQUENCY MODULATED		S/S	STAINLESS STEEL
magain an ann an	The state of the s			SUBSTA.	SUBSTATION
	G/GND.	GROUND		SWBD.	SWITCHBOARD
	GR.	GRADE BLOID STEEL		SWGR.	SWITCHGEAR
	GRS.	GALVANIZED RIGID STEEL	-		· · · · · · · · · · · · · · · · · · ·
G	GALV.	CONDUIT GALVANIZED		TRANSF.	TRANSFER
J	GOV'T.	GOVERNMENT	 T	TEL.	TELEPHONE
	GA.	GAUGE		TERM.	TERMINAL
	GFCI	GOVERNMENT FURNISHED AND		TYP.	TYPICAL
	1	CONTRACTOR INSTALLED		LIC	LINDEDCDOLIND
			111	UG.	UNDERGROUND UNDERWRITER'S LABORATORIE
	HH	HANDHOLF			SIDERWINIER S LABORATORIE
— H	HH. HT.	HANDHOLE HEIGHT	1		
Н			\ /	V	VOLTS
Η	HT. INCAND.	HEIGHT INCANDESCENT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
H	HT. INCAND. ID.	HEIGHT INCANDESCENT IDENTIFICATION	V	W	WIRE
H 	HT. INCAND.	HEIGHT INCANDESCENT	V	W	WIRE WITH
H 	HT. INCAND. ID.	HEIGHT INCANDESCENT IDENTIFICATION	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	W	WIRE
H 	HT. INCAND. ID.	HEIGHT INCANDESCENT IDENTIFICATION	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	W	WIRE WITH
H 	HT. INCAND. ID. IG	HEIGHT INCANDESCENT IDENTIFICATION INSTRUMENTATION GROUND	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	W W WP.	WIRE WITH WEATHERPROOF

ABBREVIATIONS

KVA

KILOVOLT - AMPERES

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY:

- 1. CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM STATE'S HIGHWAY DISTRICT ENGINEER AT 727 KAKOI STREET PRIOR TO COMMENCEMENT OF WORK WITHIN THE STATE RIGHT-OF-WAY.
- 2. CONTRUCTION & RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT—OF—WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CURRENT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", & THE "SPECIFICATION FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS", OF THE STATE HIGHWAYS DIVISION.
- 3. ALL LANES SHALL BE OPEN TO TRAFFIC DURING MORNING PEAK HOURS FROM 6:00 AM TO 8:30 AM & DURING AFTERNOON PEAK HOURS FROM 3:00 PM TO 6:00 PM, & DURING OFF-WORK HOURS.

 9. A
- 4. CONTRACTOR SHALL PROVIDE, INSTALL & MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, & OTHER PROTECTIVE FACILITIES & SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION & FOR THE CONVENIENCE & SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES & PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS & HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, & THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS, PART VI TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION & MAINTENANCE OPERATIONS", DATED 1985. IF LANE CLOSURES ARE REQUIRED DURING CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
- 5. THE MINIMUM PAVEMENT STRUCTURE SHALL CONSIST OF:
 - A. COMMERCIAL DRIVEWAYS, SIDEROADS & UTILITY INSTALLATIONS ON MINOR HIGHWAYS
 - (1) 2-1/2" ASPHALT CONCRETE, 8" AGGREGATE BASE COURSE & 12" AGGREGATE SUBBASE, OR 2-1/2" ASPHALT CONCRETE & 8" ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE.
 - (2) 6" OF CLASS "A" CONCRETE REINFORCED WITH 6"x 6" 6/6 WIRE MESH ON 12" AGGREGATE SUBBASE IF DEEMED NECESSARY BY ENGINEER.
 - B. CHANNELIZED INTERSECTIONS & UTILITY INSTALLATIONS ON MAJOR HIGHWAYS
 - (1) 4" ASPHALT CONCRETE, 8" AGGREGATE BASE COURSE & 12" AGGREGATE SUBBASE, OR 4" ASPHALT CONCRETE & 8" ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE, OR MATCH EXISTING PAVEMENT STRUCTURE, WHICHEVER IS GREATER.
- 6. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING & APPROVED BY THE DISTRICT ENGINEER.
- 7. CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE, NON—SKID BRIDGING MATERIAL OVER TRENCHES, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
- 8. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.

FED. ROAD DIST. NO. STATE FED. AID PROJ. NO. FISCAL SHEET TOTAL SHEETS

HAWAII HAW. GID-OI-85 1988 5 29

9. APPROVAL OF PERMIT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF ONE YEAR THEREOF FROM THE DATE OF NOTIFICATION OF APPROVAL TO THE APPLICANT. IN THE EVENT CONSTRUCTION DOES NOT COMMENCE WITHIN THIS ONE—YEAR PERIOD, THE APPLICANT WILL BE REQUIRED TO RESUBMIT THIS CONSTRUCTION PLANS FOR DIVISION'S REVIEW AND APPROVAL.

10. ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL BE OF HIGH INTENSITY REFLECTIVE SHEETING.

REGISTERED O
PROFESSIONAL
ENGINEER
No. 3737-E

WAII, U.S.P.

Rullud 12/32/127

DATE: APR., 1987

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ABBREVIATIONS, NOTES FOR

CONSTR. WITHIN STATE RIGHT-OF-WAY

PALI HIGHWAY TUNNELS
HIGHWAY LIGHTING IMPROVEMENTS
PROJECT NO. 61D-01-85

SCALE: NONE

SHEET NO. 2E OF 29 SHEETS

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