

ELECTRICAL SYMBOL LEGEND

TELEPHONE/DATA SYSTEM	
SYMBOL	DESCRIPTION
	PHONE/DATA OUTLETS MOUNTED AT RECEPTACLE HEIGHT UNLESS OTHERWISE NOTED. C = ABOVE THE COUNTER M = NUMBER OF DATA PORTS, DEFAULT = 1 N = NUMBER OF PHONE PORTS, DEFAULT = 1
M ▲	DATA OUTLET, 8P8C
△ N	PHONE OUTLET, RJ II
M ▲ N	COMBINED DATA/PHONE OUTLET, 8P8C/RJII
☐	TELEPHONE OUTLET FLOOR MOUNTED
TTB	TELEPHONE/COMPUTER TERMINAL BOARD
TTIC	TELEPHONE TERMINAL CABINET
— T —	TELEPHONE SYSTEM RACEWAY

TELEVISION RACEWAY SYSTEM	
SYMBOL	DESCRIPTION
TV	TELEVISION OUTLET FOR ANTENNA
TV	TELEVISION SIGNAL WALL OUTLET
TV	TV DISTRIBUTION SYSTEM RACEWAY
M	MAGNETIC LOCK
☐	CCTV CAMERA W/ CONDUIT TO VIDEO JUNCTION BOX
PZK	PAN/ TILT/ ZOOM CCTV CAMERA W/CONDUIT TO VIDEO JUNCTION BOX - MOUNTED MIN 15' AFF OR ● CEILING

SYNCHRONOUS MASTER CLOCK SYSTEM	
SYMBOL	DESCRIPTION
⊕	SYNCHRONOUS SYSTEM CLOCK
FATC	MASTER CLOCK CONTROL PANEL
— CL —	MASTER CLOCK SYSTEM CONDUIT AND WIRING

DOORBELL SYSTEM	
SYMBOL	DESCRIPTION
⊕	DOOR PUSH-BUTTON STATION WP = WEATHERPROOF
DB	DOORBELL CHIME (SELF CONTAINED)
— DB —	DOORBELL SYSTEM CONDUIT AND WIRING

DOOR CONTROL SYSTEM	
SYMBOL	DESCRIPTION
⊕	MOTION DETECTOR 360
CR	CARD READER
K	DIGITAL KEYPAD
⊕	BALANCED MAGNETIC DOOR CONTACT

INTERCOM SYSTEM	
SYMBOL	DESCRIPTION
IC	MASTER STATION C = COUNTER D = DESK W = WALL MOUNTED H = HAND SET TYPE HF = HANDS FREE WP = WEATHER PROOF
⊕	INTERCOM SYSTEM SPEAKER W = WALL MOUNTED
ICEC	INTERCOM EQUIPMENT CABINET
ICTC	INTERCOM TERMINAL CABINET
— IC —	INTERCOM SYSTEM CONDUIT AND WIRING
SSEC	SOUND SYSTEM EQUIPMENT CABINET
SSTC	SOUND SYSTEM TERMINAL CABINET
— S —	SOUND SYSTEM CONDUIT AND WIRING

