	ELECTRICAL SY	MBC	OL LEGEND	
<u>N</u>	NOTES:			
1	. ALL SYMBOLS MAY NOT APPLY.			
(XX)	CODED PLAN NOTE	XX	DETAIL#	DEEEDENOE TAO
XX	EQUIPMENT DESIGNATION	XXX	SHEET#	REFERENCE TAG
/IDP-22	CIRCUIT DESIGNATION PANEL DESIGNATION - CIRCUIT NUMBER			
K	ELECTRIC UTILITY KEY BOX	\$ ³		ER INDICATES 2 POLE, BER FOR SINGLE POLE
	FAN/LIGHT COMBINATION FIXTURE	\$	LOWER CASE LETTE	R INDICATES FIXTURE(OLLED BY SWITCH
Q	EXHAUST FAN	\$ \$	DIMME	R SWITCH
\odot	JUNCTION BOX	. F	CEILING FAN SPEI	ED CONTROL SWITCH
-	NON-FUSED DISCONNECT SWITCH	\$ ^K	KEY-OPER	ATED SWITCH
<u> </u>	FUSED DISCONNECT SWITCH	\$ ^M	MOTOR RATED D	ISCONNECT SWITCH
Q	MOTOR	\$ ^{OS}		NSOR WALL SWITCH /-D-1001-MV OR EQUAL
•	PUSH BUTTON	OR \$	OVERRI	DE SWITCH
В	BUZZER/BELL	PL \$	SWITCH WI	TH PILOT LIGHT
LVT	LOW VOLTAGE TRANSFORMER	\$ ^T		R SWITCH FSW-MV OR EQUAL
ф	SINGLE RECEPTACLE 20A, 120V	OS		CCUPANCY SENSOR /C-DT-120W OR EQUAL
P	SPECIAL RECEPTACLE	<u>(S)</u>	CEILING MOUNT C	OCCUPANCY SENSOR C-DT-2000-R OR EQUAL
ф	DUPLEX RECEPTACLE 20A, 120V	SP	SWITCH PACK FOR	OCCUPANCY SENSOR
$\overline{\blacksquare}$	QUADRUPLEX RECEPTACLE 20A, 120V	Po	PHO	TOCELL
6	GFCI DUPLEX RECEPTACLE 20A, 120V	TC	TIME	ECLOCK
#	GFCI QUADRUPLEX RECEPTACLE 20A, 120V	#A		IG DEVICE - NUMBER MPERAGE OF DEVICE
•	IG DUPLEX RECEPTACLE 20A, 120V	PP	POW	ER POLE
#	IG QUADRUPLEX RECEPTACLE 20A, 120V	▼w		3 AND BOX FOR WALL ING BY OTHERS
	SPLIT WIRED DUPLEX RECEPTACLE 20A, 120V	•		AND BOX FOR PHONE BY OTHERS
<u> </u>	SPLIT WIRED QUADRUPLEX RECEPTACLE 20A, 120V	∇		B AND BOX FOR DATA BY OTHERS
Ŭ ^{TL}	TWISTLOCK RECEPTACLE	V		TUB AND BOX FOR /IRING BY OTHERS
	FLUSH MTD AS INDICATED BY BOX AROUND DEVICE, FLR=FLOOR, CLG=CEILING	TV		ION OUTLET
	SURFACE MOUNT PANELBOARD/LOADCENTER	WA	WIRELE	SS ACCESS
	FLUSH MOUNT PANELBOARD/LOADCENTER	MB	MEDIA BOX DE	EMARC LOCATION
	UTILITY SERVICE METER	(P)	OVERHEAL) PROJECTOR
	PLUGMOLD - SEE PLAN VIEW FOR SPECIFIC LENGTHS	UPS	UNINTERRUPTIE	BLE POWER SUPPLY
ANNC	GENERATOR ANNUNCIATOR			

SPECIAL SYSTEMS SYMBOL LEGEND

NOTES:
1. ALL SYMBOLS MAY NOT APPLY.

FACP	FIRE ALARM CONTROL PANEL	NAC #	NOTIFICATION CIRCUIT POWER BOOST PANEL # = UNIT NUMBER
FAA	FIRE ALARM ANNUNCIATOR	BATT	BATTERY CABINET
EVAC	VOICE EVACUATION CONTROL UNIT	ARCM	AREA OF REFUGE EM COMMUNICATIO SYSTEM - MASTER UNIT
MIC	REMOTE VOICE EVACUATION MICROPHONE	ARCR	AREA OF REFUGE EM COMMUNICATIO SYSTEM - REMOTE UNIT
F	MANUAL PULL STATION	Δ_{co}	CARBON MONOXIDE DETECTOR
(5)	SMOKE DETECTOR	(2) _{SA}	SMOKE ALARM WITH SOUNDER BASE
2 >P	SMOKE DETECTOR P = PHOTOELECTRIC	\bigcirc BT	SMOKE DETECTOR BT = BEAM TRANSMITTER
(2) ₁	SMOKE DETECTOR I = IONIZATION	$\langle 2 \rangle_{BR}$	SMOKE DETECTOR BR = BEAM RECEIVER
<u>(5</u>)==	SMOKE DETECTOR IN DUCT	RTS	REMOTE TEST STATION
	HEAT DETECTOR	V O	VIBRATING BELL
H	HORN	\square	SPEAKER STROBE COMBINATION
中	WALL MOUNT STROBE	X	CEILING MOUNT STROBE
Œ	CEILING MOUNT HORN	Æ	CEILING MOUNT SPEAKER STROBE COMBINATION
WF	WATER FLOW SWITCH	DH	DOOR HOLDER

DOOR CLOSER

ADDRESSABLE INPUT MODULE

MONITORING MODULE

VALVE SUPERVISORY SWITCH

PRESSURE SWITCH

FIRE DEPARTMENT KEY BOX

	ELECTRICAL	NO7	TATIONS
AC	ABOVE COUNTER	IG	ISOLATED GROUND
AFF	ABOVE FINISHED FLOOR	LV	LOW VOLTAGE
AFG	ABOVE FINISHED GRADE	MBJ	MAIN BONDING JUMPER
BPS	BOLTED PRESSURE SWITCH	MC	MECHANICAL CONTRACTOR
CLG	CEILING MOUNTED	MTD	MOUNTED
CKT	CIRCUIT	NTS	NOT TO SCALE
EC	ELECTRICAL CONTRACTOR	(PART)	INDICATES CIRCUIT USED ELSEWHERE
EM	EMERGENCY	PC	PLUMBING CONTRACTOR
ETR	EXISTING TO REMAIN	SSBJ	SUPPLY-SIDE BONDING JUMPER
FLR	FLOOR MOUNTED	SUC	SITE UTILITY CONTRACTOR
FSC	FIRE SUPPRESSION CONTRACTOR	TYP	TYPICAL
GC	GENERAL CONTRACTOR	UG	UNDERGROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UNO	UNLESS NOTED OTHERWISE
GFEP	GROUND FAULT EQUIPMENT PROTECTION	WP	WEATHERPROOF
GND	GROUND	WG	WIRE GUARD
HC	HVAC CONTRACTOR	XX"	DIMENSIONED HEIGHT

ELECTRICAL LINETYPE LEGEND

	- — GENERAL DEMO
	— GENERAL EXISTING
	- — SWITCH LEG
——— — UGE — — —	— UNDERGROUND ELECTRIC
——— — (AB)UGE — — —	— UNDERGROUND ELECTRIC (ABANDONED)
——— — (D)UGE — — —	— UNDERGROUND ELECTRIC (DEMO)
——— — (E)UGE — — —	— UNDERGROUND ELECTRIC (EXISTING)
LV	— LOW VOLTAGE
(AB)LV	— LOW VOLTAGE (ABANDONED)
——— — (D)LV — — —	— LOW VOLTAGE (DEMO)
———(E)LV ———	— LOW VOLTAGE (EXISTING)
	— UNDERGROUND LOW VOLTAGE
——— — — (AB)UGLV — — ——	— UNDERGROUND LOW VOLTAGE (ABANDONED)
——— — (D)UGLV — — —	— UNDERGROUND LOW VOLTAGE (DEMO)
——— — (E)UGLV — — ——	— UNDERGROUND LOW VOLTAGE (EXISTING)

ELECTF	RICAL SHEET INDEX
SHEET NO.	SHEET DESCRIPTION
E001	ELECTRICAL COVER SHEET
E002	ELECTRICAL SITE PLAN
E101	LIGHTING PLAN
E201	POWER PLAN
E202	POWER PLAN - ROOF
E301	FIRE ALARM PLAN
E302	FIRE ALARM PLAN - ROOF
E501	ELECTRICAL DETAILS
E601	ELECTRICAL SCHEDULES
E701	ELECTRICAL RISER DIAGRAM
E801	ELECTRICAL ENERGY FORMS

THE FIRE ALARM PLAN FOR THIS PROJECT IS A DEFERRED SUBMITTAL PROVIDED BY THE CONTRACTOR. A FIRE ALARM NOTIFICATION AND / OR DETECTION SYSTEM IS REQUIRED IN GROUP E OCCUPANCIES WITH (1) 50+ OCCUPANTS, (2) MORE THAN ONE CLASSROOM, OR (3) USED FOR DAYCARE

PURPOSES.

THE OCCUPANT LOAD OF THIS E OCCUPANCY EXCEEDS 100. THE ALARM SYSTEM SHALL HAVE AN EMERGENCY VOICE / ALARM COMMUNICATIONS FUNCTION PER CBC 907.2.1.1.

GENERAL:

- A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENT A201,
- B. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIAL WHICH VIOLATES ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR.

LATEST EDITION, AND THESE SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.

- INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY. F. EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. ASCERTAIN FROM BUILDING OWNER AND TENANT AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH ALL AREAS.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. CONDUIT ROUTING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF CONDUIT TO AVOID OBSTRUCTIONS.
- INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.
- G. SEAL OPENINGS THROUGH PARTITIONS, WALLS AND FLOORS WITH MINERAL WOOL OR OTHER NONCOMBUSTIBLE MATERIAL.
- INTEGRITY OF THE BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF CONDUIT AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AS REQUIRED.
- THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF I. FINAL LOCATIONS AND MOUNTING ORIENTATIONS OF ALL SWITCHES, RECEPTACLES AND LIGHT THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK DURING OVERTIME HOURS AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.
- J. ALL MATERIAL AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.
- K. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.
- THE FINAL ACCEPTANCE SHALL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL

SCOPE OF WORK:

SHOP DRAWINGS:

- A. SCOPE OF WORK SHALL CONSIST OF PROVIDING LABOR, MATERIALS, EQUIPMENT, SERVICES AND FEES NECESSARY FOR COMPLETE AND SAFE INSTALLATION IN CONFORMITY WITH THE NATIONAL D. ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE INDUSTRY. NATIONAL AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.
- ALL DRAWINGS, PLANS, DETAILS, SPECIFICATIONS AND SPECIFICATION ADDENDA ARE MADE PART OF THIS CONTRACT AND SHALL APPLY TO ALL WORK UNDER THE CONTRACT UNLESS OTHERWISE AMENDED, MODIFIED, SUPPLEMENTED OR SPECIFIED HEREIN.
- THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES BY OWNER INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO E. CIRCUIT BREAKERS: MOLDED CASE BREAKERS SHALL BE THERMAL- MAGNETIC, PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.
- D. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH ALL DEPARTMENTS HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.
- A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT, CONTRACTOR SHALL PROVIDE COMPLETE SETS OF COORDINATED SHOP DRAWINGS OF ALL EQUIPMENT, INDICATING CAPACITY, DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT, ENGINEER AND KIDDIE ACADEMY DOMESTIC FRANCHISING, LLC.
- INDICATE ON EACH SHOP DRAWINGS SUBMITTED: 1) PROJECT NAME AND LOCATION. 2) NAME OF ARCHITECT AND ENGINEER. 3) ITEM IDENTIFICATION. 4) APPROVAL STAMP OF PRIME CONTRACTOR.
- SUBMISSIONS: 1) SUBMISSIONS 11 IN. X 17 IN. OR SMALLER: IF THE SUBMISSION IS A CATALOG CUT, THEN THE CONTRACTOR SHALL SUBMIT ONE ORIGINAL AND TWO COPIES. OTHERWISE, HE SHALL H. TESTS: OPEN AND CLOSE LOAD BREAK SWITCHING DEVICES UNDER LOAD. SUBMIT THREE COPIES. THE ARCHITECT WILL FORWARD THE ORIGINAL AND ONE COPY (TWO COPIES WHEN NO ORIGINAL IS RECEIVED) TO THE ENGINEER. ALL CATALOG CUTS SHALL BE COMPLETE. 2) SUBMISSIONS LARGER THAN 11 IN. X 17 IN.: SUBMIT TWO PRINTS AND ONE PAPER SEPIA TO THE ARCHITECT. THE ARCHITECT WILL FORWARD ONE PRINT AND THE PAPER SEPIA TO A.
- SUBMIT SHOP DRAWINGS FOR THE FOLLOWING: 1) SWITCHES. 2) FUSES. 3) CIRCUIT BREAKERS. 4) PANELBOARDS (INCLUDING DIMENSIONS, SCHEDULES, AND CATALOG CUTS). 5) RACEWAYS. 6) WIRE B. MATERIALS: 1) RACEWAYS: a. RIGID STEEL CONDUIT: FULL-WEIGHT PIPE, GALVANIZED, THREADED. AND CABLE. 7) WALL SWITCHES. 8) INSERTION RECEPTACLES. 9) MOMENTARY CONTACT SWITCHES. 10) TIME SWITCHES. 11) SURFACE METAL RACEWAY. 12) LIGHTING FIXTURES. 13) TRANSFORMERS.

AS-BUILT DRAWINGS AND EQUIPMENT OPERATIONAL INSTRUCTIONS:

- A. UPON COMPLETION AND ACCEPTANCE OF WORK, CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND EQUIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS
- B. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2 IN. X 11 IN. PAPER AND BOUND IN THREE RING BINDERS WITH CLEAR ACETATE COVERS. CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ENGINEER.
- C. THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PROJECT, ARCHITECT AND ENGINEER.
- D. REPRODUCIBLE "AS-BUILT" DRAWINGS SHALL BE PROVIDED INDICATING THE AS INSTALLED CONDITIONS OF THE WORK. "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AFTER COMPLETION OF THE INSTALLATION.

GENERAL PROVISIONS FOR ELECTRICAL WORK:

- A. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.
- B. DEFINITIONS: 1) "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED. 2) "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES. 3) "FURNISH" OR "SUPPLY: TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES. 4) "WORK": LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION. 5) "WIRING": RACEWAY, FITTINGS, WIRE, BOXES AND RELATED ITEMS. 6) "CONCEALED": EMBEDDED IN MASONRY OR OTHER CONSTRUCTION. INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS, IN TRENCHES, IN CRAWL SPACES, OR IN ENCLOSURES. 7) "EXPOSED": NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE. 8) "SIMILAR" OR "EQUAL": EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.
- TEMPORARY LIGHT AND POWER: PROVIDE TEMPORARY LIGHT AND POWER SYSTEMS AT EARLIEST POSSIBLE DATE WITHIN THE CONSTRUCTION AREAS FOR THE REQUIREMENTS OF ALL TRADES AS HEREIN DESCRIBED. EXTEND SYSTEMS TO NEW CONSTRUCTION AS SOON AS PHYSICALLY POSSIBLE. MAINTAIN SYSTEM DURING WORKING HOURS OF ALL TRADES. COST OF ENERGY WILL BE PAID FOR BY OWNER. PROVIDE ALL REQUIRED MAINTENANCE, INCLUDING LAMPS AND SOCKETS.
- D. QUALITY ASSURANCE: 1) QUALITY AND GAUGE OF MATERIALS: NEW, BEST OF THEIR RESPECTIVE KINDS, FREE FROM DEFECTS AND LISTED BY UNDERWRITERS LABORATORIES, INC., OR OTHER NATIONALLY APPROVED TESTING AGENCY AND BEARING THEIR LABEL. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION SHALL BE OF SAME MANUFACTURER, EXCEPT AS NOTED. 2) GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED AS DEFINED IN PARAGRAPH 2.C. 3) CURRENT CHARACTERISTICS: a. SERVICE: 120/208 VOLT (AND 120/208 VOLT), 3 PHASE, 4 WIRE, 60 HERTZ WITH GROUNDED NEUTRAL. b. DISTRIBUTION: 120/208 VOLT (AND 120/208 VOLT), 3 PHASE, 4 WIRE, 60 HERTZ WITH GROUNDED NEUTRAL. 4) OUTLET AND DATA HEIGHTS TO BE VERIFIED WITH CONCEPT PLAN / FRANCHISE: (UNLESS OTHERWISE SPECIFIED BY ARCHITECT) a. FROM FINISHED FLOOR TO CENTERLINE OF OUTLETS FOR: - RECEPTACLES AND TELEPHONES: 1'-6". - WALL SWITCHES: 3'-7". - WALL FIXTURES: 7'-0". - MOTOR CONTROLLERS: 5'-0". - STROBE LIGHTS: 6'-8". OR 6" BELOW CEILING (WHICHEVER IS LOWER) - FIRE ALARM PULL STATIONS: 4'-0". b. EXCEPTIONS: AT

JUNCTION OF DIFFERENT WALL FINISH MATERIALS, ON MOLDING OR BREAK IN WALL SURFACE, IN

PRODUCT DELIVERY, STORAGE AND HANDLING: 1) MOVING OF EQUIPMENT: WHERE NECESSARY, SHIP IN CARTED SECTIONS OF SIZE TO PERMIT PASSING THROUGH AVAILABLE SPACES. 2) ACCESSIBILITY: FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS SHALL BE PERMITTED. CHANGES OF MAGNITUDE OR INVOLVING EXTRA COST ARE NOT PERMISSIBLE WITHOUT REVIEW, GROUP CONCEALED ELECTRICAL EQUIPMENT REQUIRING ACCESS WITH EQUIPMENT FREELY ACCESSIBLE THROUGH ACCESS DOORS. OUTLET AND DATA HEIGHTS TO BE VERIFIED WITH CONCEPT PLAN / FRANCHISE.

VIOLATION OF CODE, OR AS NOTED OR DIRECTED.

MATERIALS: 1) NAMEPLATES: PROVIDE BLACK LAMICOID SHEET WITH 3/4" WHITE LETTERING, FASTENED WITH EPOXY CEMENT FOR EACH DISCONNECT SWITCH, CIRCUIT BREAKER, PANEL, CABINET, TRANSFORMER, ENCLOSURE, MOTOR CONTROLLER AND THE LIKE. NAMEPLATES SHALL DESCRIBE THE NAME AND NUMBER OF EACH COMPONENT. 2) CABLE TAGS: TAG EACH CONDUCTOR PASSING THROUGH SPLICE OR PULLBOX WITH A WHITE LINEN TAG, INDICATING POINT OF ORIGIN AND TERMINATION OF THE CIRCUIT. 3) INSERTS AND SUPPORTS: INSERTS: STEEL, SLOTTED TYPE, FACTORY PAINTED. -SINGLE SIMILAR TO GRINNELL FIG. 281. - MULTI-ROD: SIMILAR TO FEE AND MASON SERIES 9000 WITH END CAPS AND CLOSURE STRIPS. - CLIP FORM NAILS FLUSH WITH INSERTS. - MAXIMUM LOADING 75 PERCENT OF RATING. b. SUPPORTS FROM BUILDING CONSTRUCTION: INSERTS, BEAM CLAMPS, STEEL FISHPLATES (IN CONCRETE FILL ONLY), CANTILEVER BRACKETS OR OTHER MEANS. SUBMIT FOR c. GROUPED LINES AND SERVICES: TRAPEZE HANGERS OF BOLTED ANGLES OR CHANNELS. d. WHERE BUILDING CONSTRUCTION IS INADEQUATE: PROVIDE ADDITIONAL FRAMING. SUBMIT FOR REVIEW.

THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, G. PAINT SHALL BE THE BEST GRADE FOR ITS PURPOSE. DELIVER IN ORIGINAL SEALED CONTAINERS AND APPLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. COLORS SHALL BE AS BOXES, AFTER FABRICATION. UTILIZE HOT DIPPED GALVANIZED OR DIPPED IN ZINC BASED PRIMER FOR: OUTLET BOXES, JUNCTION BOXES, CONDUIT HANGERS, RODS, INSERTS AND SUPPORTS. ZINC SHALL BE UTILIZED FOR STEEL OR IRONWORK.

