

MODULAR SYSTEM NOTES & LEGEND

- BOSTON RETAIL MAIN DISTRIBUTION BOXES TOGETHER WITH CABLING FOR CONNECTION TO CIRCUITS AT HOMERUN JUNCTION BOX ARE TO BE ORDERED BY G.C. FROM BOSTON RETAIL (SEE SHEET ADO FOR CONTACT INFO).
- DISTRIBUTION BOXES ARE TO BE SECURELY SUSPENDED WITH LATERAL BRACING AT 12" ABOVE CEILING AT THE LOCATIONS SHOWN IN THE APPROVED RA-1 ASLE PLAN AVAILABLE FROM THE ROSS G.C. (GREEN BOXES SO THAT LABELING PAGES FLOOR (LARGE BOX) IS 12"x12"x4" AND WEIGHS 81/2 POUNDS). FOR STORES WITH APPROVED OPEN CEILING LIGHTS ONLY (SEE A2.0A) DISTRIBUTION BOXES ARE TO BE SECURELY SECURED TO THE UNDERSIDE OF ROOF STRUCTURE.
- EACH MAIN DISTRIBUTION BOX IS PRE-WIRED AND INCLUDES A TYPE 'MC' HOMERUN CABLE TO BE ROUTED TO A HOMERUN JUNCTION BOX. JUNCTION BOX IS TO BE OVER-SIZED FOR THE CONNECTED CIRCUITS IN ORDER TO ALLOW FOR FUTURE EXPANSION; CONTACT BOSTON RETAIL FOR ADDITIONAL INFORMATION (SEE SHEET ADO FOR CONTACT INFO).
- ALLOW A LEAD TIME AFTER RECEIPT OF ORDER OF 6 WEEKS FOR DELIVERY.
- COORDINATE INSTALL WITH ROSS CONSTRUCTION REPRESENTATIVE.

BOSTON RETAIL MAIN DISTRIBUTION BOX #1 (BY G.C.)
 ISOLATED GROUND/GENERAL PURPOSE, MOUNTED AT 12" ABOVE CEILING, WITH 25' TYPE MC HOMERUN CABLE CONTAINING 19-#10AWG CONDUCTORS.

DEDICATED CIRCUITS (3 CLEAN AND 3 DIRTY MINIMUM):
 NCR 9 (REGISTER CLEAN), NCR 14 (REGISTER CLEAN), NCR 14 (REGISTER CLEAN), LA 25 (DIRTY), LA 27 (DIRTY), LA 34 (DIRTY)

BOSTON RETAIL MAIN DISTRIBUTION BOX #2 (BY G.C.)
 ISOLATED GROUND/GENERAL PURPOSE, MOUNTED AT 12" ABOVE CEILING, WITH 25' TYPE MC HOMERUN CABLE CONTAINING 19-#10AWG CONDUCTORS.

DEDICATED CIRCUITS (2 CLEAN AND 3 DIRTY MINIMUM):
 NCR 10 (REGISTER CLEAN), NCR 12 (REGISTER CLEAN), LA 33 (DIRTY), LA 35 (DIRTY), LA 37 (DIRTY - JEWELRY CASE LIGHTS, VIA EMC DIGITAL OUTPUT #2 (0002))

HOMERUN JUNCTION BOX (BY G.C.), POWER POINT FOR HSSC AND CHECKOUT COUNTERS MOUNTED AT 12" ABOVE CEILING (4 CIRCUITS MINIMUM, SEE A5.1) G.C. TO CONNECT FASTLANE MAIN DISTRIBUTION BOX MC CABLES TO J-BOX, MAKE ELECTRICAL CONNECTIONS AND VERIFY POWER TO MAIN DISTRIBUTION BOX PORTS AND PINS.

NOTE: THE NUMBER AND LOCATIONS OF THE DISTRIBUTION BOXES, HOME RUN BOXES AND THE NUMBER OF REQUIRED CIRCUITS VARY BY THE STORES SIZE, NUMBER OF FLOORS AND THE OPERATIONAL CONFIGURATION OF THE SITE SPECIFIC STORE. SEE RA-1 REQUIRED SITE SPECIFIC CONFIGURATION.

