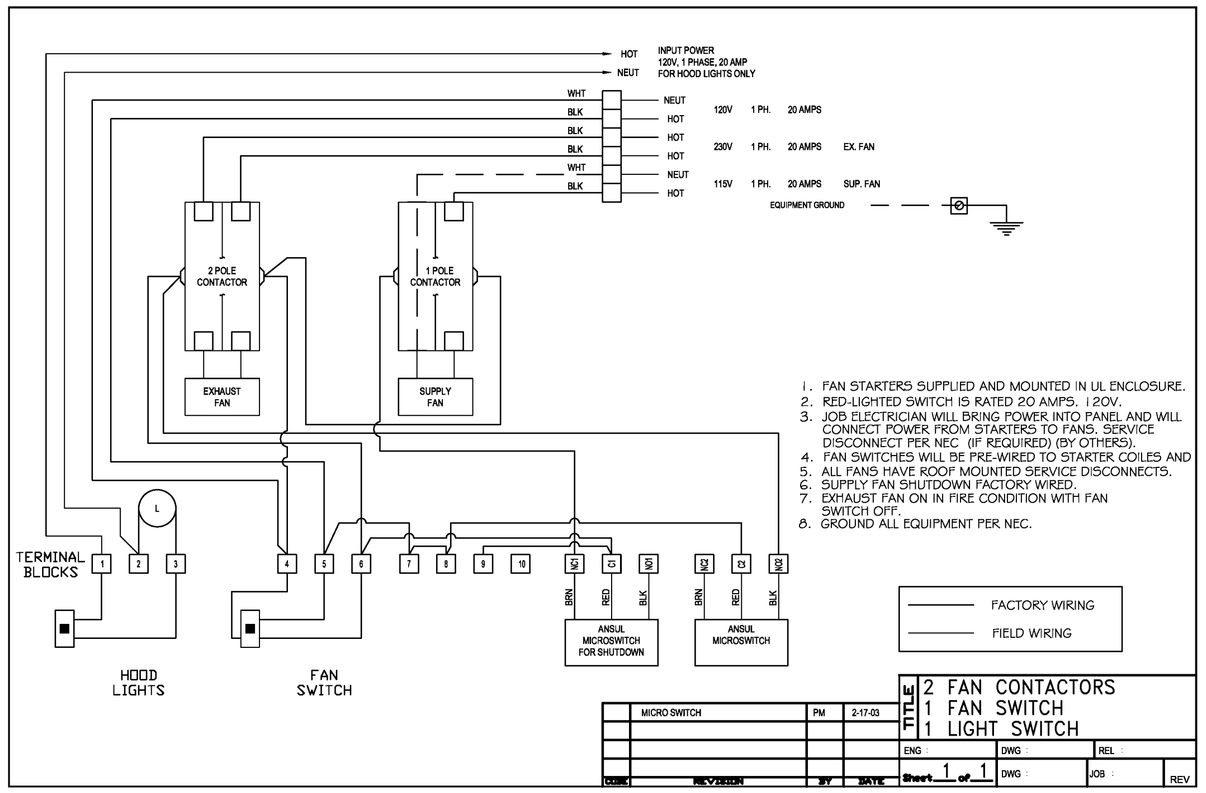
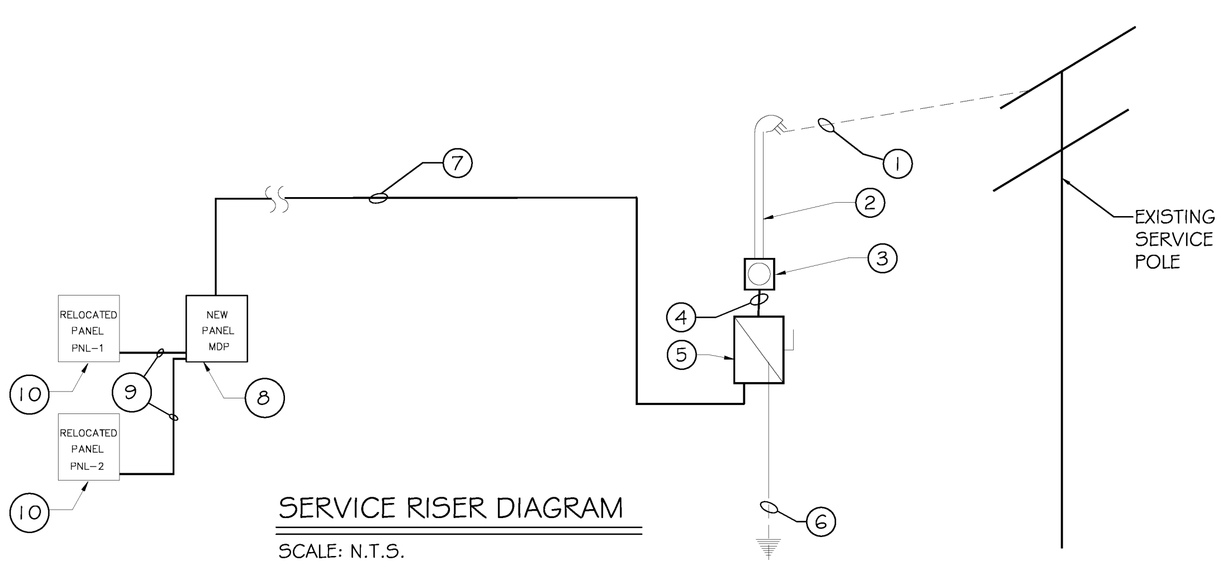