- H. PROVIDE ALL NECESSARY FLASHING AND COUNTERFLASHING TO MAINTAIN THE WATERPROOFING H. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE. PAINTED EXPOSED WORK SOILED OR DAMAGED: CLEAN AND REPAIR TO MATCH ADJOINING WORK BEFORE FINAL ACCEPTANCE. REMOVE DEBRIS FROM INSIDE AND OUTSIDE OF MATERIAL AND EQUIPMENT.
 - FIXTURES SHALL BE VERIFIED WITH ARCHITECT.
 - ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION. LOW-VOLTAGE DISTRIBUTION EQUIPMENT:
 - A. PROVIDE COMPLETE EQUIPMENT INCLUDING: SWITCHES, FUSES, CIRCUIT BREAKERS, PANELS AND TRANSFORMERS.
 - B. ALL EQUIPMENT SHALL CONFORM TO NEMA, ANSI, IEEE STANDARDS AND BUILDING STANDARDS.
- TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE C. DISCONNECT SWITCHES SHALL BE FUSED OR NONFUSED AS NOTED, AND HORSEPOWER RATED FOR MOTOR LOADS. TOGGLE TYPE SWITCHES SHALL BE NONFUSED, LOAD BREAK, HAVING MAXIMUM RATINGS OF 20 AMP AT 600 VOLTS AND 30 AMP AT 240 VOLTS. TWO-POLE SWITCHES TYPE SWITCHES SHALL BE LOAD BREAK, QUICK-MAKE-QUICK-BREAK, UL CLASS R UP TO 600 AMP. MAXIMUM RATING EXCEPT AS NOTED DEAD FRONT, NEMA TYPE 1, EXCEPT AS NOTED.
 - FUSES: 1) CIRCUIT 601 TO 6000 AMPERES SHALL BE PROTECTED BY FUSES SIMILAR TO CURRENT LIMITING BUSSMANN LOW-PEAK TIME-DELAY FUSES KRP-C (AMP)SP, CLASS L LISTED BY UL WITH AN INTERRUPTING RATING OF 300,000 AMPERES RMS SYMMETRICAL, 2) CIRCUITS 0 TO 600 AMPERES E. SHALL BE PROTECTED BY FUSES SIMILAR TO CURRENT LIMITING BUSSMAN LOW-PEAK DUAL-ELEMENT TIME-DELAY LPN-RK (AMP)SP (250V) /LPS-RK (AMP)SP (600V) OR LPJ (AMP)SP (600V) (UL CLASS RK1 OR CLASS J), AND BE LISTED BY UL WITH AN INTERRUPTING RATING OF 300,000 AMPERES RMS SYMMETRICAL. 3) MOTOR CIRCUITS - ALL INDIVIDUAL MOTOR CIRCUITS WITH FULL LOAD AMPERE RATINGS (FLA) OF 480 AMPERES OR LESS SHALL BE PROTECTED BY FUSES SIMILAR F. TO CURRENT LIMITING BUSSMANN LOW-PEAK DUAL-ELEMENT TIME-DELAY LPN-RK (AMP)SP (250V) /LPS-RK (AMP)SP (600V) OR LPJ (AMP)SP (600V) (UL CLASS RK1 OR CLASS J), AND BE LISTED BY UL WITH AN INTERRUPTING RATING OF 300,000 AMPERES RMS SYMMETRICAL. 4) ALL FUSES SHALL BE PROVIDED BY SAME MANUFACTURER. 5) PROVIDE 1 SPACE MATCHING FUSE FOR EACH SET OF 3.
 - QUICK-MAKE-QUICK-BREAK, BOLT-ON TYPE, MANUALLY OPERATED WITH INSULATED TRIP-FREE HANDLE, MULTI-POLE TYPE BREAKERS SHALL CONTAIN INTERNAL TRIP BAR. TERMINALS SHALL BE G. NOT MORE THAN 3 LIGHTING OR CONVENIENCE OUTLET CIRCUITS SHALL BE INSTALLED IN ONE SUITABLE FOR COPPER OR ALUMINUM CABLE. FURNISH AUXILIARY DEVICES WHERE REQUIRED FOR ENCLOSURES SHALL BE DEAD FRONT, NEMA TYPE 1, EXCEPT AS NOTED. FRAMES, IC AND INTERCHANGEABLE TRIPS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED: 1) 120 VOLTS, 100-AMP FRAME: 10,000 AMPS, 1 POLE. 2) 240 VOLTS, 100-AMP FRAME: 18,000 AMPS, 2 AND 3 POLES.
- INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES F. DISTRIBUTION PANELS: SWITCHING UNITS SHALL BE 3 PHASE, 4 WIRE CIRCUIT-BREAKER TYPE UNLESS OTHERWISE NOTED ON PANEL SCHEDULES. BUS BARS SHALL BE HARD DRAWN COPPER, H. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS. MINIMUM 98 PERCENT CONDUCTIVITY, SILVER OR TIN-PLATED JOINTS. CABINETS SHALL BE WELDED CORNERS. HARDWARE SHALL BE CHROME-PLATED WITH FLUSH LOCK/LATCH HANDLE ASSEMBLY (UP TO 48 IN. HIGH DOORS) OR VAULT HANDLE, LOCK AND 3-POINT CATCH (LARGER THAN 48 IN. HIGH DOORS). HINGES SHALL BE SEMI-CONCEALED, 5-KNUCKLE STEEL WITH NONFERROUS PINS, 180-DEG OPENING, LOCATED A MAXIMUM 26 IN. ON CENTERS. MINIMUM GUTTER SPACES FOR LIGHTING PANELS SHALL BE 5-3/4 IN. SIDES, PLASTIC, TRANSPARENT COVER. A TYPEWRITTEN LIST INDICATING FEEDER CABLE AND CONDUIT SIZE, CIRCUIT NUMBERS, OUTLETS SUPPLIED AND THEIR LOCATIONS SHALL BE PROVIDED.
 - G. BALANCE THE LOAD OVER PHASES WHEN NEW CIRCUITS ARE ADDED TO PANELS. PROVIDE MULTI-CABLE LUGS WHERE REQUIRED. DOUBLE LUGGING SHALL NOT BE PERMITTED. MOUNTING HEIGHT SHALL BE A MAXIMUM OF 6 FT-6 IN. FROM FLOOR TO TOP SWITCH UNIT. UPDATE DIRECTORIES ON EXISTING PANELBOARDS WHERE CIRCUITING IS CHANGED.

PROVIDE RACEWAYS COMPLETE WITH BOXES, FITTINGS AND ACCESSORIES. CONDUIT OR TUBING SIZES REFERRED TO IN SPECIFICATIONS AND ON DRAWINGS ARE NOMINAL DIAMETERS. MINIMUM

STEEL CONDUIT: CONTINUOUS SINGLE STRIP, GALVANIZED. d. WIREWAYS: WIRE SHALL BE AS NOTED, MINIMUM NO. 16 GAUGE STEEL WITH GROUND CONTINUITY. FINISH SHALL BE BAKED ENAMEL. COVERS SHALL BE SCREW-ON. e. SURFACE METAL RACEWAY: SIZE AS NOTED. BASE 0.04 E. DEVICE PLATES: SEE ARCHITECT FOR TYPE. FOR RECEPTACLES WITH OTHER THAN 120 VOLT, IN., COVER 14". MATERIAL SHALL BE STEEL. FINISH SHALL BE BAKED ENAMEL. COVERS SHALL BE SCREW-ON. 2) FITTINGS AND ACCESSORIES: a. RIGID STEEL: NONSPLIT, THREADED, STEEL OR MALLEABLE IRON. ZINC DIE CAST NOT PERMITTED. b. ELECTROMETALLIC TUBING: COMPRESSION F. COLOR OF DEVICES TO BE WHITE. TYPE. GALVANIZED RIGID STEEL ELBOWS, 2" OR LARGER. c. FLEXIBLE METALLIC CONDUIT: ANGLE WEDGE TYPE WITH INSULATED THROAT. d. BUSHINGS: METALLIC INSULATED TYPE. 3) BOXES: a. G. MOUNTING ORIENTATION OF RECEPTACLES (VERTICAL): COORDINATE WITH ARCHITECT. OUTLET BOXES: EXCEPT AS OTHERWISE REQUIRED BY CONSTRUCTION, DEVICES OR WIRING, BOXES SHALL BE STAMPED STEEL, 4" SQUARE OR OCTAGON FOR FIXTURES. BOXES ABOVE CEILING H. FLUSH FLOOR MOUNTED POKE THROUGH OUTLET POKE THROUGH FLOOR FITTING WITH 2 HOUR SHALL BE 1 1 2" DEEP. BOXES IN CEILING OR SLAB SHALL BE 3" DEEP. BOXES IN WALL FOR FIXTURES FIRE RATING. MOUNTS 4" DIAMETER HOLE. PAINTABLE, DIE CAST ALUMINUM CARPET FLANGE. SHALL BE 2 3 4" DEEP. BOXES IN WALL FOR RECEPTACLES AND SWITCHES SHALL BE 1 1 2" DEEP. FURNISH WITH RAISED COVERS AND FIXTURE STUDS WHERE REQUIRED. WITHOUT FIXTURE OR DEVICE: FURNISH BLANK COVER. OFFSET BACK-TO-BACK OUTLETS WITH MINIMUM 6" SEPARATION. b. JUNCTION AND PULL BOXES: GALVANIZED SHEET STEEL WITH SCREW-ON COVERS, EXCEPT AS NOTED. FURNISH WITH INSULATED SUPPORTS FOR CABLES. LOCATIONS SHALL BE AS NOTED OR REQUIRED AND ACCESSIBLE. PROVIDE BARRIERS IN NEW AND RENOVATED BOXES BETWEEN 120/208 VOLT AND 265/460 VOLT WIRING AND BETWEEN EMERGENCY AND NORMAL WIRING. FLOOR A. PROVIDE FIXTURES, COMPONENTS AND LAMPS. FIXTURES SHALL BE COMPLETELY FACTORY BOXES SHALL BE SUITABLE FOR CONDUIT AND DEVICES NOTED. RAISED OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH ABOVE FLOOR FITTING. TELEPHONE: BUSHED HOLE. POWER: DUPLEX RECEPTACLE OR OTHER AS NOTED. INCREASE SIZE TO SUIT AS NECESSARY. FLUSH OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH FLUSH FLOOR FITTING FOR TELEPHONE AND FLUSH DUAL FLAP COVER WITH DUPLEX RECEPTACLE FOR POWER AS NOTED. INCREASE SIZE TO SUIT AS B. FIXTURE CATALOG NUMBERS USED TO ILLUSTRATE EQUIPMENT TYPE DO NOT NECESSARILY

C. PROVIDE RACEWAYS ONLY AS HEREIN SPECIFIED, EXCEPT AS NOTED. RACEWAYS SHALL BE RUN CONCEALED, EXCEPT AS NOTED. PROVIDE RACEWAY SUPPORT UTILIZING CEILING TRAPEZE, STRAP HANGERS, OR WALL BRACKETS. PROVIDE U-BOLTS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND CONNECTED TO ACCEPTABLE SUPPORTS. PROVIDE RISER CLAMPS AT EACH FLOOR LEVEL OF A. PROVIDE CONDUIT AND OUTLET BOXES IN THE LOCATIONS AS IDENTIFIED ON THE DRAWINGS. RISER RACEWAYS AND RESTING ON SLAB. FOR THROUGH-THE-FLOOR SYSTEMS, UTILIZE AN ASSEMBLY SIMILAR TO HUBBELL FIRE RATED POKE-THROUGH-FLOOR BOX SYSTEM. FOR ABOVE B. TELEPHONE AND DATA CABLING, DEVICES, HEAD-END EQUIPMENT AND TERMINATIONS BY OWNER'S FLOOR FITTINGS TELEPHONE SHALL BE BUSHED HOLE AND POWER SHALL BE DUPLEX RECEPTACLE VENDOR. OR OTHER AS NOTED. PROVIDE SEPARATION BARRIER BETWEEN POWER AND TELEPHONE FIRE RATING OF FLOOR. SECURE ALL RACEWAYS TO SUPPORTS WITH PIPE STRAPS OR U-BOLTS. SPACING OF SUPPORTS SHALL BE A MINIMUM OF 10' ON CENTER FOR METALLIC RACEWAY AND AS REQUIRED FOR NONMETALLIC RACEWAY. SPACING SHALL BE 5' ON CENTER FOR WIREWAYS AND PER CODE AND AS NOTED FOR OTHERS. MOUNT SUPPORTS TO STRUCTURE MASONRY WITH TOGGLE BOLTS ON HOLLOW MASONRY, EXPANSION SHIELDS OR INSERTS IN CONCRETE AND BRICK, MACHINE SCREWS ON METAL, BEAM CLAMPS ON FRAMEWORK, WOOD SCREWS ON WOOD, AND PAN THROUGH STRAPS IN METAL DECK. NAILS, RAWL PLUGS OR WOOD PLUGS SHALL NOT BE PERMITTED. WHERE REQUIRED BY STRUCTURE, FURNISH THROUGH BOLTS AND FISHPLATES. EXPOSED RACEWAYS SHALL BE RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS. PROVIDE CLEARANCE WITH WATER, STEAM OR OTHER PIPING (MINIMUM 3 IN. SEPARATION FROM STEAM AND HOT WATER PIPES, EXCEPT 1" FROM PIPE COVER AT CROSSINGS AND 18" FOR PARALLEL RUNS). FOR HUNG CEILING OUTLETS, RUN IN HUNG CEILING AND CONNECT TO CEILING SUPPORT CHANNELS. IN MASONRY AND POURED CONCRETE, RUN VERTICALLY ONLY. MAINTAIN GROUNDING CONTINUITY OF INTERRUPTED METALLIC RACEWAYS WITH GROUND CONDUCTOR, AND IN FLEXIBLE CONDUIT FOR FEEDERS AND MOTOR TERMINAL CONNECTIONS. EMPTY RACEWAYS OVER 10' LONG: PROVIDE FISH OR PULL WIRE, GALVANIZED OR NYLON ROPE. RIGID STEEL CONDUIT SHALL BE PERMITTED FOR FEEDERS AND BRANCH CIRCUITS. PAINT MALE THREADS OF FIELD-THREADED CONDUIT WITH GRAPHITE-BASE PIPE COMPOUND AND BUTT CONDUIT ENDS. TOUCH UP MARRED SURFACES AND FIELD-CUT THREADS, CRC-COLD GALVANIZED. EMT SHALL BE PERMITTED FOR BRANCH CIRCUITS ONLY, IN DRY LOCATIONS, DRY WALLS, HUNG CEILINGS, HOLLOW BLOCK WALLS AND FURRED SPACES. EMT SHALL NOT BE PERMITTED IN RAISED FLOORS. FLEXIBLE STEEL CONDUIT SHALL BE UTILIZED FOR SHORT CONNECTIONS WHERE RIGID CONDUIT IS IMPRACTICAL. FROM OUTLET BOX TO RECESSED LIGHTING FIXTURE: PROVIDE MINIMUM 4' AND MAXIMUM 6'

LENGTHS. FOR FINAL CONNECTION TO MOTOR TERMINAL BOX, TRANSFORMER AND OTHER VIBRATING EQUIPMENT: PROVIDE WITH POLYVINYL SHEATHING AND GROUND CONDUCTOR. MINIMUM LENGTH: 18" WITH SLACK. CONNECT GROUND CONDUCTOR TO ENCLOSURE OR RACEWAY AT EACH END. FOR EXPANSION JOINT CROSSINGS, CROSS AT RIGHT ANGLES AND ANCHOR ENDS. CUT CONDUIT ENDS SQUARE. REAM SMOOTH. PAINT MALE THREADS OF FIELD THREADED RACEWAYS WITH GRAPHITE BASE PIPE COMPOUND. DRAW UP TIGHT WITH RACEWAY COUPLING. ALL COUPLINGS SHALL BE COMPRESSION TYPE. NO SET SCREW FITTINGS. EXPANSION FITTINGS SHALL BE INSTALLED AT RIGHT ANGLES WITH CLIP JOINT CENTERED IN EXPANSION JOINT. PROVIDE A LENGTH OF RUN IN ACCORDANCE MANUFACTURER'S RECOMMENDATIONS. PRESET FITTINGS

SHALL ALLOW FOR TEMPERATURE VARIATION. RACEWAYS PASSING THROUGH FIRE-RATED

CONSTRUCTION: SEAL OPENING WITH FIRE SEALANT.

- D. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. OUTLET BOXES SHALL BE SET SQUARE AND TRUE WITH BUILDING FINISH. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRON OR GROUT IN WITH MASONRY. VERIFY OUTLET LOCATIONS IN FINISHED SPACES WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISHES. PROVIDE BARRIERS BETWEEN SWITCHES CONNECTED TO DIFFERENT PHASES FOR VOLTAGES EXCEEDING 150 VOLTS TO GROUND.
- E. PANEL, JUNCTION AND PULL BOXES SHALL BE LOCATED CLEAR OF OTHER TRADES. CONCEAL JUNCTION AND PULL BOXES IN FINISHED SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. BOXES SHALL BE ACCESSIBLE. SUPPORT BOXES FROM BUILDING STRUCTURE. INDEPENDENT OF CONDUIT, PROVIDE FLOOR-TO-CEILING CHANNELS FOR MOUNTING ON DRYWALL AND LIGHTWEIGHT CONSTRUCTION. OUTLET BOXES FOR FIXTURES RECESSED IN HUNG CEILINGS SHALL BE ACCESSIBLE THROUGH OPENING CREATED BY REMOVAL OF FIXTURE. SECURE TO BLACK IRON SUPPORT. MOTOR TERMINAL BOXES: COORDINATE WITH MOTOR BRANCH CIRCUIT CONDUIT AND WIRING; ADD BOX VOLUME WHERE REQUIRED.
- SELECTED BY ARCHITECT OR ENGINEER. UTILIZE GALVANIZED IRON PRIMER ON PANEL AND PULL F. FIRE SEALANTS: PROVIDE FOR RACEWAYS AND WIRE PASSING THROUGH FLOOR SLOTS, SLEEVES OR OPENINGS IN FIRE-PARTITIONS ROOMS.
- BASED PRIMER OF STEEL EQUIPMENT AND RACEWAYS. A FIELD-APPLIED ZINC BASED PRIME COAT G. PERFORM CONTINUITY TESTS OF RESISTANCE OF FEEDER CONDUITS FROM SERVICE TO POINT OF FINAL DISTRIBUTION USING 1 CONDUCTOR RETURN. MAXIMUM RESISTANCE SHALL BE 25 OHMS.