FOR SECONDARY (MALL) ENTRY (IF APPLICABLE)
 BOSTON RETAIL MAIN DISTRIBUTION BOX #3 (BY G.C.)
 ISOLATED GROUND/GENERAL PURPOSE, MOUNTED AT 12" ABOVE CEILING, WITH 25' TYPE MC HOMERUN CABLE CONTAINING 19-#10AWG CONDUCTORS.

DEDICATED CIRCUITS (2 CLEAN AND 2 DIRTY MINIMUM):
 NCR 16 (REGISTER CLEAN), NCR 18 (REGISTER CLEAN), LA 24 (DIRTY), LA 28 (DIRTY)

HOMERUN JUNCTION BOX (BY G.C.), POWER POINT FOR SECONDARY ENTRY CHECKOUT COUNTERS MOUNTED AT 12" ABOVE CEILING (4 CIRCUITS MINIMUM, SEE A5.1) G.C. TO CONNECT FASTLANE MAIN DISTRIBUTION BOX MC CABLES TO J-BOX, MAKE ELECTRICAL CONNECTIONS AND VERIFY POWER TO MAIN DISTRIBUTION BOX PORTS AND PINS.

NOTE: THE NUMBER AND LOCATIONS OF THE DISTRIBUTION BOXES, HOME RUN BOXES AND THE NUMBER OF REQUIRED CIRCUITS VARY BY THE STORES SIZE, NUMBER OF FLOORS AND THE OPERATIONAL CONFIGURATION OF THE SITE SPECIFIC STORE. SEE AE-1 REQUIRED SITE SPECIFIC CONFIGURATION.

PLAN NOTES

- THIS IS A PROTOTYPICAL PLAN. SPECIFIC LOCATIONS FOR AND NUMBERS OF ELECTRICAL DEVICES AND EQUIPMENT ARE SUBJECT TO CHANGE BASED ON ROSS SITE SPECIFIC REQUIREMENTS. YOU MUST VERIFY THESE REQUIREMENTS THROUGH THE ROSS ARCHITECTURAL REPRESENTATIVE AND THE G.C. MUST VERIFY DEVICE LOCATIONS THROUGH THE ROSS CONSTRUCTION REPRESENTATIVE PRIOR TO ELECTRICAL TAKE-OFF.
- THIS POWER, SIGNAL AND PHONE PLAN IS DIAGRAMMATIC AND ADVISORY. SUBMIT COMPLETED ELECTRICAL AND MECHANICAL DRAWINGS WITH LOAD CALCULATIONS TO ROSS CONSTRUCTION REPRESENTATIVE AND TO C&C BUILDING AUTOMATION (SEE ADO) FOR CONTACT.
- MINIMUM SERVICE REQUIRED: SECONDARY METERED SERVICE OF 600 AMPS, 277/480 VOLTS, 3 PHASE, 4 WIRE. A FUSE (EMERGENCY METER) IS REQUIRED.
- THIS PLAN AND RELATED DETAIL PLAN ON E2.0 MAY NOT MATCH THE ROSS SITE SPECIFIC AET FLOOR PLAN. IN THE EVENT THAT IT DOES NOT, THESE DRAWINGS ARE TO BE USED AS A GUIDE IN THE PREPARATION OF YOUR PROJECT SPECIFIC POWER/SIGNAL PLANS. PLEASE CONTACT THE ROSS CONSTRUCTION REPRESENTATIVE IF YOU HAVE ANY QUESTIONS. SEE ALSO SITE SPECIFIC AEO TENANT PLAN ISSUED BY ROSS STORE DESIGNER SEE SHEET ADO FOR CONTACT.
- EXPOSED EMT, CONDUIT AND SURFACE MOUNTED WIRING ARE NOT PERMITTED IN ANY FINISHED SPACE.
- PARTICULAR ATTENTION SHOULD BE GIVEN TO THE ACCURATE INCORPORATION OF THE ENERGY MANAGEMENT SYSTEM REQUIREMENTS INTO THE PROJECT. PLEASE CONTACT C&C BUILDING AUTOMATION (SEE SHEET ADO FOR CONTACT INFORMATION) AT THE INITIATION OF YOUR DOCUMENT PREPARATION PHASE FOR ADDITIONAL COMMENTS. THESE DRAWINGS ARE READY FOR FINAL APPROVAL, PLEASE SEND ELECTRICAL DRAWINGS AS AN AUTOCAD 2004 SINGLE FILE FORMAT ELECTRONIC BACKGROUND TO C&C FOR PREPARATION OF EMS DRAWINGS.