HOOD CONTROL SCHEMATIC

SCALE: N.T.S.



SERVICE RISER DIAGRAM

SCALE: N.T.S.

ELECTRICAL SERVICE RISER NOTES:

1. 120/240V 3ø 320 AMP (W/STINGER LEG) SERVICE FROM POLE.
2. CONTACT LOCAL SERVICE PROVIDER TO PROVIDE NEW WEATHER HEAD FOR NEW SERVICE.
3. NEW, 320 AMP METER.
4. NEW, 3-500MCM THHN; 1-500MCM THHN N; 3½"C
5. NEW, 3P, 400 AMP, 250V, NEMA 3R TENANT SERVICE DISCONNECT, FUSE AT 320 AMPS. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXACT ELECTRICAL CHARACTERISTICS AND LOCATION WITH OWNER AND LOCAL UTILITY COMPANY, AND MAKE ALL NECESSARY MODIFICATIONS AS REQUIRED.
6. NEW, ¾" COPPER CLAD GROUNDING ROD CONNECT TO DISCONNECT WITH 1EA 1/0 WIRE. THE GROUNDING ROD MUST BE CONNECTED TO BUILDING METALLIC WATER PIPE AS PER NEC.
7. NEW, 3-500MCM THHN; 1-350MCM THHN N; 1-1/0 GND; 3½"C. EXTEND NEW CONDUIT TO REAR OF BUILDING.
8. NEW 120/240V 3P, 400 AMP PANEL MLO
9. NEW ELECTRICAL SUB PANEL FEEDER = 2-3/0; 1-4/0N; 1-#2 GND; 2-½"C
10. NEW 120/240V 2P, 200 AMP PANEL.

PANEL: MDP
LOCATION: KITCHEN REAR WALL
FEEDER SOURCE: ENTERGY

VOLTAGE: 120/240V, 400A 3Ø, 4W
ENCLOSURE: SURFACE MTD. W/ EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER, 22000 AIC
W/ MAIN BREAKER

CKT. NO.	THHN WIRE SIZE	LOAD DESCRIPTION / LOCATION	BREAKER AMP	BREAKER POLE	LOAD (VA)	AØ BØ CØ	LOAD (VA)	BREAKER POLE	BREAKER AMP	LOAD DESCRIPTION / LOCATION	THHN WIRE SIZE	CKT. NO.
1					5200		1600					2
3		NEW RTU #3 12.5 TON	60	3	5200		1600	3	15	MIXER EQ # 15		4
5					5200		1600					6
7		SPARE	20	1	1600		1600	1	20	SPARE		8
9		UNUSABLE	-	-	-		-	-	-	UNUSABLE		10
11		PNL-1	150	2	22200		22200	2	150	PNL-2		12
13					20600		20600					14
15		UNUSABLE	-	-	-		-	-	-	UNUSABLE		16
17		BLANK	-	-	-		-	-	-	BLANK		18

SOLID NEUTRAL
NEUTRAL WIRE (W)

TOTAL CONNECTED LOAD (VA)
AØ= 46600 BØ= 7000 CØ= 47700

GROUND BUS
GROUND WIRE (G)

