

LOW VOLTAGE NOTES
PROVIDE COMPLETE LOW VOLTAGE (LV) SYSTEMS INFRASTRUCTURE INCLUDING, BUT NOT LIMITED TO, SCs (STRUCTURED CABLING SYSTEM), AUDIO/VIDEO, SECURITY AND ACCESS CONTROL, CCTV, VOICE, DATA, BUILDING SYSTEM AUTOMATION, LIFE SAFETY INCLUDING BDA FIRST RESPONDER SYSTEMS (PRE-DESIGN RF STUDIES AND CALCULATIONS FOR UPLINK AND DOWNLINK CONNECTIVITY), COORDINATE DESIGN AND PROVIDE ALL SYSTEMS TO MEET OWNER, ARCHITECT, AND PROJECT REQUIREMENTS, (TYPE OF CABLING, CONDUIT SIZES, EQUIPMENT AND OUTLET LOCATIONS, ANY SPECIALIZED BONDING AND GROUNDING SYSTEMS) PRIOR TO CONSTRUCTION AND DURING BIDDING OR PRICING PROCESS. THE CONTRACTOR SHALL CONSULT THE OWNER REGARDING SPECIFICATION OF ALL PASSIVE AND ACTIVE SYSTEMS AND HEAD ENDS FOR DESIGN COORDINATION. CONTRACTOR SHALL DESIGN/BUILD ALL LV SYSTEMS WITH HIS INDEPENDENTLY ENGAGED DELEGATED/SUCCESSOR DESIGN PROFESSIONAL PE AND RCDD. THE CONTRACTOR AND HIS INTEGRATOR/DESIGN PROFESSIONAL RECOGNIZE THEY SHALL BE SOLELY RESPONSIBLE AND LIABLE FOR ALL ASPECTS OF THE LV SYSTEMS FROM DESIGN THRU PERMIT, CONSTRUCTION, CERTIFICATE OF OCCUPANCY AND WARRANTY PHASE. THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE TO PRODUCE ALL FLORIDA BUILDING CODE REQUIRED AS BUILDS, O AND M MANUALS AND TEST AND COMMISSION ALL SYSTEMS FOR PROPER PERFORMANCE.

CONTRACTOR BIDDING SUPPLEMENTAL NOTES:
CONTRACTOR SHALL ISSUE AN RFI FOR ANY MISSING CIRCUITS IN APPROPRIATE TIME FOR F&E TO RESPOND. IF NO RESPONSE IS PROVIDED, CONTRACTOR SHALL PROVIDE A CIRCUIT AND BREAKER FOR ANY DEVICE THAT IS NOT CIRCUITED ON THE F&E DRAWINGS.
CONTRACTOR SHALL REVIEW ALL EQUIPMENT AND PROVIDE A LOCAL CIRCUIT BREAKER, OSHA REQUIRED SAFETIES AND INTERLOCKING, IF NOT INTEGRATED WITH THE EQUIPMENT. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL TO INSTALL SUCH SYSTEMS IF NOT INDICATED ON THE F&E DRAWINGS.
CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS AND UL LISTED AND LABELED BREAKER LOCK OUT DEVICES FOR ALL CIRCUITS SERVING EQUIPMENT.

COORDINATION NOTES
CONTRACTOR TO COORDINATE ALL FINAL LOCATIONS, ANY TYPES OF ALL DEVICES, AND EQUIPMENT WITH ARCHITECT PRIOR TO BID AND ROUGH-IN.
CONTRACTOR TO COORDINATE VARIOUS TRADES TO AVOID ABOVE CEILING CONFLICTS.