- PROVIDE A WALL MOUNTED UTILITY LIGHT AND SERVICE POWER RECEPTACLE IN THE ENCLOSED AREA OF THE CLOSET BEHIND THE SIGN WITH THE LIGHT SWITCH CLOSE TO THE ACCESS DOOR AND CLEARLY VISIBLE FROM THAT LOCATION.
- IF LOCAL MUNICIPAL REGULATIONS/CODES REQUIRE LOW VOLTAGE ELECTRICAL WIRING (TELEPHONE, SIGNAL, MUSIC/PAGING SPEAKERS, ETC) TO BE RUN IN EMT OR RIGID CONDUIT, THEN THE SCOPE OF WORK IS TO INCLUDE THE INSTALLATION OF THAT CONDUIT. IF SO YOU MUST OBTAIN AND THE CONTRACTOR MUST VERIFY THE REQUIRED LAYOUT OF THE PHONES AND MUSIC/PAGING SYSTEM FROM THE ROSS CONSTRUCTION MANAGER.
- THE BOSTON RETAIL FASTLANE MODULAR WIRING SYSTEM IS A UL LISTED WIRING SYSTEM RECOGNIZED BY THE NATIONAL ELECTRICAL CODE. THIS SYSTEM IS COMPOSED OF TWO SEPARATE COMPONENT PACKAGES, EACH PURCHASED AND INSTALLED SEPARATELY.
- PACKAGE #1 IS PURCHASED AND INSTALLED BY THE G.C. AND CONSISTS OF TWO OR MORE FASTLANE MAIN DISTRIBUTION BOXES (MDBS) MOUNTED ABOVE THE HUNG CEILING AND CONNECTED TO THE ELECTRICAL CIRCUITS PROVIDED IN THE HOMERUN JUNCTION BOX. THESE CIRCUITS MUST CONTAIN FIVE ISOLATED GROUND (IG OR 'CLEAN') CIRCUITS (MINIMUM), FIVE GENERAL PURPOSE (GP OR 'DIRTY') CIRCUITS (MINIMUM) AND ONE JEWELRY CASE LIGHTING CIRCUIT THAT MUST BE ROUTED THROUGH THE ENERGY MANAGEMENT SYSTEM (EMS) VIA OUTPUT #1. LARGER FORMAT STORES MUST HAVE ADDITIONAL IG AND GP CIRCUITS. THE FASTLANE MDBS EACH HAVE A PRE-WIRED 25' TYPE MC CABLE HOMERUN CONTAINING #10 AWG WIRING CONDUCTORS FOR CONNECTION TO THE HOMERUN J-BOX CIRCUITS. THE G.C. IS ALSO RESPONSIBLE FOR VERIFYING POWER TO THE MDB PORTS AFTER CONNECTIONS ARE MADE. THE POWER TO THESE CIRCUITS MUST BE LIVE AFTER TURNOVER. STORE FORMATS WITH IN-LINE RECEIVERS MUST HAVE TWO MDBS LOCATED AT EACH POWER POLE LOCATION.
- PACKAGE #2 IS PURCHASED AND INSTALLED BY THE ROSS STORE PLANNING MILLWORK VENDOR AND IS COMPOSED OF ALL POWER POLES, WIRING AND RECEPTACLE DEVICES LOCATED IN THE MILLWORK (CHECKOUT COUNTERS, JEWELRY CASES AND CUSTOMER SERVICE COUNTERS). THE MILLWORK VENDOR IS RESPONSIBLE FOR MAKING FINAL PULL-IN CONNECTIONS TO THE FASTLANE MDB PORTS. CONTACT BOSTON RETAIL WITH QUESTIONS (SEE SHEET ADO FOR CONTACT INFO).