PANEL: PNL-1
LOCATION: KITCHEN
FEEDER SOURCE: MDP

VOLTAGE: 120/240V, 150A, 1Ø, 3W
ENCLOSURE: RECESSED W/EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER, 22000 AIC
W/ MAIN BREAKER

CKT. NO.	THHN WIRE SIZE	LOAD DESCRIPTION / LOCATION	BREAKER AMP	BREAKER POLE	LOAD (VA)	AØ CØ	LOAD (VA)	BREAKER POLE	BREAKER AMP	LOAD DESCRIPTION / LOCATION	THHN WIRE SIZE	CKT. NO.
1		EXISTING RTU #1 3 TON	60	2	6000		1200	2	30	CONVEYOR OVEN A EQ #7		2
3					6000		1200					4
5		HOOD EXHAUST FAN EQ #6B	20	2	800		4500	2	30	WATER HEATER 50 GALLON		6
7					800		4500					8
9		HOOD SUPPLY FAN EQ #6A	20	1	1200		1000	1	20	MONITORS & PRINTER		10
11		TELEPHONE BOARD	20	1	1500		600	1	20	DOUGH ROLLER EQ #6		12
13		PRE-PROOFER EQ #4	20	1	1100		1200	1	20	BOTTLE COOLER EQ #26		14
15		MAKE TABLE EQ #1A	20	1	1800		1600	1	20	FREEZER EQ #20		16
17		WINDOW SIGNS	20	1	1000		1000	1	20	MEN'S RM. OUTLET		18
19		WOMEN'S RM. OUTLET	20	1	1000		1600	1	20	OUTLETS		20
21		SPARE	20	1	1600		1600	1	20	SPARE		22
23		BLANK	-	-	-		-	-	-	BLANK		24

SOLID NEUTRAL
NEUTRAL WIRE (W)

TOTAL CONNECTED LOAD (VA)
AØ= 22200 BØ= 20600

GROUND BUS
GROUND WIRE (G)

PANEL: PNL-2
LOCATION: KITCHEN
FEEDER SOURCE: MDP

VOLTAGE: 120/240V, 150A, 1Ø, 3W
ENCLOSURE: RECESSED W/EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER, 22000 AIC
W/ MAIN BREAKER

CKT. NO.	THHN WIRE SIZE	LOAD DESCRIPTION / LOCATION	BREAKER AMP	BREAKER POLE	LOAD (VA)	AØ CØ	LOAD (VA)	BREAKER POLE	BREAKER AMP	LOAD DESCRIPTION / LOCATION	THHN WIRE SIZE	CKT. NO.
1		EXISTING RTU #2 3.5 TON	50	2	5000		1200	2	30	CONVEYOR OVEN B EQ #7		2
3					5000		1200					4
5		COOLER EQ # 1C / 1CA	50	2	5000		1200	1	20	HEAT LAMPS EQ #25A		6
7					5000		1200	1	20	HEAT LAMPS EQ #25A		8
9		PIZZA BAG WARMING SYSTEM EQ #34	20	1	1600		1200	1	20	DRIVER'S DESK EQ #45		10
11		BOTTLE COOLER EQ #26	20	1	1200		1600	1	20	SIGN TIMER		12
13		FREEZER AND COOLER LIGHT	20	1	1700		800	1	20	FRONT COUNTER OUTLETS		14
15		FRONT COUNTER OUTLETS	20	1	800		800	1	20	FRONT COUNTER OUTLETS		16
17		CARBON DIOXIDE DETECTOR	20	1	600		1200	1	20	LIGHTS		18
19		LIGHTS	20	1	1200		1200	1	20	LIGHTS		20
21		LIGHTS	20	1	1200		1600	1	20	SPARE		22
23		SPARE	20	1	1600		-	-	-	BLANK		24

SOLID NEUTRAL
NEUTRAL WIRE (W)

TOTAL CONNECTED LOAD (VA)
AØ= 16500 BØ= 17200

GROUND BUS
GROUND WIRE (G)

GENERAL NOTES:

GENERAL REQUIREMENTS

A. ELECTRICAL CONTRACTOR SHALL COORDINATE FULLY WITH OTHER CONTRACTORS ASSOCIATED WITH THIS PROJECT TO VERIFY ALL EQUIPMENT LOCATIONS, CONNECTION REQUIREMENTS, ELEVATIONS AND LOCATIONS OF PIPES, CONDUITS AND DUCTS TO PREVENT CONFLICTS DURING CONSTRUCTION. ANY RELOCATION OR REROUTING OF EQUIPMENT, PIPES, CONDUITS, DUCTS OR MATERIALS RESULTING FROM A LACK OF COORDINATION BETWEEN CONTRACTORS WILL BE AT THE CONTRACTORS EXPENSE.

