WIRE

1. BRANCH CIRCUIT WIRE FOR USE IN INTERIOR DRY LOCATIONS #8 AWG AND SMALLER SHALL BE TYPE THHN COPPER CONDUCTORS. ALL OTHER SIZE WIRE FOR USE IN INTERIOR DRY LOCATIONS SHALL BE DUAL RATED THHN/THWN 600 VOLT INSULATED COPPER CONDUCTORS. NO WIRE SMALLER THAN NO. 12 AWG SHALL BE USED FOR LIGHTING OR POWER WIRING. WIRE NO. 10 AND SMALLER SHALL BE SOLID, WIRE NO. 8 AND LARGER SHALL BE STRANDED. CONTROL WIRE SHALL BE 14 AWG STRANDED.
2. BRANCH CIRCUIT HOMERUNS FOR 120 VOLT CIRCUITS OVER 80'–0" LONG AND FOR 277 VOLT CIRCUITS OVER 120'–0" LONG SHALL BE ONE STANDARD WIRE SIZE LARGER THAN WHAT IS REQUIRED FOR THE AMPERE RATING OF PROTECTIVE DEVICE.
3. BRANCH CIRCUIT WIRING CONSISTING OF ONE NETWORK OR MORE SHALL HAVE THE NEUTRAL CONDUCTOR INCREASED TO #10 AWG MINIMUM.
4. ISOLATED GROUNDING RECEPTACLE BRANCH CIRCUIT WIRING SHALL CONSIST OF A DEDICATED PHASE, NEUTRAL AND ISOLATED (INSULATED) GROUNDING CONDUCTORS FOR EACH CIRCUIT.
5. PROVIDE GROUND CONDUCTOR IN ALL EMT AND IMC TYPE CONDUITS.
6. TELEPHONE AND COMMUNICATION WIRING AND ALL FINAL TERMINATION'S AT THE PUNCHDOWN ARE THE RESPONSIBILITY OF THE OWNER'S TELEPHONE SERVICE PROVIDER.
7. ELECTRONIC EQUIPMENT, CABLING, AND ALL ACCESSORIES SHALL BE INSTALLED BY THE OWNERS REPRESENTATIVE OR APPROVED OTHER.
8. 600 VOLT WIRE AND CABLE FOR BRANCH CIRCUITS AND FEEDERS SHALL BE SINGLE CONDUCTOR COPPER, NO. 12 MINIMUM EXCEPT WHERE NOTED OTHERWISE. COLOR CODE PER OWNER. 9. 600 VOLT WIRE AND CABLE, WIRE NO. 10 AND SMALLER (EXCEPT FIXTURE WIRE) SHALL BE SOLID.
9. 600 VOLT WIRE AND CABLE, WIRE NO. 8 AND LARGER SHALL BE STRANDED.
10. WIRE INSULATION FOR CONTROLS, BRANCH CIRCUITS AND BRANCH FEEDERS SHALL BE TYPE THW, THWN OR THHW, FOR 75 DEGREES C., AND WIRE FOR LINE VOLTAGE CONTROL CIRCUITS AND SIGNAL SYSTEM SHALL BE NO. 14 AWG MINIMUM SOLID COPPER WITH 800 VOLT INSULATION TYPE TW, THW, THWN.

