ELECTRICAL SYMBOLS LEGEND

Symbol	Description
	SURFACE, RECESSED, OR WALL MOUNTED LIGHTING FIXTURE CONNECTED TO NORMAL BRANCH CIRCUIT. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS.
	SURFACE, RECESSED, OR WALL MOUNTED LIGHTING FIXTURE TO BE PROVIDED WITH BATTERY PACK. LETTER INDICATES TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS.
	TRACK LIGHTING FIXTURE, NUMBER OF HEADS AS SPECIFIED.
	CEILING MOUNTED EXIT SIGN, SHADED AREA INDICATES FACE WITH DIRECTIONAL ARROWS AS SHOWN. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.
	WALL MOUNTED EXIT SIGN, SHADED AREA INDICATES FACE WITH DIRECTIONAL ARROWS AS SHOWN. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.
	EMERGENCY BATTERY PACK UNIT WITH NUMBER OF LAMPS AS INDICATED. LETTER (WHERE SHOWN) INDICATES TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.
	EXTERIOR POLE-MOUNTED LIGHTING FIXTURE. LETTER INDICATES TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS.
	EXTERIOR POLE-MOUNTED LIGHTING FIXTURE WITH NUMBER OF LUMINAIRES AS INDICATED. LETTER INDICATES TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR EXACT REQUIREMENTS.
	GRADE MOUNTED OR POLE MOUNTED FLOODLIGHT, TYPE AS INDICATED.
S	SINGLE-POLE SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221 SERIES OR EQUIVALENT.
S_2	2-POLE, SINGLE THROW SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221 SERIES OR EQUIVALENT.
S_3	THREE-WAY SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221 SERIES OR EQIUVALENT.
S_4	FOUR-WAY SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221 SERIES OR EQIUVALENT.
S_D	INCANDESCENT OR FLUORESCENT DIMMER CONTROL MOUNTED IN FLUSH (FINISHED SPACES) SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
	MAGNETIC MOTOR STARTER, FVNR UNLESS OTHERWISE INDICATED. SUBSCRIPT INDICATES NEMA SIZE. SUBSCRIPT WP INDICATES IN NEMA 3R ENCLOSURE.
	MANUAL MOTOR STARTER MOUNTED 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. SUBSCRIPT WP INDICATES IN NEMA 3R ENCLOSURE.
	COMBINATION MAGNETIC MOTOR STARTER, FVNR UNLESS OTHERWISE INDICATED. SUBSCRIPT INDICATES NEMA SIZE. SUBSCRIPT WP INDICATES IN NEMA 3R ENCLOSURE.
	FUSED SAFETY SWITCH, SIZE AND NUMBER OF POLES AS INDICATED BY SUBSCRIPTS. PROVIDE FUSES PER NAMEPLATE OF EQUIPMENT SERVED UNLESS OTHERWISE INDICATED. SUBSCRIPT WP INDICATES IN NEMA 3R ENCLOSURE.
	NON-FUSED SAFETY SWITCH, SIZE AND NUMBER OF POLES AS INDICATED BY SUBSCRIPTS. SUBSCRIPT WP INDICATES IN NEMA 3R ENCLOSURE.
	ELECTRIC PUSH BUTTON IN FLUSH OUTLET BOX WHEN SHOWN IN FINISHED WALLS. MOUNT 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. PROVIDED BY DOOR OPERATED VENDOR.
1H1	480/277 VOLT PANELBOARD, FLUSH AND SURFACE MOUNTED RESPECTIVELY. SEE PANEL SCHEDULE FOR DESIGN INFORMATION. DESIGNATION AS INDICATED.
1L1	208Y/120 OR 120/240 VOLT PANELBOARD, FLUSH AND SURFACE MOUNTED RESPECTIVELY. DESIGNATION AS INDICATED. SEE PANELBOARD SCHEDULE FOR EXACT REQUIREMENTS.
	CONDUIT WITH BUSHING AND CAP.
	HAZARDOUS LOCATION CONDUIT SEAL-OFF.
	CONDUIT TURNED UP.
	CONDUIT TURNED DOWN.
	MOTOR CONNECTION.
	SURFACE METAL RACEWAY, MOUNTING AND CONFIGURATION AS SPECIFIED.
J	FLUSH WITH COVER JUNCTION BOX IN FINISHED FLOOR. SIZE PER NEC.
JH	WALL MOUNTED JUNCTION BOX, SIZE PER NEC OR AS INDICATED. MOUNTING HEIGHT AS INDICATED. MOUNT FLUSH IN FINISHED SPACES OR SURFACE IN UNFINISHED SPACES UNLESS OTHERWISE INDICATED.
	SPECIAL EQUIPMENT CONNECTION. SUBSCRIPT INDICATES DESIGNATION. SEE EQUIPMENT CONNECTION SCHEDULE FOR EXACT REQUIREMENTS.
	GROUND ROD. SIZE AS SPECIFIED.
VFD	VARIABLE FREQUENCT DRIVE / MOTOR STARTER FURNISHED BY HVAC CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR
M	ELECTRIC MOTOR
J	JUNCTION BOX (CEILING) 'M'= MOTORIZED SCREEN, 'P'= PROJECTOR, 'WC'= WATER COOLER COMPRESSOR, 'DF'= DRINKING FOUNTAIN
TVSS OR TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
T	TRANSFORMER
ECB	CIRCUIT BREAKER IN NEMA 1 ENCLOSURE
G OR G	GENERATOR
	MAIN BONDING JUMPER TO GROUNDING ELECTRODE
F	MANUAL FIRE ALARM PULL STATION IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
V	FIRE ALARM SYSTEM VISUAL SIGNAL LIGHT IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX 80-INCHES ABOVE FLOOR OR 6-INCHES BELOW CEILING,
H	FIRE ALARM SYSTEM COMBINATION AUDIOVISUAL SIGNAL HORN AND LIGHT IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX 80-INCHES ABOVE FLOOR OR 6-INCHES BELOW CEILING, WHICHEVER IS LOWER.
C	FIRE ALARM SYSTEM COMBINATION AUDIOVISUAL CHIME AND LIGHT IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX 80-INCHES ABOVE FLOOR OR 6-INCHES BELOW CEILING, WHICHEVER IS LOWER.
B	FIRE ALARM SYSTEM EXTERIOR BELL IN WEATHERPROOF ENCLOSURE. MOUNT 96-INCHES ABOVE FINISHED GRADE UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S	CEILING MOUNTED SMOKE DETECTOR.
F	CEILING MOUNTED STAND ALONE SMOKE DETECTOR USED IN GUEST ROOMS.
SE	FIRE ALARM SYSTEM CEILING MOUNTED SMOKE DETECTOR FOR ELEVATOR RECALL.
H	FIRE ALARM SYSTEM CEILING MOUNTED HEAT DETECTOR.
L	FIRE ALARM SYSTEM DUCT DETECTOR REMOTE ALARM LAMP, CEILING MOUNTED.
R	FIRE ALARM RELAY, SUBSCRIPT. WHEN SHOWN, INDICATES ZONE.
SD	FIRE ALARM SYSTEM DUCT DETECTOR WITH REMOTE ALARM LAMP. FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR UNLESS OTHERWISE INDICATED.
W OR FS	SPRINKLER SYSTEM WATER FLOW SWITCH. PROVIDED AND INSTALLED BY SPRINKLER CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE INDICATED.
TS	SPRINKLER SYSTEM VALVE TAMPER SWITCH. PROVIDED AND INSTALLED BY SPRINKLER CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE INDICATED, SUBSCRIPT, WHEN SHOWN INDICATES ZONE .
D	FIRE ALARM SYSTEM DOOR HOLD OPEN DEVICE.
MD	MOTORIZED DAMPER
FACP	FIRE ALARM CONTROL PANEL MOUNTED 6'-6" TO TOP
FAA	FIRE ALARM ANNUNCIATOR PANEL, REMOTE LCD MOUNTED 60"AFF
FCC	FIRE COMMAND CENTER MOUNTED 60"AFF
BZR	VISUAL/AUDIO NOTIFICATION DEVICE FOR HANDICAP USE TO ALERT OCCUPANTS OF INCOMING TELEPHONE CALLS, DOOR KNOCKS, AND BELLS.
EDS	ELECTRIC DOOR STRIKE
IDS	INTERCOM DOOR STATION
SCP	SECURITY CONTROL PANEL
	PANELBOARD OR TERMINAL CABINET, FLUSH AND SURFACE MOUNTED RESPECTIVELY. DESIGNATION AS INDICATED.
ARAP	CONTRACTOR TO SUPPLY AND INSTALL "AREA OF RESCUE ASSISTANCE" RECESSED EMERGENCY PHONE EQUAL TO TALK-A-PHONE ETP-100EB. CONTRACTOR TO MAKE ALL NECESSARY CONNECTIONS TO COMMAND UNIT ON FIRST FLOOR FOR FULLY OPERABLE AND COMPLIANT SYSTEM.
ARAC	CONTRACTOR TO SUPPLY AND INSTALL "AREA OF RESCUE ASSISTANCE" RECESSED EMERGENCY COMMAND UNIT EQUAL TO TALK-A-PHONE CU-16. CONTRACTOR TO MAKE ALL NECESSARY CONNECTIONS FOR A FULLY OPERABLE AND COMPLIANT SYSTEM. VERIFY LOCATION WITH THE LOCAL FIRE MARSHALL BEFORE ROUGH IN.
ARAL	CONTRACTOR TO SUPPLY AND INSTALL "AREA OF RESCUE ASSISTANCE" LIGHTED SIGN EQUAL TO TALK-A-PHONE ETP-SIGN/LD. CONNECT TO NEAREST EXIT SIGN CIRCUIT.
T	WALL MOUNTED THERMOSTAT. PROVIDE EMPTY BOX & CONDUIT.
S_M	MOTOR RATED CONTACT SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221 SERIES OR EQUIVALENT.
S_T	TIMER SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S_{WP}	WEATHERPROOF SWITCH IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S_P	SWITCH WITH PILOT LIGHT IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. HUBBELL 1221PLC SERIES OR EQUIVALENT.
S_X	EXPLOSION PROOF SWITCH MOUNTED IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS INDICATED OR REQUIRED BY SITE CONDITIONS. LOCATION TYPE AS SPECIFIED.
S_aS_b	TWO SINGLE-POLE SWITCHES WIRED FOR MULTI-LEVEL LIGHTING. ONE SWITCH SHALL CONTROL INNER LAMP(S) IN EACH FIXTURE WHILE OTHER SWITCH SHALL CONTROL OUTER LAMPS. HUBBELL 1221 SERIES OR EQIUVALENT.
S_K	KEY TYPE SWITCH MOUNTED IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S_C	THREE POSITION MOMENTARY SWITCH WITH CENTER OFF POSITION IN FLUSH FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S_{3P}	3-POLE MOTOR RATED SWITCH WITH CENTER OFF POSITION IN FLUSH FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS.
S_aS_{3b}	TWO SWITCHES FOR MULTI-LEVEL SWITCHING WITH ONE SINGLE POLE AND ONE 3-WAY. LETTER, WHEN SHOWN, INDICATES FIXTURES CONTROLLED.
C	LIGHTING CONTACTOR
TC	TIMECLOCK WITH ASTRONOMIC DIAL AND DAY-OMITTING DEVICE, ADJUSTIBLE ON-OFF OPERATION WITH 40A CONTACTS MOUNT 54"- 60"AFF
OS	OCCUPANCY SENSOR, DUAL TECHNOLOGY CEILING MOUNTED AS MANUFACTURED BY NOVITAS OR WATT STOPPER
OS	OCCUPANCY SENSOR DUAL TECHNOLOGY WALL MOUNTED AS MANUFACTURED BY NOVITAS OR WATT STOPPER
LV1	LOW VOLTAGE SWITCH BANK #1 48"AFF
PC	PHOTOCELL, MOUNTING REQUIREMENTS AS INDICATED.
	TRANSFORMER - SIZE AS NOTED ON DRAWING
R	RELAY
CR	CONTROL RELAY
GF	GROUND FAULT PROTECTION W/CB
ST	SHUNT TRIP W/CB
SATS	AUTOMATIC TRANSFER SWITCH "SATS" DENOTES STANDBY AUTOMATIC TRANSFER SWITCH "EATS" DENOTES EMERGENCY AUTOMATIC TRANSFER SWITCH
	PANELBOARD - SEE SCHEDULE
11026	FAULT CURRENT AVAILABLE
	125 VOLT, 3 WIRE DUPLEX RECEPTACLE IN FLUSH, FLOOR-MOUNTED OUTLET BOX.
	125 VOLT, 3 WIRE SINGLE RECEPTACLE IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 18-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED. SUBSCRIPT "C" INDICATES CLOCK HANGER MOUNTED 12" BELOW CLG
E	RECEPTACLE CONNECTED TO EMERGENCY BRANCH CIRCUIT. PROVIDE WITH RED FACE UNLESS OTHERWISE INDICATED. MOUNTING AS INDICATED.
SP	125 VOLT, 3 WIRE DUPLEX SURGE PROTECTOR TYPE RECEPTACLE. MOUNTING AS INDICATED.
GF	125 VOLT, 3 WIRE GROUND FAULT TYPE DUPLEX RECEPTACLE. MOUNTING AS INDICATED.
IG	125 VOLT, 3 WIRE DUPLEX ISOLATED GROUND TYPE RECEPTACLE. MOUNTING AS INDICATED.
WP	20 AMP, 125 VOLT, 3 WIRE GROUND FAULT TYPE RECEPTACLE WITH STAINLESS STEEL WEATHERPROOF COVER. MOUNTING AS INDICATED.
S	125 VOLT, 3 WIRE SAFETY TYPE RECEPTACLE. MOUNTING AS INDICATED.
EP	125 VOLT, 3 WIRE HAZARDOUS LOCATION TYPE RECEPTACLE. MOUNTING AS INDICATED.
U	125 VOLT, 3 WIRE DUPLEX RECEPTACLE CONNECTED TO UPS CIRCUIT. MOUNTING AS INDICATED. HUBBELL 8200 SERIES OR EQUIVALENT.
	TWO 125 VOLT, 3 WIRE DUPLEX RECEPTACLES IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) 2-GANG OUTLET BOX. MOUNT 18-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
	TWO 125 VOLT, 3 WIRE DUPLEX RECEPTACLES IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR, 4" ABOVE DESK/ COUNTERTOP, OR 2" ABOVE BACKSPLASH UNLESS OTHERWISE INDICATED.
	125 VOLT, 3 WIRE DUPLEX RECEPTACLE WITH ONE SIDE SWITCHED. INSTALL IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX, 18" ABOVE FINISHED UNLESS OTHERWISE INDICATED.
	125 VOLT, 3 WIRE DUPLEX RECEPTACLE IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 18-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
	125 VOLT, 3 WIRE DUPLEX RECEPTACLE IN FLUSH (FINISHED SPACES) OR SURFACE (UNFINISHED SPACES) OUTLET BOX. MOUNT 46" ABOVE FINISHED FLOOR, 4" ABOVE DESK/ COUNTERTOP, OR 2" ABOVE BACKSPLASH UNLESS OTHERWISE INDICATED.
	CEILING MOUNTED DUPLEX RECEPTACLE NEMA 5-20R
	FACTORY WIRED, MULTI-OUTLET ASSEMBLY 12" INDICATES DUPLEX 5-20R RECEPTACLES 12" ON CENTER
T / D	CONDUIT RUN CONCEALED IN WALL, ABOVE CEILINGS, OR BELOW FLOOR. EXPOSED IN UNFINISHED AREAS. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL. "T" INDICATES EMPTY CONDUIT FOR TELEPHONE. "D" INDICATES EMPTY CONDUIT FOR DATA.
	HOMERUN TO PANELBOARD. QUANTITY OF ARROWS INDICATES NUMBER OF CIRCUITS.
1	PLAN NOTE. NOTE NUMBER AS INDICATED.
123	ROOM NAME DESIGNATION
	FLEXIBLE RACEWAY
	CONDUIT RUN UNDERGROUND OR UNDERSLAB
	CONDUIT RUN CONCEALED
	CABLE TRAY, NEMA 20C, 20"WIDE, 4"RAIL DEPTH, 6"LADDER RUNG, ALUMINUM, 24"RADIUS BENDS UON
	TELEPHONE OUTLET 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. MOUNT FLUSH IN FINISHED SPACES OR SURFACE IN UNFINISHED SPACES. SUBSCRIPT INDICATES JACK CONFIGURATION AS DEFINED ON SHEET E4.3. IF NO SUBSCRIPT SHOWN, DEVICE TYPE TO BE TYPE D-6.
	TELEPHONE OUTLET MOUNTED 46-INCHES ABOVE FINISHED FLOOR, 6-INCHES ABOVE DESK/COUNTERTOP UNLESS OTHERWISE INDICATED. MOUNT FLUSH IN FINISHED SPACES OR SURFACE IN UNFINISHED SPACES. SUBSCRIPT INDICATES JACK CONFIGURATION AS DEFINED ON SHEET E4.3. IF NO SUBSCRIPT SHOWN, DEVICE TYPE TO BE TYPE D-6.
	COMBINATION TELEPHONE/DATA OUTLET 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED OR REQUIRED BY SITE CONDITIONS. MOUNT FLUSH IN FINISHED SPACES OR SURFACE IN UNFINISHED SPACES. SUBSCRIPT INDICATES JACK CONFIGURATION AS DEFINED ON SHEET E4.3. IF NO SUBSCRIPT SHOWN, DEVICE TYPE TO BE TYPE D-1
	COMBINATION TELEPHONE/DATA OUTLE MOUNTED 46"ABOVE FINISHED FLOOR OR 6" ABOVE DESK/COUNTERTOP UNLESS OTHERWISE INDICATED. MOUNT FLUSH IN FINISHED SPACES OR SURFACE IN UNFINISHED SPACES. SUBSCRIPT INDICATES JACK CONFIGURATION AS DEFINED ON SHEET E4.3. IF NO SUBSCRIPT SHOWN, DEVICE TYPE TO BE TYPE D-1
TV OR	FLUSH TELEVISION OUTLET MOUNTED 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
TV	TV OUTLET-12" FROM CEILING, 7'-0" FOR CEILING OVER 8'-0"
	FLUSH MOUNTED TELECOM OUTLET BOX WITH COVERPLATE IN FINISHED FLOOR.
	CEILING MOUNTED DATA OUTLET
	POWER / TELEPHONE POLE
S	FLUSH MOUNTED CEILING COMMUNICATION SYSTEM SPEAKER. SUBSCRIPT, WHEN SHOWN, INDICATES ZONE.
SM	FLUSH CEILING MOUNTED MUSIC SYSTEM SPEAKER.
V	FLUSH MOUNTED COMMUNICATION SYSTEM VOLUME CONTROL 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED. SUBSCRIPT, WHEN SHOWN, INDICATES ZONE.
SH	WALL MOUNTED COMMUNICATION SYSTEM SPEAKER 12-INCHES BELOW FINISHED CEILING UNLESS OTHERWISE INDICATED. SUBSCRIPT, WHEN SHOWN, INDICATES ZONE.
S	PROJECTION HORN SPEAKER, MOUNTING AS INDICATED.
	CLOSED CIRCUIT TV CAMERA
CR	FLUSH MOUNTED SECURITY SYSTEM CARD READER MOUNTED 46-INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
DC	SECURITY SYSTEM DOOR CONTACTS. SUBSCRIPT, WHEN SHOWN, INDICATES ZONE.
GB	GLASS BREAK DETECTOR
KP	FLUSH MOUNTED SECURITY SYSTEM DOOR ACCESS KEYPAD MOUNTED 46"ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED. SUBSCRIPT, WHEN SHOWN, INDICATES SYSTEM.
MD OR MD	SECURITY SYSTEM MOTION SENSOR, SUBSCRIPT, WHEN SHOWN, INDICATES ZONE.
TC-1	COMMUNICATIONS SIGNAL CABINET, FLUSH AND SURFACE MOUNTED RESPECTIVELY. DESIGNATION AS INDICATED.

ABBREVIATIONS

– A –	
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE OR GROUND
ARA	AREA OF RESCUE ASSISTANCE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
– B –	
BAS	BUILDING AUTOMATION SYSTEM
BLDG	BUILDING
– C –	
C	CONDUIT
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
cd	CANDELA RATING
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
COMM	COMMUNICATION
CU	COPPER
– D –	
DB	DISTRIBUTION BOARD
dBA	DECIBEL LEVEL
DEG	DEGREE
DISC	DISCONNECT
DN	DOWN
DP	DISTRIBUTION PANEL BOARD
DWG	DWG
– E –	
EA	EACH
EC	ELECTRICAL CONTRACTOR
EDF	ELECTRICAL DRINKING FOUNTAIN
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY (BATTERY BACKUP)
EMT	ELECTRICAL METALLIC TUBING
EQ	EQUIPMENT
EX	EXISTING
ER	EXISTING TO BE REMOVED
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
– F –	
F (DEG)	DEGREE FAHRENHEIT
F	FUSE
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FIXT	FIXTURE
FLR	FLOOR
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FMC	FLEXIBLE METALLIC CONDUIT
FT	FOOT OR FEET
FTU	FAN TERMINAL UNIT
– G –	
G, GND	GROUND
GC	GENERAL CONTRACTOR
GF,GFI	GROUND FAULT INTERRUPT
– H –	
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HZ	HERTZ
– I –	
IC	INTERRUPTING CAPACITY
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
INCAND	INCANDESCENT
IR	IMPACT RESISTANT
– J –	
JB	JUNCTION BOX
– K –	
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
– L –	
LC	LIGHTING CONTACTOR
LFMC	LIQUIDTIGHT FMC
LTG	LIGHTING
– M –	
MAX	MAXIMUM
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCUILAR MILS
MECH	MECHANICAL
MI	MINERAL INSULATED CABLE
MIN	MINIMUM
MTD	MOUNTED
– N –	
N	NEUTRAL
NC	NORMALLY CLOSED
NL	NIGHT LIGHT
NTS	NOT TO SCALE
– P –	
P	POLE
PB	PULL BOX
PC	PHOTOCELL
PH	PHASE
PNL	PANEL
PWR	POWER
– R –	
R	RELOCATED
RE	EXISTING TO BE REMOVED
RECPT	RECEPTACLE
REQ	REQUIRED
RFL	RAISED FLOOR
RM	ROOM
RMC	RIGID METALLIC CONDUIT
RSC	RIGID GALVANIZED STEEL CONDUIT
RNC	RIGID NON-METALLIC CONDUIT
– S –	
SCHED	SCHEDULE
SD	SMOKE DETECTOR
SECT	SECTION
SP	SINGLE POLE
SN	SOLID NEUTRAL
SPEC	SPECIFICATION(S)
SPKR	SPEAKER
S/T	SHUNT TRIP
SW	SWITCH
SWBD	SWITCHBOARD
SYS	SYSTEMS
– T –	
T	TAMPERPROOF
TBB	TELECOMMUNICATIONS BACKBOARD
TC	TELECOMM CLOSET
TEL	TELEPHONE
TELCOMM	TELECOMMUNICATION
TER	TELCOMM EQUIPMENT ROOM
TRANSF	TRANSFORMER
TTB	TELEPHONE TERMINAL BACKBOARD
TVSS	TRANSIENT VOLT SURGE SUPRESSION
TYP	TYPICAL
– U –	
U/G	UNDERGROUND
UH	UNIT HEATER
UNF	UNFUSED
UON	UNLESS OTHERWISE NOTED
– V –	
V	VOLT OR VOLTAGE
VA	VOLT AMPERE
VAV	VARIABLE AIR VOLUME BOX
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLTMETER
VP	VAPORPROOF
– W –	
W	WATT
WP	WEATHERPROOF
– X –	
XFMR	TRANSFORMER

FIRE ALARM PERMIT NOTES

FIRE ALARM CONTRACTOR SHALL PROVIDE AND SUBMIT FIRE ALARM SAFETY CONSTRUCTION DOCUMENTS FOR ALL AGENCY PLAN CHECK REQUIREMENTS. APPROVAL SHALL BE OBTAINED PRIOR TO THE INSTALLATION OF THE SYSTEM. INTERCONNECTING WIRING AND CONDUIT SIZES ARE NOT INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING RACEWAY, WIRING PLANS, VOLTAGE DROP CALCULATION AND COMPLETE ONE LINE DIAGRAM OF THE SYSTEM.