- A. PROVIDE WIRE AND CABLE COMPLETE WITH ACCESSORIES. SIZE REFERENCE SHALL BE AWG EXCEPT AS NOTED.
- B. CONDUCTORS SHALL BE COPPER, ASTM STANDARD SOLID 10 AND SMALLER) OR STRANDED (NO. 8 AND LARGER). GENERAL USE CABLING SHALL BE NO. 12 MINIMUM. AT 120 VOLTS AND OVER 100' CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM. AT 265 VOLTS AND OVER 200' CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM. CONTROL AND ALARM CABLING, EXCEPT AS NOTED, SHALL BE NO. 14 MINIMUM. AT 120 VOLTS AND OVER 200' CIRCUIT LENGTH PROVIDE NO. 12 MINIMUM. OTHER VOLTAGES AND PHASES: ADJUST CABLE SIZING AS REQUIRED TO MAINTAIN VOLTAGE DROP. INCREASE RACEWAY SIZES FOR LARGER WIRE AS REQUIRED.
- C. INSULATION SHALL BE RUBBER AND THERMOPLASTIC MEETING ASTM AND IPCEA STANDARDS. TYPE THW OR THWN SHALL BE UTILIZED FOR FEEDERS AND BRANCH CIRCUITS EXCEPT AS NOTED. TYPE SFF-2 SHALL BE UTILIZED FOR BRANCH CIRCUITS LOCATED IN WIRING CHANNELS OF CONTINUOUS FLUORESCENT FIXTURES AND IN AMBIENT TEMPERATURES OVER 90 DEG C. FOR UNGROUNDED ISOLATED BRANCH CIRCUITS PROVIDE CROSS-LINKED POLYETHYLENE INSULATION (TYPE XHHW).
- SWITCHES SHALL BE LEVITON MODEL SIMILAR TO HART AND HEGEMAN NO. 7810F. KNIFE-BLADE D. COLOR CODING SHALL BE AS FOLLOWS: 1) 120/208 VOLT BLACK FOR A PHASE RED FOR B PHASE BLUE FOR C PHASE 2) NEUTRAL WIRE SHALL UTILIZE WHITE OUTER COVERING THROUGHOUT. EQUIPMENT GROUND WIRE SHALL UTILIZE GREEN OUTER COVERING THROUGHOUT. WHERE COLOR-CODED CABLE IS NOT AVAILABLE, CERTIFY IN WRITING AND REQUEST PERMISSION TO OVERLAP CONDUCTORS WITH 6" OF COLOR TAPING IN ACCESSIBLE LOCATIONS.
 - PROVIDE FLAMEPROOF LINEN OR FIBER TAGS IN ACCESSIBLE LOCATIONS. FOR FEEDERS INDICATE FEEDER NUMBER, SIZE, PHASE AND POINTS OF ORIGIN AND TERMINATIONS. FOR CONTROL AND ALARM WIRING INDICATE TYPE (CONTROL OR ALARM), SIZE OF WIRE, AND POINTS OF ORIGIN AND TERMINATIONS.
 - SMALLER SHALL UTILIZE COMPRESSION-TYPE OF TWIST-ON SPRING-LOADED CONNECTORS AND CLEAR NYLON-INSULATED COVERING. COPPER CONDUCTORS NO. 8 AND LARGER SHALL UTILIZE MECHANICAL BOLTED PRESSURE OR HYDRAULIC COMPRESSION TYPE USING MANUFACTURER'S RECOMMENDED TOOLING. CABLE LUGS AND CONNECTORS SHALL UTILIZE COMPRESSION TYPE OF SAME METAL AS CONDUCTOR. PROVIDE TO MATCH CABLE, WITH MARKING INDICATING SIZE AND TYPE. COPPER LUG CONNECTIONS TO BUS BARS: USE ANTISEIZE COMPOUND ON TANG.
 - CONDUIT UNLESS OTHERWISE INDICATED. PULL NO THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F. PROVIDE SEPARATE RACEWAYS FOR CONDUCTORS OF 120/208 AND 265/460 VOLT SYSTEMS, EXCEPT 460 VOLT MOTOR BRANCH CIRCUIT WIRING AND RELATED 120 VOLT CONTROL WIRING. THERMOPLASTIC WIRES SHALL NOT BE INSTALLED IN COMPUTER AREA RAISED

I. PERFORM CONTINUITY AND INSULATION TESTS. MEGGER TEST 100 PERCENT OF FEEDERS, 10 PERCENT OF BRANCH CIRCUITS AND ALL MOTOR BRANCH CIRCUITS OVER 25 HP. PERFORM TESTS PRIOR TO CONNECTING EQUIPMENT AND IN PRESENCE OF AUTHORIZED REPRESENTATIVES. SUBMIT WRITTEN REPORT OF RESULTS. CORRECT OR REPLACE CABLE TESTING BELOW MANUFACTURER'S STANDARDS.

- A. PROVIDE COMPLETE MATERIAL AND ACCESSORIES AS PER BUILDING STANDARDS.
- B. LOCAL WALL SWITCHES SHALL BE SPECIFICATION GRADE, TOGGLE, QUIET TYPE, RATED 20 AMP, 120/277 VOLT, AC. LEVITON MODEL SIMILAR TO HUBBELL NOS. 1221 (SINGLE POLE), 1222 (DOUBLE POLE), 1223 (3-WAY) AND 1224 (4-WAY).
- C. INSERTION RECEPTACLES SHALL BE SPECIFICATION GRADE DUPLEX CONVENIENCE 125 VOLTS, 2 POLE, 3 WIRE, U GROUND SLOT. GROUNDED, EXCEPT AS NOTED. MEETING NEMA STANDARDS, PUBLICATION WD-1-1971. LEVITON MODEL SIMILAR TO HUBBELL NOS. 5362 (20 AMP) AND 5262 (15 AMP). 1) SINGLE, EXCEPT AS NOTED: a. 20 AMP STRAIGHT BLADE, SIMILAR TO HUBBELL NO. 5361. b. 125 VOLT, 2 POLE, 3 WIRE, GROUNDED. 2) SPECIAL USE: NONINTERCHANGEABLE TYPES AND RATINGS. 3) GROUND FAULT INTERRUPTER RECEPTACLES: a. FEED-THRU TYPE. LEVITON MODEL SIMILAR TO HUBBELL NOS. GF5362 (20 AMP) AND GF5262 (15 AMP).
- b. ELECTROMETALLIC TUBING (EMT): THIN WALL PIPE, GALVANIZED, THREADLESS. c. FLEXIBLE D. MOMENTARY CONTACT SWITCHES. FOR REMOTE CONTROL SWITCHES, LEVITON MODEL SIMILAR TO
 - INSCRIBED VOLTAGE AVAILABLE

PROVIDE MODIFIED LEXAN SLIDE HOLDER TO SUPPORT A QUAD ELECTRICAL OUTLET. COMPLETE WITH ALL NECESSARY HARDWARE FOR COMPLETE INSTALLATION. SIMILAR TO WIREMOLD PART NO.

- ASSEMBLED, WIRED AND EQUIPPED WITH ALL NECESSARY SOCKETS, BALLASTS, DRIVERS, SUPPORTING HARDWARE AND ACCESSORIES. REFER TO ARCHITECTURAL DRAWINGS FOR INDIVIDUAL FIXTURE DESCRIPTIONS.
- DENOTE REQUIRED MOUNTING EQUIPMENT OR ACCESSORIES. PROVIDE ACCESSORIES TO SUIT

- COMPARTMENTS. PROVIDE JUNCTION BOX ON UNDERSIDE OF FLOOR. PACK FITTING TO RESTORE C. OUTLETS SHALL BE: 1) WALL: 4" SQUARE WITH BUSHED COVER PLATE. 2) FLOOR: CAST IRON WITH

MAIN ELECTRICAL GENERAL NOTES

CONDUCTORS PER NEC.

NAMEPLATE RATING.

APPROVAL.

- A. ALL ELECTRICAL INSTALLATIONS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES. ELECTRICAL SERVICE TO BE INSTALLED IN COMPLIANCE WITH NEC ARTICLE 230.
- B. CONTRACTOR SHALL OBTAIN FAULT CURRENT INFORMATION FROM UTILITY COMPANY AND PERFORM SHORT CIRCUIT CALCULATIONS. SIZE FUSES AND EQUIPMENT A.I.C.
- RATINGS ACCORDINGLY. C. CONTRACTOR SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC TABLE 250.122 FOR ALL BRANCH CIRCUITS INSTALLED IN NON-METALLIC CONDUITS. METALLIC CONDUITS MAY BE USED AS EQUIPMENT GROUNDING
- D. CONTRACTOR SHALL VERIFY ALL WIRE SIZING DUE TO VOLTAGE DROP CAUSED BY IN-FIELD ROUTING / INSTALLATION DISTANCES.
- E. SERVICE ENTRANCE EQUIPMENT SHALL BE GROUNDED WITH A SEPARATE COPPER OR ALUMINUM CONDUCTOR AS INDICATED ON THE DRAWINGS AND PER ARTICLE 250.52(A) OF THE NATIONAL ELECTRICAL CODE. GROUNDING CONDUCTOR SHALL ALSO BE CONNECTED TO A 5/8" DIAMETER X 8'-0" LONG GROUND ROD FOR SUPPLEMENTAL GROUNDING PER NATIONAL ELECTRICAL CODE ARTICLE 250.54.
- F. CONTRACTOR IS RESPONSIBLE FOR LABELING ALL PANELS, DISCONNECTS, LIGHTING CONTROLLERS, ETC., AND ALL CIRCUIT BREAKERS IN THE DISTRIBUTION PANELS PRIOR TO PROJECT COMPLETION. PROVIDE A TYPED DIRECTORY OF ALL CIRCUITS. BREAKERS USED FOR SWITCHING SHALL BE RATED ACCORDINGLY.
- G. CONTRACTOR SHALL SUPPLY AND INSTALL ALL N.E.C. REQUIRED EQUIPMENT DISCONNECTS (NOT ALL DISCONNECTS MAY BE SHOWN ON THE DRAWINGS). CONTRACTOR SHALL VERIFY ALL DISCONNECT SIZING WITH EACH EQUIPMENT
- H. CONTRACTOR IS RESPONSIBLE TO SECURE AND PAY FOR ALL PERMITS. CONTRACTOR SHALL COMPLY WITH ALL STATE, LOCAL, AND NATIONAL CODES (E.G., NATIONAL ELECTRICAL CODE). CONTRACTOR SHALL SCHEDULE INSPECTIONS SO JOB PROGRESS IS NOT DELAYED.
- I. CONTRACTOR SHALL SUPPLY AND INSTALL ALL EQUIPMENT IN NEW CONDITION AND U.L. LISTED UNLESS NOTED OTHERWISE.
- J. CONTRACTOR SHALL MAKE ARRANGEMENTS WITH LOCAL POWER COMPANY FOR THE INSTALLATION OF NEW ELECTRICAL SERVICE AND METER. INSTALL NEW SERVICE DISTRIBUTION EQUIPMENT AS SPECIFIED ON ELECTRICAL DRAWINGS.
- K. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES AND ARCHITECTURAL DRAWINGS TO ELIMINATE CONFLICTS.
- PRIOR TO CONSTRUCTION START, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND OPERATION MANUALS FOR ALL EQUIPMENT AND ACCESSORIES FOR OWNER
- M. CONTRACTOR SHALL PERFORM ALL WORK IN A NEAT AND PROFESSIONAL MANNER
- N. PROVIDE FLEXIBLE CONDUIT FOR ALL VIBRATING EQUIPMENT. PROVIDE FLEXIBLE

CONDUIT FOR LIGHT FIXTURE CONNECTIONS.

- O. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ELECTRICAL EQUIPMENT INFORMATION WITH MANUFACTURERS. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL ELECTRICAL CONNECTIONS OR SERVICES TO EQUIPMENT WHICH ARE NOT SHOWN ON DRAWINGS.
- P. ALL PENETRATIONS OF WALL, ROOF, AND CEILINGS TO BE SEALED AS REQUIRED WITH U.L. APPROVED FIRE SEALANT TO MAINTAIN FIRE RATING AS REQUIRED. ALL ROOF PENETRATIONS, IF APPLICABLE, ARE TO BE COORDINATED WITH THE OWNER'S DESIGNATED ROOFING CONTRACTOR.
- Q. ELECTRICAL EQUIPMENT EXPOSED TO WEATHER CONDITIONS SHALL BE WEATHERPROOF TYPE. CONDUIT EXPOSED TO WEATHER CONDITIONS OR IN CONTACT WITH CONCRETE SHALL BE POLYVINYL CHLORIDE (PVC) OR GALVANIZED HEAVY WALL STEEL (GRC).
- R. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS TO THE OWNER IF INSTALLATION VARIES FROM THE CONTRACT DRAWINGS.
- S. ANY CONDUIT AND WIRE SIZES SHOWN ARE MINIMUMS. CONTRACTOR SHALL INCREASE SIZES (DUE TO VOLTAGE DROP, QUANTITY OF CURRENT CARRYING CONDUCTORS IN THE SAME CONDUIT/RACEWAY, ETC.) AS REQUIRED BY THE N.E.C.
- T. IG DEVICES (IF APPLICABLE): CONTRACTOR SHALL INSTALL AN ADDITIONAL CONDUCTOR FOR ISOLATED GROUND CIRCUITS TO SUPPLY CONDUCTORS FOR ISOLATED GROUNDING PURPOSES. SAID GROUNDING CONDUCTOR SHALL BE COVERED WITH A CONTINUOUS OUTER FINISH THAT IS GREEN WITH ONE OR MORE YELLOW STRIPES. THE GROUNDING CONDUCTORS SHALL BE BONDED TO FRAME OF DEVICE AND RUN IN CONDUIT BACK TO 'CENTRAL' GROUNDING BLOCK(S) AT SERVICE DISTRIBUTION EQUIPMENT.
- U. ROOFTOP EQUIPMENT (IF APPLICABLE): CONTRACTOR SHALL INSTALL A WEATHERPROOF DISCONNECT FOR EACH UNIT. CONDUITS SHALL ENTER THE UNDERSIDE OF EACH HVAC UNIT FROM WITHIN THE CURBED AREA FOR THAT UNIT (THEREBY AVOIDING PENETRATIONS THROUGH THE ROOF MEMBRANE). IF J-BOX IS USED FOR SUPPLYING POWER TO MULTIPLE UNITS, THE J-BOX MUST BE LOCATED WITHIN 25 FEET OF EACH UNIT'S DISCONNECT PER THE NEC ARTICLE 240.21(B)(2). CONTRACTOR SHALL SUPPLY AND INSTALL A 120 VAC WEATHERPROOF GFCI

RECEPTACLE WITHIN 25' OF EACH UNIT.

V. ALL CONTRACTORS, PRIOR TO BID SUBMISSION PROCESS, SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITIONS THAT DIFFER FROM THAT SHOWN ON THIS PLAN SHALL BE REPORTED TO THE ARCHITECT/ENGINEER SO THAT NEW AND REVISED BID DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATIONS TO SCOPE OF WORK WHICH RESULT FROM CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO BID SUBMISSION SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY.



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CHITECTURAL, STRUĆTURAL, FIRE PROTECTIO AC, PLUMBING, & ELECTRICAL, WILL NOT BE MAD

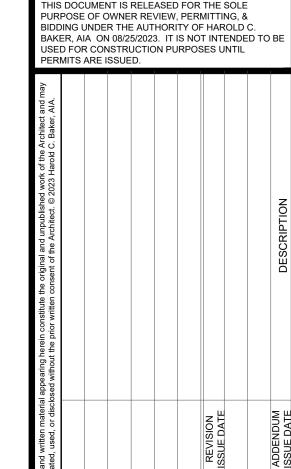
VAILABLE FOR USE BY THE GENERAL CONTRACTO

OTECTION CONTRACTOR WITH A PAYMENT OF \$2

SUBCONTRACTORS, EXCEPT FOR THE FIRE

OR THE GENERAL CONTRACTOR'S

CONTRACTORS SHALL REVIEW ALL WINGS AND SPECIFICATIONS, CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR OMPLETE REVIEW. ITEMS AFFECTING ALL TRADE ARE PLACED THROUGHOUT THE SET OF DRAWING O "EXTRAS" FOR MISSED ITEMS IN THER SECTIONS WILL BE PERMITTED. THE INTRACTORS SHALL PROMPTLY NOTIFY THE RCHITECT OF ANY AMBIGUITY, INCONSISTENCY (RROR WHICH THEY DISCOVER UPON EXAMINATION F THE CONTRACT DOCUMENTS. THE SITE. OR LOCAL CONDITIONS. <u>DO NOT SCALE DRAWINGS, US</u> <u>DIMENSIONS PROVIDED ON DRAWINGS.</u>



IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION AND CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE

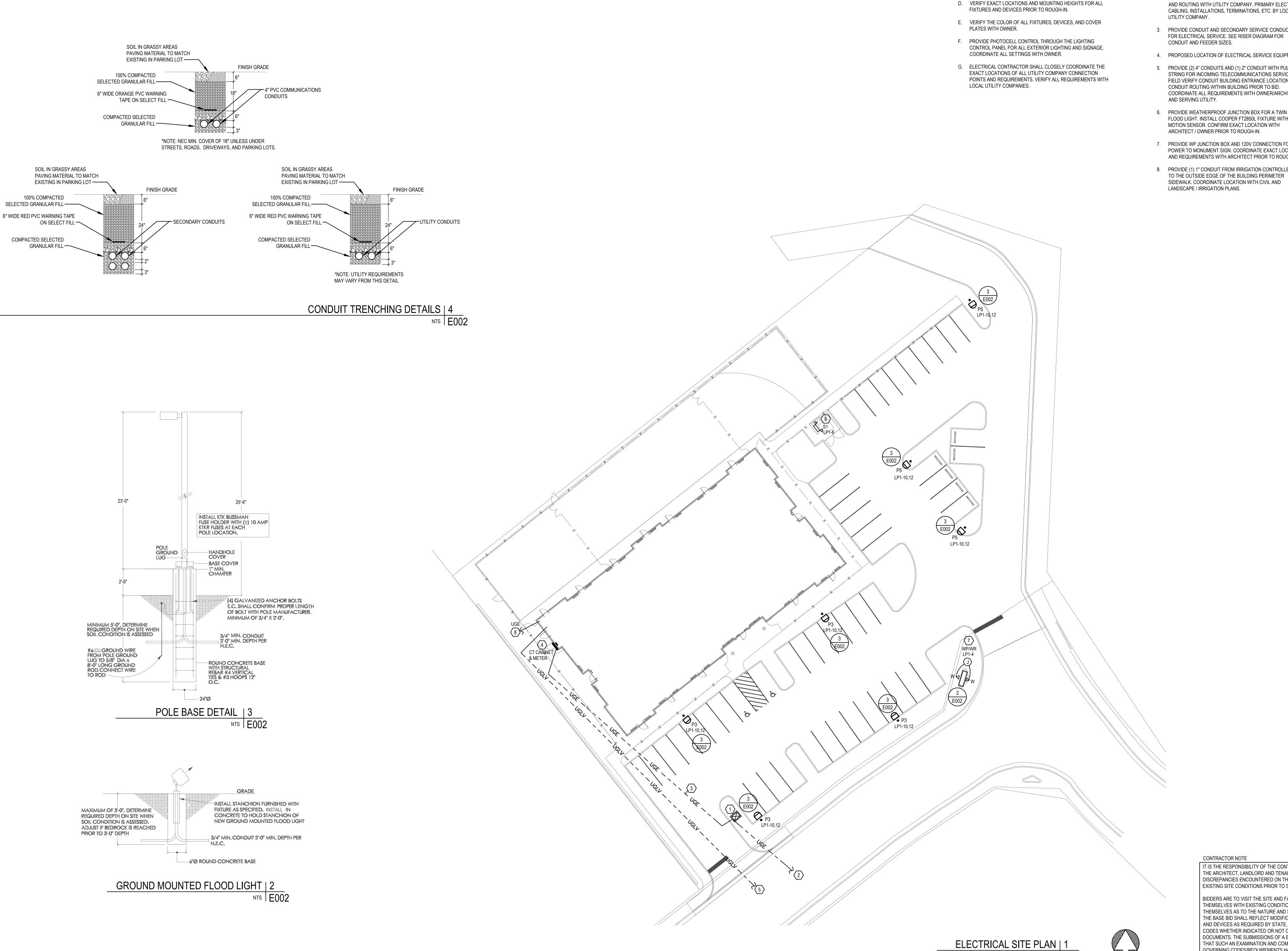
THE ARCHITECT, LANDLORD AND TENANT OF ANY

DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN

CONTRACTOR NOTE

ALLOWED.

ELECTRICAL COVER



PLAN NOTES:

GENERAL NOTES:

INFORMATION.

GC TO COORDINATE WITH SIGN VENDOR TO DETERMINE IF SIGN IS

GROUND ILLUMINATED OR INTERNALLY ILLUMINATED. IF

INTERNALLY ILLUMINATED, DELETE GROUND MOUNTED LIGHTS AND

KEEP SIGN CIRCUIT.

A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.