MODULAR WIRING RESTRICTIONS NOTE
 IN AREAS AND MUNICIPALITIES WHERE ELECTRICAL CODE RESTRICTIONS PREVENT THE USE OF A MODULAR WIRING SYSTEM OR TYPE MC CABLE IN GENERAL, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING MATERIALS AND LABOR FOR THE HARD-WIRING OF THE CHECKOUT RECEIPTS AND JEWELRY CASE POWER RECEPTACLES TO THE HOMERUN J-BOX IN THE CEILING IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. EACH CHECKOUT RECEIPT WILL REQUIRE ONE ISOLATED GROUND (CLEAN) POWER RECEPTACLE AND ONE GENERAL PURPOSE (DIRTY) POWER RECEPTACLE AND NO MORE THAN THREE RECEIPTS CAN SHARE ONE POWER CIRCUIT, RESPECTIVELY. FINAL LAYOUT OF CHECKOUT RECEIPTS AND ASSOCIATED HARDWARE WILL BE PROVIDED BY BOSTON RETAIL ONCE ROSS RA1 DRAWINGS HAVE BEEN RELEASED. POWER POLES AND ASSOCIATED HARDWARE WILL BE SUPPLIED BY BOSTON RETAIL VIA THE MILLWORK VENDOR AND WILL ARRIVE ON-SITE WITH THE MILLWORK. CONTACT AN ALBURN AT BOSTON RETAIL (781-308-4110) OR ROSS REPRESENTATIVE FOR DETAILS OR FURTHER INFORMATION.

DESIGNER NOTE:
 REMOVE ALL DETAILS AND SYMBOLS REFERENCING:
 • FASTLANE NOTE: (TEXT)
 • MODULAR SYSTEM NOTES AND LEGEND (DETAIL)
 • MAIN DISTRIBUTION BOX CIRCUITING (DETAIL)
 • MDB (SYMBOLS & CHECKOUT) WIRING AND MOUNTING (NOTES)
 • PLAN NOTES 9, 9.1, 9.2 BELOW (NOTES)

POWER, SIGNAL AND TELEPHONE LEGEND

- PRE-FINISHED POWER POLE PROVIDED AS PART OF FRONT END MODULAR SYSTEM PROVIDED AND INSTALLED BY ROSS FUTURE VENDOR.
- DUPLEX RECEPTACLE, 15" A.F.F. U.O.A.
- 20 AMP INDEPENDENT DEDICATED CIRCUIT DUPLEX RECEPTACLE, 15" A.F.F. U.O.A.
- GFCI GROUND FAULT RECEPTACLE, 44" A.F.F. U.O.A.
- 4-PLEX RECEPTACLE, MOUNTING HEIGHT AS NOTED
- 20 AMP IN FLOOR SAFETY DUPLEX OUTLET WITH LOCKING BASS FLUSH HINGED COVER (INDEPENDENT DEDICATED CIRCUIT, 10 GAUSS WIRE)
- LIGHT SWITCH LOCATION, 42" A.F.F.
- GROUND ROD
- SURGE PROTECTED RECEPTACLE PASS & SENSUR 20A DUPLEX/MODEL 1G2820SP ORANGE

