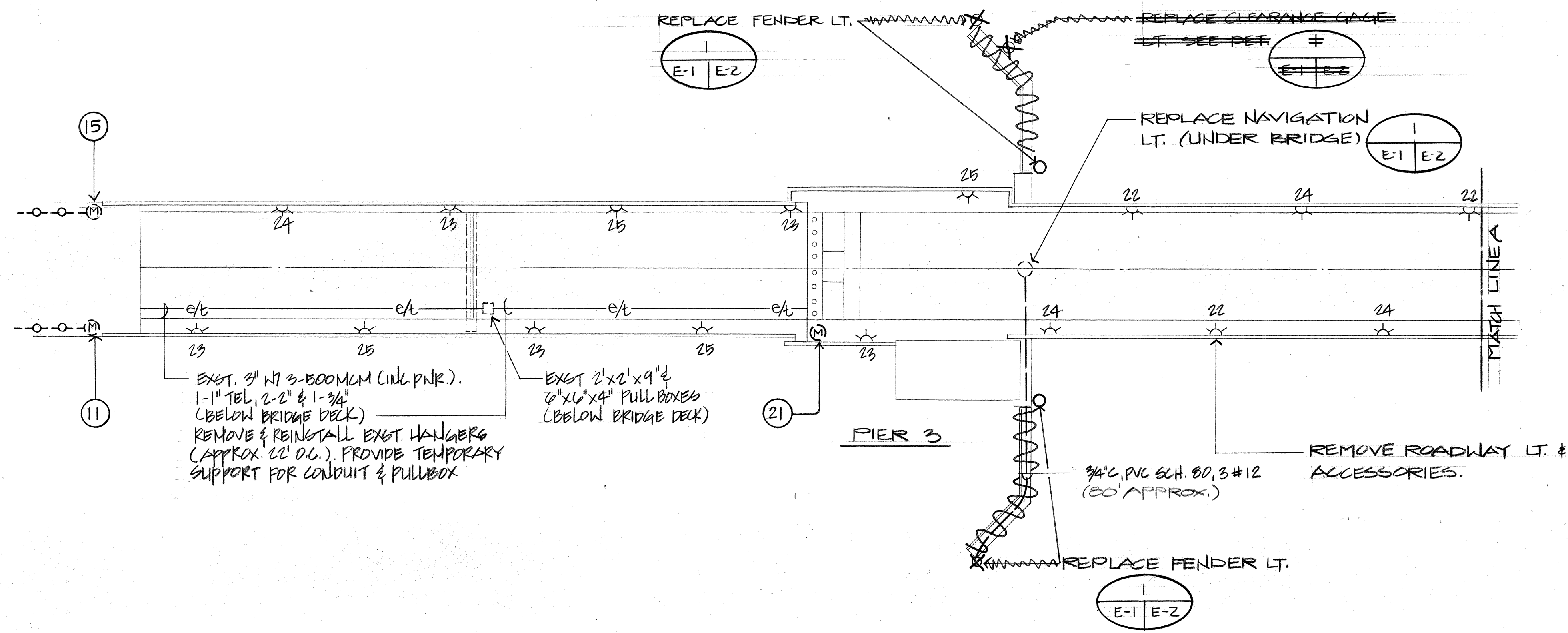
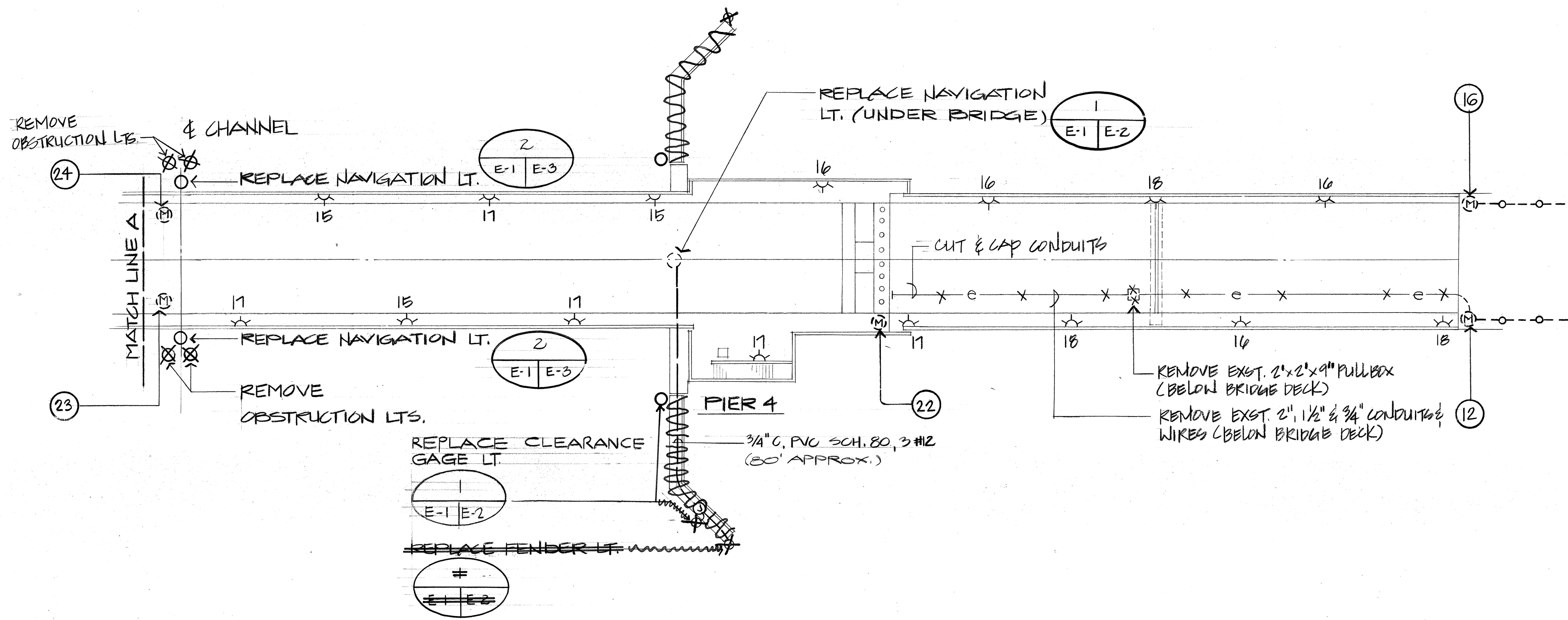