C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO

B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE

- 1. PROPOSED LOCATION OF UTILITY TRANSFORMER. ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE PAD PER LOCAL UTILITY COMPANY SPECIFICATIONS. PROTECTION BOLLARDS SHALL BE BY GENERAL CONTRACTOR. FINAL LOCATION SHALL BE AS DETERMINED BY LOCAL UTILITY
- COMPANY. 2. PROVIDE (2) 4" CONDUITS TO UTILITY EASEMENT FOR PRIMARY ELECTRIC CABLING. COORDINATE EXACT LOCATION AND ROUTING WITH UTILITY COMPANY. PRIMARY ELECTRIC
- CABLING, INSTALLATIONS, TERMINATIONS, ETC. BY LOCAL UTILITY COMPANY. 3. PROVIDE CONDUIT AND SECONDARY SERVICE CONDUCTORS
- 4. PROPOSED LOCATION OF ELECTRICAL SERVICE EQUIPMENT.
- 5. PROVIDE (2) 4" CONDUITS AND (1) 2" CONDUIT WITH PULL STRING FOR INCOMING TELECOMMUNICATIONS SERVICES. FIELD VERIFY CONDUIT BUILDING ENTRANCE LOCATION, AND CONDUIT ROUTING WITHIN BUILDING PRIOR TO BID. COORDINATE ALL REQUIREMENTS WITH OWNER/ARCHITECT AND SERVING UTILITY.
- 6. PROVIDE WEATHERPROOF JUNCTION BOX FOR A TWIN HEAD FLOOD LIGHT. INSTALL COOPER FT2850L FIXTURE WITH MOTION SENSOR, CONFIRM EXACT LOCATION WITH ARCHITECT / OWNER PRIOR TO ROUGH-IN.
- 7. PROVIDE WP JUNCTION BOX AND 120V CONNECTION FOR POWER TO MONUMENT SIGN. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
- 8. PROVIDE (1) 1" CONDUIT FROM IRRIGATION CONTROLLER BOX TO THE OUTSIDE EDGE OF THE BUILDING PERIMETER SIDEWALK. COORDINATE LOCATION WITH CIVIL AND LANDSCAPE / IRRIGATION PLANS.

CONTRACTOR NOTE

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY

EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL

CODES WHETHER INDICATED OR NOT ON CONTRACT

BEEN FORESEEN HAD AN EXAMINATION AND

CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE

CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE

THE ARCHITECT, LANDLORD AND TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN

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ECTRONIC (AUTOCAD) FILES INCLUDING RCHITECTURAL, STRUCTURAL, FIRE PROTECTION HVAC, PLUMBING, & ELECTRICAL, WILL NOT BE MADE AVAILABLE FOR USE BY THE GENERAL CONTRACTOR OR THE GENERAL CONTRACTOR'S SUBCONTRACTORS, EXCEPT FOR THE FIRE ROTECTION CONTRACTOR WITH A PAYMENT OF \$20

LL CONTRACTORS SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS. CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLETE REVIEW. ITEMS AFFECTING ALL TRADES ARE PLACED THROUGHOUT THE SET OF DRAWINGS NO "EXTRAS" FOR MISSED ITEMS IN OTHER SECTIONS WILL BE PERMITTED. THE CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY, INCONSISTENCY OF ERROR WHICH THEY DISCOVER UPON EXAMINATION OF THE CONTRACT DOCUMENTS, THE SITE, OR LOCAL CONDITIONS. DO NOT SCALE DRAWINGS, USE DIMENSIONS PROVIDED ON DRAWINGS.

THIS DOCUMENT IS RELEASED FOR THE SOLE PURPOSE OF OWNER REVIEW, PERMITTING, & BIDDING UNDER THE AUTHORITY OF HAROLD C.
BAKER, AIA ON 08/25/2023. IT IS NOT INTENDED TO BE
USED FOR CONSTRUCTION PURPOSES UNTIL
PERMITS ARE ISSUED.

OWNEW OWNEWR TOWN

ELECTRICAL SITE

LIGHT FIXTURES WILL BE PROCURED THROUGH A NATIONAL LIGHTING PROGRAM WITH VILLA LIGHTING. KIDDIE ACADEMY CORPORATE HAS NEGOTIATED DISCOUNTED, BULK PRICING FOR THE BENEFIT OF ITS INDEPENDENTLY OWNED AND OPERATED ACADEMIES NATIONWIDE. PRODUCT WILL BE STOCKED AT VILLA LIGHTING'S DISTRIBUTION CENTER IN ST. LOUIS, MO, AND CAN SHIP WITHIN 48 HOURS OF RELEASE. PLEASE ALLOW MAXIMUM OF 4-5 DAYS OF TRAVEL AFTER RELEASE. CONTACT RYAN CORBITT AT 314-633-0516 OR RYAN.CORBITT@VILLALIGHTING.COM.

ALL EMERGENCY/EXIT LIGHTING TO BE WIRED AHEAD OF LOCAL SWITCHING/CONTROLS AND ANY AUTOMATIC BUILDING CONTROLS.

MC CABLE SHALL BE PERMITTED IF INSTALLED PER LOCAL CODE AND INSTALLED IN A NEAT AND PROFESSIONAL MANNER.

CONSTRUCTION OPERATIONS AND SITE MUST COMPLY WITH NFPA 1 AND NFPA 241.

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO
- FIXTURES AND DEVICES PRIOR TO ROUGH-IN.

D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL

- E. ALL EXIT/EMERGENCY LIGHTING SHALL BE PROVIDED WITH AN UNSWITCHED CONDUCTOR ON THE INDICATED CIRCUIT.
- F. ALL FIXTURES SHOWN WITH A "NL" TAG SHALL BE CONSIDERED A NIGHT LIGHT AND BE CONNECTED AHEAD OF ALL CONTROLS.
- PLATES WITH OWNER. H. FOR ALL OCCUPANCY SENSORS, PROVIDE SWITCHPACK AND ALL

G. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER

ALL SETTINGS WITH OWNER PRIOR TO ROUGH-IN.

I. ILLUMINATION SHALL BE PROVIDED FOR ALL WORKING SPACES ABOUT ELECTRICAL EQUIPMENT AND ILLUMINATION SHALL NOT BE CONTROLLED BY AUTOMATIC MEANS ONLY PER NEC 110.26(D).

OTHER REQUIRED HARDWARE WHERE NECESSARY. COORDINATE

PLAN NOTES:

- 1. PROVIDE OVERRIDE TIMER SWITCH FOR AFTER HOURS LIGHTING CONTROL FOR LCP-1.
- 2. INSTALL LIGHT FIXTURE ON ROOF. CONFIRM EXACT LOCATION WITH ARCHITECT / OWNER PRIOR TO ROUGH-IN.



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MEP ENGINEER

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IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID. THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THE BASE BID SHALL BEELECT MODIFICATIONS TO SYSTEMS THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL CODES WHETHER INDICATED OR NOT ON CONTRACT

CONTRACTOR NOTE

ALLOWED.

THE ARCHITECT, LANDLORD AND TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN

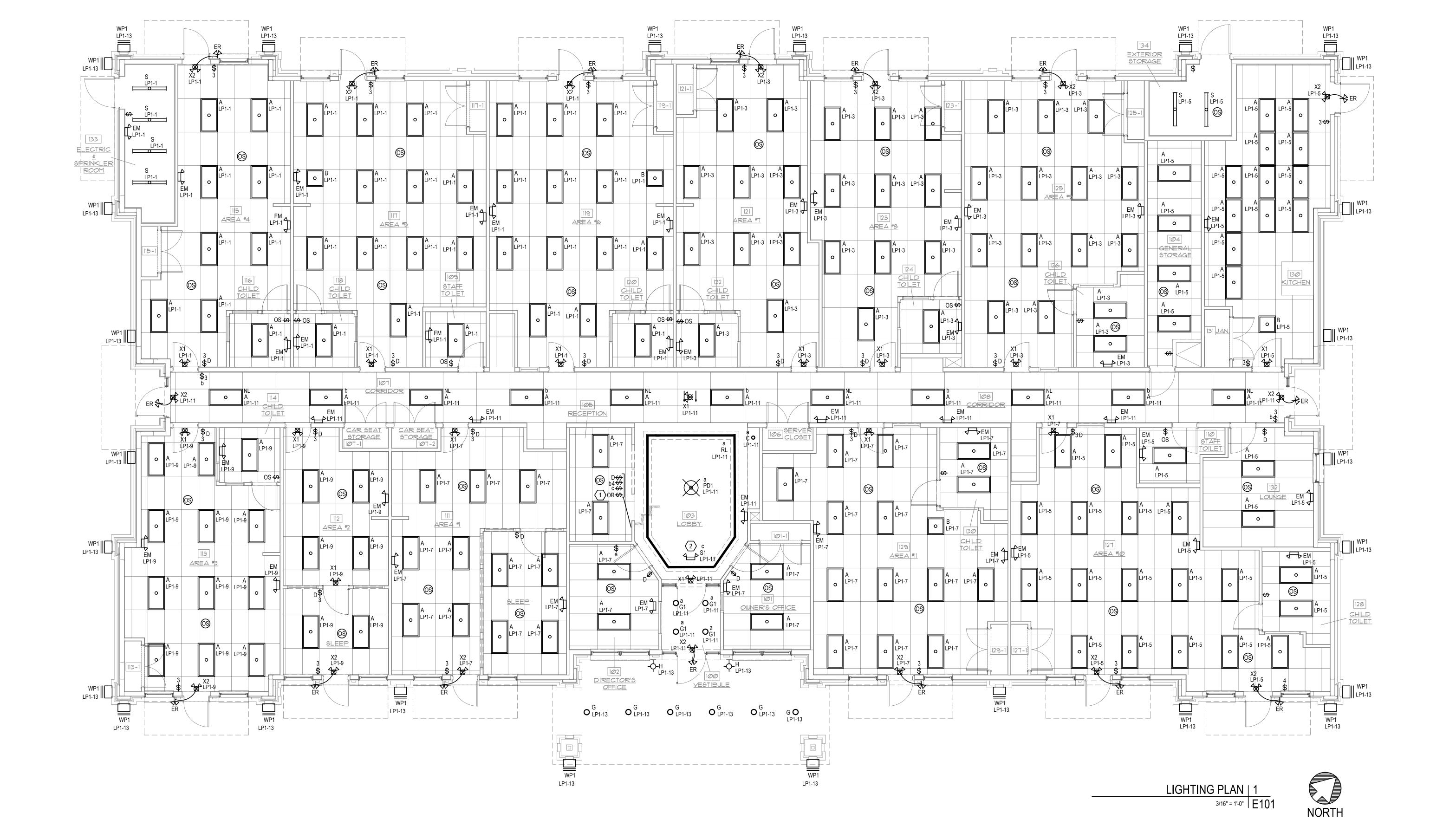
BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE

BEEN FORESEEN HAD AN EXAMINATION AND

DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE

CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE

LIGHTING PLAN



MC CABLE SHALL BE PERMITTED IF INSTALLED PER LOCAL CODE AND INSTALLED IN A NEAT AND PROFESSIONAL MANNER.

CONSTRUCTION OPERATIONS AND SITE MUST

COMPLY WITH NFPA 1 AND NFPA 241.

LANDLORD/CONTRACTOR SHALL PROVIDE AND INSTALL THREE DEDICATED OUTLETS IN THE SERVER CLOSET. TWO OUTLETS TO BE LOCATED ON BACK WALL AT 60" AFF. THIRD OUTLET TO BE LOCATED ON BACK WALL AT NORMAN HEIGHT.

LANDLORD/CONTRACTOR SHALL PROVIDE AND INSTALL WIRELESS ACCESS POINTS (WAP) POE SYSTEM AND MERAKI SYSTEM (2), AS NEEDED FOR FULL COVERAGE. CONTACT ANNA SWICKLIK 301-625-4229. WWW.CONRES.COM.

119 AREA #6

SPRINKLER

115 AREA #4

1 EH-04 MDP-58,60

113 AREA #3

RP1-2

IIT AREA #5

AREA #2

111 AREA #1

CT CABINET 8

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. SEE MAIN ELECTRICAL GENERAL NOTES FOR MORE INFORMATION.
- C. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO
- D. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN.
- E. VERIFY THE COLOR OF ALL FIXTURES, DEVICES, AND COVER
- PLATES WITH OWNER.
- REQUIRED PER NEC 406.12.

F. ALL RECEPTACLES TO BE TAMPER PROOF RECEPTACLES AS

- G. SEE SHEET M601 FOR MECHANICAL EQUIPMENT SCHEDULES.
- H. ARC-FLASH HAZARD WARNING MARKINGS SHALL BE PROVIDED ON ELECTRICAL EQUIPMENT LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE WHILE ENERGIZED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC FLASH HAZARDS IN ACCORDANCE WITH NEC 110.16.
- ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT. REQUIRED WORKING SPACE SHALL NOT BE USED FOR STORAGE.
- J. PROVIDE BONDING OF THE WATER PIPE SYSTEM AT THE WATER HEATER. WATER HEATER SHALL BE JUMPERED BETWEEN THE COLD AND HOT WATER PIPES WITH A JUMPER SIZED ACCORDING TO NEC TABLE 250.66.

RP1-9 RP1-9

123 AREA #8

121 AREA #T

PLAN NOTES:

- 1. PROVIDE ELECTRICAL CONNECTION TO SERVE MECHANICAL EQUIPMENT. VERIFY EXACT REQUIREMENTS WITH MANUFACTURER'S NAMEPLATE AND COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- 2. E.C TO MOUNT RECEPTACLE AT 66" A.F.F. COORDINATE WITH MILLWORK ON EXACT MOUNTING LOCATION.
- 3. COORDINATE EXACT LOCATION OF TELEVISION WITH ARCHITECT PRIOR TO ROUGH-IN.
- 4. E.C. SHALL FURNISH AND INSTALL 120V, 20 AMP DUPLEX RECEPTACLE MOUNTED IN SOFFIT FOR LED ROPE LIGHTING POWER SUPPLY. DUPLEX RECEPTACLES SHALL BE CONTROLLED BY SWITCH SHOWN ON SHEET E101 FOR FIXTURE "RL". COORDINATE EXACT SWITCH LOCATION AND RECEPTACLE MOUNTING REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.
- 5. EC TO PROVIDE DOORBELL AT ENTRANCE TO BE MOUNTED AT 42" AFF AND THE CHIME UNIT TO BE MOUNTED AT RECEPTION. COORDINATE EXACT LOCATION OF EQUIPMENT WITH OWNER PRIOR TO ROUGH-IN. COORDINATE ALL REQUIREMENTS WITH EQUIPMENT PROVIDER PRIOR TO ROUGH-IN.
- CONNECT 120 VOLT TO ALL DOOR ALARMS / LOCKS AS DIRECTED. REFER TO DETAILS ON SHEET E501 FOR ADDITIONAL INFORMATION.
- 7. PROCARE DOOR CONTROLLER AND MAIN VESTIBULE BOX FOR WALL MOUNTED ACCESS ENTRY MONITOR. REFER TO SHEET E501 FOR ADDITIONAL INFORMATION. COORDINATE INSTALLATION WITH OWNER'S VENDOR FOR FACILITY ACCESS HARDWARE AND SOFTWARE.
- 8. PROVIDE GFCI TYPE CIRCUIT BREAKER FOR THIS CIRCUIT.

ELECTRICAL SITE PLAN FOR CONDUIT INFORMATION.

125 AREA #9

- 9. E.C. TO COORDINATE WITH MILLWORK ON EXACT MOUNTING LOCATION OF RECEPTACLE.
- 10. PROVIDE ELECTRICAL CONNECTION AND SAFETY SWITCH TO SERVE PLUMBING EQUIPMENT. VERIFY EXACT REQUIREMENTS WITH MANUFACTURER'S NAMEPLATE AND COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.

11. PROVIDE RECEPTACLE FOR IRRIGATION CONTROLLER LOCATED 5 FEET AFF. REFER TO

- 12. PROVIDE 24"X48"X3/4" FIRE RATED PLYWOOD BACKBOARD FOR THE MOUNTING OF LOW-VOLTAGE EQUIPMENT. INCLUDE 12"X4"X1/4" COPPER GROUND BAR ON BACKBOARD. BOND GROUND BAR TO THE SERVICE GROUNDING ELECTRODE SYSTEM VIA #4 CU.
- 13. PROVIDE RECEPTACLE FOR FUTURE ICE MAKER.

- 14. PROVIDE J-BOX AND 120V CIRCUIT TO SERVE PROJECTOR SCREEN. VERIFY EXACT LOCATION AND REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.
- 15. INSTALL RECEPTACLE FOR DRINKING FOUNTAIN IN A CONCEALED LOCATION. PROVIDE GFCI TYPE BREAKER FOR THIS CIRCUIT.
- 16. PROVIDE ELECTRICAL CONNECTION AND ACCESSIBLE SAFETY SWITCH TO SERVE
 MECHANICAL EQUIPMENT. VERIFY EXACT REQUIREMENTS WITH MANUFACTURER'S

NAMEPLATE AND COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR

SUPPLIER PRIOR TO ROUGH-IN. PROVIDE WEATHERPROOF J-BOX IF LOCATED OUTSIDE.

- PRIOR TO ROUGH-IN.

 17. PROVIDE 120V CIRCUIT AND CONNECTION TO BUILDING SIGNAGE. COORDINATE EXACT LOCATION OF J-BOX AND VERIFY EXACT REQUIREMENTS WITH SIGN EQUIPMENT
- 18. PROVIDE ELECTRICAL CONNECTION FOR ZONO MACHINE. COORDINATE ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN. PROVIDE GFCI-TYPE BREAKER FOR THIS CIRCUIT.
- 19. PROVIDE 120V CIRCUITRY TO SERVE SF-01. INTERCONNECT FAN WITH KITCHEN HOOD SO THAT WHEN THE HOOD IS ON THE FAN IS ENERGIZED. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS AND EXACT LOCATIONS PRIOR TO ROUGH-IN.
- 20. PROVIDE RECEPTACLE AND DATA IN CEILING FOR PROJECTOR. VERIFY EXACT LOCATION AND REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.



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ALLOWED.

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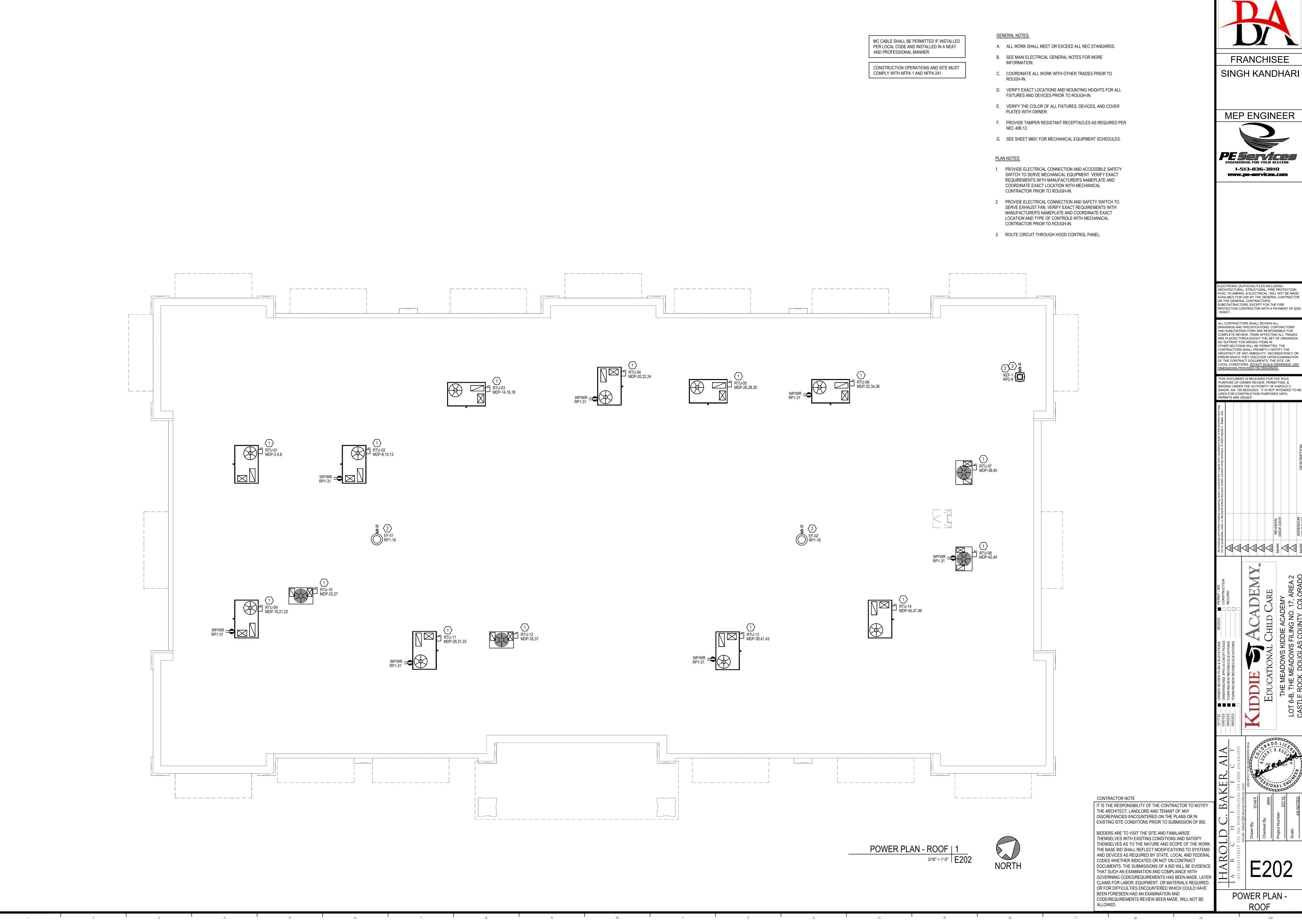
POWER PLAN

POWER PLAN | 1 3/16" = 1'-0" | E201

COMMANTICE NOTE

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GENERAL STORAGE





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STI STOPPER® II

Protective Cover To Help Stop Malicious and Accidental False Fire Alarms

This unique and patented device has been helping stop false fire alarms around the world for almost 30 years, without restricting legitimate alarms. It offers excellent protection against physical damage (both accidental and intentional) and grime as well as severe environments inside and out. It is ideal for schools, colleges, hospitals, nursing homes, stores, hotels and public buildings of almost every kind where there is a threat of false fire alarms.