CONTRACTOR SHALL PROVIDE AS PART OF FIRE ALARM SYSTEM:
* CONSTRUCTION DOCUMENT AND SHOP DRAWINGS.
* UPGRADE EXISTING FIRE ALARM SYSTEM TO PROVIDE ADEQUATE BATTERY FOR ALL STROBE CONNECTION AS REQUIRED.
* SUBMIT AND SECURE FIRE MARSHALL APPROVAL.

BRANCH CIRCUIT VOLTAGE DROP (3%)

The Contractor shall provide minimum sized branch circuit conductors per the table below

Conductor size (AWG)	Branch Circuit OCD (Amps)	Circuit Voltage 120	208	240	277
		Maximum Allowable Length (ft)			
#12	15	82	142	164	189
#10	15	135	235	271	313
#8	15	205	356	411	474
#12	20	61	107	123	142
#10	20	102	176	203	234
#8	20	154	267	308	356
#10	30	103	178	205	237
#8	30	160	277	320	369

Notes:
1. Assuming single phase circuit, 90% power factor, uncaoted copper conductors in steel raceway from NEC Chapter 9, Table 9.
2. Assuming load equal to 80% of OCD rating is concentrated at the end of the circuit.
3. Longer branch circuit lengths shall be allowed when the circuit load is known and the Contractor has provided a voltage drop calculation. The calculation results shall be marked on the As-Built plans.

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE: ☐ NO CHANGE TO BUILDING SYSTEM
■ PRESCRIPTIVE ☐ PERFORMANCE ☐ ENERGY COST BUDGET

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE	REFER TO LUMINAIRE SCHEDULE
NUMBER OF LAMPS IN FIXTURE	REFER TO LUMINAIRE SCHEDULE
BALLAST TYPE USED IN FIXTURE	REFER TO LUMINAIRE SCHEDULE
NUMBER OF BALLAST IN FIXTURE	REFER TO LUMINAIRE SCHEDULE
TOTAL WATTS PER FIXTURE	REFER TO LUMINAIRE SCHEDULE
TOTAL INTERIOR WATTS SPECIFIED VS ALLOWED	30,498 / 32,109
MINIMUM EXTERIOR SOURCE EFFICACY SPECIFIED VS ALLOWED	N/A

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEM)

MOTOR HORSEPOWER	REFER TO EQUIPMENT CONNECTION SCHEDULE
NUMBER OF PHASES	REFER TO EQUIPMENT CONNECTION SCHEDULE
MINIMUM EFFICIENCY	REFER TO EQUIPMENT CONNECTION SCHEDULE
MOTOR TYPE	REFER TO EQUIPMENT CONNECTION SCHEDULE
NUMBER OF POLES	REFER TO EQUIPMENT CONNECTION SCHEDULE

ELECTRICAL DRAWING INDEX

##	SHEET	DESCRIPTION	SCALE
1	E0.1	SYMBOL LEGEND, SHEET INDEX, AND GENERAL NOTES	NO SCALE
2	E0.2	LIGHTING FIXTURE SCHEDULE & SITE PANEL "1S1" SCHEDULE	NO SCALE
3	E0.3	ELECTRICAL SITE PLAN	1/16" = 1'-0"
4	E1.1	FIRST FLOOR LIGHTING PLAN	1/8" = 1'-0"
5	E1.2	SECOND FLOOR LIGHTING PLAN	1/8" = 1'-0"
6	E1.3	THIRD FLOOR LIGHTING PLAN	1/8" = 1'-0"
7	E1.4	FOURTH FLOOR LIGHTING PLAN	1/8" = 1'-0"
8	E2.1	FIRST FLOOR POWER & COMMUNICATION PLAN	1/8" = 1'-0"
9	E2.2	SECOND FLOOR POWER & COMMUNICATION PLAN	1/8" = 1'-0"
10	E2.3	THIRD FLOOR POWER & COMMUNICATION PLAN	1/8" = 1'-0"
11	E2.4	FOURTH FLOOR POWER & COMMUNICATION PLAN	1/8" = 1'-0"
12	E2.5	ROOF ELECTRICAL PLAN	1/8" = 1'-0"
13	E3.1	TYPICAL GUEST ROOM ELECTRICAL PLANS - PART 1	1/4" = 1'-0"
14	E3.2	TYPICAL GUEST ROOM ELECTRICAL PLANS - PART 2	1/4" = 1'-0"
15	E3.3	SWIMMING POOL ELECTRICAL PLANS	1/4" = 1'-0"
16	E4.1	ELECTRICAL POWER RISER DIAGRAM	NO SCALE
17	E4.2	FIRE ALARM SYSTEM RISER DIAGRAM	NO SCALE
18	E4.3	TELECOMMUNICATION SYSTEMS RISER DIAGRAMS	NO SCALE
19	E5.1	FIRST FLOOR PANEL SCHEDULES	NO SCALE
20	E5.2	SECOND FLOOR PANEL SCHEDULES	NO SCALE
21	E5.3	THIRD FLOOR PANEL SCHEDULES	NO SCALE
22	E5.4	FOURTH FLOOR PANEL SCHEDULES	NO SCALE
23	E5.7	MSB & DISTRIBUTION PANEL SCHEDULES	NO SCALE
24	E5.8	ELECTRICAL EQUIPMENT CONNECTION SCHEDULE	NO SCALE
25	E6.1	ELECTRICAL SERVICE, GROUNDING, AND POWER DETAILS	NO SCALE
26	E6.2	ELECTRICAL LIGHTING DETAILS	NO SCALE
27	E6.3	ELECTRICAL SYSTEMS DETAILS	NO SCALE
28	E6.4	ELECTRICAL MISCELLANEOUS DETAILS	NO SCALE
29	E6.5	TELECOMMUNICATIONS DETAILS	NO SCALE
30	E6.6	ELECTRICAL UL DETAILS	NO SCALE

GENERAL NOTES

1. ALL SYMBOLS SHOWN ON THE SYMBOL LEGEND ARE NOT NECESSARILY USED ON THIS PROJECT. ALL WORK SHALL BE IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE CURRENT VERSION OF THE NATIONAL ELECTRICAL CODE AND THE LOCAL AUTHORITIES HAVING JURISDICTION.
2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND FEES REQUIRED FOR INSTALLATION OF THE ELECTRICAL WORK. FURNISH FINAL CERIFICATE OF INSPECTION OR WRITTEN EVIDENCE OF ACCEPTANCE BY INSPECTION OF THE AUTORITIES FOR ALL WORK INSTALLED.
3. BEFORE STARTING ANY WORK, THE CONTRACTOR SHALL EXAMINE THE COMPLETE SET OF DRAWINGS FOR ALL TRADES, INCLUDING ARCHITECTURAL, HVAC, PLUMBING, FIRE PROTECTION AND ANY OTHER SPECIAL SYSTEMS. VERIFY ALL DIMENSIONAL SPACE REQUIREMENTS AND POINTS OF CONNECTION TO ALL EQUIPMENT. MAKE ANY MINOR ADJUSTMENTS NECESSARY TO AVOID CONFLICTS WITH THE BUILDING STRUCTURE AND THE WORK OF OTHER TRADES.
4. THE DRAWINGS INDICATE, IN A DIAGRAMMATIC MANNER, THE DESIRED LOCATIONS AND ARRANGEMENT OF THE COMPONENTS OF THE ELECTRICAL WORK. DETERMINE THE EXACT CONDUIT ROUTING, CONDUIT BENDS, AUXILIARY JUNCTION BOXES, SUPPORTS AND UNDEFINED CONSTRUCTION DETIALS AS A JOB CONDITION TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.
5. ALL ELECTRICAL MATERIALS SHALL BE NEW AND BARE THE UNDERWRITERS LABORATORY LABEL.
6. FOR EXACT LOCATIONS OF RECEPTACLES, JUNCTION BOXES, LIGHTING FIXTURES, SWITCHES, ETC. SEE ARCHITECTURAL DRAWINGS.
7. ALL WALL JUNCTION BOXES SHALL BE MOUNTED FLUSH WITH FINISH FACE OF WALL. PROVIDE EXTENSION BOXES OR RINGS AT WALLS WITH APPLIED ACOUSTIC PANELS. ALL WALL JUNCTIONS BOXES SHALL BE INSTALLED WITH MOUNTING HOLES AT TOP AND BOTTOM OF BOX, UNLESS NOTED OTHERWISE.
8. THE CONTRACTOR SHALL PROVIDE PULL CORDS IN ALL EMPTY CONDUITS. WHERE MORE THAN ONE CONDUIT TERMINATES IN A JUNCTION BOX, THE ELECTRICAL CONTRACTOR SHALL IDENTIFY EACH JUNCTION BOX AND CONDUIT IN A MANNER ALLOWING IDENTIFICATION OF JUNCTION BOX CONDUITS AFTER ALL WALL FINISHES HAVE BEEN APPLIED.
9. PROVIDE FINISH TRIM ON ALL FLOOR ELECTRICAL BOXES. FINISH REQUIREMENTS SHALL BE DETERMINED BY THE ARCHITECT.
10. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT VERSION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES AND REGULATIONS.
11. MINIMUM SIZE OF CONDUITS SHALL BE 3/4 INCH. MINIMUM SIZE OF CONDUCTOS SHALL BE #12 AWG UON.
12. ALL PANELS, SWITCHES, AND OTHER NECESSARY GEAR SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS TO ACCOMMODATE CONDUCTORS SHOWN.
13. ALL CONDUCTORS SHALL BE COPPER TYPE THHN/THWN INSULATION.
14. ALL JUNCTION BOXES AND PULL BOXES SHALL BE OF CODE GAUGE AND OF THE REQUIRED SIZE TO ACCOMMODAT THE NUMBER OF CONDUCTORS SHOWN.
15. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT AND OTHER EQUIPMENT REQUIREING ELECTRICAL CONNECTION PRIOR TO ROUGH IN.
16. THE CONTRACTOR SHALL EXTEND WIRING FROM ALL JUNCTION BOXES, RECEPTACLES, SWITCHES, ETC. AND MAKE FINAL CONNECTION AS REQUIRED TO ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTION.
17. THE CONTRACTOR SHALL COORDINATE LOCATION OF ALL OUTLET BOXES FOR SWITCHES, RECEPTACLES, SPEAKERS, ETC. WITH THE ARCHITECT AND OTHER TRADES.
18. FOR ALL WIRING DEVICES VERIFY FINISH COLOR WITH THE ARCHITECT. CONTRACTOR TO SUBMIT SAMPLES OF FINISH COLOR TO ARCHITECT FOR APPROVAL.
19. PROVIDE TYPEWRITTEN PANEL SCHEDULES TO BE MOUNTED ON THE INSIDE OF ALL PANEL COVER DOORS. SCHEDULE TO MATCH THOSE SHOWN ON THE ELECTRICAL PLANS PANEL SCHEDULES AND REFLECT ANY "AS-BUILT" CHANGES.
20. VERIFY NAME-PLATE RATINGS OFF ALL MOTORS AND APPLIANCES AND COORDINATE WITH LISTED REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES BEFORE ROUGH-IN.
21. ALUMINUM CONDUCTORS OR CONDUCTING MATERIALS (BUS BARS, TRANSFORMER COILS, ETC.) SHALL NOT BE USED ON THIS PROJECT IN ANY CAPACITY UNLESS ALLOWED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ). IF ALLOWED BY THE "AHJ" THE ALUMINUM MAY BE USED ON THE INCOMING SERVICE AND FEEDERS ONLY.
22. ARMORED CABLES (TYPE AC) CABLES SHALL NOT BE USED ON THIS PROJECT WITHOUT EXPRESS PERMISSION FROM THE ENGINEER. METAL CLAD CABLES (TYPE MC) SHALL BE ALLOWED ONLY IF ALLOWED BY THE "AHJ" (IN WRITING) ON 120V 20A BRANCH CIRCUITS ONLY.
23. THESE DRAWINGS INDICATE THE FINISHED REQUIREMENTS FOR THE ELECTRICAL SYSTEMS, EQUIPMENT, LIGHTING FIXTURES, OUTLETS AND DEVICES. DUE TO STRUCTURAL CONDITIONS, MECHANICAL DUCT OR PIPING INTERFERENCE, OR FOR OTHER REASONS, THE CONTRACTOR MAY DESIRE TO INSTALL THE WORK IN A MANNER DIFFERENT FROM THAT SHOWN. SUCH CHANGES SHALL BE PRESENTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE PROCEEDING. ONCE APPROVED, THE RECORD DRAWINGS SHALL BE ACCURATELY REVISED TO SHOW THE CHANGES AS COMPLETED AND INSTALLED.
24. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL WALL SWITCHES.
25. EVERY OUTELT HEIGHT SHALL BE VERIFIED ON EACH WALL WITH THE INTERIOR PLANNING AND DESIGN DRAWINGS AND CABINET SHOP DRAWINGS TO INSURE THE PROPER HEIGHT AND LOCATION WITH RESPECT TO CABINETS, EQUIPMENT, ETC.
26. COORDINATE BOX LOCATIONS IN MILLWORK WITH THE ARCHITECT AND/OR MILLWORK CONTRACTOR.
27. BEFORE SUBMITTING PROPOSALS FOR THIS WORK, EACH BIDDER SHALL BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS AND SHALL HAVE EXAMINED THE PREMISIS AND BE AWARE OF ALL EXISTING CONDITIONS UNDER WHICH HE OR SHE WILL BE OBLIGATED TO OPERATE IN PERFORMING THE CONTRACT WORK. THE CONTRACTOR WILL NOT BE ENTITLED TO ANY EXTRA COMPENSATION FOR FAILURE TO ALLOW FOR ANY EXISTING CONDITIONS. SUBMITION OF A BID OR PROPOSAL FOR THIS WORK WILL BE CONSIDERED AS EVIDENCE OF THE FACT THAT THE CONTRACTOR IS FULLY AWARE OF THESE CONDITIONS AND IS ABLE TO COMPLETE ALL WORK REQUIRED BY THE DOCUMENTS FOR THE GIVEN PROPOSAL OR BID PRICE.
28. THE CONTRACTOR SHALL INTERCONNECT ALL FANS AND AC UNITS WITH THE BUILDING LIFE SAFETY SYSTEM FOR UNIT SHUTDOWN UPON SIGNAL FOMR THE LIFE SAFETY SYSTEM (SEE DETAIL SECTION). VERIFY AND COORDINATE WITH THE LIFE SAFETY SYSTEM CONTRACTOR.
29. ALL JUNCTION BOXES SHALL BE SIZED PER NEC TABLE 314.6(A).
30. CONTRACTOR SHALL PROVIDE COMPLETE RED LINED AS-BUILT DRAWINGS PRIOR TO COMPLETION AND FULL PAYMENT OF THE PROJECT FOR REVIEW BY THE ARCHITECT AND THE ENGINEER.
31. PROVIDE LIFE SAFETY SYSTEM COMPONENETS NECESSARY FOR A COMPLETE SYSTEM AS APPROVED BY THE LOCAL FIRE MARSHALL AND OTHER AUTHORITIES HAVING JURISDICTION AND CONNECT TO BASE BUILDING SYSTEM FOR PROPER OERATION OF THE FACILITY.
32. ALL STROBE LIGHTS SHALL HVE A MINIMUM 15/75 (SELECTABLE) CANDELA LIGHT INTENSITY, UNLESS OTHERWISE NOTED.
33. THE ENTIRE INSTALLATION OF THE LIFE SAFETY SYSTEM, INCLUDING MATERIALS AND EQUIPMENT, SHALL MEET OR EXCEED THE MINIMUM STANDARDS AND REQUIREMENTS OF THE FOLLOWING:
    A. UL LISTING SERVICES
    B. NFPA
    C. UBC AS ACCEPTED AND/OR MODIFIED BYT THE LOCAL AUTHORITIES
    D. IBC AS ACCEPTED AND/OR MODIFIED BYT THE LOCAL AUTHORITIES
    E. LOCAL CITY FIRE CODES
    F. LOCAL STATE REQUIREMENTS
34. A DUBLEX RECEPTACLE INSTALLED ON AN INDIVIDUAL 20A CIRCUIT BREAKER SHALL HAVE A 20A RATING.
35. PROVIDE A MINIMUM OF 24 INCHES SEPARATION FOR BACK TO BACK OUTLET BOXES.
36. ALL RECESSED LIGHTING FIXTURES SHALL BE EQUIPPED WITH FRAMES AND SUPPORTS AS REQUIRED BY CEILING CONSTRUCTION. CONTRACTOR SHALL VERIFY CEILING TYPES PRIOR TO ORDERING RECESSED FIXTURES AND INSURE THAT THE CORRECT MOUNTING HARDWARE FOR THE CONDITION NEEDED IS SUPPLIED. FIXTURES SHALL BE SEALED TO PREVENT LIGHT LEAKS, AND SHALL BE INSPECTED, APPROVED, AND BEAR THE LABEL OF THE UNDERWRITERS LABORATORIES.
37. ALL WORK SHALL CONFORM TO FRANCHISE STANDARDS AND BUILDING STANDARD SPECIFICATIONS.
38. ALL OUTLETS, JUNCTION BOXES, AND OTHER EQUIPMENT SHALL BE LABELED WITH CIRCUIT DESIGNATIONS. LABELS SHALL BE LAMINATED TYPE CONSTRUCTION AND COLOR CODED AS FOLLOWS:
    A. WHITE WITH BLACK LETTERING - UTILITY SOURCE
    B. WHITE WITH RED LETTERING - SEP (EMERGENCY) SOURCE
    C. WHITE WITH BLUE LETTERING - UPS SOURCE
39. CONTRACTOR TO PROVIDE EQUIPMENT GROUND CONDUCTOR FOR ALL CIRCUITS. DO NOT USE THE CONDUIT FOR EQUIPMENT GROUND. EXTEND EQUIPMENT GROUND TO ALL ELECTRICAL DEVICES. PROVIDE EQUIPMENT GROUND BUS PARS IN ALL PANELS.
40. RUN ALL LIGHTING AND OUTDOOR CIRCUITS FROM PANEL "1S1" THROUGH A PHOTOCELL AND CONTROL RELAY ("PCR") CONFIGURATION (SEE DETAIL SECTION). PCR TO HAVE THE NUMBER OF CONTACTS SHOWN PLUS THREE SPARE SET OF CONTACTS. MOUNT PHOTO CONTROL RELAY IN THE ELECTRICAL ROOM ON THE FIRST FLOOR WITH PANEL "1S1". PROVIDE AND INSTALL A MANUAL OVERRIDE SWITCH FOR ALL OUTDOOR POLE LIGHT CIRCUITS IN PARALLEL WITH PHOTOCELL AS SHOWN IN DETAIL.
41. VERIFY ALL REQUIREMENTS FOR BRINGING THE MAIN ELECTRICAL SERVICE TO THE BUILDING INCLUDING TRANSFORMER, CT CABINET, METER BASE AND PRIMARY SERVICE REQUIREMENTS WITH THE LOCAL UTILITY COMPANY (SEE DETAILS). CONTRACTOR TO VERIFY LOCATION OF EXISTING PRIMARY POWER FOR CONNECTION FOR NEW SERVICE. VERIFY REQUIREMENTS AND RESPONSIBILITY FOR MATERIALS AND LABOR WITH THE LOCAL UTILITY COMPANY. CONTRACTOR RESPONSIBLE FOR TRANSFORMER PAD UNLESS OTHERWISE NOTED.
42. WIRE SIZE SHALL BE #8 CU MINIMUM IN A 1" CONDUIT FOR ALL OUTDOOR LIGHING AND POWER CIRCUITS.
43. CONTRACTOR SHALL PROVIDE AND INSTALL SAFETY DISCONNECT SWITCHES AT EACH SIGN LOCATION ACCORDING TO NEC 600.6.
44. RUN ONE SPARE 1" CONDUIT FROM PANEL "1S1" TO OUTSIDE OF BUILDING FOR FUTURE USE.
45. ELECTRICAL CONTRACTOR TO USE MULTIPOLE BRANCH BREAKERS FOR ALL SHARED NEUTRAL CIRCUITS, OR PROVIDE SEPERATE NEUTRAL FOR EACH BRANCH CIRCUIT, AND ADJUST PANEL SCHEDULES ACCORDINGLY, TO MEET NEC 210.4

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REVISIONS		
No.	Date	Description

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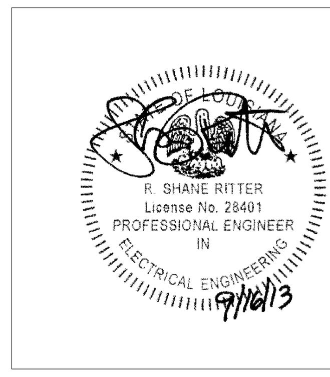

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Symbol Legends, Sheet Index, and General Notes

