

ELECTRICAL LEGEND:

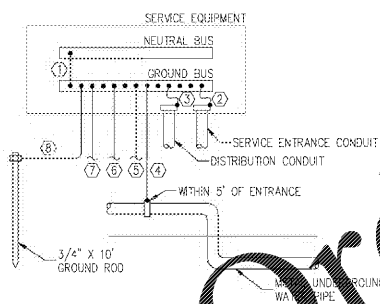
- ☐ DUPLEX RECEPTACLE, WALL-MOUNTED, MOUNT 18" AFF, UON.
- ☐ DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED, MOUNT 18" AFF, UON.
- ☐ GFCI DUPLEX RECEPTACLE, WALL-MOUNTED, MOUNT 18" AFF, UON.
- ☐ GFCI DOUBLE DUPLEX RECEPTACLE, WALL-MOUNTED, MOUNT 18" AFF, UON.
- ☐ DUPLEX RECEPTACLE, WALL-MOUNTED, MOUNT HORIZONTALLY 2.5" ABOVE COUNTER BACKSPASH, UON.
- ☐ GFCI DUPLEX RECEPTACLE, WALL-MOUNTED, MOUNT HORIZONTALLY 2.5" ABOVE COUNTER BACKSPASH, UON.
- ☐ GFCI DUPLEX RECEPTACLE, WALL-MOUNTED, WITH WEATHERPROOF-IN-USE COVER, MOUNT 18" AFF, UON.
- ☐ INFRASTRUCTURE FOR TELECOMMUNICATIONS OUTLET, PROVIDE 4" SQUARE BOX WITH BLANK COVER, MOUNTED 18" AFF, UON, PROVIDE 1" CONDUIT FROM BOX TO ABOVE ACCESSIBLE CEILING.
- ☐ INFRASTRUCTURE FOR TELECOMMUNICATIONS OUTLET, PROVIDE 4" SQUARE BOX WITH BLANK COVER, MOUNTED HORIZONTALLY 2.5" ABOVE COUNTER BACKSPASH, UON, PROVIDE 1" CONDUIT FROM BOX TO ABOVE ACCESSIBLE CEILING.
- ☐ JUNCTION BOX, WALL-MOUNTED, MOUNT 18" AFF, UON.
- ☐ JUNCTION BOX, ABOVE CEILING.
- ☐ CONNECTION TO MECHANICAL OR PLUMBING EQUIPMENT, TAG INDICATES EQUIPMENT SERVED, REFER TO EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
- ☐ SAFETY DISCONNECT SWITCH, NOMENCLATURE IS AMPERES/POLES/FUSED OR NONFUSED/ENCLOSURE TYPE IF OTHER THAN NEMA 1, MOUNT 48" AFF, UON.
- ☐ TOGGLE SWITCH, SINGLE POLE, SINGLE THROW, MOUNT 48" AFF, UON.
- ☐ TOGGLE SWITCH, 3-WAY, SINGLE POLE, DOUBLE THROW, MOUNT 48" AFF, UON.
- ☐ WALL SWITCH OCCUPANCY SENSOR, MOUNT 48" AFF, UON.
- ☐ CEILING-MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY, PASSIVE INFRARED AND ULTRASONIC.
- ☐ PANELBOARD, SURFACE-MOUNTED.
- ☐ PANELBOARD, FLUSH-MOUNTED.
- ☐ LUMINAIRE, TAG INDICATES TYPE, REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.
- ☐ EX1 SIGN, TAG INDICATES TYPE, DASHED SECTIONS INDICATES FACES, ARROWS INDICATE DIRECTIONAL INDICATORS, REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.
- ☐ EMERGENCY LIGHT, REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.

ELECTRICAL ABBREVIATIONS:

- AFF ABOVE FINISHED FLOOR
- F* FUSED PER MANUFACTURER RECOMMENDATIONS
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- MFR EQUIPMENT MANUFACTURER
- UON UNLESS OTHERWISE NOTED
- WP WEATHERPROOF
- XMR TRANSFORMER

FIRE ALARM LEGEND:

- ☐ MANUAL PULL STATION, MOUNT 48" AFF, UON.
- ☐ STROBE LIGHT, MOUNT 80" AFF, UON.
- ☐ HORN, MOUNT 80" AFF, UON.
- ☐ COMBINATION HORN/STROBE LIGHT, MOUNT 80" AFF, UON.
- ☐ BELL, MOUNT 80" AFF, UON.
- ☐ AREA SYSTEM SMOKE DETECTOR.
- ☐ DUCT SYSTEM SMOKE DETECTOR.
- ☐ HEAT DETECTOR.



