

ELECTRICAL LEGEND

- HP1-1 →
- HOMERUN TO PANEL - ARROWS INDICATE NUMBER OF CIRCUITS. CROSS LINES INDICATE NUMBER OF CONDUCTORS OTHER THAN TWO (PROVIDE NUMBER OF WIRES REQUIRED TO ALLOW SWITCHING SHOWN - E10 SERIES LIGHTING DRAWINGS).
- CIRCUIT NUMBER(S)
- PANEL DESIGNATION
- VOICE AND DATA OUTLET - 4"x4" JUNCTION BOX WITH 1" CONDUIT TO 6" ABOVE DROP CEILING - MOUNT UP SAME AS ASSOCIATED RECEPTACLE
- WALL PHONE OUTLET - 4"x4" JUNCTION BOX WITH 1" CONDUIT TO 6" ABOVE DROP CEILING
- JUNCTION BOX
- EXISTING PANELBOARD
- PANELBOARD
- FIRE ALARM CONTROL PANEL
- FIRE ALARM REMOTE ANNUNCIATOR
- FIRE ALARM MASTER CITY BOX
- FIRE ALARM POWER EXTENDER PANEL
- FIRE ALARM MANUAL PULL STATION - MOUNTED C/L UP 48"
- FIRE ALARM SPEAKER/LIGHT UNIT - CANDLE POWER (CD) PER NFPA 72 AND AS NOTED - 15/75 WHERE NOT OTHERWISE INDICATED ON PLANS - MOUNTED BOTTOM OF STROBE UP 80" ON WALL
- FIRE ALARM CHIMELIGHT UNIT - CANDLE POWER (CD) PER NFPA 72 AND AS NOTED - 15/75 WHERE NOT OTHERWISE INDICATED ON PLANS - MOUNTED BOTTOM OF STROBE UP 80" ON WALL
- FIRE ALARM STROBE LIGHT UNIT - CANDLE POWER (CD) PER NFPA 72 AND AS NOTED - 15/75 WHERE NOT OTHERWISE INDICATED ON PLANS - MOUNTED BOTTOM OF STROBE UP 80" ON WALL
- FIRE ALARM SMOKE DETECTOR - CEILING MOUNTED
- FIRE ALARM DUCT SMOKE DETECTOR - SUPPLY
- FIRE ALARM DUCT SMOKE DETECTOR - RETURN
- FIRE ALARM DUCT SMOKE DETECTOR REMOTE TEST STATION
- FIRE ALARM HEAT DETECTOR
- FIRE ALARM TAMPER SWITCH
- FIRE ALARM FLOW SWITCH
- FIRE ALARM BEACON
- FIRE ALARM KNOX BOX
- FIRE ALARM ADDRESSABLE OUTPUT MODULE
- FIRE ALARM ADDRESSABLE INPUT MODULE
- FIRE ALARM DOOR HOLDER
- ANSUL PULL STATION
- EXISTING ITEMS SHOWN DASHED