- TELEPHONE 38" AT MANAGERS, 58" A.F.F. AT SALES FLOOR (SEE 3/E3.0 FOR ROUGH-IN), U.O.A. (NOTE: SALES FLOOR PHONES ARE NOT PUBLIC PHONES AND AS SUCH MAY NOT BE REQUIRED TO BE ACCESSIBLE. ARCHITECT OF RECORD MUST VERIFY. LOCATIONS SHOWN FOR CONCEPT AND MUST BE VERIFIED THROUGH THE ROSS CONSTRUCTION REPRESENTATIVE PRIOR TO INSTALLATION. PROVIDE PLASTER RING AND CONDUIT WITH PULL-STRING STUBBED TO ABOVE CEILING (TYPICAL OMB INSTALLATION OF SIMILAR PER MOUNTING CONDITION), COLUMN MOUNTED DEVICES ARE TO BE FED CONCEALED FROM WITHIN TUBE. CONFIRM LOCATIONS AND PROVIDE FEED HOLES WITH FULL WIRES. ROSS INSTALLER WILL PROVIDE AND INSTALL WIRE, JACK AND PHONE.
- DATA OUTLET, MOUNTING HEIGHT AS NOTED. (VERIFY LOCATIONS PRIOR TO INSTALLATION). PROVIDE PLASTER RING AND CONDUIT WITH PULL-STRING STUBBED TO ABOVE CEILING (TYPICAL OMB INSTALLATION OR SIMILAR PER MOUNTING CONDITION). ROSS INSTALLER WILL PROVIDE AND INSTALL WIRE & JACK.
- MOUNT BUZZER (OR RINGER) ABOVE CEILING AT CUSTOMER SERVICE COUNTER AND OFFICE HALL. WALL MOUNTED (48"-0" A.F.F.) ALL OTHER LOCATIONS. CONNECT TO PUSH BUTTON OF MATCHING NUMBER. SOUND OF THE BUZZER (OR RINGER) FOR NUMBER 1 BUTTON MUST BE DIFFERENT FROM THAT FOR NUMBER 2 BUTTON. BUZZER (OR RINGER) SOUND LEVELS MUST BE ADJUSTABLE AND BE AUDIBLE WITHIN 75'-FEET OF LOCATION. 24 VOLT SYSTEM.
- T.T.A. TELEPHONE TERMINAL BOARD