DEVICES

1. SPECIAL RECEPTACLES SHALL BE AS NOTED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL SPECIAL OUTLET BOXES THAT MAY BE REQUIRED TO ENCLOSE RECEPTACLES.
2. RECEPTACLES AND SWITCHES SHALL BE TRADITIONAL STYLE WITH FINDER GROOVE FACE, 20A RATED, SIDE WIRED, PLATED STEEL WRAP–AROUND BRIDGE, TOGGLE TYPE SWITCH OPERATORS AND THERMOPLASTIC NYLON FACE.
3. THE COLOR OF RECEPTACLES, SWITCHES, DIMMERS AND WALL PLATES SHALL BE AS DIRECTED BY ARCHITECT. ISOLATED GROUNDING OUTLETS AND COVERPLATES SHALL BE IDENTIFIED WITH AN ORANGE TRIANGLE.
4. DIMMERS SHALL BE THIN PROFILE WITH ELECTRONIC TOUCH SWITCH AND LINEAR SLIDE CONTROL. DIMMERS SHALL BE COMPATIBLE WITH THE LIGHT FIXTURE BALLAST OR LOW VOLTAGE TRANSFORMERS. DERATE FOR HEAT AS REQUIRED, PROVIDE SEPARATE NEUTRALS FOR EACH DIMMER AND ONE SINGLE CONTINUOUS COVERPLATE FOR MULTIPLE DIMMERS. MANUFACTURED BY LUTRON MODEL #VARIO, LIGHTOLIER MODEL #ONSET SERIES.
5. PROVIDE PILOT SWITCH FOR CONTROL OF EACH EXHAUST FAN. THE TOGGLE SHALL ILLUMINATE WHEN THE FAN IS ON. ENGRAVE THE NAMEPLATE WITH THE MARKING "EXHAUST FAN".
6. DEVICE TYPES:

TYPE	HUBBELL	GE	LEV
1P SWITCH	CS1221	5951	1221–2
2P SWITCH	CS1222	5952	1222–2
3W SWITCH	CS1223	5953	1223–2
4W SWITCH	CS1224	5954	1224–2
1P KEY SWITCH	HBL1221L	59510LG	1221–2L
1P PILOT	HBL1221PL	59518G	1221–PLR
NEMA 5–20R	CR5262	5362	BR20
NEMA 5–20R–IG	CR5252IG	5362IG	5362–IG
NEMA 5–20R–GFI	GF5352A	GFR5342	6899
NEMA 5–20R–SS	5360S	5362S	5380–B
FACEPLATE THERMOPLASTIC NYLON	P OR HPS SERIES	80000 SERIES	NYLON SERIES