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-064-1(3)	1990	34	30

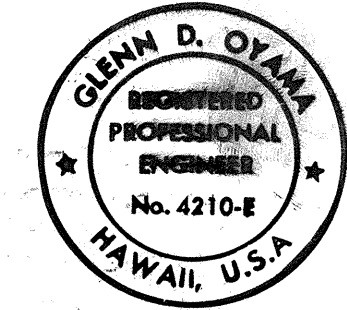


ELECTRICAL SYMBOLS		
EXST.	NEW	DESCRIPTION
		ROADWAY LTS.
		FLUOR. LT., SURF.
		INCAND. LTS. (FENDER OBSTRUCTION, CLEARANCE GATE LTS.)
		INCAND. LT., WALL
		MOTOR LOCATION
		DISCONN. SWITCH
		MOTOR CONN.
		CAST METAL JB
		CONDUIT, ELEC.
		CONDUIT, ELEC. & TEL.
		EXPOSE CONDUIT W/ WIRES
		FLEX. CONDUIT
		KEY TO MOTOR I.D. SHOWN ON POWER DIAGRAM
		GALV. RIGID STEEL

GENERAL NOTE: ALL ELECTRICAL EQUIPMENT & WIRING SHALL BE WATERTIGHT.



ELECTRICAL PLAN
SCALE: 1"=20'

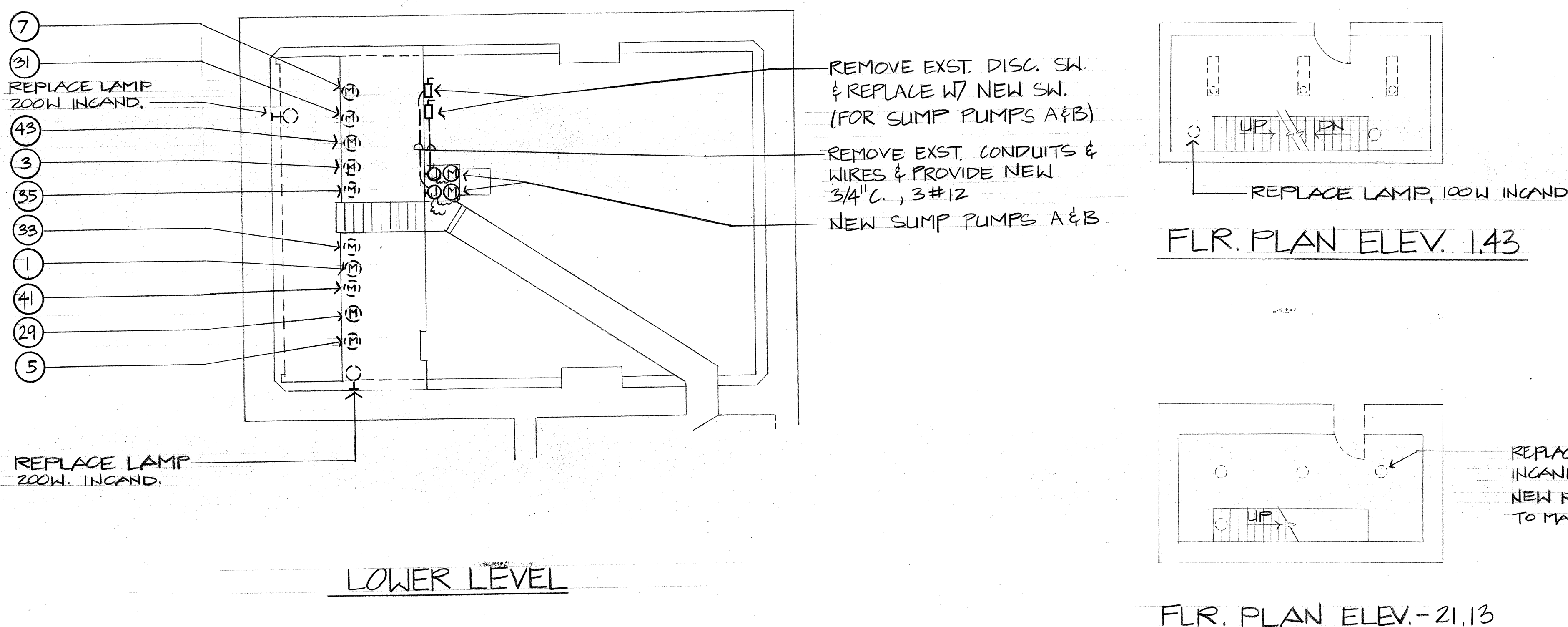
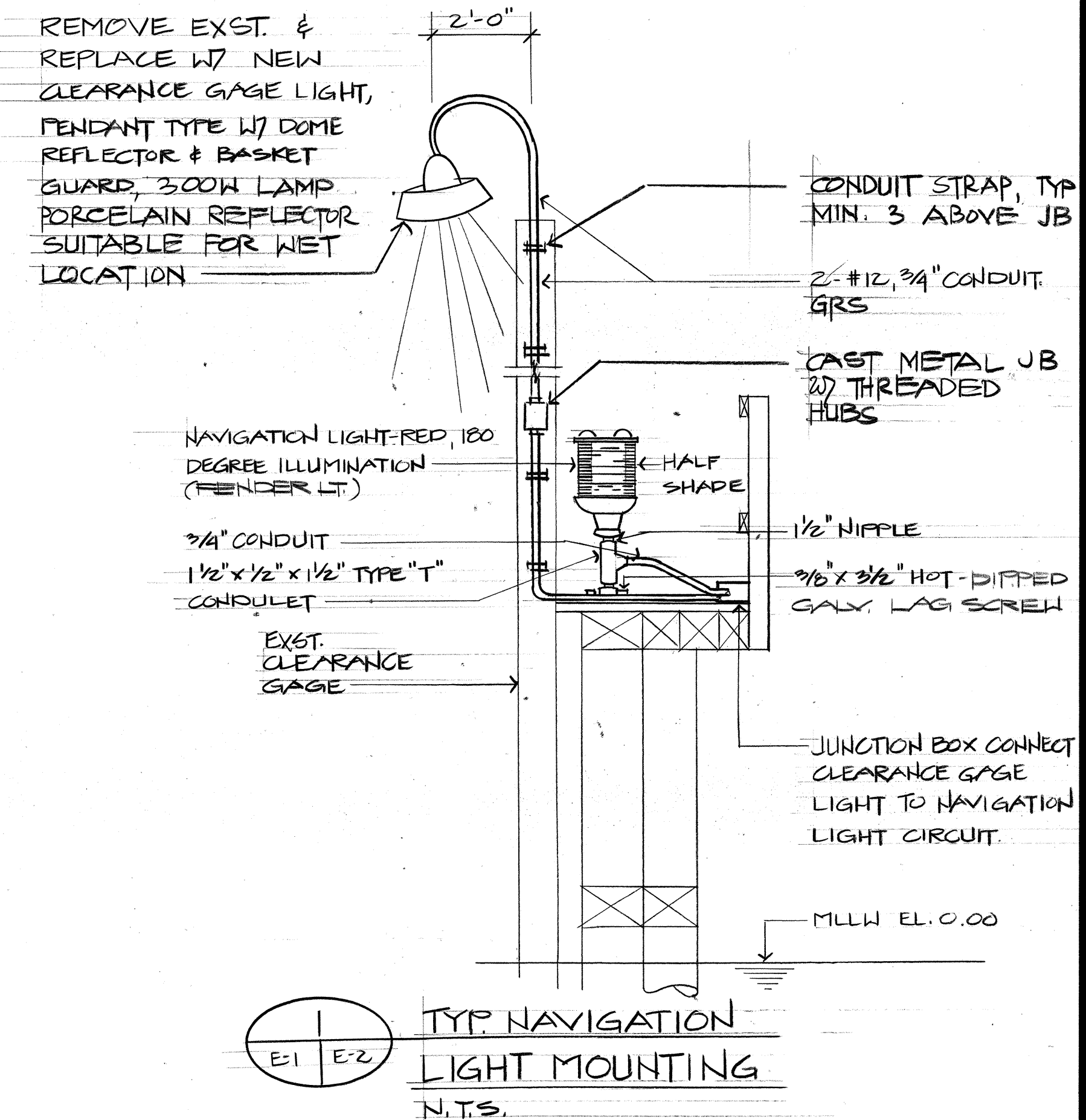
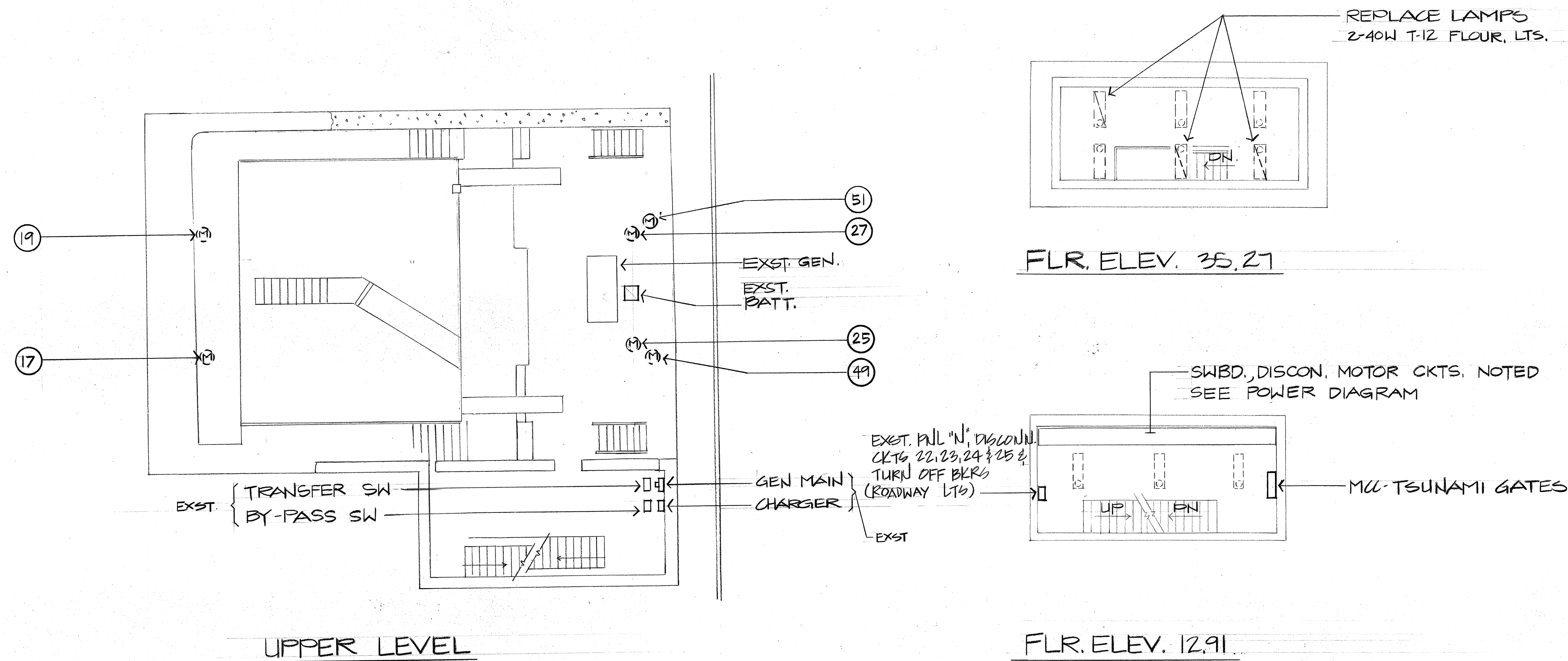