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 70, NATIONAL ELECTRICAL CODE (NEC), OSHA REGULATIONS, AS WELL AS APPLICABLE REGULATIONS OF THE RELEVANT FEDERAL, STATE, COUNTY, AND CITY AGENCIES. PROVIDE MATERIALS AND EQUIPMENT THAT COMPLY WITH ANSI, IEEE, IES, AND NEMA STANDARDS. WHERE APPLICABLE, PROVIDE ONLY MATERIALS THAT ARE U.L. LISTED AND LABELED.
- THE ELECTRICAL SUBCONTRACTOR SHALL VISIT THE SITE AND INSPECT EXISTING CONDITIONS, SERVICES, CONDUITS, SPATIAL CONSIDERATIONS AND ALL OTHER PERTINENT CONDITIONS TO FULLY FAMILIARIZE HIMSELF WITH CONDITIONS TO BE ENCOUNTERED IN THE PERFORMANCE OF THIS WORK. THE ELECTRICAL SUBCONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR DURING CONSTRUCTION. FAILURE TO DO SO WILL NOT RELIEVE THE ELECTRICAL SUBCONTRACTOR OF THE RESPONSIBILITY FOR FULL COMPLETION OF THE WORK IN ACCORDANCE WITH APPLICABLE DRAWINGS AND SPECIFICATIONS. VERIFY EXISTING SYSTEMS THAT WILL BE UTILIZED FOR CONNECTION TO THE NEW SYSTEM. IF DISCREPANCIES EXIST BETWEEN THE CONTRACT DRAWINGS AND THE ACTUAL EXISTING CONDITIONS, THE ELECTRICAL SUBCONTRACTOR SHALL NOTIFY THE ENGINEER/OWNER PRIOR TO PROCEEDING WITH THE INSTALLATION.
- CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. INSTALL CONDUIT WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE. CONSIDERING THE BUILDING CONSTRUCTION AND OBSTRUCTIONS, EXCEPT WHERE OTHERWISE NOTED.
- WHERE IT IS INDICATED THAT EXISTING WIRING IS TO BE REUSED, THE ELECTRICAL SUBCONTRACTOR SHALL VERIFY THAT THE INTEGRITY OF THE INSULATION IS ADEQUATE FOR REUSE. ALL SUSPECT WIRING SHALL BE REPLACED BY THE SUBCONTRACTOR.
- ALL PENETRATIONS THROUGH FIRE-RATED FLOORS, WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN THE RATING OF THE SEPARATION.
- ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS WHICH CONTAIN FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.
- UNLESS OTHERWISE NOTED, WIRING SHALL BE #12 AWG CONDUCTORS & #12 O.D. HOMERUNS FED FROM 20A SINGLE POLE CIRCUITS IN EXCESS OF 100 FEET SHALL BE #10 AWG UNLESS INDICATED OTHERWISE. INSULATION TYPE SHALL BE THINWALL 75 DEG. C. AND 900V CLASS UNLESS SPECIFIED OTHERWISE.
- WHERE EXISTING EQUIPMENT AND DEVICES ARE TO BE RELOCATED, ALL ASSOCIATED WIRING, CONDUIT AND ACCESSORIES SHALL BE EXTENDED, RELOCATED OR REPLACED WHERE REQUIRED.

GENERAL NOTES (CON'T)

- UNLESS OTHERWISE NOTED, ALL WIRING SHALL BE 600V, COPPER WITH THIN-WALL INSULATION.
- ALL GENERAL NOTES, SYMBOLS, LISTS, ABBREVIATIONS AND DETAILS ARE TO BE CONSIDERED APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT.
- WHERE A DISCREPANCY OCCURS BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE SPECIFICATIONS SHALL PREVAIL. CONTACT THE ENGINEER FOR CLARIFICATION WHEN SUCH A SITUATION OCCURS.
- WHERE MATERIAL IS CALLED OUT IN THE LEGEND BY MANUFACTURER, TYPE OR CATALOG NUMBER, SUCH DESIGNATIONS ARE TO ESTABLISH STANDARDS OR DESIRED QUALITY, ACCEPTANCE OR REACTION OF THE PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT, DEVICES, AND FURNITURE REQUIREMENTS, PRIOR TO ROUGHING IN FOR SAME.
- IN AREAS AFFECTED BY THIS RENOVATION, THE ELECTRICAL SUBCONTRACTOR SHALL MAINTAIN CONTINUITY OF EXISTING ELECTRICAL SERVICE.
- PRIOR TO REMOVAL OF EQUIPMENT, THE OWNER WILL INDICATE WHICH EXISTING DEVICES OR MATERIALS SHALL BE SALVAGED AND TURNED OVER FOR STORAGE.

FIRE ALARM SYSTEM NOTES

- THE CONTRACTOR SHALL PROVIDE A NEW FIRE ALARM PANEL IN THE BUILDING SCOPE OF WORK SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO:
 - PROVIDE NEW SMOKE DETECTORS WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM SPEAKER/STROBES WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM STROBES WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM PULLSTATIONS WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM DUCT SMOKE DETECTOR WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM ADDRESSABLE INPUT MODULES WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM ADDRESSABLE OUTPUT MODULES WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM REMOTE ANNUNCIATORS WHERE INDICATED.
 - PROVIDE NEW FIRE ALARM BEACONS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO ANSUL SYSTEMS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO ELEVATOR RECALL SYSTEMS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO SECURITY SYSTEMS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO DOOR HOLDERS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO MEDICAL GAS ALARM SYSTEMS WHERE INDICATED.
 - PROVIDE NEW CONNECTIONS TO EMERGENCY POWER MONITORING SYSTEMS WHERE INDICATED.
 - SPACE SMOKE DETECTORS THIRTY FEET ON CENTER AND WITHIN FIFTEEN FEET OF THE END OF THE CORRIDORS.
 - DO NOT PLACE SMOKE DETECTOR WITHIN FIVE FEET OF AIR DIFFUSERS.
 - PENETRATIONS OF SMOKE BARRIER AND FIRE WALLS SHALL BE SEALED THE SAME DAY THE PENETRATION IS MADE.

