

SYMBOL	DESCRIPTION
TECHNOLOGY (ROUGH-IN ONLY)	
COORDINATE WITH SYSTEM INSTALLERS PRIOR TO INSTALLATION FOR LOCATIONS, HEIGHTS, CONDUIT TERMINATIONS, ETC. ALL OUTLET BOXES SHALL BE MINIMUM 1-1/4" DEEP. COMMUNICATION OUTLET - VOICE, DATA, VOICE/DATA RESPECTIVELY LEFT TO RIGHT - PROVIDE 4X4" OUTLET BOX WITH 1-GANG RING AND (1) 1" CONDUIT TO ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE.	
ELECTRICAL SPECIFICATIONS	
The General Provisions of the contract apply to the work in this section. Before submitting a bid, examine documents of all other trades, visit the site and get acquainted with all conditions that may in any way affect the execution of this contract. Include all labor, material, equipment, tools and incidental costs to provide all work in contract documents. Apply for, secure and pay for all required permits.	
All materials and methods shall be in accordance with applicable codes, regulations and/or ordinances and meet the approval of local inspection authority having jurisdiction. The latest edition of NFPA 70 (National Electrical Code, NEC) and NFPA 72 shall be the minimum requirement for all work.	
All materials and equipment shall be new and shall bear a UL listing or similar testing agency listing. Material and equipment shall be suitable for installed environment, temperature range, strength, durability, voltage, etc. Install all equipment with code required and manufacturer recommended minimum clearances for operation and maintenance.	
Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. Consult all other disciplines drawings and coordinate with contractors in field before performing work so that this work will not interfere with other disciplines work.	
Exposed finished materials and equipment shall be carefully cleaned and wiped to remove grease, smudges, fingerprints, dust and other spots. During the progress of the work, the electrical sub-contractor shall carefully clean the job site and shall leave the premises and all portions of the building in which he is working free of debris and in a clean and safe condition.	
Neatly provide all cutting and patching required for the admission of work. Patching shall match quality of surroundings to owner's satisfaction. Seal all new floor, ceiling, wall, slab, etc., penetrations to match or exceed existing assembly fire ratings.	
Provide two clean sets of contract drawings reserved for showing a complete picture of the work as actually installed at completion of project. Provide two neatly bound and tabbed copies of all maintenance books, instruction books and parts list pertaining to all equipment furnished.	
All work, materials, and equipment shall have a one year warranty after acceptance of the work by the Owner. Any defective items shall be removed and replaced at the electrical sub-contractor's expense and to the satisfaction of the engineer and owner's representative. Train the owner's representatives of each system to the satisfaction of the owner's representative.	
Provide product data submittals for each of the following sections. Provide submittals as individual PDFs by section. Provide cover sheet for and naming of each submittal per http://www.klhengrs.com/the-firm/contractor-resources.html	
26 05 19.00 LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES 26 05 26.00 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS 26 05 29.00 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS 26 05 33.00 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS 26 09 23.00 LIGHTING CONTROL DEVICES 26 24 16.00 PANELBOARDS 26 27 13.00 ELECTRICAL METERING 26 27 26.00 WIRING DEVICES 26 29 13.13 ACROSS-THE-LINE MOTOR CONTROLLERS 26 51 00.00 LIGHTING 28 46 21.25 FIRE ALARM SYSTEM EXTENSION	
All metallic conduit, surface raceways, wireways, supports, cabinet and equipment shall be grounded per NEC.	
Provide temporary lighting, power and life safety measures in areas affected by construction.	
Where demolition is required, selectively demolish equipment, conduit, wiring, devices, etc., to accommodate project demolition and as required to accommodate new construction. Restore power to all downstream devices not affected by demolition. Reinstall work that is intended to be operational after demolition and construction is complete. Appropriately and legally dispose of items demolished.	
Provide 600V rated conductors (R12 AWG minimum) wire with color coded insulation(jacket to identify phases, grounded conductor and grounding conductor. Insulation shall be 1/2" minimum unless installed underground or subject to 120VW 2. Provide copper conductors unless stated otherwise on drawings. Provide insulated equipment grounding conductor for each branch circuit. Do not share neutrals. Provide copper jumpers for final terminations of aluminum conductors where required by equipment.	