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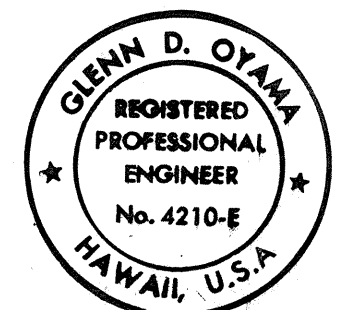
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ELECTRICAL PLAN

SAND ISLAND BASCULE BRIDGE
REHABILITATION PHASE II
PROJECT NO. BR-064-1(3)
SCALE: AS NOTED DATE: AUG. 15, 1991
SHEET No. E-1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-064-1 (3)	1990	35	38



ELECTRICAL PLAN-PIER 3
SCALE: 1/8" = 1'-0"

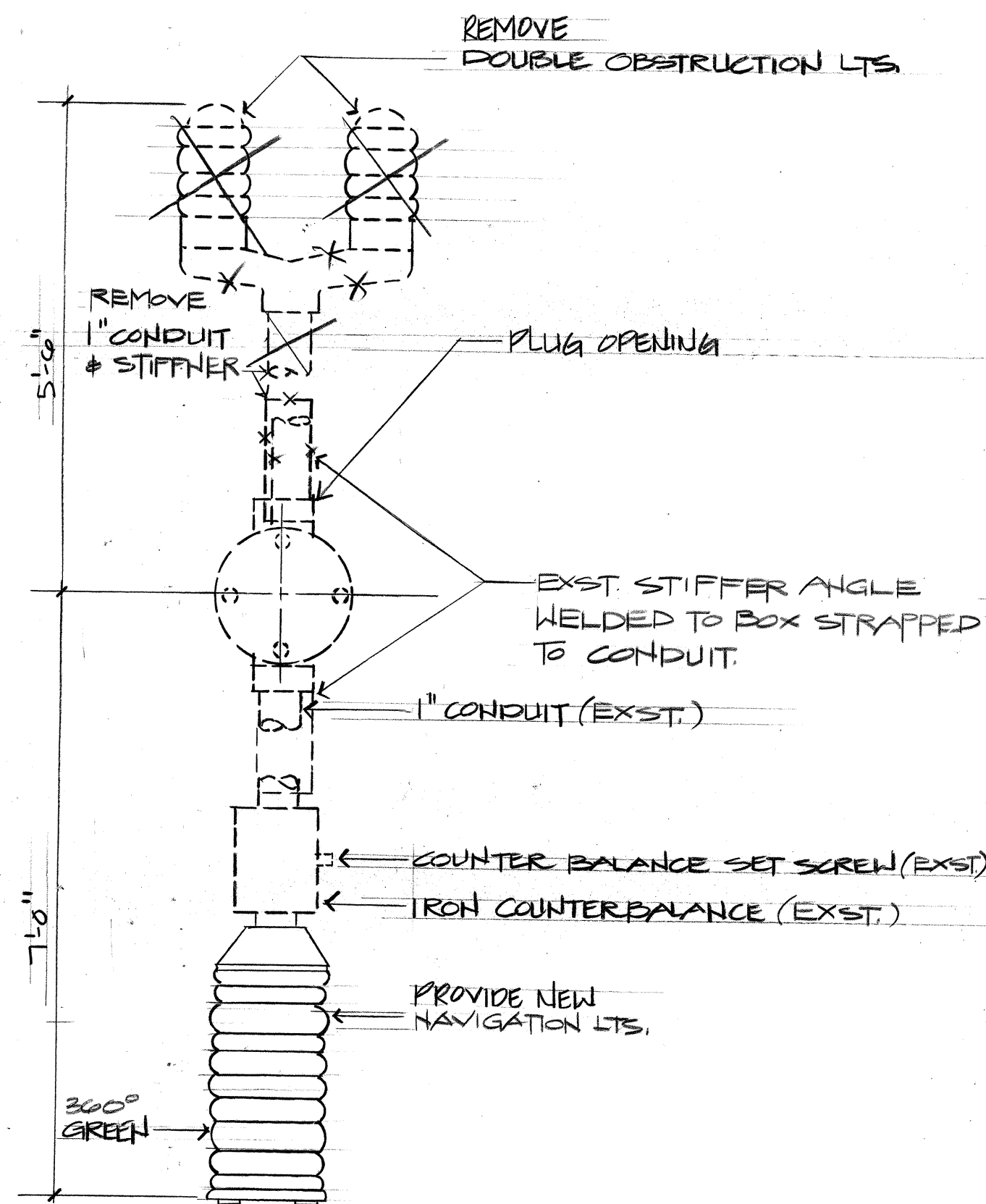
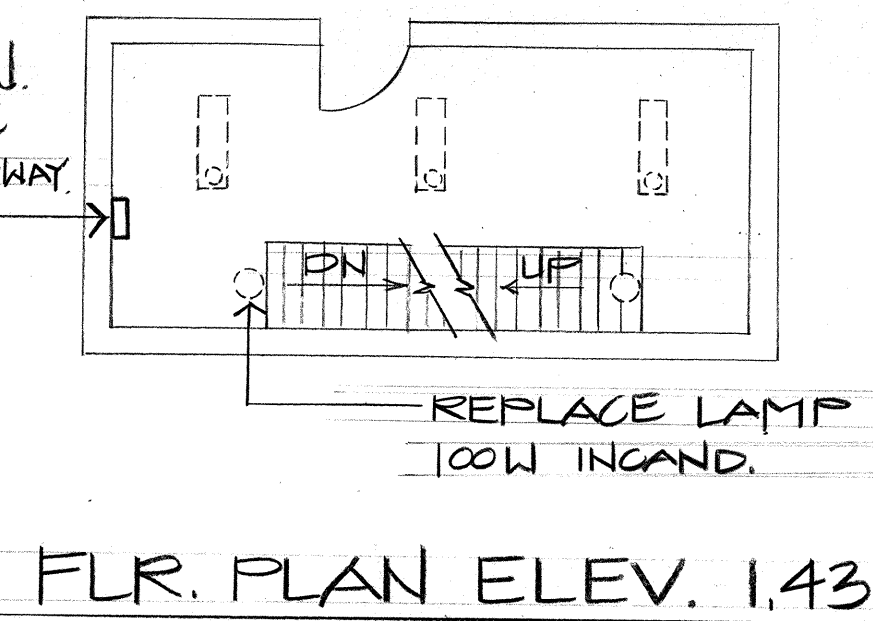
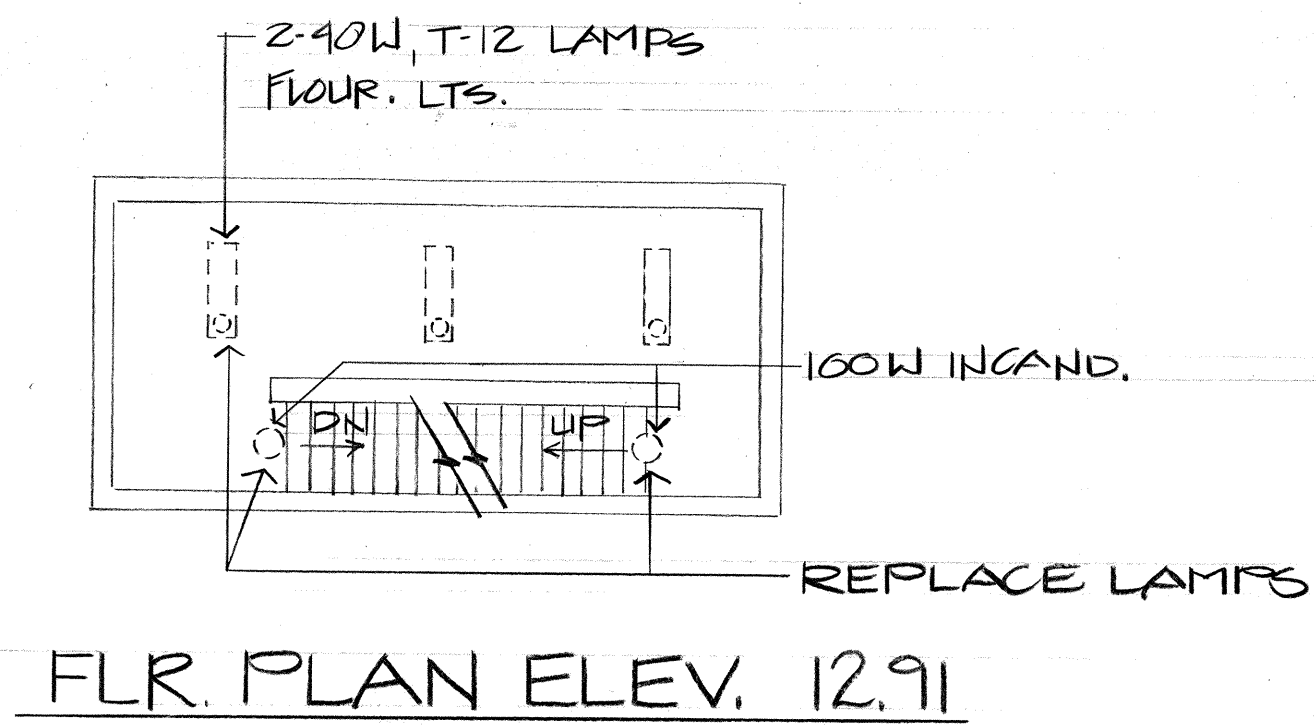
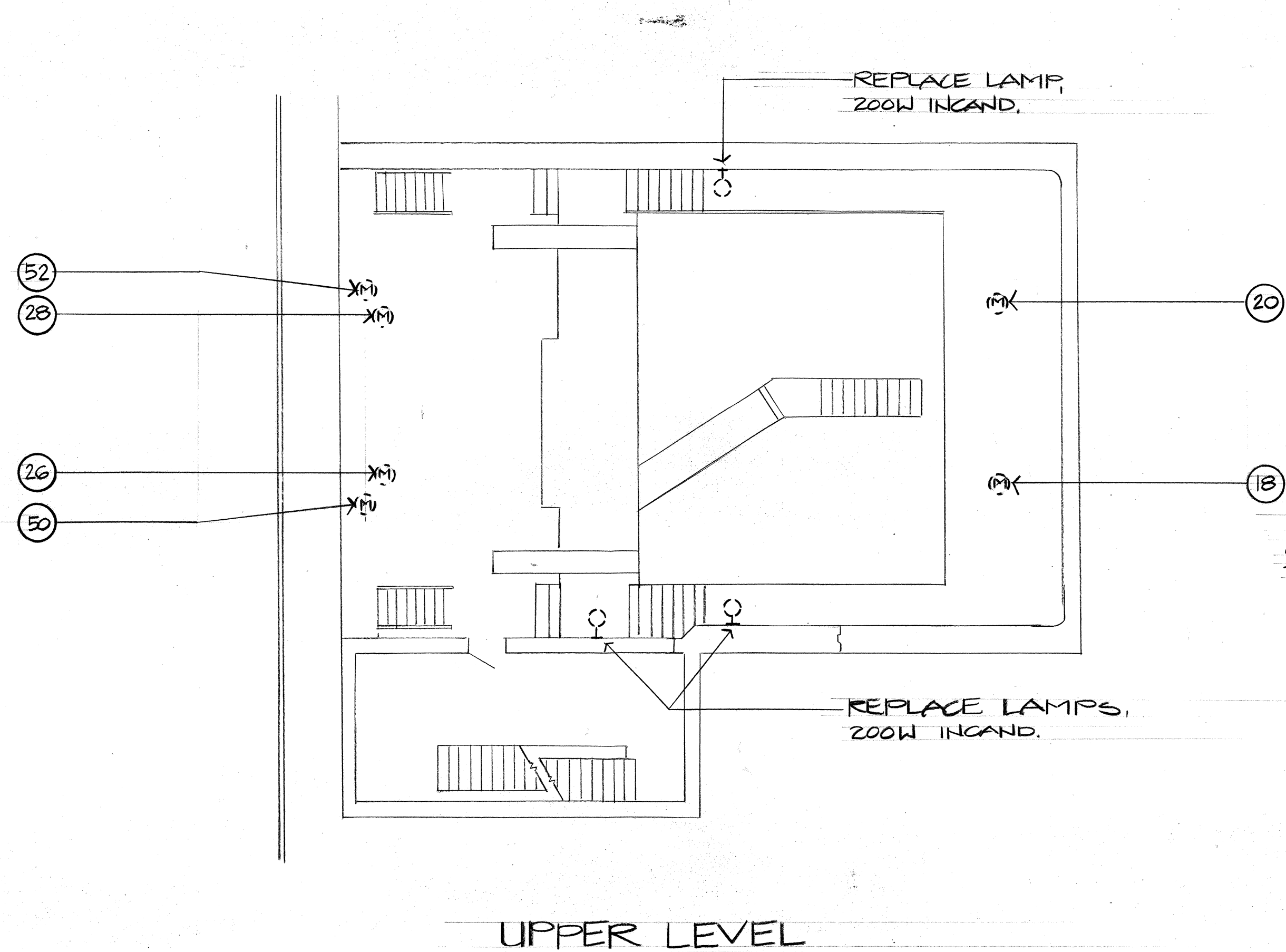