CODES AND STANDARDS:

- THE FOLLOWING CODES AND STANDARDS SHALL REPRESENT MINIMUM INSTALLATION AND PERFORMANCE STANDARDS.
- INTERNATIONAL BUILDING CODE (IBC)
 - UNDERWRITER'S LABORATORIES, INC. (UL)
 - NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 - NFPA 20 - STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
 - NFPA 70 - NATIONAL ELECTRICAL CODE (NEC)
 - NFPA 70E - STANDARD FOR ELECTRICAL SAFETY REQUIREMENTS FOR EMPLOYEE WORKPLACES
 - NFPA 72 - NATIONAL FIRE ALARM CODE FOR FIRE PROTECTION
 - NFPA 75 - STANDARD FOR THE PROTECTION OF ELECTRONIC COMPUTER/DATA PROCESSING EQUIPMENT
 - NFPA 99 - STANDARD FOR HEALTH CARE FACILITIES
 - NFPA 101 - LIFE SAFETY CODE
 - TELECOMMUNICATIONS INDUSTRY ASSOCIATION AND ELECTRONIC ALLIANCE STANDARDS ASSOCIATION (EIA/TIA) 568 AND/OR 569A, COMMUNICATIONS CABLING CIRCUITS AND EQUIPMENT
 - BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL (BICSI)
 - UNITED STATES DEPARTMENT OF COMMERCE, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA), MANUAL OF REGULATIONS AND PROCEDURES FOR FEDERAL RADIO FREQUENCY MANAGEMENT FOR ALL TWO-WAY RADIO AND RADIO PAGING SYSTEMS, ALL NARROW-BAND AND FREQUENCY USE STANDARDS
 - OCCUPATIONAL, SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS
 - SAFETY CODE FOR ELEVATORS AND ESCALATORS, AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) A-17.1
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 - AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
 - FEDERAL COMMUNICATIONS COMMISSION (FCC)
 - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)
 - AMERICANS WITH DISABILITIES ACT (ADA)
 - ENERGY POLICY ACT OF 2005 (EPACT)