How It Works

Stopper II consists of a clear, tamperproof, super tough polycarbonate shield and frame that fits over a manual pull station. When lifted to gain access to the actual alarm, it sounds a piercing self-contained 95 dB or 105 dB warning horn (at one foot). Immediate attention is drawn to the area and a prankster will either run or be caught. The cover is connected to the frame by a cable. When the cover is lifted, it drops off of the frame and a horn will sound (models with horn). Horn will sound until the cover is snapped back onto the frame or for the life of the battery.

- Proven effective for almost 30 years in helping stop false fire alarms without restricting legitimate
- Lifetime guarantee against breakage of the
- polycarbonate housing in normal use (one year on electronic components). Can be used as a guard against physical damage to a manual pull station, with or without the optional
- warning horn. Cover is UV-stabilized. Optional horn has choice of 95 or 105 dB at one
- Standard red units have "In Case of Fire..." label unless specified no label or custom label (charge for
- with optional custom labeling.
- Horn housing available in red, blue, green or yellow When covering a pull station outside, UL requires stations to be listed for outdoor use.

UL Listed to U.S. and Canadian safety standards (also for custom labeling). Larger sizes and surface mounted pull stations accommodated with STI-3100 conduit spacer. Polycarbonate rated -40° to 120°F (-40° to 49°C). Weather models have closed cell gaskets. Power source is 9 VDC alkaline battery included on

IN CASE OF FIRE - LIFT COV

PULL

IN CASE OF

LIFT HERE

STI-1100

NEMA 3R

standard Stopper II (remote powered unit is "RC" models include one form "C" dry relay contact and is capable of operating from 9-24 VDC remote power or internal 9 VDC battery power. Not just for pull stations, this cover can also help protect other devices such as EPO's, call boxes,

telephones and emergency shutdowns just by changing the color and messaging. With backplate and gaskets, UL Listed to NEMA 3R

Safety Technology International, Inc.

2306 Airport Road • Waterford, Michigan 48327-1209 Phone: 248-673-9898 • Fax: 248-673-1246 • Toll Free: 800-888-4784 • E-mail: info@sti-usa.com • Web: www.sti-usa.com Europe Branch Office • Unit 49G Pipers Road • Park Farm Industrial Estate • Redditch • Worcesters hire • 898 OHU • England Tel: 44 (0) 1527 520 999 • Fax: 44 (0) 1527 501 999 • Freephone: 0800 085 1678 (UK only) • E-mail: info@sti-europe.com • Web: www.sti-europe.com

ALL CABLING TO BE PLENUM RATED AND INSTALLED PER LOCAL CODE.

STI STOPPER' II

Dimensions and Technical Information

It has been tested and approved or listed by:

ADA Compliant (UL Certified No. S2466)

stations for outdoor use

• MFA 49-00-F (STI-1200)

For fire alarm applications, UL38 requires outdoor listed

Factory Mutual No. OG6A2.AY (STI-1100 and STI-1130 only)

NEMA 3R Rated (only for Stopper II models with backplate

State of California (obtain local fire marshal approval)

United States No. 4267549, Canada No. 1147828

← 6.2 in. (158mm) -

SIDE VIEW

MODELS WITH HORN (STI-1100 Series)

---- 8.5 in. (2.16mm) -----

MODELS WITHOUT HORN (STI-1200 AND STI-3150 Series)

-3 in. (76mm)→

<-- 4 in. (102mm)-->

STI-3100 SPACER ADDS 2" DEPTH(51mm

7.2W x 10.2H x 3.3D in.

(183 x 259 x 84mm)

7,2W x 10.2H x 5.5D in.

(183 x 259 x 140mm)

Flush models:

Surface models:

____ 5.5 in.(140mm) ____

← 5.5 in.(140mm)-

ALL MODELS END VIEW

C STI-3100 CONDUIT SPACER - STANDARD SPACER

Stopper II Models Indoor Use:

STI-1130 With horn and spacer

STI-1230 STI-1200 with spacer

STI-1100 With horn for flush mount

STI-1200 Without horn flush mount

STI-1100RC® With horn and relay flush mount

STI-1130RC* With horn and relay with spacer

STI-1250 STI-1200 flush mount and gasket

STI-3150 STI-1200 with spacer and gaskets

STI-1102 Replacement horn for cover with alarm

Custom-LBL Custom text message for horn housing

devices, the Stopper II could prove invaluable.

battery annually or as required.

STI-1280 BACKPLATE

"NOTE: STI SUGGESTS USING THE STI-1280 BACKPLATE FOR WEATHER UNITS OR WHEN MOUNTED ON AN UNEVEN SURFACE.

Printed in U.S.A. (0.198, 196, 197, 2000, 102, 103, 104, 105, 106, STI

CUT GASKET AT THE BOTTOM TO

5 Th - 3002 WEATHER GASKET

Weather Stopper* with gaskets (Indoor/Outdoor rated):

STI-1150RC° Stopper II with horn and relay flush mount (indoor/outdoor rated)

STI-1150 Stopper II with horn flush mount (indoor/outdoor rated)

STI-1155 Stopper II with horn and spacer (indoor/outdoor

STI-1155RC° Stopper II with horn, relay and spacer (indoor/outdoor

STI-3104 2" conduit spacer with 3/4" conduit entry (includes one 3/4" conduit entry gasket)

topper II is intended to be used in areas where the incidence of false fire

alarms from manual pull stations is high or has proven to be a serious

problem. Any disadvantage of this device is more than balanced when one

considers the consequences of false fire alarms, especially if fire service

personnel and equipment are responding to a false fire alarm when they are

needed for a real fire somewhere else. Add to this the disruption to the

facility when false alarms occur. If you have, or may have, a problem with

false fire alarms or physical/weather damage to your fire alarm activation

"WARNING: A For RC models: UL Listing does not permit relay contacts to

connect to the fire alarm or a life safety function. The power supply for horns, according to UL Listing, cannot be connected to a UL Listed fire alarm system. For electrical specifications see install book. RC models contain one set of Form "C" dry contacts. Contacts rated 30 VAC/VDC 1 amp.

\$11-3003 GASKET (1/2 in. CONDUIT)-\$11-3004 GASKET (3/4 in. CONDUIT)-

NOTE: End user must verify the alarm and battery every six months and replace

2" conduit spacer with 1/2" conduit entry (no gaskets

IT SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO COORDINATE THE EXACT FIRE ALARM SYSTEM DESIGN REQUIREMENTS, INCLUDING FIRE ALARM SYSTEM TYPE, DEVICE TYPES, DEVICE LOCATIONS, ETC. WITH THE AUTHORITY HAVING JURISDICTION PRIOR TO BID. ALL COSTS ASSOCIATED WITH THE FIRE ALARM SYSTEM, AS IT IS REQUIRED BY CODE AND LOCAL AUTHORITY HAVING JURISDICTION, SHALL BE INCLUDED IN THE BID. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO PROVIDE THE AUTHORITY HAVING JURISDICTION THE REQUIRED PERMIT SUBMISSION DOCUMENTATION FOR PROPER REVIEW AND APPROVAL. ALL COSTS ASSOCIATED WITH THIS DESIGN AND PERMIT SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR.

THE FIRE ALARM DRAWING IS DIAGRAMMATIC IN NATURE AND THEREFORE INDICATES THE MINIMUM INSTALLATION EXPECTED BY THE ARCHITECT, ENGINEER, AND OWNER. THE BIDDER (GENERAL CONTRACTOR & FIRE ALARM CONTRACTOR), HAVING EXPERIENCE IN THIS PARTICULAR JURISDICTION, DOING WORK OF SIMILAR SCOPE & NATURE, IS THEREFORE RESPONSIBLE TO DESIGN AND BID A COMPLETE SYSTEM THAT WILL MEET THE LOCAL STANDARDS REQUIRED. NO CHANGE ORDERS WILL BE PAID FOR SUB-STANDARD WORK, WORK THAT REQUIRES ADDITIONAL EQUIPMENT, OR WIRING IN ORDER TO MEET THE LOCAL CODE REQUIREMENTS.

SHOP DRAWINGS ARE A REQUIREMENT OF THIS WORK. SUBMITTALS / SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ARCHITECT / ENGINEER FOR INFORMATIONAL PURPOSES ONLY. 17 IS THE FIRE ALARM CONTRACTOR'S / GENERAL CONTRACTOR'S RESPONSIBILITY TO SUBMIT AND TO HAVE APPROVED ALL SUBMITTALS / SHOP DRAWINGS BY THE AHJ / FIRE MARSHAL.

PROVIDE FIRE DEPARTMENT KNOX BOX(ES) FOR ACCESS TO ALL AREAS. STUB 3/4" EMT TO THE BACK OF THE BOX FOR ACCESS CONTROL PURPOSES. A 1650 SERIES KNOX BOX IS REQUIRED AT THE FIRE RISER ROOM. ALL KNOX BOXES ARE TO BE MOUNTED AT 60" A.F.F. CONTACT FIRE DEPARTMENT FOR NUMBER OF KNOX BOXES NEEDED PRIOR TO PURCHASE AND INSTALLATION FOR PROPER PLACEMENT.

PROVIDE PREMISE KEYS FOR ALL THE KNOX BOXES TO BE INSTALLED.

FIRE ALARM CONTRACTOR TO PROVIDE A FIRE ALARM SYSTEM. DESIGN AND INSTALL OF THE FIRE ALARM SYSTEM SHALL MEET THE REQUIREMENTS OF NFPA 72. SUBMIT DETAILED FIRE ALARM PLANS TO INCLUDE BATTERY CALCULATIONS AND CUT SHEET OF SYSTEM COMPONENTS FOR REVIEW AND APPROVAL UNDER SEPARATE PERMIT. PROVIDE 24 HOURS OF BATTERY BACK-UP.

PER SECTIONS 915.1.3 AND 915.2.3 OF THE IFC. CARBON MONOXIDE DETECTION SHALL BY CARBON MONOXIDE ALARMS IN ACCORDANCE WITH SECTION 915.4 OF THE IFC, OR BY CARBON WITH SECTION 915.5 OF THE IFC.

CONSTRUCTION OPERATIONS AND SITE MUST

THESE FIRE ALARM DRAWINGS ARE PERFORMANCE SPECIFICATION ONLY. CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM DESIGN IN COMPLIANCE WITH NFPA 72, THE IBC, NFPA 101, AND ANY OTHER ENFORCED CODES AND AMENDMENTS, INCLUDING ENGINEERED SIGNED AND SEALED DRAWINGS, POINT TO POINT WIRING WITH PROPOSED CIRCUITING OR CONDUIT ROUTING, ALL APPLICABLE CALCULATIONS, DEVICE MANUFACTURERS AND QUANTITIES, WIRING DIAGRAMS, AND SHOP SUBMITTALS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED PERMITS, INSPECTIONS, AND TESTING. CONSULT LOCAL BUILDING AUTHORITY AND FIRE MARSHAL REGARDING LOCAL AREA'S REQUIREMENTS.

- THE FIRE ALARM SYSTEM FOR THIS PROJECT MUST BE AN ADDRESSABLE TYPE SYSTEM.
- THE FIRE ALARM PLAN FOR THIS PROJECT IS A DEFERRED SUBMITTAL PROVIDED BY THE CONTRACTOR.
- A FIRE ALARM NOTIFICATION AND / OR DETECTION SYSTEM IS REQUIRED IN GROUP E OCCUPANCIES WITH (1) 50+ OCCUPANTS. (2) MORE THAN ONE CLASSROOM, OR (3) USED FOR DAYCARE

FIRE ALARM PLAN |

3/16" = 1'-0" | **E30**

FIRE ALARM SYSTEM TO BE A VOICE EVACUATION / ALARM COMMUNICATION SYSTEM.

FIRE ALARM SEQUENCE OF OPERATION:

- 1. OPERATION OF A TAMPER SWITCH WILL ANNUNCIATE AT THE FIRE ALARM CONTROL PANEL (FACP) AND AT THE REMOTE ANNUNCIATOR.
- 2. OPERATION OF A MANUAL PULL STATION OR OF AN AREA SMOKE DETECTOR WILL ACTIVATE THE AUDIBLE AND VISUAL ALARM DEVICES THROUGHOUT; DISPLAY ALARM AT THE FACP AND THE REMOTE ANNUNCIATOR; DISPLAY THE APPROPRIATE ZONE AT THE
- FACP AND AT THE REMOTE ANNUNCIATOR; AND CALL THE FIRE DEPARTMENT VIA CENTRAL STATION. 3. ACTIVATION OF A DUCT SMOKE DETECTOR SHALL INITIATE AN AUDIBLE

SUPERVISORY SIGNAL AT THE PANEL AND SUPERVISORY STATION.

SUPPLY AND RETURN AIR FANS FOR THE RESPECTIVE MECHANICAL UNIT

SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT SMOKE DETECTOR.

- 4. TROUBLE SIGNALS FROM ALL DEVICES WILL BE DISPLAYED AT THE FACP AND THE REMOTE ANNUNCIATOR.
- 5. AFTER ANY AC OR CAC UNIT IS SHUT DOWN VIA THE FIRE ALARM SYSTEM, THE UNIT SHALL NOT RESTART UNTIL THE ZONE IN ALARM HAS BEEN CLEARED AND RESET; AND THE FAN IS MANUALLY RESTARTED.

FIRE ALARM GENERAL NOTES:

- A. CONTRACTOR SHALL INSTALL TAMPER SWITCHES ON ALL VALVES BETWEEN RISER AND CITY MAIN. TIE TAMPER SWITCHES TO FACP. REFERENCE CIVIL FOR EXACT LOCATIONS OF ALL VALVES LOCATED 5' OR MORE OUTSIDE THE BUILDING.
- B. UPON ACTIVATION, SMOKE DETECTORS SHALL SHUT DOWN ALL OPERATIONAL CAPABILITIES OF THE AIR DISTRIBUTION SYSTEM EQUIPMENT. INCLUDE ALL NECESSARY RELAYS AND WIRING TO SHUT DOWN ALL AIR HANDLING EQUIPMENT UPON DETECTION OF SMOKE.

FIRE ALARM PLAN NOTES:

- 1. COORDINATE EXACT LOCATION WITH FIRE PROTECTION CONTRACTOR.
- 2. LOCATION OF DUCT DETECTOR REMOTE TEST STATIONS. LABEL EACH STATION WITH THE RESPECTIVE MECHANICAL EQUIPMENT DESIGNATION.

CONTRACTOR NOTE

ALLOWED.

THE ARCHITECT, LANDLORD AND TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN

BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE. THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE, LATE CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED,

OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE

CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE

BEEN FORESEEN HAD AN EXAMINATION AND

RCHITECTURAL, STRUCTURAL, FIRE PROTECTIO IVAC, PLUMBING, & ELECTRICAL, WILL NOT BE MAD AVAILABLE FOR USE BY THE GENERAL CONTRACTO OR THE GENERAL CONTRACTOR'S SUBCONTRACTORS, EXCEPT FOR THE FIRE ROTECTION CONTRACTOR WITH A PAYMENT OF \$20

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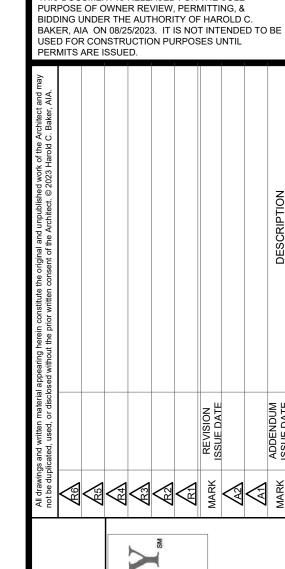
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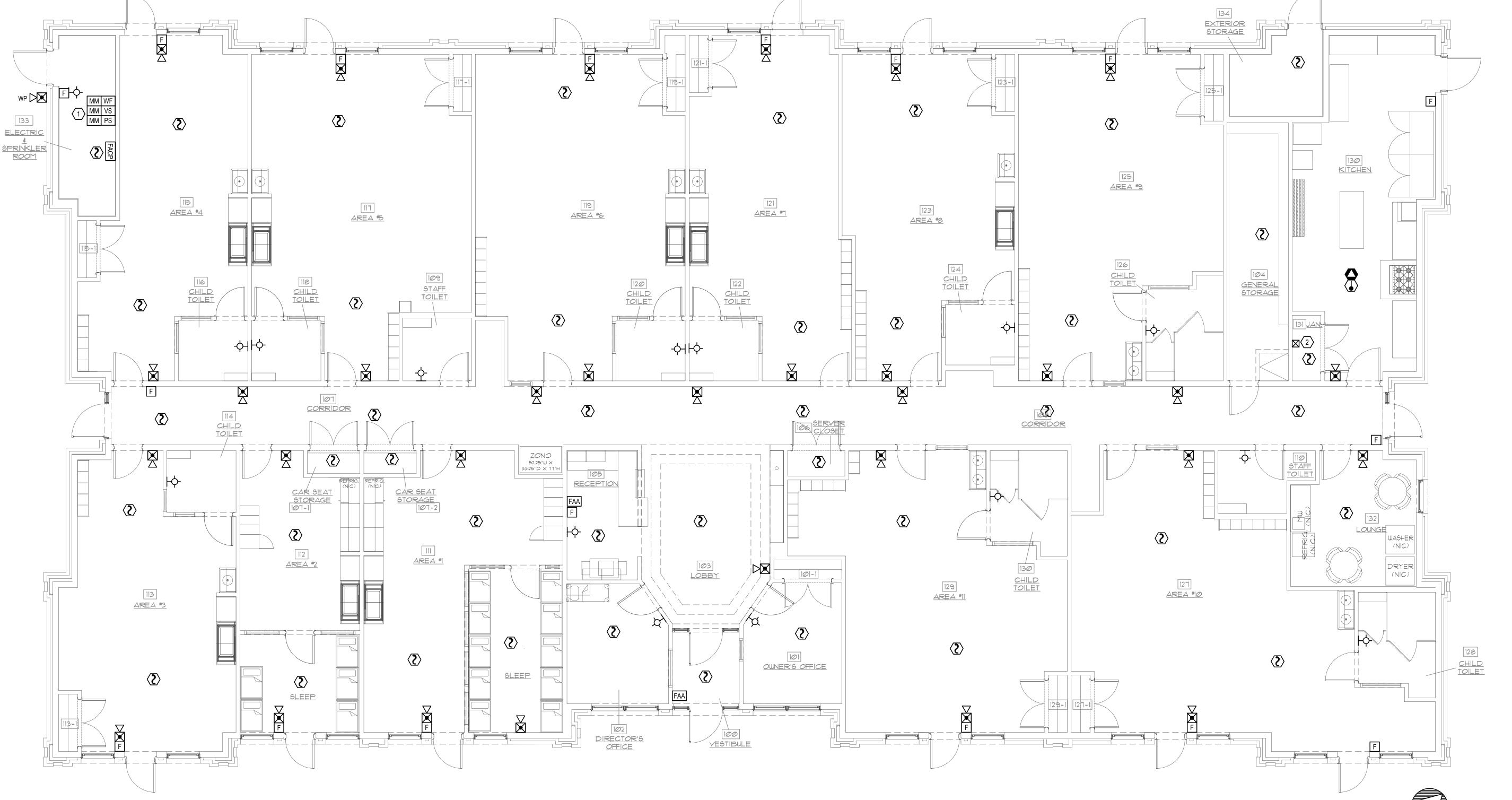
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LL CONTRACTORS SHALL REVIEW ALL RAWINGS AND SPECIFICATIONS, CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLETE REVIEW. ITEMS AFFECTING ALL TRADE ARE PLACED THROUGHOUT THE SET OF DRAWING NO "EXTRAS" FOR MISSED ITEMS IN OTHER SECTIONS WILL BE PERMITTED. THE CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY, INCONSISTENCY (ERROR WHICH THEY DISCOVER LIPON EXAMINATION OF THE CONTRACT DOCUMENTS, THE SITE, OR LOCAL CONDITIONS. <u>DO NOT SCALE DRAWINGS, US DIMENSIONS PROVIDED ON DRAWINGS.</u>



