SCALE: AS NOTED

DATE: 3-29-17

E-001

ELECTRICAL SYMBOLS

RECEPTACLES

LIGHTING

A O

A

Ao

FIXTURE CONTROLS

120/277V, 20A LIGHT SWITCH

LED COMPATIBLE DIMMER SWITCH

120/277V, 20A 3-WAY LIGHT SWITCH,

LIGHT FIXTURE WITH EMERGENCY DRIVER

SUBSCRIPT INDICATES FIXTURE TYPE

EMERGENCY LIGHT, REMOTE HEAD

EMERGENCY LIGHT, REMOTE HEADS

ILLUMINATED EXIT SIGN, LED TYPE

SINGLE FACE OR DOUBLE FACE,

ARROW INDICATES DIRECTION OF

FLOW FOR THE FACE

SPECIFICATION GRADE

SPECIFICATION GRADE

TIMER SWITCH

LIGHT FIXTURES

WALL MOUNTED FIXTURE

RECESSED DOWNLIGHT

TWO LAMPS

ONE LAMP

TWO LAMPS

TIME CLOCK

TRACK LIGHTING

INVERTER

NOTE: LOWER CASE SUBSCRIPTS INDICATE DUPLEX RECEPTACLE, 120V, 20A, UPPER CASE SUBSCRIPTS INDICATE FIXTURE TYPE. SPECIFICATION GRADE, NEMA 5-20 R REFER TO LIGHTING FIXTURE SCHEDULE.

> DUPLEX RECEPTACLE, 120V, 20A SPECIFICATION GRADE, NEMA 5-20 R SUBSCRIPT "G" INDICATES GROUND FAULT INTERRUPT, WP INDICATES WEATHERPROOF GROUND FAULT INTERRUPT.

DOUBLE DUPLEX RECEPTACLE

SECURITY

SECURITY SYSTEM PANEL

MOTION DETECTOR

CCTV DOME CAMERA

LINE TYPE LEGEND

----- REMOVE EXISTING ITEMS EXIST ITEMS TO REMAIN

— PROVIDE ITEMS EMERGENCY LIGHT, BATTERY POWERED REMOVE SWITCH (REMOVALS DRAWINGS) PROVIDE SWITCH (INSTALLATION DRAWINGS)

EXISTING SWITCH TO REMAIN

TELEPHONE, DATA AND AUDIO

TELEPHONE JACK OUTLET W = WALL TYPE POTS = PLAIN OLD TELEPHONE SERVICE

CAT6 DATA JACK # INDICATES QUANTITY OF JACKS. DEFAULT IS ONE.

SPEAKER

CAT6 TELEPHONE/(2) CAT6 DATA JACKS

GENERAL

NON-FUSED DISCONNECT SWITCH

FUSED DISCONNECT SWITCH AF = AMP FRAME/SWITCH SIZE AT AMP TRIP/FUSE SIZE

 \odot JUNCTION BOX

> BRANCH CIRCUIT HOMERUN, A-1 INDICATES PANEL DESIGNATION AND CIRCUIT NUMBER

PUSHBUTTON

EXISTING PANELBOARD

PANELBOARD

FIRE ALARM

FIRE ALARM CONTROL PANEL

REMOTE ANNUNCIATOR

SMOKE DETECTOR R = FOR ELEVATOR RECALLD = DUCT SMOKE, PHOTOELECTRIC Z# = ZONE

I = IONIZATIONHEAT DETECTOR

SPEAKER

MANUAL PULL STATION

HORN/STROBE # SUBSCRIPT = CANDELA RATING C SUBSCRIPT = CEILING MOUNTED

WP SUBSCRIPT = WEATHERPROOF # SUBSCRIPT = CANDELA RATING

KNOX BOX

RADIO TRANSMITTER

REMOTE INDICATOR AND TEST STATION

MAGNETIC HOLD OPEN

TAMPER SWITCH

ANTENNA

ELECTRICAL GENERAL NOTES

COMPLY WITH THE REQUIREMENTS OF THE CURRENTLY ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), NFPA, AND STATE AND LOCAL CODES.

2. COMPLY WITH THE CITY OF PORTLAND FIRE DEPARTMENT RULES AND REGULATIONS.

3. COORDINATE WORK WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND SPRINKLER TRADES.

4. ELECTRICAL EQUIPMENT AND WIRING SHALL BE NEW AND UL LISTED UNLESS OTHERWISE NOTED.

5. LIGHT FIXTURES AND OTHER CEILING MOUNTED ELECTRICAL EQUIPMENT SHALL BE COORDINATED WITH ARCHITECTURAL. STRUCTURAL, AND MECHANICAL WORK TO AVOID INTERFERENCE.