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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ELECTRICAL PLAN-PIER 3

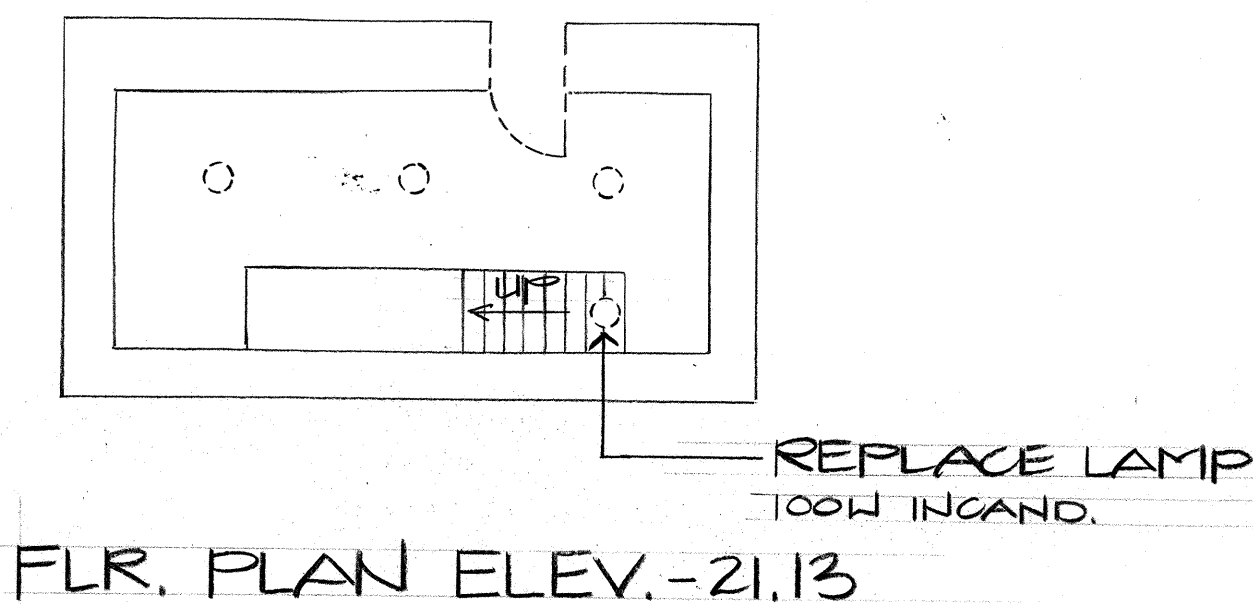
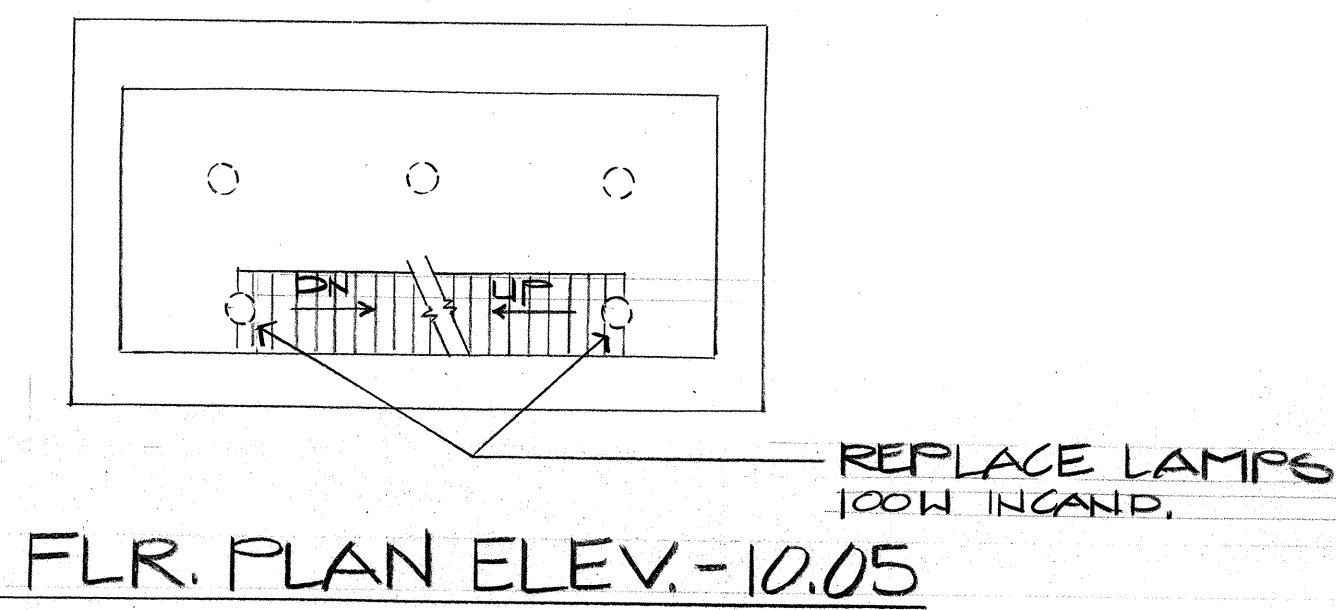
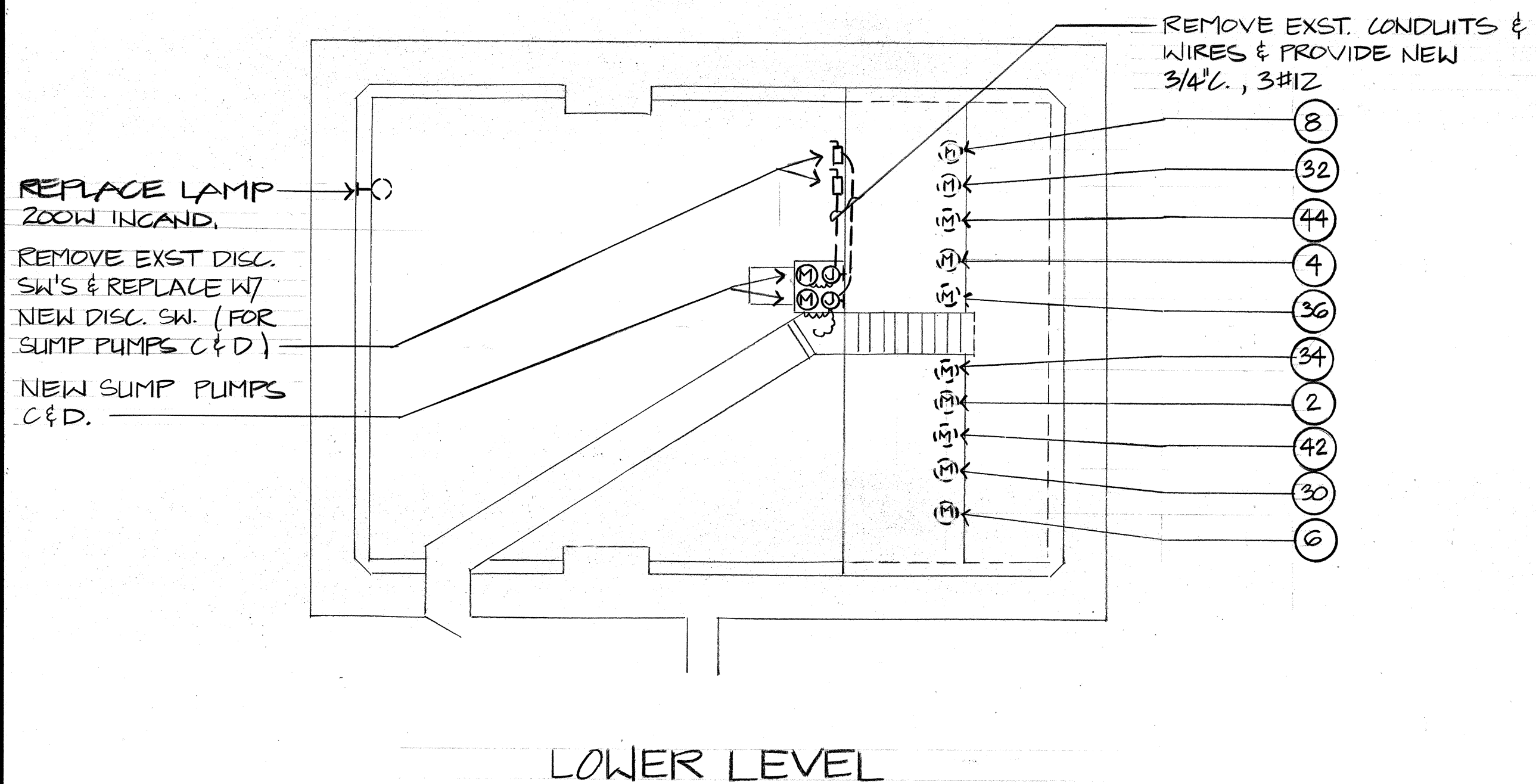
SAND ISLAND BASCULE BRIDGE
REHABILITATION PHASE II
PROJECT NO. BR-064-1 (3)
SCALE: AS NOTED DATE: AUG. 15, 1991
SHEET NO. E-2 OF E-5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-064-1 (3)	1990	36	36

