			ELECTRICAL S	YMBOL LEGEND		
	BASIC M	ATERIALS	FIRE ALARM / DETECTION SYSTEM	VOICE AND DATA RACEWAY SYSTEM	TELEPHONE/COMPUTER RACEWAY SYSTEM	ABBREVIATIONS (CONT.)
SYMBOL	DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	
SYMBOL DEVICE ABBREV 6C 8C 4G 6G 8G AV C ETR H IG RL TR TV U WP Sa S3 S4 S K S T S OSab S OS S VS	POKE-THRU WITH 6" CORE DRILL POKE-THRU WITH 8" CORE DRILL POKE-THRU WITH 8" CORE DRILL FOUR-GANG FLOOR BOX SIX-GANG FLOOR BOX SIX-GANG FLOOR BOX DOUBLE DUPLEX RECEPTACLE WITH DEDICATED CIRCUIT FOR AV RACK OR CART RECEPTACLE CONTROLLED PER ASHRAE 90.1 (2010); PROVIDE POWER PACK FOR RECEPTACLE CIRCUIT, TO BE CONTROLLED THROUGH LOCAL ROOM OCCUPANCY SENSOR(S); PROVIDE DEVICE WITH BLUE DOT OR UNIVERSAL POWER SYMBOL EXISTING TO REMAIN HOSPITAL GRADE ISOLATED GROUND (ORANGE DEVICE) RELOCATED TAMPER RESISTANT RECEPTACLE MOUNTED ADJACENT TO TV OUTLET, COORDINATE HEIGHT W/ ARCHITECT DUPLEX RECEPTACLE WITH (2) USB PORTS WEATHERPROOF SINGLE POLE SWITCH (SUBSCRIPT INDICATES ITEM CONTROLLED) THREE-WAY SWITCH FOUR-WAY SWITCH DIGITAL TIMER SWITCH W/ 5 MIN. WARNING FLASH WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH, DUAL RELAY WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH	SYMBOL MH MANHOLE PB PULLBOX HH HANDHOLE T TRANSFORMER AUTOMATIC TRANSFER SWITCH NON-FUSED DISCONNECT SWITCH, RATING AS NOTED NF = NON-FUSED AR = AMPERE RATING OF SWITCH 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED TUSED DISCONNECT AF = AMPERE RATING OF FUSE AR = AMPERE RATING OF FUSE AR = AMPERE RATING OF SWITCH 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE MCP AMPERE AND FOLES NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED COMBINATION MAGNETIC MOTOR STARTER, SIZE AS NOTED, 3-POLE UNLESS OTHERWISE NOTED 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE NEMA STARTER SIZE SWITCHBOARD, SWITCHGEAR/ DISTRIBUTION PANEL BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, FLUSH MOUNTED	NFPA / LEGACY	SINGLE-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR VOICE/DATA OUTLET WITH 1" CONDUIT STUBBED UP AND INTO NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED; PROVIDE WITH NYLON PULL STRING & SMOOTH BUSHING C = ABOVE COUNTER SINGLE-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR TELEPHONE WALL OUTLET WITH 1" CONDUIT STUBBED UP AND INTO NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED; PROVIDE WITH NYLON PULL STRING & SMOOTH BUSHING W = WALL MOUNTED AT 52" AFF FOR HOUSE PHONE W, ADA = WALL MOUNTED AT 22" AFF FOR HOUSE PHONE W, ADA = WALL MOUNTED AT 4" AFF FOR ADA ACCESSIBLE PAY PHONE ELV = WALL MOUNTED @ 52" AFF FOR TELEPHONE IN ELEVATOR MACHINE ROOM WIRELESS ACCESS POINT OUTLET, CEILING MOUNTED; ACTUAL QUANTITY AND LOCATIONS SHALL BE BASED ON SIGNAL SURVEY BY OWNER'S WLAN VENDOR MULTI-SERVICE FLOOR BOX WITH RECEPTACLE AND TECHNOLOGY DEVICES (REFER TO OWNER'S VENDOR DRAWINGS FOR DEVICES); PROVIDE RACEWAY(S) AS INDICATED ON FLOOR PLANS MULTI-SERVICE FLOOR BOX WITH FURNITURE FEED CONNECTION; PROVIDE RACEWAY(S) AS INDICATED ON FLOOR PLANS 2-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR WALL MOUNTED FURNITURE FEED DATA CONNECTION; PROVIDE RACEWAY(S) AS INDICATED ON FLOOR PLANS MULTI-SERVICE POKE-THRU WITH RECEPTACLES AND TECHNOLOGY DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS), OR FURNITURE FEED CONNECTION; REFER TO POKE-THRU DETAILS AND FLOOR PLANS FOR RACEWAY INFORMATION POWER POLE WITH POWER & DATA FURNITURE FEED POWER CONNECTIONS (REFER	SYMBOL DESCRIPTION VOICE/DATA OUTLET BACK BOX C = ABOVE THE COUNTER W = WALL MOUNTED TELEPHONE OUTLET FLOOR MOUNTED TELEPHONE OUTLET CEILING MOUNTED TELEPHONE OUTLET PEDESTAL MOUNTED TELEPHONE OUTLET PEDESTAL MOUNTED TELEPHONE TERMINAL CABINET TO COMPUTER TERMINAL CABINET TELEPHONE SYSTEM RACEWAY TELEPHONE SYSTEM RACEWAY TELEVISION RACEWAY DISTRIBUTION SYSTEM	IBC INTERNATIONAL BUILDING CODE IC INTERCOM ICU INTERSIVE CARE UNIT IECC INTERNATIONAL ENERGY CONSERVATION CODE IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS IES ILLUMINATING ENGINEERING SOCIETY IMC INTERMEDIATE METAL CONDUIT IN INCHES IPCEA INSULATED POWER CABLE ENGINEERS ASSOCIATION IT INSTANTANEOUS TRIP JB OR J-BOX KCMIL ONE THOUSAND CIRCULAR MILS KV KILOVOLT KVA KILOVOLT AMPERES KW KILOWATT KWH KILOWATT HOURS LBS POUNDS LED LIGHT EMITTING DIODE LP LIGHTNING PROTECTION LT LIGHT LTG LIGHTING LSIG LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND LSIA LONG TIME, SHORT TIME, INSTANTANEOUS, ALARM LSI LONG TIME, SHORT TIME, INSTANTANEOUS MAX MAXIMUM MCA MINIMUM CIRCUIT AMPS MCB MAIN CIRCUIT AMPS MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL OENTER MDP MAIN SERVICE DISTRIBUTION PANEL MIC MICROPHONE MIN MINIMUM MLO MAIN LUGS ONLY MAX MAXIMUM OVERCURRENT PROTECTION MAX MAXIMUM MINIMUM MLO MAIN LUGS ONLY MAX MAXIMUM OVERCURRENT PROTECTION MAX MAXIMUM MINIMUM MLO MAIN LUGS ONLY MAX MAXIMUM OVERCURRENT PROTECTION
SD,OS SLV SLVO SLVD SF SM SD	WALL MOUNTED DUAL TECHNOLOGY DIMMING/OCCUPANCY SENSOR SWITCH LOW VOLTAGE SWITCH LOW VOLTAGE OVERRIDE SWITCH LOW VOLTAGE OVERRIDE SWITCH WITH DIMMING FAN SWITCH MOTOR RATED SWITCH DIMMER SWITCH, LINE VOLTAGE WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR	BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, FLUSH MOUNTED CONDUIT CONCEALED ABOVE CEILING OR IN WAL CONDUIT EXPOSED CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR CONDUIT HOMERUN TO ELECTRICAL PANEL	SPEAKER ONLY, WALL MOUNTED STROBE, WALL MOUNTED, 75CD UNLESS OTHERWISE NOTED FIREMAN'S PHONE JACK VS TS SPRINKLER TAMPER SWITCH CONNECTION WS FS SPRINKLER WATERFLOW SWITCH CONNECTION PS PS PRESSURE SWITCH CONNECTION DH ELECTROMAGNETIC DOOR HOLD OPEN DEVICE FACP FACP FACP FIRE ALARM CONTROL PANEL	TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS); REFER TO FLOOR PLANS FOR RACEWAY INFORMATION 3/4"THICK X 8' HIGH A/C PLYWOOD BACKBOARD MOUNTED 6" AFF FROM BOTTOM, PAINTED WITH GRAY FIRE-RETARDANT PAINT, WIDTH AS INDICATED ON FLOOR PLAN CABLE TRAY FOR HORIZONTAL LOW VOLTAGE CABLE, 12"W X 4" HIGH UNLESS OTHERWISE NOTED; LADDER TYPE IN IDF/MDF/IT ROOMS, BASKET/MESH TYPE IN OTHER AREAS, UNLESS OTHERWISE NOTED 2-POST DATA RACK	TV TELEVISION SIGNAL WALL OUTLET TWO GANG BOX RECEPTACLE/ CONTROL/ ANTENNA TV DISTRIBUTION SYSTEM RACEWAY PAGING SYSTEM & BACKGROUND MUSIC	MSB MAIN SERVICE SWITCHBOARD MTD MOUNTED MTG MOUNTING MTR MOTOR MTS MANUAL TRANSFER SWITCH MUX MULTIPLEX (TRANSPONDER) PANEL MVA MEGA VOLT AMPS N NEUTRAL NC NORMALLY CLOSED NEC NATIONAL ELECTRICAL CODE NEMA NATIONAL FIRE PROTECTION ASSOCIATION NIC NOT IN CONTRACT
® ⊕ ⊢	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR DAYLIGHT SENSOR CEILING MOUNTED DAYLIGHT SENSOR WALL MOUNTED VACANCY SENSOR CEILING MOUNTED VACANCY SENSOR WALL MOUNTED PHOTOCELL, MOUNTED ON ROOF FACING NORTH	CONDUIT TURNING UP CONDUIT TURNING DOWN CONDUIT STUBBED OUT OR UP CONDUIT CONTINUED FLEXIBLE CONDUIT	FATC FATC FIRE ALARM TERMINAL CABINET FAA FAA FIRE ALARM ANNUNCIATOR PANEL - FLUSH MOUNTED EVAC EVAC VOICE EVACUATION PANEL MNS MNS MASS NOTIFICATION SYSTEM PANEL DACT DACT MASS NOTIFICATION SYSTEM PANEL	4-POST DATA RACK WALL MOUNTED DATA RACK	S LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ SUPPORT TRUSS. (CEILING MOUNTED) W = WALL MOUNTED PAEC PAGING SYSTEM EQUIPMENT CABINET PATC PAGING SYSTEM TERMINAL CABINET	NF NON-FUSED NL NON-LINEAR NO NORMALLY OPEN OR NUMBER OL OVERLOAD OSHA OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION P POLE PB PULLBOX PF POWER FACTOR PIV POST INDICATOR VALVE
	NOTE: DIAGONAL MARKS INDICATED ON ANY DEVICE REPRESENTS DEVICE CONNECTED TO EMERGENCY CIRCUIT (RED DEVICE FOR RECEPTACLE); TYPICAL FOR ANY DEVICE IN LEGEND SINGLE RECEPTACLE DUPLEX RECEPTACLE	CONDUIT SEAL-OFF FITTING GROUND OR GROUND ROD AS NOTED EXISTING TO BE REMOVED (HEAVY, DASHED LINE) EXISTING TO REMAIN (LIGHT, SOLID LINE) NEW (HEAVY, SOLID LINE)	TELEVISION SIGNAL WALL OUTLET, MOUNTED ADJACENT TO DUPLEX RECEPTACLE IDENTIFIED WITH "TV" ADJACENT TO DEVICE; REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT S X CEILING MOUNTED SPEAKER X = ZONE TO BE CONTROLLED	NURSE CALL SYSTEMS	P PAGING SYSTEM CONDUIT AND WIRING VOLUME CONTROL ABBREVIATIONS	PNL PANEL PR PAIR PRI PRIMARY PT POTENTIAL TRANSFORMER PVC POLYVINYLCHLORIDE PWR POWER REC, RECEPT RECEPTACLE REF REFRIGERATOR
₩ ₩	TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER	LIGHTING	WALL MOUNTED SPEAKER WALL-MOUNTED VOLUME CONTROL; PROVIDE 3/4" C. STUBBED UP ABOVE CEILING AND	SINGLE PATIENT STATION DUAL PATIENT STATION	A/C AIR CONDITIONING	RGS, GRC RIGID GALVANIZED STEEL CONDUIT RLA RUNNING LOAD AMPERES RMS ROOT-MEAN-SQUARE
	TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVER MOUNTED ABOVE COUNTER DUPLEX RECEPTACLE; EACH RECEPTACLE ON SEPARATE CIRCUIT (PROVIDE BREAKER WITH 2-POLE COMMON TRIP HANDLE) SPLIT-WIRED CONTROLLED DUPLEX RECEPTACLE GFCI RECEPTACLE; "WP" INDICATES CAST METAL "IN-USE" WEATHERPROOF COVER, WEATHER-RESISTANT LISTED TWO GFCI DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE GFCI RECEPTACLE MOUNTED ABOVE COUNTER DUPLEX RECEPTACLE, CEILING MOUNTED TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE, CEILING MOUNTED PEDESTAL MOUNTED DUPLEX RECEPTACLE FLOOR BOX, TWO DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE FLOOR BOX, TWO DUPLEX RECEPTACLES (QUAD) WITH APPROPRIATE FLANGE MULTI-SERVICE FLOOR BOX WITH DUPLEX RECEPTACLE, VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS) MULTI-SERVICE FLOOR BOX WITH TWO DUPLEX RECEPTACLES (QUAD), VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS) MULTI-SERVICE POWER & DATA FLOOR BOX WITH FURNITURE FEED CONNECTION (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS) MULTI-SERVICE POWER & DATA FLOOR BOX WITH FURNITURE FEED CONNECTION (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS) SPECIAL PURPOSE RECEPTACLE, NEMA CONFIGURATION AS NOTED JUNCTION BOX WALL MOUNTED	STRIP FIXTURE FIXTURE, RECESSED, PENDANT OR SURFACE CEILING LOWER CASE LETTER INDICATES CONTROLLING SWITCH CIRCUIT NUMBER LIGHTING CONTROL ZONE NUMBER FIXTURE RECESSED, PENDANT OR SURFACE CEILING DIAGONAL HALF SHADING INDICATE FIXTURE CONNECTED TO CRITICAL CIRCUIT OR PROVIDED WITH INTEGRAL EMERGENCY BATTERY PACK; "E" AFTER FIXTURE TYPE TAG INDICATES INTEGRAL BATTERY PACK UNLESS OTHERWISE NOTED ON LIGHT FIXTURE SCHEDULE (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS) FULL SHADING INDICATE FIXTURE CONNECTED TO LIFE SAFETY CIRCUIT. FIXTURE, WALL MOUNTED ORECESSED, PENDANT OR SURFACE CEILING WALL MOUNTED CEILING WALLWASHER, ACCENT LIGHT, LANDSCAPING TREE ACCENT LIGHT, FACADE LIGHT TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF TRACK HEADS) EMERGENCY TWIN-HEAD LIGHT WITH INTEGRAL BATTERY PACK, WALL MOUNTED LINEAR RECESSED, PENDANT OR SURFACE CEILING	SINGLE STANDARD ELECTRICAL BOX AT 48" AFF WALL-MOUNTED MASTER VOLUME CONTROL; PROVIDE 3/4" C. STUBBED UP ABOVE CEILING AND SINGLE STANDARD ELECTRICAL BOX AT 48" AFF X = ZONE TO BE CONTROLLED WALL-MOUNTED DUAL RCA JACKS FOR MP3 CONNECTION AV AUDIO/VISUAL CABINET OR RACK AREA OF RESCUE ASSISTANCE SYSTEM AREA OF RESCUE ASSISTANCE CALL STATION, WALL, FLUSH MOUNTED AOR R AREA OF RESCUE ASSISTANCE RECEIVER, WALL, FLUSH MOUNTED AOR PS AREA OF RESCUE ASSISTANCE POWER SUPPLY AREA OF RESCUE ASSISTANCE ILLUMINATED SIGNAGE ACCESS CONTROL / CCTV RACEWAY SYSTEM ACP ACCESS CONTROL SYSTEM PANEL FIX CCTV CAMERA; PROVIDE FACEPLATE & DOUBLE GANG JUNCTION BOX, (1) 1"C. WITH CAT6A CABLE TO NEAREST IDF/IMDF/IT ROOM, UNLESS NOTED OTHERWISE FIX = FIXED CCTV CAMERA PAN = PANTIL/ZOON CCTV CAMERA	DUTY STATION S STAFF STATION SE STAFF EMERGENCY STATION SA STAFF EMERGENCY ANNUNCIATOR E EMERGENCY STATION TOILET EMERGENCY STATION SHOWER EMERGENCY STATION OB CODE BLUE EMERGENCY STATION DUAL STAFF PRESENCE INDICATOR STATION C CORRIDOR DOME LIGHT WALL MOUNTED C CORRIDOR ZONE LIGHT CBAP CODE BLUE ANNUNCIATOR PANEL WALL MOUNTED NURSE CALL EQUIPMENT CABINET NURSE CALL EQUIPMENT CABINET NURSE CALL SYSTEM CONDUIT AND WIRING	AC ALTERNATING CURRENT ABV CLG ABOVE CEILING ADA AMERICANS WITH DISABILITIES ACT AF AMPERE FRAME AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AHU AIR HANDLING UNIT AIC AMPERE INTERRUPTING CAPACITY AL ALUMINUM AMP AMPERE ANSI AMERICAN NATIONAL STANDARDS INSTITUTE ASA AMERICAN NATIONAL STANDARDS INSTITUTE ASA AMERICAN NATIONAL STANDARDS INSTITUTE ATS AUTOMATIC TRANSFER SWITCH AUX AUXILIARY AWG AMERICAN WIRE GUAGE BC BARE COPPER BIL BASIC IMPULSE LEVEL BAS BUILDING AUTOMATION SYSTEM BMS BUILDING AUTOMATION SYSTEM BMS BUILDING MANAGEMENT SYSTEM BMS BUILDING MANAGEMENT SYSTEM BRKR OR BKR C C CONDUIT OR RACEWAY CAB CABINET CKT CIRCUIT CB CIRCUIT BEAKER CGC CONDUIT OR RACEWAY CABLE TELEVISION CCTV CLOSED CIRCUIT TELEVISION CLEC CLOCK EQUIPMENT CABINET CCOX CONDUIT OR RACEWAY ONLY COAX COAXIAL CABLE COND CONNECTION CPU CENTRAL PROCESSING UNIT	RPM REVOLUTIONS PER MINUTE RTU ROOF TOP UNIT SCA SHORT CIRCUIT AMPERES SD SMOKE DETECTOR SEC SECONDARY S/N SOLID NEUTRAL SPD SURGE PROTECTIVE DEVICE SPKR SPEAKER SPST SINGLE POLE SINGLE THROW SS STAINLESS STEEL SST SOLID STATE TRIP STD SHORT TIME TRIP SW SWITCH SWBD SWITCHGAR TEL TELEPHONE TIB TELEPHONE TERMINAL BOARD TTC TELEPHONE TERMINAL CABINET TVEC TELEVISION EQUIPMENT CABINET TYP TYPICAL UG UNDERGROUND UON UNLESS OTHERWISE NOTED UL UNDERWRITERS LABORATORIES UTIL UTILITY V VOLT VA VOLTAMPERE VAR VOLT AMPERE REACTIVE VAV VARIABLE AIR VOLUME VFD VARIABLE FREQUENCY DRIVE WP WEATHER PROOF XFMR TRANSFORMER XFR TRANSFER
	WALL MOUNTED FURNITURE FEED POWER CONNECTION POWER POLE WITH POWER & DATA FURNITURE FEED POWER CONNECTIONS POWER POLE WITH POWER & DATA OUTLETS MULTI-SERVICE POKE-THRU WITH TWO INTEGRAL DUPLEX RECEPTACLES AND VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS), OR FURNITURE FEED CONNECTION:	EXTERIOR POLE-MOUNTED AREA LIGHT FIXTURE, ARMS AS INDICATED ON DRAWINGS EXTERIOR PEDESTRIAN SIDEWALK BOLLARD OR POST-TOP LIGHT FIXTURE EXIT LIGHT, CEILING OR PENDANT MOUNTED; DIRECTIONAL ARROWS AS INDICATED; SHADED QUADRANT INDICATES FACE(S) OF FIXTURE EXIT LIGHT, WALL MOUNTED	DPS DOOR POSITION SWITCH -CR CARD READER, WALL MOUNTED, MOUNTED AT 48" AFF -KP KEY PAD, WALL MOUNTED, MOUNTED AT 48" AFF -CK COMBINED CARD READER/KEY PAD, WALL MOUNTED, MOUNTED AT 48" AFF ES ELECTRIC STRIKE EM ELECTRIC MORTISE/TRIM LOCK EL ELECTRIC LATCH	INTERCOM SYSTEM -IC MASTER STATION	CRT CATHODE RAY TERMINAL (VIDEO DISPLAY TERMINAL) CT CURRENT TRANSFORMER CU COPPER CW COLD WATER DC DIRECT CURRENT DDC DIRECT DIGITAL CONTROL DEG DEGREE DF DEMAND FACTOR DISC DISCONNECT DISC SW DISCONNECT SWITCH	SHEET DESCRIPTION E0.01 ELECTRICAL SYMBOLS, LEGEND, NOTES AND INDEX E0.02 ELECTRICAL GENERAL NOTES E0.03 ELECTRICAL SCHEDULES E1.01 SECOND FLOOR ELECTRICAL DEMOLITION PLAN
	REFER TO POKE-THRU DETAILS MULTI-SERVICE RACEWAY WITH 5-20R RECEPTACLES, 18" O.C. UNLESS OTHERWISE NOTED CLOCK RECEPTACLE, WALL MOUNTED GROUND BUS BAR, COPPER SURGE PROTECTIVE DEVICE SHUNT-TRIP PUSHBUTTON; SEMI-FLUSH WALL MOUNTED UNLESS OTHERWISE NOTED; NEMA 3R FOR EXTERIOR LOCATIONS EMERGENCY POWER OFF SHUNT-TRIP PUSHBUTTON, RED MUSHROOM HEAD, CLEAR LEXAN PROTECTIVE COVER OVERHEAD DOOR PUSHBUTTON CONTROL STATION PUSHBUTTON STATION MOTOR CONNECTION	CI — CLASS I MAIN CONDUCTOR CABLE CII — CLASS II MAIN CONDUCTOR CABLE TEE SPLICE BONDING CONDUCTOR FOUR-WAY SPLICE BONDING PLATE PIPE CLAMP FOR PLUMBING VENT THRU ROOF. AIR TERMINAL; PROVIDE PARAPET TYPE BASE WHERE MOUNTED ON PARAPET; PROVIDE FLAT BASE FOR MECHANICAL EQUIPMENT OR ROOF PERIMETER WITH NO PARAPET; PROVIDE BLUNT TIP WHERE MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON LIGHTNING PROTECTION PLANS	MAGNETIC LOCK DE DELAYED EGRESS REMOTE DOOR RELEASE BUTTON ASSOCIATED DOOR DETAIL REFERENCE DICTATION RACEWAY SYSTEM DICTATION OUTLET C = COUNTER TOP W = WALL MOUNTED ER = PROPRIETARY ER SYSTEM DICTATION EQUIPMENT DIC DICTATION TERMINAL CABINET	C = COUNTER D = DESK W = WALL MOUNTED H = HAND SET TYPE HF = HANDS FREE WP = WEATHER PROOF INTERCOM SYSTEM SPEAKER W = WALL MOUNTED ICCC INTERCOM EQUIPMENT CABINET ICC INTERCOM TERMINAL CABINET ICC INTERCOM SYSTEM CONDUIT AND WIRING SSEC SOUND SYSTEM EQUIPMENT CABINET	DO DRAW OUT DN DOWN DPST DOUBLE POLE SINGLE THROW EDH ELECTRIC DUCT HEATER EMT ELECTRIC METALLIC TUBING EO ELECTRICALLY OPERATED EOL END OF LINE EOR ENGINEER OF RECORD ETR EXISTING TO REMAIN EWC ELECTRIC WATER COOLER FA FIRE ALARM FAAP FIRE ALARM ANNUNCIATOR PANEL FATC FIRE ALARM TERMINAL CABINET FBC FLORIDA BUILDING CODE FCU FAN COIL UNIT FLA FULL LOAD AMPERES FM FACTORY MUTUAL FPU FAN POWERED UNIT FT FEET GF GROUND FAULT ALARM	E1.02 SECOND FLOOR LIGHTING DEMOLITION PLAN E2.01 SECOND FLOOR ELECTRICAL PLAN E2.02 SECOND FLOOR LIGHTING PLAN FA1.02 SECOND FLOOR FIRE ALARM PLAN
VFD DDC BAS LCP	MOTORIZED DAMPER CONNECTION VARIABLE FREQUENCY DRIVE DIRECT DIGITAL CONTROL PANEL BUILDING AUTOMATION SYSTEM CONTROL PANEL LIGHTING CONTROL PANEL	PARAPET MOUNTED AIR TERMINAL FLAT ROOF MOUNTED OR MECHANICAL COUNTERPOISE CONDUCTOR THRU-ROOF CONDUCTOR	DICTATION TERMINAL CABINET DEC DICTATION EQUIPMENT (OWNER FURNISHED) DICTATION SYSTEM RACEWAY	SOUND SYSTEM TERMINAL CABINET SOUND SYSTEM CONDUIT AND WIRING	GFCI GROUND FAULT CIRCUIT INTERRUPTER GFR GROUND FAULT RELAY GND, G GROUND HP HORSEPOWER HOA HAND-OFF-AUTOMATIC HORIZ HORIZONTAL	