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E0.1

Released for
PERMIT ONLY

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURERS	CATALOG INFORMATION	LAMP DATA NO	LAMP DATA TYPE	BALLAST DATA NO	BALLAST DATA TYPE	INPUT WATTS	VOLTAGE	MOUNTING	FIXTURE DESCRIPTION	REMARKS
B1	LITHONIA (PARAMAX)	2PM3-*-B3/17-9ND -**-GEB10RS-PAF	3	T8/4100K/17W	2	ELECTRONIC	56		RECESSED	2X2 FLOURESCENT PARABOLIC TROFFER W/3-T8 (17W) / 3" DEEP LOUVERS NON-IRIDESCENT DIFFUSE SILVER FINISH PAINTED AFTER FABRICATION	*-REVIEW ARCH PLANS FOR TRIM REQUIREMENT **-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL" OPTION WHEN SHOWN AS EMERGENCY
B3	LITHONIA (PARAMAX)	2PM3-*-B3/32-18ND -**-GEB10RS-PAF	3	T8/4100K/32W	2	ELECTRONIC	106		RECESSED	2X4 FLOURESCENT PARABOLIC TROFFER W/3-T8 (32W) / 3" DEEP LOUVERS NON-IRIDESCENT DIFFUSE SILVER FINISH PAINTED AFTER FABRICATION	*-REVIEW ARCH PLANS FOR TRIM REQUIREMENT **-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL" OPTION WHEN SHOWN AS EMERGENCY
C3	LITHONIA	2SP-*-332-A12125 -**-GEB10RS-PAF	3	T8/4100K/32W	2	ELECTRONIC	106		RECESSED	2X4 FLOURESCENT TROFFER W/3-T8 / .125" #12 ACRYLIC DIFFUSER FLUSH STEEL WHITE DOOR FRAME PAINTED AFTER FABRICATION	*-REVIEW ARCH PLANS FOR TRIM REQUIREMENT **-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL" OPTION WHEN SHOWN AS EMERGENCY
C4	LITHONIA	2SP-*-432-A12125 -**-GEB10RS-PAF	4	T8/4100K/32W	2	ELECTRONIC	142		RECESSED	2X4 FLOURESCENT TROFFER W/4-T8 / .125" #12 ACRYLIC DIFFUSER FLUSH STEEL WHITE DOOR FRAME PAINTED AFTER FABRICATION	*-REVIEW ARCH PLANS FOR TRIM REQUIREMENT **-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL" OPTION WHEN SHOWN AS EMERGENCY
C5	LITHONIA	2WRT-*-432-A12125 -**-GEB10RS	4	T8/4100K/32W	2	ELECTRONIC	142		RECESSED	2X4 GASKETED FLOURESCENT TROFFER W/4-T8 / .125" #12 ACRYLIC DIFFUSER FLUSH ALUMINUM WHITE DOOR FRAME UL LISTED FOR WET LOCATIONS	*-REVIEW ARCH PLANS FOR TRIM REQUIREMENT **-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL6DW" OPTION WHEN SHOWN AS EMERGENCY
D1	LITHONIA	WP-232-DO-*-GEB10 -TPS	2	T8/4100K/32W	1	ELECTRONIC	70		WALL	4-FOOT FLUORESCENT WALL BRACKET W/2-T8 / TAMPER PROOF DIFFUSER	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL" OPTION WHEN SHOWN AS EMERGENCY MOUNT 7-FOOT AFF UNLESS NOTED OTHERWISE
D2	LITHONIA	DMW-232-AR-* -GEB10RS-STSL	2	T8/4100K/32W	1	ELECTRONIC	70		SURFACE	ENCLOSED & GASKETED INDUSTRIAL STRIP UL WET LOCATION / 4-FOOT FLUORESCENT STAINLESS STEEL LATCHES HIGH-IMPACT ACRYLIC DIFFUSER	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "EL6DW" OPTION WHEN SHOWN AS EMERGENCY
D7	LITHONIA	WC-217-MVOLT -GEB10PS	2	17WT8	1	ELECTRONIC	35		WALL	2-FOOT FLUORESCENT WALL BRACKET W/2-T8 / WHITE OPAL ACRYLIC DIFFUSER	MOUNT 7-FOOT AFF OR DIRECTLY ABOVE MIRROR (IF APPLICABLE) UNLESS NOTED OTHERWISE
E1	LITHONIA (AFFINITY)	AFN-*-EXT	2	XENON/6W			21		WALL	DIE CAST EXTERNAL EMERGENCY LIGHT UL LISTED FOR WET LOCATIONS & COLD WEATHER / HIGH TEMP NI-CAD BATTERY SELF DIAGNOSTICS	MOUNT FIXTURES AT 8 1/2 FEET AFF UNLESS NOTED OTHERWISE *COLOR BY ARCHITECT CONNECT TO NEAREST LIGHTING CIRCUIT
E2	LITHONIA (QUANTUM)	ELM2-SD	2	KRYPTON/5.4W			1.2		WALL	THERMOPLASTIC EMERGENCY LIGHT LEAD-CALCIUM BATTERY SELF DIAGNOSTICS	MOUNT FIXTURES AT 7 1/2 FEET AFF UNLESS NOTED OTHERWISE CONNECT TO NEAREST LIGHTING CIRCUIT
F1	PORTFOLIO	C6142 -EDR32 -6150L1	2		1	ELECTRONIC	42		RECESSED	RECESSED COMPACT FLUORESCENT CAN FIXTURE	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY
F1D	PORTFOLIO	C6142 -EDR32 -6150L1	2		1	ELECTRONIC	42		RECESSED	RECESSED COMPACT FLUORESCENT CAN FIXTURE DIMMABLE FLUORESCENT BALLAST	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY
F2	LITHONIA (GOTHAM)	AF-2/32TRT-8MB-* -GEB10	2	TRT/32W	1	ELECTRONIC	65		RECESSED	RECESSED COMPACT FLUORESCENT CAN FIXTURE HORIZONTAL TRIPLE TUBE BULBS (2/32W) 8" OPEN REFLECTOR / CLEAR TRIM SPECULAR LOW IRIDESCENT FINISH	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY ADD "2W5" WHEN SHOWN WITH DIMMER ADD "DS" WHEN SHOWN AS DUAL SWITCHED ADD "ELSD" WHEN SHOWN AS EMERGENCY
F5	LITHONIA	DECO HALF ROUND 11956	2	TT/13W	1	ELECTRONIC	30		WALL	DECORATIVE COMPACT FLUORESCENT WALL SCONCE ADA COMPLIANT ELECTRONIC BALLAST	MOUNT AT 7 1/2 FEET UNLESS NOTED OTHERWISE
FW	PORTFOLIO	C6142 -E -6110L1	2		1	ELECTRONIC	42		RECESSED	RECESSED COMPACT FLUORESCENT CAN FIXTURE WALL WASHER	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY
H1	LITHONIA (GOTHAM)	AH-100M-BAR -CGL-*-HEB-WL	1	MH/100W/COAT	1	ELECTRONIC	110		RECESSED	RECESSED 8" HID CAN FIXTURE CLEAR TRIM / CLEAR GLASS LENS UL LISTED FOR WET LOCATIONS 100W MH LAMP	MINIMUM OF 25% OF FIXTURES TO HAVE "QRS" OPTION (DISTRIBUTED EVENLY) *-VOLTAGE AS REQUIRED / SEE CIRCUITRY
P3	LITHONIA (POLE PART NUMBER)	KSF2-400M-R3-* -RP09-**-PERSCX -CR-DF-*** SSS25-9B-DM**-***	1	MH/400W	1	MAGNETIC	444		AS NOTED	400W MH ARCHITECTURAL POLE LIGHT IES TYPE R3 DISTRIBUTION / WITH TENON MOUNTED ON 25 FOOT POLE WITH 3 FOOT BASE SEE POLE LIGHT DETAIL IN DETAIL SECTION	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY **-PROVIDE NECESSARY HARDWARE FOR FIXTURE CONFIGURATION SHOWN WITH SYMBOL ***-COLOR TO BE CHOSEN BY ARCHITECT
P4	LITHONIA	TFL-400M-RA2-*-DF -CR-PERSC-UV- FTS-1M-**	1	MH/400W	1	MAGNETIC	455		AS NOTED	400W MH POLE TOP MOUNT FLOODLIGHT WITH INTEGRAL SLIPFITTER AND UPPER VISOR SHIELD SEE POLE LIGHT DETAIL IN DETAIL SECTION	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY **-COLOR TO BE CHOSEN BY ARCHITECT PROVIDE NECESSARY HARDWARE FOR FIXTURE CONFIGURATION SHOWN WITH SYMBOL
S1	LITHONIA (CONTOUR)	TFM-175M-RB-*-CR -PE-YK-TFMFV	1	MH/175W	1	MAGNETIC	194		AS NOTED	GROUND MOUNTED 175W MH FLOOD LIGHT FOR LIGHTING FLAG POLES CORROSION RESISTANT / YOKE MOUNT SUPPLIED WITH FULL VISOR	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY PROVIDE NECESSARY HARDWARE FOR FIXTURE CONFIGURATION SHOWN WITH SYMBOL SEE DETAIL SECTION FOR MOUNTING DETAIL
W1	LITHONIA	WSR-175M-WTU -*-CR-UCS -PE-QRS-**	1	MH/175W	1	MAGNETIC	195		WALL	DECORATIVE WALLPACK (175W MH) UL LISTED FOR WET LOCATIONS INTEGRAL PHOTO CELL / 10% UPLIGHT	*-VOLTAGE AS REQUIRED / SEE CIRCUITRY **-COLOR TO BE CHOSEN BY ARCHITECT MOUNT AT 12 FEET UNLESS NOTED OTHERWISE
X1	LITHONIA (PRECISE)	LRP-W-*-RC/MR-** -120/277-ELN		LED			4		SURFACE	EDGE-LIT LED EXIT SIGNS NICKEL-CADMIUM BATTERY	*-SINGLE/DOUBLE FACE INDICATED BY SYMBOL **-CHEVRONS INDICATED ON SYMBOL (ARROWS) MOUNTING INDICATED BY SYMBOL TYPE CONNECT TO NEAREST LIGHTING CIRCUIT
Z1	HUBBELL	VWX-151 / VCG-15 VCGP-100	1	A21/150W			150		SURFACE	WALL MOUNT 150W INCANDESCENT CAST ALUMINUM / TEMPERED CLEAR GLASS GASKETED / CAST GLOBE GAURD CORROSION RESISTANT	PROVIDE ALL NECESSARY HARDWARE FOR WALL MOUNTED INSTALLATION
3 Z2	TUBE LIGHTING PRODUCTS	DSHWL-HO -24V-W31		LED					AS NOTED	LED STRAND LIGHTS 2.3 WATS PER FOOT 24 VDC STRANDS MOUNTED IN COVES	LENGTH AND NUMBERS OF SPOOLS AS REQUIRED
Z5	REFER TO HAMPTON STANDARD FOR FIXTURE DEFINITION	REFER TO HAMPTON STANDARD FOR FIXTURE DEFINITION					100		AS NOTED	CONTRACTOR TO PROVIDE $750 ALLOWANCE FOR DECORATIVE FIXTURE TO BE CHOSEN BY OWNER OR ARCHITECT. CONTRACTOR TO INSTALL SELECTED FIXTURE.	SEE CIRCUITRY FOR VOLTAGE REQUIREMENT. MAXIMUM WATTAGE OF FIXTURE TO BE 100W. MOUNTING AS REQUIRED.
Z9	REFER TO HAMPTON STANDARD FOR FIXTURE DEFINITION	REFER TO HAMPTON STANDARD FOR FIXTURE DEFINITION					75		AS NOTED	CONTRACTOR TO PROVIDE $750 ALLOWANCE FOR DECORATIVE FIXTURE TO BE CHOSEN BY OWNER OR ARCHITECT. CONTRACTOR TO INSTALL SELECTED FIXTURE.	SEE CIRCUITRY FOR VOLTAGE REQUIREMENT. MAXIMUM WATTAGE OF FIXTURE TO BE 75W. MOUNTING AS REQUIRED.
Z10	FLIGHTLIGHT	FL-810LED -120A-DB-3-P					20		AS NOTED	FAA OBSTRUCTION LIGHT INSTALL IN ACCORDANCE WITH FAA CIRCULAR 70/7460-1 K CHANGE 2: CHAPTERS 4, 5(RED) AND 12.	STANCHION MOUNT CONTRACTOR REQUIRED TO SUBMIT FAA FORM 7460-2 WITHIN 5 DAYS OF GREATEST HIGH IN CONSTRUCTION ACHIEVED.

1S1

BUS NUMBER: 181 — AMPERE RATING: 225 — VOLTAGE (L-L): 208 — PHASE: 3
SERVED FROM: MSB — MAIN TYPE: MAIN LUGS ONLY — VOLTAGE (L-N): 120 — WIRE: 4
MOUNTING: SURFACE — LUG OPTIONS: — MIN. KAIC: 35
REMARKS: SEE DETAIL 4/E6.3 FOR CONTACTOR INFO

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE
G 1	20	1	PYLON SIGN	M	0.75	1 2	10	12	3/4	2	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
G 3	20	1	MONUMENT SIGN	M	0.75	1 2	10	12	3/4	4				L	1.35				
5	20	1	LIGHTS - FLAG POLES	L	0.60	1 2	10	12	3/4	6	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
7	20	1	LIGHTS - CANOPY	L	0.99	1 2	12	12	1/2	8				L	1.35				
9	20	1	POWER - EXT SHED	N	1.00	1 2	10	12	3/4	10	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
11	20	1	POWER - EXT SHED	N	1.00	1 2	10	12	3/4	12				L	1.35				
2 13	20	1	LIGHTS - COLUMNS	L	0.50	1 2	10	12	3/4	14	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
3 15	20	1	LIGHTS - CANOPY	L	0.30	1 2	10	12	3/4	16				L	1.35				
17	20	1	LIGHTS - ROOF LED	L	1.00	1 2	10	12	3/4	18	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
19		1	SPACE ONLY							20				L	1.35				
21		1	SPACE ONLY							22	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
23		1	SPACE ONLY							24				L	1.35				
25		1	SPACE ONLY							26	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
27		1	SPACE ONLY							28				L	1.35				
29		1	SPACE ONLY							30	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
31	20	2	BUILDING SIGNAGE	M	0.75	1 2	12	12	1/2	32				L	1.35				
				M	0.75					34	20	1	SITE POLE LIGHTS	L	1.35	1 2	8	10	1
35	20	2	BUILDING SIGNAGE	M	0.75	1 2	12	12	1/2	36				L	1.35				
				M	0.75					38	20	1	BUILDING SIGNAGE	M	0.50	1 2	12	12	1/2
39	20	2	BUILDING SIGNAGE	M	0.75	1 2	12	12	1/2	40	20	1	BUILDING SIGNAGE	M	0.50	1 2	12	12	1/2
				M	0.75					42	20	1	BUILDING SIGNAGE	M	0.50	1 2	12	12	1/2

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A - HOSPITAL LIGHTING	0.00	0.00	0.00
B - HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C - SPACE COOLING*	0.00	0.00	0.00
D - OTHER HVAC LOADS	0.00	0.00	0.00
H - SPACE HEATING*	0.00	0.00	0.00
K - KITCHEN APPLIANCES	0.00	0.00	0.00
L - GENERAL LIGHTING	27.69	1.25	34.61
M - MISC. CONTINUOUS	7.50	1.25	9.37
N - MISC. NONCONTINUOUS	2.00	1.00	2.00
R - RECEPTACLES	0.00	0.00	0.00
W - WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.10	0.25	0.02
	37.19		46.01

PHASE BALANCE (% OF TOTAL LOAD) A: 99.6 % B: 98.1 % C: 102.5 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 127.7 A.
X LARGEST UNBALANCED PHASE %: x 1.02
TOTAL: 131.0 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 153.5 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. — MIN. NEC ART. 220 FEEDER SIZE:

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F - BREAKER TO BE ARC FAULT TYPE
G - BREAKER TO BE GFI TYPE
O - BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S - BREAKER TO BE SHUNT TRIP TYPE

LIGHT FIXTURE GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL AS SPECIFIED BY ARCHITECTURAL FINISH SCHEDULES REGARDLESS OF CATALOG NUMBER GIVEN. CONTRACTOR SHALL VERIFY REQUIRED FIXTURE INSTALLATION APPENDAGES PRIOR TO ORDERING FIXTURES.
2. ALL FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE AS STATED IN THE SPECIFICATIONS OR AS APPROVED BY THE ENGINEER.
3. ALL FLUORESCENT FIXTURES SHALL BE EQUIPPED WITH ELECTRONIC BALLAST HAVING A MIN. BALLAST FACTOR OF .91 AND THD LESS THAN 10% WITH SYLVANIA OCTRON 41K LAMPS, OR EQUIVALENT UNLESS NOTED OTHERWISE.
4. ALL FLUORESCENT TROFFERS SHALL BE EQUIPPED WITH ONE DUAL TAP BALLAST OR DUAL BALLAST PROVIDING THE ABILITY TO SWITCH INBOARD AND OUTBOARD LAMPING IN EACH FIXTURE OR VIA TANDEM WIRING WHERE MULTIPLE LEVEL LIGHTING IS INDICATED BY SWITCHING ON PLANS.
5. LIGHTING FIXTURES, AS SPECIFIED, HAVE BEEN SO SELECTED TO ACHIEVE REQUIRED/DESIRED FOOT CANDLE LEVELS OF ILLUMINATION IN THEIR RESPECTIVE AREA, THEREFORE, SPECIFIC FIXTURE CHARACTERISTICS WHICH MAY CREATE PARTICULAR ILLUMINATION RESULTS ARE ESSENTIAL. ANY DEVIATIONS FROM SPECIFIED FIXTURES SHALL REQUIRE THE SUBMITTING AGENT OR CONTRACTOR TO PROVIDE PROOF THAT SUCH SUBSTITUTIONS WILL PROVIDE THE EXACT LIGHTING RESULT INTENDED BY THE DESIGN.
6. ALL RECESSED FIXTURES INSTALLED IN CEILINGS, INDICATED BY ARCHITECT AS HAVING INSULATION INSTALLED OVER CEILING AND FIXTURES, SHALL BE U.L. RATED FOR DIRECT CONTACT WITH INSULATION. VERIFY WITH ARCHITECTURAL PLANS.
7. ALL RECESSED FIXTURES INSTALLED IN FIRE RATED CEILINGS SHALL BE INSTALLED WITH AN APPROVED TENT ENCLOSURE BY G.C., OR BE U.L. RATED FOR USE IN FIRE RATED CEILINGS. VERIFY WITH ARCHITECTURAL PLANS.
8. ELECTRICAL CONTRACTOR SHALL VERIFY LIGHTING FIXTURE REQUIREMENTS AGAINST ARCHITECTURAL PLANS WITH SPECIFICS TO, BUT NOT LIMITED TO, CUSTOM ARCHITECTURAL SOFFITS IF SO SHOWN ON ANY PLANS.
9. WHERE MULTIPLE VENDORS ARE SPECIFIED FOR A SPECIFIC FIXTURE TYPE, SUBSTITUTIONS WILL NOT BE ACCEPTED UNLESS THE PROPOSED SUBSTITUTIONS ARE APPROVED IN WRITING BY THE ENGINEER PRIOR TO THE BID DATE.
10. EACH CONTINUOUS RUN OF SUSPENDED FLUORESCENT FIXTURES SHALL BE CONNECTED VIA A SINGLE POINT FEED.
11. ALL INCANDESCENT LAMPS SHALL BE 130V.
12. ALL FIXTURES MOUNTED OVER FOOD SERVING OR PREPARATION AREAS SHALL BE COMPLETELY LENSED AND GASKETED OR BE FITTED WITH SHATTER PROOF LAMP ENCLOSURES, PER DIVISION OF ENVIRONMENTAL HEALTH.
13. CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS AND LAYOUT OF LIGHTING FIXTURES.