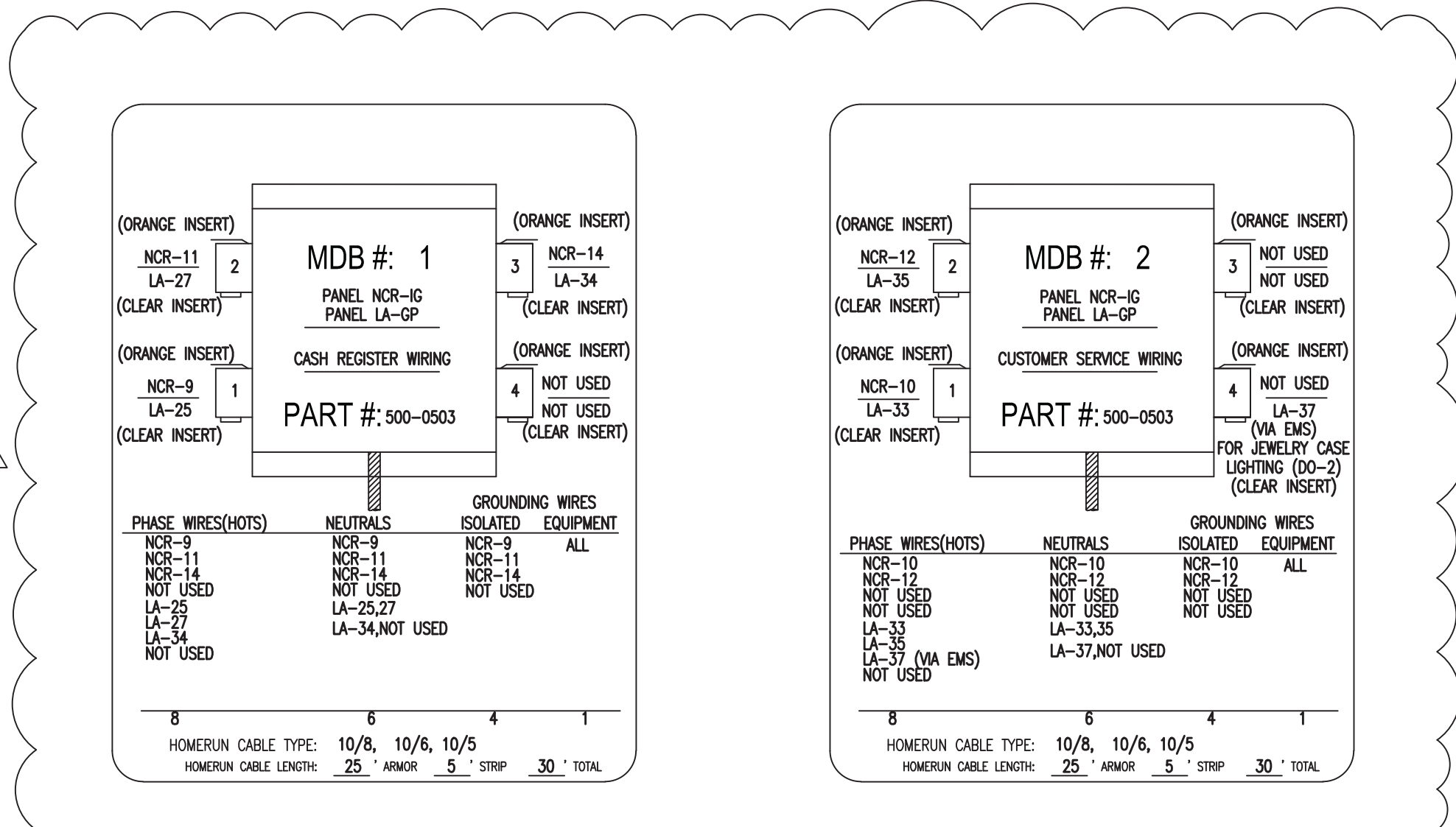
- PUSH-BUTTON 45" A.F.F. USE WEATHER-TIGHT STAINLESS STEEL PUSH-BUTTON AND STAINLESS STEEL FASTENERS. EDWARDS #832, (200) 699-3000. CONNECT TO MATCHING BUZZER NUMBER.
- VON DUPRIN MODEL 8211 ELECTRIC STRIKE WITH LOCKMECHANICS (SCHLAGE) 701 RD MOMENTARY WALL SWITCH (800) 950-4873.
- 48" SECURITY KEYPAD. PROVIDE J-BOX WITH 3/4" CONDUIT STUBBED TO ACCESSIBLE LOCATION ABOVE CEILING WITH PULL-STRING. KEYPAD AND WIRING BY ROSS INSTALLER.
- JUNCTION BOX, MOUNTING HEIGHT AS NOTED.
- TRANSFORMER, MOUNTING HEIGHT AS NOTED
- SURFACE MOUNTED DOME CAMERA
- FIRE DEPARTMENT ANNUNCIATOR
- HURRICANE SHUTTER CENTER PAD