FIRE ALARM/DETECTION SYSTEM	
SYMBOL	DESCRIPTION
☐	MANUAL PULL STATION
☒	CEILING SMOKE DETECTOR, PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED
☒	DUCT SMOKE DETECTOR, SIMPLEX 4098-9686 OR EQUAL E = ELEVATOR WITH RECALL CONTACTS I = IONIZATION
☒	DUCT SMOKE DETECTOR, SIMPLEX 4098-9686 OR EQUAL SA = SIMPLEX 4098-9682 OR EQUAL
☒	SUPERVISED CONTROL RELAY
⊕	DUCT DETECTOR REMOTE ALARM INDICATOR AND TEST STATION, WALL MOUNTED 72" AFF, SIMPLEX 4098-9686 OR EQUAL
⊕	DUCT DETECTOR REMOTE A/V CONTROL STATION WITH TEST SWITCH, WALL MOUNTED 72" AFF, SIMPLEX 4098-9682 OR EQUAL
☒	COMBINATION AUDIBLE/VISUAL NOTIFICATION DEVICE CD = CANDELA RATING, MINIMUM 75 CD PER FBC II-4.28.3(4)
☒	FIRE ALARM SPEAKER - CEILING MOUNTED
☒	WALL MOUNTED SPEAKER WITH STROBE CD = CANDELA RATING
☒	FIRE ALARM SPEAKER - WALL MOUNTED
☒	FIRE ALARM SPEAKER WITH STROBE - CEILING MOUNTED CD = CANDELA RATING
☒	VISUAL SIGNALING UNIT, WALL MOUNTED (NO AUDIO DEVICE)
☒	FIREMAN'S PHONE JACK
☒	SPRINKLER TAMPER SWITCH CONNECTION
☒	SPRINKLER WATER FLOW SWITCH CONNECTION
☒	FIRE ALARM SYSTEM PRINTER
☒	ZONE ADDRESSABLE MODULE
☒	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE
☒	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE CONNECTION TO CLOSURE/ HOLDER
☒	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE CONNECTION TO CLOSURE/ HOLDER INCLUDES DETECTOR
☒	CEILING HEAT DETECTOR 135 F UNLESS OTHERWISE INDICATED.
☒	BEAM DETECTOR - TRANSMITTER
☒	BEAM DETECTOR - RECEIVER
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FAAP	FIRE ALARM ANNUNCIATOR PANEL - FLUSH MOUNTED
— F —	FIRE ALARM SYSTEM CONDUIT AND WIRING
☒	FIREMAN'S ELEVATOR WARNING LIGHT
☒	KNOX BOX-LOCATION TO BE COORDINATED WITH THE AHJ

PAGING SYSTEM & BACKGROUND MUSIC	
SYMBOL	DESCRIPTION
☒	LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ SUPPORT TRUSS. (CEILING MOUNTED) W = WALL MOUNTED
☒	LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ ENCLOSURE FOR EXPOSED CEILING AREAS W = WALL MOUNTED
☒	HORN/TRANSFORMER FOR HIGH NOISE AREAS
PAEC	PAGING SYSTEM EQUIPMENT CABINET
PATC	PAGING SYSTEM TERMINAL CABINET
— DR —	DOCTORS REGISTRY SYSTEM CONDUIT AND WIRING
☒	VOLUME CONTROL
☒	DEAD FRONT/BLANK FACED, WHITE GFCI DEVICE. EATON ● SFGD20 W. MOUNTED AT 48" AFF OR EQUAL
☒	CONTROLLED RECEPTACLE, BREAK OUT TAB FOR SPLIT OPERATION. SHALL BE MARKED IN FIELD PER 406.3(E). BOTTOM RECEPTACLE TO BE CONTROLLED
☒	PASSIVE INFRARED, 0-10V DIMMING WALL SWITCH/OCCUPANCY SENSOR WATTSTOPPER ● PW-310W