CONTRACTOR GENERAL CONDITIONS NOTES
1. RFI'S: CONTRACTOR SHALL SUBMIT RFI'S WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND.
2. SUBMITTALS AND PRODUCT DATA: CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMISSIONS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
3. SHOP DRAWINGS: CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
4. LAYOUT AND COORDINATION DRAWINGS: CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS, PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL CONFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS WILL FIT, FUNCTION AS INTENDED, BE FREE OF INTERFERENCES AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES.
5. DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.
6. SUBSTITUTIONS: A. CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS. B. PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM. PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN. C. PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION, INCLUDING INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT TIME. D. PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPINION, AFTER THOROUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACT DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED. E. CONSULTANT'S EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR OR APPROVED BY THE OWNER SHALL BE COMPENSATED TO THE CONSULTANT BY THE CONTRACTOR. 7. AS-BUILT DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND OWNER AT PROJECT CLOSEOUT. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR. 8. INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS- CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR. 9. CONTRACTOR/DELEGATED/SUCCESSOR ENGINEER - CONTRACTOR IS ASSIGNED TO PROVIDE DESIGN/BUILD SERVICES FOR SELECTED SYSTEMS. CONTRACTOR'S ENGINEER SHALL COMPLY WITH ALL FAC 61615 REQUIREMENTS. DELEGATED/SUCCESSOR ENGINEER SHALL SUBMIT SIGNED/SEALED DRAWINGS TO A/E, TO AGENCIES, RESPOND TO ALL RFI'S, AGENCY COMMENTS, AND BECOME THE DESIGNATED SOLE SYSTEM ENGINEER OF RECORD FOR DISCIPLINE RESPONSIBILITY/LIABILITY.

SEALING NOTE
SEAL ALL CONDUITS EXTERNALLY WITH APPROVED SEALANTS PER ARCHITECTS SPECIFICATIONS, AND INTERNALLY WITH POLYWATER FST PER NEC 225.27, 300.5G, 300.7A, 505.15(B)-2.

ELECTRICAL SYMBOL LEGEND		
	110V RECEPTACLE	FUSE DISCONNECT
	QUAD-PLEX RECEPTACLE	ELECTRICAL CIRCUIT BREAKER
	110V SWITCHED RECEPTACLE	COMBINATION STARTER/BREAKER
	WATER PROOF WITH WP TYPE RECEPTACLE	FACTORY INSTALLED DISCONNECT
	GROUND FAULT CIRCUIT INTERRUPTER	ELECTRICAL PANEL
	RECEPTACLE MOUNTED ABOVE COUNTER VERIFY MOUNTING HEIGHT WITH OWNER/ARCHITECT PRIOR TO ROUGH IN	ELECTRICAL METER
	SPECIAL PURPOSE OUTLET (VERIFY)	LIGHTING CONTROL TIME CLOCK/PANEL
	FLOOR RECEPTACLE WITH COVER PLATE, FLUSH WITH FLOOR	TELEPHONE BOARD
	CEILING RECEPTACLE	SWITCH
	FLOOR RECEPTACLE/TELE/FAX/DATA WITH COVER PLATE, FLUSH WITH FLOOR	3-WAY SWITCH
	FLOOR TELE/FAX/DATA PORT WITH COVER PLATE, FLUSH WITH FLOOR **	4-WAY SWITCH
	TELE/FAX/DATA PORT **	DIMMER SWITCH
	CEILING TELE/FAX/DATA PORT **	MANUAL MOTOR STARTER
	TELEVISION JACK **	PUSH BUTTON
	JUNCTION BOX	SENSOR DOOR OPENER/CARD READER BY OTHERS **
	POWER POLE	ALARM BY OTHERS **
	RECESSED JUNCTION BOX FOR SYSTEM FURNITURE POWER	IG ISOLATED GROUND
	RECESSED JUNCTION BOX FOR SYSTEM FURNITURE TELEPHONE/DATA	ASW ABOVE SHOW WINDOW
	EXHAUST FAN	CM CEILING MOUNTED
	THERMOSTAT	AC ABOVE COUNTER
	REMOTE ALARM TEST STATION	UC UNDER COUNTER
	SMOKE DUCT DETECTOR	AFF ABOVE FINISHED FLOOR
	STEP DOWN TRANSFORMER	VIF VERIFY IN FIELD
	CENTRAL CONTROL PANEL	TGB TELEPHONE GROUND BAR
	CIRCUITING LEGEND: GENERAL BRANCH CIRCUIT	(E) EXISTING - COORDINATE REPLACING COVER PLATES W/ OWNER/ARCH
	COLLECTOR CIRCUITING - UNSWITCHED	(RE) RELOCATED EXISTING - COORDINATE REPLACING COVER PLATES W/ OWNER/ARCH
	LOW VOLTAGE	NO SYMBOL NEW
	SINGLE HOMERUN	WIFI CEILING MOUNTED WIFI CONNECTION **
	DOUBLE HOMERUN	SP WALL MOUNTED SPEAKER ** MOUNTING HEIGHT BY ARCHITECT
	THREE PHASE HOMERUN	FLOOR RECESSED JUNCTION BOX FLUSH WITH FLOOR
	HORN STROBE	
	CAMERA	
* NOTE: ALL SYMBOLS MAY NOT BE USED FOR THIS PROJECT.		
** PROVIDE 1" WITH PULL WIRE UNLESS OTHERWISE NOTED. STUB UP 6" ABOVE CEILING.		
NOTES: RECEPTACLES ARE TO BE MOUNTED AT 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. SWITCHES ARE TO BE MOUNTED AT 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.		