Provide Type MC cable for feeders and branch circuits indoors, Schedule 40 PVC conduit for underground wiring, and EMT conduit for other applications. Conduit and cable shall be independently supported directly from structural members by approved straps, fasteners and hangers. Conduit and cables shall be installed parallel and perpendicular to structural members. Noncompliant work shall be removed and replaced to satisfaction of owner. Do not support conduit or cables from roof deck or install within 4" of roof deck. Provide flexible conduit or fittings, and leave slack in cables, at all expansion joints. Provide separate raceways for normal and emergency branches of power complaint. Install raceways and cables concealed in new construction. Provide surface raceway for existing surfaces.	
Recessed steel boxes shall not be less than 4" x 1-1/2" deep. No ganged boxes. Cut in box neatly. Verify all box/device mounting heights and locations in field with Owners representative.	
Where technology devices shown on plan, provide 4" x 2-1/8" deep square box, and with at least (1) 1" conduit (with plastic bushings or insulated pipes) extending to above accessible ceiling and pull string to facilitate future cable installation. Where no accessible ceiling route to technology room. Provide blank wall plates for boxes that are not immediately needed.	
Provide engraved plastic laminate naming identification for all electrical equipment and circuit identification for junction boxes and conductors. Provide accurate type panel schedules.	
Provide all necessary electrically related work as required to render all fire protection, plumbing, mechanical, electrical, technology, architectural and Owner equipment fully operational and fully compliant with manufacturer instructions and codes. Review equipment submittal data and coordinate with installing contractors to ensure the correct size, rating and quantity of conductors and overcurrent protective devices (OCP's) are provided. Provide electrical disconnect ahead of all equipment. Locate electrical equipment to meet clearances required by respective manufacturers and by NEC 110.26. Provide boxes and conduits to controlled equipment for control and monitor devices of other trades (thermostats, other environmental control devices, alarms, etc.).	
Provide exterior photocells equal to Torq 2104 series for surface mount and Torq 30# for flush applications.	
Provide occupancy sensor switches equal to Watstopper DW-100-24. Provide ceiling mounted occupancy sensors equal to Watstopper DT-300. Provide enough sensors for 100% coverage without nuisance tripping. Provide BZ-150 power packs and other accessories for a complete system.	
Provide specification grade wiring devices. Provide WR type and NEMA 3R while-in-use covers for wiring devices installed outdoors and other areas exposed to water. All GFCI receptacles shall be accessible or protect the circuit with a GFCI circuit breaker. Device colors shall be ivory. Provide neutral in each switch box. Unless noted otherwise, install receptacles 18" to center and switches 48" to center. Ensure that lighting control devices are fully compatible with luminaires controlled.	
Provide motor starters, manual or combination type, of sizes, ratings and control types as required per coordination schedules and per requirements of equipment that will actually be provided.	
Provide luminaires and/or luminaire outlet boxes to properly support luminaire weight. All luminaires installed in suspended ceiling systems shall be independently supported directly to the building structural system. Connect all emergency lighting ahead of switching providing additional unswitched "hubs" where required for operation.	
Provide all work in strict compliance with all prevailing codes, standards and ordinances. Provide a complete multiplexed intelligent addressable fire alarm system for the building. All equipment and devices shall be UL listed and labeled. Provide the fire alarm system design completed by an approved and certified Fire Alarm System contractor, who shall coordinate the final design with all national and local codes, regulations and AHJ (Authority/Authorities Having Jurisdiction). Fire alarm contractor with system manufacturer shall provide detailed drawings including floor plans, wiring diagrams, risers, battery calculations and product data. Demonstrate testing to AHJ as required for occupancy. Provide 120V power to new battery cabinets. Furnish and wire dust smoke detectors where shown, interlock to shutdown mechanical equipment, and programmed to report to alarm or supervisory signal to the fire alarm system and to the building fire control station. Provide Class A - verify in field with AHJ. For smoke or fire/smoke dampers, provide 120V power and smoke detector interlocked to damper. Receive, install, wire, connect and test owner-furnished digital communicator - programmed to report to the owner's UL approved Central Station monitoring agency. Install new wiring in EMT unless special use cable using UL hooks. Provide all specified items, plus all