LIGHTING

1. THE CONTRACTOR SHALL VERIFY THE CEILING TYPE BEFORE ORDERING LIGHTING FIXTURES. RECESSED FIXTURES INSTALLED IN PLENUM CEILING SHALL BE PLENUM APPROVED. FIXTURES SHALL BE PROVIDED WITH THE PROPER FRAME OR ADAPTER TO RECEIVE THE TYPE OF CEILING, COMPLETE WITH LAMPS, LENSES, END CAPS, MOUNTING HARDWARE, ETC. MODIFY THE FIXTURE CATALOG NUMBERS AS REQUIRED TO OBTAIN THE NECESSARY OPTIONS AND ACCESSORIES.
2. EACH LIGHTING FIXTURE SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING CONSTRUCTION AND SHALL INCLUDE SUSPENSION HANGERS, DEVICES AND OTHER WORK FOR FIXTURE SUPPORT. FIXTURES SHALL NOT BE SUPPORTED FROM THE CEILING GRID SYSTEM UNLESS THE CEILING SYSTEM IS SPECIFICALLY MANUFACTURED AND APPROVED TO DO SO.
3. PROVIDE INLINE FUSE FOR ALL FLUORESCENT BALLASTS. FIELD FUSE ANY FIXTURE NOT CONTAINING SAME.
4. RECESSED MOUNTED LIGHTING FIXTURES SHALL BE CONNECTED TO A JUNCTION BOX WITH FLEXIBLE CONDUIT. FUNNEL CONNECTION OF LIGHT FIXTURE SHALL BE WITH HEAT RESISTANT WIRE.
5. BALLASTS SHALL BE ACCESSIBLE, FOR SERVICING WITHOUT REMOVING OR DISMANTLING THE FIXTURES. EACH FLORESCENT BALLAST SHALL BE BOLTED TO THE FIXTURE BODY OR HOUSING WITH FOUR STUDS OR CAPTIVE SCREWS. FIXTURE SHALL BE RECESSED, SURFACE OR PENDANT TYPE AS SPECIFIED IN FIXTURE SCHEDULE, AND SHALL INCLUDE SOCKETS, DIFFUSERS, CEILING CANOPIES AND STEMS, HICKEYS AND ALL OTHER NECESSARY ACCESSORIES.
6. SHEET METAL ASSEMBLIES SHALL CONFORM WITH ALL OF THE FOLLOWING:
   - A. SHALL BE FORMED TO PREVENT WARPING AND SAGGING. HOUSING, TRIM AND LENS FRAME SHALL BE TRUE STRAIGHT (UNLESS INTENTIONALLY CURVED) AND PARALLEL TO EACH OTHER AS DESIGNED.
   - B. WIREWAYS AND FITTINGS SHALL BE FREE OF BURPS AND SHARP EDGES AND SHALL ACCOMMODATE INTERNAL AND BRANCH CIRCUIT WIRING WITHOUT DAMAGE TO THE WIRING.
   - C. WHEN INSTALLED, ALL EXPOSED FIXTURE HOUSING SURFACE, TRIM FRAME, DOOR FRAME AND LENS FRAME SHALL BE FREE OF LIGHT LEAKS: LENS DOOR SHALL CLOSE IN A LIGHT TIGHT MANNER.
   - D. HINGED DOOR CLOSURE FRAMES SHALL OPERATE SMOOTHLY WITHOUT BINDING WHEN THE FIXTURE IS IN THE INSTALLED POSITION, AND LATCHES SHALL FUNCTION EASILY BY FINGER ACTION WITHOUT THE USE OF TOOLS.
   - E. PROVIDE 18" X 18" MINIMUM ACCESS PANELS AS REQUIRED. TYPE SHALL BE TO SUIT APPLICATION.
7. LIGHTING FIXTURE INSTALLATION SHALL BE COORDINATED WITH HVAC DUCTS, EQUIPMENT, AND FIRE PROTECTION PIPING. WITHOUT ADDITIONAL COST TO THE OWNER, CONTRACTOR SHALL REARRANGE FIXTURES TO AVOID OBSTRUCTIONS AND SUBMIT NEW LAYOUT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
8. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE CEILING CONTRACTOR AND THE MECHANICAL CONTRACTOR. FAILURE TO COORDINATE WILL MAKE THE ELECTRICAL CONTRACTOR RESPONSIBLE FOR ALL COST RELATING TO LIGHT FIXTURE LOCATIONS AND CHANGES.
9. ENAMELED FINISHES SHALL BE ELECTROSTATIC ALLY APPLIED AND BAKED.
10. FINISH OF FIXTURES SHALL BE UNIFORM IN QUALITY AND APPEARANCE, DURABLE AND FREE FROM DEFECTS.
11. ALL REFLECTORS SHALL BE PROTECTED WITH REMOVABLE PROTECTIVE VINYL FILM WHICH SHALL BE REMOVED AFTER INSTALLATION AND BEFORE RELAMPING.
12. ALL FLUORESCENT FIXTURES CONNECTED TO 20A CIRCUITS SHALL BE PROVIDED WITH INDIVIDUAL FUSES.
13. ALL LIGHTING CONTROL SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH ASHRAE 90.1 AND IECC 2006.