BASIC MATERIALS	
SYMBOL	DESCRIPTION
S ₀	SINGLE POLE SWITCH (SUBSCRIPT INDICATES ITEM CONTROLLED)
S ₃	THREE-WAY SWITCH
S ₄	FOUR-WAY SWITCH
S _D	DIMMER SWITCH (5000 WATTS UNLESS OTHERWISE INDICATED)
S _F	CEILING FAN/LIGHT CONTROL, DAN'S FAN CITY #423LW OR EQUAL
S _K	SINGLE POLE KEY SWITCH
S _{3K}	THREE-WAY KEY SWITCH
S _{4K}	FOUR-WAY KEY SWITCH
S _L	SINGLE POLE SWITCH WITH SECURITY LOCKING KEY
S _{LV}	LOW VOLTAGE SWITCH
S _M	MOTOR RATED SNAP SWITCH, IHP MIN., 20A, 120/277V LEVITON I02-2 OR EQUAL
S _{MP}	MANUAL MOTOR STARTER WITH OVERLOAD HEATERS AND PILOT LIGHT
S _P	SINGLE POLE SWITCH WITH PILOT LIGHT
S _R	SINGLE POLE SWITCH CONTROLLING SWITCHED RECEPTACLE
S _{TD}	SINGLE POLE SWITCH - TIME DELAY FOR EXHAUST FAN/LIGHTS
S _{WP}	SINGLE POLE SWITCH WITH WEATHERPROOF COVER
S _{WST}	SPRING WOUND WALL SWITCH TIMER (30 MIN.)
☒	DUPLEX RECEPTACLE, 5-20R UNLESS OTHERWISE NOTED
☒	SINGLE 5-20R RECEPTACLE, T DENOTES TWIST-LOCK DEAD FRONT/BLANK FACED, WHITE GFCI DEVICE. EATON ● SFGD20 W. MOUNTED AT 48" AFF OR EQUAL
☒	SURGE PROTECTION TYPE (TVSS) DUPLEX RECEPTACLE
☒	PEDESTAL MOUNTED RECEPTACLE
☒	FLOOR OUTLET BOX AND DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE.
☒	FLOOR OUTLET BOX WITH DUPLEX RECEPTACLE AND ONE COMBINATION W/ VOICE/DATA OUTLET
☒	FLOOR OUTLET BOX WITH TWO DUPLEX RECEPTACLES AND ONE COMBINATION W/ VOICE/DATA OUTLET
☒	POKE THRU POWER POLE
☒	SINGLE POLE SWITCH/RECEPTACLE COMBINATION
☒	DUPLEX RECEPTACLE WITH EACH HALF ON SEPARATE CIRCUIT (BREAKER SHALL BE TWO POLE WITH COMMON TRIP)
☒	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
☒	DUPLEX TAMPER-RESISTANT RECEPTACLE. MOUNT COVER PLATE WITH SPANNER HEAD SCREWS
☒	DUPLEX RECEPTACLE WITH TOP HALF SWITCHED
☒	GFCI RECEPTACLE (EWC DENOTES ELECTRIC WATER COOLER. COORDINATE WITH EWC INSTALLER FOR MOUNTING HEIGHT)
☒	GFCI RECEPTACLE, WP DENOTES WEATHERPROOF COVER.
☒	GFCI RECEPTACLE MOUNTED ABOVE COUNTER
☒	DEAD-FRONT/BLANK FACE GFCI, EATON SFGD20 OR EQUAL
☒	TWO DUPLEX RECEPTACLES WITH COMMON COVER
☒	TWO DUPLEX RECEPTACLES WITH COMMON COVER MOUNTED ABOVE COUNTER
☒	CONTROLLED RECEPTACLE, BREAK OUT TAB FOR SPLIT OPERATION. SHALL BE MARKED IN FIELD PER 406.3(E).
☒	ISOLATED GROUND DUPLEX RECEPTACLE, (ORANGE DEVICE)
☒	DUPLEX RECEPTACLE NOTE: TICK MARKS SHOWN ON ANY DEVICE REPRESENTS RECEPTACLE CONNECTED TO THE EMERGENCY CIRCUIT (RED DEVICE) TYPICAL FOR ANY DEVICE IN LEGEND
☒	SPECIAL PURPOSE RECEPTACLE, RATING AS NOTED
☒	ASTRONOMIC TIME SWITCH ABLE TO RETAIN PROGRAMMING AND THE TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST 10 HOURS.
☒	PHOTOCELL, MOUNTED ON ROOF FACING NORTH
☒	GROUND BAR
☒	PLUG-IN STRIP WITH RECEPTACLES, 18" O.C. UNLESS OTHERWISE INDICATED
☒	UNDER GROUND CONCRETE ENCASED DUCTBANK
☒	JUNCTION BOX
☒	JUNCTION BOX- WALL MOUNTED
☒	JUNCTION BOX- FURNITURE SYSTEM FEED
☒	CONDUIT SEAL-OFF FITTINGS
☒	SURGE PROTECTIVE DEVICE C3 = TYPE I, NEMA 4X, CITEL MDSS00 OR EQUAL B3 = DISTRIBUTION BOARD DEVICE. SEE RISER FOR RATING A3 = PANEL BOARD DEVICE, SQUARE D 002175S9 OR EQUAL
☒	SHUNT-TRIP BUTTON - FLUSH MOUNTED UNLESS OTHERWISE NOTED NEMA 3R FOR EXTERIOR LOCATIONS
☒	ELECTRIC DUCT HEATER
☒	MOTOR CONNECTION
☒	VARIABLE FREQUENCY DRIVE
☒	ELECTRIC HAND DRYER
☒	DIRECT DIGITAL CONTROL PANEL
☒	TRANSFORMER