ELECTRICAL SPECIFICATIONS

- GENERAL REQUIREMENTS AND CONTRACTOR QUALIFICATIONS
 - The Contractor for this work shall be a specialist in this field, having the organization to provide trained, experienced and skilled personnel required to construct a practical and working system.
 - Study all matters and conditions of the Project and coordinate with the other Divisions of work to provide a complete and functioning system in accordance with the Contract Documents.
 - Use only the specified materials, equipment and procedures in fabricating the system.
 - Notify the Engineer of any and all conflicts in ample time to avoid unwarranted changes in any work.
 - Obtain all applicable permits and pay all fees charged by above authorities.
 - Existing conditions
 - Prior to submitting a proposal, visit the job site to become familiar with existing conditions and equipment for the work to be accomplished.
 - Verify exact location of existing electrical system.
 - The Electrical Systems in their entirety shall be installed in accordance with the NFPA 70, National Electrical Code, International Energy Code and all other governing Codes and Authorities. Modifications required by the above said authorities shall be made without additional charge to the owner.
 - With submission of bid, Contractor shall give written notice to the Architect or Engineer of any materials or apparatus believed inadequate or unsuitable, in violation of laws, ordinances, rules and any necessary items or work omitted. In the absence of such written notice, it is mutually agreed the Contractor has included the cost of all required items in his proposal, and that he will be responsible for the satisfactory functioning of the entire system without extra compensation.
 - LIGHTING AND POWER CIRCUITS AND SWITCHLEGS
 - Provide a luminaire for each luminaire symbol shown on the drawings and install all luminaires complete with lamps.
 - Install luminaires complete with all materials, devices, parts, cables, hardware, hangers, supports, frames and equipment required for a complete, safe and fully operational installation.
 - Furnish and install all conduit and conductors necessary for complete circuiting of general power and lighting and for light switching.
 - SHOP DRAWINGS AND PRODUCT DATA
 - Submit manufacturer's printed product literature for all components of the electrical systems prior to purchase and installation.
 - BRANCH CIRCUITS FOR POWER AND LIGHTING
 - Conduit systems shall be U.L. labeled EMT with U.L. labeled compression or die cast type fittings.
 - Minimum 3/4" for homeruns, 1/2" for switchlegs.
 - Branch circuit Conductors to be soft drawing annealed copper having a conductivity of not less than 99% of pure copper.
 - Type "THHN" (interior), or "THHW" (exterior) solid conductor.
 - All feeders, service conductors & branch circuit wiring shall be copper only. Conduit through slab shall be galvanized.
 - Use flexible conduit for light fixture wiring where length is within limits as prescribed by NEC and Local Codes.
 - Conduit interconnection of lighting fixtures shall be from joist level. Do not extend runs horizontally from fixture to fixture.
 - Except where wiring and conduits is routed exposed in electrical room, all wiring and conduits must be concealed within floors, walls or partitions. Confirm with architectural sections and elevations the locations of gypsum board walls and requirements prior to submit bidding. Route all conduits concealed through gypsum board walls.
 - Color coding of wire larger than No. 6 AWG and other types of wire accomplished by means of self-adhesive, wrap around type markers of solid colors.
 - Mark each wire at panelboards, junction boxes, pull boxes, and outlets.
 - Color Code or use building standard installation.

480/277V	208/120V
A. brown	A. black
B. purple	B. red
C. yellow	C. blue
N. grey	N. white
green	G. green
SL. pink	SL. pink
 - Motor circuit conductors shall be continuous throughout their entire length.
 - Wireless joints in branch circuit wiring shall be made only in accessible junction boxes and shall be made with compression type solderless connectors. Connectors of the nonmetallic screw type are not approved.
 - Minimum wire size shall be no less than #12 AWG unless otherwise noted on plans.
 - Minimum wire size 20 amp branch circuit shall be AWG listed size per distance shown below unless otherwise noted on plans. Distance shall be measured from the panelboard circuit breaker to the furthest outlet.