LAMPS AND BALLASTS

1. FLUORESCENT AND COMPACT FLUORESCENT LAMPS SHALL BE TRIPHOSPHOR TYPE, COLOR TEMPERATURE OF 3500K AND A COLOR RENDERING INDEX OF NOT LESS THAN 82 (T8). MANUFACTURED BY GENERAL ELECTRIC, OSRAM/SYLVANIA OR PHILIPS.
2. BALLASTS SHALL CONSIST OF THE FOLLOWING:
   - A. A. FLUORESCENT LAMP BALLASTS SHALL BE ELECTRONIC, WITH A MAXIMUM TOTAL HARMONIC DISTORTION LESS THAN 10%, HIGH POWER FACTOR TYPE, CLASS A SOUND RATING.
   - B. B. COMPACT FLUORESCENT BALLASTS SHALL BE HIGH POWER FACTOR TYPE.
   - C. C. MANUFACTURED BY GE/MOTOROLA, ADVANCE, ENERGY SAVING OR UNIVERSAL.
   - D. D. COORDINATE BALLAST/REDUCED WATTAGE LAMP COMPATIBILITY WITH MANUFACTURER.
   - E. E. ENERGY SAVING, HIGH EFFICIENCY.
   - F. F. ALL BALLASTS USED SHALL BE UL LISTED.
3. INCANDESCENT LAMP HOLDERS SHALL BE MADE OF PORCELAIN OR HIGH HEAT, NOW HYGROSCOPIC, NONFLAMMABLE MOLDED COMPOUND, RATED AT NOT LESS THAN 600 WATTS, 250 VOLTS, AND SHALL BE FIRMLY HELD IN PLACE TO PREVENT DAMAGE TO CONDUCTOR INSULATION AND TO PREVENT SOCKET TURNING DURING LAMP REPLACEMENT.