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

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SEALS

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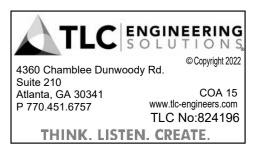
CAFETERIA RENOVATION

PROGRESS BID SET

11/26/2024

ELECTRICAL SYMBOLS, LEGEND, NOTES AND INDEX

E0.01



ELECTRICAL DEMOLITION NOTES DEVICES, LIGHT FIXTURES AND EQUIPMENT SHOWN IN DASHED LINE TYPE ARE EXISTING TO BE DEMOLISHED; DEVICES, LIGH FIXTURES AND EQUIPMENT SHOWN IN LIGHT (SCREENED) SOLID LINE TYPE ARE EXISTING TO REMAIN, UNLESS NOTED EXISTING EQUIPMENT, LIGHT FIXTURES AND DEVICES SHOWN ARE BASED ON FIELD SURVEYS AND RECORD DRAWINGS PROVIDED BY THE OWNER, AND ARE NOT NECESSARILY INCLUSIVE OF ALL EXISTING ELECTRICAL EQUIPMENT, LIGHT FIXTURES AND DEVICES WITHIN PROJECT AREAS. IT IS THE INTENT THAT THE DEMOLITION PLANS PROVIDE A GENERAL KNOWLEDGE OF THE EXISTING CONDITIONS WITHIN THE PROJECT AREA. ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED FLECTRICAL DEMOLITION WHETHER INDICATED ON THE PLANS OR NOT EXISTING CIRCUITING SHOWN IS BASED ON RECORD DRAWINGS AND THE SURVEYED PANEL DIRECTORIES. WHERE THEY WERE AVAILABLE. THE ACTUAL CONDITIONS MAY VARY. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. THE CONDITIONS SHOWN ARE INTENDED TO SHOW THE LOCATIONS OF EXISTING DEVICES, LIGHT FIXTURES AND EQUIPMENT, WHERE SHOWN ON THE PLAN DRAWINGS, AND IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING ANY AND ALL COORDINATION NECESSARY TO COMPLETE THE NEW WORK, FIELD CONDITIONS SHALL GOVERN. . WHERE EXISTING DEVICES ARE INDICATED TO REMAIN OR BE RELOCATED, ARE WITHIN THE SCOPE OF THIS PROJECT AND EXISTING CIRCUITING INFORMATION IS UNAVAILABLE, CONTRACTOR IS TO PROVIDE CIRCUIT TRACING TO IDENTIFY PANEL AND CIRCUIT SERVING THE DEVICE TO AND PROVIDE THAT INFORMATION TO THE ARCHITECT/ENGINEER PRIOR TO ROUTING CONDUITS AND WIRING FOR NEW DEVICES AND EQUIPMENT WITHIN THE SCOPE OF THIS PROJECT. WHERE EXISTING DEVICES ARE TO REMAIN. CONTRACTOR MUST EXTEND EXISTING CIRCUITING WHERE NECESSARY TO MAINTAIN CONTINUITY OF CIRCUIT. COORDINATE WITH THE OWNER FOR DISPOSITION OF ELECTRICAL ITEMS TO BE DEMOLISHED. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS SUCH AS COVERPLATES, RECEPTACLES, LIGHT FIXTURES, PANELBOARDS, TRANSFORMERS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH THE OWNER PRIOR TO START OF DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED. COORDINATE EXACT AREAS, WALLS, CEILINGS, ETC. TO BE DEMOLISHED WITH ARCHITECTURAL, STRUCTURAL, PLUMBING AND MECHANICAL DEMOLITION PLANS WHERE EXISTING DEVICES, LIGHT FIXTURES AND EQUIPMENT ARE INDICATED TO BE DEMOLISHED, REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE PANEL OR TO NEAREST JUNCTION BOX TO MAINTAIN CIRCUIT CONTINUITY OF DEVICES AND EQUIPMENT TO REMAIN. WHERE PANELS ARE TO REMAIN, TURN BREAKER TO "OFF" POSITION AND LABEL THE CIRCUIT AS ALL AREAS OUTSIDE THE SCOPE OF CONSTRUCTION ARE TO REMAIN ENERGIZED. COORDINATE PHASING WITH CONSTRUCTION MANAGER AND OWNER PRIOR TO DEMOLITION OF ANY ITEM WHICH MAY RESUILT IN INTERRUPTION OF POWER). REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR EXTENT OF AREA REQUIRING DEMOLITION AND ADDITIONAL INFORMATION ON ELECTRICAL DEMOLITION WITHIN THAT AREA. DISCONNECT ELECTRICAL SERVICE TO ALL EQUIPMENT BEING REMOVED. DEMOLITION SHALL BE PHASED AS REQUIRED BY DIVISION 1. OR DIRECTED BY THE OWNER. I. REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED OR RENOVATED AREA. CAP BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT P. ELECTRICAL DEVICES CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC., AND NOT NOTED ON THE DEMOLITION DRAWINGS ARE TO BE REMOVED AS REQUIRED, UNLESS SHOWN AS EXISTING TO REMAIN. 3. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES, UNLESS OTHERWISE NOTED ON ARCHITECTURAL PLANS. REPAIRS ARE TO BE DONE T LOGICAL EDGES OF SURFACES AFFECTED AND SHALL MATCH IMMEDIATELY ADJACENT AREAS IN CONSTRUCTION, MATERIAL, 4. PROVIDE BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM EXISTING WALLS TO REMAIN. MATCH COLOR OF NEW ADJACENT DEVICE COVERPLATES 5. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND OBTAIN CLARIFICATIONS COORDINATE ALL POWER INTERRUPTION WITH CONSTRUCTION MANAGER, OWNER, LANDLORD, AND UTILITY COMPANY (WHERE APPLICABLE) AND DO NOT INTERRUPT POWER WITHOUT WRITTEN PERMISSION. PROVIDE A MINIMUM OF ONE WEEK'S WRITTEN NOTIFICATION PRIOR TO WHEN POWER IS DESIRED TO BE INTERRUPTED. CONTRACTOR SHALL INVESTIGATE AND IDENTIFY ALL LOADS TO BE AFFECTED BY THE REQUESTED INTERRUPTION. CONTRACTOR SHALL SUBMIT WRITTEN SEQUENCE OF STEPS FOR EACH SHUTDOWN ALONG WITH THE ESTIMATED INTERRUPTION DURATIONS. MAKE ARRANGEMENTS TO MAINTAIN POWER TO ALL EXISTING NECESSARY LIGHTING, DEVICES AND EQUIPMENT AS NEEDED AND REQUESTED BY THE OWNER PRIOR TO COMMENCEMENT OF WORK. 7. EXERCISE EXTREME CAUTION WHEN REMOVING/ RELOCATING WIRING AND EQUIPMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT OTHER WIRING DEVICES, EQUIPMENT AND LIGHT FIXTURES THAT MAY BE CONNECTED TO THE SAME CIRCUIT REMAIN OPERATIONAL AND ACTIVE. 3. INFORMATION INDICATED IN THE DEMOLITION PORTION OF THE CONTRACT DRAWINGS IS $\,\,\,\,$ DIAGRAMMATIC IN NATURE. FIELD VERIFY ELECTRICAL CIRCUIT HOMERUNS TO ALL ELECTRICAL ITEMS SCHEDULED TO BE DEMOLISHED AND PERFORM THE WORK 9. UPDATE ALL EXISTING ELECTRICAL EQUIPMENT NAMEPLATES AND DIRECTORIES AS NECESSARY TO REFLECT FINAL AS-BUILT CONDITIONS AT THE END OF CONSTRUCTION. 0. STORE ITEMS INDICATED TO BE RETURNED TO THE OWNER IN A DRY, CLEAN AND PROTECTED AREA. NOTIFY OWNER WHEN ITEMS ARE READY TO BE REMOVED I. COORDINATE ANY ALTERATION AND CHANGES TO THE ELECTRICAL SERVICE WITH THE LOCAL UTILITY COMPANY AND THE OWNER PRIOR TO COMMENCEMENT OF WORK 2. PROVIDE ANY NECESSARY REPROGRAMMING OF EXISTING BUILDING FIRE ALARM SYSTEMS TO DISABLE FIRE ALARM DEVICES THAT ARE BEING DISCONNECTED AND REMOVED, AND FOR ANY NEW DEVICES THAT ARE ADDED, AS PART OF BID PRICE. 3. ALL CONDUITS SERVING OTHER SPACES THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION SO AS NOT TO CAUSE DISRUPTION TO THESE OTHER SPACES. ENSURE THAT ALL CONDUITS. NEW OR EXISTING WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED IN ACCORDANCE WITH THE NEC. 4. REMOVE ALL ABANDONED WIRING AND CONDUIT THAT IS WITHIN THE PROJECT AREA PRIOR TO THE END OF CONSTRUCTION. ALL WORK UNDER THIS DIVISION SHALL BE IN STRICT COMPLIANCE AND IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS INCLUDING THE REGULATIONS OF GOVERNING LOCAL, STATE, COUNTY AND OTHER APPLICABLE CODES. REFER TO SPECIFICATIONS FOR ADDITIONAL CODE REQUIREMENTS: NATIONAL ELECTRICAL CODE 2020 W/ GEORGIA 2021 AMENDMENTS ADDITIONAL CODES, STANDARDS, AND REQUIREMENTS 1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI). 2. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) 3. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA). 4. REQUIREMENTS OF LOCAL POWER COMPANY 5. THE AMERICANS WITH DISABILITIES ACT (ADA) 6. OWNER'S PUBLISHED DESIGN STANDARDS. 7. FGI GUIDELINES FOR DESIGN AND CONSTRUCTION OF HOSPITALS AND OUTPATIENT FACILITIES (2014) ALL MATERIALS SHALL BE NEW AND FREE OF DEFECTS, AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LAB. AS DEFINED BY OSHA. WHERE NO LABELING OR LISTING SERVICE IS AVAILABLE FOR CERTAIN TYPES OF EQUIPMENT, TEST DATA SHALL BE SUBMITTED TO VALIDATE THAT EQUIPMENT MEETS OF EXCEEDS AVAILABLE STANDARDS. NATIONAL FIRE PROTECTION (NFPA) STANDARDS: NFPA 10, 2018 EDITION, STANDARD FOR PORTABLE FIRE EXTINGUISHERS. NFPA 13, 2019 EDITION, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS. NFPA 20, 2019 EDITION, STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION. NFPA 30, 2021 EDITION, FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE. • NFPA 37, 2021 EDITION, STANDARD FOR THE INSTALLATION AND USE OF STATIONARY COMBUSTION ENGINES AND GAS NFPA 45, 2019 EDITION, STANDARD ON FIRE PROTECTION FOR LABORATORIES USING CHEMICALS. NFPA 54, 2021 EDITION, NATIONAL FUEL GAS CODE. NFPA 70, 2020 EDITION, NATIONAL ELECTRICAL CODE®. NFPA 72, 2019 EDITION, NATIONAL FIRE ALARM AND SIGNALING CODE. NFPA 75, 2020 EDITION, STANDARD FOR THE PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT. NFPA 80, 2019 EDITION, STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES NFPA 85, 2019 EDITION, BOILER AND COMBUSTION SYSTEMS HAZARDS CODE. NFPA 88A, 2019 EDITION, STANDARD FOR PARKING STRUCTURES. NFPA 90A, 2021 EDITION, STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS. NFPA 90B, 2021 EDITION, STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR-CONDITIONING SYSTEMS. NFPA 92, 2018 EDITION, STANDARD FOR SMOKE-CONTROL SYSTEMS. NFPA 99, 2021 EDITION, HEALTH CARE FACILITIES CODE. NEPA 101, 2021 EDITION, LIFE SAFETY CODE®. NFPA 110, 2019 EDITION, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS. NFPA 111, 2019 EDITION, STANDARD ON STORED ELECTRICAL ENERGY EMERGENCY AND STANDBY POWER SYSTEMS. NFPA 780, 2020 EDITION, INSTALLATION OF LIGHTNING PROTECTION SYSTEMS

FIRE ALARM SYSTEM NOTES ALL FIRE ALARM EQUIPMENT IS TO BE NEW, UL LISTED FOR FIRE SERVICE, AND SHALL BE COMPATIBLE WITH THE SYSTEM GENERAL REQUIREMENTS BEING USED. THE DRAWINGS AND APPLICABLE SPECIFICATIONS SHALL BE CONSIDERED SUPPLEMENTARY, ONE TO THE OTHER AND ARE 2. ALL WIRING AND CONDUIT IS TO CONFORM TO NEC ARTICLE 760. WIRING SHALL BE UL LISTED, MINIMUM 300V TYPE FPLP PLENUM RATED SOLID COPPER OR STRANDED COPPER WITH MAXIMUM 19 STRANDS. CONSIDERED THE "CONTRACT DOCUMENTS". ALL WORKMANSHIP, METHODS AND/OR MATERIALS DESCRIBED OR IMPLIED BY ONE 3. LOW VOLTAGE CONDUCTORS: PROVIDE CONDUCTORS IN ACCORDANCE WITH NFPA 70 AND NFPA 72, AND AS AND NOT DESCRIBED OR IMPLIED BY THE OTHER SHALL BE PROVIDED, FURNISHED OR PERFORMED AS IF IT HAD APPEARED IN RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. CONDUCTORS SHALL BE COPPER, MINIMUM NO. 14 AWG, BOTH SECTIONS. THE TERM "CONTRACT DOCUMENTS" DESCRIBED HEREIN IS NOT LIMITED SOLELY TO THE ELECTRICAL TWISTED SHIELDED PAIR. PORTION OF THE DRAWINGS AND SPECIFICATIONS, BUT ENCOMPASSES THE DRAWINGS AND SPECIFICATIONS OF ALL DIVISIONS 4. SURVIVABILITY: A 2-HOUR RATED CABLE ASSEMBLY SHALL BE PROVIDED FOR NOTIFICATION APPLIANCE CIRCUITS AND ANY AS A WHOLE. 2. THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION, METHODS, OTHER CIRCUITS NECESSARY FOR THE OPERATION OF THE NOTIFICATION APPLIANCE CIRCUITS FROM THE POINT AT WHICH THEY EXIT THE CONTROL UNIT UNTIL THE POINT THAT THEY ENTER THE NOTIFICATION ZONE THAT THEY SERVE MATERIALS AND EQUIPMENT, OR EXACT LOCATIONS, ROUTING, ETC, THEY INDICATE THE RESULT TO BE ACHIEVED BY THE 5. MANUAL PULL STATIONS ARE TO BE INSTALLED AT 42" TO BOTTOM OF DEVICE AND NO HIGHER THAN 48" TO HANDLE ABOVE ASSEMBLAGE OF SEVERAL SYSTEMS FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. DO NOT SCALE THE CONTRACT FINISHED FLOOR DOCUMENTS. COORDINATE EXACT EQUIPMENT LOCATIONS WITH THE ARCHITECTURAL, CIVIL AND STRUCTURAL CONTRACT 6. PROVIDE MINIMUM 3/4" CONDUIT AND WIRING BETWEEN EACH FIRE ALARM DEVICE AND FROM LAST DEVICE TO FACP DOCUMENTS. AS WELL AS FIELD CONDITIONS, APPROVED SHOP DRAWINGS AND WORK OF ALL OTHER DIVISIONS/TRADES. . THE TERM "PROVIDE" USED IN THE CONTRACT DOCUMENTS INDICATES TO FURNISH AND INSTALL MATERIALS REQUIRED FOR UNI FSS OTHERWISE NOTED 7. PROVIDE DUCT DETECTOR (AND FIRE ALARM RELAY WHERE APPLICABLE) CONNECTED TO FIRE ALARM SYSTEM. WITHIN 5' CORRECT INSTALLATION OF A COMPLETE SYSTEM, UNLESS SPECIFICALLY NOTED OTHERWISE OF ALL DUCT PENETRATIONS THROUGH FIRE/SMOKE WALLS, WHETHER INDICATED ON ELECTRICAL OR MECHANICAL PLANS I. UNLESS NOTED AS EXISTING, ALL ELECTRICAL INDICATED ON THE CONTRACT DOCUMENTS SHALL BE NEW, SHALL BE U.L. LISTED, AND SHALL BEAR A U.L. LABEL. WHERE NO U.L. LABEL OR LISTING IS AVAILABLE, THE MATERIAL SHALL BE LISTED WITH AN 8. FIRE ALARM CONTROL PANEL IS TO BE PROVIDED WITH DEDICATED 120V CIRCUIT WITH EQUIPMENT GROUND CONNECTION APPROVED, NATIONALLY RECOGNIZED ELECTRICAL TESTING AGENCY. 5. PROVIDE EXPERIENCED, QUALIFIED AND RESPONSIBLE SUPERVISION FOR ALL WORK REQUIRED BY THE CONTRACT PER MANUFACTURER'S RECOMMENDATIONS AND ARTICLE 760 OF THE NEC. PROVIDE MINIMUM #12 AWG FOR GROUND CONNECTION. NOTE: PANEL NEUTRAL OR CONDUIT GROUND IS NOT ACCEPTABLE. 120V CIRCUIT SHALL BE FROM DOCUMENTS. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. TO THE SATISFACTION EMERGENCY/LIFE SAFETY BRANCH WHERE AVAILABLE OF THE ARCHITECT/ENGINEER AND OWNER. 9. SECONDARY BACK-UP POWER SHALL BE PROVIDED BY INTEGRAL BATTERIES WITHIN THE FIRE ALARM CONTROL PANEL TO SUPPLY POWER TO THE SYSTEM UNDER QUIESCENT LOAD FOR A MINIMUM OF 24 HOURS, AND THEN BE CAPABLE OF AN ADDITIONAL 15 MINUTES (5 MINUTES FOR NON VOICE SYSTEMS) ALARM OPERATION AT MAXIMUM CONNECTED LOAD.