incidentals and required items necessary to provide a complete and working system, installed in a professional manner, and in accordance with applicable codes and industry accepted "best practices", including all monitoring and alarming associated with fire suppression systems and wiring configurations (using Class A, or Class A and B, pathways) for fault isolation so that any one fault will not cause any part of the system to go down other than the zone of the fault; provide zoning compliant with prevailing codes, with at least one zone per floor (more if areas are subdivided into multiple zones by fire and/or smoke barriers). Initialing Device, Notification Appliance and Signaling Line Circuits. Class A or Class A and B (provide Class A for circuits that provide isolation module protection for zones). Provide power-limited cables that have a temperature rating of at least 60 degrees C; provide additional marking for conductor size and temperature ratings for cables rated in excess of 60°C (140°F). Program detailed device and room descriptions so that any trouble, supervisory or alarm condition clearly announces floor, level, room number, room name, device, and indication of normal, alarm, trouble and supervisory status at fire alarm control panel(s), at fire alarm annunciator panel(s) and at the supervising central station. Provide documentation (hard-copy and digital) of fire alarm system documentation, and provide a single documentation cabinet at the main fire alarm control unit, including Chapter 7. Qualifications of system designers, installers, programming personnel, inspection personnel, testing personnel and maintenance personnel shall be trained and certified by manufacturer for installation of units required for this Project, and shall be qualified in compliance with requirements prevailing codes, standards and authorities. Refer to Division 26 sections for requirements associated with all electrical work not specifically defined in this section, which shall be considered additional and concurrent scope of work that is associated with work of this section. Provide submittals for equipment, materials and systems specified in this section. Include cuts, descriptive information, technical data, wiring diagrams, plan-view layouts, legend, point-to-point wiring, etc. Identify all information that is specific to this project. Submit to applicable authority or authorities having jurisdiction and obtain fire alarm permit prior to submitting to consultant for review.	
Provide ventilation, test electronic dust smoke detector with sampling tube. Install the dust detector in an indoor accessible location. Provide sampling tube, photo stat and all other required accessories.	
Install all dust smoke detectors in the return air duct/plenum of the respective air handling equipment, or in multiple locations of the return duct branches if necessary to meet the minimum straight distances that are required by manufacturer of smoke dust detectors. Refer to HVAC ductwork drawings, and to HVAC installer's coordination drawings, for configurations when determining actual locations and quantities of dust smoke detectors. Where more than one detector is already indicated associated with a particular piece of air handling equipment, there are special reasons for the additional detectors (i.e. split returns, return risers serving multiple floors, etc.); coordinate all locations for same with the HVAC installer. Provide all required power and control wiring so that upon detection of smoke, the following sequence of operations occurs: An alarm signal is sent to alarm system (fire alarm system or remote test station or both as applicable). The HVAC unit shut down (including applicable dampers); Associated smoke dampers close, if present (wired to automatically re-open on dust detector reset).	
Provide keyed test/monitor station (with status-alarm/trouble indicating LED's) on the ceiling or wall (flush in finished areas) beneath the dust detector at descent but readily visible location as determined in field unless specific location is shown on drawings. Provide engraved or approved equivalent method plate at each remote station to read: "###" Reset Switch to reset "###" after a dust smoke detector event has been cleared and the fire alarm system has been reset", where "###" is the equipment identification used on drawings. Coordinate with authority having jurisdiction for verification of, or required modification to, the language to be engraved. Correct to fire alarm system.	
Provide 20A/120VAC power as required to energize components. This requirement applies whether or not such power work is shown on the drawings. Dedicate branch circuits serving fire alarm related equipment to fire alarm related equipment only.	
Properly identify system components, wiring, cabling, and terminals. Install framed intercom in a location visible from fire-alarm control unit. Provide boxes, along with identification.	

