

# **ADDENDUM**



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Date:	3.16.15	Addendum No:	2
Project:	Replace elevator 1-4 & 6 Motors & Controls	Project No:	636-13-121 20313
To:	Roy Mockelstrom	Firm:	Department of Veterans Affairs

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## **NOTICE**

**THIS ADDENDUM IS ISSUED BY THE ARCHITECT TO ALL PARTIES WHO HAVE RECEIVED BIDDING DOCUMENTS FOR THE ABOVE LISTED PROJECT. THIS ADDENDUM SHALL BECOME PART OF THE CONTRACT DOCUMENTS AS A REVISION TO THE ORIGINAL DOCUMENTS.**

## **CONSTRUCTION DOCUMENTS**

### **Mechanical Drawing Items:**

MD1. Sheet M1-5 – Mechanical Schedules:

A. This sheet is reissued in its entirety.

1. Review split unit's Air-to-Air Heat Pump Schedule: HP-1, HP-2, and HP-3 and Fan Coil FC-1, FC-2, and FC-3.

### **Electrical Drawing Items:**

ED1. Sheet E2-0 – Electrical Schedules, Risers, & Details

A. This sheet is reissued in its entirety.

1. Revise electrical sources for split units.

**Attachments:** *M1-5, E2-0*

**By:** Chris Peterson





ELECTRICAL SYMBOLS			
LIGHTING AND POWER "X" INDICATES FIXTURE NUMBER IN SCHEDULE			
	FLUORESCENT FIXTURE		FLUORESCENT STRIP LIGHT
	BRACKET FLUORESCENT FIXTURE		BRACKET FIXTURE
	CEILING FIXTURE		TRACK MOUNTED FIXTURE
	POLE LUMINAIRE		BOLLARD LUMINAIRE
	SHADED FIXTURES REPRESENT BATTERY PACKS OR EMERGENCY CIRCUIT		EMERGENCY BATTERY FIXTURE
	CEILING MOUNTED EXIT SIGN WITH DIRECTIONAL ARROW		WALL MOUNTED EXIT SIGN WITH DIRECTIONAL ARROW
	CEILING FAN, NUMBER INDICATES FIXTURE NUMBER IN SCHEDULE, NUMBER OF BLADES PER SCHEDULE		
	SWITCH - SINGLE POLE		SWITCH - DOUBLE POLE
	SWITCH - 3-WAY		SWITCH - 4-WAY
	SWITCH - DOOR		SWITCH - MOMENTARY CONTACT
	SWITCH - PILOT		CEILING OCCUPANCY SENSOR (LOCAL RELAY)
	MANUAL DIMMER OR FAN SPEED CONTROL		CEILING OCCUPANCY SENSOR (REMOTE RELAY)
	LIGHTING CONTACTOR		WALL SWITCH OCCUPANCY SENSOR (LOCAL RELAY)
	PUSH BUTTON		RECEPTACLE - SINGLE
	RECEPTACLE - DUPLEX		RECEPTACLE - DOUBLE DUPLEX
	RECEPTACLE - DUPLEX - GFI		RECEPTACLE - DOUBLE DUPLEX - ISOLATED GROUND
	RECEPTACLE - DUPLEX - ISOLATED GROUND		RECEPTACLE - DOUBLE DUPLEX - RED TYPE