B. EQUIPMENT ROUGH-INS SHOWN ARE ACCURATE TO THE BEST OF DESIGNERS KNOWLEDGE. HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE, OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE ELECTRICAL CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.

C. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED DISCONNECT SWITCHES AND MOTOR STARTERS TO ALL EQUIPMENT.

D. ELECTRICAL CONTRACTOR SHALL REVIEW WITH OWNER AND SIGNAGE MANUFACTURER, REQUIREMENTS AND LOCATION OF BUILDING SIGNAGE PRIOR TO CONSTRUCTION AND PROVIDE 120VAC CONNECTION AS REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS AT JOB COMPLETION TO ARCHITECT.

F. ALL WORK SHALL BE INSTALLED PER ALL GOVERNING CODES.

G. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL OVEN PLUGS, HUBBELL PLUGS (TWIST LOCKS)/ RECEPTACLES COMPLETE. REFER TO INSTRUCTION MANUAL FOR DETAILS.

H. ALL LIGHTING AND SIGN CIRCUIT BREAKERS TO BE "SWITCH GRADE".

I. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL STARTERS FOR ROOF MOUNTED SUPPLY AND EXHAUST FANS (SF-1 AND EF-2) AND START-STOP SWITCH. BOTH SF-1 AND EF-2 SHALL RUN AND STOP TOGETHER AND ARE TO BE CONTROLLED FROM THE SAME SWITCH.

J. ALL JUNCTION BOXES INSTALLED ABOVE OR DIRECTLY BELOW THE SUSPENDED CEILING SHALL BE SUPPORTED IN ACCORDANCE WITH ARTICLE 314-23 OF THE 2002 NEC.

K. COMPUTER AND PHONE WIRING SHALL BE ROUTED IN 3/4" CONDUIT TO PHONE BOARD FROM DEVICE LOCATION.

L. ALL ISOLATED GROUND RECEPTACLE CIRCUITS SHALL BE EQUIPPED WITH INSULATED GROUND CONDUCTOR AND SEPARATE NEUTRAL WIRE.

M. NEUTRAL WIRES FOR ISOLATED GROUND CIRCUITS SHALL NOT BE SHARED WITH OTHER BRANCH CIRCUITS. PROVIDE SEPARATE NEUTRAL WIRE FOR EACH ISOLATED GROUND CIRCUIT.

N. ISOLATED GROUND CIRCUITS SHALL NOT BE ROUTED WITHIN SAME CONDUIT AS GENERAL BRANCH CIRCUIT WIRING. PROVIDE SEPARATE CONDUIT FOR SERVICE TO ISOLATED GROUND CIRCUITS.

O. ISOLATED GROUND RECEPTACLES SHALL UNDER NO CIRCUMSTANCE BE INSTALLED IN COMMON JUNCTION BOX WITH NON-ISOLATED GROUND TYPE RECEPTACLE.

P. ELECTRICAL CONTRACTOR SHALL USE THE PORCELAIN WIRE NUTS PROVIDED WITH THE HEAT STRIP UNITS. THE USE OF PLASTIC WIRE NUTS WILL VOID THE MANUFACTURERS' WARRANTY. ELECTRICAL CONTRACTOR SHALL USE 90°C WIRE FOR CONNECTION TO HEAT STRIP UNITS PER MANUFACTURER'S RECOMMENDATION.

Q. USE CIRCUIT BREAKERS U.L. LISTED AS HACR TYPE FOR USE WITH HVAC AND REFRIGERATING EQUIPMENT HAVING MOTOR GROUP COMBINATIONS AND MARKED FOR USE WITH HACR TYPE CIRCUIT BREAKERS.

R. ELECTRICAL CONTRACTOR SHALL MAKE ALL REQUIRED ELECTRICAL CONNECTIONS FOR WALK-IN COOLER LIGHTING, WALK-IN COOLER REFRIGERATION UNIT AND CUT TABLE HEAT STRIP UNITS.