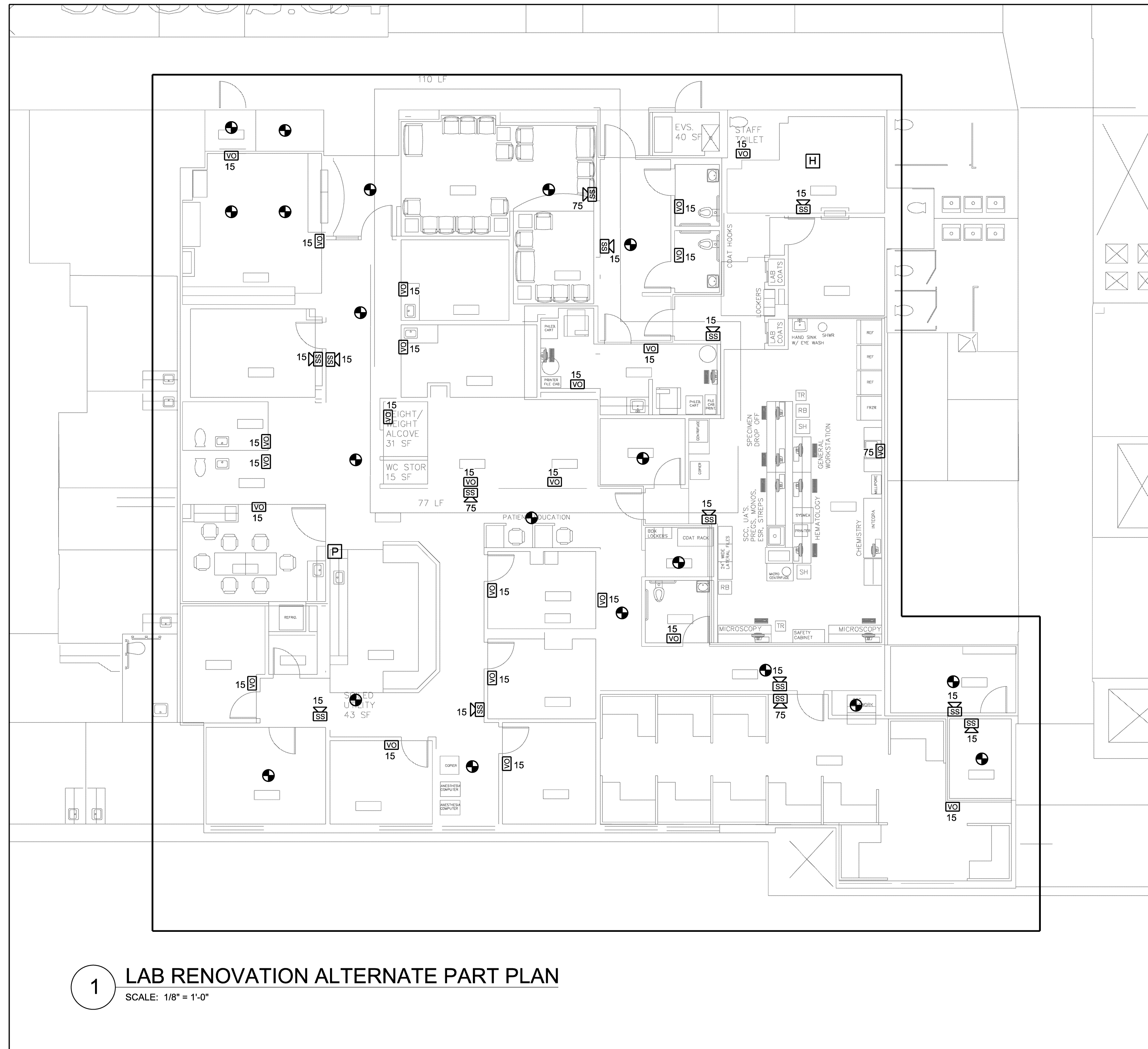
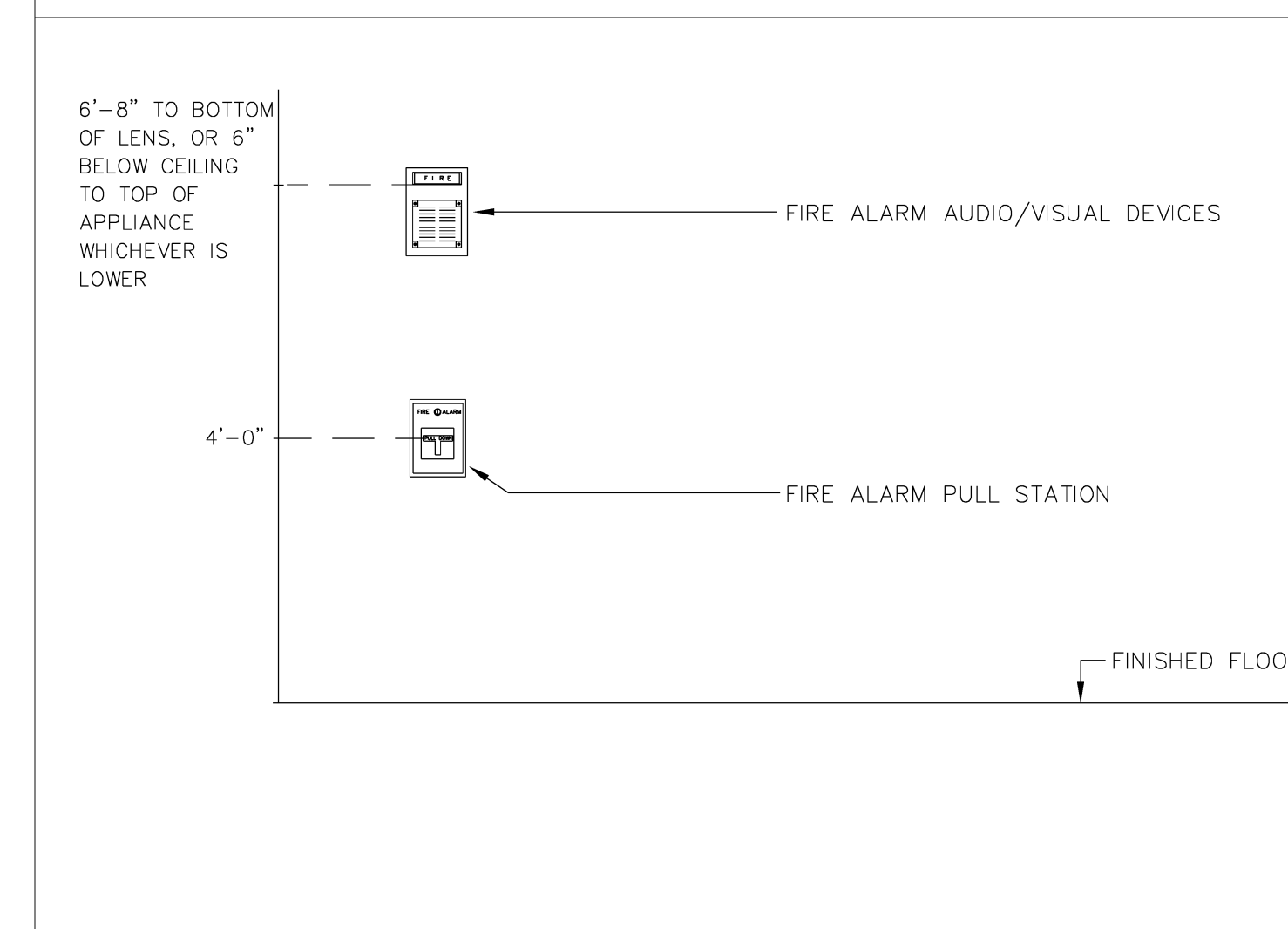
EXISTING EQUIPMENT LEGEND