FIRE ALARM

1. PROVIDE A NEW UL LISTED FIRE ALARM SYSTEM OR A FULLY FUNCTIONAL EXTENSION OF THE EXISTING BUILDING FIRE ALARM SYSTEM. INCLUDE ALL NECESSARY HARDWARE AND SOFTWARE IMPROVEMENTS AND POINT–TO–POINT WIRING DIAGRAMS. PROVIDE ADDITIONAL CIRCUITS, POWER SUPPLIES AND AMPLIFICATION AS REQUIRED. TEST, ADJUST, PROGRAM AND RECERTIFY THE SYSTEM AT THE COMPLETION OF CONSTRUCTION. PROVIDE UPDATES TO ALL ZONE SCHEDULES AND ZONE MAPS.
2. ALL FIRE ALARM DEVICES SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT" AND SHALL MATCH BUILDING STANDARD.
3. ACCEPTABLE MANUFACTURERS: SIMPLEX–GRINNELL, EDWARD'S, OR NOTIFIER. IF ANY OTHER EQUAL SHALL BE USED, IT FIRST MUST BE APPROVED BY ARCHITECT, OWNER AND DESIGN ENGINEER.
4. CONTRACTOR SHALL SUBMIT VOLTAGE DROP, DECIBEL LEVEL, AND BATTERY CALCULATIONS.
5. FIRE ALARM SYSTEM SHALL BE PROVIDED WITH BATTERY BACKUP FOR A MINIMUM OF 24 HOURS OF STANDBY AND AT LEAST 10 MINUTES OF ALARM.
6. ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE AUTHORITY HAVING JURISDICTION (FIRE MARSHALL OR OTHERS) PRIOR TO BID AND START OF WORK, TO VERIFY ANY AND ALL SPECIAL REGULATIONS AND REQUIREMENTS, AS NO ADDITIONAL SERVICES OR CHARGES WILL BE ACCEPTED AND ARE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE INSTALLATION.
7. CONDUIT AND WIRING:
   - A. ALL WIRING SHALL BE ROUTED IN CONDUIT AND CONCEALED IN FINISHED AREAS OF THE BUILDING. EXPOSED OR SURFACE MOUNTED RACEWAY OR CONDUIT IS UNACCEPTABLE WITHOUT SPECIFIC AUTHORIZATION FROM THE ARCHITECT AND THE OWNER.
   - B. ALL FIRE ALARM BOXES SHALL BE PAINTED RED WITH STENCILED LABEL "FIRE ALARM".
   - C. PROVIDE WIRING PER MANUFACTURERS RECOMMENDATIONS, SPECIFICATIONS, AND DIAGRAMS. VERIFY REQUIREMENTS WITH MANUFACTURER OR CONSULTANT PRIOR TO BID. MINIMUM WIRE SIZE FOR INITIATING CIRCUITS SHALL BE #16 AWG AND MINIMUM SIZE WIRE FOR INDICATING CIRCUITS SHALL BE #14 AWG.
8. ALARM DEVICES:
   - A. ALL AUDIBLE ALARM DEVICES SHALL COMPLY WITH NFPA AND LOCAL MUNICIPALITY REQUIREMENTS FOR MINIMAL DECIBEL LEVELS.
   - B. VISUAL ALARM DEVICES SHALL COMPLY WITH ADA AND LOCAL MUNICIPALITY REQUIREMENTS. WHERE TWO (2) OR MORE DEVICES ARE VISIBLE IN ANY LOCATION, ALL VISUAL ALARM DEVICES SHALL BE SYNCHRONIZED.
9. CENTRAL FIRE ALARM SYSTEM NOTIFICATION:
   - A. CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT AND WIRING FROM THE FIRE ALARM CONTROL PANEL TO A DEDICATED PHONE LINE AT THE TELEPHONE TERMINAL BACKBOARD FOR THE CENTRAL STATION TIE–IN, TO PROVIDE REMOTE TRANSMISSION AND FOR THE MONITORING OF THE FIRE ALARM SYSTEM. THIS SHALL BE INSTALLED PER THE LOCAL AUTHORITY HAVING JURISDICTION AND LOCAL MUNICIPALITY REGULATIONS. CONTRACTOR SHALL VERIFY ALL REGULATIONS PRIOR TO START OF WORK.
10. KNOX BOX:
    - A. PROVIDE A KNOX BOX FOR THE FIRE DEPARTMENT ENTRY. THE KNOX BOX SHALL BE THE TYPE AND MANUFACTURER AS REQUIRED BY THE LOCAL HAVING JURISDICTION.
    - B. THE FIRE ALARM ENTRY SHALL BE SUPERVISED BY THE FIRE ALARM SYSTEM OR AS DIRECTED BY THE FIRE ALARM DEPARTMENT.
11. HVAC SHUT DOWN:
    - A. ALL FANS OVER 2000 CFM SHALL BE PROVIDED WITH SMOKE DUCT DETECTORS ON THE SUPPLY AND RETURN AIR DUCT AS REQUIRED BY NFPA 90A AND INTERNATIONAL MECHANICAL CODE, RESPECTIVELY.
    - B. ALL FANS OVER 2,000 CFM SHALL BE PROVIDED WITH A FAN SHUTDOWN SYSTEM. ALL FAN SHUTDOWN SYSTEMS SHALL BE RESETABLE AT THE FIRE ALARM CONTROL PANEL AND HAVE REMOTE TEST/ INDICATORS LOCATED IN ACCESSIBLE LOCATIONS AND LABELED ON SITE OF UNITS AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
12. TAMPER & FLOW SWITCHES:
    - A. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE ALL TAMPER AND FLOW SWITCHES.
    - B. THE FIRE ALARM CONTRACTOR SHALL INSTALL ADDRESSABLE MONITOR MODULES REQUIRED FOR TAMPER AND FLOW SWITCHES.
    - C. THE FIRE ALARM CONTRACTOR SHALL WIRE ADDRESSABLE MONITOR MODULES TO THE FIRE ALARM CONTROL PANEL TO INDICATE TROUBLE AND ALARM ANNUNCIATION REQUIRED.
    - D. COORDINATE ADDITIONAL REQUIREMENTS WITH THE FIRE PROTECTION CONTRACTOR.