EXISTING CONDITIONS - GENERAL NOTES
A. INTENT OF DOCUMENTS: EXISTING CONDITIONS SHOWN ON THE DRAWINGS ARE BASED ON VISUAL FIELD OBSERVATIONS AND THE REVIEW OF PREVIOUS DRAWINGS THAT MAY NOT HAVE BEEN CERTIFIED "AS-BUILT". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS SHOWN ON THE DRAWINGS AND TO CORRECT ANY DISCREPANCIES. ELECTRICAL WORK IS SHOWN TO A VERY LIMITED EXTENT ON THE DRAWINGS AND IS SHOWN FOR GENERAL PLANNING REFERENCE ONLY.
B. PRE-BID SURVEY: PERFORM A DETAILED PRE-BID WALK-THROUGH FIELD INSPECTION AND SURVEY TO REVIEW THE EXISTING STRUCTURES AND PREMISES, TO ACCURATELY DETERMINE EXISTING CONDITIONS, AND TO DETERMINALLY PLAN REQUIRED ELECTRICAL RELATED WORK, INCLUDING APPLICABLE ACCESSIBLE CEILING CAVITY AREAS IN THIS INSPECTION.
C. REUSE OF REMOVED MATERIALS: DO NOT REUSE REMOVED ELECTRICAL MATERIALS UNLESS SPECIFICALLY INDICATED IN PROJECT DOCUMENTS. EXISTING WIRING SYSTEMS MAY BE UTILIZED ONLY TO THE EXTENT INDICATED IN PROJECT DOCUMENTS, OR AS DIRECTED BY OWNERS REPRESENTATIVE IN FIELD.
D. EXISTING POWER DISTRIBUTION EQUIPMENT: WHERE MODIFICATIONS ARE MADE TO EXISTING POWER DISTRIBUTION EQUIPMENT, COMPLETELY RE-TYPE PANELBOARD DIRECTLY FROM EXISTING PANELBOARD. PROVIDE ADDITIONAL ADDING COMPONENTS TO EXISTING POWER DISTRIBUTION EQUIPMENT, PROVIDE FULL SIZE (NO SPLIT OR TANDEM DEVICES) OVERCURRENT PROTECTION DEVICES (COP) TO MATCH THOSE ALREADY IN PLACE, INCLUDING MANUFACTURER, MODEL, SERIES, SHORT CIRCUIT CURRENT (SCCR) RATING, PROVIDE COMBINATION OF FIELD-INSTALLED HANDLE TIES IN THE SAME OUTLET FOR MULTI-POLE DEVICES. PROVIDE SWITCHING DUTY (SWD), HACR AND HAD RATINGS WHERE APPLICABLE FOR LOADS. PROVIDE HANDLE LOCK-ON DEVICES FOR EMERGENCY AND CRITICAL LOADS.
E. EXISTING BRANCH CIRCUITS: MAINTAIN, AND RECONNECT IF REQUIRED, BRANCH CIRCUITS THAT ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE. ALL CIRCUIT DESIGNATIONS SHOWN ON THE DRAWINGS INDICATE NEW CIRCUIT ASSIGNMENTS, NOT EXISTING. WHERE COLOR CODING OF BRANCH CIRCUIT CONDUCTORS DOES NOT COMPLY WITH NFPA 70 OR IS NOT CONSISTENT WITH EXISTING CONDITIONS, IT SHALL BE CORRECTED TO COMPLY WITH NFPA 70 AND WITH AUTHORITIES HAVING JURISDICTION.
F. ADDED LOADS TO EXISTING CIRCUITS: IN CASES WHERE NEW LOADS ARE INDICATED TO BE CONNECTED TO EXISTING CIRCUITS WITH EXISTING LOADS, MEET THE EXISTING CIRCUIT IN ADVANCE AND ENSURE THE EXISTING PLUS ADDED LOAD DOES NOT EXCEED 80 PERCENT OF THE SOURCE CIRCUIT BREAKER AMPERE RATING. IF THAT LOAD IS EXCEEDED, NOTIFY DESIGN PROFESSIONAL.
G. REASSIGNMENT OF EXISTING CIRCUITS: IN CASES WHERE EXISTING CIRCUITS ARE REUSED (BASED ON INFORMATION SHOWN ON DRAWINGS OR BASED ON FIELD CONDITIONS) BUT MUST BE CONNECTED TO BREAKERS OTHER THAN THEIR ORIGINAL BREAKER, MODIFY COLOR CODING AS REQUIRED IF THE NEW BREAKER ASSIGNMENT IS CONNECTED TO A DIFFERENT LINE-PHASE THAN THE ORIGINAL ONE. USE MEANS AND METHODS COMPLIANT WITH NFPA 70 AND WITH AUTHORITIES HAVING JURISDICTION.