- (D) DOTTED INDICATES EXISTING EQUIPMENT (REFER TO LEGEND FOR TYPE)
- (E) EXISTING TO REMAIN
- (R) EXISTING TO BE DISCONNECTED AND REMOVED
- (RL) EXISTING TO BE DISCONNECTED AND RELOCATED
- (ER) EXISTING IN NEW LOCATION
- (N) NEW

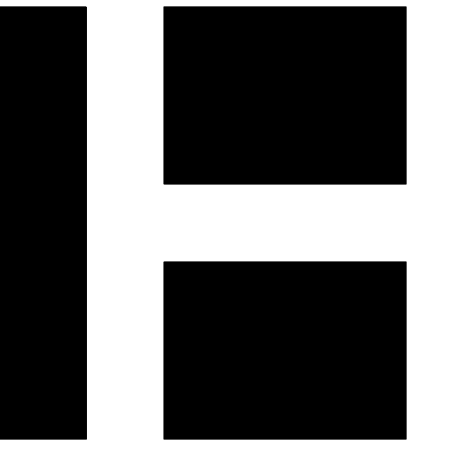
JUNCTION BOX IDENTIFICATION COLOR CODE CHART

FIRE ALARM	---	RED
SIGNAL (NURSE CALL, PA)	---	PURPLE
AUDIO VISUAL	---	WHITE
480V	---	BROWN
277V	---	ORANGE
120V	---	BLUE
208V	---	BLACK

TYPICAL DEVICE MOUNTING HEIGHTS DETAIL



1 LAB RENOVATION ALTERNATE PART PLAN
SCALE: 1/8" = 1'-0"



HARRIMAN

AUBURN PORTLAND MANCHESTER

MAINE MEDICAL CENTER
BRIGHTON CAMPUS
FIRE ALARM UPGRADE

PORTLAND, MAINE

Harriman Project No. 12657

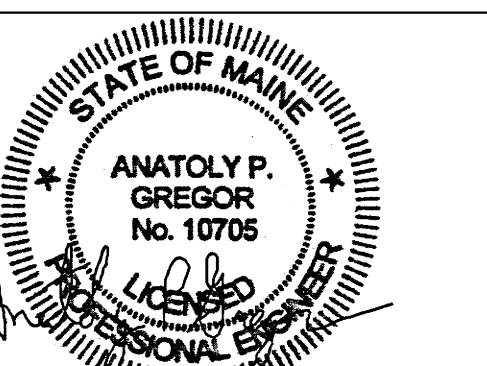
Key Plan

Plot North



Revisions and Revisions

Mark	Date	Description
3-4-14		ISSUED FOR PERMIT



Drawing Scale: 1/8" = 1'-0" 0 4' 8' 12'

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Drawn By: APG

ELECTRICAL LEGENDS,
SYMBOLS, NOTES
SCHEDULES & PART PLAN

FA-01