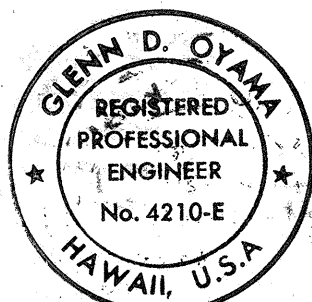


2
E-1 E-3

NAVIGATION & OBSTRUCTION LIGHTS
N.T.S.



ELECTRICAL PLAN - PIER 4
SCALE: 1/8" = 1'-0"



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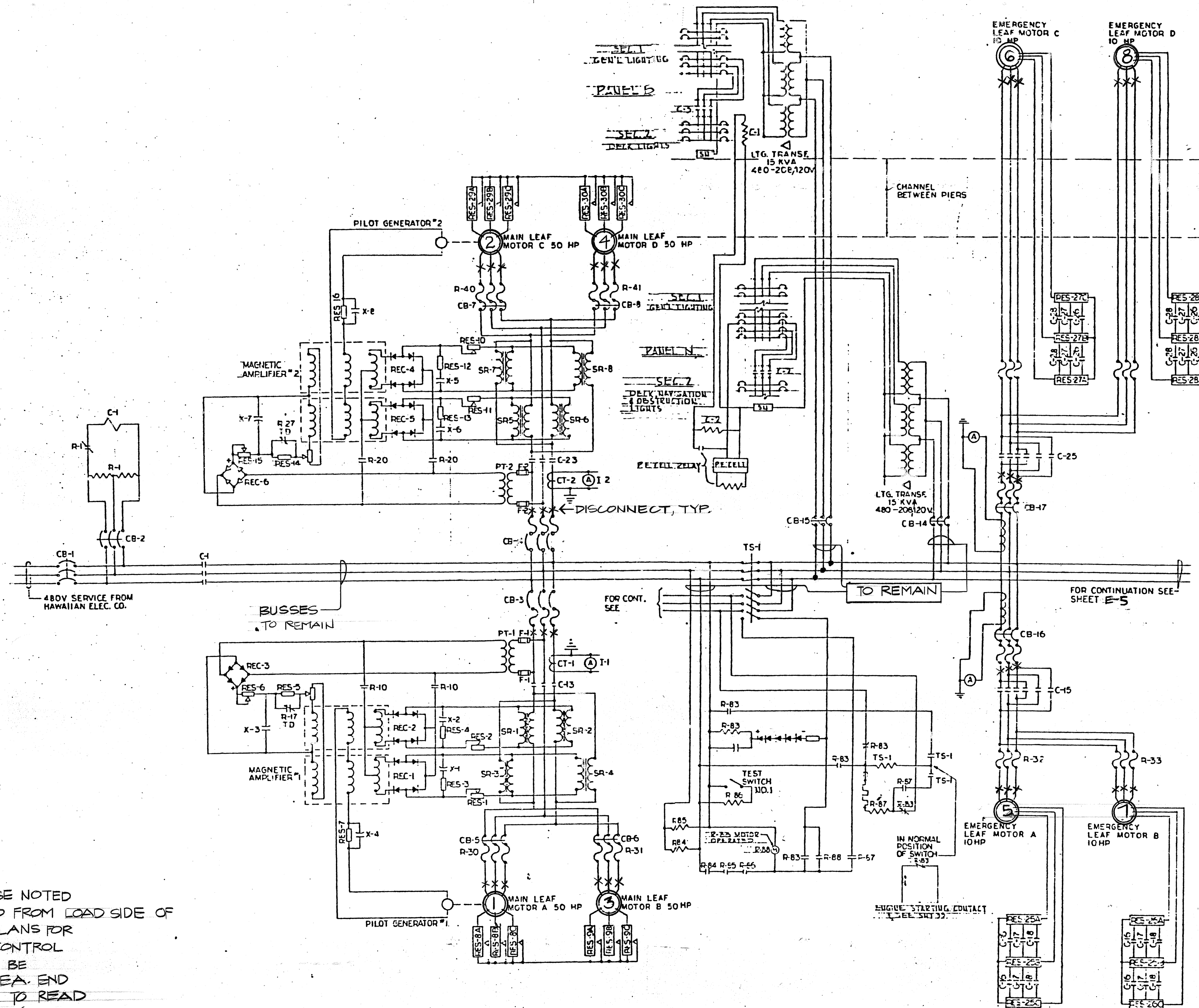
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ELECTRICAL PLAN - PIER 4

SAND ISLAND BASCULE BRIDGE
REHABILITATION PHASE II
PROJECT NO. BR-064-1 (3)
SCALE: AS NOTED DATE: AUG. 15, 1991
SHEET No. E-3 OF E-3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-064-1 (3)	1990	37	38

SYMBOL LIST

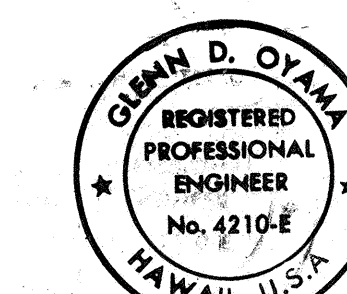
	SQUIRREL CAGE INDUCTION MOTOR OR OTHER DEVICE AS NOTED
	WOUND ROTOR INDUCTION MOTOR
	INSTRUMENT, A=AMMETER
	LIGHT: G=GREEN, R=RED, W=WHITE, B=BLUE, A=AMBER
	CIRCUIT BREAKER
	CONTACTOR OR STARTER
	RSC SWITCH, NEW AS SHOWN
	CONTACTOR, STARTER, OR RELAY COIL
	SINGLE CONTACT ON RELAY, STARTER, CONTACTOR, OR LIMIT OR CAM SWITCH
	OVERLOAD RELAY
	TRANSFORMER
	REACTOR
	CONTROL WINDING
	CURRENT TRANSFORMER
	FUSE
	RESISTOR
	VARIABLE RESISTOR
	CAPACITOR
	RECTIFIER
	PUSHBUTTON, NORMALLY OPEN
	PUSHBUTTON, NORMALLY CLOSED
	BELL
	TUMBLER SWITCH
	MULTIPOSITION, MULTIPOLE CONTROL SWITCH
	X=CONTACT CLOSED IN POSITION INDICATED SWITCH SHOWN IN OFF POSITION.
	CAM TYPE SWITCH
	CONTACTS CLOSED IN POSITIONS COVERED BY BLACK BAR. SWITCH SHOWN IN POSITION 1.
	GROUND CONNECTION
	CONTACT OPEN
	CONTACT CLOSED
	①, ② MOTOR NO.