BASIC MATERIALS CONT.	
SYMBOL	DESCRIPTION
☒	AUTOMATIC TRANSFER SWITCH
☒	NON-FUSED DISCONNECT SWITCH, AMP RATING / # OF POLES NEMA 1 IF INDOORS NEMA 3R IF OUTDOORS
☒	FUSED DISCONNECT AR DENOTES AMP RATING OF SWITCH AF DENOTES AMP FUSE SIZE ● DENOTES FUSE PER MANUFACTURER RECOMMENDATIONS
☒	# OF POLES COMBINATION MAGNETIC MOTOR STARTER, SIZE 8 # OF POLES 3 POLE UNLESS OTHERWISE NOTED
☒	ENCLOSURE NEMA RATING. NEMA STARTER SIZE
☒	BRANCH CIRCUIT PANEL BOARD, UNDER 250 VOLTS, SURFACE MOUNTED
☒	BRANCH CIRCUIT PANEL BOARD, UNDER 250 VOLTS, FLUSH MOUNTED
☒	BRANCH CIRCUIT PANEL BOARD, OVER 250 VOLTS, SURFACE MOUNTED
☒	BRANCH CIRCUIT PANEL BOARD, OVER 250 VOLTS, FLUSH MOUNTED
☒	BRANCH CIRCUIT CONDUIT CONCEALED ABOVE CEILING OR IN WALL. CONDUIT SHALL INCLUDE PHASE, NEUTRAL AND GROUND CONDUCTORS AS REQUIRED FOR CIRCUITS (UNLESS OTHERWISE NOTED).
☒	BRANCH CIRCUIT CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR.
☒	BRANCH CIRCUIT CONDUIT EXPOSED
☒	GROUND OR GROUND ROD AS NOTED
☒	EMERGENCY BRANCH CONDUIT
☒	CONDUIT TURNING UP
☒	CONDUIT TURNING DOWN
☒	CONDUIT STUB
☒	CONDUIT CONTINUED
☒	FLEXIBLE CONDUIT
☒	EXISTING TO BE REMOVED
☒	EXISTING TO REMAIN
☒	EXISTING AFFECTED BY THIS PROJECT
☒	FUTURE
☒	NEW