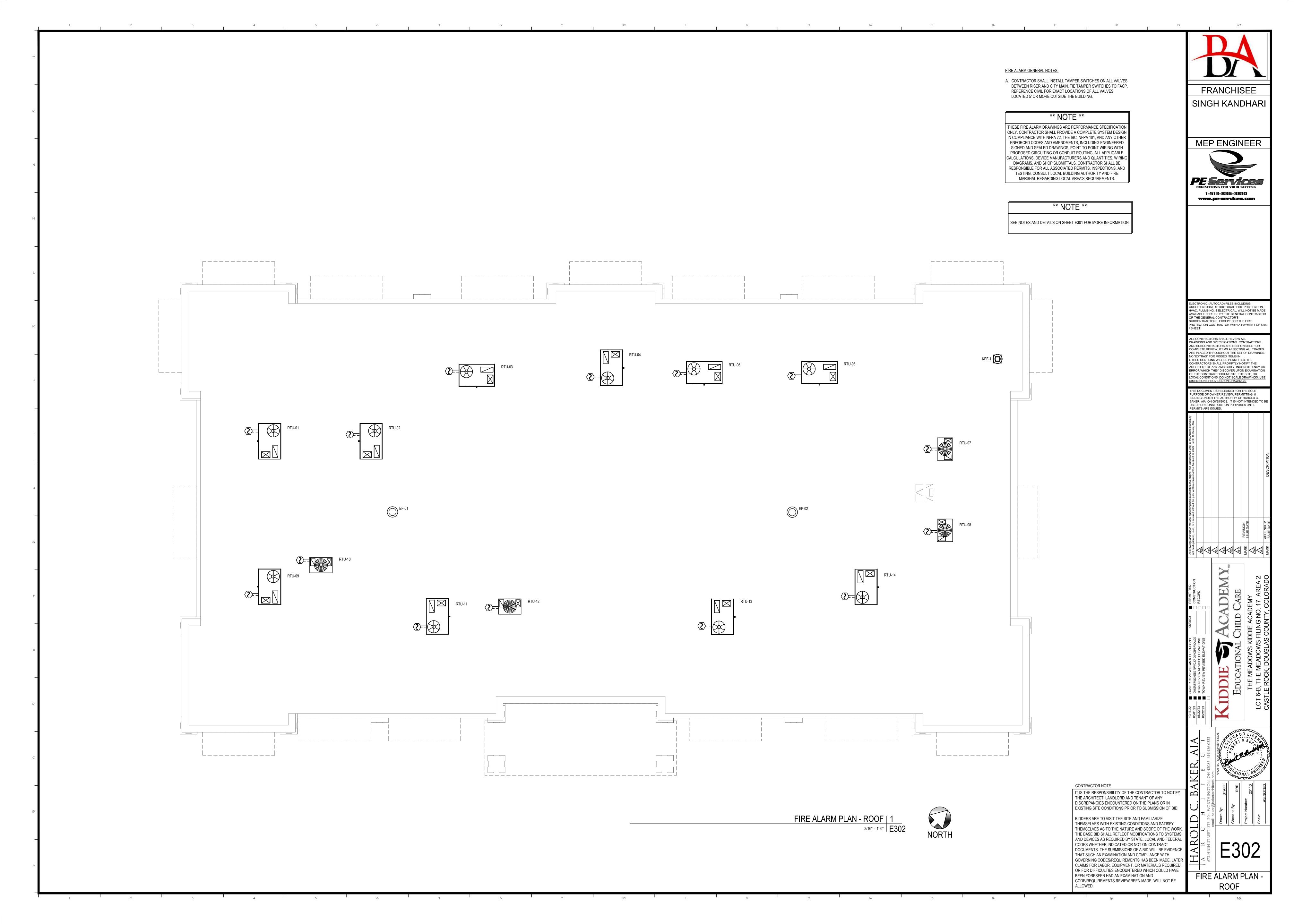
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

FIRE ALARM PLAN



CARBON MONOXIDE DETECTION IS REQUIRED MONOXIDE DETECTION SYSTEM IN ACCORDANCE

COMPLY WITH NFPA 1 AND NFPA 241.

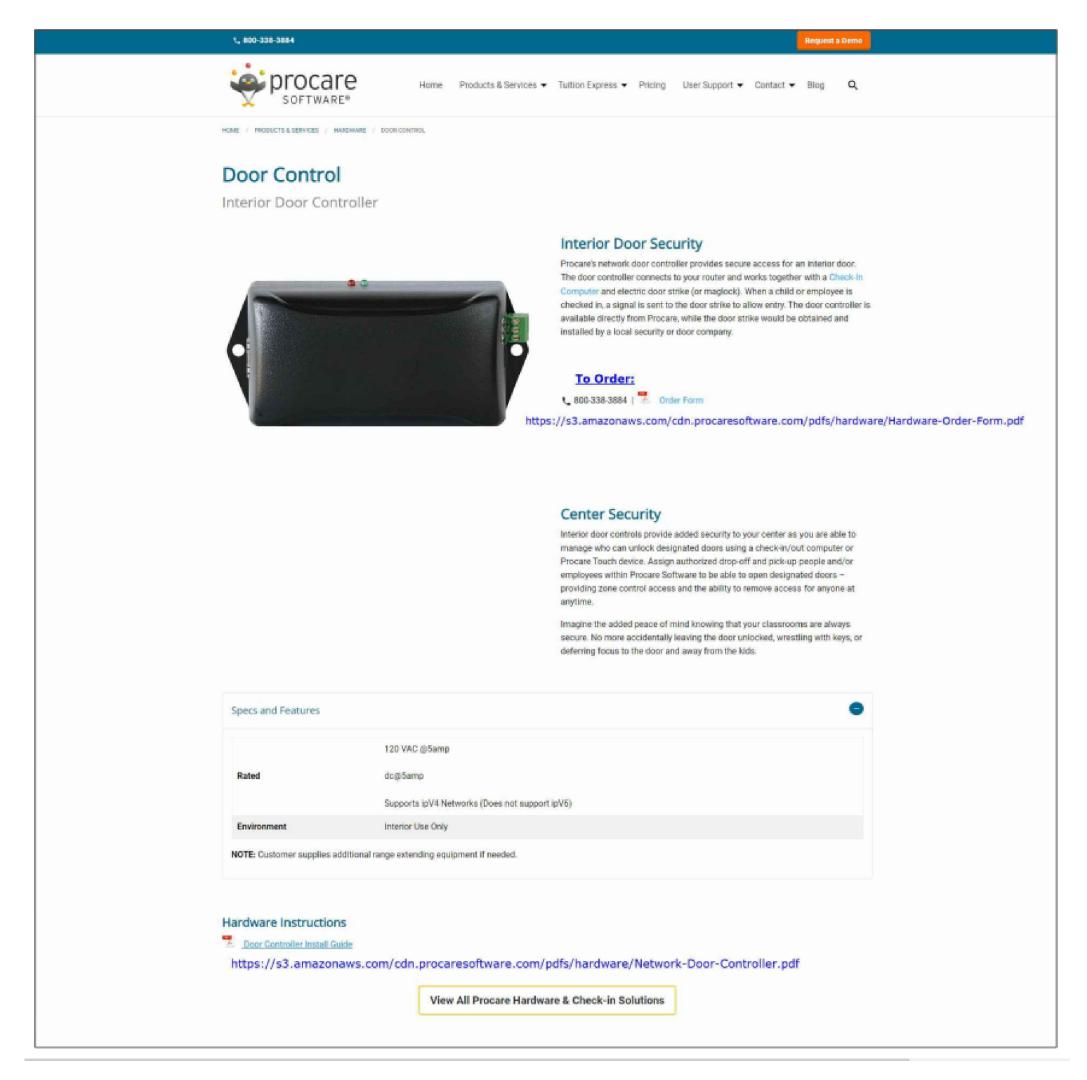


PROCARE DOOR CONTROL INSTALL INSTRUCTIONS

PLEASE SEE THE FOLLOWING LINK FOR PROCARE'S DETAILED INSTALLATION INSTRUCTION

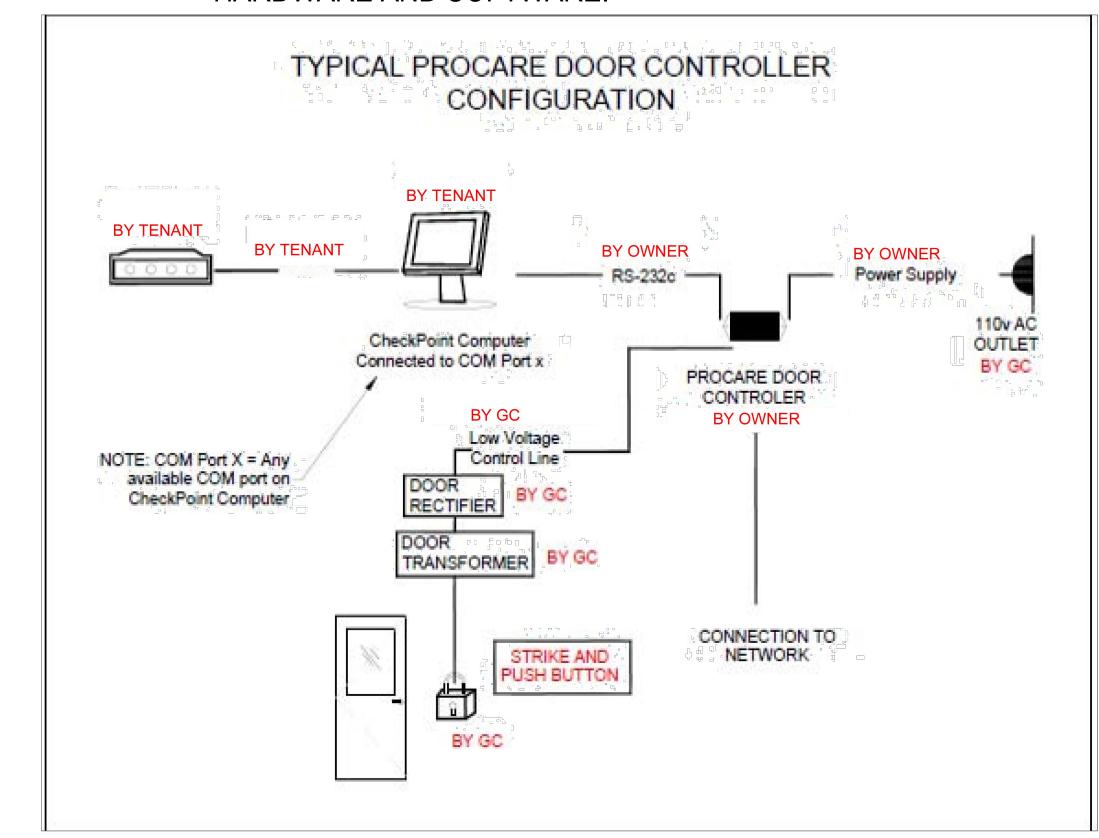
INSTALLATION GUIDE: https://s3.amazonaws.com/cdn.procaresoftware.com/pdfs/hardware/Network-Door-Controller.pdf

THE ORDER FORM URL: https://s3.amazonaws.com/cdn.procaresoftware.com/pdfs/hardware/Hardware-Order-Form.pdf

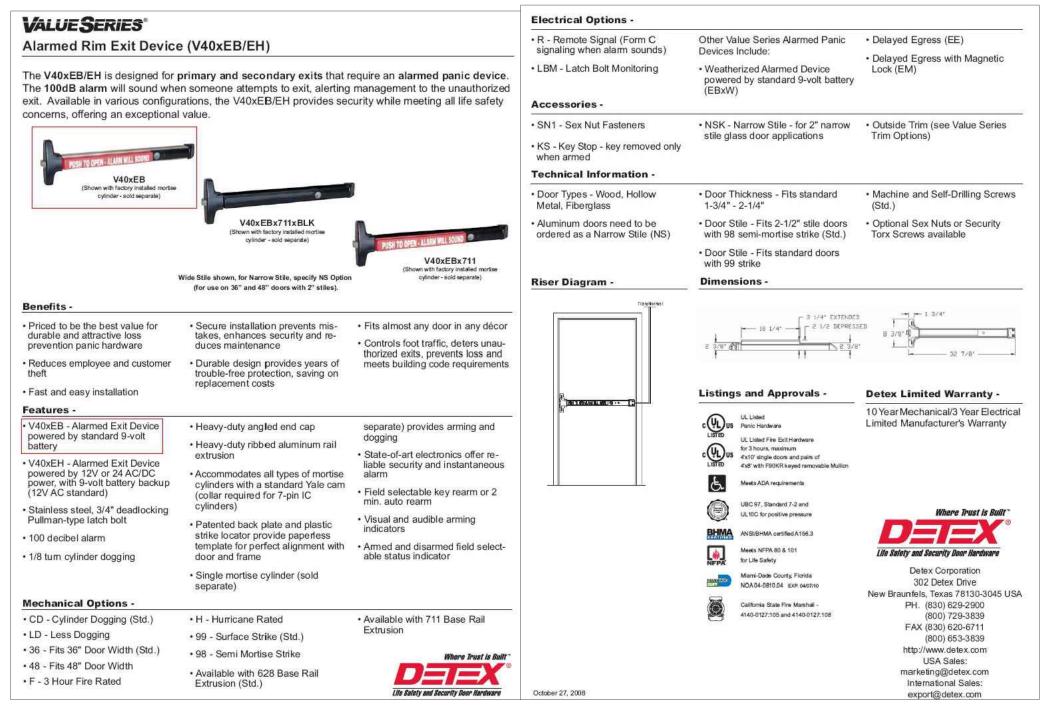


PROCARE DOOR CONTROL | 6

NOTE: EC TO COORDINATE INSTALLATION OF PROCARE DOOR CONTROLLER WITH OWNER'S VENDOR FOR FACILITY ACCESS HARDWARE AND SOFTWARE.

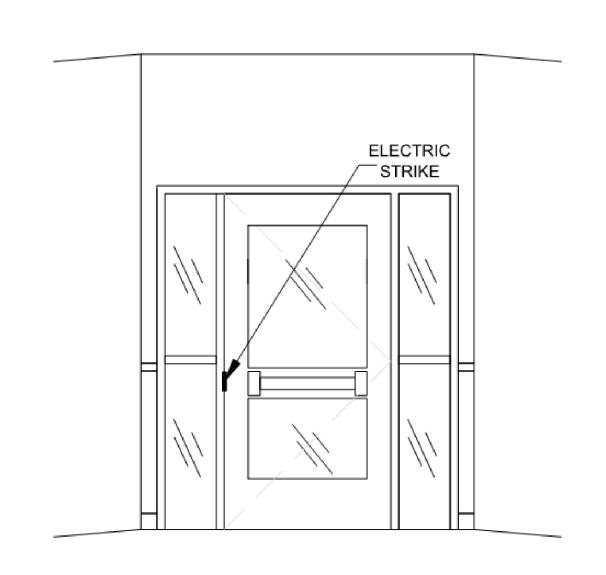


PROCARE DOOR CONTROLLER CONFIGURATION DIAGRAM & INSTRUCTIONS | 5



PANIC HARDWARE | 4

NOTE: GC / EC TO COORDINATE INSTALLATION OF MAG LOCK WITH SCHOOL LEADER / PROCARE DOOR CONTROL.



ELECTRIC STRIKE ELEVATION FOR MAIN VESTIBULE DOORS | 3

MAIN VESTIBULE BOX FOR WALL MOUNTED ACCESS ENTRY MONITOR | 2



RECESSED BOX FOR DATA & ELEC. TYP. IN OWNER'S OFFICE | 1

CONTRACTOR NOTE

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD AND TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

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DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE
THAT SUCH AN EXAMINATION AND COMPLIANCE WITH
GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER
CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED,
OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE
BEEN FORESEEN HAD AN EXAMINATION AND
CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE
ALLOWED.

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ELECTRONIC (AUTOCAD) FILES INCLUDING:
ARCHITECTURAL, STRUCTURAL, FIRE PROTECTION,
HVAC, PLUMBING, & ELECTRICAL, WILL NOT BE MADE
AVAILABLE FOR USE BY THE GENERAL CONTRACTOR
OR THE GENERAL CONTRACTOR'S
SUBCONTRACTORS, EXCEPT FOR THE FIRE
PROTECTION CONTRACTOR WITH A PAYMENT OF \$200

ALL CONTRACTORS SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS. CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLETE REVIEW. ITEMS AFFECTING ALL TRADE ARE PLACED THROUGHOUT THE SET OF DRAWING NO "EXTRAS" FOR MISSED ITEMS IN OTHER SECTIONS WILL BE PERMITTED. THE CONTRACTORS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY, INCONSISTENCY (ERROR WHICH THEY DISCOVER UPON EXAMINATIO OF THE CONTRACT DOCUMENTS, THE SITE, OR LOCAL CONDITIONS. DO NOT SCALE DRAWINGS, UDIMENSIONS PROVIDED ON DRAWINGS.

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THIS DOCUMENT IS RELEASED FOR THE SOLE PURPOSE OF OWNER REVIEW, PERMITTING, & BIDDING UNDER THE AUTHORITY OF HAROLD C. BAKER, Ala ON 08/25/2023. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES UNTIL PERMITS ARE ISSUED.