NOTES:

- ALL MOTOR CKTS., UNLESS OTHERWISE NOTED TO REMAIN, SHALL BE DISCONNECTED FROM LOAD SIDE OF THE BREAKER & AT THE MOTOR (SEE PLANS FOR MOTOR LOCATIONS). MOTOR BKRS, CONTROL ACCESSORIES & ASSOC. WIRING TO BE ABANDONED - IN-PLACE, ATTACH AT EA. END OF MOTOR CKT. WIRES PLASTIC TAG TO READ "CKT. DEENERGIZED".
- ALL EQPT. & WIRING SHOWN EXST. UNLESS NOTED OTHERWISE.
- POWER DIAGRAM SHOWN IS COPIED FROM "AS-BUILT" DWGS. VERIFY CKT. ASSIGNMENTS BEFORE PROCEEDING W/ WORK.

POWER DIAGRAM



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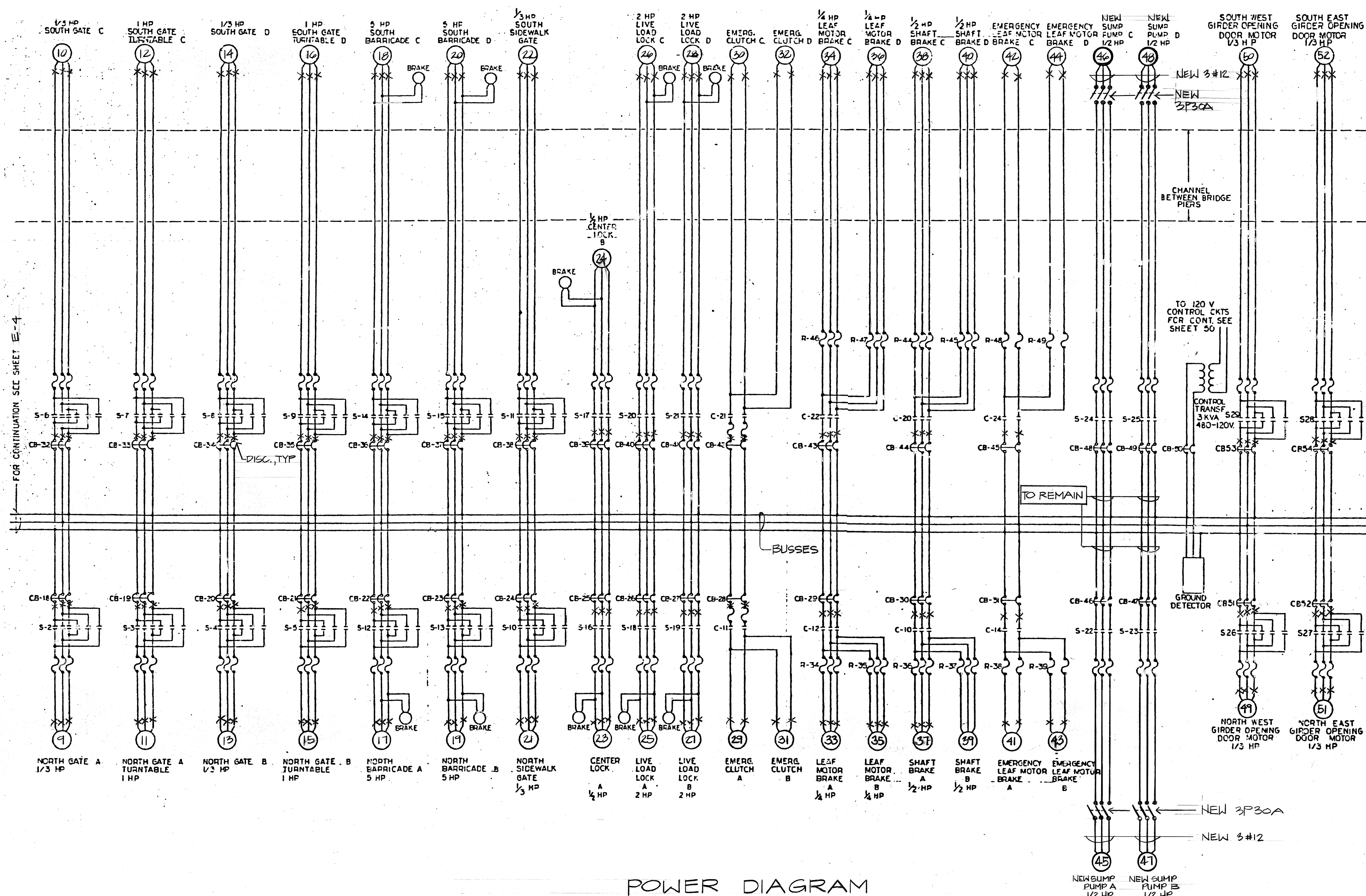
POWER DIAGRAM

SAND ISLAND BASCULE BRIDGE
 REHABILITATION PHASE II
 PROJECT NO. BR-064-1 (3)

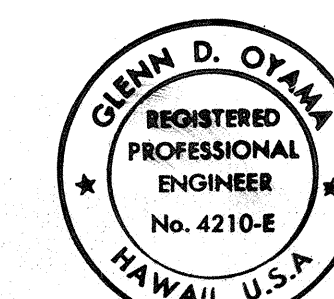
SCALE: AS NOTED DATE: AUG. 15, 1991

SHEET No. 4 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-064-1 (3)	1990	30	30



POWER DIAGRAM
SEE NOTES ON SHT. E-4



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
POWER DIAGRAM

SAND ISLAND BASCULE BRIDGE
REHABILITATION PHASE II
PROJECT NO. BR-064-1 (3)
SCALE: AS NOTED DATE: AUG. 15, 1991
SHEET No. E-5 OF E-5 SHEETS