- KEY NOTES:**
1. MAIN BONDING JUMPER SIZED PER NFPA 70-TABLE 250.102(C)(1).
 2. SUPPLY-SIDE EQUIPMENT BONDING JUMPER SIZED PER NFPA 70-TABLE 250.102(C)(1).
 3. SYSTEM BONDING JUMPER SIZED PER NFPA 70-TABLE 250.102(C)(1).
 4. GROUNDING ELECTRODE CONDUCTOR SIZED PER NFPA 70-TABLE 250.66 IN 1" CONDUIT, PROVIDE BONDING JUMPER SIZED PER NFPA 70-TABLE 250.102(C)(1) AROUND INSULATED JOINTS, FILTERING DEVICES, AND METERING EQUIPMENT.
 5. GROUNDING ELECTRODE CONDUCTOR SIZED PER NFPA 70-TABLE 250.66 IN 1" CONDUIT TO METAL IN-GROUND SUPPORT STRUCTURES.
 6. #4 AWG GROUNDING ELECTRODE CONDUCTOR IN 1" CONDUIT TO CONCRETE-ENCASED ELECTRODE.
 7. #6 AWG BONDING CONDUCTOR FOR TELECOMMUNICATIONS IN 1" CONDUIT TO TELEPHONE BACKBOARD.
 8. #6 AWG GROUNDING ELECTRODE CONDUCTOR IN 1" CONDUIT.

1 GROUNDING ELECTRODE SYSTEM

ELECTRICAL SPECIFICATIONS:

- GENERAL:**
1. INSTALLATION SHALL COMPLY WITH NFPA 70-2017 AND ALL APPLICABLE LOCAL CODES.
 2. ALL PRODUCTS PROVIDED IN THIS CONTRACT SHALL BE NEW, SHALL BE LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
 3. ALL EQUIPMENT OF THE SAME TYPE SHALL BE BY THE SAME MANUFACTURER.
 4. WORKING CLEARANCE AROUND EQUIPMENT SHALL NOT BE LESS THAN THE MINIMUM REQUIREMENTS SPECIFIED IN NFPA 70.
 5. FIRESTOPPING SHALL BE APPLIED TO ELECTRICAL PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO RESTORE ORIGINAL FIRE-RESISTANCE RATING OF THE ASSEMBLY.
 6. COORDINATE INSTALLATION WITH STRUCTURE, ARCHITECTURE, AND OTHER TRADEWORK PRIOR TO INSTALLATION TO AVOID CONFLICTS.
 7. ELECTRICAL REQUIREMENTS FOR EQUIPMENT OF OTHER TRADES HAVE BEEN COORDINATED AS A BASIS OF DESIGN. CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF EQUIPMENT FURNISHED PRIOR TO INSTALLATION AND PROVIDE ELECTRICAL SYSTEMS REQUIRED BY THAT EQUIPMENT. ANY ELECTRICAL SYSTEM REVISIONS REQUIRED TO COORDINATE WITH EQUIPMENT FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
 8. WORK SHALL BE NEAT IN APPEARANCE, PLUMB, LEVEL, AND TRUE. ANY WORK DEEMED UNSATISFACTORY BY THE ARCHITECT SHALL BE IMMEDIATELY REMOVED AND REPLACED.
 9. PROVIDE ALL COMPONENTS AND PERFORM ALL WORK NECESSARY FOR A COMPLETE WORKING SYSTEM.
 10. PROVIDE AN IDENTIFYING NAMEPLATE FOR EACH PANELBOARD, DISCONNECT SWITCH, OR OTHER PIECE OF EQUIPMENT. NAMEPLATE SHALL INCLUDE EQUIPMENT NAME, ELECTRICAL CHARACTERISTICS, EQUIPMENT RATINGS, AND SOURCE NAME.
 11. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR THE FOLLOWING MATERIALS:
 - a. FIRE ALARM SYSTEM
 - b. LUMINAIRES
 - c. PANELBOARDS