	RECEPTACLE - DUPLEX - EXTRA HEAVY DUTY		RECEPTACLE - DRYER TYPE - NEMA 14-30 (125/250V 30A)
	RECEPTACLE - DUPLEX - SAFETY TYPE (TAMPER RESISTANT)		RECEPTACLE - RANGE TYPE - NEMA 14-50 (125/250V 50A)
	RECEPTACLE - DUPLEX - RED TYPE		RECEPTACLE - WELDER TYPE - NEMA 6-50 (250V 50A)
	RECEPTACLE - DUPLEX - SPLIT WIRED		RECEPTACLE - SPECIAL PURPOSE - (NEMA CONFIG. AS NOTED)
	RECEPTACLE - DUPLEX - CEILING MOUNTED		MULTI-OUTLET ASSEMBLY - LENGTH AS INDICATED
	RECEPTACLE - DUPLEX - FLOOR		
	RECEPTACLE - DUPLEX - HORIZONTAL MOUNTED		
	LIGHTING PANEL		WALL MOUNTED JUNCTION BOX
	DISTRIBUTION PANEL, SWITCHBOARD OR MOTOR CONTROL CENTER		JUNCTION BOX ("F" INDICATES FLOOR, "C" INDICATES CEILING)
	PHOTOCCELL		
	CONDUIT SEAL		
	CONDUIT DOWN		
	CONDUIT UP		
	CONDUIT STUB-OUT		
	CONDUIT BREAK		
	MOTOR - HORSEPOWER AS INDICATED		SINGLE PHASE MAGNETIC MOTOR STARTER
	SAFETY SWITCH - FUSED UNLESS OTHERWISE NOTED		THREE PHASE MAGNETIC MOTOR STARTER
	SINGLE POLE MANUAL MOTOR STARTER WITH THERMAL OIL AND PILOT LIGHT		COMBINATION MAGNETIC STARTER/DISCONNECT
	SWITCH & FUSE		MOTOR CONTROL PUSHBUTTON STATION
	SWITCH & FUSTAT		RELAY
			EQUIPMENT CONTROL PANEL
FIRE ALARM SYSTEM "W" INDICATES WALL MOUNTED UNLESS NOTED OTHERWISE			
	AUTOMATIC SMOKE DETECTOR - CEILING		STROBE - CEILING
	AUTOMATIC HEAT DETECTOR - CEILING		HORN - CEILING
	SAMPLING TUBE TYPE SMOKE DETECTOR		HORN & STROBE COMBINATION - CEILING
	COMBINATION FIRE/SMOKE DAMPER		SPEAKER - CEILING
	SMOKE DAMPER		SPEAKER & STROBE COMBINATION - CEILING
	MAGNETIC DOOR HOLDER		CHIME - CEILING
	FIRE FIGHTER'S TELEPHONE JACK		CHIME & STROBE COMBINATION - CEILING
	CONTROL PANEL		BELL - CEILING
	ANNUNCIATOR PANEL		BELL & STROBE COMBINATION - CEILING
	FIRE SPRINKLER VALVE TAMPER SWITCH		MANUAL STATION
	FIRE SPRINKLER FLOW SWITCH		CONTROL MODULE
			MONITORING MODULE
NURSE CALL SYSTEM			
	DUTY STATION		CORRIDOR DOME LIGHT
	BEDSIDE STATION (W/ PILLOW SPEAKER)		CORRIDOR ZONE LIGHT
	EMERGENCY STATION (W/ PULL CORD)		EMERGENCY CORRIDOR LIGHT
	STAFF EMERGENCY PUSH BUTTON		CONTROL PANEL
	CARDIAC ARREST STATION (W/ PUSH BUTTON)		MASTER STATION
SOUND			
	CEILING SPEAKER		VOLUME CONTROL
	WALL SPEAKER		CALL IN SWITCH