LIGHTING	
SYMBOL	DESCRIPTION
☒	LINEAR OR STRIP FIXTURE
☒	LAY-IN TROFFER FIXTURE
☒	LOWER CASE LETTER INDICATES LIGHTING CONTROL
☒	LAY-IN TROFFER FIXTURE DIAGONAL SHADING DENOTES EMERGENCY LIGHT FIXTURE. WRAP AROUND OR SURFACE MOUNTED FIXTURE.
☒	WALL MOUNTED VANITY OR CLOSET FIXTURE
☒	EXTERIOR WET LOCATION WALL MOUNTED FIXTURE
☒	CEILING OR SOFFIT MOUNTED DOWNLIGHT FIXTURE
☒	PENDANT OR BAY FIXTURE
☒	WALL WASH FIXTURE
☒	ACCENT FLOOD LIGHTING - AIMING AS INDICATED
☒	EXIT LIGHT FIXTURE DIRECTION ARROWS AS SHOWN (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)
☒	WALL MOUNTED EXIT LIGHT FIXTURE
☒	COMBINATION EXIT/EMERGENCY LIGHT FIXTURE W/REMOTES
☒	POLE MOUNTED AREA LIGHT FIXTURE WITH ARMS AS SHOWN ON DRAWINGS
☒	ELECTRICAL PULL BOX
☒	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF LIGHT FIXTURES)
☒	BATTERY PACK WITH TWIN HEADS (CEILING MOUNT)
☒	BATTERY PACK WITH TWIN HEADS (WALL MOUNT)

LIGHTING CONTROL SYSTEM	
SYMBOL	DESCRIPTION
LCP	LIGHTING CONTROL PANEL
S _A	WALL-MOUNTED, MANUAL ON/OFF SWITCH AND AUTOMATIC OFF OCCUPANCY SENSOR
S _P	WALL-MOUNTED, ON PULSE / OFF PULSE BUTTON
☒	TIME SWITCH CONTROL PER FBC C405.2.2.1. INDEPENDENT 7-DAY PROGRAMMING HOLIDAY SETTING, 10 HOUR PROGRAM BACKUP TWO-HOUR MANUAL OVERRIDE MODE. INTERMATIC ET2800 SERIES OR EQUAL
☒	PASSIVE INFRARED / ULTRASONIC OCCUPANCY SENSOR C = CEILING MOUNT W = WALL MOUNT
☒	DAYLIGHT SENSOR
☒	SINGLE POLE SWITCH - PASSIVE INFRARED OCCUPANCY SENSOR
☒	LIGHTING ROOM CONTROLLER/POWER SUPPLY

SPECIFICATIONS:

1. THE TOTAL ELECTRICAL INSTALLATION MUST MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA ADMINISTRATIVE CODE (FAC), SECTION 6165-33, AND, BY REFERENCE IN THE FAC, THE FLORIDA BUILDING CODE, 7TH EDITION, (2020), THE FLORIDA FIRE PREVENTION CODE, 7TH EDITION, (2020), AND THE 2017 EDITION OF NFPA 70, THE NATIONAL ELECTRICAL CODE.	33. PER FBC C405.6.4.2, WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER AN OPERATING AND MAINTENANCE MANUAL FOR ALL ELECTRICAL SYSTEMS INSTALLED IN ACCORDANCE WITH THESE PLANS THAT REQUIRE MAINTENANCE. AT A MINIMUM, THE MANUAL SHALL INCLUDE: A. EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. B. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. C. NAME AND ADDRESS OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
2. ON ALL ELECTRICAL PLAN SHEETS, E.G. "E-1", "E-2", ETC., THE TERM "CONTRACTOR" SHALL MEAN "ELECTRICAL CONTRACTOR", SOMETIMES ALSO ABBREVIATED AS "E.C."	41. WORKMANSHIP, MATERIALS AND APPARATUS UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
3. MATERIALS AND EQUIPMENT INSTALLED SHALL BE ENTIRELY NEW, UNLESS OTHERWISE NOTED, AND SHALL BE LISTED BY UNDERWRITERS LABORATORIES.	42. GREATER THAN 80% NONLINEAR LOADS: SHARED NEUTRALS AND GROUNDS ARE NOT PERMITTED FOR SINGLE PHASE CIRCUITS.
4. EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.	43. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC IIO, AND WITH NEC 210.8 FOR GFCI DEVICES.
5. CONTRACTOR TO REMOVE AND INSTALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH THESE PLANS, FROM BRANCH-CIRCUIT PANEL "PB" TO AND INCLUDING ALL EQUIPMENT SPECIFIED ON THESE PLANS AND EQUIPMENT FURNISHED BY OTHERS AS MAY BE REQUIRED.	44. THE EXCLUSIVELY-DEDICATED SPACE EXTENDING FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE PANEL BOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC 408.
6. CONTRACTOR SHALL MAKE EARLY CONTACT AND MAINTAIN DIRECT COMMUNICATION WITH THE SERVING ELECTRIC UTILITY TO ASSIST THE OWNER IN OBTAINING A FAULT CURRENT LETTER.	45. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL, FIRE-RESISTIVE ASSEMBLIES, (CLASSIFIED AS FIRE/SMOKE AND SMOKE PARTITIONS), THEY SHALL BE INSTALLED WITHOUT AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS AND FBC 714 SHALL BE MET: A. ALL ELECTRICAL BOXES SHALL BE METALLIC. B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE. C. BOX OPENING SHALL NOT EXCEED 16 SQUARE INCHES.
7. SERVICE EQUIPMENT SHALL BE MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AMPERES (FCA) PER NEC IIO.2.4 AND THE DATE OF THE MARKING. SEE RISER DIAGRAM SHEET E-4.1 FOR FAULT CURRENT CALCULATED VALUES.	D. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 1/8" INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.
8. UNLESS OTHERWISE NOTED OR SHOWN ON THESE PLANS, 8.4 KV MC/V LINE-TO-NEUTRAL, 75KV BIL, 33.7KV CREST FRONT-OF-WAVE PROTECTIVE LEVEL, 65KA MINIMUM SHORT-DURATION WITHSTAND SURGE PROTECTION (TYPICAL) IS PROVIDED BY THE SERVING ELECTRIC UTILITY AT THE PRIMARY RISER POLE SERVICING THIS PREMISES.	E. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL).
9. CONTRACTOR TO COMPLETE ALL WORK INCIDENTAL TO MECHANICAL TRADES FOR A COMPLETE INSTALLATION, INCLUDING CONDUIT WIRING, MOTOR STARTERS, DISCONNECT SWITCHES AND EQUIPMENT GROUNDS.	F. PROVIDE A WALL AROUND OUTLETS LARGER THAN 16 SQUARE INCHES. THE INTEGRITY OF THE WALL RATING SHALL BE MAINTAINED.