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REVISIONS		
No.	Date	Description
1	11-5-13	Review Comments
2	11-15-13	Franchise Comments
3	04-10-14	Hilton Update

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R. SHANE RITTER License No. 28401 PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Lighting Fixture Schedule & Site Panel "1S1" Schedule

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013

Sheet No. E0.2

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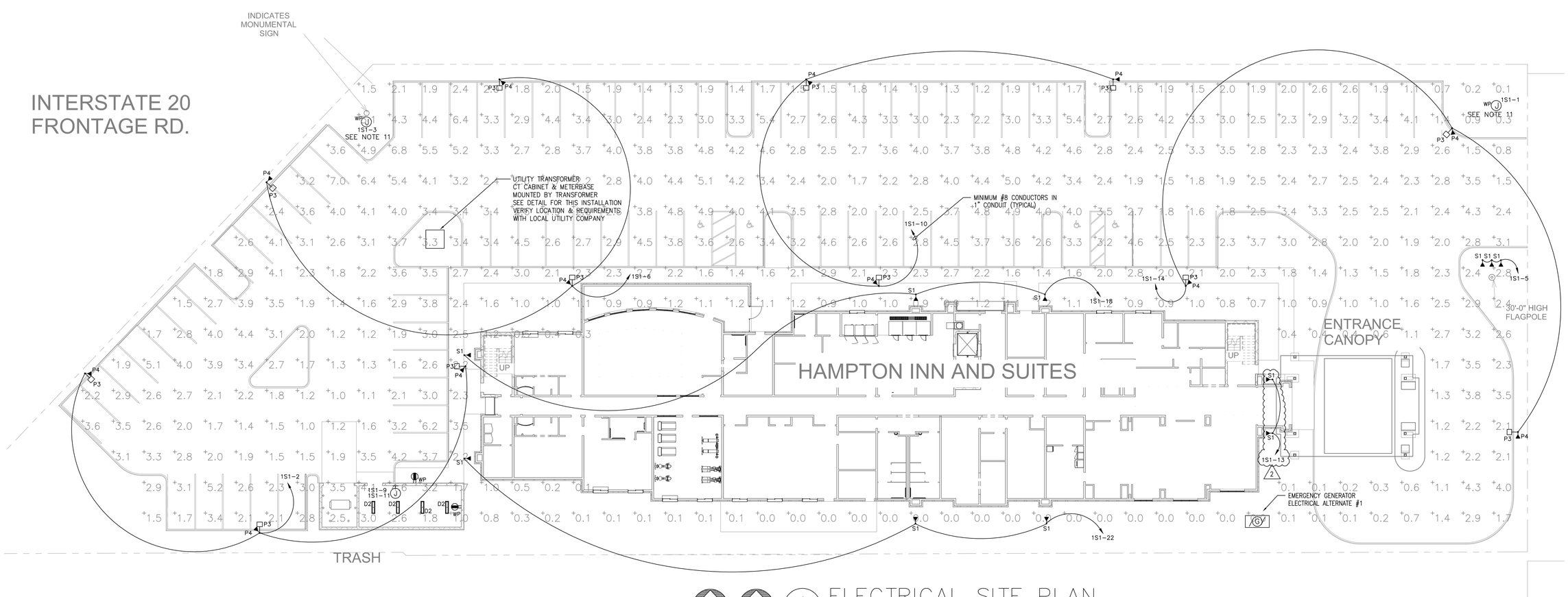
Hampton Inn and Suites



LIGHT POINT-TO-POINT CALCULATION NOW SHOWN
CALCULATED VALUES ARE FROM TYPE "P3" FIXTURES ONLY
TYPE "P4" FIXTURES TO BE ADJUSTED AT TIME OF INSTALLATION
TO INSURE PROPER AND EVEN LIGHTING LEVELS ACROSS PARKING LOT

MAGNETIC NORTH PROJECT NORTH

1 E0.3

ELECTRICAL SITE PLAN

SCALE: 1/16" = 1'

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO ALL STATE, LOCAL AND FEDERAL CODES, INCLUDING THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
2. RUN ALL LIGHTING AND OUTDOOR CIRCUITS FROM PANEL "1S1"
3. VERIFY LOCATION AND TYPES OF ALL FIXTURES WITH ARCHITECT.
4. RUN ALL OUTDOOR LIGHTING THROUGH PHOTOCELL AND CONTROL RELAY "PCR" "PCR" TO HAVE NUMBER OF CONTACTS EQUAL TO NUMBER OF CIRCUITS SEE 4/E6.3 FOR MORE DETAILS.
5. THE CONTRACTOR IS TO, AT HIS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, AND LICENSES, ETC. NECESSARY TO COMPLETE THE PROJECT.
6. VERIFY ALL REQUIREMENTS OF TRANSFORMER, CT CABINET, METER BASE, AND SERVICE ENTRANCE WITH THE LOCAL UTILITY COMPANY (SEE DETAIL 4/E6.1).
7. WIRE SIZE SHALL BE #8 CU MINIMUM IN A 1" CONDUIT FOR ALL OUTDOOR LIGHTING CIRCUITS.
8. MOUNT PHOTO CONTROL RELAY IN ELECTRICAL ROOM ON THE FIRST FLOOR WITH PANEL "1S1". MOUNT PHOTO CELL "PE" ON TOP OF BUILDING FACING NORTH.
9. CONTRACTOR TO VERIFY LOCATION OF EXITING PRIMARY POWER FOR CONNECTION FOR NEW SERVICE ENTRANCE. VERIFY RESPONSIBILITY FOR MATERIALS AND LABOR WITH THE LOCAL UTILITY CO.
10. RUN ONE EXTRA SPARE 1" CONDUIT FROM PANEL "1S1" TO OUTSIDE OF BUILDING FOR FUTURE USE. SEE ALSO RISER DIAGRAM FOR OTHER REQUIREMENTS.
11. CONTRACTOR TO PROVIDE AND INSTALL SAFETY DISCONNECT SWITCH AT EACH SIGN LOCATION ACCORDING TO NEC 600.6.
12. PROVIDE AND INSTALL A MANUAL OVERRIDE SWITCH FOR ALL OUTDOOR POLE LIGHTING CIRCUITS. INSTALL OVERRIDE SWITCH IN PARALLEL WITH PHOTOCELL.
13. CONTRACTOR RESPONSIBLE FOR TRANSFORMER PAD. VERIFY REQUIREMENTS WITH LOCAL UTILITY CO.
14. VERIFY LOCATION OF FLAG POLE LIGHTS BEFORE ROUGH-IN.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 034913 R. SHANE RITTER Licensed To Practice ELECTRICAL ENGINEERING

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Site Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E0.3

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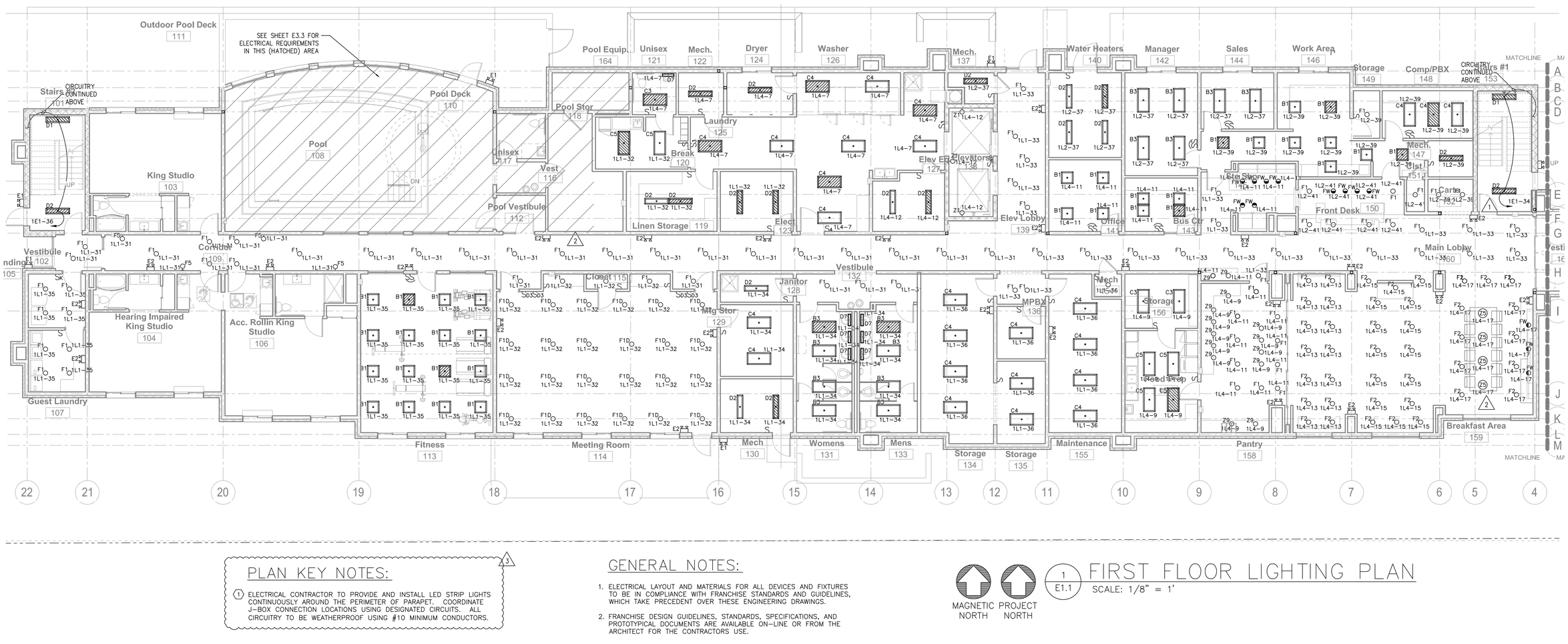

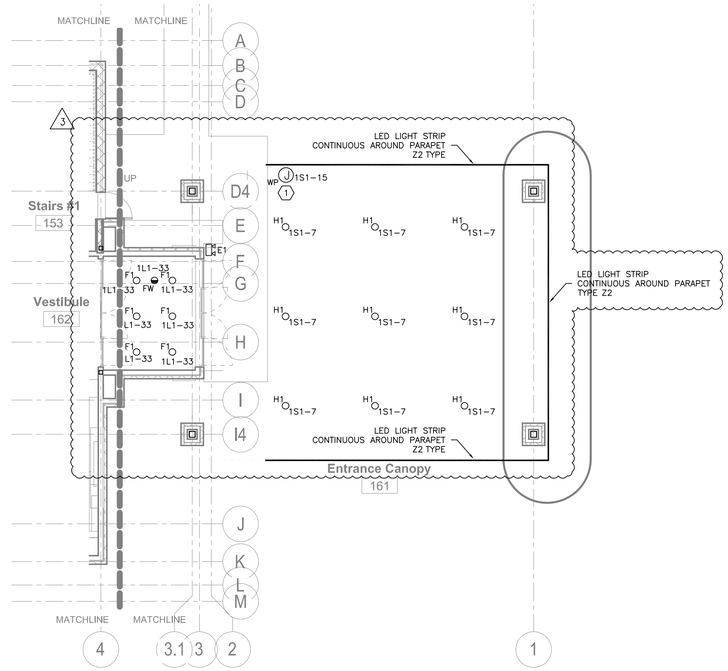

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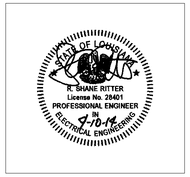

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
First Floor Lighting Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E1.1

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Hampton Inn and Suites

PLAN KEY NOTES:

3

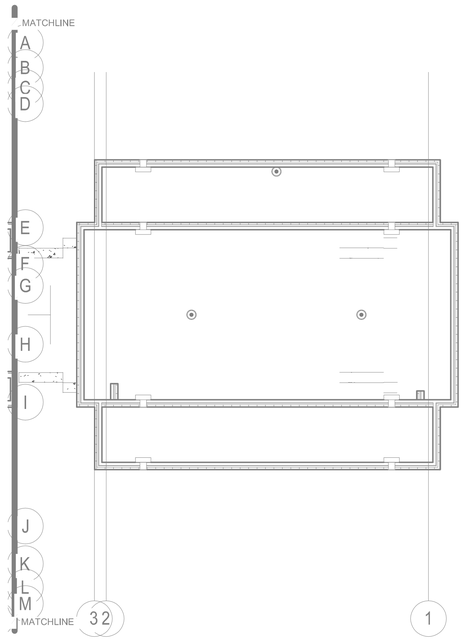
1. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL LED STRIP LIGHTS CONTINUOUSLY AROUND THE PERIMETER OF PARAPET. COORDINATE J-BOX CONNECTION LOCATIONS USING DESIGNATED CIRCUITS. ALL CIRCUITRY TO BE WEATHERPROOF USING #10 MINIMUM CONDUCTORS.

GENERAL NOTES:

1. ELECTRICAL LAYOUT AND MATERIALS FOR ALL DEVICES AND FIXTURES TO BE IN COMPLIANCE WITH FRANCHISE STANDARDS AND GUIDELINES, WHICH TAKE PRECEDENT OVER THESE ENGINEERING DRAWINGS.
2. FRANCHISE DESIGN GUIDELINES, STANDARDS, SPECIFICATIONS, AND PROTOTYPICAL DOCUMENTS ARE AVAILABLE ON-LINE OR FROM THE ARCHITECT FOR THE CONTRACTORS USE.

MAGNETIC NORTH
PROJECT NORTH

1 / E1.1 FIRST FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'



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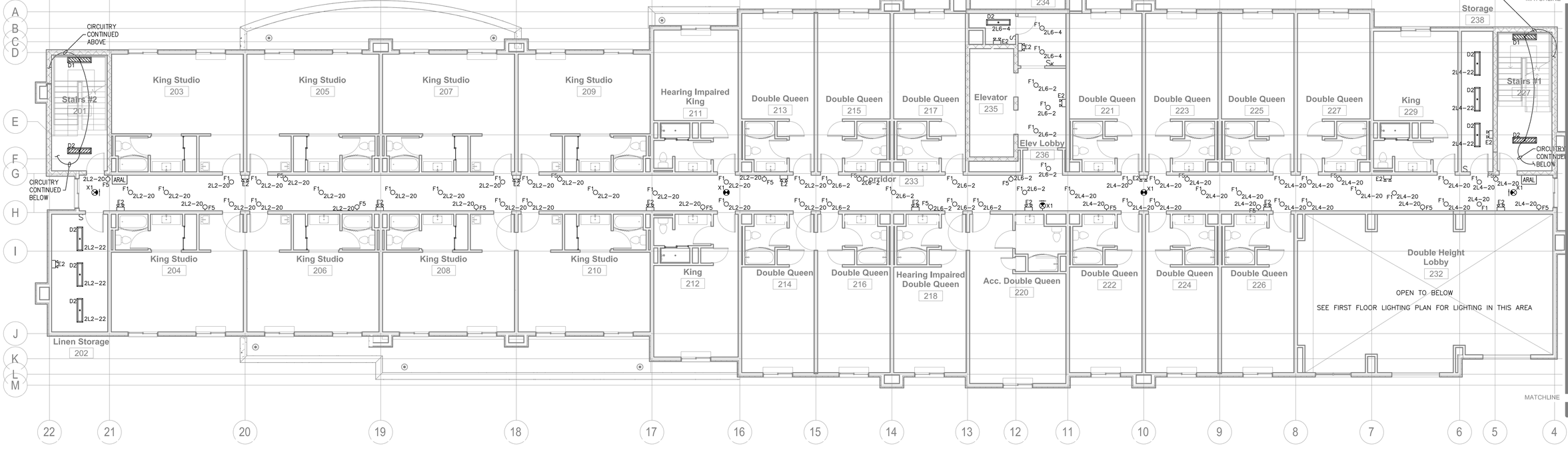

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2. FRANCHISE DESIGN GUIDELINES, STANDARDS, SPECIFICATIONS, AND PROTOTYPICAL DOCUMENTS ARE AVAILABLE ON-LINE OR FROM THE ARCHITECT FOR THE CONTRACTORS USE.

MAGNETIC NORTH PROJECT NORTH

1 / E1.2 SECOND FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Second Floor Lighting Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E1.2

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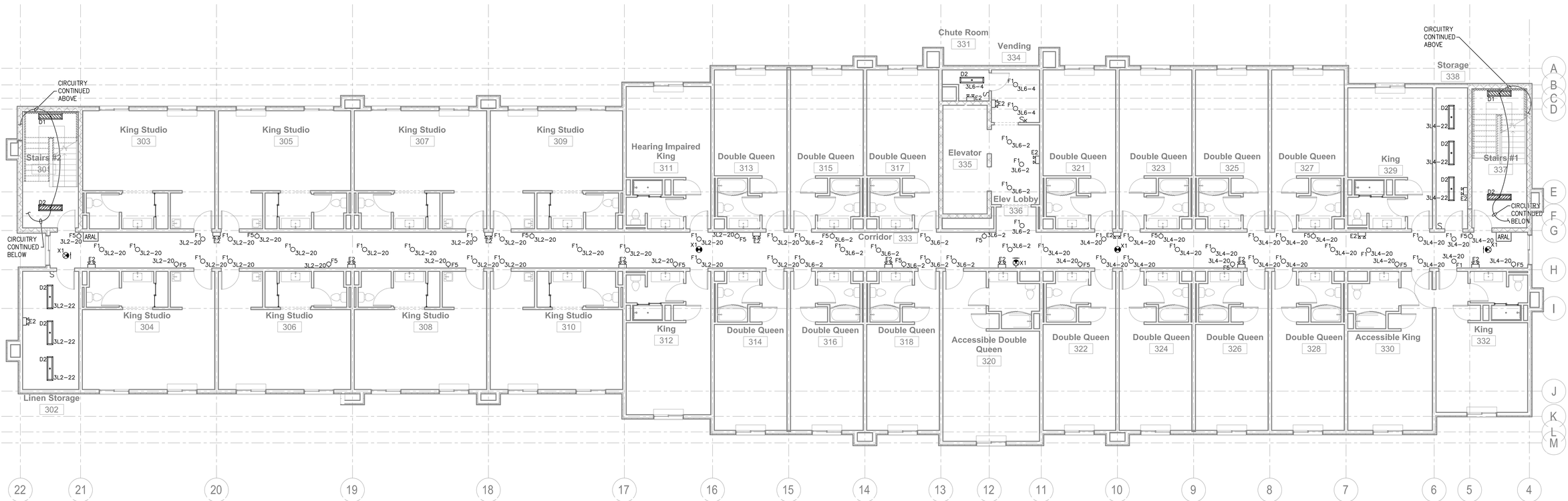

MAGNETIC NORTH

PROJECT NORTH

1 / E1.3

THIRD FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'

GENERAL NOTES:

1. ELECTRICAL LAYOUT AND MATERIALS FOR ALL DEVICES AND FIXTURES TO BE IN COMPLIANCE WITH FRANCHISE STANDARDS AND GUIDELINES, WHICH TAKE PRECEDENT OVER THESE ENGINEERING DRAWINGS.
2. FRANCHISE DESIGN GUIDELINES, STANDARDS, SPECIFICATIONS, AND PROTOTYPICAL DOCUMENTS ARE AVAILABLE ON-LINE OR FROM THE ARCHITECT FOR THE CONTRACTORS USE.

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R. SHANE RITTER
License No. 26401
PROFESSIONAL ENGINEER
IN
ELECTRICAL ENGINEERING
9/10/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Third Floor Lighting Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E1.3

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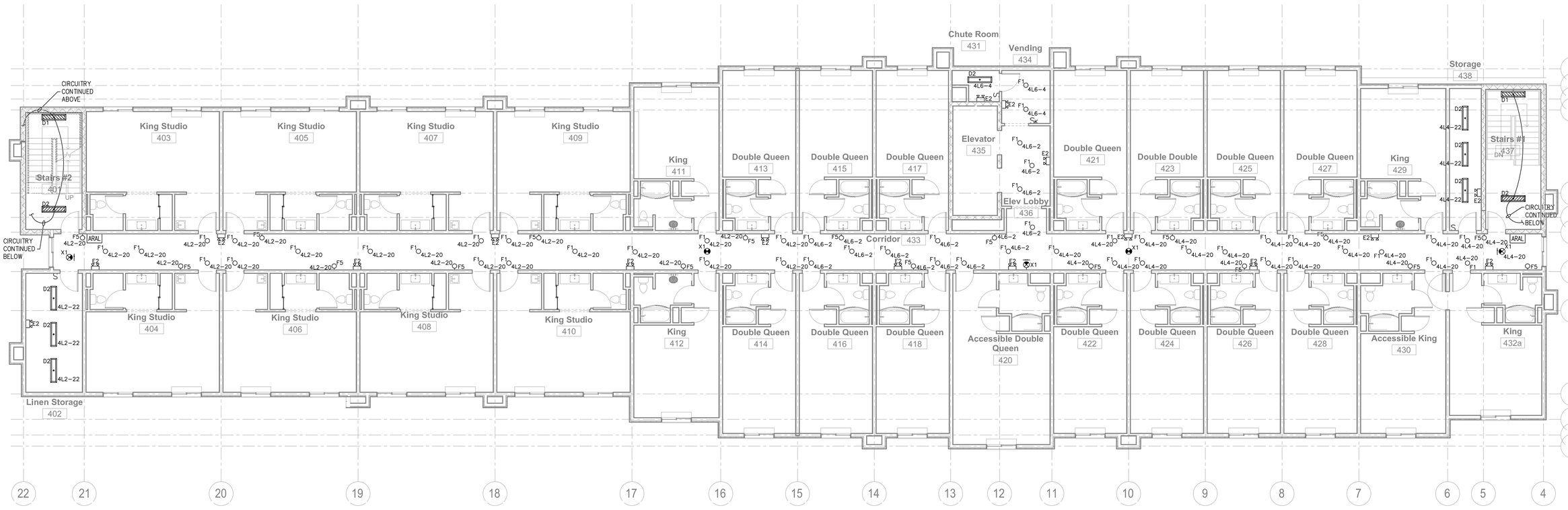
Hampton Inn and Suites



MAGNETIC NORTH

PROJECT NORTH

1 / E1.4

FOURTH FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'

GENERAL NOTES:

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No.	Date	Description

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SHANE RITTER
LICENSE NO. 25241
PROFESSIONAL ENGINEER
IN
ELECTRICAL ENGINEERING
7/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Fourth Floor Lighting Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
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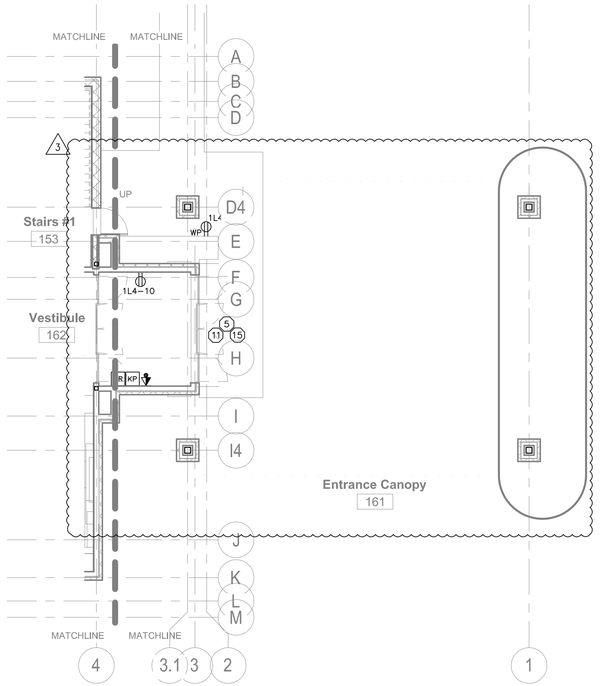
GENERAL NOTES:

1. ALL WORK SHALL COMFORM TO ALL STATE, LOCAL, AND FEDERAL CODES, INCLUDING THE LATEST EDITION OF THE NATIONALL ELECTRICAL CODE AND THE INTERNATIONAL BUILDING CODE.
2. MINIMUM WIRE SIZE SHALL BE #12 CU AWG UNLESS OTHERWISE NOTED.
3. HOME RUNS GREATER THAN 100 FEET SHALL BE #10 CU AWG MINIMUM.
4. ALL CIRCUITRY SHALL BE RUN IN EMT, IMC OR RIGID CONDUIT.
5. CONTRACTOR TO FURNISH AND INSTALL ALL NECESSARY MATERIALS AND LABOR TO INSURE A COMPLETE AND OPERABLE SYSTEM.
6. CONTRACTOR SHALL AT HIS OWN EXPENSE OBTAIN ALL NECESSARY PERMITS INSPECTIONS, LICENSES, ETC. NECESSARY TO COMPLETE THIS PROJECT.
7. PROVIDE WITH FIRE ALARM SYSTEM A DUCT MOUNTED SMOKE DETECTOR IN THE RETURNS OF ALL CENTRAL AIR HANDLING UNITS FOR AHU SHUT DOWN.
8. INSTALL J-BOX AND CIRCUITS AS NECESSARY FOR BUILDING SIGNS AS SHOWN ON THE ARCHITECTURAL PLANS. COORDINATE WITH THE SIGN SUPPLIER AND/OR OWNER FOR LOCATIONS AND REQUIREMENTS. PROVIDE 3 1P/20A BREAKERS AND 3-2P/20A BREAKERS IN PANEL "1S1" FOR THESE SIGNS.
9. ALL CCTV SHOWN IS SCHEMATIC IN DESIGN. VERIFY ALL REQUIREMENTS WITH THE OWNER/ARCHITECT/FRANCHISE BEFORE ROUGH IN.
10. CONTRACTOR TO POWER ALL ELECTRONIC DOOR LOCKS THROUGHOUT FACILITY. SEE ARCHITECTURAL PLANS FOR DOORS TO BE ELECTRONICALLY LOCKED.
11. SPRINKLER FLOW VALVE AND TAMPER SWITCHES TO BE MONITORED BY THE FIRE ALARM CONTROL PANEL. MAKE ALL NECESSARY PROVISIONS AND CONNETIONS.
12. CONTRACTOR TO INSTALL GFI WEATHERPROOF OUTLETS ON ROOF TOP AS NEEDED.
13. CONTRACTOR TO VERIFY EXACT LOCATION OF ALL FLOOR BOXES WITH OWNER/ARCHITECT BEFORE ROUGH-IN.
14. ALL BREAKERS FOR ALL DWELLING UNITS CIRCUITS SHALL BE ARC FAULT INTERRUPT TYPE. TYPICAL FOR ALL FLOORS.