- CONDUCTORS:**
1. CONDUCTORS SHALL BE COPPER.
 2. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG FOR POWER AND LIGHTING CIRCUITS, UNLESS OTHERWISE INDICATED. MINIMUM CONDUCTOR SIZE SHALL BE #16 AWG FOR FIRE ALARM INITIATING CIRCUITS AND #14 AWG FOR FIRE ALARM NOTIFICATION AND RELAY CIRCUITS, UNLESS OTHERWISE INDICATED.
 3. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED.
 4. INSULATION SHALL BE TYPE THHN/THWN-2 OR XHHW-2, RATED AT 90°C.
 5. CONDUCTORS SHALL BE COLOR-CODED TO INDICATE THE PHASE AND VOLTAGE.
 - a. COLORS FOR 208/120V SYSTEMS:
 - 1. PHASE A - BLACK
 - 2. PHASE B - RED
 - 3. PHASE C - BLUE
 - 4. NEUTRAL - WHITE
 - 5. GROUND - GREEN
 6. SPLICES AND TAPS IN SOLID BRANCH CIRCUIT CONDUCTORS SHALL BE MADE WITH TWIST-ON OR CRIMP PRESSURE TYPE CONNECTION DEVICES.
 7. SPLICES, TAPS, AND BUS BAR TERMINATIONS OF STRANDED CONDUCTORS SHALL BE MADE WITH COPPER COMPRESSION OR CRIMP TYPE LUGS.

- METAL-CLAD CABLE:**
1. METAL-CLAD CABLE SHALL BE OF STEEL OR ALUMINUM CONSTRUCTION AND SHALL HAVE INSULATED GROUNDING CONDUCTOR.
 2. METAL-CLAD CABLE SHALL ONLY BE USED WHERE PERMITTED BY NFPA 70.
- GROUNDING:**
1. ELECTRICAL ENCLOSURES, AND RACEWAYS SHALL BE GROUNDED. INSTALL INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS.
 2. BOND GROUND CONDUCTORS AT ORIGIN OF CIRCUITS, AT INTERMEDIATE PULL BOXES, AND TO PANELBOARDS OR EQUIPMENT AT TERMINATIONS.
 3. EQUIPMENT GROUNDING CONDUCTORS AND GROUNDING ELECTRODE CONDUCTORS SHALL BE CONNECTED TO THE GROUND BUS OF THE SERVICE EQUIPMENT. INSTALL A MAIN BONDING JUMPER BETWEEN THE NEUTRAL AND GROUND BUSES OF THE SERVICE EQUIPMENT.
 4. A GREEN-COLORED GROUNDING CONDUCTOR SHALL BE PROVIDED IN RACEWAYS WITH THE PHASE CONDUCTORS.
 5. PROVIDE NFPA 70-COMPLIANT GROUNDING ELECTRODE SYSTEM. PROVIDE BONDING JUMPERS WHERE NECESSARY. THE FOLLOWING GROUNDING ELECTRODES SHALL BE BONDED TOGETHER TO FORM A COMPLETE GROUNDING ELECTRODE SYSTEM:
 - a. METAL UNDERGROUND WATER PIPE
 - b. METAL IN-GROUND SUPPORT STRUCTURES
 - c. CONCRETE-ENCASED ELECTRODES
 - d. GROUND RODS