VOLTAGE DROP NOTE
THE CONTRACTOR, AS PART OF HIS PRICING AND BIDDING, SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND TERMINATIONS, INCLUDING FPL AND UTILITY REQUIREMENTS AND APPROVALS FOR ALL CONDUCTING AND TERMINATIONS, TO SATISFY THE PROJECT REQUIREMENTS. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND INCLUDE ALL HIS BRANCH CIRCUIT, FEEDER, AND SERVICE CONDUCTOR CONDUITING AND WIRING LENGTHS AND ROUTING BASED ON HIS PROPOSED INSTALLATION MEANS AND METHODS. WIRING LENGTHS, SHOWN AS THE BASIS OF DESIGN LENGTHS, ARE MERELY AN APPROXIMATION BY THE CONSULTANT. THE CONTRACTOR SHALL USE THOSE BASIS OF DESIGN CONDUCTOR LENGTHS AND WIRING SIZES AS THE, MINIMUM, NOT LIMITED TO, REQUIREMENTS FOR THE PROJECT BIDDING. THE CONTRACTOR, PRIOR TO BIDDING, SHALL CONFIRM ALL HIS PROPOSED LENGTHS, MAKE ANY AND ALL ADJUSTMENTS AS MAY IMPACT THE ELECTRICAL SYSTEMS AND EQUIPMENT FOR CODE COMPLIANCE AND CONSTRUCTABILITY, AND DOCUMENT ALL PROPOSED CHANGES AND ADJUSTMENTS TO THE ARCHITECT AS PART OF HIS BID RESPONSE. THE CONTRACTOR SHALL SUBMIT COMPLETE SCALED PROPOSED ROUTINGS FOR SERVICES AND FEEDERS, QUANTITIES AND CONDUCTORING, SECTIONS THRU BUILDING FOR RACKING, DUCT/BANK CROSS SECTIONS FOR CLEARANCES AND COORDINATED AS FREE OF ALL INTERFERENCES, ETC. CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION TO THE ARCHITECT FOR REVIEW NO LATER THAN 3 WEEKS AFTER NOTICE TO PROCEED.