6. PROVIDE A SEPARATE GREEN GROUNDING CONDUCTOR FOR EACH INDIVIDUAL CIRCUIT. METAL CONDUIT SHALL BE GROUNDED BUT SHALL NOT BE USED AS THE EQUIPMENT GROUNDING CONDUCTOR.

. VERIFY EXISTING CONDITIONS AND DIMENSIONS AND REPORT DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. PROCEED WITH THE WORK ONLY AFTER THE DISCREPANCIES HAVE BEEN RESOLVED BY THE OWNER'S REPRESENTATIVE.

8. CONDUCTORS SHALL BE MINIMUM #12 AWG UNLESS NOTED OTHERWISE.

9. CONDUIT SHALL BE MINIMUM 1/2" FOR POWER AND 1" FOR COMMUNICATIONS UNLESS OTHERWISE NOTED.

10. COORDINATE LOCATION OF DEVICES IN ELEVATOR PIT AND HOISTWAY WITH ELEVATOR INSTALLER.

11. UNLESS OTHERWISE INDICATED, WIRE AND CONDUIT SIZE FOR EACH 15A 1P, 15A 2P, 20A 1P AND 20A 2P BRANCH CIRCUIT SHALL BE 2 #12 + #12G, IN 1/2"C.

12. UNLESS OTHERWISE INDICATED, WIRE AND CONDUIT SIZE FOR EACH 15A 3P AND 20A 3P BRANCH CIRCUIT SHALL BE 3 #12 + #12G, IN 1/2"C.

13. A SEPARATE NEUTRAL CONDUCTOR SHALL BE PROVIDED FOR EACH INDIVIDUAL 120V CIRCUIT.

14. DISCONNECT SWITCHES WITH NO RATING INDICATED SHALL BE 30A.

ELECTRICAL ABBREVIATIONS

AMPERE A, AMP AMPERES, 3-POLE AC ALTERNATING CURRENT AFF ABOVE FINISHED FLOOR AIC AMPERE INTERRUPTING CAPACITY AHJ AUTHORITY HAVING JURISDICTION AVG AVERAGE AMERICAN WIRE GAUGE AWG BKR BREAKER CONDUCTOR, CONDUIT CATALOG, CATEGORY CAT CB CIRCUIT BREAKER CCTV CLOSED CIRCUIT TELEVISION CFM CUBIC FEET PER MINUTE CKT CIRCUIT CU DWG COPPER

EMT ELECTRICAL METALLIC TUBING FACP FIRE ALARM CONTROL PANEL GROUND; GROUND FAULT CIRCUIT INTERRUPTER **GFCI** GROUND FAULT CIRCUIT INTERRUPTER HEATING LOAD TYPE FOR PANEL SCHEDULE НО HIGH OUTPUT

HP HORSEPOWER HEATING, VENTILATION, AND AIR CONDITIONING INTRUSION DETECTION SYSTEM IDS KCMIL KILO-CIRCULAR MILS

DRAWING

ELEV

ELEVATOR

KVA KILO-VOLT-AMPERE KW KILO-WATT LIGHTING LOAD TYPE FOR PANEL SCHEDULE

LC LED LIGHTING CONTROL PANEL LIGHT EMITTING DIODE

LTG LIGHTING MOTOR LOAD TYPE FOR PANEL SCHEDULE

MAX MAXIMUM MCB MAIN CIRCUIT BREAKER

MIN MINIMUM MLO MAIN LUG ONLY NEUTRAL

NOT APPLICABLE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NFPA NATIONAL FIRE PROTECTION ASSOCIATION NIC NOT IN CONTRACT

NO, # NUMBER OCC **OCCUPANCY** PHASE POLE

SW

PART OF RECEPTACLE LOAD TYPE FOR PANEL SCHEDULE

REMOTE ANNUNCIATOR REC RECEPTACLE RIGID GALVANIZED STEEL RM RIGID METAL CONDUIT SINGLE POLE, DOUBLE THROW

HEAT RESISTANT THERMOPLASTIC WIRE WITH NYLON JACKET MOISTURE & HEAT RESISTANT THERMOPLASTIC

WIRE WITH NYLON JACKET UNDERWRITERS LABORATORIES UNIVERSITY OF NEW ENGLAND

VOLT AMPERE WATT, WIRE WEATHERPROOF

SWITCH

MOUNTING HEIGHT SCHEDULE

(UNLESS NOTED OTHERWISE)

RECEPTACLES: 18" TO CENTER. SWITCHES: 48" TO CENTER.

WIRE SIZE	HOME RUNS (20A CIRCUIT) MAXIMUM DISTANCE IN FEET UNLESS NOTED OTHERWISE	
	120V	208V
#12	60'	100'
#10	100'	160'
#8	150'	250'
#6	240'	400'

SHEET: 22 OF 26