- RACEWAYS:**
1. ELECTRICAL METALLIC TUBING SHALL COMPLY WITH ANSI C80.3 AND UL 797. FITTINGS SHALL BE STEEL, COMPRESSION OR SETSCREW TYPE, WITH INSULATED THROAT CONNECTIONS.
 2. FLEXIBLE METAL CONDUIT SHALL COMPLY WITH UL 1 AND SHALL BE ZINC-COATED STEEL. FITTINGS SHALL BE TWIST-IN, INSERTION TYPE, WITH INSULATED THROAT.
 3. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL COMPLY WITH UL 360 AND SHALL BE PVC-JACKETED STEEL. FITTINGS SHALL BE TWIST-IN, INSERTION TYPE, WITH INSULATED THROAT.
 4. RIGID NONMETALLIC CONDUIT SHALL COMPLY WITH NEMA TC2 AND UL 651 AND SHALL BE SCHEDULE 40 ELECTRICAL POLYMER CHLORIDE. FITTINGS SHALL BE SCHEDULE 40 ELECTRICAL POLYMER CHLORIDE.
 5. RACEWAYS FOR EXTERIOR APPLICATIONS SHALL BE RIGID NONMETALLIC CONDUIT, SCHEDULE 40 ELECTRICAL POLYMER CHLORIDE.
 6. RACEWAYS FOR EXTERIOR CONNECTION TO MOTORS AND OTHER VIBRATING EQUIPMENT SHALL BE LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
 7. RACEWAYS FOR INTERIOR CONNECTION TO MOTORS AND OTHER VIBRATING EQUIPMENT SHALL BE FLEXIBLE METAL CONDUIT FOR DRY LOCATIONS AND LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR DAMP OR WET LOCATIONS.
 8. RACEWAYS FOR INTERIOR CONNECTION TO MOTORS AND OTHER VIBRATING EQUIPMENT SHALL BE FLEXIBLE METAL CONDUIT FOR DRY LOCATIONS AND LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR DAMP OR WET LOCATIONS.
 9. REINSTALL CONDUCTORS IN RACEWAYS, UNLESS OTHERWISE SPECIFIED.
 10. INSTALL PULL LINES IN EMPTY CONDUITS AND CONDUITS FOR TELECOMMUNICATIONS OUTLETS. CONDUITS SHALL BE MONUMENTAL PLASTIC LINE WITH NOT LESS THAN 200LB TENSILE STRENGTH. LEAVE AT LEAST 12 INCHES OF SLACK AT EACH END OF PULL LINE.
 11. PROVIDE A COMPLETE RACEWAY SYSTEM.
 12. RACEWAYS SHALL BE RUN PARALLEL WITH OR PERPENDICULAR TO THE BUILDING WALLS.
 13. TELEPHONE SERVICE RACEWAYS AND OTHER INFRASTRUCTURE REQUIREMENTS SHALL BE COORDINATED WITH THE SERVICE PROVIDER PRIOR TO INSTALLATION.
 14. MINIMUM RACEWAY SIZE SHALL BE 0.5" FOR LOCAL BRANCH CIRCUITS, 1" FOR NUMBERS WITH MULTIPLE CIRCUITS, AND 1" FOR TELECOMMUNICATIONS.

- BOXES AND ENCLOSURES:**
1. BOXES SHALL BE CODE-GAUGE GALVANIZED STEEL.
 2. BOXES SHALL BE 4" SQUARE AND 2.125" DEEP, OR 4" OCTAGONAL AND 2.125" DEEP WHERE INSTALLED RECESSED IN CEILING. PROVIDE PLASTER RING WHERE RECESSED IN PLASTER OR GYPSUM BOARD WALLS.
 3. BOXES FOR FUTURE USE SHALL BE PROVIDED WITH BLANK COVER PLATES.
 4. LOCATE BOXES SO THAT COVER OR PLATE WILL NOT SPAN DIFFERENTIAL BUILDING JOINTS.