WIRING NOTES
1. ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT, FINAL CONNECTIONS ONLY (6'-0" OR LESS). ALL HOME RUNS IN EMT.
2. CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE, ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE PERMITTED. FLEXIBLE CONDUIT IS NOT PERMITTED WITHIN DEMISING WALLS.
3. CONDUIT CONNECTIONS TO TRANSFORMERS, VIBRATING AND/OR ROTATING EQUIPMENT, SHALL BE MADE WITH FLEXIBLE METAL CONDUIT OR "SEAL TIGHT."
4. TWO OR THREE CONDUCTORS SHARING THE SAME NEUTRAL SHALL HAVE PROTECTION DEVICES WITH TIES. DISCONNECTION SHALL BE ACCOMPLISHED BY A SINGLE MOVEMENT.

FIRE RATING NOTE
ALL DEVICES PENETRATING FIRE RATED WALLS SHALL BE PROVIDED WITH U.L. APPROVED FIRE RATED ASSEMBLIES. (EQUAL TO WALL FIRE RATING - SEE ARCHITECTURAL DRAWINGS)

GENERAL ELECTRICAL NOTES
1. DO NOT SCALE THE ELECTRICAL DRAWING. REFER TO THE ARCHITECTURAL PLAN AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT AND CONFIRM WITH OWNERS REPRESENTATIVES. CONTRACTOR SHALL REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR PROJECT COORDINATION.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EDITIONS CURRENTLY ADOPTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION OF THE FOLLOWING: THE NATIONAL ELECTRICAL CODE (NFPA 70), NFPA 701, NFPA 72, NFPA 75, THE FIRE PREVENTION CODE INCLUDING NFPA 1 & NFPA 101, NFPA 110, AND THE FBC, AND THE FPFC.
3. UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER, WITH "THHN" INSULATION FOR SIZE #10 AND SMALLER. CONDUCTORS LARGER THAN #10 SHALL HAVE "THWN" INSULATION. ALL CONDUCTORS IN WET LOCATIONS MUST HAVE "THWN" INSULATION. ALL CONDUCTORS #10 AND SMALLER MAY BE SOLD. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS MUST COMPLY WITH ARTICLE 310 OF THE N.E.C.
4. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK MAKE, QUICK BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.
6. THESE PLANS DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND MEET ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
7. THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDING AS REQUIRED IN ARTICLE 250, NATIONAL ELECTRICAL CODE. THE GROUNDING SYSTEM SHALL BE TESTED AND SHALL BE PROVIDED TO MEASURE A MAXIMUM OF 5 OHMS. PROVIDE A COPY OF THE TEST REPORT TO ENGINEER.
8. ALL MATERIALS SHALL BE NEW AND SHALL BEAR U.L. LABELS WHERE APPLICABLE.
9. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANSHIP MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY ENGINEER/ARCHITECT MUST BE A CONDITION OF THE SUBCONTRACTOR.
10. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER, LIGHT COMPANY, TELEPHONE COMPANY, AND BROADBAND PROVIDER.
11. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS TO SUIT JOB CONDITIONS, BALANCE LOADS ON EACH PHASE.
12. SEE NOTES ON PLANS FOR OTHER REQUIREMENTS.
13. FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS CALLED FOR ON PLANS, OR AS SELECTED BY OWNER.
14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.
15. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY PHASE OF THE INSTALLATION WHICH MAY BE DAMAGED.
16. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OR PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
17. CHECK ALL EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND CURRENT BEFORE CONNECTION TO CIRCUITS AND START UP.
18. ELECTRICAL CONTRACTOR SHALL CHECK AND VERIFY EQUIPMENT FURNISHED AGAINST THOSE SPECIFIED OR INTENDED AND REVISE BRANCH CIRCUITS AS MAY BE REQUIRED WITH PRIOR APPROVAL OF ENGINEER/ARCHITECT.
19. ALL SYSTEMS AND ROUGH-IN SHALL BE CONCEALED IN FINISHED AREAS. COORDINATE WITH ARCHITECT.
20. THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE BASIS OF DESIGN EQUIPMENT SPECIFIED BY DIVISION 16 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 A/E 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 DECISION TO SUBSTITUTE PRODUCTS OR MODIFY DESIGN REQUIRING A/E SERVICES, THE A/E RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.
21. CONTRACTOR SHALL PROVIDE A CONTROLS TRADE SUBCONTRACTOR TO DESIGN AND INSTALL ALL CONTROLS TO MEET THE PROJECT REQUIREMENTS.
22. GFCI DEVICES MUST BE READILY ACCESSIBLE. NEC 210. NO SHARED NEUTRALS ON GROUND FAULT OR ARC FAULT CIRCUITS ARE PERMITTED.
23. ALL ROOFTOP EQUIPMENT AND SUPPORT SHALL BE SECURE TO THE STRUCTURE IN COMPLIANCE WITH THE PROVISION OF FBC CHAPTER 16 (HIGH-VELOCITY HURRICANE ZONES) FBC BUILDING 1522.2.
AIR CONDITIONING EQUIPMENT AND CONTROLS SPECIFICATION
1. ELECTRICAL CONTRACTOR SHALL INSTALL ALL CONTROL RACEWAY (CONDUIT), WIRE INSTALLATION, CONNECTIONS ETC. IN ACCORDANCE WITH WIRING DIAGRAMS ON AIR EQUIPMENT.
2. A/C / ELECTRICAL PLANS OR DIAGRAMS FURNISHED BY MANUFACTURER OF THE EQUIPMENT.
3. ALL POWER WIRING FOR THE AIR CONDITIONING EQUIPMENT SHALL BE FURNISHED, INSTALLED AND CONNECTED UNDER THIS SECTION OF THE SPECIFICATION.
4. MECHANICAL CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR ALL AIR CONDITIONING EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONNECTIONS TO AIR CONDITIONING EQUIPMENT PER MANUFACTURERS SPECIFICATIONS.
5. AIR CONDITIONING EQUIPMENT INCLUDES CONDENSER, COMPRESSOR AND FAN, FAN COIL UNITS, ELECTRICAL STRIP HEATER, THERMOSTAT, ETC.