	WALL MICROPHONE OUTLET		INTERCOM STATION
	FLOOR MICROPHONE OUTLET		INTERCOM CONTROL PANEL
TELECOMMUNICATIONS			
	COMMUNICATIONS OUTLET. OUTLET TYPE INDICATED PER PLAN. PROVIDE CABLES AS FOLLOWS: V = 1 VOICE CABLE, D = 1 DATA CABLE, A = 1 ANALOG VOICE CABLE, W = 1 VOICE CABLE WITH PHONE MOUNTING BRACKET FACEPLATE AT 48" AFF. OUTLETS WITH NO CABLE DESIGNATION SHALL BE EMPTY WITH A BLANK COVER PLATE. CABLE DESIGNATIONS TYPICAL FOR FLOOR AND CEILING DEVICES.		VERTICAL CABLE MANAGEMENT - DIMENSIONS ARE IN INCHES. FIRST NUMBER INDICATES WIDTH, SECOND NUMBER INDICATES DEPTH. CABLE TRAY (TYPE INDICATED PER SPECIFICATION)
	COMBINATIONS FLOOR OUTLET-POWER & COMMUNICATIONS		CONDUIT BANK (SPECIFIED PER PLAN)
	FLOOR COMMUNICATIONS OUTLET		CONCRETE ENCASED CONDUIT BANK (SPECIFIED PER PLAN)
	CEILING COMMUNICATIONS OUTLET		PROVIDE CONDUIT SLEEVE(S) WITH BUSHINGS. LOCATE ABOVE CEILING. SIZE AND QUANTITY AS INDICATED. SEE SPECIFICATIONS.
	TELEVISION OUTLET		EXAMPLE
	PRE-MANUFACTURED PATHWAYS		4" WIDE x 8" TALL PLYWOOD BACKING. SEE SPECIFICATION.
SECURITY SYSTEMS			
	DOOR CONTACT		VIDEO CAMERA ("W" INDICATES WALL MOUNTED)
	CEILING MOUNTED SECURITY MOTION DETECTOR		SECURITY CONTROL PANEL
	WALL MOUNTED SECURITY MOTION DETECTOR		SECURITY KEYPAD
MISCELLANEOUS			
	WALL CLOCK HANGER OUTLET		DOUBLE FACE CLOCK
	WALL MOUNTED CLOCK		COMBINATION CLOCK / SPEAKER UNIT
	THERMOSTAT		CHIME
	AQUISTAT		BELL
	SUBSCRIPT "EP" APPLIED TO ANY SYMBOL INDICATES EXPLOSION PROOF CLASS, GROUP & DIVISION AS NOTED		SUBSCRIPT "RT" APPLIED TO ANY SYMBOL INDICATES RAINLIGHT NEMA 3R OR EQUIVALENT
	SUBSCRIPT "WP" APPLIED TO ANY SYMBOL INDICATES WEATHERPROOF NEMA TYPE 4 OR EQUIVALENT		SUBSCRIPT "PD" ADDED TO ANY FLOOR OUTLET INDICATES PEDESTAL MOUNTED
	SUBSCRIPT "T" ADDED TO ANY SYMBOL INDICATES EXISTING		SUBSCRIPT "P" ADDED TO ANY SYMBOL INDICATES PILOT LIGHT
	SUBSCRIPT "V" ADDED TO ANY SYMBOL INDICATES VOICE		SUBSCRIPT "W" ADDED TO ANY SYMBOL INDICATES WALL PHONE
	SUBSCRIPT "D" ADDED TO ANY SYMBOL INDICATES DATA		SHEET NOTE
	SUBSCRIPT "R" ADDED TO ANY SYMBOL INDICATES REVISED		GENERATOR DERANGEMENT ALARM PANEL
	SUBSCRIPT "C" ADDED TO ANY SYMBOL INDICATES CEILING		PART