- LIGHTING CONTROL DEVICES:**
1. TIME SWITCHES
 - a. SOLID STATE, PROGRAMMABLE, ASTERISK, AND ALPHANUMERIC DISPLAY AND 7-DAY CONTROL.
 - b. CONTACTS SHALL HAVE 2000VA AND RATING AT 120-277V WITH SINGLE-POLE, SINGLE-THROW CONFIGURATION AND NUMBER OF POLES INDICATED ON THE DRAWINGS.
 - c. ON-OFF SELECTION SHALL BE BY MOVABLE LIGHT LEVEL SELECTOR.
 - d. SHALL BE DESIGNED FOR MOUNTING ON THREADED CONDUIT NIPPLE.
 - e. MANUFACTURER SHALL BE INTERMATIC OR TORX.
 2. PHOTO-EYE
 - a. HEAVY DUTY PHOTO-EYE ENCLOSURE, WEATHER, GASKETED, CONTAINING CADMIUM SULPHIDE HERMETICALLY SEALED CELL.
 - b. CONTACTS SHALL BE SINGLE-POLE, SINGLE-THROW, NORMALLY CLOSED.
 - c. ON-OFF SELECTION SHALL BE BY MOVABLE LIGHT LEVEL SELECTOR.
 - d. SHALL BE DESIGNED FOR MOUNTING ON THREADED CONDUIT NIPPLE.
 - e. MANUFACTURER SHALL BE INTERMATIC OR TORX.
 3. INDOOR OCCUPANCY AND VACANCY SENSORS
 - a. SENSORS SHALL BE CEILING-MOUNTED OF TECHNOLOGY TYPE INDICATED ON THE DRAWINGS.
 - b. SENSORS SHALL HAVE ADJUSTABLE AMBIENT LIGHT LEVELS, ADJUSTABLE TIME DELAY, LED INDICATOR LIGHT, 360° FIELD OF VIEW, AND A MINIMUM COVERAGE AREA OF 1000 SQ.FT.
 - c. SENSOR LAYOUT DEPICTED ON THE DRAWINGS IS DIAGRAMMATIC IN NATURE ONLY. EXACT LOCATIONS SHALL BE DETERMINED AT THE BUILDING BASED ON MANUFACTURER'S RECOMMENDATIONS AND COORDINATION WITH OTHER TRADES.
 - d. SENSORS SHALL BE AUTOMATIC-ON OR OCCUPANCY TYPE IN CORRIDORS, STAIRWELLS, RESTROOMS, KITCHENS, AND LOBBIES AND SHALL BE MANUAL-ON OR VACANCY TYPE IN ALL OTHER SPACES.
 4. WALL SWITCH OCCUPANCY SENSORS
 - a. SENSORS SHALL BE RATED FOR LOADS UP TO 800VA AT 120V AND 1200VA AT 277V.
 - b. SENSORS SHALL HAVE A 180° FIELD OF VIEW AND A MINIMUM COVERAGE AREA OF 900 SQ.FT.
 - c. SENSORS SHALL BE DUAL-TECHNOLOGY - PASSIVE INFRARED AND ULTRASONIC.
 - d. DEVICE FINISH SHALL BE PER ARCHITECT.
 5. LIGHTING CONTACTORS
 - a. ELECTRICALLY OPERATED AND MECHANICALLY HELD, COMBINATION-TYPE LIGHTING CONTACTORS WITH NONFUSED DISCONNECT AND SOLID STATE CONTROL MODULES.
 - b. CONTACTORS SHALL HAVE NUMBER OF POLES INDICATED ON THE DRAWINGS.
 - c. LIGHTING CONTROL DEVICES OTHER SHALL BE BY ACUITY CONTROLS, EATON GREENGATE, HUBBELL CONTROL SOLUTIONS, LEVITON, OR WATTSSTOPPER, UNLESS OTHERWISE NOTED.

- PANELBOARDS:**
1. PANELBOARD CABINET SHALL BE STEEL WITH DEAD FRONT, COMBINATION LATCH AND CYLINDER LOCK, AND HINGED DOOR-IN-DOOR TYPE.
 2. PHASE, NEUTRAL, AND GROUND BUSES SHALL BE COPPER.
 3. PANELBOARD SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT-CIRCUIT CURRENT AVAILABLE AT TERMINALS. PANELBOARD AND OVERCURRENT PROTECTIVE DEVICES SHALL HAVE SHORT-CIRCUIT RATINGS AS SHOWN ON THE DRAWINGS.
 4. OVERCURRENT PROTECTIVE DEVICES WITHIN PANELBOARDS SHALL BE BOLT-ON MOLDED CASE THERMAL-MAGNETIC CIRCUIT BREAKERS.
 5. PANELBOARDS SHALL BE FIELD OR FACTORY MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS.
 6. PANELBOARDS MOUNTED FLUSH SHALL BE PROVIDED WITH A MINIMUM OF TWO (2) 0.75" SPARE CONDUITS TO ABOVE ACCESSIBLE CEILING.
 7. PANELBOARDS SHALL BE BY EATON, GE, SIEMENS, OR SQUARE D.