SERVICE AGENCY

10. ALL FIRE ALARM POWER CIRCUITS SHALL HAVE A DEDICATED 120V 20A BREAKER THAT SHALL BE RED IN COLOR AND

12. A CERTIFICATION OF COMPLETION AND UL LISTING SHALL BE ISSUED AND INSTALLED ON THE FIRE ALARM CONTROL

PANEL. SUBMIT NFPA RECORD OF COMPLETION FORM ALONG WITH SMOKE DETECTOR SENSITIVITY REPORT FOR ALL

MINIMUM CANDELA RATING OF STROBES IS 75; "110" ADJACENT TO DEVICE INDICATES 110 CANDELA RATING. PROVIDE

15. ALL STROBES SHALL BE INSTALLED PER ADA MOUNTING HEIGHT REQUIREMENTS. WALL MOUNTED STROBES SHALL BE

17. FIRE ALARM DEVICES INSTALLED OUTSIDE OR IN AREAS OPEN TO THE EXTERIOR SHALL BE WEATHERPROOF DEVICES IN

19. SMOKE DETECTORS ARE TO BE INSTALLED PER NFPA 72. WALL MOUNTED SMOKE DETECTORS SHALL BE MOUNTED 4"-12"

20. SMOKE DETECTORS LOCATED IN ELEVATOR LOBBIES, ELEVATOR HOISTWAYS AND ELEVATOR MACHINE ROOMS SHALL

21. DUCT DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE, AND RATED FOR VELOCITIES UP $\,$ TO 5000 FT/MIN.

23. FOR PROJECTS WITH AN ELEVATOR, THE ELEVATOR CONTROL PANEL SHALL HAVE TWO SIGNALS FROM THE FIRE ALARM

CONTROL PANEL/ ASSOCIATED SMOKE DETECTORS - ONE FROM THE "DESIGNATED FLOOR" SMOKE DETECTOR AND

ANOTHER COMBINED SIGNAL FROM THE SMOKE DETECTORS AT THE OTHER LOBBY LANDINGS AND IN THE ELEVATOR

24. ACTIVATION OF ANY SMOKE DETECTOR IN THE ELEVATOR LOBBY OF THE DESIGNATED PRIMARY RECALL LEVEL OR

26. HEAT DETECTORS SHALL BE LOCATED WITHIN 24" OF SPRINKLER HEADS LOCATED IN THE ELEVATOR MACHINE ROOM AND

BOTH A LOWER TEMPERATURE RATING AND HIGHER SENSITIVITY THAN THE SPRINKLER HEADS. HEAT DETECTORS SHALL

ELEVATOR POWER SHALL BE MONITORED BY THE FIRE ALARM CONTROL PANEL. CONTROL MODULE SHALL BE WITHIN 3

MONITOR THE FOLLOWING THREE CONDITIONS: GENERATOR RUNNING; GENERATOR FAULT; GENERATOR SWITCH NOT IN

OPEN THE MAIN DISCONNECT/POWER SUPPLY TO THE ELEVATOR CONTROLLER. CONTROL CIRCUITS TO SHUT OFF

27. WHERE THERE IS A GENERATOR ON THE PROJECT. PROVIDE RELAYS AS REQUIRED FOR THE FIRE ALARM SYSTEM TO

28. WHERE THERE IS A FIRE PUMP ON THE PROJECT, PROVIDE RELAYS AS REQUIRED FOR THE FIRE ALARM SYSTEM TO

MONITOR THE FOLLOWING THREE CONDITIONS: FIRE PUMP RUNNING; FIRE PUMP LOSS OF POWER; FIRE PUMP POWER

29. PROVIDE AN ADDRESSABLE FIRE ALARM SYSTEM PER NFPA AND ALL STATE AND LOCAL CODE REQUIREMENTS. COMPLY

30. FIELD VERIFY LOCATION OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF AN HVAC

OTHERWISE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTERLINE OF THE DOOR AND A

MAXIMUM OF FIVE FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR SHALL BE THE DEPTH OF THE WALL

31. PROVIDE LABELS FOR REMOTE ALARM INDICATORS FOR DUCT MOUNTED SMOKE DETECTORS (I.E., AHU-1 SUPPLY, AHU-2

RETURN. FIRE/SMOKE DAMPER. ETC.). DUCT DETECTORS SHOULD BE LOCATED WITHIN 6 TO 10 EQUIVALENT DIAMETERS OF STRAIGHT, UNINTERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN

THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRE INLET OR OUTLET DOWNSTREAM OF THE DAMPER,

32. EQUIPMENT SHUT DOWN FIRE ALARM RELAYS SHALL BE LOCATED WITHIN THREE (3) FEET OF THE EQUIPMENT CONTROLS

33. ALL FIRE ALARM CABLE SHALL BE INSTALLED IN CONDUIT; NO FIRE ALARM CONDUIT SHALL BE INSTALLED UNDER SLAB.

34. MINIMIZE EXPOSURE OF DETECTORS TO DIRT AND DUST FROM CONSTRUCTION. PROVIDE PLASTIC COVERS DURING

36. FOR RENOVATION PROJECTS, CONTRACTOR SHALL PROVIDE MEANS OF AUTOMATIC SMOKE DETECTION VIA INSTALLED

SMOKE DETECTORS CONNECTED TO THE FACILITY FIRE ALARM SYSTEM FOR COVERAGE DURING NON-OCCUPIED PERIODS WITHIN THE CONSTRUCTION AREA. ALTERNATIVELY, A DOCUMENTED FIRE WATCH OF THE ENTIRE AREA PERFORMED IN

35. STATE CERTIFIED AND LICENSED FIRE ALARM CONTRACTOR SHALL PREPARE AND SUBMIT SIGNED AND SEALED

INCREMENTS NO GREATER THAN ONE HOUR MAY BE PERFORMED PROVIDED THAT IT IS DOCUMENTED IN FULL

39. ALL HIGHRISE AND PARTIAL EVACUATION SYSTEMS SHALL BE AN ADDRESSABLE TYPE VOICE EVACUATION AND SHALL

HAVE A SOUND PRESSURE LEVEL OF 15dB ABOVE AVERAGE AMBIENT SOUND LEVELS OR 5dB ABOVE MAXIMUM AMBIENT

ACCORDANCE WITH NFPA 72. COORDINATE ACTIVITY IN FIELD WITH GENERAL CONTRACTOR.

37. ALL NOTIFICATION DEVICES SHALL MATCH EXISTING NOTIFICATION DEVICES IN COLOR.

DIFFUSER (SUPPLY OR RETURN). IN DIRECT AIR FLOW PATH, OR WITHIN 24" OF A SPRINKLER HEAD UNLESS NOTED

ALL HOISTWAY SPRINKLER HEADS LOCATED 24" ABOVE THE ELEVATOR PIT FLOOR. THESE HEAT DETECTORS SHALL HAVE

25. PRIOR TO INSTALLATION OF ELEVATOR HOISTWAY HEAT DETECTORS, VERIFY WITH LOCAL AUTHORITY HAVING

INITIATE ELEVATOR RECALL. ACTIVATE ELEVATOR WARNING LIGHTS AND CAUSE SEPARATE AND DISTINCT VISIBLE

18. SMOKE DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE, UNLESS SPECIFICALLY NOTED OTHERWISE.

SYNCHRONIZATION OF STROBES IN ALL ADJACENT AREAS WHERE STROBES ARE VISIBLE TO EACH OTHER.

1. A SUPERVISORY SIGNAL SHALL BE ANNUNCIATED UPON ANY TAMPER SWITCH ACTIVATION. FAILURE OR REMOVAL OF ANY

MECHANICALLY PROTECTED (LOCKABLE IN THE "ON" POSITION), MARKED AS "FIRE ALARM CIRCUIT".

DETECTORS WITHIN THE PROJECT AREA TO ENGINEER AND MAKE AVAILABLE AT FINAL INSPECTION.

DETECTION OR MANUAL DEVICE SHALL ACTIVATE A TROUBLE SIGNAL.

14. ALL STROBES SHALL ACTIVATE UPON INITIATION OF THE GENERAL ALARM.

16. STROBES SHALL BE INSTALLED WITHIN 15' OF THE ENDS OF ALL CORRIDORS

ELEVATOR MACHINE ROOM SHALL ACTIVATE ALTERNATE LEVEL RECALL.

ANNUNCIATION AT THE FIRE ALARM CONTROL PANEL AND FIRE ALARM ANNUNCIATORS.

22. HEAT DETECTORS SHALL BE ADDRESSABLE, FIXED TYPE @ 135 DEG F, UNLESS OTHERWISE NOTED.

INSTALLED SO THAT THE BOTTOM OF THE STROBE LENS IS 80" AFF.

BELOW THE CEILING AND AWAY FROM CORNERS.

APPROVED BACKBOXES.

FOUIPMENT ROOM.

PHASE REVERSAL

JURISDICTION IF THEY ARE REQUIRED.

FEET OF THE ELEVATOR CONTROLLER.

WITH NFPA 72 AND ADA REQUIREMENTS.

SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".

AND WITHIN FIVE FEET OF THE FIRE/SMOKE WALL

SOUND LEVEL. WHICHEVER IS GREATER.

AND THE WIRING TO THE RELAY SHALL BE MONITORED BY THE FIRE ALARM SYSTEM.

DRAWINGS FOR THE LOCAL AUTHORITY HAVING JURISDICTION/ FIRE MARSHALL.

38. FIRE ALARM CIRCUITS SHALL MATCH EXISTING CLASS IN EXISTING BUILDINGS.

PROVIDE MANUFACTURED RED CONDUIT UNI ESS OTHERWISE NOTED

3. CARRY ALL INSURANCE REQUIRED TO PROTECT AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THIS 7. GUARANTEE ALL MATERIALS AND WORKMANSHIP ARE FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ARCHITECT/ENGINEER AND OWNER, UNLESS NOTED OTHERWISE IN DIVISION 1. AT NO ADDITIONAL COSTS, PROVIDE THE CORRECTION OF ANY DEFECTS INCLUDING REPAIR OR REPLACEMENT. 3. INCLUDE ALL COSTS ASSOCIATED WITH PERMITS, LICENSES, FEES, INSPECTIONS, TESTING AND TEMPORARY POWER IN THE BID PRICE, UNI ESS NOTED OTHERWISE). IF HAZARDOUS MATERIALS ARE ENCOUNTERED, COMPLY WITH ALL APPLICABLE RULES, REGULATIONS AND GUIDELINES CONCERNING REMOVAL, HANDLING, DISPOSAL AND PROTECTION AGAINST ENVIRONMENTAL EXPOSURE OR POLLUTION. PROVIDE DOCUMENTATION OF SAID COMPLIANCE. D. PROVIDE ELECTRONIC SUBMITTALS (PRODUCT DATA & SHOP DRAWINGS) FOR EACH MAJOR COMPONENT OF THE ELECTRICAL SYSTEM FOR REVIEW BY THE ARCHITECT/ENGINEER AND OWNER, MAJOR COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO.

RACEWAYS, BOXES, WIRE AND CABLE, EQUIPMENT, DEVICES, LIGHT FIXTURES, SWITCHGEAR, PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES, FIRE ALARM SYSTEM, ETC. ALL SUBMITTALLS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR FOR CONFORMANCE WITH THE PROJECT REQUIREMENTS PRIOR TO SUBMITTING TO THE ARCHITECT/ENGINEER. ALLOW A MINIMUM OF TEN (10) BUSINESS DAYS FOR REVIEW BY ARCHITECT/ENGINEER, UNLESS NOTED OTHERWISE IN DIVISION 1. THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE DESIGN BASIS EQUIPMENT SPECIFIED BY DIVISION 26 AND OTHER DIVISIONS. WHERE THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE ARCHITECT/ENGINEER AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO ENSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DESIGN SUBSTITUTION RESULTS IN THE NEED FOR THE ENGINEER TO REVISE THE CONTRACT DOCUMENTS, THE ENGINEER RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.

2. MAINTAIN A CURRENT AND ACCURATE SET OF PROJECT RECORD DOCUMENTS (AS-BUILTS) AT THE SITE THROUGHOUT THE DURATION OF THE PROJECT. RECORD DRAWINGS SHALL BE UPDATED EACH DAY TO REFLECT THE ACTUAL LOCATIONS, SIZES ROUTING. ETC. OF EACH PORTION OF THE ELECTRICAL SYSTEM AFFECTED BY THIS WORK. A FINAL SET OF RECORD DOCUMENTS SHALL BE ISSUED TO THE ARCHITECT/ ENGINEER FOR REVIEW AND THEN SUBMITTED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. PROVIDE RECORD DRAWINGS OF THE ACTUAL INSTALLATION INCLUDING SINGLE LINE DIAGRAM, POWER RISER DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM, SITE PLANS AND ALL ELECTRICAL FLOORPLANS, DETAILS, PANEL SCHEDULES, ETC. 3. PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO OWNER PRIOR TO THE FINAL ACCEPTANCE. THE MANUAL SHALL INCLUDE, AS A MINIMUM, (1) SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. ALSO PROVIDE TWO OPERATIONS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS AND METHOD OF OPERATION FOR EQUIPMENT SHALL BE CLEARLY IDENTIFIED, AND THE NAME, PHONE NUMBER AND ADDRESS OF AT LEAST ONE QUALIFIED

4. INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING, BACKFILLING, SURFACE RESTORATION, REPAIR OF FINISHES, ETC. THAT IS REQUIRED IN ORDER TO MEET THE PROJECT REQUIREMENTS. 5. INCLUDE IN BID ALL COSTS ASSOCIATED WITH TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR USE BY ALL TRADES DURING CONSTRUCTION. REMOVE TEMPORARY POWER AT THE COMPLETION OF THE PROJECT. OBTAIN AND PAY FOR ALL REQUIRED PERMITS FOR TEMPORARY POWER. ENGINEER OF RECORD SHALL BE PROVIDED WITH ADDITIONAL COMPENSATION FROM THE CONTRACTOR WHERE SIGNED & SEALED DRAWINGS ARE REQUESTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD IF REQUIRED BY THE AHJ FOR THE TEMPORARY POWER. 16. LOCATE, IDENTIFY, PROTECT AND DOCUMENT ALL UTILITY LINES LOCATED WITHIN THE PROJECT BOUNDARY. FOR LOCATING SITE UTILITIES, CONTACT ALL LOCAL MUNICIPALITIES AND UTILITIES AT LEAST 48 HOURS PRIOR TO DIGGING. 7. INCLUDE IN BID THE TRANSPORT AND DISPOSAL OR RECYLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL RULES, REGULATIONS AND GUIDELINES APPLICABLE. COMPLY FULLY WITH ALL APPLICABLE STATUTES REGARDING MERCURY- CONTAINING DEVICES, AND WITH ALL LOCAL, STATE AND FEDERAL

APPLICABLE GUIDELINES AT THE TIME OF DISPOSAL, PROVIDE OWNER WITH WRITTEN CERTIFICATION OF ACCEPTED DISPOSAL.