PLAN KEY NOTES

1. ONE (1) 2 1/2" CONDUIT UP TO OCV. AT TOP FLOOR TURN UP 12" AFF, EACH END, AND CAP.
2. TWO (2) 4" CONDUIT OUT TO PROPERTY LINE AS DIRECTED BY LOCAL TELEPHONE COMPANY AND ONE (1) 4" CONDUIT OUT TO PROPERTY LINE AS DIRECTED BY LOCAL CABLE COMPANY.
3. CONNECT FIRE ALARM SYSTEM REMOTE COMMUNICATION CAPABILITIES. VERIFY EXACT REQUIREMENTS.
4. TELEPHONE SYSTEM BACKBOARD, 4'x8'X3/4" PLYWOOD.
5. CONNECT ELECTRIC DOOR STRIKE. INTERFACE WITH RELEASE MECHANISM AT FRONT DESK AND BUILDING LIFE SAFETY SYSTEM. VERIFY EXACT REQUIREMENTS.
6. CONNECT ELEVATOR CAB COMMUNICATION REQUIREMENTS. VERIFY EXACT REQUIREMENTS.
7. PROVIDE GROUNDING PER THE NATIONAL ELECTRICAL CODE, AND IN ACCORDANCE WITH THE POOL/SPA MANUFACTURER;S RECOMMENDATIONS, FOR THE SWIMMING POOL.
8. 66"A.F.F. FOR SECURITY MONITOR AND VCR. VERIFY EXACT REQUIREMENTS.
9. JUNCTION BOX ABOVE CEILING TO SERVE PUBLIC PHONES. COORDINATE WITH LOCAL TELEPHONE COMPANY. VERIFY EXACT LOCATION WITH ARCHITECT.
10. VERIFY LOCATION OF FLOOR OUTLETS WITH ARCHITECT BEFORE ROUGH IN.
11. VERIFY EXACT LOCATIONS AND REQUIREMENTS WITH THE ARCHITECT AND SUPPLIER. THESE DEVICES SHALL DROP OUT ON POWER LOSS OR ALARM.
12. RUN 4 – 3" CONDUITS IN EACH DIRECTION (N,S,E,W), STUB OUTSIDE BUILDING.
13. RUN 1 – 2" CONDUIT FROM THIS LOCATION TO ATTIC FOR SATELLITE.
14. LOCATE CCTV EQUIPMENT & NETWORK COMPUTER IN THIS ROOM.
15. RUN 3/4" CONDUIT TO THIS DOOR FOR ELECTRONIC LOCKING. RUN BACK TO FRONT DESK REGISTRATION AREA. VERIFY WITH ARCHITECT/OWNER.
16. INSTALL GFCI OUTLET AND PIT LIGHT ON SEPERATE CIRCUITS.
17. SMOKE DETECTOR SCHEDULED FOR ELEVATOR RECALL (TYPICAL).
18. CONTRACTOR TO INSTALL TAMPER AND FLOW SWITCH ON SPRINKLER SYSTEM. VERIFY LOCATION WITH SPRINKLER CONTRACTOR.
19. CONTRACTOR TO INSTALL PANIC HARDWARE TO ELECTRICAL ROOM EXTERIOR DOOR TO COMPLY WITH NEC 110.26(C)(2) TO "OPEN UNDER SIMPLE PRESSURE"
20. CONTRACTOR TO INSTALL DEDICATED T1 LINE, AND A MODEM OUTLET IN THIS LOCATION. CONTRACTOR ALSO SHALL INSTALL A FLOOR MOUNTED METAL COMPUTER RACK.



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REVISIONS		
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1	11-5-13	Review Comments
2	11-15-13	Franchise Comments
3	04-10-14	Hilton Update

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PROFESSIONAL ENGINEER
NORTH CAROLINA

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
First Floor Power & Communication Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E2.1

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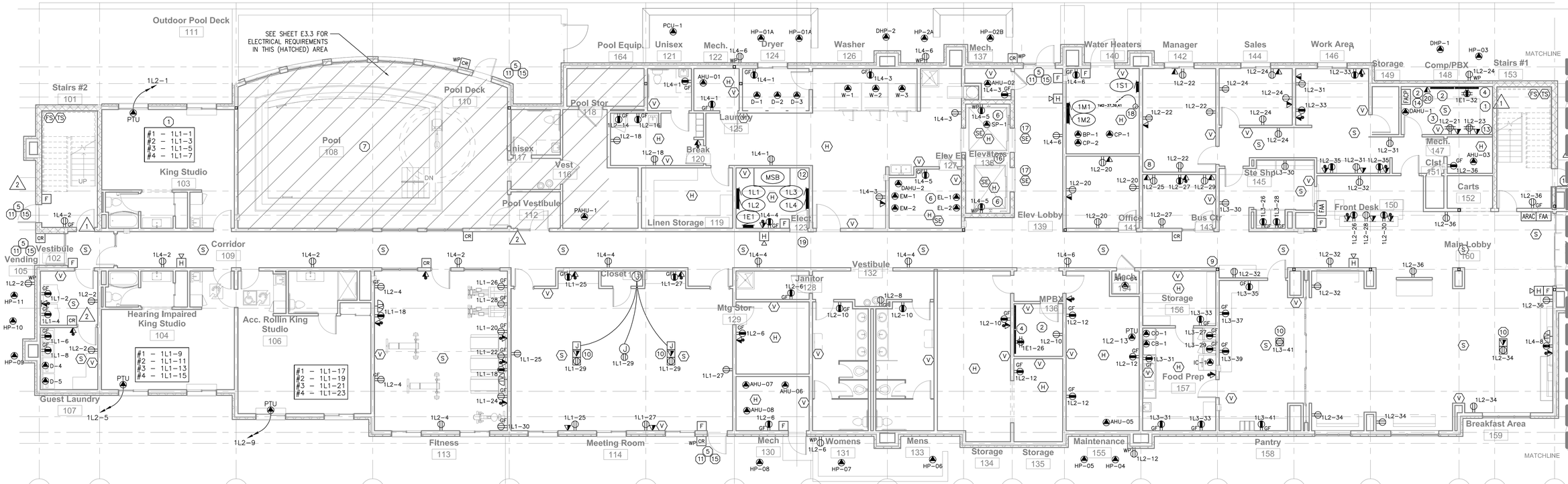
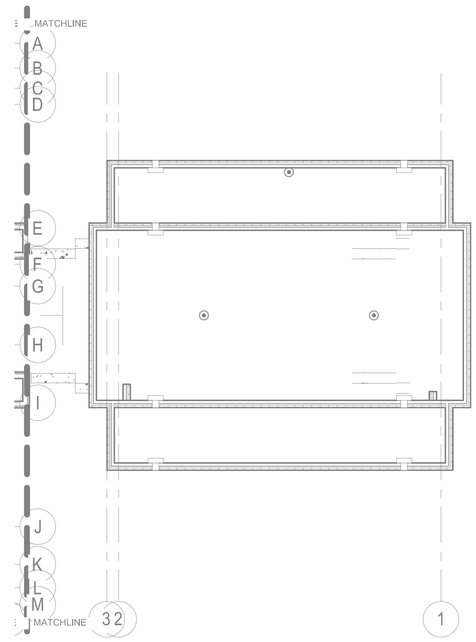


MAGNETIC NORTH
PROJECT NORTH

1 / E2.1 FIRST FLOOR POWER & COMMUNICATION PLAN
SCALE: 1/8" = 1'

Hampton Inn and Suites



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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Second Floor Power & Communication Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

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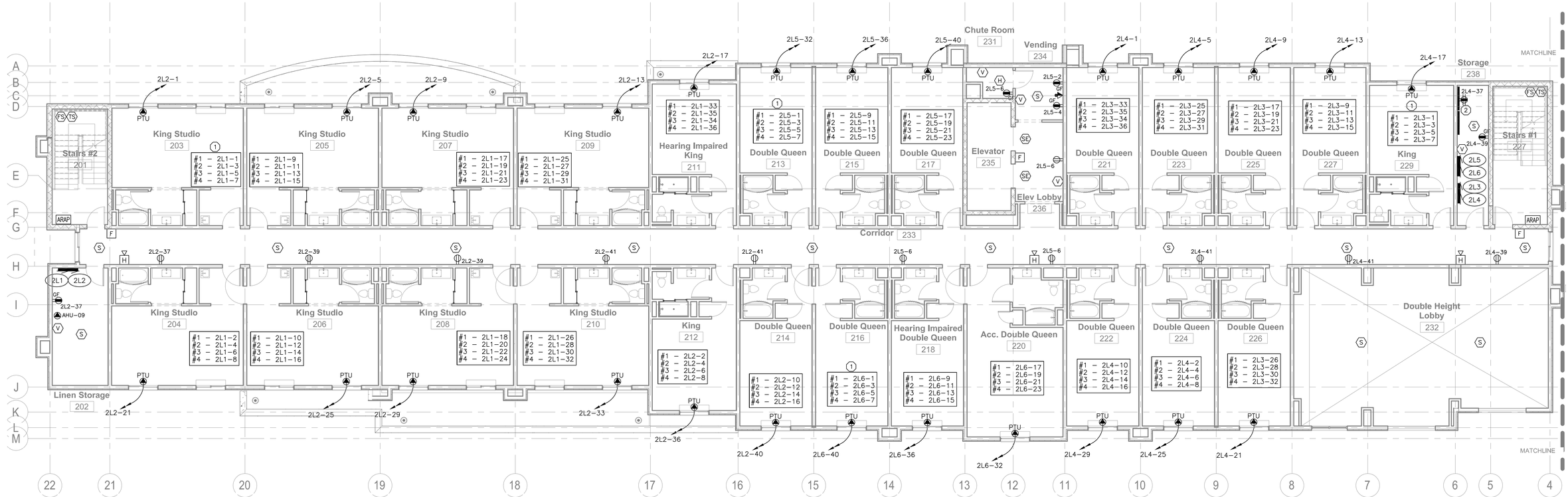


PLAN KEY NOTES:

1. CIRCUITS SHOWN IN BLOCKS TO BE USED TO DEFINE CIRCUITS USED FOR EACH ROOM AS SHOWN IN TYPICAL ROOM LAYOUTS SHOWN ON E3.1 AND E3.2 (TYPICAL).
2. TWO (2) 4'X8'X3/4" PAINTED BACKBOARD FOR TELECOM AND CATV (SEE COMMUNICATION RISER DIAGRAM).

GENERAL NOTES:

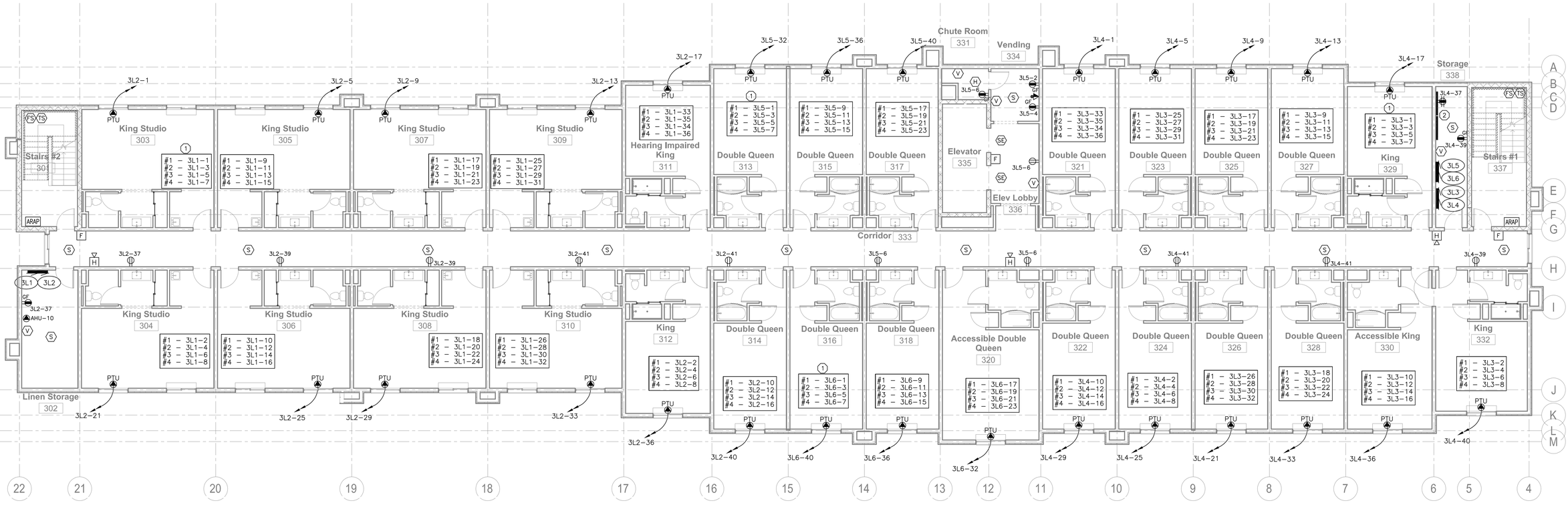
1. ELECTRICAL LAYOUT AND MATERIALS FOR ALL DEVICES AND FIXTURES TO BE IN COMPLIANCE WITH FRANCHISE STANDARDS AND GUIDELINES, WHICH TAKE PRECEDENT OVER THESE ENGINEERING DRAWINGS.
2. FRANCHISE DESIGN GUIDELINES, STANDARDS, SPECIFICATIONS, AND PROTOTYPICAL DOCUMENTS ARE AVAILABLE ON-LINE OR FROM THE ARCHITECT FOR THE CONTRACTORS USE.
3. ALL BREAKERS FEEDING 120V 20A CIRCUITS IN ALL GUESTROOMS, DWELLING SPACES, AND APARTMENTS SHALL BE ARC FAULT TYPE BREAKERS.

MAGNETIC NORTH PROJECT NORTH

1 / E2.2

SECOND FLOOR POWER & COMMUNICATION PLAN

SCALE: 1/8" = 1'



PLAN KEY NOTES:

1. CIRCUITS SHOWN IN BLOCKS TO BE USED TO DEFINE CIRCUITS USED FOR EACH ROOM AS SHOWN IN TYPICAL ROOM LAYOUTS SHOWN ON E3.1 AND E3.2 (TYPICAL).
2. TWO (2) 4'X8'X3/4" PAINTED BACKBOARD FOR TELECOM AND CATV (SEE COMMUNICATION RISER DIAGRAM).

GENERAL NOTES:

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1 / E2.3

THIRD FLOOR POWER & COMMUNICATION PLAN

SCALE: 1/8" = 1'

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Third Floor Power & Communication Plan

Phase
Construction Documents

Project No.	12-111
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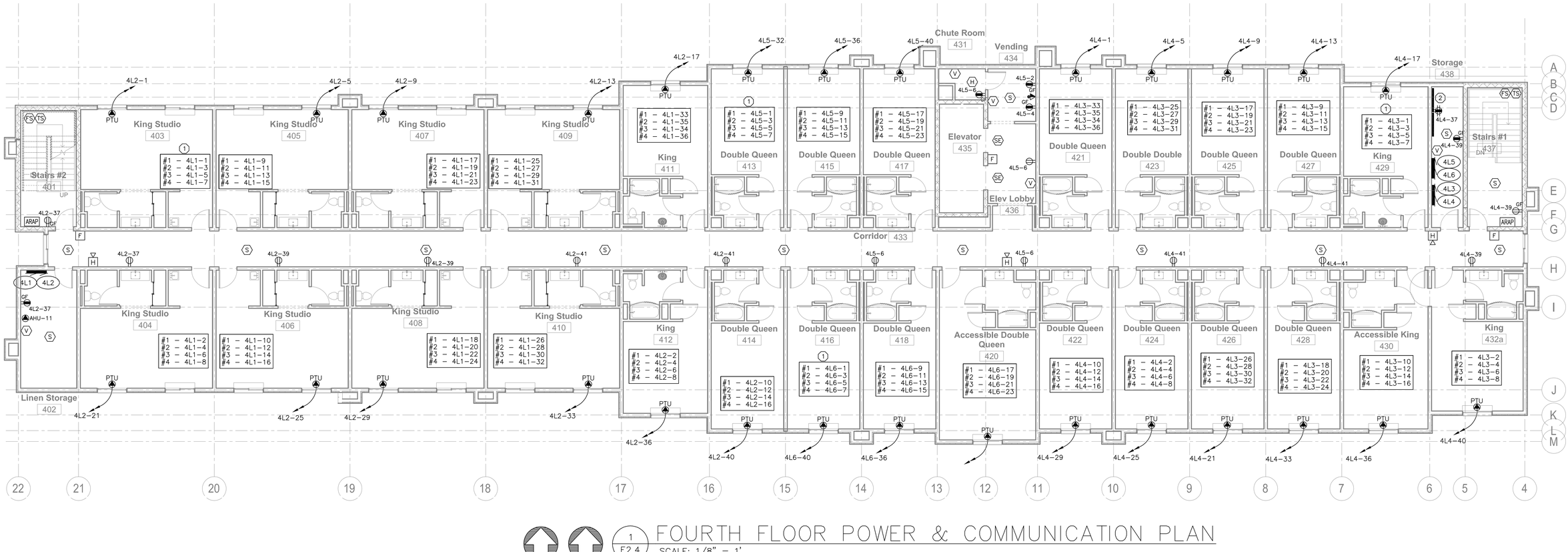

MAGNETIC NORTH PROJECT NORTH

1 / E2.4 FOURTH FLOOR POWER & COMMUNICATION PLAN

SCALE: 1/8" = 1'

PLAN KEY NOTES:

1. CIRCUITS SHOWN IN BLOCKS TO BE USED TO DEFINE CIRCUITS USED FOR EACH ROOM AS SHOWN IN TYPICAL ROOM LAYOUTS SHOWN ON E3.1 AND E3.2 (TYPICAL).
2. TWO (2) 4'X8'X3/4" PAINTED BACKBOARD FOR TELECOM AND CATV (SEE COMMUNICATION RISER DIAGRAM).

GENERAL NOTES:

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ELECTRICAL ENGINEERING
9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Fourth Floor Power & Communication Plan

Phase
Construction Documents

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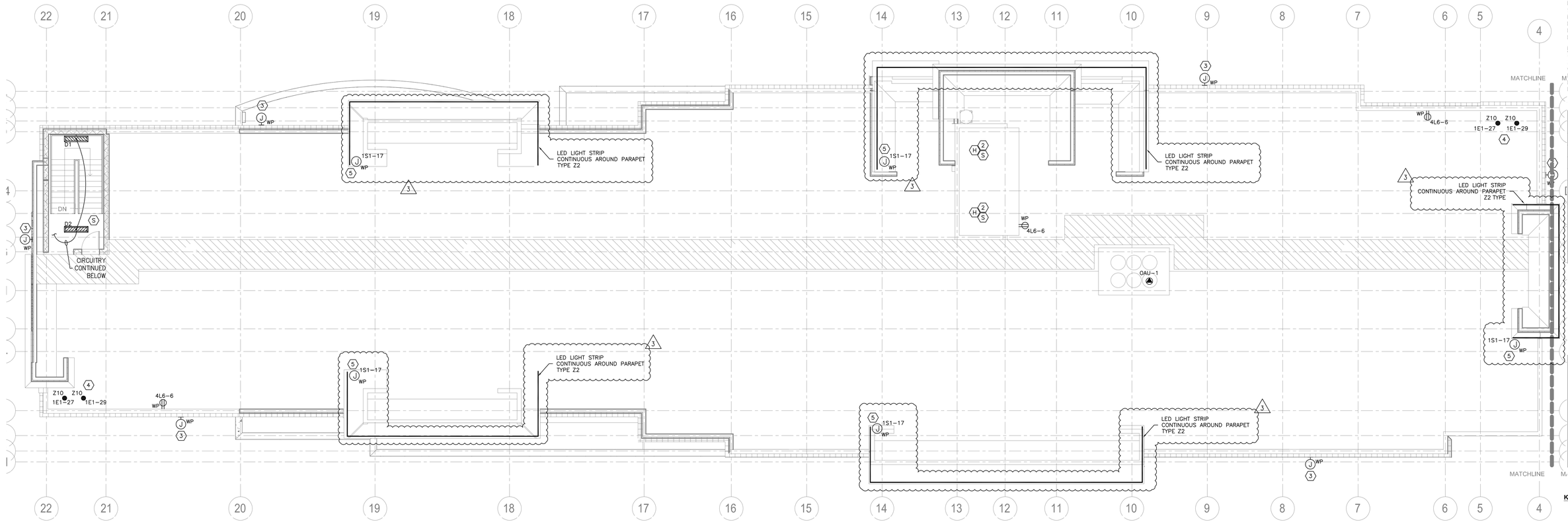

ROOF ELECTRICAL PLAN

1 / E2.5

SCALE: 1/8" = 1'

MAGNETIC NORTH

PROJECT NORTH

PLAN KEY NOTES:

1. ALL LIGHT FIXTURES IN ATTIC TO BE SWITCHED BY PILOT LIGHT TYPE SWITCH LOCATED AT THE ATTIC ACCESS LOCATION.
2. SMOKE AND HEAT DETECTORS SHALL BE INSTALLED AT THE TOP OF THE ELEVATOR SHAFT AND CONNECTED TO THE ELEVATOR/SPRINKLER PRE-ACTION SYSTEM AS SHOWN IN DETAIL SECTION.
3. WEATHER PROOF JUNCTION BOX FOR BUILDING SIGNAGE. COORDINATE WITH SIGN SUPPLIER FOR EXACT LOCATION AND REQUIREMENTS. RUN DESIGNATED CIRCUITS IN PANEL "1S1" FOR BUILDING SIGNS AS REQUIRED.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL NECESSARY EQUIPMENT AND LABOR TO COMPLY WITH ALL REQUIREMENTS OF FAA ADVISORY CIRCULAR 70/7460-1 K CHANGE 2 FOR OBSTRUCTION MARKING AND LIGHTING CHAPTERS 4, 5(RED), AND 12. CONTRACTOR SHALL ALSO SUPPLY FAA FORM 7460-2 PART II AS REQUIRED.
5. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL LED STRIP LIGHTS CONTINUOUSLY AROUND THE PERIMETER OF PARAPET. COORDINATE J-BOX CONNECTION LOCATIONS USING DESIGNATED CIRCUITS. ALL CIRCUITRY TO BE WEATHERPROOF USING #10 MINIMUM CONDUCTORS.