10. DEFERRED SUBMITTALS FOR ANY LOW VOLTAGE SYSTEMS SHALL BE SUBMITTED TO THIS ENGINEER AND TO THE BUILDING OFFICE PRIOR TO INSTALLATION. CONTRACTOR TO MAKE NECESSARY REVISIONS TO ANY AND ALL SYSTEMS FOR THIS PROJECT, INCLUDING RACEWAYS, CABINETS, PULL BOXES AND OUTLETS. SEE SHOP DRAWINGS FOR EACH SYSTEM FOR ADDITIONAL DETAILS AND INSTRUCTIONS.	G. THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET OF WALL AREA.
11. CONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES COMPLETE AS LISTED IN THE "LIGHTING FIXTURE SCHEDULE".	H. OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE-RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.
12. DISCONNECT SWITCHES SHALL HAVE COPPER OR COPPER (NOMINAL 15% BY VOLUME) CLAD ALUMINUM BUS.	I. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS.
13. ALL PANELS, DISCONNECTS, TIME CLOCKS, AND CONTACTORS SHALL BE LABELED WITH A PERMANENT ENGRAVED LABEL. IDENTIFICATION ON THE LABEL MUST CONFORM TO THESE ELECTRICAL DRAWINGS.	
14. TYPEWRITTEN CIRCUIT IDENTIFICATION SHALL BE UPDATED IN PANEL "PB", EACH BREAKER HAVING A DISTINCTIVE DESCRIPTION COMPLYING WITH NEC 408.4(A). ALL PANELBOARDS SHALL BE MARKED WITH THEIR SOURCE OF SUPPLY PER NEC 408.4(B). IF PRESENT, THE FIRE ALARM CONTROL PANEL BREAKER AND ITS DESCRIPTION SHALL HAVE A CLEARLY VISIBLE IDENTIFICATION.	
15. CONDUIT FOR UNDERGROUND SHALL BE SCHEDULE 40 PVC OR MC CABLE LISTED FOR UNDERGROUND USE UNLESS OTHERWISE SHOWN AND/OR REQUIRED BY CODE. UNDERGROUND CONDUITS SHALL BE INSTALLED AT A DEPTH IN ACCORDANCE WITH TABLE 300.5.	
16. CONDUIT FOR ABOVE GRADE SHALL BE "GRC", "IMC", "SCH 80 PVC" OR "EMT". "LFNC" SHALL BE USED FOR CONNECTIONS TO AIR HANDLING UNITS, CONDENSING UNITS, WATER HEATERS AND OTHER EQUIPMENT. MC CABLE SHALL BE USED FROM "J-BOXES" IN CEILING, OR WHEN STUDS OR OTHER POINTS OF SECURE SUPPORT NOT GREATER THAN 6 FEET APART ARE AVAILABLE, FROM BRANCH-CIRCUIT PANELS TO SWITCHES, RECEPTACLES AND BETWEEN DEVICES. SPARE CONDUITS SHALL HAVE A PULL WIRE INSTALLED.	
17. CONDUCTORS SHALL BE COPPER THHN/THWN EXCEPT WHERE SPECIFIED OTHERWISE ON THE DRAWINGS. CONDUCTORS NO. 8 AWG AND LARGER SHALL BE JOINED BY AN APPROVED PRESSURE CONNECTOR OR CIRCUIT DISCONNECTS SHALL BE PROVIDED WITH A MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES.	
18. CONDUCTORS OF MULTIWIRE CIRCUITS SHALL BE GROUPED IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGIN BY WIRE TIES OR SIMILAR MEANS PER 200.4(B). MULTIWIRE CIRCUIT DISCONNECTS SHALL BE PROVIDED WITH A MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES.	
19. COLOR CODE FOR 208Y/120V 3φ SYSTEM SHALL BE: BLACK, RED, BLUE, WHITE, & GREEN.	
20. CONTRACTOR SHALL VERIFY WITH ARCHITECT FOR DETAILED DIMENSIONS AND LOCATIONS OF OUTLETS AND EQUIPMENT AND FOR ANY REVISIONS IN LAYOUT.	
21. MOUNT WALL SWITCHES 44" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWING. GANG SWITCHES WHEREVER POSSIBLE.	
22. LIGHTING CONTROLS SHALL CONFORM TO THE REQUIREMENTS LISTED ON THE E-3 SERIES SHEETS IN THESE PLANS. CONTROLS SHALL BE WHITE OR IVORY IN COLOR. SWITCHES CONTROLLING LINE-TO-NEUTRAL LIGHTING LOADS SHALL COMPLY WITH NEC 404.2(C).	
23. RECEPTACLES SHALL BE LOCATED 15" ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED. ABOVE-COUNTER RECEPTACLES SHALL BE MOUNTED BY ABOVE BACK SPLASH TO CENTERLINE OF DEVICE.	