. VERIFY AND COORDINATE LOCATIONS OF ANY MISCELLANEOUS EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (I.E

COPIERS, FAX MACHINES, PRINTERS, KITCHEN APPLIANCES, LAUNDRY APPLIANCES, PROJECTION SCREENS, SHOP TOOLS,

A. ALL ELECTRICAL BOXES SHALL BE METALLIC.

MACHINE, ELEVATORS, ETC.) WITH APPROVED SHOP DRAWINGS, OWNER-PROVIDED CUT SHEETS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL VERIFY AND COORDINATE LOCATIONS AND EXACT ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT PRIOR TO SUBMITTAL OF SHOP DRAWINGS OF ELECTRICAL EQUIPMENT. PROVIDE ALL NECESSARY RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT, ACCESSORIES, ASSOCIATED DISCONNECT SWITCHES, CIRCUIT BREAKERS. CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH APPROPRIATE TRADE'S APPROVED SHOP DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED, UNLESS NOTED

. THIS PROJECT REQUIRES COORDINATION DRAWINGS BY THE CONTRACTOR. PARTICIPATE IN THE COORDINATION DRAWING PREPARATION PROCESS AND PROVIDE ALL NECESSARY INFORMATION REQUIRED TO COORDINATE ALL TRADE INFORMATION. . ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE PROGRESS OF OTHER DIVISIONS/TRADES WHERE WALLS ARE OF TILT-UP OR PRE-CAST CONSTRUCTION. PROVIDE COORDINATION FOR EXACT DIMENSIONS AND

OPENINGS REQUIRED FOR ALL ELECTRICAL COMPONENTS INSTALLED WITHIN SUCH WALLSDURING THE SHOP DRAWING REVIEW PROCESS OF THE WALLS, PRIOR TO CONSTRUCTION OF THE WALLS. LOCATIONS OF VFD'S, DISCONNECTS, MOTOR STARTERS, ETC. FOR HVAC EQUIPMENT ARE DIAGRAMMATIC ON THE PLAN DRAWINGS. EXACT LOCATIONS ARE TO BE COORDINATED WITH CONTRACTOR'S COORDINATION DRAWINGS PRIOR TO ROUGH-IN TO ENSURE PROPER NEC CLEARANCES AND APPROPRIATE MOUNTING SURFACE. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, LANDSCAPE, INTERIOR DESIGN, TECHNOLOGY,

REQUIREMENTS TO BE PERFORMED AS PART OF THE WORK. WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND APPLICABLE SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITTEN FORM. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES OR OWNER'S DESIGN STANDARDS, WHEREIN THE CODE OR OWNER'S DESIGN STANDARDS SHALL GOVERN. . CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTING BID PRICE, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK, SUBMISSION OF A BID PRICE SHALL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE, LATER CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN REASONABLY OBSERVED WILL NOT BE RECOGNIZED. D. COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO

STRUCTURAL, AND VENDOR EQUIPMENT DRAWINGS FOR RELATED INFORMATION AND ADDITIONAL INSTALLATION

SUBMITTING BID PRICE. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. PROVIDE ADEQUATE WORK FORCE AND EQUIPMENT, AND INCLUDE PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, ENSURE THAT LONG LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING. 1. ANY TEMPORARY INTERRUPTION OF POWER REQUIRED FOR THE SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED IN WRITING BY THE OWNER AND SCHEDULED IN ADVANCE. 2. COORDINATE EXACT REQUIREMENTS WITH THE LOCAL UTILITY COMPANIES AND PROVIDERS (ELECTRIC, TELEPHONE, CABLE TV, ETC.) AND INCLUDE ALL COSTS FOR PROVIDING TEMPORARY AND PERMANENT SERVICES REQUIRED FOR THIS PROJECT IN

THE BID PRICE. BID PRICE SHALL INCLUDE, BUT NOT BE LIMITED TO, EXCAVATION, RACEWAYS, BACKFILL, EQUIPMENT,

EQUIPMENT PADS, BACKBOARDS, METERS, GROUNDING, UTILITY ENGINEERING AND IMPACT FEES. 3. CONDUCT WORK OPERATIONS AND DEBRIS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMAL BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. ONGOING IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL THAT IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY LOSSES OR ANY DAMAGE RESULTING FROM THE FAILURE TO ADHERE TO THIS REQUIREMENT. RESTORE DAMAGED ELEMENTS TO ORIGINAL CONDITION TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AND OWNER, AT NO ADDITIONAL COSTS. REPORT OF ANY SUCH OCCURRENCE TO THE ARCHITECT/ENGINEER AND OWNER IMMEDIATELY AND AWAIT WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.

4. COORDINATE THE LOCATION OF ALL LIGHT FIXTURES, DEVICES AND BOXES WITH WINDOWS, MIRRORS, MILLWORK, CABINETS, GLASS CURTAIN WALLS, AND GLASS WALLS PRIOR TO INSTALLATION OF CONDUITS OR BOXES. REVIEW ALL CONTRACT DRAWINGS TO ASCERTAIN ANY CONFLICTS PRIOR TO BIDDING. OBTAIN CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO BID. CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR WORK REQUIRED TO RELOCATE OUTLET BOXES OR RACEWAYS FOR COORDINATION WITH OTHER TRADE'S WORK.

1. FIRE PROTECTION PIPING SHALL NOT BE USED FOR GROUNDING. ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR. METAL RACEWAYS SHALL NOT BE USED AS THE SOLE EQUIPMENT GROUND. 3. WHERE A PHASE CONDUCTOR IS INCREASED IN SIZE DUE TO VOLTAGE DROP, THE EQUIPMENT GROUND CONDUCTOR SHALL BE INCREASED IN SIZE PROPORTIONATELY. 4. PROVIDE A GROUND BUS BAR IN EACH ELECTRICAL ROOM AND TELECOMMUNICATIONS / IDF/ MDF ROOM FOR ALL NEW CONSTRUCTION AND NEW ROOMS IN EXISTING CONSTRUCTION, AND IN EXISTING CONSTRUCTION WHERE THERE IS NONE INSTALLED WITHIN AN EXISTING ROOM.

PROVIDE TYPED PANEL DIRECTORIES FOR ALL NEW PANELBOARDS, AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT

PANEL DIRECTORIES

CONNECTED TO.

WHERE APPLICABLE.

ARCHITECT/ENGINEER.

LIGHT FIXTURES.

EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OR INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE WEATHERPROOF, NEMA 3R, AS A MINIMUM, WHETHER INDICATED ON THE CONTRACT DRAWINGS OR NOT. TERMINATION PROVISIONS FOR ALL ELECTRICAL EQUIPMENT (PANELBOARDS, SWITCHBOARD, TRANSFORMERS, DISCONNECT SWITCHES, MOTOR CONTROLLERS, AUTOMATIC TRANSFER SWITCHES, ENCLOSED CIRCUIT BREAKERS, BUSWAYS, ETC.) SHALL BE LISTED AND IDENTIFIED FOR USE WITH MINIMUM 75 DEG. F CONDUCTORS IN ACCORDANCE WITH NEC. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC. . THE ELECTRICAL DEDICATED EQUIPMENT SPACE EXTENDING FROM FLOOR TO 6' ABOVE ELECTRICAL EQUIPMENT OR TO THE

STRUCTURAL CEILING, WHICHEVER DISTANCE IS LOWER, WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD

ELECTRICAL GENERAL NOTES

PROVIDE A REINFORCED CONCRETE PAD, SIZED 4" LARGER IN ALL DIRECTIONS THAN THE FOOTPRINT OF THE EQUIPMENT, AND 4" HIGH, FOR ALL FREESTANDING, FLOOR-MOUNTED ELECTRICAL EQUIPMENT. PROVIDE VIBRATION ISOLATORS AND/OR ANCHORS PER MANUFACTURER'S INSTRUCTIONS PROVIDE HACR RATED CIRCUIT BREAKER FOR ALL HVAC EQUIPMENT. ALL PANELBOARDS OR DISCONNECT SWITCHES LOCATED IN KITCHEN AREAS SHALL BE STAINLESS STEEL (COVER AND DOOR WHERE PANEL IS FLUSH MOUNTED; PANEL BOX, COVER & DOOR WHERE SURFACE MOUNTED). PROVIDE SURGE PROTECTION DEVICE FOR ALL MAIN SERVICE EQUIPMENT, PANELBOARDS SERVING SENSITIVE ELECTRONIC

MUST BE CLEAR OF ALL PIPING, DUCTS, ARCHITECTURAL APPURTENANCES AND OTHER EQUIPMENT FOREIGN TO THE

EQUIPMENT (DATA RACKS) OR COMPUTERS, EMERGENCY SWITCHBOARDS AND PANELBOARDS, LIGHTING PANELS SERVING EXTERIOR LIGHTING, POWER CIRCUITS OR LOW VOLTAGE (FIRE ALARM, TELECOMMUNICATIONS) EXITING THE BUILDING. PROVIDE MINIMUM 30A/3P BREAKER IN BRANCH CIRCUIT PANELBOARDS AND 60A/3P IN DISTRIBUTION PANELBOARDS OR SWITCHBOARDS, UNLESS NOTED OTHERWISE. OR PER THE SPD MANUFACTURER'S RECOMMENDATIONS FOR SURGE PROTECTION DEVICE. PROVIDE ARC ENERGY REDUCING MAINTENANCE SWITCH FOR ANY BREAKER RATED (OR ABLE TO BE ADJUSTED TO) 1200A OR HIGHER UNLESS OTHER ARC ENERGY REDUCTION MEANS MEETING NEC 240.87 IS INDICATED ON DRAWINGS/SPECIFICATIONS OF OTHERWISE PROVIDED

LECTRICAL DEVICES OUTLET BOXES, JUNCTION BOXES

ELECTRICAL INSTALLATION IN ACCORDANCE WITH NEC.

LIGHT SWITCHES SHALL BE MOUNTED 48 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS NOTED RECEPTACLES, VOICE/DATA OUTLETS AND WALL FURNITURE FEEDS SHALL BE MOUNTED 18 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS NOTED OTHERWISE. ABOVE COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK SPLASH TO CENTERLINE OF DEVICE, UNLESS NOTED OTHERWIS . IT IS THE INTENT THAT ALL DEVICE OUTLET BOXES (POWER AND SYSTEMS) BE FLUSH MOUNTED IN WALLS. CEILINGS OR FLOORS AND JUNCTION BOXES FLUSH MOUNTED IN WALLS, CEILINGS, OR FLOORS, OR CONCEALED ABOVE ACCESSIBLE CEILINGS, AND

NOT SURFACE MOUNTED, UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, OR UNLESS THE ARCHITECT/ENGINEER GRANTS WRITTEN PERMISSION 4. ALL COMPONENTS OF THE ELECTRICAL SYSTEM (INCLUDE RACEWAYS, ELECTRICAL EQUIPMENT, OUTLET BOXES, JUNCTION BOXES, ETC.) LOCATED IN A HAZARDOUS (CLASSIFIED) LOCATION SHALL BE APPROVED FOR USE IN SAID LOCATION, AS DEFINED BY THE NEC, WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR NOT. 5. ALL DEVICES SHALL BE MOUNTED VERTICALLY, UNLESS NOTED OTHERWISE.

. WHERE DEVICES ARE SHOWN IN WALLS BACK-TO-BACK ON OPPOSITE SIDES, INSTALL SO THAT THEY ARE SEPARATED BY AT RECEPTACLES OR JUNCTION BOXES FOR ELECTRIC WATER COOLERS AND VENDING MACHINES SHALL BE LOCATED DIRECTL' BEHIND SAID APPLIANCE, CONCEALED FROM DIRECT VIEW, RECEPTACLES AND/OR HARD WIRED EQUIPMENT CONNECTIONS SHALL BE PROTECTED BY A READILY ACCESSIBLE GFCI FEED-THRU DEVICE LOCATED IMMEDIATELY ADJACENT TO THE APPLIANCE OR BE PROTECTED BY GFCI BREAKER IN THE PANELBOARD. ALL GFCI DEVICES MUST BE READILY ACCESSIBLE PER

9. ALL EXTERIOR RECEPTACLES OR RECEPTACLES LOCATED IN AREAS SUBJECT TO MOISTURE (PARKING GARAGE, WASHDOWN

ALL RECEPTACLES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP.

AREAS IN KITCHEN, ETC) SHALL BE GFCI TYPE. ALL EXTERIOR RECEPTACLES SHALL WE PROVIDED WITH CAST METAL, IN-USE COVER UNLESS NOTED OTHERWISE. . ALL RECEPTACLES LOCATED IN KITCHENS, BATHROOMS, MECHANICAL ROOMS, JANITOR CLOSETS, ELEVATOR SHAFTS, ELEVATOR EQUIPMENT ROOMS, FOR ELEVATOR SUMP PUMP(S) OR INSTALLED WITHIN 6' OF THE INSIDE FACE OF A SINK, SHALL BE GFCI TYPE OR GFCI PROTECTED. 1. ALL RECEPTACLES LOCATED IN CHILD-CARE FACILITIES, DWELLING UNITS, HOTEL/MOTEL GUEST ROOMS, PEDIATRIC CLINICS OR PEDIATRIC CAREA AREAS, AND OTHER AREAS AS REQUIRED BY NEC AND LOCAL CODE REQUIREMENTS SHALL BE TAMPER

. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE-RESISTIVE ASSEMBLIES, THEY SHALL BE INSTALLED WITHOUT AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:

B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE. BOX OPENING SHALL NOT EXCEED 16 SQUARE INCHES.

. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL) E. PROVIDE A WALL AROUND OUTLETS LARGER THAN 16 SQUARE INCHES. THE INTEGRITY OF THE WALL RATING SHALL BE

THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET. G. OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.

H. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 1/8 INCH BETWEEN THE EDGES OF THE

OUTLET BOX AND THE EDGES OF THE OPENING.

FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS THE ARCHITECT/ENGINEER GRANTS WRITTEN 2. ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS, INCLUDING LOW VOLTAGE SYSTEMS, SHALL BE INSTALLED IN A COMPLETE RACEWAY SYSTEM (CONDUIT) UNLESS SPECIFICALLY NOTED OTHERWISE. THE USE OF ELECTRICAL NON-METALLIC TUBING (ENT) AND LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT (LFNC) ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS THE ARCHITECT/ENGINEER OR OWNER GRANTS WRITTEN PERMISSION.

CONNECTIONS TO TRANSFORMERS, AHU'S, AND PUMPS SHALL BE WITH LIGUIDTIGHT, FLEXIBLE METAL CONDUIT. 5. NO PVC CONDUIT MAY BE USED INSIDE OF BUILDING UNLESS ROUTED UNDERGROUND. AND UNLESS NOTED OTHERWISE. 6. ALL CONDUIT TERMINATIONS AT TERMINAL BOARDS ARE TO HAVE GROUNDING BUSHINGS AT CONDUIT ENDS.

7. ALL CONDUITS ARE TO BE CONCEALED UNLESS IMPOSSIBLE DUE TO EXISTING CONDITIONS (I.E., EXPOSED CEILINGS, BUILDING EXTERIOR WALL RUNS). CONCEAL ALL CONDUITS ABOVE CEILINGS OR IN WALLS AND MILLWORK, WHERE EXISTING CONDITIONS DICTATE THAT CONDUITS CANNOT BE CONCEALED. NOTIFY ARCHITECT/ENGINEER PRIOR TO INSTALLING CONDUIT FOR RESOLUTION TO ROUTING. SEAL ALL PENETRATIONS AND OPENINGS MADE DURING EXECUTION OF WORK IN FIRE-RATED AND SMOKE-RATED WALLS WALLS SHALL BE SEALED WITH UL-APPROVED PRODUCT WITH THE SAME OR GREATER RATING OF WALL PENETRATED. 9. PROVIDE ALL PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WHERE REQUIRED. COORDINATE LOCATIONS

AND SIZES WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS, FIELD CONDITIONS AND WORK OF ALL OTHER DIVISIONS/TRADES. ALL OPENINGS ARE TO BE SEALED WATERTIGHT. 10. ALL RACEWAYS THAT TURN UP THROUGH THE SLAB OR INTO ELECTRICAL EQUIPMENT FROM UNDERGROUND SHALL BE RIGID GALVANIZED STEEL (RGS) WITH BITUMASTIC COATING FOR AT LEAST THE FINAL 18" LENGTH. THE USE OF NON-METALLIC CONDUIT ABOVE GRADE IS PROHIBITED. 1. PANEL SCHEDULES AND FLOOR PLANS MAY INDICATE DEDICATED HOMERUNS FOR EACH BRANCH CIRCUIT. BRANCH CIRCUITS MAY BE GROUPED IN A COMMON HOMERUN WHERE THE HOMERUN DOES NOT EXCEED 3 PHASE CONDUCTORS. 3 INCREASED AS NECESSARY TO COMPLY WITH THE NEC FOR 40% MAXIMUM FILL AND DERATING REQUIREMENTS.

NEUTRAL CONDUCTORS, AND 1 EQUIPMENT GROUND. THE HOMERUN RACEWAY SIZE AND CONDUCTOR SIZE SHALL BE . PROVIDE SEAL OFF FITTINGS, APPROVED FOR SUCH USE, WHERE RACEWAYS PENETRATE BETWEEN A DRY, CONDITIONED ENVIRONMENT AND THE EXTERIOR OR OTHER WET ENVIRONMENTS AND ADDITIONAL AREAS WHERE CONDUITS PASS FROM WARM TO COLD LOCATIONS SUCH AS WALK-IN COOLERS OR FREEZERS, BOILER ROOMS, ETC. 3. PROVIDE POLYOLEFIN JET-LINE #232 (NYLON PULL STRING) IN EACH EMPTY CONDUIT WITH ENGRAVED METAL TAG INDICATING CONDUIT DESIGNATION. 14. ALL HOMERUNS SHALL BE IN 3/4" RACEWAY MINIMUM. 1/2" RACEWAY IS ACCEPTABLE FOR A SINGLE CIRCUIT FROM THE HOMERUN TO REMAINING DEVICES.

15. CONTRACTOR SHALL USE COMPRESSION FITTINGS ONLY FOR EMT CONDUIT. 16. WHERE RACEWAYS ARE INSTALLED IN SLABS, THE MINIMUM SPACING, MAXIMUM RACEWAY SIZE, AND ANY OTHER STRUCTURAL LIMITATIONS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS AND THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

 ALL WIRE SHALL BE SIZED AS SHOWN ON THE DRAWINGS. IF NO WIRE SIZE IS SHOWN. THEN WIRE SHALL BE #12 AWG. 2. BRANCH CIRCUITS SHALL BE INCREASED IN SIZE AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP. FROM LENGTH OF CIRCUIT DUE TO FIELD ROUTING. FINAL INSTALLATION SHALL NOT EXCEED A MAXIMUM OF 3% VOLTAGE DROP FOR BRANCH CIRCUITS. REFER TO VOLTAGE DROP TABLE BELOW FOR CONDUCTOR SIZES FOR BRANCH CIRCUITS AS FOLLOWS: A. 120V. 20A CIRCUITS SHALL BE:

i. #12 FROM 0-70 FT ii. #10 FROM 71-115FT iii. #8 FROM 116-180FT B. 277V, 20A CIRCUITS SHALL BE #12 FROM 0-140FT

ii. #10 FROM 141-220FT

iii. #8 FROM 221-350FT ANYTHING LONGER THAN THE ABOVE SHALL BE SUBMITTED TO THE ENGINEER WITH CALCULATIONS FOR APPROVAL. . ALL CONDUCTORS IN CABINETS MUST BE CAREFULLY FORMED AND HARNESSED SO THAT EACH CONDUCTOR DROPS OFF DIRECTLY OPPOSITE TO TERMINAL. 4. ALL WIRE SIZES ARE BASED ON AMPACITIES FOR 60 DEG F TEMPERATURE RATING FROM 0-100A AND 75 DEG. F TEMPERATURE

RATING LISTED IN NEC FOR 100A AND ABOVE. ALL CONDUCTORS SHALL BE COPPER, THHN/THWN: SOLID FOR #10 AWG AND SMALLER; STRANDED FOR #8 AWG AND LARGER. 5. CONDUCTORS USED IN WET LOCATIONS, INCLUDING BUT NOT LIMITED TO UNDERGROUND CONDUITS/ DUCTBANKS AND EXTERIOR CONDUITS SHALL COMPLY WITH NEC 310.10 AND BE LISTED FOR USE IN WET LOCATIONS. 7. ALL POWER CIRCUITS HAVE BEEN DESIGNED TO MEET 2% OR LESS VOLTAGE DROP FOR FEEDERS, AND 3% OR LESS VOLTAGE

DIRECTORIES SHALL REFLECT PROJECT AS-BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE 1. THE EQUIPMENT GROUNDING TERMINAL BARS OF THE NORMAL AND ESSENTIAL ELECTRICAL SYSTEM PANELBOARDS

iv. MOVEABLE METAL CABINETS

E. EQUIPMENT:

EACH LOAD (I.E., RECEPTACLES-RMS 501,503), ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM SIGNAGE INSTALLED IN

MOTOR CONTROL CENTER, SAFETY SWITCH, ENCLOSED CIRCUIT BREAKER, CABINET, STEP-DOWN TRANSFORMER, TRANSFER

SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT, NAME TAG SHALL INCLUDE

PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS FOR EACH DISTRIBUTION BREAKER OR BRANCH CIRCUIT BREAKER IN

5. PROVIDE LABELS ON THE INSIDE OF EACH DEVICE COVERPLATE, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) DEVICE IS

. PROVIDE NEATLY, HANDWRITTEN IDENTIFICATION ON THE EXTERIOR COVER OF ALL JUNCTION BOXES, PULLBOXES AND

PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BUILDING STATING THAT THE MAIN SERVICE

PROVIDE A PERMANENT LABEL ON ALL PANELBOARDS, SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROL CENTERS AND

). Provide engraved phenolic label on all new service equipment to indicate the maximum $\,$ available faul $^{\circ}$

EQUIPMENT WHEN MODIFICATIONS OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE.

ENERGY VALUES SHALL BE INCLUDED ON THE ARC FLASH WARNING LABELS FOR EACH EQUIPMENT.

FIT INTO CEILING SHALL BE REPORTED TO ARCHITECT/ENGINEER PRIOR TO ORDERING.

ALL LIGHT FIXTURES SHALL BE PROVIDED COMPLETE WITH LAMPS, UNLESS OTHERWISE NOTED.

CURRENT AND THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED. PROVIDE LABEL ON ALL EXISTING SERVICE

1. PROVIDE ARC FLASH HAZARD ANALYSIS PER NFPA 70E FOR ANY EQUIPMENT INCLUDED WITHIN THE SCOPE OF WORK. INCIDENT

LIGHT FIXTURES SUPPORTED BY CEILING GRID SHALL BE SUPPORTED AS FOLLOWS: LIGHT FIXTURES WEIGHING LESS THAN 10

FIXTURES WEIGHING 10 POUNDS OR MORE SHALL HAVE (2) 12-GAUGE HANGER WIRES ATTACHED AT OPPOSITE CORNERS OF

COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES IN LAY-IN AND GYPBOARD CEILINGS WITH ARCHITECTURAL REFLECTED

CEILING PLANS. AND WALL MOUNTED EXTERIOR AND INTERIOR LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS PRIOR TO

LIGHTING PLANS, PROVIDE THE HIGHEST QUANTITY OF FIXTURES IN THE BID PRICE. THE DISCREPANCY IN QUANTITY SHALL BE

BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE HIGHEST QUANTITY SHALL BE CIRCUITED TO THE LOCAL

ROOM OR AREA LIGHTING CIRCUITS AND LIGHTING CONTROL DEVICES, UNLESS OTHERWISE DIRECTED IN WRITING BY THE

VERIFY ACTUAL CEILING CONSTRUCTION TYPE AS DEFINED ON THE ARCHITECTURAL DRAWINGS AND FURNISH ALL LIGHT

FIXTURE CATALOG NUMBER. VERIFY THE DEPTH OF ALL RECESSED LIGHT FIXTURES WITH THE ARCHITECTURAL DRAWINGS

PRIOR TO ORDERING LIGHT FIXTURES. ANY DISCREPANCIES THAT WOULD CAUSE THE RECESSED LIGHT FIXTURES NOT TO

LIGHT FIXTURES RECESSED IN FIRE-RATED CEILINGS SHALL BE PROVIDED WITH APPROVED FIRE-RATED ENCLOSURE WITH A

FIRE RATING EQUAL TO THAT OF THE CEILING. PROVIDE A MINIMUM OF 3" CLEARANCE FROM SIDES AND TOP OF RECESSED

VOLTAGES INDICATED. COORDINATE THE CATALOG NUMBERS WITH THE EXACT FIXTURE MOUNTING AND TRIM REQUIRED BY

FIXTURES WITH INTEGRAL BATTERY PACKS, AND BATTERY PACKS INTEGRAL TO LIGHT FIXTURES, SHALL BE WIRED AHEAD OF

PROVIDE UL WET LABEL OR IP67 RATED LIGHT FIXTURES FOR ALL FIXTURES LOCATED OUTSIDE OR IN PARKING GARAGES, IN

EXTERIOR LIGHTING BALLASTS/DRIVERS SHALL HAVE A MINMUM STARTING TEMPERATURE OF -40 DEGREE C, AND A NORMAL

D. PROVIDE FUSING FOR ALL EXTERIOR LIGHT FIXTURES, OR FIXTURES IN PARKING GARAGES OR OPEN STRUCTURES.

. PROVIDE ALL TEMPORARY NORMAL LIGHTING. EMERGENCY LIGHTING AND EXIT SIGNS REQUIRED DURING THE PROJECT

. COORDINATE EXACT FOUNDATION AND/OR COMPACTING REQUIREMENTS FOR ALL POLE MOUNTED LIGHT FIXTURES WITH

MANUFACTURER'S AND/OR INSTALLER'S STRUCTURAL ENGINEER. POLE BASES SHALL MEET OR EXCEED ALL WIND LOAD

RATINGS, GUST FACTORS, IMPORTANCE FACTORS, ETC. REQUIRED BY NATIONAL AND/OR LOCAL CODES. SHOP DRAWINGS

SHALL INCLUDE STRUCTURAL DRAWINGS FOR ALL POLE BASES, POLE, ASSEMBLY AND OVERTURN CALCULATIONS REQUIRED

IN THIS PROJECT, SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE PROJECT STATE.

3. REFER TO LIGHT FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES. DESCRIPTIONS. CATALOG NUMBERS AND ADDITIONAL

PROVIDE 120V 20A 5-20R RECEPTACLE AT ALL FAN COIL UNITS FOR CONDENSATE PUMP POWER AND HOT WATER

RECIRCULATING PUMPS, WHETHER SHOWN ON PLANS OR NOT. RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V

PROVIDE 120V CONNECTION TO ALL MOTORORIZED DAMPERS INDICATED ON MECHANICAL PLANS, WHETHER SHOWN ON

DIVISION 26 DRAWINGS OR NOT. FIRE/SMOKE DAMPER CIRCUITS ARE TO BE PROVIDED AS SHOWN ON FIRE SMOKE DAMPER

COORDINATE RECEPTACLE LOCATIONS WITH TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS SO THAT A 120V

THE INFRASTRUCTURE FOR THE ACCESS CONTROL/ CCTV OR SECURITY ELECTRONICS SYSTEM (CONDUITS, ELECTRICAL

INSTALLATION OF THE CONDUITS AND ELECTRICAL BOXES SHALL BE UNDER THE DIRECT SUPERVISION OF THE ACCESS

CONTROL/ CCTV SYSTEM CONTRACTOR. COORDINATE EXACT LOCATIONS OF DEVICES, RACEWAY LOCATIONS, SIZES AND

THE INFRASTRUCTURE FOR THE VOICE/DATA TELECOMMUNICATIONS SYSTEM (CONDUITS, ELECTRICAL BOXES) SHALL BE

INSTALLED BY DIVISION 26. THE TELECOMMUNICATIONS CONTRACTOR SHALL PROVIDE AND INSTALL THE WIRE AND CABLE

FOR THE SYSTEM AND ALL REQUIRED EQUIPMENT AND COMPONENTS. INSTALLATION OF THE CONDUITS AND ELECTRICAL

BOXES SHALL BE UNDER THE DIRECT SUPERVISION OF THE TELECOMMUNICATIONS CONTRACTOR. COORDINATE EXACT

LOCATIONS OF DEVICES, RACEWAY LOCATIONS, SIZES AND QUANTITY, AND CONDUIT STUB-UPS PRIOR TO ROUGH IN.