BASE BID & ALTERNATE #1

ALTERNATE #1

LIGHTING FIXTURE SCHEDULE									
FIXT NO.	MANUFACTURER	SUBS. (NOTE B)	CATALOG NO. (NOTE A)	LAMP DATA QUANTITY AND SIZE	TYPE	VOLTS	INPUT WATTS	MOUNTING	DESCRIPTION
S1	COOPER	P	SNLED-LD1-49-LW-INW-L835-CD1	INCLUDED W/ FIXTURE	LED	120/277	50	SURFACE	4' LED STRIP LIGHT 4400 LUMENS
S2	COOPER	P	SNLED-LD1-49-LW-INW-L835-CD1-AYC-CHAIN/SET	INCLUDED W/ FIXTURE	LED	120/277	50	CHAIN HUNG	4' LED STRIP LIGHT 4400 LUMENS
P1	LITHONIA	P	OLVYWM	INCLUDED W/ FIXTURE	LED	120/277	15	WALL SURFACE	LED VAPOR TIGHT PIT LIGHT

KEY NOTES: (LIGHTING FIXTURE SCHEDULE)

- PROVIDE WITH CATALOG NO. W6/SNF-4FT WIRE GUARD.

GENERAL NOTES: (LIGHTING FIXTURE SCHEDULE)

- CATALOG NUMBER VERIFICATION - CONTRACTOR SHALL VERIFY LIGHTING FIXTURE INSTALLATION REQUIREMENTS AND CATALOG NUMBER PRIOR TO ORDERING.
- SUBSTITUTIONS - WHERE INDICATED WITH "N" (NO), NO SUBSTITUTIONS WILL BE ACCEPTED. WHERE INDICATED WITH "P" (PRIOR APPROVAL), SUBSTITUTIONS MUST BE APPROVED PRIOR TO BID WITH ACCEPTANCE ISSUED BY ADDENDUM. WHERE INDICATED WITH "Y" (YES), THE FOLLOWING MANUFACTURERS ARE CONSIDERED ACCEPTABLE EQUIVALENT MANUFACTURERS, PROVIDED THE EQUIVALENT FIXTURE IS OF THE SAME QUALITY, EFFICIENCY, PERFORMANCE AND CHARACTERISTICS AS THAT SCHEDULED:
  - ACUTY BRANDS
  - COOPER
  - HUBBELL
  - WILLIAMS

SEE PROJECT SPECIFICATIONS FOR SPECIFIC MANUFACTURER/MODEL EQUIVALENCY OF COMMONLY USED LIGHTING FIXTURE TYPES. ABSENCE OF A SELECTION INDICATES THAT PRIOR APPROVALS ARE REQUIRED.

- FIXTURE NUMBER SUFFIX "M" (SEE PLANS) - PROVIDE FIXTURE WITH TWO BALLASTS AND CONNECT TO PROVIDE UNIFORM MULTI-LEVEL LIGHTING CONTROL.
- FIXTURE NUMBER SUFFIX "B" (SEE PLANS) - PROVIDE FIXTURE WITH INTEGRAL 90 MINUTE BATTERY BALLAST WITH SELF-DIAGNOSTICS TO ILLUMINATE A MINIMUM OF ONE LAMP WITH A TOTAL OUTPUT OF 1400 LUMENS. CONNECT BATTERY SENSING SOURCE INPUT TO UNWITTED PORTION OF LOCAL LIGHTING BRANCH CIRCUIT. UNDER NORMAL OPERATION, FIXTURE SHALL BE CONTROLLED (ON/OFF) SIMILAR TO OTHER ROOM LIGHTING FIXTURES UNLESS NOTED FOR 24-HOUR ILLUMINATION.

MARK	DESCRIPTION	QTY HP/KW/A	VOLTAGE-PHASE	MCA MOCP	STARTER/CONTROLLER	CONTROL TYPE	DISCONNECT	FEEDER	CIRCUIT NUMBER O/G PROTECTION	GEN	KEY NOTES
FC-1	SPLIT SYSTEM, FAN COIL	--	208-3	6.1 15	INT	DDC	NF 30/3	1M	E13C1-2 15/3	X	NOTE 1
HP-1	SPLIT SYSTEM, HEAT PUMP	--	208-3	29.9 50	INT	DDC	NF 60/3	3M	E13C1-3 50/3	X	NOTE 1
FC-2	SPLIT SYSTEM, FAN COIL	--	208-3	6.1 15	INT	DDC	NF 30/3	1M	E13C1-4 15/3	X	NOTE 1
HP-2	SPLIT SYSTEM, HEAT PUMP	--	208-3	29.9 50	INT	DDC	NF 60/3	3M	E13C1-5 50/3	X	NOTE 1
FC-3	SPLIT SYSTEM, FAN COIL	--	208-3	6.1 15	INT	DDC	NF 30/3	1M	E13C1-6 15/3	X	NOTE 1
HP-3	SPLIT SYSTEM, HEAT PUMP	--	208-3	29.9 50	INT	---	NF 60/3	3M	E13C1-7 50/3	X	NOTE 1
HP-4	HEAT PUMP	--	208-1	7.8 15	INT	DDC	NF 30/2	1X	3PEQ2 (NOTE 5) 15/2	X	NOTE 6
CP-1	CONDENSATE PUMP	1/8 HP	120-1	---	INT	INT	NEMA 5-20 GFI	1X	ELEV6 20/1	X	---
ELEV-1	ELEVATOR #1 CONTROLLER	42.8 HP	480-3	---	INT	INT	175/3 F (NOTE 4)	9E	E13C2-1 175/3	X	NOTE 2
ELEV-2	ELEVATOR #2 CONTROLLER	42.8 HP	480-3	---	INT	INT	175/3 F (NOTE 4)	9E	E13C2-2 175/3	X	NOTE 2
ELEV-3	ELEVATOR #3 CONTROLLER	42.8 HP	480-3	---	INT	INT	175/3 F (NOTE 4)	9E	E13C2-3 175/3	X	NOTE 2
ELEV-4	ELEVATOR #4 CONTROLLER	42.8 HP	480-3	---	INT	INT	175/3 F (NOTE 4)	9E	E13C2-4 175/3	X	NOTE 2
ELEV-6	ELEVATOR #6 CONTROLLER	20 HP	208-3	---	INT	INT	100/3 F (NOTE 3)	5E	3PEQ2 (NOTE 5) 150/3	X	NOTES 2,6