H. ELECTRICAL WORK TO REMAIN OR BE RELOCATED: IF REQUIRED TO ACCOMMODATE CONSTRUCTION RELATED ACTIVITIES OR WHERE SPECIFICALLY SHOWN ON THE DRAWINGS, EXISTING ELECTRICAL WORK SHALL BE MAINTAINED, RELOCATED, OR REINSTALLED. EXISTING ELECTRICAL EQUIPMENT, LUMINAIRES, OR DEVICES THAT ARE TO REMAIN OR TO BE RELOCATED.
I. PROTECT ADJACENT INSTALLATIONS DURING CUTTING AND PATCHING ACTIVITIES, AND TO THE LIMITED EXTENT THAT IT APPLIES TO PRE-EXISTING GENERAL INSTALLATION METHODS SUCH AS MISSING JUNCTION BOX PLATE, OPEN JUNCTION BOX AND/OR CUTOUT, MINOR CONDUIT RE-ANCHORING AND MINOR EXPOSED CONDUIT REPAIRS. IF MORE EXTENSIVE CODE OR SAFETY VIOLATIONS ARE DISCOVERED, IMMEDIATELY BRING THEM TO THE ATTENTION OF THE OWNERS REPRESENTATIVE (DETAILED WRITING) ALONG WITH PROPOSED COST FOR CORRECTIONS AND IMPACT IF ANY ON THE CONSTRUCTION SCHEDULE.
J. PRE-EXISTING CODE VIOLATIONS: INSPECT EXISTING ELECTRICAL WORK IN AREAS ACCESSED UNDER THIS PROJECT AND BRING INTO COMPLIANCE WITH NFPA 70. THIS APPLIES ONLY TO THE EXTENT THAT SUCH WORK IS UNCOVERED IN THE IMMEDIATE PROJECT AREAS AFFECTED BY CONSTRUCTION ACTIVITIES, AND NOT TO THE LIMITED EXTENT THAT IT APPLIES TO PRE-EXISTING GENERAL INSTALLATION METHODS SUCH AS MISSING JUNCTION BOX PLATE, OPEN JUNCTION BOX AND/OR CUTOUT, MINOR CONDUIT RE-ANCHORING AND MINOR EXPOSED CONDUIT REPAIRS. IF MORE EXTENSIVE CODE OR SAFETY VIOLATIONS ARE DISCOVERED, IMMEDIATELY BRING THEM TO THE ATTENTION OF THE OWNERS REPRESENTATIVE (DETAILED WRITING) ALONG WITH PROPOSED COST FOR CORRECTIONS AND IMPACT IF ANY ON THE CONSTRUCTION SCHEDULE.
L. TEMPORARY LIGHTING AND POWER: COMPLY WITH NFPA 70 (INCLUDING ARTICLE 590, NFPA 70E AND ALL OTHER PREVALUING CODES). PROVIDE SUFFICIENT LIGHTING AND POWER CENTERS THROUGHOUT INTERIOR OF NEW WORK OR RENOVATION SCOPE. PROVIDE GFCI PROTECTION FOR ALL WORK. COORDINATE WITH GENERAL CONTRACTOR AND OTHER TRADES, AND PROVIDE ANNUAL INSPECTION, ARRANGE WITH LOCAL UTILITY FOR TEMPORARY SERVICE AND PAY ASSOCIATED FEES FOR INSPECTIONS, CONNECTIONS, ETC. AND PAY FOR UTILITY ELECTRIC USAGE/CONSUMPTION COSTS. RESTORE ACCESSORY AND TEMPORARY ELECTRICAL EQUIPMENT TO ORIGINAL CONDITION AFTER TEMPORARY LIGHTING AND POWER IS NO LONGER NEEDED.
M. INTERIM LIFE SAFETY PROVISIONS: PROVIDE MEANS AND METHODS TO PROVIDE MINIMUM LIGHTING IN DEMOLITION AND CONSTRUCTION AREAS. PROVIDE TEMPORARY FIRE EXTINGUISHERS, OBTAINED FROM SMOKE DETECTOR MANUFACTURER OR OBTAINED FROM A THIRD PARTY AND SPECIFICALLY APPROVED FOR SUCH USE BY SMOKE DETECTOR MANUFACTURER, OVER EXISTING SMOKE DETECTORS WITHIN PROJECT AREA, AND IN ADJACENT AREAS THAT ARE EXPOSED TO CONSTRUCTION-RELATED DUST OR AIRBORNE PARTICULATES. REMOVE ALL TEMPORARY LIFE SAFETY WORK WHEN NO LONGER NEEDED.
N. INTERIM EGRESS PATH PROVISIONS: PROVIDE TEMPORARY UL 924 COMPLIANT EXIT AND/OR EGRESS LIGHTING ALONG EGRESS ROUTES THAT MUST BE KEPT ACCESSIBLE DURING CONSTRUCTION. PROVIDE TEMPORARY FIRE ALARM SYSTEM PULL STATIONS AND AUDIO VISUAL AND NOTIFICATION DEVICES ALONG ALL AFFECTED EGRESS ROUTES. REMOVE THIS SCOPE WHEN NO LONGER NEEDED.