GENERAL NOTES:

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3. MOUNT GENERAL ELECTRICAL OUTLET WITHIN 10 FEET OF HVAC UNIT(S).

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PROFESSIONAL ENGINEER
IN
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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Attic Electrical Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
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Date	Sept. 16, 2013

Sheet No.
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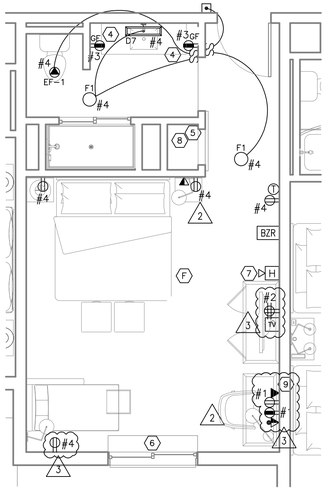
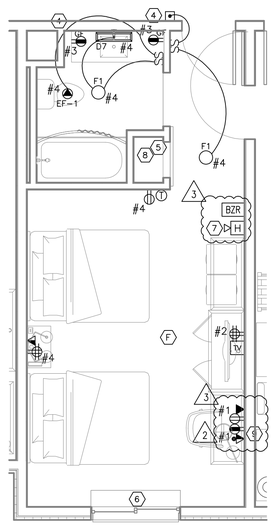
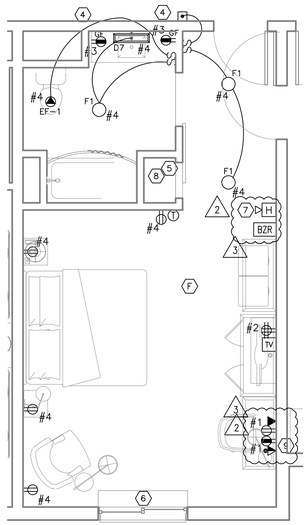


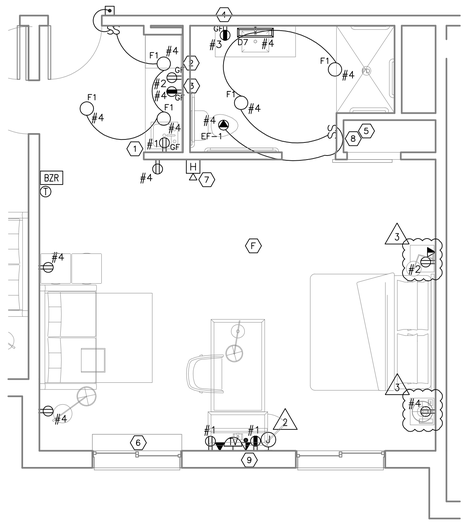
1 E3.1 KING
SCALE: 1/4" = 1'



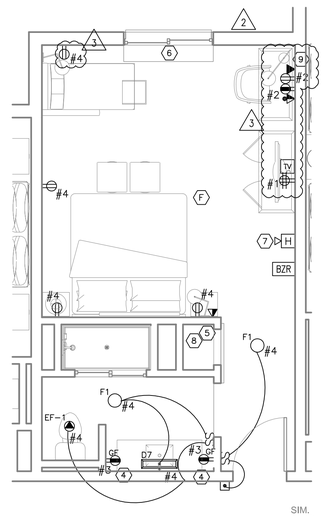
2 E3.1 QUEEN/QUEEN
SCALE: 1/4" = 1'



3 E3.1 ACC KING
SCALE: 1/4" = 1'



4 E3.1 ACC ROLL KING STUDIO
SCALE: 1/4" = 1'



5 E3.1 HEAR KING
SCALE: 1/4" = 1'
SIM. MIRR.

GENERAL GUEST ROOM ELECTRICAL NOTES:

1. OUTLETS ARE NOT BE BE LOCATED BACK TO BACK IN COMMON WALLS BETWEEN ROOMS. VERIFY ALL LOCATIONS BEFORE ROUGH IN.
2. ALL OUTLETS TO BE MOUNTED 15" AFF TO THE CENTER OF THE DEVICE UNLESS OTHERWISE NOTED.
3. LIGHT SWITCHES MUST BE MOUNTED NO MORE THAN 48" AFF.
4. COORDINATE WITH FF&E VENDOR FOR RESPONSIBLITY OF FIXTURE PROVISIONS FOR EACH FIXTURE TYPE. FIXTURE TO BE SUPPLIED BY CONTRACTOR MUST BE APPROVED BY THE FRANCHISE BEFORE PURCHASE.
5. THE LOCATION AND INSTALLATION OF ALL FIXTURES SHALL BE IN COMPLIANCE WITH THE FRANCHISE STANDARDS AND GUIDELINES.
6. COORDINATE THE EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES AND DEVICES WITH THE MILLWORK DETAILS AND THE FINAL INTERIOR DESIGN PLANS BEFORE ROUGH-IN. REFER TO ARCHITECTURAL PLANS FOR THIS INFORMATION AND ADDITIONAL REQUIREMENTS.
7. GENTEX #9210 SERIES CEILING MOUNTED PHOTOELECTRIC SMOKE DETECTOR WITH AUDIBLE ALARM AND BATTERY BACKUP TO BE INSTALLED IN EACH DWELLING UNIT. TYPICAL FOR ALL NON-HANDICAPPED ROOMS. THESE SMOKE DETECTORS SHALL BE CONNECT TO 120V SUPPLY. DWELLING ROOM DETECTORS TO ALARM LOCALLY IN GUESTROOM, AND NOT PUT SYSTEM IN GENERAL ALARM. AUXILLARY CONTACTS OF DETECTOR SHALL BE USED TO ANNUNCIATE PROXIMITY ALARM ON REMOTE ANNUNCIATOR LOCATED AT FRONT DESK.
8. IN ALL HANDICAPPED AND ACCESSIBLE ROOMS INSTALL A WALL MOUNTED PHOTOELECTRIC SMOKE DETECTOR 80" AFF WITH AN AUDIBLE ALARM, BATTERY BACKUP, AND AN ADA APPROVED STROBE. ALL OF THESE SMOKE DETECTORS SHALL BE CONNECTED TO 120V POWER SUPPLY. THESE ROOMS SHALL HAVE A MINIMUM OF TWO (2) OF THESE DEVICES; ONE IN THE BEDROOM, AND ONE STROBE ONLY IN THE BATHROOM.
9. MOUNT THE LIGHT SWITCH AND GFI RECEPTACLE IN GUEST ROOM TOILETS UNDER A SINGLE COVER PLATE (WHERE POSSIBLE).
10. WHERE TWO OUTLETS ARE SHOWN ON TOP OF ONE ANOTHER IN GUEST ROOMS, INSTALL ONE AT 15" AFF AND THE OTHER OUTLET AT 48" AFF. COORDINATE LOCATIONS AND REQUIREMENTS WITH EQUIPMENT TO BE SERVED.
11. ALL DOORS TO HAVE ELECTRONIC LOCKS. CONNECT POWER FOR THESE LOCKS TO CIRCUIT #4 (UNSWITCHED). VERIFY REQUIREMENTS WITH THE OWNER/ARCHITECT.
12. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO ALL MECHANICAL EQUIPMENT INCLUDING WINDOW/WALL AC UNITS, EXHAUST FANS IN BATHROOMS, ETC. EXHAUST FANS SHALL BE CONTROLLED BY A SEPARATE MOTOR RATED TOGGLE SWITCH LOCATED NEXT TO LIGHT SWITCH.
13. ROOM LAYOUTS ARE TYPICAL AND SHOW THE NUMBER OF HOME RUN CIRCUIT REQUIRED FOR EACH ROOM GENERALLY DESIGNATED AS #1 THROUGH #4. SEE FLOOR PLANS FOR THE DEFINITION OF THESE CIRCUITS FOR EACH ROOM.
14. ALL BREAKERS FEEDING CIRCUITS IN GUEST ROOMS OR DWELLING UNITS SHALL BE ARCH FAULT INTERRUPT TYPE. CONTRACTOR FOR SUPPLYING ALL ADDITIONAL EQUIPMENT, MATERIALS AND LABOR TO ACCOMPLISH THIS.
15. THE CONTRACTOR SHALL COORDINATE THESE DRAWINGS WITH THE FRANCHISE DESIGN GUIDELINES & STANDARDS, AND PROTOTYPICAL DOCUMENTS. FRANCHISE DOCUMENTS SHALL TAKE PRECEDENT OVER THE ENGINEERED DRAWINGS DEVICE REQUIREMENTS AND LOCATIONS.
16. THE FRANCHISE GUIDELINES, STANDARDS, SPECIFICATIONS, AND PROTOTYPICAL DOCUMENTS ARE AVAILABLE ONLINE AT THE FRANCHISE WEBSITE, OR FROM THE ARCHITECT FOR THE CONTRACTORS USE.
17. ALL LIGHT SWITCHES SHALL BE PILOT LIGHT TYPE.
18. PROVIDE TWO NON-SWITCHED ELECTRICAL SOCKETS ABOVE THE BEDSIDE SURFACE IN THE BASE OF LIGHT FIXTURES OR RECESSED IN THE WALL. SOCKETS ARE NOT ALLOWED IN WALL-HUNG FIXTURES.

PLAN KEY NOTES:

1. RECEPTACLE FOR BELOW COUNTER MINI REFRIGERATOR. VERIFY LOCATION, MOUNTING HEIGHT, AND REQUIREMENTS BEFORE ROUGH-IN.
2. RECEPTACLE FOR MICROWAVE OVEN. VERIFY LOCATION, MOUNTING HEIGHT, AND REQUIREMENTS BEFORE ROUGH-IN.
3. RECEPTACLE FOR COFFEE MAKER (AND CONVENIENCE OUTLET). VERIFY LOCATION AND MOUNTING HEIGHT BEFORE ROUGH-IN.
4. GFI TYPE RECEPTACLE FOR RESTROOM USE. VERIFY LOCATION AND MOUNTING HEIGHT BEFORE ROUGH-IN.
5. ACCESSIBLE BOX WITH REMOVABLE COVER. MOUNT HIGH IN CLOSET, ABOVE SHELF. PAINT COVER TO MATCH WALL FINISH. INSCRIBE PANEL WITH CIRCUIT DESIGNATIONS UTILIZED IN BOX ON INSIDE COVER. EXTEND GUEST ROOM CIRCUITRY AS INDICATED AND REFER TO FLOOR PLANS AND PANELS SCHEDULES FOR CIRCUIT DESIGNATIONS FOR EACH ROOM.
6. PROVIDE DISCONNECT SWITCH ON THE OUTSIDE FACE OF THE SUB-BASE OR THE AC UNIT. REFER TO FLOOR PLANS AND PANEL SCHEDULES FOR CIRCUIT DESIGNATIONS FOR EACH ROOM. COORDINATE ALL WORK WITH DIVISION 15 CONTRACTOR. ALL ELECTRICAL WORK TO BE CONCEALED FROM VIEW.
7. FIRE ALARM SYSTEM MINI-HORN AND DETECTOR. CONNECT DEVICES TO NOTIFICATION CIRCUITRY. SEE FIRE ALARM RISER FOR MORE DETAILS.
8. HOMERUN FOR GENERAL CIRCUITS #1, #2, #3, AND #4. ALL HOMERUNS TO USE #10 WIRE IN A 1" CONDUIT MINIMUM. CIRCUIT ASSIGNMENTS FOR #1, #2, #3 AND #4 GENERAL CIRCUITS ARE DEFINED ON THE POWER AND COMMUNICATIONS FLOOR PLANS. REFER TO SPECIFIC ROOM LOCATION OF THESE FLOOR PLANS FOR CIRCUIT DEFINITION FOR EACH ROOM.
9. OUTLETS MOUNTED ABOVE DESK TO BE INSTALLED HORIZONTALLY.

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REVISIONS		
No.	Date	Description
1	11-5-13	Review Comments
2	11-15-13	Franchise Comments
3	04-10-14	Hilton Update

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R. SHANE RITTER
License No. 28401
PROFESSIONAL ENGINEER
3-10-14
ELECTRICAL ENGINEERING

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Typical Guest Room Electrical Plans - Part 1

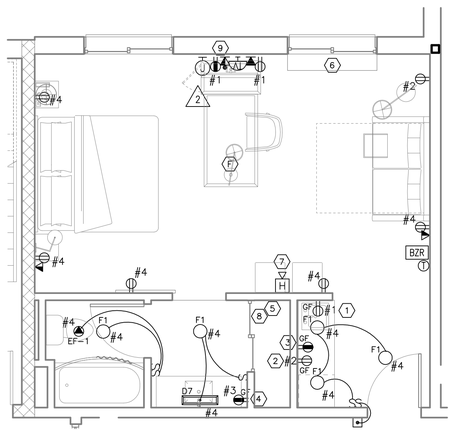
Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013

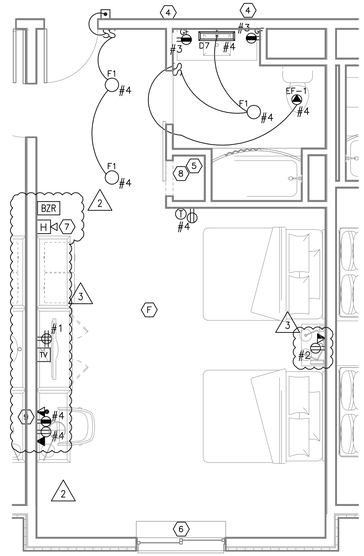
Sheet No. E3.1

Released for
PERMIT ONLY

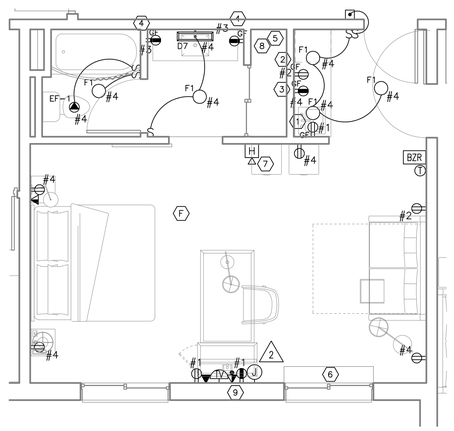
Hampton Inn and Suites



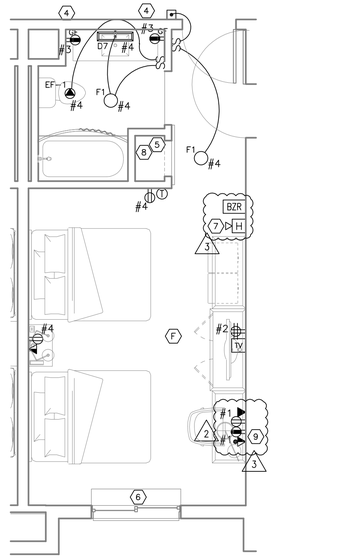
1 E3.2 KING STUDIO
SCALE: 1/4" = 1'



2 E3.2 ACC QUEEN/QUEEN
SCALE: 1/4" = 1'



3 E3.2 HEAR KING STUDIO
SCALE: 1/4" = 1'



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REVISIONS

No.	Date	Description
1	11-5-13	Review Comments
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STATE OF LOUISIANA
SHANE RITTER
License No. 28401
PROFESSIONAL ENGINEER
IN
ELECTRICAL ENGINEERING

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Typical Guest Room Electrical Plans - Part 2

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E3.2

Released for
PERMIT ONLY

Hampton Inn and Suites

POOL NOTES:

1. ALL ELECTRICAL WORK TO CONFORM TO 2008 NEC.
2. ALL CIRCUITS TO BE FED WITH GFCI BREAKERS. EXCEPTION FOR HVAC UNITS.
3. LOCATE RECEPTACLES AS CLOSE TO LOCATION AS SHOWN ON DWGS. CONTRACTOR MAY HAVE TO MOVE LOCATIONS AS NECESSARY FOR PROPER MOUNTING.
4. VERIFY ALL DISTANCES WITH MANUFACTURER DWG.
5. CONTRACTOR TO VERIFY ALL ELECTRICAL NEEDS FOR POOL AREA WITH ARCHITECT AND POOL SUPPLIER BEFORE ROUGH-IN.
6. COORDINATE LOCATION OF LIGHTS WITH MECHANICAL HVAC DUCT. IN NO WAY SHALL LIGHTS BE LOCATED OVER SWIMMING POOL.
7. MOUNT LIGHTS AS HIGH AS POSSIBLE, DO NOT MOUNT BELOW 8'-6" A.F.F.
8. CONTRACTOR TO FEED ALL ELECTRICAL CIRCUITS ASSOCIATED WITH POOL FROM NEW PANEL "1P1" AS SHOWN ON THIS DWG.
9. CONTRACTOR TO LOCATE KEYED LIGHT SWITCHES FOR POOL AREA LIGHTING INSIDE EQP. ROOM OR AS DIRECTED BY OWNER. SWITCHES NOT SHOWN ON DWGS.
10. LUMINAIRES UNDERWATER IN POOL SHALL MEET ALL REQUIREMENTS OF NEC ARTICLE 680.23.
11. INSTALL A COMMON BONDING GRID AROUND POOL AND TERMINATE AS PER NEC ARTICLE 680.26 (C).
12. AN EMERGENCY SHUT OFF SWITCH SHALL BE INSTALLED WITHIN SIGHT BUT NOT LESS THAN 5' OF THE POOL AND WHIRLPOOL AND BE READILY ACCESSIBLE.
13. INSTALL HOUSE PHONE AT POOL AREA AS SHOWN. MOUNT IN WEATHERPROOF COVER. WHEN OFF HOOK, PHONE SHOULD AUTOMATICALLY DIAL FRONT DESK AND EMERGENCY NUMBER IF REQUIRED. MOUNT NO HIGHER THAN 48" AFF.

1P1

BUS NUMBER: 191 AMPERE RATING: 400 VOLTAGE (L-L): 208 PHASE: 3
SERVED FROM: MSB MAIN TYPE: MAIN BREAKER VOLTAGE (L-N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 42
REMARKS: MAIN BREAKER TO BE SHUNT TRIP TYPE

	CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT S E S	BRANCH CIRCUIT PHASE/ NEUT. NO	BRANCH CIRCUIT PHASE/ NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE	BRANCH CIRCUIT S E S	BRANCH CIRCUIT PHASE/ NEUT. NO	BRANCH CIRCUIT PHASE/ NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
G	1	20	1	MISC POOL POWER	M	0.75	1	2	12	12	1/2						5.80	M				
G	3	20	1	MISC POOL POWER	M	0.75	1	2	12	12	1/2	1	3	4	8	1-1/4	5.80	M	POOL PUMP	90	3	4
G	5	20	1	MISC POOL POWER	M	0.75	1	2	12	12	1/2						5.80	M				
	9	20	3	PCU-1	D D D	1.66 1.66 1.66	1	3	12	12	1/2	1	3	6	10	1	5.00 5.00 5.00	H H H	POOL HEAT	60	3	10
	15	250	3	PAHU-1	D D D	16.66 16.66 16.66	1	3	4/0	4	2	1	3	6	10	1	3.86 3.86 3.86	M M M	HOT TUB	60	3	16
	19	20	1	LIGHTS	L	1.43	1	2	12	12	1/2	1	2	12	12	1/2	0.40	L	LIGHTS	20	1	20
	21	20	1	LIGHTS	L	1.20	1	2	12	12	1/2	1	2	12	12	1/2	0.54	R	RECEPTACLES	20	1	22
	23	20	1	LIGHTS	L	1.20	1	2	12	12	1/2	1	2	12	12	1/2	0.54	R	RECEPTACLES	20	1	24
	25		1	SPACE ONLY															SPACE ONLY		1	26
	27		1	SPACE ONLY															SPACE ONLY		1	28
	29		1	SPACE ONLY															SPACE ONLY		1	30
	31		1	SPACE ONLY															SPACE ONLY		1	32
	33		1	SPACE ONLY															SPACE ONLY		1	34
	35		1	SPACE ONLY															SPACE ONLY		1	36
	37		1	SPACE ONLY															SPACE ONLY		1	38
	39		1	SPACE ONLY															SPACE ONLY		1	40
	41		1	SPACE ONLY															SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X	NEC ART. 220 FEEDER SIZING FACTOR	=	NEC ART. 220 FEEDER SIZING LOAD (KVA)
A - HOSPITAL LIGHTING	0.00		0.00		0.00
B - HOTEL/MOTEL LIGHTING	0.00		0.00		0.00
C - SPACE COOLING*	0.00		0.00		0.00
D - OTHER HVAC LOADS	54.96		1.00		54.96
H - SPACE HEATING*	15.00		1.25		18.75
K - KITCHEN APPLIANCES	0.00		0.00		0.00
L - GENERAL LIGHTING	4.23		1.25		5.28
M - MISC. CONTINUOUS	31.23		1.25		39.03
N - MISC. NONCONTINUOUS	0.00		0.00		0.00
R - RECEPTACLES	1.08		1.00		1.08
W - WAREHOUSE LIGHTING	0.00		0.00		0.00
LARGEST MOTOR**	15.00		0.25		3.75
	106.50				122.86