24. COVER PLATES SHALL BE WHITE PLASTIC, UNLESS OTHERWISE NOTED. RECEPTACLES WITH PLASTIC COVER PLATES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED DOWN, UNLESS OTHERWISE NOTED. RECEPTACLES WITH METAL COVER PLATES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP, UNLESS OTHERWISE NOTED.	
25. ALL NEW 125V RECEPTACLES SHALL BE NEMA 5-20R, AND COLOR SHALL BE WHITE UNLESS NOTED OTHERWISE. OUTDOOR RECEPTACLES SHALL COMPLY WITH 406.3(A) OR (B) AS APPROPRIATE TO CONDITIONS. AFCI AND GFCI TYPE RECEPTACLES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.	
26. CONTRACTOR SHALL CONNECT AIR CONDITIONERS, PUMPS, FANS AND OTHER EQUIPMENT.	
27. AIR CONDITIONER BREAKER SHALL BE MARKED "LISTED HACR TYPE" AS REQUIRED BY NEC 110.3(D). IF BREAKER IS NOT MARKED, THE OUTSIDE DISCONNECT SHALL BE CHANGED TO USED DISCONNECT WITH RATING AS NOTED ON A/C EQUIPMENT.	
28. CONTRACTOR SHALL MAKE TESTS AND ADJUSTMENTS AS REQUIRED, UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM IN THE PRESENCE OF THE ENGINEER/ARCHITECT FOR CONTINUITY, FUNCTION, CONTROL, PERFORMANCE, LOAD BALANCE, GROUNDS AND GROUND RESISTANCE, SHORT CIRCUITS, AND TO INSURE SATISFACTORY OPERATION AND CONFORMANCE TO CONTRACT REQUIREMENTS.	
29. EQUIPMENT, LABOR AND MATERIAL REQUIRED FOR TESTING SHALL BE FURNISHED BY THE CONTRACTOR(S) AS PART OF THIS CONTRACT.	
30. PRIOR TO COMPLETION OF THE WORK, THE CONTRACTOR SHALL MARK THE SERVICE EQUIPMENT WITH THE AVAILABLE FAULT CURRENT PER NEC 110.2.4, USING EITHER THE FAULT-CURRENT FROM THE UTILITY FAULT CURRENT LETTER, OR THE SHORT CIRCUIT CURRENT CALCULATION FROM THESE PLANS. IF PROVIDED WITH THE FAULT CURRENT LETTER, THIS ENGINEER WILL UPDATE THE CALCULATION TO OBTAIN THE FAULT CURRENT AT THE SERVICE ENTRANCE.	
31. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL SECURE CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM AUTHORITIES HAVING JURISDICTION (AHJ).	
32. PER FBC C405.6.4.1, WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER WITH RECORD DRAWINGS OF THE ACTUAL INSTALLATION. THE RECORD DRAWINGS SHALL INCLUDE A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION. IF PROVIDED WITH COMPLETE FIELD MARKUPS ON THESE PLAN SHEETS, THE ENGINEER SHALL MODIFY THESE PLAN SHEETS INTO SAID RECORD DRAWINGS AND PROVIDE A COPY TO THE OWNER AND TO THE CONTRACTOR AND RETURN THE ORIGINAL FIELD MARKUP TO THE CONTRACTOR.	
NOTE: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE 7TH EDITION (2020) AND THE FLORIDA FIRE PREVENTION CODE 6TH EDITION (2020).	

NO.	DATE	REVISIONS

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PROJECT NAME:
GEMARE DISTRIBUTORS OFFICE EXPANSION

CLIENT:
ARCHITECTONIC INC.
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FORT PIERCE, FLORIDA
34950

PROJECT LOCATION:
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ENGINEER SEAL

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ELECTRICAL DRAWING INDEX		
SHEET	DESCRIPTION	ISSUED
E-1.0	ELECTRICAL LEGEND, SPECIFICATIONS & ABBREVIATIONS	YES
E-2.1	ELECTRICAL LIGHTING/POWER SYSTEMS DEMOLITION PLAN	YES
E-2.2	ELECTRICAL POWER SYSTEMS NEW WORK FLOOR PLAN	YES
E-3.1	LIGHTING PLAN AND LIGHTING FIXTURE SCHEDULE	YES
E-4.1	ELECTRICAL RISER DIAGRAM & SCHEDULES	YES

SHEET TITLE
ELECTRICAL LEGEND, SPECIFICATIONS & ABBREVIATIONS

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