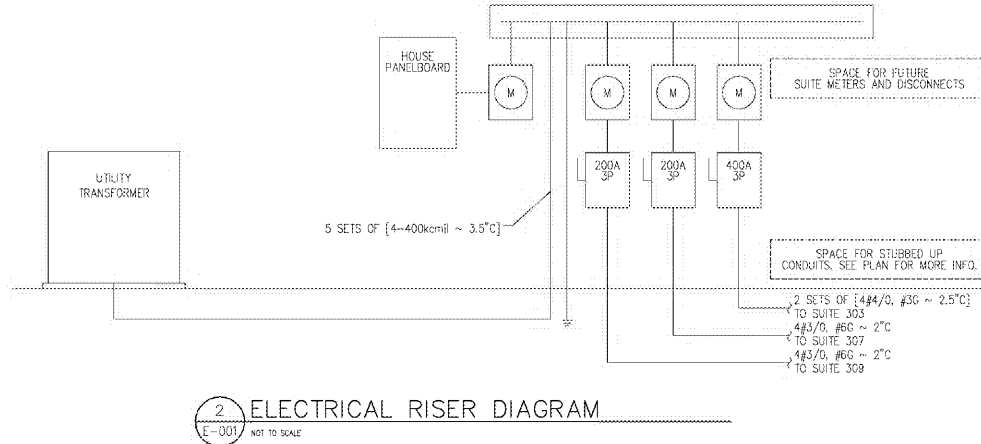
- WIRING DEVICES:**
1. DUPLEX RECEPTACLES SHALL BE 125V, 20A, STRAIGHT BLADE TYPE, NEMA WD 6 CONFIGURATION 5-20R, WITH ONE-PIECE BRASS WRAP-AROUND MOUNTING STRAP WITH INTEGRAL GROUND CONTACTS.
 2. GFCI RECEPTACLES SHALL BE 125V, 20A, STRAIGHT BLADE, FEED-THROUGH TYPE, NEMA WD 6 CONFIGURATION 5-20R, UL 943 CLASS A, WITH ONE-PIECE BRASS WRAP-AROUND MOUNTING STRAP WITH INTEGRAL GROUND CONTACTS.
 3. TOGGLE SWITCHES SHALL BE 120-277V, 20A. SWITCHES SHALL BE SINGLE POLE, 3-WAY, OR 4-WAY AS INDICATED ON THE DRAWINGS.
 4. MOMENTARY-CONTACT SWITCHES SHALL BE 120-277V, 20A, SINGLE POLE, DOUBLE THROW, CENTER OFF.
 5. DEVICES SHALL BE COLORED PER ARCHITECT.
 6. DEVICE FACEPLATES SHALL BE SMOOTH, HIGH-IMPACT THERMOPLASTIC, COLORED TO MATCH DEVICE.
 7. RECEPTACLES INSTALLED OUTDOORS OR IN WET LOCATIONS SHALL BE GFCI TYPE, WEATHER-RESISTANT, WITH A NEMA 3R EXTRA-DUTY-RATED WEATHERPROOF-IN-USE COVER.
 8. RECEPTACLES SHALL NOT BE INSTALLED BACK-TO-BACK.
 9. DEVICES SHALL BE EATON, HUBBELL, LEVITON, OR PASS & SEYMOUR. DEVICES SHALL BE BY THE SAME MANUFACTURER.

- FUSES:**
1. FUSES IN DEVICES FOR MOTOR BRANCH CIRCUITS AND TRANSFORMER FEEDERS UP TO 600A SHALL BE TYPE RK-1, 600V, 200K AIC, TIME DELAY TYPE WITH CLASS R FUSE CLIPS.
 2. FUSES IN DEVICES FOR OTHER USES UP TO 600A SHALL BE TYPE J, 600V, 200K AIC, FAST-ACTING TYPE.
 3. FUSES IN DEVICES GREATER THAN 600A SHALL BE TYPE L, 600V, 200K AIC, TIME DELAY TYPE.