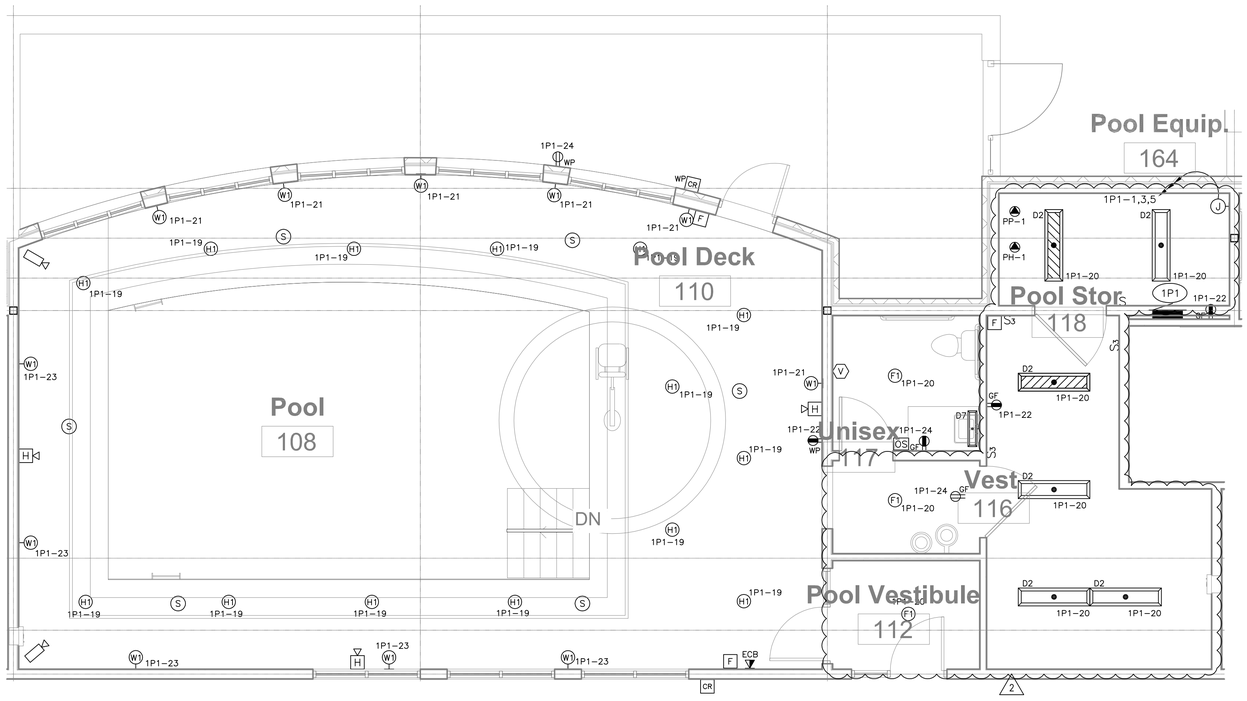
PHASE BALANCE (% OF TOTAL LOAD)
A: 100.2 % B: 100.0 % C: 100.0 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 341.0 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 342.0 A.
+ RESERVED FUTURE CAPACITY: + 40.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 382.0 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 400 A.
MIN. NEC ART. 220 FEEDER SIZE:

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F - BREAKER TO BE ARC FAULT TYPE
G - BREAKER TO BE GFI TYPE
O - BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S - BREAKER TO BE SHUNT TRIP TYPE



1 / E3.3 SWIMMING POOL ELECTRICAL PLAN
SCALE: 1/4" = 1'

SWIMMING POOL EQUIPMENT CONNECTION SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS	PHASE	LOAD INFO HP	KVA	AMPS	MCA	MOCP	EMERG. POWER REQD.	STARTER FURN. BY	STARTER INST. BY	STARTER NEMA SIZE	STARTER TYPE	STARTER DISCONNECT TYPE	STARTER TRIP OR FUSE SIZE	STARTER NEMA ENCL TYPE	DISCONNECT FURN. BY	DISCONNECT INST. BY	DISCONNECT TYPE	DISCONNECT SWITCH RATING	DISCONNECT POLE	DISCONNECT FUSE OR TRIP RATING	DISCONNECT NEMA ENCL TYPE	CIRCUIT ID	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	BRANCH CIRCUIT S E S	BRANCH CIRCUIT PHASE/ NEUT. NO	BRANCH CIRCUIT PHASE/ NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE	CONNECTION NOTES	CONNECTION DESIGNATION
HT-1	HOT TUB	208	3	10	11.60	32.2	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	5	1P1-16	60	3	1	3	6	10	1	1 4 9	HT-1
PAHU-1	PAHU-1	208	3	N/A	50.00	138.7	161	230	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1P1-15	250	3	1	3	4/0	4	2	1 4 10	PAHU-1
PCU-1	PCU-1	208	3	N/A	5.00	13.8	14	20	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	3R	1P1-9	20	3	1	3	12	12	1/2		PCU-1
PH-1	POOL HEAT	208	3	N/A	15.00	41.6	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	5	1P1-10	60	3	1	3	6	10	1	1 4 9	PH-1
PP-1	POOL PUMP	208	3	15	17.40	48.3	N/A	N/A	NO	EQ. MFR.	DIV. 16	3	SEE NOTES	N/A		5	DIV. 16	DIV. 16	NON-FUSED SWITCH	100	3	N/A	5	1P1-4	90	3	1	3	4	8	1-1/4	1 4 9	PP-1

1. VERIFY EQUIPMENT LOCATIONS AND REQUIREMENTS BEFORE ROUGH IN.
2. CONNECT THROUGH JUNCTION BOX MOUNTED ON OR ADJASCENT TO EQUIPMENT.
3. MAKE FINAL CONNECTION USING FLEXIBLE METALLIC CONDIUT.
4. MAKE FINAL CONNECTION USING LIQUID TIGHT FLEXIBLE CONDIUT.
5. CONNECT THROUGH SINGLE RECEPTACLE. PROVIDE CONFIGURATION AS REQUIRED.
6. UNIT MOUNTED ON SIDE WALL.
7. UNIT LOCATED IN OR ABOVE CEILING.
8. UNIT LOCATED ON ROOF.
9. BREAKER SUPPLYING THIS LOAD TO BE SHUNT TRIP TYPE.
10. INSTALL DUCT TYPE SMOKE DETECTOR (SEE DETAIL 2/E6.3)
11. SEE FLOOR PLANS FOR CIRCUIT ASSIGNMENT FOR EACH OCCURANCE.
12. SEE DETAIL 3/E6.3 FOR INFORMATION ON ELEVATOR CONNECTION.
13. ELECTRICAL ALTERNATE #1 - SEE DETAIL 5/E6.4 & RISER DIAGRAM (E4.1).
14. DISCONNECT (OR BREAKER) TO HAVE 2 NO & 2 NC AUX CONTACTS
15. INDOOR UNIT (DAHU) TO BE POWERED FROM THIS UNT.

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REVISIONS		
No.	Date	Description
1	11-5-13	Review Comments
2	11-15-13	Franchise Comments

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11/5/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Swimming Pool Electrical Plan

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E3.3

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PERMIT ONLY

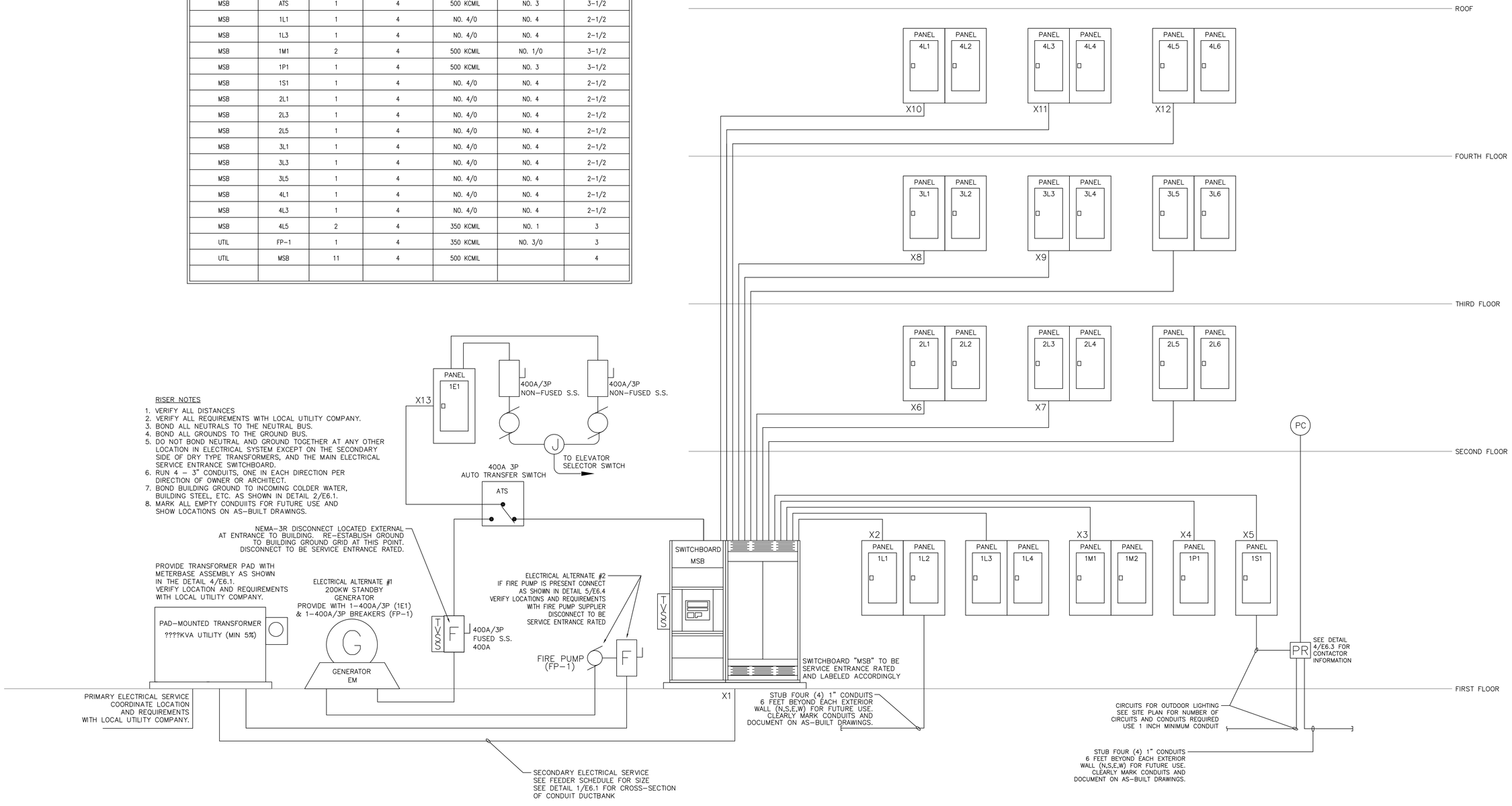
Hampton Inn and Suites

FEEDER SCHEDULE

FEEDER ORIGINATION LOCATION	LOAD SERVED	NUMBER OF PARALLEL SETS	NUMBER OF PHASE & NEUTRAL CONDUCTORS PER CONDUIT	PHASE & NEUTRAL CONDUCTOR SIZE	EQUIPMENT GROUND CONDUCTOR SIZE	MINIMUM CONDUIT SIZE
ATS	1E1	1	4	500 KCMIL	NO. 3	3-1/2
GEN	FP-1	1	3	350 KCMIL	NO. 3/0	3
GEN	ATS	1	4	500 KCMIL	NO. 3	3-1/2
MSB	ATS	1	4	500 KCMIL	NO. 3	3-1/2
MSB	1L1	1	4	NO. 4/0	NO. 4	2-1/2
MSB	1L3	1	4	NO. 4/0	NO. 4	2-1/2
MSB	1M1	2	4	500 KCMIL	NO. 1/0	3-1/2
MSB	1P1	1	4	500 KCMIL	NO. 3	3-1/2
MSB	1S1	1	4	NO. 4/0	NO. 4	2-1/2
MSB	2L1	1	4	NO. 4/0	NO. 4	2-1/2
MSB	2L3	1	4	NO. 4/0	NO. 4	2-1/2
MSB	2L5	1	4	NO. 4/0	NO. 4	2-1/2
MSB	3L1	1	4	NO. 4/0	NO. 4	2-1/2
MSB	3L3	1	4	NO. 4/0	NO. 4	2-1/2
MSB	3L5	1	4	NO. 4/0	NO. 4	2-1/2
MSB	4L1	1	4	NO. 4/0	NO. 4	2-1/2
MSB	4L3	1	4	NO. 4/0	NO. 4	2-1/2
MSB	4L5	2	4	350 KCMIL	NO. 1	3
UTIL	FP-1	1	4	350 KCMIL	NO. 3/0	3
UTIL	MSB	11	4	500 KCMIL		4

FAULT CURRENT DATA

POINT	Isca	Let-thru	REMARKS
X1	132,181	77,759	MIN. 100FT FEEDER
X2	77,759	54,403	MIN. 10FT FEEDER
X3	77,759	44,956	MIN. 50FT FEEDER
X4	77,759	35,876	MIN. 40FT FEEDER
X5	77,759	28,617	MIN. 40FT FEEDER
X6	77,759	11,092	MIN. 140FT FEEDER
X7	77,759	11,816	MIN. 130FT FEEDER
X8	77,759	10,452	MIN. 150FT FEEDER
X9	77,759	11,092	MIN. 140FT FEEDER
X10	77,759	9,882	MIN. 160FT FEEDER
X11	77,759	10,452	MIN. 150FT FEEDER
X12	77,759	22,443	MIN. 150FT FEEDER
X13	53,220	60,191	MIN. 10FT FEEDER



1 E4.1 ELECTRICAL POWER RISER DIAGRAM

SCALE: NO SCALE

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No.	Date	Description

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Power Riser Diagram

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E4.1

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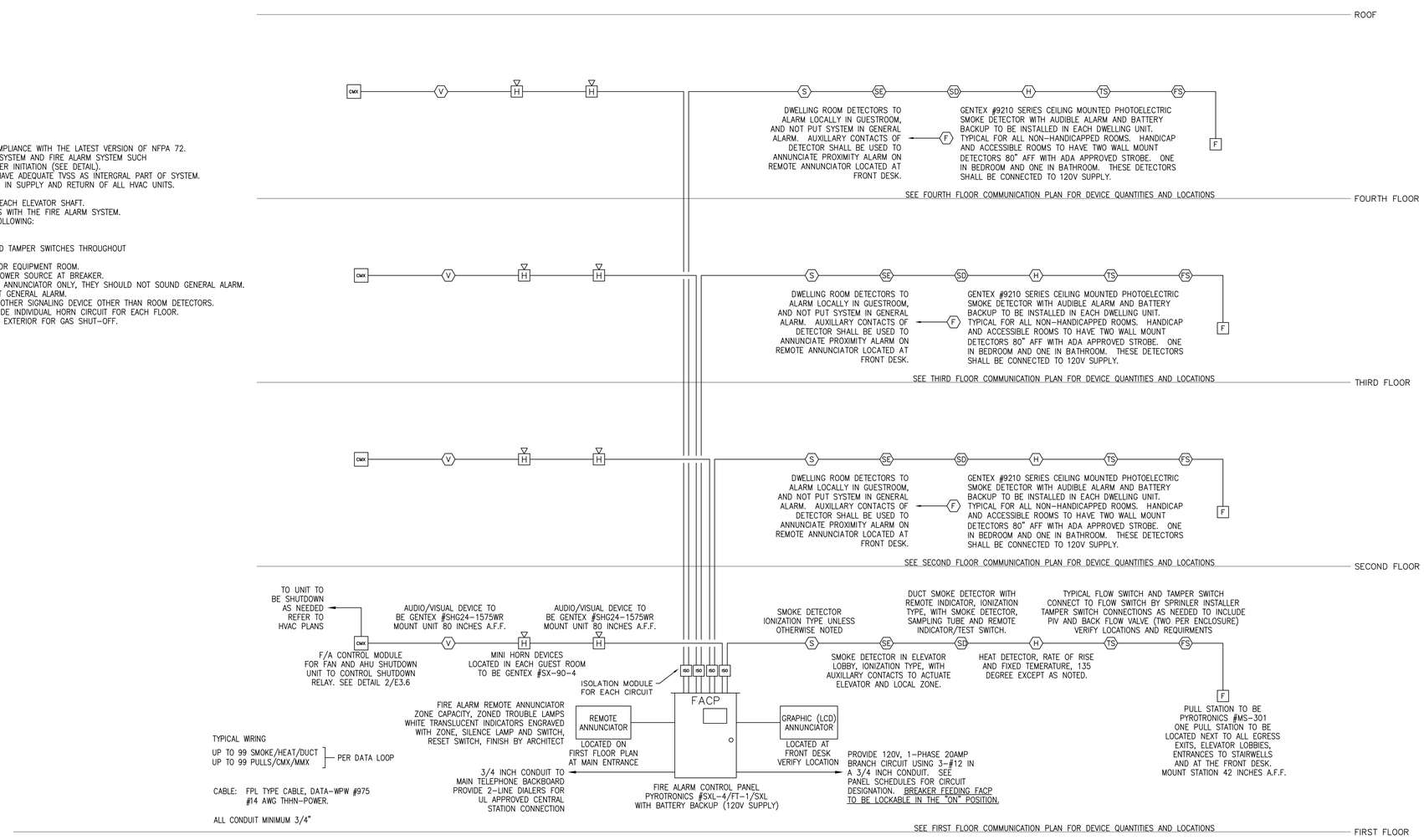
FIRE ALARM NOTES

1. FIRE ALARM SYSTEM TO BE INSTALLED AND IN COMPLIANCE WITH THE LATEST VERSION OF NFPA 72.
   COORDINATE ELEVATOR CONTROL WITH SPRINKLER SYSTEM AND FIRE ALARM SYSTEM SUCH
   THAT ELEVATOR IS SHUT DOWN PRIOR TO SPRINKLER INITIATION (SEE DETAIL).
2. FIRE ALARM CONTROL PANEL POWER SUPPLY TO HAVE ADEQUATE TVSS AS INTERGRAL PART OF SYSTEM.
3. FIRE ALARM SYSTEM TO INCLUDE DUCT DETECTORS IN SUPPLY AND RETURN OF ALL HVAC UNITS.
   PROVIDE A RELAY AT EACH UNIT FOR SHUTDOWN.
4. LOCATE ONE HEAT DETECTOR AT THE BOTTOM OF EACH ELEVATOR SHAFT.
5. IF FIRE PUMP PRESENT, COORDINATE CONNECTIONS WITH THE FIRE ALARM SYSTEM.
6. IF FIRE PUMP PRESENT, THEN ANNUNCIATE THE FOLLOWING:
   A. FIRE PUMP RUNNING
   B. FIRE PUMP POWER FAILURE
7. LOCATE AND CONNECT TO ALL FLOW SWITCHES AND TAMPER SWITCHES THROUGHOUT
   INTERIOR AND EXTERIOR OF BUILDING.
8. LOCATE SHUNT TRIP BREAKER OUTSIDE OF ELEVATOR EQUIPMENT ROOM.
   SHUNT TRIP CIRCUIT SHOULD BE DERIVED FROM POWER SOURCE AT BREAKER.
9. ROOM DETECTOR TO SIGNAL FRONT DESK GRAPHIC ANNUNCIATOR ONLY, THEY SHOULD NOT SOUND GENERAL ALARM.
   ROOM DETECTOR TO GIVE LOCAL ALARM ONLY, NOT GENERAL ALARM.
   SYSTEM GENERAL ALARM TO BE INITIATED BY ANY OTHER SIGNALING DEVICE OTHER THAN ROOM DETECTORS.
10. USE TWISTED PAIR CABLE FOR HORN UNITS. PROVIDE INDIVIDUAL HORN CIRCUIT FOR EACH FLOOR.
11. PROVIDE RELAY AND SOLENOID VALVE AT BUILDING EXTERIOR FOR GAS SHUT-OFF.



1 / E4.2 FIRE ALARM RISER DIAGRAM

SCALE: NO SCALE

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Fire Alarm Riser Diagram

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
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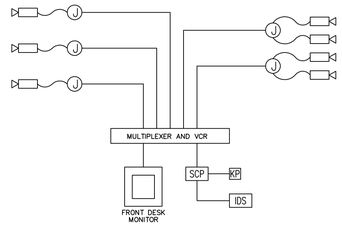
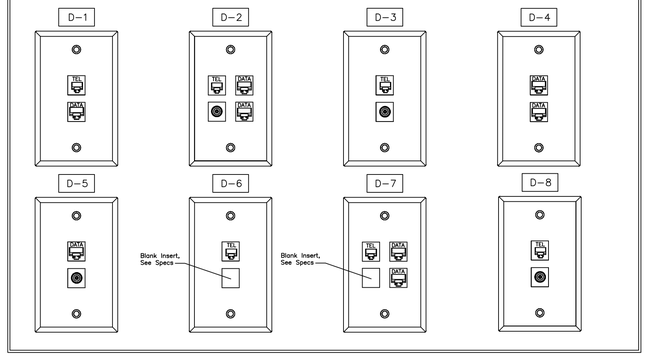


2 E4.2 SECURITY / CCTV RISER DIAGRAM

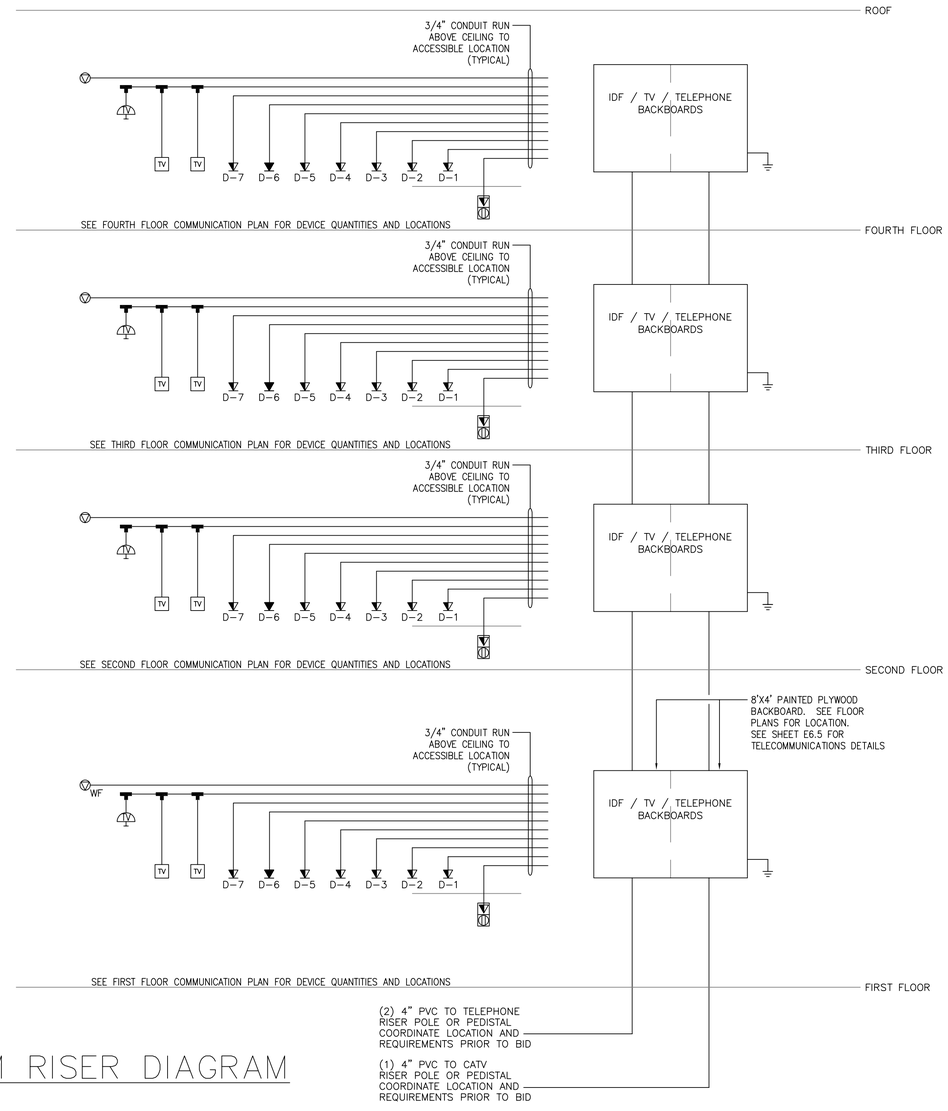
SCALE: NO SCALE

DATA TYPES



VOICE, DATA & VIDEO CABLE SCHEDULE

SYMBOL	DESCRIPTION
D-1	4 PAIR CAT 6 / 4 PAIR TELEPHONE CAT 3
D-2	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR CAT 6 / 4 PAIR TELEPHONE CAT 3
D-3	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR TELEPHONE CAT 3
D-4	4 PAIR CAT 6 / 4 PAIR CAT 6
D-5	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR CAT 6
D-6	4 PAIR TELEPHONE CAT 3
D-7	4 PAIR CAT 6 / 4 PAIR CAT 6 / 4 PAIR TELEPHONE CAT 3
D-8	RG-59 COAXIAL + 2-18 AWG
	4 PAIR CAT 6 / 4 PAIR TELEPHONE CAT 3
TV	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR CAT 6 (SPLITTERS AS REQUIRED)
TV	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR CAT 6 (SPLITTERS AS REQUIRED)
	4 PAIR CAT 6 / 4 PAIR CAT 6 (UNLESS OTHERWISE DESIGNATED)
	RG-6/U QUAD SHIELDED 75 Ω CABLE / 4 PAIR CAT 6
WF	4 PAIR CAT 6 / 4 PAIR CAT 6 (SEE DETAIL 5/E6.5)