DISTRIBUTION

1. ALL ELECTRICAL PANELBOARDS SHALL COMPLY WITH THE FOLLOWING:
   - A. COPPER BUS
   - B. ALLOW ADEQUATE WIRING AND BENDING SPACE TO PROPERLY TERMINATE CONDUCTORS WITHOUT INJURY TO THE CONDUCTOR OR THE CONDUCTOR
   - C. ALL CIRCUIT BREAKERS SHALL BE BOLT ON UNLESS OTHERWISE NOTED.
2. THREE PHASE MOTOR STARTERS SHALL BE OF THE COMBINATION TYPE CONSISTING OF A FUSED DISCONNECT SWITCH AND ACROSS THE LINE MAGNETIC STARTER. NEMA NO.1 CONTACTS SHALL BE MINIMUM SIZE STARTER CONTACTS FURNISHED. ALL THREE PHASE MOTOR STARTERS SHALL BE FURNISHED WITH SOLID–STATE OVERLOAD RELAYS TO PROTECT ALL THREE PHASES. THE RELAYS SHALL BE ADJUSTED FOR THE PARTICULAR MOTOR IT IS USED WITH, BASED ON ACTUAL NAMEPLATE DATA. PROVIDE ONE SET OF FORM C AUXILIARY CONTACTS, (1 N.O. AND 1 N.C.) IN EACH STARTER. PROVIDE INTERNAL 120 VOLT CONTROL TRANSFORMER OF 100 VA MINIMUM SIZE. MOUNT THE CONTROL TRANSFORMER INSIDE THE STARTER ENCLOSURE. BOTH PRIMARY AND SECONDARY SIDES OF THE CONTROL TRANSFORMER SHALL BE FUSED. PROVIDE A HAND–OFF–AUTOMATIC SELECTOR SWITCH ON THE COVER, WITH MOTOR ON/OFF PILOT LIGHTS. MANUFACTURED BY SIEMENS, SQUARE D, ALLEN–BRADLEY.
3. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE FUSIBLE OR NON–FUSIBLE OF AMPERAGE VOLTAGE RATING, NUMBER OF POLES AND NEMA ENCLOSURES AS REQUIRED FOR LOCATIONS. IN PLENUM SPACES, DISCONNECT SWITCHES SHALL BE NEMA 12.
4. ENCLOSURE SHALL BE CODE GAUGE STEEL PHOSPHATE COATED, PRIMED AND FINISHED WITH HIGH GRADE LACQUER, ANSI 60 GRAY COLOR. PROVIDE EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS. MANUFACTURERS: SQUARE D, WESTINGHOUSE, ITE.
5. ALL FUSES SHALL BEAR THE UL LABEL, WITH INTERRUPTING RATING OF 200,000 AMPERES AND AS CURRENT LIMITING.
6. THERE SHALL BE NO PARALLELING OF FUSES WILL BE PERMITTED. THERE SHALL BE NO MORE THAN ONE FUSE PER PHASE IN EACH SWITCH, COMBINATION STARTER, OR OTHER INSTALLATION.
7. WHEN FUSES ARE DIRECT FEEDING A SINGLE MOTOR, THEY SHALL HAVE A TIME DELAY OF AT LEAST 10 SECONDS AT 5 TIMES RATING.
8. THE EQUIPMENT MANUFACTURER OF THE DISTRIBUTION EQUIPMENT INDICATED SHALL PROVIDE A FAULT CURRENT AND SHORT CIRCUIT ANALYSIS FOR THE MAIN DISTRIBUTION SYSTEMS AND SUBMIT TO THE ENGINEER FOR RECORD. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE AVAILABLE FAULT CURRENT WITH THE UTILITY COMPANY AND THE FAULT CURRENT ANALYSIS WITH THE MANUFACTURER.