S. FLUORESCENT LAMPS IN FOOD PREP, COOK AND FOOD STORAGE AREAS SHALL BE PROVIDED WITH SHATTER PROTECTIVE COVERS. GENERAL ELECTRIC "COVRGUARD" LAMPS OR APPROVED EQUAL.

T. ALL EXIT SIGNS, EMERGENCY EGRESS LIGHTS AND NIGHT LIGHT FIXTURES SHALL BE CONNECTED TO THE BRANCH CIRCUITS INDICATED AHEAD OF RESPECTIVE CONTROL SWITCH, IN ORDER TO PROVIDE UNSWITCHED SOURCE TO FIXTURES.

U. ALL 125 VOLT, SINGLE PHASE, 15 OR 20 AMP RECEPTACLES LOCATED IN THE KITCHEN AREA SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION AS REQUIRED BY SECTION 210.8.B.3 OF THE 2002 NEC.

RACEWAY SYSTEMS

A. ALL BRANCH CIRCUIT WIRING SHALL BE ROUTED IN EMT, ELECTRICAL METALLIC TUBING. USE STEEL SET SCREW TYPE FITTINGS ON ALL EMT.

B. CONDUIT SHALL BE SUPPORTED AT INTERVALS PER NEC REQUIREMENTS AND SHALL BE SECURELY FASTENED TO BUILDING WITH AN APPROVED FASTENING SYSTEM.

WIRING, WIRING DEVICES, PLATES AND GROUNDING

A. ALL WIRING SHALL CONSIST OF COPPER CONDUCTORS WITH THERMOPLASTIC INSULATION RATED FOR SIX HUNDRED (600) VOLTS. ALL WIRING INSULATION SHALL BE HEAT AND MOISTURE RESISTANT TYPES THW, THWN, OR THHN FOR INTERNAL AND DRIVE LOCATIONS.

B. MINIMUM CONDUCTOR SIZE SHALL BE NO. 12 AWG FOR ALL POWER CIRCUITS (I.E. RECEPTACLES, LIGHTING, EQUIPMENT POWER, ETC.). NUMBER 14 AWG SHALL BE MINIMUM SIZE PERMITTED FOR EQUIPMENT CONTROL CIRCUIT WIRING.

C. ALL SPLICES AND CONNECTIONS SHALL BE MADE IN OUTLET BOXES, JUNCTION BOXES OR EQUIPMENT WHERE ACCESSIBLE.

D. CONDUCTORS SHALL BE PULLED WITHOUT THE USE OF OIL OR GREASE. WIRE PULLING LUBRICANTS WHICH ARE APPROVED FOR USE WITH CONDUCTOR INSULATION MAY BE USED. CARE SHALL BE TAKEN IN PULLING WIRE TO ASSURE THAT MAXIMUM ALLOWABLE PULLING TENSION OF WIRE IS NOT EXCEEDED. WIRING WITH DAMAGED CONDUCTORS OR INSULATION WILL NOT BE ACCEPTED.

E. ALL PLUG-IN DEVICES SHALL BE GROUNDED TYPE. A GROUNDING JUMPER FROM RECEPTACLE TO OUTLET BOX SHALL BE INSTALLED WHERE CONDUIT SYSTEM IS USED FOR GROUND.

F. INSTALL INSULATED GREEN GROUNDING CONDUCTOR (NO. 12 AWG MINIMUM) IN RACEWAYS AS INDICATED ON DRAWINGS AND IN ALL NON-METALLIC RACEWAYS PER NEC.

G. SWITCHES FOR LIGHTING CONTROL SHALL BE INDUSTRIAL GRADE. IVORY COLOR, SIDE WIRED ONLY, TWENTY (20) AMP, ONE HUNDRED TWENTY/TWO HUNDRED SEVENTY-SEVEN (120/277) VOLT.

H. DUPLEX RECEPTACLES SHALL BE INDUSTRIAL GRADE, THREE (3) WIRE GROUNDING, IVORY COLOR, FINDER GROOVE, TWENTY (20) AMP, NEMA 5-20R 125 VAC.