EQUIPMENT/FEEDER REMOVAL NOTES
SALVAGED MATERIALS, EQUIPMENT, AND FEEDERS SHALL BE DELIVERED TO THE OWNER AT HIS PROPERTY AND STORED WITHIN THE BUILDING WHERE DIRECTED. ANY REMOVED MATERIALS OR EQUIPMENT WHICH THE OWNER DOES NOT WISH TO KEEP SHALL BE DISPOSED OF BY THE CONTRACTOR, WITHOUT ADDITIONAL COST TO THE OWNER.

CODE COMPLIANCE
FLORIDA BUILDING CODE, 8th EDITION, 2023
NATIONAL ELECTRICAL CODE, 2020.

GENERAL DEMOLITION NOTES
1. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN RELOCATING WIRING DEVICES, EQUIPMENT AND LIGHTING FIXTURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT OTHER WIRING DEVICES, EQUIPMENT, AND LIGHTING FIXTURES THAT MAY BE CONNECTED ON THE SAME CIRCUIT REMAIN OPERATIONAL AND ACTIVE.
2. INFORMATION SHOWN ON THESE DOCUMENTS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR TO FIELD VERIFY ELECTRICAL CIRCUIT HOME RUNS TO ALL ELECTRICAL ITEMS SCHEDULED FOR DEMOLITION AND PERFORM THE WORK AS INTENDED AND DEPICTED ON THE DRAWINGS.
3. UPDATE ALL ELECTRICAL PANEL BOARD DIRECTORIES THAT ARE AFFECTED BY THE DEMOLITION AND/OR RENOVATIONS. DIRECTORIES SHALL BE TYPED.
4. 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.
5. COORDINATE ANY ALTERATION AND CHANGES TO THE ELECTRICAL SERVICE WITH THE LOCAL UTILITY COMPANY.
6. PRE SCHEDULE ALL POWER INTERRUPTIONS WITH OWNER. GIVE OWNER 48 HOURS NOTICE PRIOR TO DISCONNECTING POWER TO ANY PORTION OF THE BUILDING AND MAKE ARRANGEMENTS TO MAINTAIN POWER TO ALL CRITICAL EQUIPMENT AS NEEDED AND REQUESTED BY OWNER.
7. CONTRACTOR IS RESPONSIBLE OF BECOMING FULLY INFORMED AS TO EXISTING CONDITIONS AT THE SITE. NEITHER THE OWNER NOR THE A/E MAKES ANY REPRESENTATION WARRANTY AS TO SITE CONDITIONS.
8. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE NATURE AND EXTENT OF THE WORK TO BE PERFORMED AND LOCAL CONDITIONS THAT MAY AFFECT THE WORK.
9. DUE TO REMOVAL OR CORRECTION TO ANY WALLS OR OTHER CONSTRUCTION NECESSITATING CAPPING OF EXISTING ELECTRICAL WIRING DEVICES OR ANY OTHER ELECTRICAL EQUIPMENT INCLUDING RECONNECT OF SUCH EXISTING ITEMS IS CONSIDERED TO BE PART OF THE WORK UNDER THIS CONTRACT. ALL EXISTING OUTLETS SHOWN TO REMAIN WILL REMAIN ACTIVE. THE REWIRING SHALL BE INCLUDED UNDER THIS CONTRACT WITHOUT ADDITIONAL COST TO OWNER.
10. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING CODES: NATIONAL ELECTRICAL CODE (NEC) NATIONAL FIRE PROTECTION AGENCY (NFPA) FLORIDA BUILDING CODE
11. WHERE CONDUIT IS INACCESSIBLE, REMOVE CONDUCTORS AND CUT BACK CONDUIT FLUSH WITH SLAB OR WALL. PATCH OPENING TO MATCH EXISTING FINISH. WHERE EXISTING WIRING EXTENDS OUTSIDE OF THE AREA BY NATURE OF THE ORIGINAL INSTALLATION, CONTRACTOR SHALL MODIFY EXISTING WIRING AS REQUIRED TO MAINTAIN CONTINUITY OF EXISTING CIRCUITRY SUCH THAT NO EQUIPMENT TO REMAIN IS LEFT WITHOUT SERVICE.