ELECTRIC DESIGN CRITERIA
2025 NEW YORK STATE BUILDING CODE (BASED ON THE 2015 INTERNATIONAL BUILDING CODE) 2017 NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) 2016 NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
TESTING/COMMISSIONING FOR LIGHTING CONTROLS
LIGHTING CONTROL DEVICES AND SYSTEMS SHALL BE TESTED TO ENSURE THE HARDWARE AND SOFTWARE IS CALIBRATED, PROGRAMMED, AND IN PROPER WORKING ORDER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED INSTALLATION CERTIFICATES AND SHALL PROVIDE MANUALS FOR LIGHTING CONTROL DEVICES TO OWNER PRIOR TO PROJECT CLOSE-OUT. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING WITH APPROPRIATE PARTIES TO ARRANGE FOR TESTING/COMMISSIONING OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL REQUIRED FUNCTIONAL TESTING FORMS ARE COMPLETED AND SUBMITTED TO THE OWNER AND LOCAL AHJ PRIOR TO PROJECT CLOSE-OUT.
UTILITY COORDINATION - CONTRACTOR RESPONSIBILITY
COORDINATE UTILITY SERVICE WORK CONTAINED WITHIN THIS DRAWING SET WITH RESPECTIVE LOCAL UTILITY COMPANY. UTILITY COORDINATION HAS NOT BEEN PERFORMED AS PART OF THIS DRAWING SET. CURRENT UTILITIES SHOWN ON THE DRAWINGS ARE ASSUMED VALUES BASED ON SERVICE SIZE, AND EXISTING DESIGNS FOR CONDUIT SIZE. VERIFY THE AVAILABLE FAULT CURRENT AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
Obtain and comply with all utility installation details and standards.
CONTACT #11 "CALL BEFORE YOU DIG" SERVICE PRIOR TO COMMENCING WITH ANY UNDERGROUND WORK.