BOXES) SHALL BE INSTALLED BY DIVISION 26. THE ACCESS CONTROL/ CCTV OR SECURITY ELECTRONICS SYSTEM

CONTRACTOR SHALL PROVIDE AND INSTALL THE WIRE AND CABLE FOR THE SYSTEM AND ALL REQUIRED EQUIPMENT.

20A 5-20R RECEPTACLE IS LOCATED ADJACENT TO EACH VOICE/DATA OUTLET AND TV OUTLET INDICATED ON PLANS.

RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V RECEPTACLE CIRCUIT, UNLESS OTHERWISE NOTED ON PLANS.

MODIFY ALL LIGHT FIXTURE CATALOG NUMBERS AS REQUIRED TO COORDINATE WITH THE LIGHTING BRANCH CIRCUIT

7. ALL EXIT LIGHTS, LIGHT FIXTURES INDICATED WITH UNSWITCHED CIRCUIT (NIGHTLIGHT N/L), EMERGENCY TWIN-HEAD

FIXTURES WITH THE CORRECT MOUNTING DEVICES WHETHER OR NOT SUCH VARIATIONS ARE INDICATED BY THE LIGHT

INSTALLATION. WHERE THE QUANTITY OF LIGHTS DIFFERS BETWEEN THE ARCHITECTURAL RCP AND THE ELECTRICAL

POUNDS SHALL HAVE 12-GAUGE HANGER WIRE CONNECTED FROM THE LIGHT FIXTURE TO THE STRUCTURE ABOVE. LIGHT

PROVIDE REQUIRED IDENTIFICATION PER ANSI STANDARDS, NEC REQUIREMENTS, AND OWNER'S PUBLISHED DESIGN STANDARDS

DISTRIBUTION PANELS STATING "DO NOT WORK ON EQUIPMENT WHILE ENERGIZED. LOCK-OUT TAG-OUT REQUIRED".

FIELD. COORDINATE EXACT ROOM NUMBERS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO COMPLETION OF

SWITCH, ETC., AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM.

WIREWAYS, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) CONTAINED WITHIN.

LOAD DESCRIPTION AND ROOM NUMBER FOR EACH LOAD.

DISCONNECTING MEANS IS LOCATED INSIDE.

THE LIGHT FIXTURE TO THE STRUCTURE ABOVE.

THE CEILING IN WHICH EACH FIXTURE IS BEING INSTALLED

ANY LOCAL SWITCHING OR LIGHTING CONTROLS.

AMBIENT OPERATING TEMPERATURE OF 40 DEGREE C

MISCELLANEOUS CIRCUIT INSTALLATION REQUIREMENTS

QUANTITY, AND CONDUIT STUB-UPS PRIOR TO ROUGH IN.

RECEPTACLE CIRCUIT.

DETAIL ON THE DETAILS SHEET.

TECHNOLOGY REQUIREMENTS

INFORMATION PERTINENT TO THE LIGHT FIXTURE OR INSTALLATION THEREOF.

15. EACH LIGHTING CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL

14. COORDINATE LIGHT FIXTURE TRIM TYPE AND FINISH COLOR WITH ARCHITECT PRIOR TO ORDERING.

SHOWERS, OR OPEN STRUCTURES.

CONSTRUCTION PHASE.

EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBER(S) FOR SERVING THE SAME PATIENT VICINITY SHALL BE BONDED TOGETHER WITH AN INSULATED, CONTINUOUS, COPPER CONDUCTOR NOT SMALLER THAN #10 AWG. 2. CRITICAL AND LIFE SAFETY LIGHT SWITCHES SHALL BE ROUTED IN CONDUIT AND BOXES OTHER THAN THAT FOR NORMAL BRANCH, ESSENTIAL SYSTEM SWITCHES SHALL BE RED IN COLOR. PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS ON EACH SWITCHBOARD, SWITCHGEAR, DISTRIBUTION PANEL, PANELBOARD 3. MAINTAIN SEPARATION AMONG EACH TYPE OF ESSENTIAL AND NON-ESSENTIAL POWER WIRING, LIFE SAFETY, CRITICAL, EQUIPMENT, AND NORMAL WIRING SHALL BE INSTALLED TO MAINTAIN NEC REQUIRED SEPARATION OF EACH BRANCH OF ESSENTIAL POWER. 4. PATIENT CARE AREAS SHALL BE PROVIDED WITH GROUNDING IN ACCORDANCE WITH NEC 517.

5. NON-METALLIC RACEWAYS SHALL NOT BE USED TO SERVE ANY PATIENT CARE SPACE. ALL WIRING SHALL BE MECHCANICALLY PROTECTED BY INSTALLATION IN METALLIC RACEWAYS. 6. CONTRACTOR SHALL PERFORM A COMPLETE EQUIPOTENTIAL GROUND TEST IN ACCORDANCE WITH NFPA 99. TEST ALL 1. ARC FLASH DANGER/WARNING LABELS SHALL BE APPLIED TO SWITCHBOARD, PANELBOARDS, AND EQUIPMENT CONTROLLERS PE METAL CONDUCTIVE SURFACES LIKELY TO BECOME ENERGIZED WITHIN ALL PATIENT CARE AREAS. TEST ALL LARGE CONDUCTIVE SURFACES LIKELY TO BECOME ENERGIZED WITHIN A VOLUME DEFINED AS 6 FOOT FROM THE PATIENT BED HORIZONTALLY OR 7 FOOT 6 INCHES VERTICALLY AS FOLLOWS:

A. LARGE METAL SURFACES NOT LIKELY TO BE ENERGIZED, WHICH DO NOT REQUIRE TESTING: WINDOW FRAMES ii. DOOR FRAMES iii. FLOOR DRAINS

> ONE OF THE FOLLOWING: i. THE GROUND BUS OF THE PANELBOARD OR ISOLATED POWER SYSTEM PANEL SUPPLYING THE PATIENT CARE ii. GROUNDING POINT, IN OR NEAR THE ROOM UNDER TEST, THAT IS ELECTRICALLY REMOTE FROM THE RECETPACLES. iii. GROUNDING CONTACT OF A RECEPTACLE THAT IS POWERED FROM A DIFFERENT BRANCH CIRCUIT FROM THE

3. VOLTAGE AND IMPEDANCE MEASUREMENTS SHALL BE TAKEN WITH RESPECT TO A REFERENCE POINT, WHICH SHALL BE

RECEPTACLE UNDER TEST. C. TEST METHOD: i. MEASURE VOLTAGE FROM REFERENCE POINT TO CONDUCTIVE SURFACES AND ALL RECEPTACLE GROUND CONTACTS.

ii. MEASURE IMPEDANCE BETWEEN REFERENCE POINT AND RECEPTACLE GROUND CONTACTS. iii. CHECK FOR PROPER POLARITY iv. IDENTIFY THE REFERENCE GROUND FOR EACH ROOM ON THE GROUND TEST REPORT.). MAXIMUM ACCEPTABLE VALUES: i. VOLTAGE: 20mV ii. IMPEDANCE 0.1ohm

i. MILLIVOLT METER WITH 1kohm IMPEDANCE AND PROPER FREQUENCY RESPONSE. IN ACCORDANCE WITH NFPA 99. ii. POLARITY TESTER GROUND TEST REPORT: i. SUBMIT COMPLETE TYPED GROUND TEST REPORT ii MAKE COPIES AVAILABLE AT THE FINAL INSPECTION

SAMPLING OF TEST LOCATIONS PER AUTHORITY HAVING JURISDICATION.

iii. ENSURE METER USED FOR EQUIPOTENTIAL TESTING IS ON-SITE DURING FINAL INSPECTION TO DEMONSTRATE A

DYER BROWN & ASSOCIATES INC

DYER BROWN

976 BRADY AVE NW ATLANTA GA 30318

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SEALS

T 404 606 6469

GRADY HEALTH 80 JESSE HILL JR DRIV

CAFETERIA RENOVATION

PROGRESS BID SET

11/26/2024

ELECTRICAL GENERAL NOTES

E0.02

C	411	el: 2CNBB												ISTI
	Loc	ation:				_	URFACE		Phase / W			20V / 3 / 4		100
÷	• •	From:				osure: T	_		leight Bus				Mains Type: MCB MCB Rating:	_
(N)	CKT	Circuit Description	Trip(A)	Р	A (I	(VA)	B (K	VA)	C (K	(VA)	Р	Trip(A)	Circuit Description	СКТ
		VAV	20	1	1.920	1.920					1	20	REC 2C007 -B	2
		REC 2C007 BREAK AREA	20	1			1.920	1.920			1	20	REC 2C007 -C	4
_		REC RESTROOM IN 2C047	20	1					1.920	1.920	1	20	REC 2C007 -D	6
_		LIGHTING 2C047 RESTROO, CORRIDOR, 2C007 -B,	20	1	1.920	1.920					1	20	REC 2C007 CORRIDOR	8
+		EXISTING CIRCUIT	20	1			1.920	1.920	4 000	4.000	1	20	REC 2C007, 2C007 -C	10
-		EXISTING CIRCUIT	20	1	4.000	4.000			1.920	1.920	1	20	REC 2C007 -F	12
+		EXISTING CIRCUIT	20	1	1.920	1.920	4.000	4.000			1	20	EXISTING CIRCUIT	14
+		EXISTING CIRCUIT	20	1			1.920	1.920	4.000	4.000	1	20	EXISTING CIRCUIT	_
+		EXISTING CIRCUIT	20	1	1.000	1.000			1.920	1.920	1	20	EXISTING CIRCUIT	18 20
+		EXISTING CIRCUIT	20	1	1.920	1.920	1.000	1.000			1	20	EXISTING CIRCUIT	20
+		EXISTING CIRCUIT	20 20	1			1.920	1.920	1.000	1.920	1	20	EXISTING CIRCUIT	24
+		EXISTING CIRCUIT		1					1.920	1.920	1		EXISTING CIRCUIT	26
+		Space Space		1							1		Space	28
+				1							1		Space	30
+		Space Space		1							1		Space Space	32
+		Space		1							1		Space	34
_		Space		1							1		Space	36
+		Space		1							1		Space	38
+		Space		1							1		Space	40
+		Space		1							1		Space	42
		Connected Phase	Load (K		15	.360	15.3	360	15.		 		Горасс	72
		Connected Pha		- 1		3.000	128.			.000	J			
oad	d Cl	assification			ted Loa		emand Fa		Dema	nd Load			Panel Totals	
GHT	ING			192	20 VA		100.00%		19:	20 VA				
ECE	PTAC	LE		441	60 VA		61.32%		270	080 VA		Total	Connected Load (KVA): 46.080	
													tal Demand Load (KVA): 29.000	
													tal Demand Current (A): 80	
												1	• •	
												l		
												l		
												l		
												1		
ane	l Key	ynotes (KN):												

Su		ation: From:				inting: SI osure: T`			Phase / W leight Bu			20V / 3 / 4	4 K.A.I.C. Rating: BUS Rati Mains Type: MCB MCB Rati	ng: 100 A ng:
	СКТ		Trip(A) P	A (I	(VA)	В (К	(VA)		KVA)	_	Trip(A)	Circuit Description	CKT
	1	SERVERY LIGHTS	20	1	1.920	0.000					1	20	Spare	2
	3	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	4
		EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	6
		EXISTING CIRCUIT	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	8
		EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	10
		EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	12
		Spare	20	1	0.000	0.000					1	20	Spare	14
		Spare	20	1			0.000	0.000			1	20	Spare	16
		Spare	20	1					0.000	1.920	1	20	BEVERAGE COOLER	18
		Spare	20	1	0.000	1.920					1	20	BEVERAGE COOLER	20
		Spare	20	1			0.000				1		Space	22
		Space		1							1		Space	24
		Spare	20	1	0.000						1		Space	26
		Spare	20	1			0.000				1		Space	28
		Space		1							1		Space	30
		Space		1							1		Space	32
		Space		1							1		Space	34
		Space		1						1.920	1	20	BEVERAGE COOLER	36
		Space		1		0.000					1	20	Spare	38
		Space		1				1.920			1	20	BEVERAGE COOLER	40
	41	Space		1						1.920	1	20	EXISTING CIRCUIT	42
		Connected Pha		- 1		000 000	9.6			.440 I.462				
Ωa	d CI	Connected Plassification			ted Loa		emand Fa			nd Load	1	Ι	Panel Totals	
	TING	assincation	- 0011		60 VA	<u>u D</u>	100.00%			760 VA		 	T dilet Totals	
	EPTAC	N F			60 VA		82.55%			680 VA		Total	Connected Load (KVA): 30.720	
VA()LL			00 VA	_	100.00%			600 VA			tal Demand Load (KVA): 28.040	
VAC				900	JU VA		100.00%		90	000 VA			tal Demand Current (A): 78	
						_						۱ '	tal Demand Current (A). 10	
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_												ł		