12. THE CONTRACTOR IS TO GIVE THE OWNER AN OPPORTUNITY TO ACCEPT ANY ELECTRICAL ITEMS THAT WERE REMOVED FOR THEIR USE. SALVAGED MATERIALS, AND EQUIPMENT THE OWNER DOES NOT WISH TO KEEP SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR, WITHOUT ADDITIONAL COST TO THE OWNER.
13. CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING WHERE REQUIRED DURING DEMOLITION AND CONSTRUCTION SCOPE OF WORK.
14. THE EXISTING CONDITIONS SHOWN ON THESE DRAWINGS ARE TAKEN FROM ORIGINAL DRAWINGS PROVIDED BY THE OWNER AND FIELD INVESTIGATION. THE ACTUAL CONDITIONS MAY VARY. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. THE CONDITIONS SHOWN ARE INTENDED TO SHOW THE LOCATIONS OF THE EXISTING EQUIPMENT, AND IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING ANY AND ALL COORDINATION REQUIRED TO COMPLETE THE NEW WORK. FIELD CONDITIONS SHALL GOVERN.
15. THE DEMOLITION PLAN IS NOT INCLUSIVE OF ALL ELECTRICAL DEVICES WITHIN THE PROJECT AREA. IT IS INTENDED TO PROVIDE THE CONTRACTOR WITH A GENERAL KNOWLEDGE OF THE EXISTING CONDITIONS WITHIN THE PROJECT AREA. ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
16. ALL CONDUITS SERVING OTHER SPACES OR FLOORS, THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THE OTHER SPACES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL CONDUITS, NEW OR EXISTING WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED AND PROVIDED WITH BONDING BUSHINGS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
17. THE CONTRACTOR SHALL PHASE DEMOLITION WORK AS REQUIRED OR DIRECTED BY THE OWNER.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR PATCHING ANY DAMAGE WHICH MAY OCCUR DURING DEMOLITION ACTIVITIES. REPAIRS TO BE DONE TO LOGICAL EDGES OF SURFACES AFFECTED, AND SHALL MATCH IMMEDIATE ADJACENT AREAS IN CONSTRUCTION, MATERIAL, FIRE RATING, FINISH AND COLOR.
19. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR AND SHALL BE COORDINATED WITH OTHER TRADES.
UL LISTING AND NRTL CERTIFICATIONS NOTE
CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE DOCUMENTATION AND CERTIFICATIONS FOR ANY EQUIPMENT THAT HE PROPOSES WITH A NRTL (NATIONALLY RECOGNIZED TESTING LAB) LISTING AND LABELING EQUIVALENT TO THE BASIS OF DESIGN UL LISTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ACCEPTABILITY BY THE LOCAL AHJ AND AGENCIES FOR THE NRTL LISTING AND CERTIFICATION FOR THE PRODUCTS HE PROPOSES AND DEMONSTRATE SUCH AS PART OF THE PRODUCT DATA SUBMISSION AND INSTALLATION.
SPECIAL PURPOSE OUTLET NOTES
1. CONTRACTOR IS CAUTIONED TO OBTAIN COMPLETE EQUIPMENT PRODUCT DATA FROM ARCHITECT, PRIOR TO BIDDING AND ROUGH-IN.
2. CONTRACTOR SHALL PROVIDE NEMA OUTLET TO MEET PROJECT AND EQUIPMENT REQUIREMENTS.
3. CONTRACTOR TO PROVIDE MATCHING NEMA CAP/CORD AS REQUIRED.
SCOPE OF WORK
THE PROJECT CONSISTS OF A TENANT IMPROVEMENT WITHIN AN EXISTING BUILDING. UPGRADING ELECTRICAL SYSTEMS - PROVIDING POWER FOR HVAC TRAINING EQUIPMENT. LIGHTING IS EXISTING TO REMAIN. FIRE ALARM IS EXCLUDED FROM F&E'S SCOPE OF SERVICES.