I. PLATES SHALL BE FURNISHED AND INSTALLED FOR ALL WIRING DEVICES, TELEPHONE OUTLETS, JUNCTION BOXES, ETC.

J. PLATES FOR FLUSH MOUNTED DEVICES SHALL BE STAINLESS STEEL. PLATES FOR SURFACE MOUNTED BOXES SHALL BE GALVANIZED STEEL.

LIGHTING FIXTURES

A. PROVIDE LIGHTING FIXTURES, OF SIZES, TYPES AND RATINGS INDICATED; COMPLETE WITH, BUT NOT LIMITED TO, HOUSINGS, ENERGY-EFFICIENT LAMPS, LAMP HOLDERS, REFLECTORS, ENERGY EFFICIENT BALLASTS, STARTERS AND WIRING. SHIP FIXTURES FACTORY-ASSEMBLED, WITH THOSE COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. DESIGN FIXTURES WITH CONCEALED HINGES AND CATCHES, WITH METAL PARTS GROUNDED AS COMMON UNIT, AND SO CONSTRUCTED AS TO DAMPEN BALLAST GENERATED NOISE.

B. FLUORESCENT BALLASTS PROVIDED FOR FOUR (4) FOOT T-8 FLUORESCENT LAMPS SHALL BE TWO-LAMP ENERGY SAVING, ELECTRONIC TYPE.

C. INSTALL INTERIOR LIGHTING FIXTURES AT LOCATIONS AS INDICATED, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC, NECA'S "STANDARD OF INSTALLATION", NEMA STANDARDS, AND WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT LIGHTING FIXTURES FULFILL REQUIREMENTS.

D. PROVIDE AND INSTALL ALL LIGHT FIXTURES INDICATED COMPLETE WITH SPECIFIED LAMPS. FLUORESCENT LAMPS SHALL BE 48" 32W. T-8, RAPID START WITH NOMINAL OPERATING TEMPERATURES OF 3,500 K - MINIMUM INITIAL LIGHT OUTPUT OF 2850 LUMENS. COMPACT FLUORESCENT LAMPS SHALL BE 26 WATT COMPACT FLUORESCENT LAMPS SHALL BE HIGH COLOR RENDERING, HIGH EFFICIENCY LAMPS WITH NOMINAL OPERATING TEMPERATURE OF 3,500 K.

E. FASTEN LIGHTING FIXTURES SECURELY TO STRUCTURAL SUPPORTS; AND ENSURE THAT FIXTURES ARE PLUMB AND LEVEL.

F. FLUORESCENT FIXTURES INSTALLED IN LAY-IN CEILINGS SHALL BE SUPPORTED BY ADDITIONAL WIRE SUPPORT AT TWO CORNERS. ATTACHED TO CEILING GRID, AND ANCHORED TO STRUCTURAL MEMBER. THIS ADDITIONAL WIRE SUPPORT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND IS NOT CONSIDERED PART OF GENERAL GRID LAYOUT.

G. PROVIDE EQUIPMENT GROUNDING CONNECTIONS FOR INTERIOR LIGHTING FIXTURES AS INDICATED. TIGHTEN CONNECTION TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN UL STD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDS.

H. ALL LIGHT FIXTURES SHALL BE U.L. LISTED.

FIRE RATED WALL PENETRATIONS

A. PROVIDE U.L. LISTED FIRESTOP SYSTEM SEALANTS AROUND ALL CONDUITS PASSING THROUGH ALL RATED WALLS OR FLOORS IN ACCORDANCE WITH THE U.L. FIRE RESISTANCE DIRECTORY.

B. THE SELECTED SYSTEM MUST BEAR AN APPROVED U.L. PENETRATION SYSTEM NUMBER AND BE INSTALLED IN ACCORDANCE WITH THE SELECTED SYSTEM TAKING INTO ACCOUNT THE CONSTRUCTION AND THE RATING OF THE RATED ASSEMBLY BEING PENETRATED AND THE TYPE OF PENETRATION BEING MADE.

C. THE ELECTRICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS TO CONFIRM NUMBER AND EXTENT OF ALL FIRE RATED PARTITIONS IN THE FACILITY.

D. APPROVED PRODUCTS:
(1) HILTI CS240
(2) TERMCO FYREFSHIELD
(3) 3M CP-25

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9212 WEST
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CHALMETTE, LA

ELECTRICAL
SCHEDULES

REV:

SCALE: AS NOTED

JOB#: 2126

DATE: 12-08-11

SHEET 9

E-2

OF 11