MECHANICAL/HVAC

1. MOTORS:
   - A. REFER TO THE MECHANICAL DRAWINGS FOR EXACT LOCATION OF MOTORS.
   - B. CONTRACTOR SHALL WIRE, SET AND CONNECT ALL INDIVIDUAL MOTORS, CONTROLS AND EQUIPMENT.
   - C. PROVIDE LOCAL DISCONNECT SWITCHES FOR ALL MOTORS.
   - D. CONTROLLER AND CONTROL WIRING OF THE VENTILATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR.
   - E. PROVIDE ALL SINGLE PHASE MOTORS 1/2 HORSE POWER OR LESS NOT REQUIRING MAGNETIC STARTERS WITH TT SWITCHES, TYPE "F". PROVIDE PILOT LIGHT ON ALL MANUALLY CONTROLLED MOTORS AND WHERE CALLED FOR AUTOMATICALLY CONTROLLED MOTORS. PROVIDE ALL OTHER MOTORS WITH APPROPRIATE STARTERS. ALL TT SWITCHES AND COMBINATION STARTERS SHALL BE LOCKABLE IN THE "OFF" POSITION.
   - F. APPROVED MOTOR STARTERS: A.C MAGNETIC WHEN REMOTE CONTROL OR INTERCONNECTION WIRING WITH OTHER DEVICES OR EQUIPMENT IS REQUIRED, OTHERWISE MANUAL: WITH INTEGRAL FUSIBLE DISCONNECT IONS: HAVE PUSHBUTTONS COVER MOUNTED IN MANUAL TYPE SIZE 0 OR LARGER: HAVE BUILT–IN OR REMOTELY LOCATED START–STOP, P.B. STATIONS AND/OR H–O–A SELECTOR SWITCHES AS NOTED IN THE PLANS FOR MAGNETIC TYPE (WHEN NOT NOTED): BE SUPPLIED WITH CORRECTLY SIZE TIME DELAY FUSES, TO BACKUP OVERLOADS: HAVE 3 OVERLOADS FOR 3–PHASE MOTORS: BE PROVIDED IN APPROPRIATE NEMA ENCLOSURE.
   - G. ALL CONTROL WIRING FOR MECHANICAL EQUIPMENT SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR TO CONNECT FROM 120/208 VOLT POWER SOURCE.
   - H. CONTROL VOLTAGES SHALL BE 120 VOLT OR LESS. CONTROL WIRING MUST HAVE ALL CONTROLS WIRED IN HOT LINE (FUSED FOR THREE OR MORE CONTROL DEVICES) WITH OPPOSITE SIDE GROUNDED. CONTROL CIRCUIT MAY BE FROM 120 VOLT LINE OR FROM TRANSFORMERS. THIS CONTRACTOR SHALL PROVIDE CONTROL TRANSFORMER UNLESS OTHERWISE NOTED.
   - I. ALL MOTORS SHALL BE TESTED FOR CORRECT DIRECTION OF ROTATION.
2. HVAC AND ELECTRICAL COORDINATION:
   - A. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT.