EXISTING CONDITIONS - DEMOLITION NOTES
A. DEFINITION OF DEMOLITION: THE TERM "DEMOLITION" IS USED IN ELECTRICAL DOCUMENTS, INTERPRET IT TO MEAN "DEMOLITION" OR "SELECTIVE DEMOLITION" AS APPLICABLE FOR THE RESPECTIVE SCOPE OF WORK, WHERE THE TERM "DEMOLISH", "REMOVE" OR SIMILAR TERMS ARE USED IN ELECTRICAL DOCUMENTS, INTERPRET TO MEAN "DISCONNECT", "REMOVE", "DISPOSE OF", AND REMOVE ALL RELATED ELECTRICAL CONDUIT, RACEWAYS, WIRING, CABLES, BOXES, SUPPORTS, ETC.
B. GENERAL ACCOMMODATIONS: PROVIDE ELECTRICAL DEMOLITION WORK AS REQUIRED TO ACCOMMODATE PROJECT DEMOLITION AND AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION. DISCONNECT AND REMOVE WORK TO BE ABANDONED, AND AS REQUIRED TO ACCOMMODATE WORK OF OTHER TRADES. IN AFTER-THOUGHT, REMOVE FULLY DEMOLITION SPECIFICALLY NOTED OTHERWISE. COORDINATE PHASING OF WORK CAREFULLY WITH OWNER PRIOR TO BEGINNING DEMOLITION WORK.
C. REMOVAL OF ABANDONED WORK: REMOVE ACCESSIBLE ABANDONED, INACTIVE AND OBSOLETE RACEWAY SYSTEMS, EQUIPMENT, LUMINAIR, WIRING, CABLES, BOXES, SUPPORTS, ETC. REMOVE IDENTIFIED ABANDONED WORK FROM RACEWAYS EMBEDDED IN FLOORS, WALLS, AND CEILINGS MAY REMAIN IF SUCH MATERIALS DO NOT INTERFERE WITH NEW INSTALLATIONS, THIS APPLIES FOR ALL ELECTRICAL WORK, AND ALL COMMUNICATIONS AND INFORMATION TECHNOLOGY TYPE WORK. WORK ABOVE CEILINGS, ETC. REMOVE IDENTIFIED ABANDONED WORK FROM UNUSED RACEWAY BACK TO THE NEAREST RESPECTIVE "UPSTREAM" JUNCTION BOX THAT REMAINS ACTIVE EVEN IF OUTSIDE OF THE CONTRACT AREA. REMOVE ABANDONED UNUSED WIRING AND CABLES BACK TO RESPECTIVE SOURCES SOURCE EVEN IF SOURCES ARE OUTSIDE THE CONFINES OF THE PROJECT AREA.
D. DISCONNECT AND REMOVE WORK: DISCONNECT AND REMOVE WORK FROM EXISTING BUILDING NEW CONSTRUCTION AND NOT CONFLICTING WITH OVERHEAD OR CEILING CAVITY REQUIREMENTS, MAY BE REUSED AT THE DISCRETION OF THE ELECTRICAL INSTALLER IF IT COMPLIES WITH THE PROJECT DOCUMENTS AFTER ALL ABANDONED CONDUCTORS AND CABLES HAVE BEEN REMOVED FROM THEM. DO NOT EXCEED NFPA 70 REQUIRED CONDUIT FILL AND DO NOT INSTALL WIRING FEND FROM DIFFERENT SOURCES IN COMMON CONDUIT.
E. MODIFICATIONS TO ACCOMMODATE DEMOLITION: REMOVE EXISTING ELECTRICAL EQUIPMENT, DEVICES, CONDUIT, RACEWAYS, WIRING, CABLES, BOXES, SUPPORTS, ETC. THAT CONFLICT WITH CONSTRUCTION RELATED WORK OR ALL TRADES AS NECESSARY TO ACCOMMODATE NEW WORK OF RESPECTIVE TRADES. REWORK AND EXTEND RACEWAY AND WIRING AS REQUIRED TO ACCOMMODATE NEW OR RELOCATED ELECTRICAL WORK. MAINTAIN (OR RECONNECT IF APPLICABLE) REMAINING WIRING. PROVIDE ELECTRICAL CONNECTIONS, AND RECONNECTIONS WHERE APPLICABLE, FOR EQUIPMENT TO BE REMOVED (OR RELOCATED BY OTHER TRADES).
F. CUTTING AND PATCHING: PERFORM CUTTING AND PATCHING REQUIRED FOR DEMOLITION, RESTORED TO MATCH SURROUNDING REMAINING SURFACES, INCLUDING FIRE-SMOKE RATINGS.
G. LUMINAIRES: FOR ALL EXISTING LUMINAIRES WHICH ARE SCHEDULED FOR REUSE, REMOVE FROM EXISTING CEILINGS PRIOR TO BEGINNING DEMOLITION WORK. REMOVE EXISTING LUMINAIRES WHICH ARE SCHEDULED TO BE REMOVED AND TURNED OVER TO OWNER. THE LUMINAIRES SHALL BE DISCONNECTED, CAREFULLY REMOVED AND TURNED OVER TO OWNER. TRANSFER SUCH LUMINAIRES TO STORAGE AREA AS DIRECTED IN FIELD.
H. ELECTRICAL MATERIALS REFERRED TO OWNERS REPRESENTATIVE FOR DISPOSAL INSTRUCTIONS FOR ABANDONED ELECTRICAL MATERIALS REMOVED DURING DEMOLITION AND THEREAFTER. NEATLY STORE ELECTRICAL MATERIALS THAT THE OWNER elects TO RETAIN AT THE SITE AS DESIGNATED BY THE OWNERS REPRESENTATIVE. DISPOSE OF MATERIALS THAT THE OWNER elects NOT TO RETAIN. DISCONNECT AND REMOVE ELECTRICAL MATERIALS DESIGNATED FOR SALVAGE. REMOVAL AND REUSE, OR FOR TURNING OVER TO OWNER, UNDAMAGED. DISCONNECT AND REMOVE WIRING AND "WHIRL" FROM EQUIPMENT TERMINAL POINTS. CAREFULLY TRANSPORT SALVAGED ELECTRICAL MATERIALS TO A PROTECTED ON-SITE STORAGE LOCATION AS DIRECTED IN FIELD AND NEATLY STORE THEM GROUPED BY SYSTEM TYPE.
I. CLEANING OF REUSED COMPONENTS: CLEAN COMPONENTS TO BE REUSED INSIDE AND OUT, AND REINSTALL WHERE INDICATED ON DRAWINGS. MODIFY AND EXTEND RELATED EXISTING WIRING IN CONDUIT ACCORDINGLY.