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2023 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.

ELECTRICAL SHEET INDEX	
SHEET #	DESCRIPTION
E0.1	ELECTRICAL NOTES, LEGEND AND SHEET INDEX
E1.1	CLASSROOM POWER PLAN
E3.1	RISER DIAGRAM AND PANEL SCHEDULES
E5.1	ELECTRICAL DETAILS

FLORIDA BUILDING CODE 2023 CONFORMANCE
1. CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL TO CONFORM TO FBC 2023, ENERGY COMPLIANCE, RELATED SECTIONS, AND STANDARDS.
2. OWNER SHALL PROVIDE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT(CXA) TO PREPARE FUNCTIONAL TEST PROCEDURES (DOCUMENT SYSTEMS PERFORMANCE, WITNESS CONTRACTOR TESTING), AS REQUIRED BY FBC FOR LIGHTING AND HVAC SYSTEMS.
3. CONTRACTOR SHALL PROVIDE SERVICES TO TEST, BALANCE AND COMMISSION THE SYSTEM VIA AN INDEPENDENT AGENT FOR THE MECHANICAL SYSTEMS ENERGY PERFORMANCE.
4. CONTRACTOR TO PROVIDE COMPLETE CERTIFICATIONS AND CHECKLISTS AS REQUIRED BY FBC FOR HIS WORK RESPONSIBILITIES.