- DISCONNECT SWITCHES:**
1. SWITCHES SHALL BE HEAVY DUTY, HORSEPOWER RATED, 600V, CAPACITY AND POLES AS INDICATED ON THE DRAWINGS WITH LOCKABLE HANDLE. FUSIBLE SWITCHES SHALL HAVE CLASS R FUSE KIT.
 2. NONFUSIBLE SWITCHES FOR MOTOR LOADS 2HP OR SMALLER OR NONMOTOR LOADS CONNECTED TO 20A OR SMALLER CIRCUIT MAY BE MOTOR-RATED TOGGLE SWITCHES OR NONAUTOMATIC CIRCUIT BREAKERS.
 3. SWITCH ENCLOSURES SHALL BE NEMA 250 TYPE 1 INDOORS AND SHALL BE NEMA 250 TYPE 3R OUTDOORS OR IN WET LOCATIONS.

- LUMINAIRES:**
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LOCATION OF LUMINAIRES.
 2. CEILING-MOUNTED LUMINAIRES SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE AND SHALL BE SECURELY FASTENED TO THE CEILING FRAMING MEMBER BY MECHANICAL MEANS SUCH AS BOLTS, SCREWS, RIVETS, OR LISTED CLIPS IDENTIFIED FOR THE TYPE OF FRAMING MEMBER AND LUMINAIRE.

- FIRE ALARM SYSTEM:**
1. FIRE ALARM SYSTEM SHALL COMPLY WITH NFPA 101, NFPA 72, AND NFPA 90A.
 2. SYSTEM COMPONENTS
 - a. FIRE ALARM CONTROL PANEL
 - 1. FACP SHALL BE MODULAR, POWER-LIMITED DESIGN WITH ELECTRONIC MODULES. REFER TO LISTED PANEL FOR LISTING.
 - 2. PRIMARY POWER SHALL BE 24VDC OBTAINED FROM 120VAC SERVICE AND POWER-SOURCELY MONITORED INITIATING AND SIGNAL CIRCUITS SHALL BE SERVED BY THE 24VDC SOURCE.
 - 3. SECONDARY POWER SHALL BE 24VDC SUPPLY SYSTEM WITH BATTERIES, AUTOMATIC BATTERY CHARGER, AND AUTOMATIC TRANSFER SWITCH.
 - b. SYSTEM SMOKE DETECTORS
 - 1. DEVICES SHALL BE TWO-WIRE TYPE AND SHALL BE TWIST-LOCK MODULE THAT CONNECTS TO A FIXED BASE.
 - 2. AREA DETECTORS SHALL BE PHOTOELECTRIC TYPE WITH ALARM INDICATING LIGHT AND SHALL COMPLY WITH UL 268.
 - 3. DUCT DETECTORS SHALL BE PHOTOELECTRIC TYPE WITH ALARM INDICATING LIGHT, NEMA 250 TYPE 4X WEATHERPROOF DUCT HOUSING ENCLOSURE, AND SAMPLE POINT SHALL COMPLY WITH UL 268A.
 - c. NOTIFICATION APPLIANCES
 - 1. BELLS SHALL BE 6" CONTINUOUSLY VIBRATING, UNDERBELL MOUNT, HORN BELLS SHALL COMPLY WITH UL 464 AND SHALL PRODUCE A MINIMUM SOUND RATING OF 85 dBA AT 10 FEET FROM THE BELL. BELLS IN EXTERIOR LOCATIONS SHALL BE SPECIFICALLY LISTED OR APPROVED FOR OUTDOOR USE. BILLS SHALL BE PROVIDED WITH A METAL HOUSING AND PROTECTIVE GRILLES.
 - 2. DIGITAL ADDRESS COMMUNICATOR TRANSMITTER
 - 1. DACT SHALL BE ACCEPTABLE TO THE LOCAL CENTRAL STATION AND SHALL COMPLY WITH UL 632.
 - 2. DACT SHALL BE PERMITS AND SIZE 2.5" TELEPHONE LINES, TRANSMIT A TEST MESSAGE EVERY 24 HOURS, AND TRANSMIT AN INDIVIDUAL MESSAGE FROM EACH OF 4 INTERIOR SIGNALS.
 - 3. DACT SHALL HAVE AN INTEGRAL RECHARGEABLE BATTERY AND AUTOMATIC CHARGER.
 - 4. THIS CONTRACT SHALL INCLUDE ANNUAL MONITORING FEES FOR A PERIOD OF 1 YEAR.
 - d. UPON ACTIVATION OF ANY ALARM INITIATING DEVICE, THE FOLLOWING RESPONSE SHALL AUTOMATICALLY OCCUR:
 - 1. AUDIBLE NOTIFICATION APPLIANCES SHALL SOUND AND VISUAL NOTIFICATION APPLIANCES SHALL FLASH THROUGHOUT THE BUILDING.
 - 2. THE ACTIVATED ALARM ZONE SHALL BE VISUALLY INDICATED ON THE FIRE ALARM CONTROL PANEL.
 - 3. THE DIGITAL ALARM COMMUNICATION TRANSMITTER SHALL OPERATE.
 - 4. DELAYS SHALL SHUT DOWN AIR HANDLING SYSTEMS.
 - e. OPERATION OF A DUCT SMOKE DETECTOR SHALL STOP THE AFFECTED HVAC SYSTEM.
 - f. AUTOMATIC FIRE-EXTINGUISHING SYSTEMS SHALL BE MONITORED BY BUILDING FIRE ALARM SYSTEM.
 - g. FIRE ALARM WIRING SHALL BE INSTALLED IN DEDICATED CONDUIT AND KEPT SEPARATE FROM WIRING FOR POWER OR LIGHTING SYSTEMS.
 - 5. SYSTEM SHALL BE BY GAMEWELL-FC, HONEYWELL, NOTIFIER, OR SIMPLEX.