CONDUIT APPLICATION	CONDUCTOR TYPE	RACEWAY TYPE	RACEWAY AND CONDUCTOR NOTES
-FIRE ALARM--			
EXISTING HOLLOW PARTITIONS	NON-PLENUM RATED	EMT	
CONCEALED	NON-PLENUM RATED	EMT	
EXPOSED	NON-PLENUM RATED	EMT	
-POWER- INDOOR--			
EXISTING HOLLOW PARTITIONS	THHN	MC	
CONCEALED	THHN	MC	
EXPOSED	THHN	MC (GRC)	
CONNECTION TO SYSTEMS FURNITURE	THHN	LMFC	
LUMINAIRE WIRING IN ACCESSIBLE CEILING, 72" MAX	THHN	LMFC	
CONNECTION TO VIBRATING EQUIPMENT, 72" MAX	THHN	LMFC	
EXPOSED (UNDERGROUND)	2XHHW-2	EMT (SCH 40 PVC)	
-POWER- OUTDOOR--			
EXPOSED TO DIRECT SUNLIGHT, ROOF	2XHHW-2	RMG (GRC)	
EXPOSED TO DIRECT SUNLIGHT, ROOF	2XHHW-2	RMG (GRC)	
-TECHNOLOGY--			
EXISTING HOLLOW PARTITIONS	NON-PLENUM RATED	EMT	
CONCEALED, ABOVE INACCESSIBLE CEILINGS	NON-PLENUM RATED	EMT	
CONCEALED, ABOVE ACCESSIBLE CEILINGS	NON-PLENUM RATED	2-HOOKS	

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description

by

date

mark

revisions

date

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checked

06/15/2022

project 2022 27/10/23/16

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6/27/2022

project

drawing

sheet

DOLLAR TREES

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STONY POINT, NY 09800

ELECTRIC LEGEND

E-001

KLH PROJECT

24211