FBC NOTE
1. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.1). PROVIDE OWNER WITH A RECORD SET DRAWING OF COMPLETE INSTALLATION DRAWINGS.
2. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.2). PROVIDE OWNER WITH OPERATIONAL MANUALS AND MAINTENANCE MANUALS.
3. CONTRACTOR SHALL PREPARE AND PRODUCE ALL BUILDING OPERATIONS AND MAINTENANCE INFORMATION PER FBC (C408.1.1).
4. CONTRACTOR SHALL PREPARE AND PRODUCE ALL DATA, DRAWINGS, MANUALS, REPORTS AND INFORMATION REQUIRED PER FBC (C408.3) SECTIONS.

CLEARANCE NOTE
ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED WITH NEC REQUIRED WORKING CLEARANCES. TYPICAL FOR ENTIRE PROJECT.

CONTRACTOR SCCR AND POWER STUDY NOTE
CONTRACTOR AND MANUFACTURER SHALL PROVIDE ALL ELECTRICAL SYSTEMS FOR ALL EQUIPMENT, INCLUDING MECHANICAL AND PLUMBING EQUIPMENT WITH INTEGRAL DISCONNECTS, INTEGRAL BREAKERS, INTEGRAL MOTOR STARTERS, VFDs, CHILLER PANELS, PACKAGED UNIT PANELS, ETC., SHALL BE RATED WITH A SHORT CIRCUIT CURRENT RATING AT LEAST EQUAL TO THE IMMEDIATE UPSTREAM ELECTRIC OVERCURRENT PROTECTIVE DEVICE SHORT CIRCUIT RATING. IF SERIES OR INTEGRATED EQUIPMENT RATINGS ARE USED BY CONTRACTOR, CONTRACTOR/ MANUFACTURER SHALL SUBMIT CERTIFICATION AND CALCULATIONS VERIFYING ALL EQUIPMENT MEETS THE COORDINATION SELECTED. THE CONTRACTOR SHALL PREPARE A COMPLETE POWER STUDY INCLUDING FAULT/COORDINATION AND ARC FLASH REPORTS AS EVIDENCE THE EQUIPMENT HE PROPOSES SHALL MEET CODE AND POWER STUDY RECOMMENDATIONS. CONTRACTOR SHALL ENGAGE HIS OWN DELEGATED ENGINEER TO PROVIDE THE STUDIES AND REPORTS.

CONTRACTOR CAUTION - POWER STUDY NOTE
IN THE ABSENCE OF VERIFIED FAULT CURRENT DATA, ALL EQUIPMENT SHALL BE RATED FOR A MINIMUM, BUT NOT LIMITED TO, SCCR OF 10KA. FINAL FAULT CURRENT CALCULATIONS AND SCCR VERIFICATION SHALL BE PROVIDED BY THE CONTRACTOR AND HIS DELEGATED ENGINEER, PRIOR TO EQUIPMENT PROCUREMENT, INSTALLATION, AND ENERGIZATION.
THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE ACCURATE POWER STUDY VIA HIS DELEGATED ENGINEER DOCUMENTING HIS PROPOSED SYSTEMS COMPLY AS FULLY RATED AND SELECTIVELY COORDINATED.
TYPES OF ANALYSES TYPICALLY REQUIRED AS PART OF THE POWER STUDY: • SHORT-CIRCUIT STUDY: DETERMINES FAULT CURRENTS AND ENSURES PROTECTIVE DEVICES ARE PROPERLY RATED. • COORDINATION STUDY: SELECTIVE COORDINATION OF BREAKERS/FUSES TO MINIMIZE OUTAGE IMPACT. • ARC FLASH STUDY: CALCULATES INCIDENT ENERGY LEVELS AND PPE REQUIREMENTS FOR WORKER SAFETY.

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Qualifier: Angel Lopez
State of Florida: AR 103182

Sign & Seal:
State of Florida:

15201 NW 79th Ct,
Miami Lakes, FL 33016

DATE 06/17/2026

Revision

PROJECT # 26009

ELECTRICAL
NOTES, LEGEND
AND SHEET
INDEX

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This item has been digitally signed and sealed on the date adjacent to the seal.

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PERMIT SET: 06/17/26

F&E CONSULTING	
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