KEY NOTES: (EQUIPMENT CONNECTION SCHEDULE)

- CONTROLS BETWEEN INDOOR AND OUTDOOR UNITS - INCLUDE CONTROL WIRING IN CONDUIT BETWEEN INDOOR AND OUTDOOR UNIT PER MANUFACTURER'S REQUIREMENTS.
- ELEVATOR SIZING BASED ON PRELIMINARY INFORMATION. FINAL SELECTION SHALL BE MADE PRIOR TO ORDERING ELECTRICAL EQUIPMENT.
- PROVIDE NEW FUSED SWITCH PER ELEVATOR CONNECTION DETAIL 1 ON SHEET E2-1.
- PROVIDE NEW FUSED SWITCH PER ELEVATOR CONNECTION DETAIL 2 ON SHEET E2-1.
- PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL TO MATCH EXISTING RATING AND TYPE.
- EXISTING PANEL 3PEQ2 IS LOCATED IN ROOM 3254, WEST OF ELEVATORS 1 AND 2 ON 3RD LEVEL. EXISTING PANEL IS WESTINGHOUSE MODEL AW46392, RATED AT 18 KAIC.

GENERAL NOTES: (EQUIPMENT CONNECTION SCHEDULE)

A. EQUIPMENT LISTED MAY NOT BE UNIQUE, VERIFY QUANTITY ON PLANS. REFER TO DEFINITIONS BELOW FOR CLARIFICATION OF CONNECTION REQUIREMENTS.

B. ITEMS NOTED AS "NA" ARE NOT APPLICABLE TO THE CONNECTION.

C. "STARTER/CONTROLLER" - PROVIDE STARTER AND ASSOCIATED CONNECTIONS TO EQUIPMENT AND BRANCH CIRCUIT:

- "MAG" = COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT (COORDINATE COIL VOLTAGE WITH CONTROL SOURCE).
- "MAN" = COMBINATION MANUAL MOTOR STARTER WITH DISCONNECT.
- "DIV 15" = STARTER OR CONTROLLER IS FURNISHED BY MECHANICAL CONTRACTOR, TEMPERATURE CONTROLS CONTRACTOR, OR PROVIDED WITH EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE MOUNTING AND ADDITIONAL CONNECTIONS REQUIRED FOR THESE LOOSE STARTERS AND CONTROLLERS.
- "VFD" = VARIABLE FREQUENCY DRIVE CONTROLLER FURNISHED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE MOUNTING AND ADDITIONAL CONNECTIONS REQUIRED FOR LOOSE VFD CONTROLLERS FURNISHED BY THE MECHANICAL CONTRACTOR. REFER TO MECHANICAL PLANS FOR VFD LOCATION.
- "INT" = STARTER/CONTROLLER IS MANUFACTURED INTEGRAL TO THE EQUIPMENT.
- LOCATE STARTER/CONTROLLER ADJACENT TO INDOOR EQUIPMENT - PROVIDE WITH STRUT MOUNTING AS REQUIRED.
- WHERE STARTER SERVES OUTDOOR EQUIPMENT, LOCATE STARTER IN THE SOURCE ELECTRICAL ROOM.