WARK REVISION

WARK ISSUE DATE

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204, WORTHINGTON, OH 43085 614.436.0555

E baker@bakerarchitects.com

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HAROLD (

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673 HIGH STREET, STE. 204, WG
email: bakery

Drawn By:

ELECTRICAL DETAILS

1.00.4	THIS LIGHTING CONTROL PANEL SHALL BE GREENGATE	LITEKEEPER LK 16	(OR EQUAL)
LCP-1	PROVIDE WITH	12	RELAYS
CIRCUIT TAG	DESCRIPTION OF CIRCUIT / AREAS OR ROOMS THAT ARE INCLUDED	VOLTAGE	CONTROLLED VIA
LP1-4	MONUMENT SIGN	120	LIGHTING CONTROL PANEL / PHOTOCELL
LP1-6	DUMPSTER FLOOD LGT	120	LIGHTING CONTROL PANEL / PHOTOCELL
LP1-8	BUILDING SIGN	120	LIGHTING CONTROL PANEL / MANUAL
LP1-10,12	SITE LIGHTING	208	LIGHTING CONTROL PANEL / PHOTOCELL
LP1-11	ENTRY & CORRIDOR LTG	120	LIGHTING CONTROL PANEL / MANUAL
LP1-13	EXTERIOR LTG	120	LIGHTING CONTROL PANEL / PHOTOCELL
	SPARE		

	ALL OTHER LIGHTING CIRCUITRY -	CONTROL	SCHEDULE
CIRCUIT TAG	DESCRIPTION OF CIRCUIT / AREAS OR ROOMS THAT ARE INCLUDED	VOLTAGE	CONTROLLED VIA
LP1-1	INTERIOR LTG	120	OCCUPANCY SENSORS / MANUAL SWITCH
LP1-3	INTERIOR LTG	120	OCCUPANCY SENSORS / MANUAL SWITCH
LP1-5	INTERIOR LTG	120	OCCUPANCY SENSORS / MANUAL SWITCH
LP1-7	INTERIOR LTG	120	OCCUPANCY SENSORS / MANUAL SWITCH
LP1-9	INTERIOR LTG	120	OCCUPANCY SENSORS / MANUAL SWITCH

PANEI	L - MDI	Р					CHEDULE AD (VA)	-			
	1			COMINE			AD (VA)				
LOAD SERVED	No.	CKT BKR	TYPE	LOAD	PHA A B		LOAD	TYPE	CKT BKR	CKT No.	LOAD SERVED
	1		9	10040			1825	3		2	
PANEL RP1	3	100	9	11784			1825	3	30	4	RTU-01
	5		9	10071			1825	3		6	
	7		9	11620			2306	3		8	
PANEL RP2	9	150	9	11233			2306	3	30	10	RTU-02
	11		9	9453			2306	3		12	
	13		9	5386			2306	3		14	
PANEL LP1	15	100	9	4156			2306	3	30	16	RTU-03
	17		9	3245			2306	3		18	
	19		3	1825			1825	3		20	
RTU-09	21	30	3	1825			1825	3	30	22	RTU-04
	23		3	1825			1825	3	1	24	
DTU 40	25	-00	3	1265			1825	3		26	
RTU-10	27	20	3	1265			1825	3	30	28	RTU-05
	29		3	1825			1825	3	1	30	
RTU-11	31	30	3	1825			2306	3		32	
	33		3	1825			2306	3	30	34	RTU-06
	35		3	1265			2306	3	1	36	
RTU-12	37	20	3	1265			1265	3		38	
	39		3	2306			1265	3	20	40	RTU-07
RTU-13	41	30	3	2306			1265	3		42	
	43		3	2306			1265	3	20	44	RTU-08
	45		3	2306			1500	3		46	
RTU-14	47	30	3	2306			1500	3	20	48	EH-01
	49		3	2306			2000	3		50	
BLANK SPACE	51		Ť				2000	3	25	52	EH-02
BLANK SPACE	53						1000	3		54	
BLANK SPACE	55						1000	3	15	56	EH-03
BLANK SPACE	57						1000	3		58	
BLANK SPACE	59				_		1000	3	15	60	EH-04
22	1 00			VOLTAGE:	120/2	208			MAIN 7		MCB
				PHASE:	3					CP =	
				WIRE:	4			FEED-	THRU L		
NEC LOAD ANALYSIS	TYPE						l				
		40-	20	4050/	450	70		T^-	. A.I. D	.OF 4	50700
CONTINUOUS	1	125		125%	156				AL PHA		56700
RECEPTACLE	2	189		TABLE 220.44	144				AL PHA		55807
HVAC EQUIPMENT	3	885		100%	885			TOT	AL PHA	ASE C	49452
NONCOINCIDENT	4	0		0%	0				D 1 2 : -		
MISC EQUIPMENT	5	200		100%	200				D LOAD	. ,	161959
KITCHEN EQUIPMENT	6	218		70%	153		CO	NNECT	ED LOA	AD (A)	450
MOTOR	7	0		100%	0						
LARGEST MOTOR				25%	0		Ī		D LOAE	. ,	154052
DWELLING UNIT	8	0						DEMA	ND LOA	AD (A)	428
PANEL FEEDER	9	*									

PANEL - RP1		1			PANELBOARD SCHEDULE CONNECTED LOAD (VA)							
	- 111			CONNE	СТ	ED	LOA	AD (VA)				
LOAD SERVED	CKT No.	CKT BKR	TYPE	LOAD	Ь.	HAS B		LOAD	TYPE	CKT BKR	CKT No.	LOAD SERVED
RECEPTACLES	1	20	2	1080	/\	Ë	H	1080	2	20	2	RECEPTACLES
RECEPTACLES	3	20	2	1260	П		П	1080	5	20	4	RECEPTACLES
RECEPTACLES	5	20	2	900		П		1080	2	20	6	RECEPTACLES
RECEPTACLES	7	20	2	900			П	1260	5	20	8	RECEPTACLES
RECEPTACLES	9	20	2	1260			П	1080	2	20	10	RECEPTACLES
RECEPTACLES	11	20	2	1080		Г		360	5	20	12	PROCARE DOOR
RECEPTACLES	13	20	2	900			П	360	2	20	14	RECEPTACLES
RECEPTACLES	15	20	2	900	П		П	1224	3	20	16	EF-01,02
** ZONO MACHINE	17	20	5	1500		Г		550	5	20	18	FACP
IT EQUIPMENT	19	20	5	1200			П	360	5	20	20	TELEPHONE BOARD
IT EQUIPMENT	21	20	5	1200				180	5	20	22	IRRIGATION CONTROLLER
IT EQUIPMENT	23	20	5	1200				1080	5	20	24	RECEPTACLES
DOOR LOCK	25	20	5	200			П	1080	2	20	26	RECEPTACLES
PROJECTOR SCREEN	27	20	5	1200				1200	2	20	28	PROJECTOR
GWH-1/CP-1	29	20	5	411				1260	2	20	30	RECEPTACLES
ROOF REC	31	20	2	1260				360	2	20	32	RECEPTACLES
BLANK SPACE	33							1200	2	20	34	COPIER/PRINTER
BLANK SPACE	35							650	5	20	36	** DRINKING FOUNTAIN
BLANK SPACE	37										38	BLANK SPACE
BLANK SPACE	39										40	BLANK SPACE
BLANK SPACE	41										42	BLANK SPACE
	-			VOLTAGE:	12	0/2	80		N	MAIN T	YPE:	MLO
				PHASE:		3				C	CP =	100
				WIRE:		4		FE	ED-T	HRU L	UGS:	NO
NEC LOAD ANALYSIS	TYPE											
CONTINUOUS	1	()	125%		0			TOTA	L PHA	SE A	10040
RECEPTACLE	2	182	240	TABLE 220.44	1	412	0		TOTA	L PHA	SE B	11784
HVAC EQUIPMENT	3	12	24	100%	1	1224	4		TOTA	L PHA	SE C	10071
NONCOINCIDENT	4	()	0%		0						
MISC EQUIPMENT	5	124	131	100%	1	243	1	CONNE	CTED	LOAD	(VA)	31895
KITCHEN EQUIPMENT	6	()	100%		0		CONN	ECTE	D LOA	D (A)	89
MOTOR	7	()	100%		0						
LARGEST MOTOR				25%		0		DE	MAND	LOAD	(VA)	27775
	8	()					D	EMAN	D LOA	D (A)	77
DWELLING UNIT												

ALL FIXTURES MAY NOT APPLY

B.O.F. = BOTTOM OF FIXTURE

EC SHALL CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.

EC SHALL COORDINATE DIMENSIONED LOCATIONS OF ALL FIXTURES WITH ARCHITECTS DRAWINGS PRIOR TO ROUGH-IN.

EC SHALL PROVIDE ALL NECESSARY HARDWARE/INSTALLATION TO MAINTAIN THE INTEGRITY OF FIRE RATED ASSEMBLIES IN WHICH FIXTURES ARE INSTALLED.

36" 6 BURNER GAS RANGE

PANEL	ממ)					CHEDULE				
PANEL	- KP2			CONNECTED LOA			AD (VA)				
LOAD SERVED	СКТ	CKT	TYPE	LOAD		IASE	LOAD	TYPE	CKT	CKT	LOAD SERVED
EO/ID GENVED	No.	BKR		20/10	Α	ВС	EONB	-	BKR	No.	
** LOUNGE DRYER	1	30	5	2500			1800	6	20	2	** FUTURE ICE MAKER
LOUNGE DITTER	3	30	5	2500	Ш		2517	6	35	4	** 3 - DISHWASHER
**LOUNGE WASHER	5	20	5	1500	Ш		2517	6	33	6	3 - DIGITWAGITER
RECEPTACLE	7	20	2	360			3000	6	40	8	** 3 - DISHWASHER BOOSTER
KEF-01	9	20	3	1176	Ш		3000	6	40	10	3 - DISHWASHER BOOSTER
LOUNGE REC	11	20	6	180			864	5	20	12	16 - HOOD LTG & CNTRL
**LOUNGE REFRIGERATOR	13	20	6	1200			1584	6	20	14	** 2 - KITCHEN FREEZER
** REFRIGERATOR	15	20	6	1200			360	2	20	16	RECEPTACLE
** 4 - KITCHEN MICROWAVE	17	20	6	1608	П		1584	6	20	18	** 1 - KITCHEN REFRIG.
BLANK SPACE	19						1176	3	20	20	SF-1
BLANK SPACE	21				П					22	BLANK SPACE
** REFRIGERATOR	23	20	6	1200	П					24	BLANK SPACE
SHUNT TRIP	25									26	BLANK SPACE
17 - GAS RANGE	27	20	6	480	П					28	BLANK SPACE
BLANK SPACE	29				П					30	BLANK SPACE
				VOLTAGE:	120)/208			MAIN 7	YPE:	MLO
				PHASE:		3			C	CP =	150
				WIRE:		4	F	EED-T	HRU L	.UGS:	NO
NEC LOAD ANALYSIS	TYPE										
CONTINUOUS	1	()	125%		0		TOTA	L PHA	ASE A	11620
RECEPTACLE	2	72	20	TABLE 220.44	7	20		TOTA	L PHA	ASE B	11233
HVAC EQUIPMENT	3	23	52	100%	23	352		TOTA	L PHA	ASE C	9453
NONCOINCIDENT	4	()	0%		0					
MISC EQUIPMENT	5	73	64	100%	73	364	CONNE	ECTED	LOAD	(VA)	32306
KITCHEN EQUIPMENT	6	218	370	65%	14	215		NECTE			90
MOTOR	7	()	100%		0					
LARGEST MOTOR				25%		0	DE	MAND	LOAD	(VA)	24651
DWELLING UNIT	8	()					EMAN		` '	68
PANEL FEEDER	9	*	-							` /	
* SEE THAT PANEL SCHEDULE FOR	ITS SII	MMAF	RY								

** PROVIDE GFCI BREAKER

PANEL - LP1				PANELBOARD SCHEDULE CONNECTED LOAD (VA)								
	CVT	CVT		COMM	AD (VA)		CKT	CVT	1			
LOAD SERVED	CKT No.	CKT	TYPE	LOAD		HAS B		LOAD	TYPE	CKT	CKT No.	LOAD SERVED
INTERIOR LTG	1	20	1	1507	1	۲	Ť	250	5	20	2	LCP-1
INTERIOR LTG	3	20	1	1417	Т			1240	1	20	4	MONUMENT SIGN
INTERIOR LTG	5	20	1	1539		Г		25	1	20	6	DUMPSTER FLOOD LGT
INTERIOR LTG	7	20	1	1273		Г		1200	1	20	8	BUILDING SIGN
INTERIOR LTG	9	20	1	711	Г			788	1	20	10	CITE LICUTING
ENTRY & CORRIDOR LTG	11	20	1	893				788	1	20	12	SITE LIGHTING
EXTERIOR LTG	13	20	1	1156						20	14	SPARE
BLANK SPACE	15										16	BLANK SPACE
BLANK SPACE	17										18	BLANK SPACE
BLANK SPACE	19										20	BLANK SPACE
				PHASE WIRE		3 4		FE	EED-T	C HRU L	CP = UGS:	
NEC LOAD ANALYSIS	TYPE											
CONTINUOUS	1	125	536	125%	1	1567	0		TOTA	L PHA	SE A	5386
RECEPTACLE	2	()	TABLE 220.44		0			TOTA	L PHA	SE B	4156
HVAC EQUIPMENT	3	()	100%		0			TOTA	L PHA	SE C	3245
NONCOINCIDENT	4	()	0%		0						
MISC EQUIPMENT	5	25	50	100%		250)	CONNE	CTED	LOAD	(VA)	12786
KITCHEN EQUIPMENT	6	()	80%		0		CONN	ECTE	D LOA	D (A)	35
MOTOR	7	()	100%		0						
LARGEST MOTOR				25%		0		DE	MAND	LOAD	(VA)	15920
DWELLING UNIT	8	()					D	EMAN	D LOA	D (A)	44
PANEL FEEDER	9	*										
* SEE THAT PANEL SCHEDULE I ** PROVIDE GFCI BREAKER	FOR IT	S SUN	ИMAR	Y								

					L	.UMINAIRE	SCHEDULE	
TAG	MANUFACTURER	MODEL NUMBER	VOLTS	LAMPS	INPUT WATTS	MOUNTING	DESCRIPTION	NOTES
				EXIT / EME	RGENCY E	GRESS FIXTU	RES	
X1	BARRON LIGHTING GROUP	VLED-U-WH-EL90	120	INCLUDED	(2)1.1,2.2	UNIVERSAL	(2) HEAD EXIT / EMERGENCY FIXTURE - WITH BATTERY BACK-UP	
X2	BARRON LIGHTING GROUP	VLED-U-WH-EL90-R	120	INCLUDED	(2)1.1,2.2	UNIVERSAL	(2) HEAD EXIT / EMERGENCY FIXTURE - WITH BATTERY BACK-UP WITH REMOTE CAPABILITY	
ER	BARRON LIGHTING GROUP	MLED-2-W-WP	9.6	INCLUDED	(2)1.5,3	UNIVERSAL	WEATHERPROOF (2) HEAD REMOTE EMERGENCY FIXTURE	
EM	BARRON LIGHTING GROUP	LED-52-2W-WH-G2	120	INCLUDED	(2)2,4	UNIVERSAL	(2) HEAD EMERGENCY EGRESS FIXTURE - WITH BATTERY BACK-UP	
				COM	MON SPAC	E FIXTURES		
A	METALUX	24AC-LD5-44-UNV-L835-CD1-U	120	LED	38	RECESSED	2x4 LED TROFFER	E.C. SHALL INCLUDE 2 #18 AWG, 0-10V WIRING FROM 0-10V DIMMER SWITCH ON WALL DAISY CHAINED BETWEEN EACH FIXTURE WHEREVER DIMMER IS SHOWN.
В	METALUX	22AC-LD5-23-UNV-L835-CD1-U	120	LED	20	RECESSED	2x2 LED TROFFER	7
С	ECOSCENCE	JMA-RT-WH / JMA-MOD-35-OPI / JMA-45 / JMA-RH-12	120	LED	19	RECESSED	4" LED DOWNLIGHT	
G	PORTFOLIO	MD6-730-6501W-WF	120	MH	70	RECESSED	6" CANOPY DOWNLIGHT	
G1	CREE LIGHTING	LAMP-LR6-18L-35K-DR1RC6-GU24 HOUSING-RC6-12W-GU24	120	LED	20	RECESSED	6" LED DOWNLIGHT	
RL	US LED SUPPLY	6X 24V RGB FLEXIBLE LED STRIP 16' ROLL (5060 30/M 150/ROLL) UN- COATED (NON WATERPROOF) 1X RGB IN WALL TOUCH CONTROLLER (COLOR WHEEL BLACK) 1X RGB LED AMPLIFIER 8A/CH 1X MEAN WELL POWER SUPPLY 12V 324 W 27A LF 18-4 POWER CABLE (18 AWG WIRE) ENOUGH TO RUN FROM POWER SUPPLY TO EACH OF THE 4 CORNERS OR 2 OPPOSITE CORNERS) LF 22-4 POWER CABLE (22 AWG WIRE) (ENOUGH TO RUN FROM THE POWER SUPPLY DOWN TO THE CONTROLLER AND BACK UP TO THE AMP OR YOU COULD USE 1X6 CONDUCTOR WIRE INSTEAD OF 2 OF THESE)	120	LED	98	SURFACE	LENGTH AS NEEDED IN FRONT LOBBY. EC SHALL CONTACT US LED SUPPLY @ 724-264-5001 410 WOODLAND RD. MERCER, PA 16137 NO ALTERNATES OR EXCEPTIONS ON THIS FIXTURE. RATED 2.25W / FT	E.C. SHALL CONTACT US LED SUPPLY @ (724) 264-5001, 410 WOODLAND RD. MERCER, PA 16137 NO ALTERATIONS OR EXCEPTIONS ON THIS FIXTURE.
Н	FC LIGHTING	FCW3262-120-LED-4K-750-BZ	120	LED	30	WALL	DECORATIVE EXTERIOR WALL FIXTURE. MOUNT BELOW EIFS TRIM.	
PD1	KUZCO LIGHTING	KUZ1882563	120	LED	154	PENDANT	CERCHIO LED 3-TIER CHANDELIER	
P3	COOPER	GLEON-AF-04-LED-E1-SL3-BZ-HSS	208	LED	225	POLE	SINGLE HEAD, TYPE 3 DISTRIBUTION WITH SPILL CONTROL AND HOUSE SHIELD	FIXTURE TO BE MOUNTED AT 23'-0"
P5	COOPER	GLEON-SA4C-740-U-5WQ-BZ	208	LED	225	POLE	SINGLE HEAD, TYPE 5 WIDE DISTRIBUTION	FIXTURE TO BE MOUNTED AT 23'-0"
S	LITHONIA	CLX-L48-3000LM-SEF-FDL-MVOLT-GZ10-35K-80CRI-PLR1G-WH	120	LED	20	WALL	4' COMPACT LOW PROFILE STRIP	
S1	COOPER	FT2850L	120	LED	20	SURFACE	TWIN HEAD OUTDOOR FLOODLIGHT	
W	EATON	NFFLD-S-C70-KNC-UNV	120	LED	26	GROUND	MONUMENT SIGN LIGHTING	
WP1	COOPER	XTOR3B	120	LED	26	WALL	WALL PACK	

				EQL	JIPMENT S	SCHEDU	JLE	
TAG	DECODIDATION	ELECTRICAL			MOUNTING	GFCI @	GFCI @	DEMARKO
TAG	DESCRIPTION		DEVICE	BREAKER	REMARKS			
1	REACH IN REFRIGERATOR	120 / 1	13.2		48		Х	NEMA 5-15R
2	REACH IN FREEZER	120 / 1	13.2		48		Х	NEMA 5-15R
2	DISHWASHER	208 / 1	24.2				Х	WP J-BOX / DIRECT CONNECTION. PROVIDE BREAKER LOCK PROVISIONS
3	BOOSTER HEATER	208 / 1		6			Х	WP J-BOX / DIRECT CONNECTION. PROVIDE BREAKER LOCK PROVISIONS
4	MICROWAVE OVEN	120 / 1	13.4		66		Х	NEMA 5-15R
	KITCHEN HOOD	120 / 1	1.7					HOOD LIGHTING
16		120 / 1	5.5					HOOD CONTROLS
		120 / 1	9.8					KEF-1

NOTE: PRIOR TO ANY INSTALLATION OR ORDERING OF WIRING, CONDUIT, BREAKERS, ETC. EC TO VERIFY ALL EQUIPMENT SPECIFICIATIONS AND REQUIREMENTS WITH OWNER.

CONTRACTOR NOTE

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THE ARCHITECT, LANDLORD AND TENANT OF ANY
DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN
EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

WP J-BOX / DIRECT CONNECTION. PROVIDE BREAKER LOCK PROVISIONS

BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE
THEMSELVES WITH EXISTING CONDITIONS AND SATISFY
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AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL
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DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE
THAT SUCH AN EXAMINATION AND COMPLIANCE WITH
GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER
CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED,
OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE
BEEN FORESEEN HAD AN EXAMINATION AND
CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE
ALLOWED.

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OR THE GENERAL CONTRACTOR'S
SUBCONTRACTORS, EXCEPT FOR THE FIRE
PROTECTION CONTRACTOR WITH A PAYMENT OF \$200
/ SHEET.