	120V	277V
A. #12	Less than 50 feet	Less than 175 feet
B. #10	Between 50-150 feet	Between 175-300 feet
C. #8	Between 150-250 feet	Between 300-450 feet
D. #6	Between 250-375 feet	Between 450-700 feet
- WIRING DEVICES
 - Furnish and install all wiring devices for convenience outlets, telephone outlets, push buttons, conductor splices, and switches as shown on the drawings unless otherwise noted.
 - Unless shown otherwise, convenience outlets shall be Hubbell #C85362GR/WH. CS1222GR/WH/CS1223GR/WH/CS1224GR/WH.
 - Unless shown otherwise, light switches shall be Hubbell #CS1221GR/WH/CS1222GR/WH/CS1223GR/WH/CS1224GR/WH. Dimmer - Incandescent: Lutron AY-600P-WH/AY-10P-WH Dimmer - Fluorescent: Lutron AY-103P-WH.
 - Where shown on drawings, duplex receptacles designated with ground fault circuit interruption shall be HUBBELL #FR53521 and weatherproof cover shall be HUBBELL CWP26H.
 - The following are the ADA Accessibility Guidelines for switches, receptacles, telephones and outlets. Unless shown otherwise on the drawings, mounting heights to be as follows:
 - Wall switches - 4'-0"
 - Wall switches at countertops 3'-8" to center of device or shown on drawings.
 - Wall receptacles, telephone and data outlets - 1'-6" to center of device or shown on drawings.
 - Wall receptacles, telephone and data outlets at countertops 3'-8" to center of device or shown on drawings.
 - Provide white wall/face plates for all interior areas unless otherwise noted on electrical and architectural floor plans or instructed by architect.
 - Occupancy Sensors:
 - Wall mounted: Greengate-Cooper Model OWW-D-1001-MV-W/OSW-DT-0801 120/277 VAC and white color.
 - Ceiling mounted: Greengate-Cooper Model OMC-DT-2000-R/D72000 120/277 VAC and white color.
- LIGHT FIXTURES AND LIGHTING CONTROLS
 - Furnish and install all lighting fixtures in accordance with the fixture designation, light fixture schedule or indicated on drawings.
 - Lighting system controls areas that are controlled by an Novar controls device shall comply with International Energy Conservation Code and City of Greenville requirements. Install override switches for lighting as shown on plans.
- TELEPHONE, VIDEO AND DATA CONDUIT SYSTEM REQUIREMENT
 - Where shown on drawings, at each telephone, video and data outlet location, furnish and install recessed wall or floor boxes with 3/4" empty conduit and pull string extending to 6" above ceiling. Provide ivory plastic cover plate over wall box if not in use.
- CUTTING AND PATCHING
 - The contract shall do all cutting and patching of the existing construction work which may be required for the proper installation of the electrical work. All patching shall be of the same materials, workmanship and finish as, and shall accurately match all surrounding work.
- FIRE ALARM, SMOKE DETECTION AND SECURITY SYSTEMS
 - Installation of new fire alarm devices shall comply with the current applicable provisions of NFPA 70, NFPA 71, NFPA 72/72E, NFPA 101, local and state building codes, and all requirements of the local authority having jurisdiction.
 - Furnish and install new security devices with all necessary equipment, wiring, conduits, boxes, etc. required to ensure a fully operational system. Confirm with owner.
 - It shall be the responsibility of the Electrical Contractor to provide all conduit systems, standard electrical boxes, and operating power for the fire alarm/security system as outlined on the project drawings or as required by the Fire Alarm/Security System Contractor. Verify all requirements prior to installation of conduit and wall boxes.
 - Wiring and installation shall be in accordance with standard professional security system engineering practices and Texas State Board of Private Investigators. All installation and service personnel working on this project shall be "Registered" Alarm system installers.
- PANELBOARDS, CBs, DISCONNECT SAFETY SWITCHES & MOTOR STARTERS
 - Furnish and install at locations as shown on the drawings and shall be of the type approved by owner, indicated or specified.
- GROUNDING OF ELECTRICAL SYSTEMS
 - Grounding of the electrical systems shall conform to the requirements of the latest National Electrical Code and other governing local codes.
- BUILDING ENERGY MANAGEMENT SYSTEM
 - Furnish and install all conduits, conductors, contactors, relays and low voltage cables in accordance with Novar controls requirements. Energy management system vendor shall install, calibrate and/or program new EMS components and split, current transformer and watts transducer, bypass and phase loss modules, and supply and install all sensors, controls and modules equipment in accordance with Marshalls requirements.
 - EMS controls system installer will be responsible to make final terminations and configurations of all control cables furnished by electrical contractor which includes HVAC control, sensors and alarm interface.
 - Electrical contractor to confirm and coordinate with all trades all energy management system requirements prior to submit bidding and/or make final installation.



1 MAIN DISTRIBUTION BOX CIRCUITING
 E3.1 SCALE: NOT TO SCALE

WINDLE + VOLPE
 ARCHITECTS
 HOUSTON, TEXAS 77065
 7650 BRINDLE JUTE 200
 HOUSTON, TEXAS 77065
 PH 713.925.1970

CAI ENGINEERS
 HOUSTON, TEXAS 77042
 10706 RICHMOND AVE., SUITE 145
 TEL: (713) 788-1634 FAX: (713) 788-6099

ROSS BUILD-OUT #1663
 CROSSROADS MALL
 GREENVILLE, TEXAS
 GREENVILLE PROPERTIES LTD.
 GREENVILLE, TEXAS

DATE: 02/02/2014
 PROJECT NO.: 08-12-02
 DRAWN BY: LLL

LEGEND,
 NOTES & DETAILS

E3.1