D. "CONTROL TYPE" - PROVIDE CONTROL AND CONNECTIONS:

- "INT" = CONTROLS ARE MANUFACTURED INTEGRAL TO THE EQUIPMENT (SELF-CONTAINED).
- "CONT" = EQUIPMENT OPERATES CONTINUOUSLY (NO CONTROLS).
- "NONE" = EQUIPMENT OPERATES CONTINUOUSLY OR CONTROLS ARE SELF-CONTAINED.
- "DDC" = CONTROL SIGNAL FROM TEMPERATURE CONTROL SYSTEM PROVIDED BY MECHANICAL CONTRACTOR OR TEMPERATURE CONTROLS CONTRACTOR.
- "TIME SW" = CONTROL SIGNAL FROM TIME SWITCH PROVIDED BY ELECTRICAL CONTRACTOR. TIME SWITCH SHALL BE 7-DAY DIGITAL TYPE WITH AUTOMATIC DAYLIGHT SAVING ADJUSTMENTS AND BATTERY BACKUP. LOCATE TIMESWITCH IN NEAREST MECHANICAL OR ELECTRICAL UTILITY ROOM. LABEL TIME SWITCH. COORDINATE TIME SCHEDULE WITH OWNER AND MECHANICAL ENGINEER.
- "WALL SW" = CONTROL SIGNAL FROM WALL SWITCH PROVIDED BY ELECTRICAL CONTRACTOR. COORDINATE LOCATION OF WALL SWITCH WITH OWNER. LABEL WALL SWITCH.
- "FA STOP" = FANS WITH CFM OF 2000 OR GREATER AND FANS SERVING DUCTS CONTAINING SMOKE DAMPERS, FIRE ALARM SYSTEM SHALL SHUTDOWN FAN UPON DETECTION OF SMOKE IN DUCT OR ROOMS SERVED FROM THIS EQUIPMENT. PROVIDE WITH INDIVIDUAL ADDRESSABLE CONTROL MODULE AT MOTOR CONTROLLER/STARTER AND CONNECT TO SHUTDOWN FAN.
- "FA START" = FANS USED FOR SMOKE EVACUATION OR PRESSURIZATION. FIRE ALARM SYSTEM SHALL START FAN UPON DETECTION OF SMOKE IN DUCT OR ROOMS SERVED FROM THIS EQUIPMENT. PROVIDE WITH INDIVIDUAL ADDRESSABLE CONTROL MODULE AT MOTOR CONTROLLER/STARTER AND CONNECT TO START FAN.
- "DATA" = PROVIDE WITH DATA CONNECTION FROM NEAREST DATA NETWORK COMMUNICATIONS ROOM.
- "CONDUIT" = PROVIDE EMPTY 3/4" CONTROLS CONDUIT BETWEEN INDOOR AND OUTDOOR UNIT TO ACCOMMODATE CONTROL CABLES BY MECHANICAL OR TEMPERATURE CONTROLS CONTRACTOR.

E. "DISCONNECT" - PROVIDE DISCONNECT/RECEPTACLE AT EQUIPMENT LOCATION AND ASSOCIATED CONNECTION TO EQUIPMENT AND BRANCH CIRCUIT:

- "NEMA" = DISCONNECT (TYPE) RECEPTACLE TO ACCOMMODATE CORD AND PLUG CONNECTION (CORD AND PLUG FURNISHED WITH EQUIPMENT UNLESS NOTED OTHERWISE)
- "REC/SW" = PROVIDE 20A 120V RECEPTACLE OR 20A TOGGLE SWITCH DISCONNECT. COORDINATE REQUIRED SELECTION WITH EQUIPMENT.
- "NF" = NON-FUSED DISCONNECT. SIZE AND POLE QUANTITY AS INDICATED. 20/1 AND SMALLER SHALL BE TOGGLE SWITCH DISCONNECT.
- "F" = FUSED DISCONNECT. SIZE AND POLE QUANTITY AS INDICATED. FUSE PER MANUFACTURER'S RECOMMENDATIONS.
- "FUSTAT" = SWITCH AND FUSTAT. FUSE SIZE PER EQUIPMENT MANUFACTURER. LOCATE SWITCH IN CONCEALED ACCESSIBLE LOCATION.
- "ENCL CB" = ENCLOSED CIRCUIT BREAKER DISCONNECT. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED.
- "ENCL MCBW" = ENCLOSED MOLDED CASE SWITCH DISCONNECT. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED.
- "SHUNT ENCL CB" = SHUNT TRIP ENCLOSED CIRCUIT BREAKER DISCONNECT. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED. PROVIDE WITH INTEGRAL 120V CONTROL TRANSFORMER SERVED FROM LINE SOURCE WITH PRIMARY AND SECONDARY FUSING. COORDINATE ENCLOSURE AND COVER SIZE TO ACCOMMODATE TRANSFORMER. PROVIDE WITH EQUIPMENT GROUND BAR AND SEPARATE INSULATED ISOLATED GROUND BAR. WHERE NEUTRAL CONDUCTOR IS UTILIZED, PROVIDE SOLID NEUTRAL BAR. CONNECT SHUNT TRIP VOLTAGE SOURCE AND ACTUATOR TO ASSOCIATED EMERGENCY POWER OFF (EPO) SWITCHES. PROVIDE EPO AND COORDINATE LOCATION.
- "DIV 15" = DISCONNECT IS FURNISHED BY MECHANICAL CONTRACTOR OR PROVIDED WITH MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE MOUNTING AND ADDITIONAL CONNECTIONS REQUIRED FOR DISCONNECTS FURNISHED BY THE MECHANICAL CONTRACTOR.
- "INT" = DISCONNECT IS MANUFACTURED INTEGRAL TO THE EQUIPMENT.
- "HW" = HARDWARE. DISCONNECT NOT REQUIRED.
- LOCATE DISCONNECT ADJACENT TO EQUIPMENT PER NEC - PROVIDE WITH STRUT MOUNTING AS REQUIRED.
- LOCATE RECEPTACLE OR JUNCTION BOX TO DIRECTLY SERVE EQUIPMENT. COORDINATE EXACT LOCATION WITH ARCHITECT, ARCHITECTURAL DETAILS, AND EQUIPMENT MANUFACTURER'S REQUIREMENTS.
- WHERE DISCONNECT SERVES OUTDOOR EQUIPMENT, PROVIDE AS NEMA-3R.
- PROVIDE DISCONNECT WITH EQUIPMENT GROUND KIT.
- WHERE FEEDER INDICATED UTILIZES A NEUTRAL, PROVIDE DISCONNECT WITH SOLID NEUTRAL KIT.
- WHERE FEEDER INDICATED UTILIZES AN ISOLATED GROUND, PROVIDE DISCONNECT WITH ADDITIONAL INSULATED GROUND KIT.
- DISCONNECTS NOT SHOWN AS "F" OR "NF" SHALL BE NON-FUSED.
- DISCONNECTS OF MOTORS SERVED FROM A VFD SHALL CONTAIN AUXILIARY CONTACTS CONNECTED TO THE VFD TO DISABLE VFD UPON DISCONNECT.
- WHERE STARTERS VFD'S CONTAIN INTEGRAL DISCONNECTS AND ARE LOCATED PER NEC TO SATISFY AS THE EQUIPMENT DISCONNECT, AN ADDITIONAL EQUIPMENT DISCONNECT IS NOT REQUIRED.

F. "GEN"

- EQUIPMENT IS SERVED FROM A SOURCE PANEL PROVIDED WITH GENERATOR BACK-UP.

DISTRIBUTION PANEL SCHEDULE									
DESIGNATION	CIRCUIT NUMBER	NAMEPLATE DESIGNATION	ACTIVE	SPARE	SPACE	REMARKS			
E13C1 •208Y/120V, 3ø, 4W •WITH GROUND BAR •600 A MCO •BREAKER DISTRIBUTION •22 KA AVAILABLE SCC	1	PANEL E13C2	600/3	---	---	---			
	2	FC-1	15/3	---	---	---			
	3	HP-1	50/3	---	---	---			
	4	FC-2	15/3	---	---	---			
	5	HP-2	50/3	---	---	---			
	6	FC-3	15/3	---	---	---			
	7	HP-3	50/3	---	---	---			
	8	EXISTING A/C (EAST)	30/3	---	---	---			
	9	EXISTING A/C (WEST)	30/3	---	---	---			
	10	ELEVATOR TEMPORARY	225/3	---	---	---			
	11	ELEVATOR TEMPORARY	225/3	---	---	---			
	12	ELEVATOR TEMPORARY	225/3	---	---	---			
	13	MACHINE ROOM LIGHTS	20/1	---	---	---			
E13C2 •480Y/277V, 3ø, 4W •WITH GROUND BAR •400 A MCB •BREAKER DISTRIBUTION •6 KA AVAILABLE SCC	1	ELEVATOR #1	175/3	---	---	---			
	2	ELEVATOR #2	175/3	---	---	---			
	3	ELEVATOR #3	175/3	---	---	---			
	4	ELEVATOR #4	175/3	---	---	---			