2 ELECTRICAL RISER DIAGRAM

EQUIPMENT CONNECTION SCHEDULE					
EQUIPMENT	LOCATION	SIZE	VOLTAGE	DISCONNECT	PANELBOARD
EBRH-A	RISER ROOM	4.5 MCA	120V/1φ	BY MFR	HOUSE
EF-A	RESTROOM	54W	120V/1φ	BY MFR	303
RTU-1	ROOF	26.5 MCA	208V/3φ	BY MFR	HOUSE
RTU-2	ROOF	32.0 MCA	208V/3φ	BY MFR	HOUSE
RTU-3	ROOF	22.0 MCA	208V/3φ	BY MFR	HOUSE
RTU-4	ROOF	22.0 MCA	208V/3φ	BY MFR	HOUSE
RTU-5	ROOF	29.0 MCA	208V/3φ	BY MFR	303
RTU-6	ROOF	26.0 MCA	208V/3φ	BY MFR	303
RTU-7	ROOF	22.0 MCA	208V/3φ	BY MFR	303
RTU-8	ROOF	22.0 MCA	208V/3φ	BY MFR	303
RTU-9	ROOF	26.0 MCA	208V/3φ	BY MFR	303
RTU-10	ROOF	32.0 MCA	208V/3φ	BY MFR	307
RTU-11	ROOF	29.0 MCA	208V/3φ	BY MFR	309
WH	RESTROOM	3.6 KW	120V/1φ	60/1/F*	303

NOTES:

1. DISCONNECT NOMENCLATURE IS AMPERES/POLES/FUSED OR NONFUSED/ENCLOSURE TYPE IF OTHER THAN NEMA 1.
2. SEE ELECTRICAL EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION REGARDING ASSOCIATED CIRCUIT BREAKER, CONDUCTORS, RACEWAY, ETC.

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PROFESSIONAL SEAL:



PROJECT TITLE:

**MARKET PLACE
AT LOCUST
GROVE SHOPS
PHASE 2**

LOCUST GROVE, GEORGIA

PROJECT INFO:

4959 BILL GARDNER PARKWAY
LOCUST GROVE, GA 30248

OWNER:

IP ILG, LLC

JACOB LANG

912.655.3438

PRINT RECORD

Description	Date

REVISION

No.	Description	Date

**ELECTRICAL
LEGEND
& SPECIFICATIONS**

Project number: D20-101
Date: 10/26/2020
Drawn by: EKC
Checked by: EKC

E-001

Scale: AS NOTED

ISSUED FOR CONSTRUCTION