DEMOLITION

1. DRAWINGS INDICATE GENERAL INTENT OF THE SCOPE OF THE WORK. CONTRACTOR MUST REVIEW ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND MISCELLANEOUS OTHER DOCUMENTS AND DRAWINGS TO VERIFY THE EXTENT OF THE DEMOLITION WORK. CONTRACTOR MUST SURVEY EXISTING SITE TO DETERMINE THE EXTENT OF THE NECESSARY REMOVALS, REPAIRS, AND RELOCATIONS TO AVOID CONFLICTS WITH NEW CONSTRUCTION. DISCUSS ANY DISCREPANCIES WITH THE OWNER'S REPRESENTATIVE AND ENGINEER.
2. LOCATION AND QUANTITY OF EXISTING EQUIPMENT, DEVICES, RACEWAYS, ETC. SHALL BE FIELD VERIFIED.
3. THIS CONTRACTOR SHALL PROTECT THE EXISTING FACILITY AND EXERCISE CARE NOT TO DAMAGE ANY EXISTING CONSTRUCTION TO REMAIN. ALL WORK DAMAGED BY THE CONTRACTOR MUST BE RESTORED SO AS TO MATCH EXISTING ADJACENT SURFACES IN ALL RESPECTS AND A APPROVED BY THE ARCHITECT. ANY SUCH CORRECTIVE WORK MUST BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
4. EXISTING BUILDING SYSTEMS INCLUDING POWER, EXIT SIGN LIGHTING, VOICE/DATA, FIRE ALARM SYSTEM, SECURITY, ETC., MUST REMAIN IN CONTINUOUS AND NON–INTERRUPTED OPERATION DURING THIS RENOVATION WORK. CONTRACTOR MUST PROVIDE TEMPORARY SERVICES FOR ALL SYSTEMS UNTIL THE RENOVATION WORK IS COMPLETE. REROUTE AND/OR MAINTAIN ANY RACEWAYS, FEEDERS, BRANCH CIRCUITS, JUNCTION/PULL BOXES FOR LIGHTING POWER, VOICE/DATA, FIRE ALARM SYSTEM, SECURITY, ETC., THAT ARE TO REMAIN IN OPERATION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF THIS EQUIPMENT.
5. THE BUSINESS OPERATION OF SURROUNDING AREAS WHICH ARE NOT PART OF THIS PROJECT MUST NOT BE DISRUPTED DURING THE EXECUTION OF THIS WORK WITHOUT PRIOR NOTIFICATION AND APPROVAL BY THE OWNER'S REPRESENTATIVE. COORDINATE ALL POWER OUTAGES NECESSARY WITH OWNER'S REPRESENTATIVE.
6. EXISTING ELECTRICAL EQUIPMENT THAT IS NOTED TO BE REMOVED IS TO REMAIN AS THE PROPERTY OF THE OWNER AFTER THE REMOVAL. EXISTING ELECTRICAL EQUIPMENT BEING REMOVED THAT THE OWNER DOES NOT WISH TO RETAIN MUST BECOME THE PROPERTY OF THE CONTRACTOR AND MUST BE REMOVED FROM THE PREMISES AND DISPOSED OF PROPERLY.
7. REMOVE ALL EXISTING HANGERS AND SUPPORTS ASSOCIATED WITH EXISTING RACEWAYS TO BE REMOVED.
8. REMOVE ALL TEMPORARY WORK AFTER THE RENOVATED AREAS ARE IN FULL OPERATION.

CHICAGO ENERGY CONSERVATION CODE

ENERGY CONSERVATION CODE COMPLIANCE STATEMENT

I CERTIFY THAT I AM A REGISTERED ENERGY PROFESSIONAL (R.E.P.).

I ALSO CERTIFY THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE ATTACHED PLANS FOR:

QDOBA MEXICAN GRILL
20 E. CHICAGO AVENUE
CHICAGO, IL 60611–2009

FULLY COMPLY WITH THE REQUIREMENTS OF CHAPTER 18–13, ENERGY CONSERVATION OF THE MUNICIPAL CODE OF CHICAGO, EXCEPT 18–13–303.

SIGNED: ______________________
JASON M. DEROSA P.E.

DATE: ______________

ILLINOIS LICENSE NUMBER: 062–059453

LINGLEDESIGNGROUP,INC
WEST MAIN STREET
LENA, IL 61048 158
PHONE: 815-369-9155
FAX: 815-369-4495
WWW.LINGLEDESIGN.COM

LINGLE DESIGN GROUP,INC

Larson Engineering Inc.
1488 Bond Street, Suite 100
Naperville, Illinois 60563–6503
(P) 630.357.0540 (F) 630.357.0164
ILLINOIS LICENSE NO. 184–001442
LEIL Comm. No. 24090046.000

20 E. Chicago Avenue
Chicago, IL 60611-2009

REVISIONS:

#	DATE:	DESCRIPTION:
	01/08/10	ISSUED FOR PERMIT

PROJECT NUMBER: 09-116
DRAWN BY: TMR
CHECKED BY: JMD

SHEET TITLE:
ELECTRICAL SPECS.

SHEET NUMBER:
E1.1

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