Loc													EXISTIN
	cation:				_	SURFACE			/ires: 208		20V / 3 /		ing: 100 A
upply	From:			Encl	sure:	TYPE 1	Max H	leight Bu	sing: Yes			Mains Type: MCB MCB Rati	ing:
ι скт	Circuit Description	Trip(A)	P	A (K	(VA)	B (K	(VA)	C (I	(VA)	Р	Trip(A)	Circuit Description	CKT
1	EMERGENCY & EXIT LIGHTS 2C007-A, -B, -C, -D, -E, -F	20	1	1.920	1.920					1	20	EXIT LIGHTS "C" AREA	2
3	FSD "C" CORRIDOR	20	1			1.920				1		Space	4
5	REC 2C029	20	1					1.920		1		Space	6
7	Space		1							1		Space	8
9	Space		1							1		Space	10
11	Space		1							1		Space	12
13	Space		1		1.920					1	20	REC 2E005	14
15	Space		1				1.920			1	20	REC 2E005	16
17	Space		1							1		Space	18
19	Space		1							1		Space	20
21	Space		1							1		Space	22
23	Space		1							1		Space	24
25	Space		1							1		Space	26
27	Space		1							1		Space	28
29	Space		1							1		Space	30
31	Space		1							1		Space	32
33	Space		1							1		Space	34
35	Space		1							1		Space	36
37	EXISTING CIRCUIT	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	38
39	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	40
41	EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	42
43	Space		1							1		Space	44
45	Space		1							1		Space	46
47	Space		1							1		Space	48
	Connected Phase	Load (K	VA)	9.6	00	7.6	80	5.	760				
	Connected Pha	se Amps	(A)	82.4	462	66.	462	48.	.000				
ad C	lassification	Con	nec	ted Loa	d [Demand Fa	actor	Dema	nd Load	1		Panel Totals	
UIPMEN	IT		192	.0 VA		100.00%		19	920 VA				
HTING			384	AV 0		100.00%		38	340 VA		Total	Connected Load (KVA): 23.040	
CEPTAC	CLE		172	80 VA		78.94%		13	640 VA		То	tal Demand Load (KVA): 19.400	
											To	otal Demand Current (A): 54	
											1		
											1		
											1		
											1		
											1		
											1		
nel Ke	ynotes (KN):		_							_	•		
	• ,												

Su		ation: From:				inting: Sl	URFACE		Phase / W leight Bu			20V / 3 /	4 K.A.I.C. Rating: BUS Rating: Mains Type: MCB MCB Rating:	
	CKT		Trip(A)	Р		(VA)		(VA)	_	(VA)		Trip(A)		скт к
	1	REC OUTSIDE ELEC ROOM	20	1	1.920	1.920		,			1	20	REC COLUMN	2
	3	Spare	20	1			0.000	1.920			1	20	REC ISLAND FRONT ENTRANCE, VICTORY FRIDGE	4
	5								9.600	1.920	1	20	JUNCTION BOX 1ST BAR	6
	7	2HEBA1	20	3	9.600	1.920					1	20	EXISTING CIRCUIT	8
	9						6.720	1.920			1	20	REC SANDWAICH SERVING LINE	10
	11	JUNCTION BOX 1ST BAR	20	1					1.920	1.920	1	20	REC SANDWICH SERVING LINE	12
	13	EXISTING CIRCUIT	20	1	1.920	1.920					1	20	REC SANDWICH SERVING LINE	14
	15	REC COCA COLA COOLER	20	1			1.920	1.920			1	20	REFRIGREATOR C149	16
	17	REC COCA COLA COOLER	20	1					1.920	2.496	2	30	EVICTING CIDCUIT	18
	19	REC COCA COLA COOLER	30	1	2.880	2.496					7 -	30	EXISTING CIRCUIT	20
	21	SPARE ABOVE FEDERAL COOLER	30	1			2.880	1.920			1	20	EXISTING CIRCUIT	22
	23	GRILL RECEP	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	24
	25	Spare	20	1	0.000	1.920					1	20	EXISTING CIRCUIT	26
	27	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	28
	29	EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	30
	31				4.800	8.160								32
	33	PIZZA OVEN	50	3			4.800	8.160			3	20	2HEBA2	34
	35								4.800	8.160				36
	37				2.880	1.920					1	20	EQUIPMENT	38
	39	EF-13B	30	3			2.880	1.920			1	20	EQUIPMENT	40
	41								2.880	1.920	1	20	EQUIPMENT	42
		Connected Phase	e Load (K	VA)	44.	256	40.	800	45.	.216				
		Connected Pha	ase Amps	(A)	373	.231		.000	381	.231				
		assification	Con		ted Loa	d De	emand F	-		nd Load	<u>t</u>		Panel Totals	
EQU	IPMEN	Т		395	552 VA		100.00%)	39	552 VA		1		
KITC	HEN E	QUIPMENT		360	000 VA		65.00%		23	400 VA		Total	Connected Load (KVA): 130.272	
REC	EPTAC	CLE		336	600 VA		64.88%		21	800 VA		To	tal Demand Load (KVA): 105.872	
HEA	ΓING			144	100 VA		100.00%	,	14	400 VA		T T	otal Demand Current (A): 294	
IVA	2			67	20 VA		100.00%	,	67	'20 VA		1		
												1		
												1		
												1		
												l		
												1		

	Loc	ation:			Mou	inting: S	URFACE	Dist. /	Phase / W	/ires: 208	Y/12	20V / 3 /	4 K.A.I.C. Rating: BUS Rating	j: 100 A
Su	pply	From:			Encl	osure: T	YPE 1	Max I	Height Bu	sing: Yes	;		Mains Type: MCB MCB Rating	j :
KN	СКТ	Circuit Description	Trip(A)	Р	A (I	(VA)	B (F	(VA)		(VA)		Trip(A)		CKT I
	1	PRATT ST. LIGHTS	30	1	1.920	1.664					2	20	CORD AND PLUG IN CAFETERIA CEILING BY	2
	3	EXISTING CIRCUIT	20	1			1.920	1.664				20	MICROWAVES	4
	_	REC 2C028	20	1					1.920	0.000	1	20	Spare	6
	_	EXISTING CIRCUIT	20	1	1.920	0.000					1	20	Spare	8
		EXISTING CIRCUIT	20	1			1.920	0.000			1	20	Spare	10
	_	EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	12
	_	EXISTING CIRCUIT	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	14
	_	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	16
	_	EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	18
		EXISTING CIRCUIT	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	20
		EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	22
		EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	24
		EXISTING CIRCUIT	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	26
	27	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	28
		EXISTING CIRCUIT	20	1					1.920	1.920	1	20	EXISTING CIRCUIT	30
	31	Space		1							1		Space	32
	33	Space		1							1		Space	34
	35	Space		1							1		Space	36
	37	Space		1							1		Space	38
	39	Space		1							1		Space	40
	41	Space		1							1		Space	42
		Connected Pr	nase Load (K	VA)	17.	024	17.	024	17.	280				
		Connected	Phase Amps	(A)	141	.867	141	.867	144	.000				
Loa	d CI	assification	Conr	1ec	ted Loa	d De	emand F	actor	Dema	nd Load	l		Panel Totals	
LIGH	TING			192	20 VA		100.00%		19	20 VA				
RECE	EPTAC	LE		494	08 VA		60.12%		29	704 VA		Total	Connected Load (KVA): 51.328	
												To	tal Demand Load (KVA): 31.624	
													otal Demand Current (A): 88	
												1		
												İ		
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Pane	al Ka	ynotes (KN):									_			
ant	oi ne	ynotoo (Rity.												

	Loca	ation:			Mou	inting: Sl	JRFACE	Dist. /	Phase / W	ires: 208	Y/12	0V / 3 / 4	4 K.A.I.C. Rating: BUS Rating	q: 225 /	A
Sur		From:				osure: T			leight Bu				Mains Type: MLO MCB Rating	-	•
_	СКТ	Circuit Description	Trip(A) P		4		3))	$\overline{}$	Trip(A)	†	СКТ	ī
\neg	1	REC COLUMN 2E107; ELEC. RM	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	2	+
		REC COLUMN	20	1			1.920	1.920			1	20	EXISTING CIRCUIT	4	T
		LTG KITCHEN & CFA	20	1					1.920	1.920	1	20	SERVING LINE PIZZA PANEL	6	Ť
	7		- 00		1.664	1.920					1	20	SERVING LINE PIZZA PANEL	8	T
	9	REC SERVING LINE	20	2			1.664	1.920			1	20	SERVING LINE PIZZA PANEL	10	T
	11	TOACTED CANDWICH	20	2					1.664	1.920	1	20	REC PREP TABLE SANDWICH	12	Ι
	13	TOASTER SANDWICH	20		1.664	1.920					1	20	REC SERVING LINE	14	Ι
	15	PREP TABLE SANDWICH	30	2			2.496	1.920			1	20	EXISTING CIRCUIT	16	Ι
	17	PREP TABLE SANDWICH	30	4					2.496	1.920	1	20	REC SEATING AREA	18	T
	19	Spare	20	1	0.000	1.920					1	20	REC COLUMN 2E002	20	T
	21	EXISTING CIRCUIT	20	1			1.920	1.920			1	20	REC CONDIMENT COUNTER	22	I
	23	EXISTING CIRCUIT	20	1					1.920	1.920	1	20	REC CONDIMENT COUNTER	24	I
	25	REC CONDIMENT COUNTER	20	1	1.920	1.920					1	20	EXISTING CIRCUIT	26	T
	27	REC CASH REGISTER	20	1			1.920	0.000			1	20	Spare	28	Τ
	29	EXISTING CIRCUIT	20	1					1.920	0.000	1	20	Spare	30	Τ
	31	DIZZA OVENI	50	2	4.160	1.920					1	20	REC CASH REGISTER CENTER	32	T
	33	PIZZA OVEN	50	4			4.160	0.000			1	20	Spare	34	Τ
	35	PIZZA OVEN	50	2					4.160	1.920	1	20	EXISTING CIRCUIT	36	T
	37	PIZZA OVEN	50	4	4.160	0.000					1	20	Spare	38	T
	39	CMOOTHE MACHINE	30	2			2.496	0.000			1	20	Spare	40	Τ
	41	SMOOTHIE MACHINE	30	4					2.496	0.000	1	20	Spare	42	
	43	EXISTING CIRCUIT	20	1	1.920	0.000					1	20	Spare	44	
	45	EXISTING CIRCUIT	20	1			1.920	0.000			1	20	Spare	46	
	47	COOLER RECEP	20	1					1.920	0.000	1	20	Spare	48	
		Connected Pl				928	26.	176	28.	096					
			Phase Amp			.528	218.			.595					
		assification	Con		ted Loa	d De	mand Fa	actor		nd Load			Panel Totals		_
		QUIPMENT			20 VA		65.00%			968 VA					
LIGHT				192	20 VA		100.00%		19	20 VA			Connected Load (KVA): 83.200		
RECE	PTAC	LE		505	60 VA		59.89%		302	280 VA			tal Demand Load (KVA): 52.168		
												То	tal Demand Current (A): 145		
ane	l Key	notes (KN):	<u> </u>			<u> </u>									_
	•														

					ME	CHANICA	AL EQUIPM	MENT CO	NNECTION	SCHEDULE					
										DISCONNECT				VOLTAGE DROP	
L COUIDMENT SERVED	UD	l ELA	I IOAD	VOLTACE	No OF BOLES	DANEL	CIDCUIT NUMBER	CD DATING	EDAME DATING	FUSE DATING	NEMA DATINO	WIDE CIZE	CONDITIES I	0/	NOTES

		LIGHTING FIXTURE S	CHEDUL	.E		
			LAMP	FIXTU		
TYPE	DESCRIPTION	MANUFACTURER / MODEL	SOURCE	WATTAGE	W/LF	COMMENTS
A2	2' x 2' LED TROFFER	COOPER LIGHTING 22EN-LD2-25-UNV-L835-CD1-U	LED	20.00 W		
D1	4.5" SQUARE DOWNLIGHT	FOCAL POINT FLC44D-SO-1500L-UNV-LD1-T-LC44-SDO-1500L-35K-DN-FL2-WH-WP	LED	19.00 W		
D2	4.5" SQUARE DOWNLIGHT	FOCAL POINT FLC44D-SO-1000L-UNV-LD1-T-LC44-SDO-1000L-35K-DN-FL2-WH-WP	LED	11.00 W		
F	4' LINEAR SUSPENDED FIXTURE	XICO ESO200-P-4FT-PMB-OFL-35-DLAM-75-UNV	LED	27.00 W		
L1	4' RECESSED LINEAR FIXTURE	XICO GSL3-R-X-4FT-MWH-OFL-S80-35-DLAM-75-UNV-FD01	LED	27.20 W	6.80 W	
L2	4' RECESSED LINEAR FIXTURE	COOPER LIGHTING S122IW-V970U835-4F0-1-UDD	LED	27.20 W	6.80 W	
L3	10' RECESSED LINEAR FIXTURE	COOPER LIGHTING S122IW-V970U835-10F0-1-UDD	LED	68.00 W	6.80 W	
Р	6' PENDANT LIGHT FIXTURE	KUZCO LIGHTING PD19359-AN-3500K	LED	88.00 W		
S1	DECORATIVE WALL SCONCE	TECH LIGHTING 700WSEBL-16-NB-LED835	LED	14.40 W		
S2	SHIELDED WALL SCONCE	VISA LIGHTING CB3660 L35K-MVOLT	LED	14.00 W		FINISH BY ARCHITECT

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976 BRADY AVE NW

ATLANTA GA 30318

SEALS

GRADY HEALTH 80 JESSE HILL JR DRIVE

CAFETERIA RENOVATION

PROGRESS BID SET

11/26/2024

ELECTRICAL SCHEDULES

E0.03



EXISTING PANEL AND LABEL AS "SPARE". WIRING ABOVE CEILING TO BE COMPLETELY REMOVED.

1 SECOND FLOOR ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



EXISTING PANEL 2KLBA

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SECOND FLOOR
ELECTRICAL DEMOLITION

24.0128

E1.01

PLAN

4360 Chamblee Dunwoody Rd.
Suite 210
Atlanta, GA 30341
P 770.451.6757
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THINK. LISTEN. CREATE.

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DEMOLISH LIGHT FIXTURE(S) IN THIS AREA UNLESS NOTED OTHERWISE. PRESERVE CIRCUIT FOR USE DURING CONSTRUCTION PHASE.

1 SECOND FLOOR DEMOLITION LIGHTING PLAN
1/8" = 1'-0"

EXISTING LIGHT FIXTURE(S) AND CONTROL(S) IN THIS AREA TO REMAIN.

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SEALS

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CAFETERIA RENOVATION

PROGRESS BID SET

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24.0128

SECOND FLOOR LIGHTING DEMOLITION PLAN

E1.02



PROVIDE RECESSED JUNCTION BOX WITH MOAN 104630 TRANSFORMER FOR PLUMBING FIXTURE. COORDINATE LOCATION WITH PLUMBING DRAWINGS. PROVIDE CONNECTION TO PLUMBING FIXTURE PER MANUFACTURER'S SPECIFICATIONS.

SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE (SHEET E0.03) FOR DISCONNECT, WIRE SIZE AND CIRCUIT DESIGNATION.



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SEALS

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SECOND FLOOR ELECTRICAL PLAN

E2.01

24.0128

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SECOND FLOOR LIGHTING PLAN

E2.02

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SEALS

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SECOND FLOOR FIRE ALARM PLAN

FA1.02