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ISSUE DATE

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BRITISH ARCHITECTION PURPOSES UNTIL

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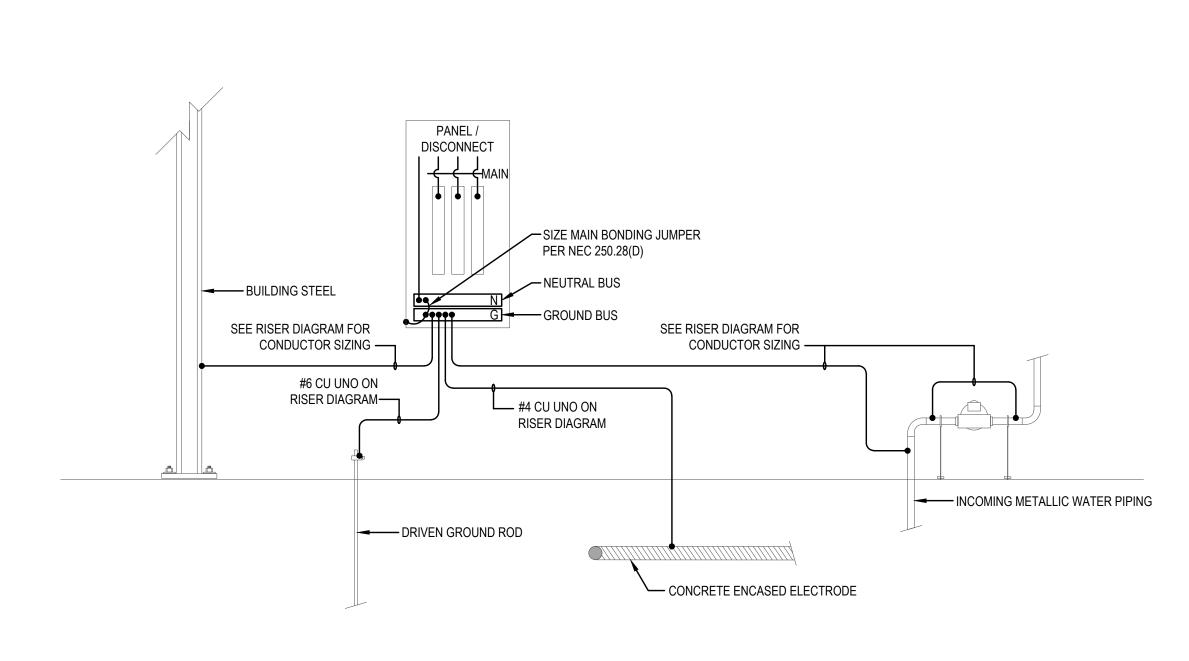
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OLD C. BAKER,
C. H. I. T. E.
REET, STE. 204, WORTHINGTON, OH 43085 (email: baker@bakerarchitects.com.)
Drawn By: STAFF
Checked By: RRR
Checked By: RRR
Project Number: 23110

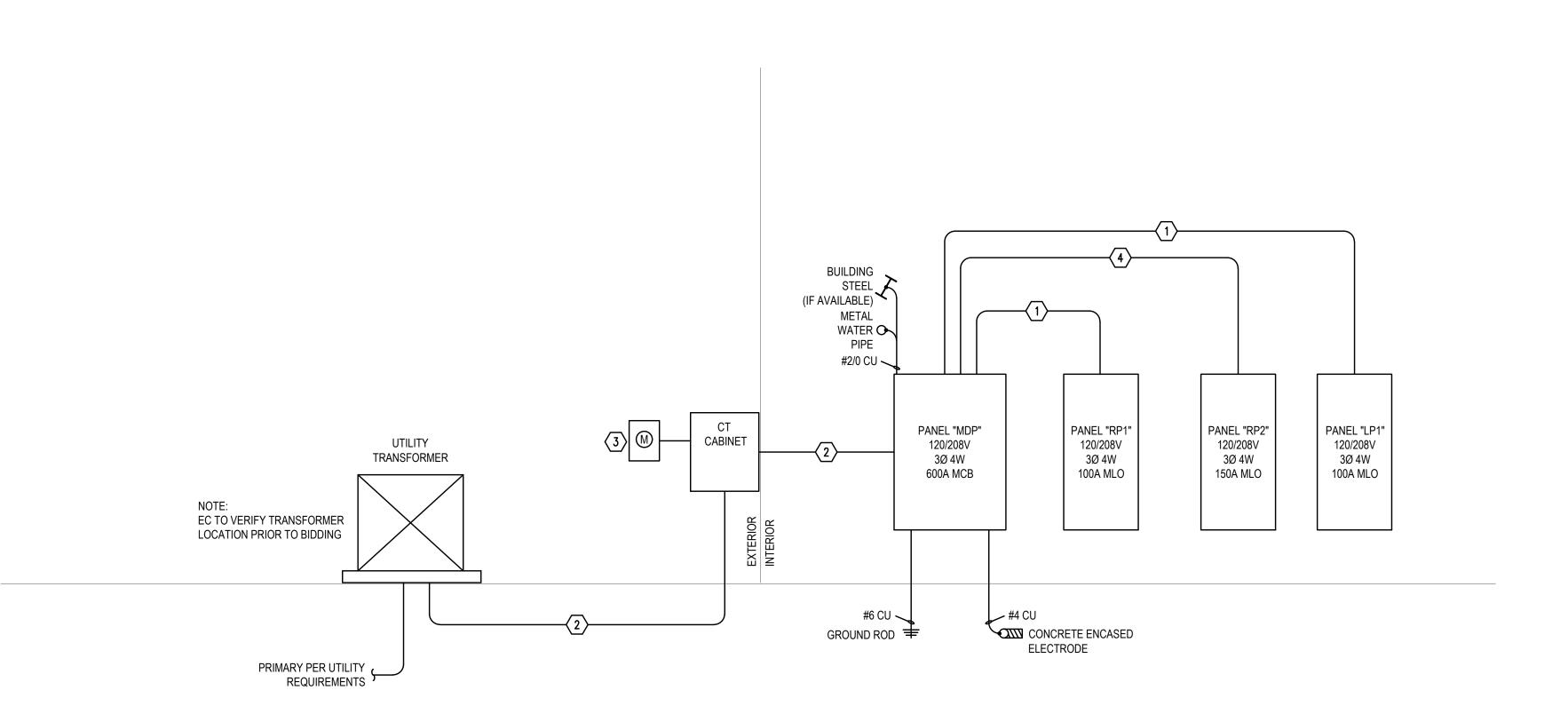
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ELECTRICAL SCHEDULES



GROUNDING ELECTRODE SYSTEM AT SERVICE MAIN DETAIL | 2

NTS | E701



ELECTRICAL RISER DIAGRAM | 1

GENERAL NOTES:

- A. ALL WORK SHALL MEET OR EXCEED ALL NEC STANDARDS.
- B. EC SHALL VERIFY ALL WIRE SIZING DUE TO IN FIELD ROUTING AND VOLTAGE DROP.
- C. ALL 15A-20A CIRCUITS SHALL HAVE A MINIMUM #12 CU WIRE.
- D. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER UNLESS NOTED OTHERWISE.
- E. PROVIDE APPROPRIATELY RATED EQUIPMENT, BREAKERS, FUSES, ETC. BASED ON SHORT CIRCUIT CALCULATIONS AND FAULT CURRENT INFORMATION FROM LOCAL UTILITY. SHORT CIRCUIT CALCULATIONS ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. PROVIDE LABELING PER NEC 110.24.
- F. PROVIDE TYPE WRITTEN CIRCUIT DIRECTORY FOR EACH PANELBOARD.
- G. PROVIDE PLACARD ON EACH PIECE OF DISTRIBUTION EQUIPMENT INDICATING EQUIPMENT DESIGNATION, VOLTAGE AND PHASE IDENTIFICATION. PLACARD SHALL BE ENGRAVED PHENOLIC WITH 1/4" TALL LETTERS.
- H. PROVIDE INTERSYSTEM BONDING ON ALL SERVICES. I. COORDINATE ALL SERVICE CONDUIT AND ROUTING WITH LOCAL
- J. PROVIDE ARC-FLASH HAZARD WARNING LABELING PER NEC
- K. MAIN CIRCUIT BREAKER TO MEET THE REQUIREMENTS OF NEC
- L. PROVIDE PERMANENT MARKING OF THE SERVICE DISCONNECT AS SUCH PER NEC 230.70(B).

RISER DIAGRAM NOTES:

- 1. PROVIDE (4) #3 CU AND (1) #8 CU GND IN 1-1/4" CONDUIT.
- 2. PROVIDE TWO SETS: (4) 500 MCM AL, EACH SET IN 3" CONDUIT.
- 3. COORDINATE UTILITY COMPANY REQUIREMENTS PRIOR TO EQUIPMENT SELECTION TO DETERMINE TRANSFORMER LOCATION, AVAILABLE FAULT CURRENT, AND METERING EQUIPMENT REQUIREMENTS.

CONTRACTOR NOTE

ALLOWED.

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BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY

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CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE

BEEN FORESEEN HAD AN EXAMINATION AND

4. PROVIDE (4) #3/0 AL AND (1) #4 AL GND IN 2" CONDUIT.

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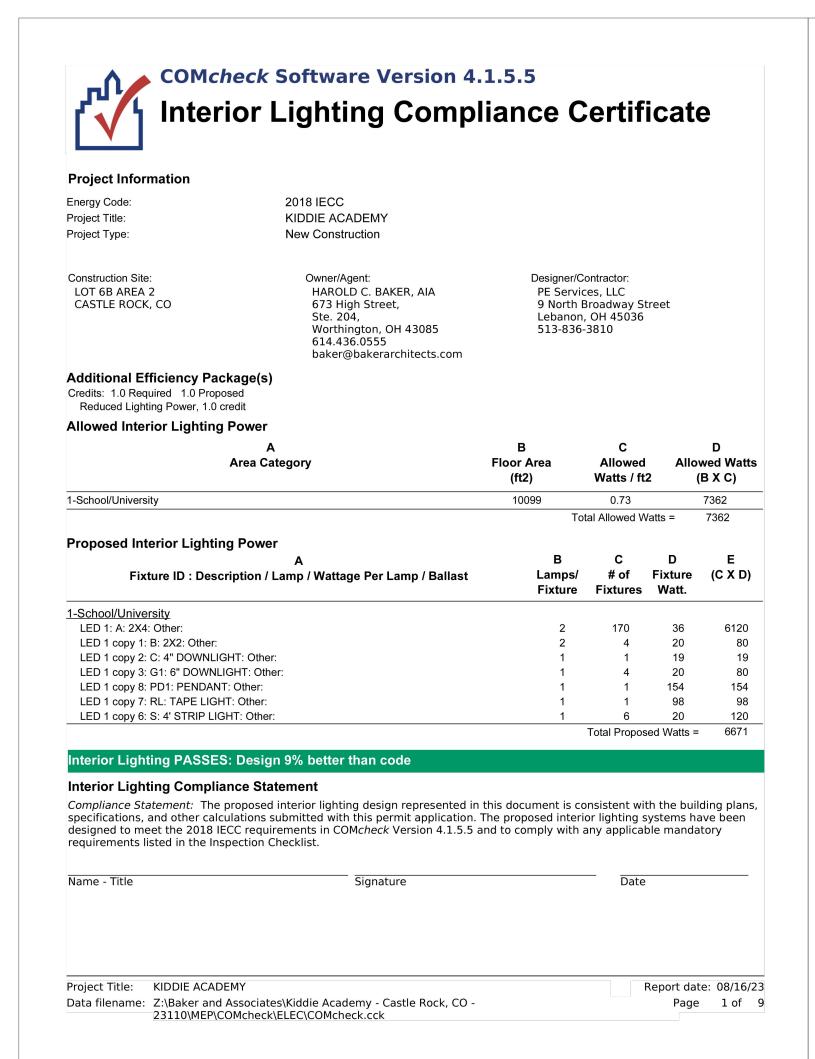
PROTECTION CONTRACTOR WITH A PAYMENT OF \$20

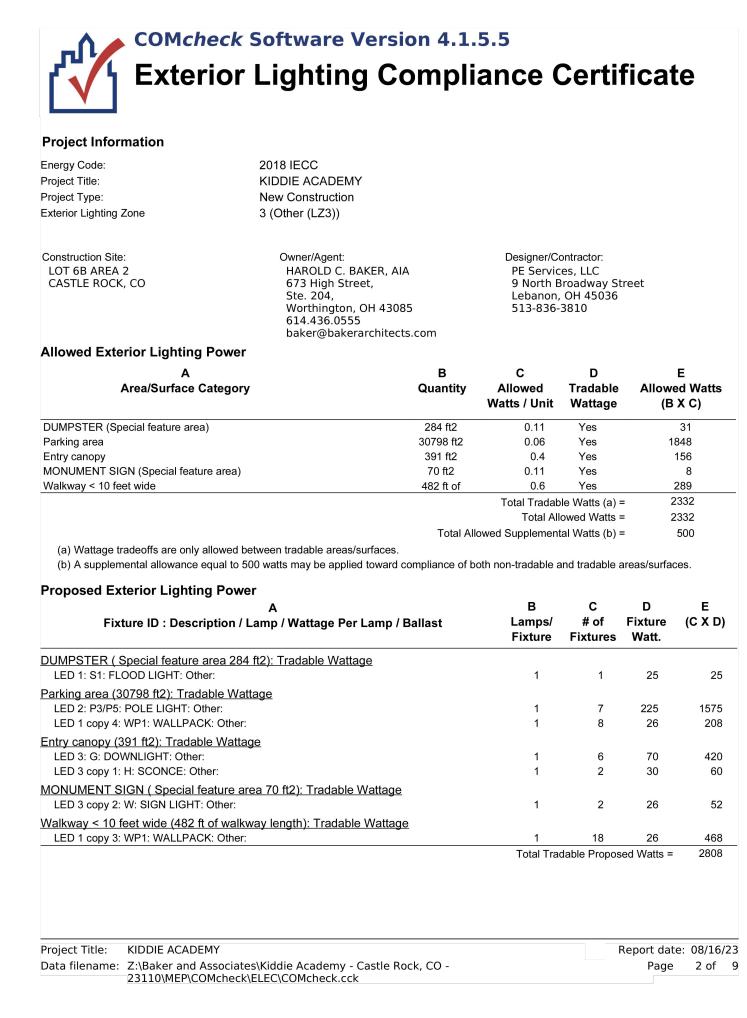
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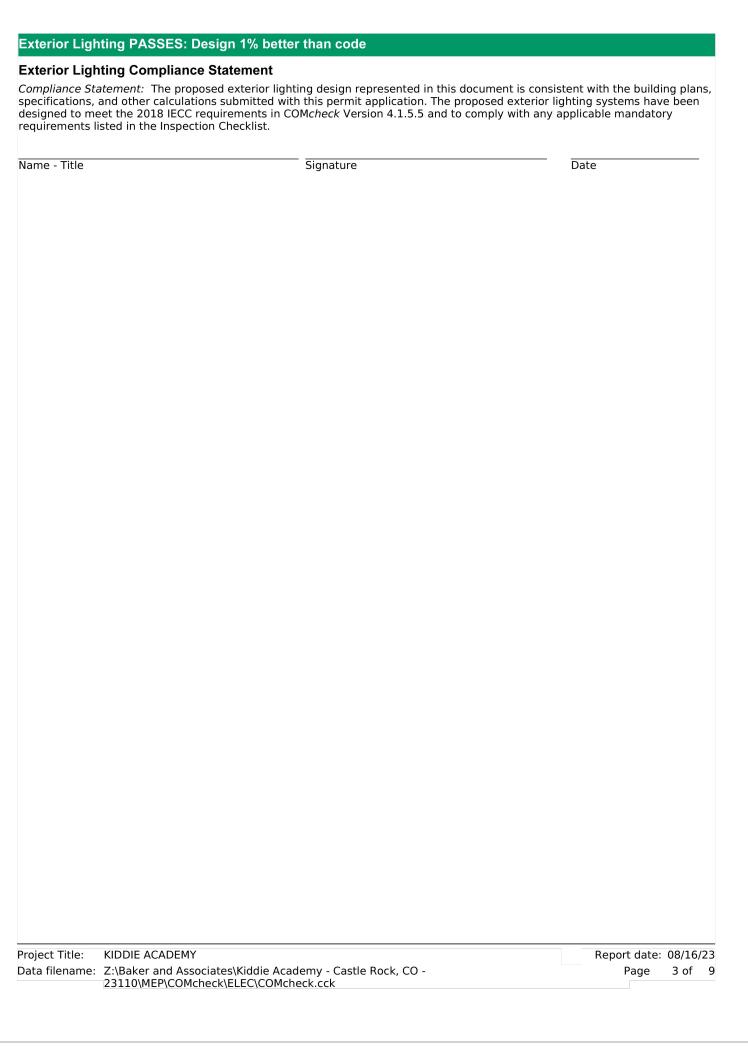
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ELECTRICAL RISER DIAGRAM







Requirer	Energy Code: 2018 IEGnents: 100.0% were addressed of		OM <i>check</i> software
requirem	ent, the user certifies that a code re	equirement will be	he user in the COMcheck Requirements screen. For e met and how that is documented, or that an exce table, a reference to that table is provided.
Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C103.2 [PR8] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
Addition	al Comments/Assumptions:		
Addition	al Comments/Assumptions:		

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2. 2 [EL22] ¹	Spaces required to have light- reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Lighting that is related to means of egress in stairways, ramps, corridors, or emergency routes.
C405.2.1, C405.2.1. 1 [EL18] ¹	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.1. 2 [EL19] ¹	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.1. 3 [EL20] ¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.2, C405.2.2. 1, C405.2.2. 2 [EL21] ²	sensors (per C405.2.1) have time- switch controls and functions detailed	□Complies □Does Not □Not Observable □Not Applicable	Exception: Lighting that is related to means of egress in stairways, ramps, corridors, or emergency routes.
	1 High Impact (Tier 1)	2 Medium Impa	act (Tier 2) 3 Low Impact (Tier 3)

# & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3. individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.		□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.4 [EL26] ¹	Separate lighting control devices for specific uses installed per approved lighting plans.	□Complies □Does Not	Requirement will be met.
	,	□Not Observable □Not Applicable	
C405.2.4 [EL27] ¹		□Complies □Does Not	Requirement will be met.
	approved lighting plans and is automatically controlled and separated from general lighting.	□Not Observable □Not Applicable	
C405.2.5 [EL28] ^{null}	Manual controls required by the energy code are in a location with	□Complies □Does Not	Requirement will be met.
	ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	□Not Observable □Not Applicable	
C405.2.6 [EL30] ^{null}	Automatic lighting controls for exterior lighting installed. Controls will be	□Complies □Does Not	Requirement will be met.
	daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	□Not Observable □Not Applicable	
EL6] ¹ Exit signs do not exceed 5 watts per face.		□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.6 [EL26] ²	electric transformers meet the	□Complies □Does Not	Requirement will be met.
	Table C405.6.	□Not Observable □Not Applicable	
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.8.2, C405.8.2. 1 [EL28] ²		□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29] ²	combination of feeders and branch	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
Additiona	al Comments/Assumptions:	• • • • • • • • • • • • • • • • • • • •	

Ilighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts. Ca05.5.1 Every fighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed lighting plans, demonstrating proposed watts are less than or equal to allowed watts. Ca08.1.1 Building operations and maintenance documents will be provided to the owner, Documents will be provided to the owner, Documents will be provided to the owner, Documents will be maintained, and operated. Ca08.2.5 Furnished as-built drawings for electric power systems within 90 days of system acceptance. Ca08.3.5 Furnished as-built drawings for electric power systems within 90 days of system acceptance. Ca08.3.6 Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation. Ca08.3.6 Purnished as-built drawings for electric power systems within 90 days of system acceptance. Ca08.3.6 Ca08.3 Ca08.	& Req.ID	rinal inspection	Compiles:	Comments/Assumptions
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With what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts. Caos 1.1	[FI18] ¹ I	lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed	□Does Not □Not Observable	See the Interior Lighting fixture schedule for values.
documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. Ca08.2.5. Furnished as-built drawings for electric power systems within 90 days of system acceptance. Complies Not Observable No	[FI19] ¹	with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal	□Does Not □Not Observable	See the Exterior Lighting fixture schedule for values.
electric power systems within 90 days of system acceptance. Does Not	[FI57] ¹ (FI57)	documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed,	□Does Not □Not Observable	Requirement will be met.
ensure proper calibration, adjustment, programming, and operation. Not Observable Not Applicable Additional Comments/Assumptions:	1	electric power systems within 90 days	□Does Not □Not Observable	
	[FI33] ¹	ensure proper calibration, adjustment,	□Does Not □Not Observable	Requirement will be met.
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)		1 High Impact (Tier 1)	2 Medium Impa	act (Tier 2) 3 Low Impact (Tier 3)

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ELECTRICAL ENERGY

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