1 E4.3 TELECOM RISER DIAGRAM

SCALE: NO SCALE

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title

Electrical Systems
Riser Diagram

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E4.3

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Hampton Inn and Suites

1L1

BUS NUMBER: 111 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: MSB MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – VENDING	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – VENDING	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – WASHER	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – WASHER	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	3	10	10	3/4	2.50	N	CLOTHES DRYER #4	30	2	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2						2.50	N				
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	3	10	10	3/4	2.50	N	CLOTHES DRYER #5	30	2	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2						2.50	N				
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.80	N	RECPT – TV	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – FITNESS	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – FITNESS	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.50	N	RECPT – FITNESS	20	1	24
25	20	1	RECPT – MEETING ROOM	R	0.54	1	2	12	12	1/2	1	2	12	12	1/2	0.30	N	RECPT – FITNESS	20	1	26
27	20	1	RECPT – MEETING ROOM	R	0.54	1	2	12	12	1/2	1	2	12	12	1/2	0.30	N	RECPT – FITNESS	20	1	28
29	20	1	RECPT – MEETING ROOM	R	0.54	1	2	12	12	1/2	1	2	12	12	1/2	0.30	N	RECPT – FITNESS	20	1	30
31	20	1	LIGHTS	L	1.20	1	2	12	12	1/2	1	2	12	12	1/2	1.64	L	LIGHTS	20	1	32
33	20	1	LIGHTS	L	1.24	1	2	12	12	1/2	1	2	12	12	1/2	1.61	L	LIGHTS	20	1	34
35	20	1	LIGHTS	L	1.28	1	2	12	12	1/2	1	2	12	12	1/2	1.58	L	LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	9.00	0.50	4.50
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	14.00	1.00	14.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	11.14	1.25	13.92
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	19.28	1.00	19.28
R – RECEPTACLES	12.78	0.89	11.39
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	66.20		63.22

PHASE BALANCE (% OF TOTAL LOAD) A: 93.3 % B: 110.8 % C: 96.1 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 175.4 A.
X LARGEST UNBALANCED PHASE %: x 1.10
TOTAL: 194.6 A.
\+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 203.6 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 225 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE
G – BREAKER TO BE GFI TYPE
O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S – BREAKER TO BE SHUNT TRIP TYPE

1L2

BUS NUMBER: 121 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 1L1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.54	R	RECEPTACLES	20	1	2
				D	1.75						1	2	12	12	1/2	0.54	R	RECEPTACLES	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	6
				D	1.75						1	2	12	12	1/2	0.50	N	RECPT – EDF	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	10
				D	1.75						1	2	12	12	1/2	0.90	R	RECEPTACLES	20	1	12
13	25	2	MAINT ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.36	N	RECPT – BREAKROOM	20	1	14
				D	1.75						1	2	12	12	1/2	0.36	N	RECPT – BREAKROOM	20	1	16
17		1	SPACE ONLY								1	2	12	12	1/2	0.36	N	RECPT – BREAKROOM	20	1	18
19		1	SPACE ONLY								1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	20
21	20	1	RECPT – COMP/PBX	N	0.72	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	22
23	20	1	RECPT – COMP/PBX	N	0.72	1	2	12	12	1/2	1	2	12	12	1/2	1.08	R	RECEPTACLES	20	1	24
25	20	1	RECPT – BUS CENTER	N	0.35	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECPT – FRONT DESK	20	1	26
27	20	1	RECPT – BUS CENTER	N	0.36	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECPT – FRONT DESK	20	1	28
29	20	1	RECPT – BUS CENTER	N	0.35	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECPT – FRONT DESK	20	1	30
31	20	1	RECPT – WORK AREA	R	0.54	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	32
33	20	1	RECPT – WORK AREA	R	0.36	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	34
35	20	1	RECPT – WORK AREA	R	0.36	1	2	12	12	1/2	1	2	12	12	1/2	0.90	R	RECEPTACLES	20	1	36
37	20	1	LIGHTS	L	1.01	1	2	12	12	1/2								SPACE ONLY		1	38
39	20	1	LIGHTS	L	1.14	1	2	12	12	1/2								SPACE ONLY		1	40
41	20	1	LIGHTS	L	0.44	1	2	12	12	1/2								SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	14.00	1.00	14.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	2.59	1.25	3.23
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	4.08	1.00	4.08
R – RECEPTACLES	11.70	0.92	10.85
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	32.37		32.29

PHASE BALANCE (% OF TOTAL LOAD) A: 99.3 % B: 107.7 % C: 93.2 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 89.6 A.
X LARGEST UNBALANCED PHASE %: x 1.07
TOTAL: 96.5 A.
\+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 119.0 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 125 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE
G BREAKER TO BE GFI TYPE
O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S BREAKER TO BE SHUNT TRIP TYPE

1L3

BUS NUMBER: 131 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: MSB MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
				N	1.33											2.66	N				
3	20	3	CLOTHES WASHER #1	N	1.33	1	3	12	12	1/2	1	4	10	10	3/4	2.66	N	CLOTHES DRYER #1	30	3	4
				N	1.33											2.66	N				
				N	1.33											2.66	N				
9	20	3	CLOTHES WASHER #2	N	1.33	1	3	12	12	1/2	1	4	10	10	3/4	2.66	N	CLOTHES DRYER #2	30	3	10
				N	1.33											2.66	N				
				N	1.33											2.66	N				
15	20	3	CLOTHES WASHER #3	N	1.33	1	3	12	12	1/2	1	4	10	10	3/4	2.66	N	CLOTHES DRYER #3	30	3	16
				N	1.33											2.66	N				
19	30	2	ICE MAKER #1	K	1.50	1	2	10	10	1/2						5.03	K				
				K	1.50						1	3	6	10	1	5.03	K	COFFEE BREWER #1	60	3	22
23	20	2	CONVECTION OVER #1	K	1.45	1	2	12	12	1/2						5.03	K				
				K	1.45						1	2	12	12	1/2	0.40	N	RECPT – SUITE SHOP	20	1	26
27	20	1	RECPT – FOOD PREP	K	0.50	1	2	12	12	1/2	1	2	12	12	1/2	0.40	N	RECPT – SUITE SHOP	20	1	28
29	20	1	RECPT – FOOD PREP	K	0.50	1	2	12	12	1/2	1	2	12	12	1/2	0.40	N	RECPT – SUITE SHOP	20	1	30
31	20	1	RECPT – FOOD PREP	R	0.36	1	2	12	12	1/2								SPACE ONLY		1	32
33	20	1	RECPT – FOOD PREP	R	0.36	1	2	12	12	1/2								SPACE ONLY		1	34
35	20	1	RECPT – PANTRY	K	0.40	1	2	12	12	1/2								SPACE ONLY		1	36
37	20	1	RECPT – PANTRY	K	0.40	1	2	12	12	1/2								SPACE ONLY		1	38
39	20	1	RECPT – PANTRY	K	0.40	1	2	12	12	1/2								SPACE ONLY		1	40
41	20	1	RECPT – PANTRY	K	0.40	1	2	12	12	1/2								SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	0.00	0.00	0.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	23.59	0.65	15.33
L – GENERAL LIGHTING	8.53	1.25	10.66
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	37.51	1.00	37.51
R – RECEPTACLES	5.22	1.00	5.22
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	4.00	0.25	1.00
	74.85		69.72

PHASE BALANCE (% OF TOTAL LOAD) A: 103.2 % B: 98.5 % C: 98.5 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 193.5 A.
X LARGEST UNBALANCED PHASE %: x 1.03
TOTAL: 199.8 A.
\+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 222.3 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 225 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

A BREAKER TO BE ARC FAULT TYPE
G BREAKER TO BE GFI TYPE
O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S BREAKER TO BE SHUNT TRIP TYPE

1L4

BUS NUMBER: 141 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 1L3 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	RECEPTACLES	R	0.72	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	2
3	20	1	RECEPTACLES	R	0.72	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	4
5	20	1	RECPT – ELEVATOR RM	R	0.54	1	2	12	12	1/2	1	2	12	12	1/2	0.90	R	RECEPTACLES	20	1	6
7	20	1	LIGHTS	L	1.55	1	2	12	12	1/2	1	2	12	12	1/2	0.40	N	RECPT – TV	20	1	8
9	20	1	LIGHTS	L	1.72	1	2	12	12	1/2	1	2	12	12	1/2	0.36	R	RECEPTACLES.	20	1	10
11	20	1	LIGHTS	L	1.28	1	2	12	12	1/2	1	2	12	12	1/2	0.59	L	LIGHTS – ELEV PIT/RM	20	1	12
13	20	1	LIGHTS	L	0.98	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	LIGHTS	L	1.12	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	LIGHTS	L	1.29	1	2	12	12	1/2								SPACE ONLY		1	18
19		1	SPACE ONLY															SPACE ONLY		1	20
21		1	SPACE ONLY															SPACE ONLY		1	22
23		1	SPACE ONLY															SPACE ONLY		1	24
25		1	SPACE ONLY															SPACE ONLY		1	26
27		1	SPACE ONLY															SPACE ONLY		1	28
29		1	SPACE ONLY															SPACE ONLY		1	30
31		1	SPACE ONLY															SPACE ONLY		1	32
33		1	SPACE ONLY															SPACE ONLY		1	34
35		1	SPACE ONLY															SPACE ONLY		1	36
37		1	SPACE ONLY															SPACE ONLY		1	38
39		1	SPACE ONLY															SPACE ONLY		1	40
41		1	SPACE ONLY															SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	0.00	0.00	0.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	8.53	1.25	10.66
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.40	0.99	0.40
R – RECEPTACLES	4.68	1.00	4.68
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	1.00	0.25	0.25
	13.61		15.99

PHASE BALANCE (% OF TOTAL LOAD) A: 96.4 % B: 102.4 % C: 101.5 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 44.3 A.
X LARGEST UNBALANCED PHASE %: x 1.02
TOTAL: 45.4 A.
\+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 67.9 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 70 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

1M1

BUS NUMBER: 171 AMPERE RATING: 800 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: MSB MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
				D	2.50											2.50	D				
3	35	3	HEAT PUMP #1A	D	2.50	1	3	8	10	3/4	1	3	8	10	3/4	2.50	D	HEAT PUMP #1B	35	3	4
				D	2.50											2.50	D				
				D	2.50											2.50	D				
9	35	3	HEAT PUMP #2A	D	2.50	1	3	8	10	3/4	1	3	8	10	3/4	2.50	D	HEAT PUMP #2B	35	3	10
				D	2.50											2.50	D				
				D	5.33											1.26	D				
15	40	3	HEAT PUMP #3	D	5.33	1	3	8	10	3/4	1	3	12	12	1/2	1.26	D	HEAT PUMP #4	20	3	16
				D	5.33											1.26	D				
				D	2.66											2.66	D				
21	40	3	HEAT PUMP #5	D	2.66	1	3	8	10	3/4	1	3	8	10	3/4	2.66	D	HEAT PUMP #6	40	3	22
				D	2.66											2.66	D				
				D	2.66											2.66	D				
27	40	3	HEAT PUMP #7	D	2.66	1	3	8	10	3/4	1	3	8	10	3/4	2.66	D	HEAT PUMP #8	40	3	28
				D	2.66											2.66	D				
				D	2.66											2.66	D				
33	40	3	HEAT PUMP #9	D	2.66	1	3	8	10	3/4	1	3	8	10	3/4	2.66	D	HEAT PUMP #10	40	3	34
				D	2.66											2.66	D				
				D	2.66													SPACE ONLY		1	38
39	40	3	HEAT PUMP #11	D	2.66	1	3	8	10	3/4								SPACE ONLY		1	40
				D	2.66													SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	222.76	1.00	222.76
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.00	0.00	0.00
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	4.32	1.00	4.32
R – RECEPTACLES	0.00	0.00	0.00
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	5.00	0.25	1.25
	227.08		228.33

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1 % B: 100.1 % C: 100.1 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 633.7 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 634.5 A.
\+ RESERVED FUTURE CAPACITY: + 80.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 714.5 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 800 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

1M2

BUS NUMBER: 172 AMPERE RATING: 800 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 1M1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 65
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
				D	3.66											5.33	D				
3	35	3	AIR HANDLER #1	D	3.66	1	3	8	10	3/4	1	3	8	10	3/4	5.33	D	AIR HANDLER #2	50	3	4
				D	3.66											5.33	D				
				D	5.00											4.00	D				
9	50	3	AIR HANDLER #3	D	5.00	1	3	8	10	3/4	1	3	8	10	3/4	4.00	D	AIR HANDLER #4	40	3	10
				D	5.00											4.00	D				
				D	5.00											5.00	D				
15	50	3	AIR HANDLER #5	D	5.00	1	3	8	10	3/4	1	3	8	10	3/4	5.00	D	AIR HANDLER #6	50	3	16
				D	5.00											5.00	D				
				D	5.00											3.33	D				
21	50	3	AIR HANDLER #7	D	5.00	1	3	8	10	3/4	1	3	8	10	3/4	3.33	D	AIR HANDLER #8	35	3	22
				D	5.00											3.33	D				
25	20	2	DHP–2	D	1.25	1	2	12	12	1/2								SPACE ONLY		1	26
				D	1.25													SPACE ONLY		1	28
29	30	2	DHP–1	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	20	1	RECIRC PUMP #1	D	0.52	1												SPACE ONLY		1	34
35	25	1	RECIRC PUMP #2	D	1.65	1												SPACE ONLY		1	36
37	20	1	MISC MECH POWER	N	1.00	1	2	12	12	1/2						0.44	N				
39	20	1	MISC MECH POWER	N	1.00	1	2	12	12	1/2	1	3	12	12	1/2	0.44	N	BOOSTER PUMP #1	20	3	40
41	20	1	MISC MECH POWER	N	1.00	1	2	12	12	1/2						0.44	N				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	117.13	1.00	117.13
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.00	0.00	0.00
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	4.32	1.00	4.32
R – RECEPTACLES	0.00	0.00	0.00
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	5.00	0.25	1.25
	121.45		122.70

PHASE BALANCE (% OF TOTAL LOAD) A: 100.8 % B: 97.7 % C: 101.7 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 340.5 A.
X LARGEST UNBALANCED PHASE %: x 1.01
TOTAL: 346.7 A.
\+ RESERVED FUTURE CAPACITY: + 80.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 426.7 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 450 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

1L1	1L2	1L3
1L4	1M1	1M1

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REVISIONS		
No.	Date	Description

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STATE OF LOUISIANA
R. SHANE RITTER
License No. 28401
PROFESSIONAL ENGINEER
IN
ELECTRICAL ENGINEERING
9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
First Floor Electrical Panel Schedules

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013
Sheet No. E5.1

Released for
PERMIT ONLY

Hampton Inn and Suites

2L1

BUS NUMBER: 211 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	33.00	0.46	15.20
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	51.75	1.00	51.75
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	87.41		70.08

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 194.5 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 194.7 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 203.7 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 225 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

2L2

BUS NUMBER: 221 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2L1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	18
				D	1.75						1	2	12	12	1/2	1.19	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.21	L	LIGHTS	20	1	22
				D	1.75											5.00	D				
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	3	8	10	3/4	5.00	D	AIR HANDLER #9	50	3	26
				D	1.75											5.00	D				
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	34
				D	1.75						1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2	1	2	12	12	1/2	0.18	R	RECEPTACLES	20	1	38
39	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	51.75	1.00	51.75
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	60.41		57.88

PHASE BALANCE (% OF TOTAL LOAD) A: 96.8 % B: 99.7 % C: 103.7 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 160.6 A.
X LARGEST UNBALANCED PHASE %: x 1.03
TOTAL: 166.6 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 189.1 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 200 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

2L3

BUS NUMBER: 231 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	24.00	0.48	11.60
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	28.00	1.00	28.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.27	1.25	1.58
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	54.35		42.39

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 117.6 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 117.8 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 126.8 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 150 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

2L4

BUS NUMBER: 241 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2L3 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	18
				D	1.75						1	2	12	12	1/2	1.06	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.21	L	LIGHTS	20	1	22
				D	1.75													SPACE ONLY		1	24
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	26
				D	1.75													SPACE ONLY		1	28
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33		1	SPACE ONLY															SPACE ONLY		1	34
35		1	SPACE ONLY															SPACE ONLY		1	36
37	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2								SPACE ONLY		1	38
39	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2								SPACE ONLY		1	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2								SPACE ONLY		1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	28.00	1.00	28.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.27	1.25	1.58
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	36.35		33.79

PHASE BALANCE (% OF TOTAL LOAD) A: 117.0 % B: 95.6 % C: 87.6 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 93.7 A.
X LARGEST UNBALANCED PHASE %: x 1.17
TOTAL: 109.8 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 132.3 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 150 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

2L5

BUS NUMBER: 251 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	24
25		1	SPACE ONLY															SPACE ONLY		1	26
27		1	SPACE ONLY															SPACE ONLY		1	28
29		1	SPACE ONLY															SPACE ONLY		1	30
31		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33		1	SPACE ONLY													1.75	D				
35		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37		1	SPACE ONLY													1.75	D				
39		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	18.00	0.50	9.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	21.00	1.00	21.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.81	1.24	1.01
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	1.50	1.00	1.50
R – RECEPTACLES	0.72	0.99	0.72
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	42.03		33.35

PHASE BALANCE (% OF TOTAL LOAD) A: 100.2 % B: 100.2 % C: 99.8 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 92.5 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 92.8 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 101.8 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 110 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

2L6

BUS NUMBER: 261 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 2L5 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.64	L	LIGHTS	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.17	L	LIGHTS	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	24
25		1	SPACE ONLY															SPACE ONLY		1	26
27		1	SPACE ONLY															SPACE ONLY		1	28
29		1	SPACE ONLY															SPACE ONLY		1	30
31		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33		1	SPACE ONLY													1.75	D				
35		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37		1	SPACE ONLY													1.75	D				
39		1	SPACE ONLY								1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	9.00	0.50	4.50
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	10.50	1.00	10.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.81	1.24	1.01
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	0.00	0.00	0.00
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	20.31		16.13

PHASE BALANCE (% OF TOTAL LOAD) A: 105.5 % B: 98.6 % C: 96.1 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 44.7 A.
X LARGEST UNBALANCED PHASE %: x 1.05
TOTAL: 47.2 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 56.2 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 60 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

2L1	2L2	2L3
2L4	2L5	2L6

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REVISIONS

No.	Date	Description

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Second Floor Electrical Panel Schedules

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013

Sheet No. E5.2

Released for
PERMIT ONLY

Hampton Inn and Suites

3L1

BUS NUMBER: 311 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	33.00	0.46	15.20
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	53.50	1.00	53.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	89.48		72.15

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 200.2 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 200.5 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 209.5 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 225 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

3L2

BUS NUMBER: 321 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3L1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.50	N	JACUZZI – GFI TYPE	20	1	18
				D	1.75						1	2	12	12	1/2	1.19	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.21	L	LIGHTS	20	1	22
				D	1.75											5.00	D				
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	3	8	10	3/4	5.00	D	AIR HANDLER #10	50	3	26
				D	1.75											5.00	D				
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	34
				D	1.75						1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				
39	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	53.50	1.00	53.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	62.48		59.95

PHASE BALANCE (% OF TOTAL LOAD) A: 101.1% B: 96.4% C: 102.6%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 166.4 A.
X LARGEST UNBALANCED PHASE %: x 1.02
TOTAL: 170.8 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 193.3 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 200 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

3L3

BUS NUMBER: 331 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	33.00	0.46	15.20
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	38.50	1.00	38.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.21	1.24	1.51
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	74.29		56.91

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 157.9 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 158.1 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 167.1 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

3L4

BUS NUMBER: 341 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3L3 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.50	N	JACUZZI – GFI TYPE	20	1	18
				D	1.75						1	2	12	12	1/2	1.06	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.15	L	LIGHTS	20	1	22
				D	1.75													SPACE ONLY		1	24
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	26
				D	1.75													SPACE ONLY		1	28
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	34
				D	1.75						1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				
39	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	38.50	1.00	38.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.21	1.24	1.51
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.08	1.00	1.08
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	47.29		44.71

PHASE BALANCE (% OF TOTAL LOAD) A: 101.1% B: 95.3% C: 103.9%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 124.1 A.
X LARGEST UNBALANCED PHASE %: x 1.03
TOTAL: 128.9 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 151.4 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

3L5

BUS NUMBER: 351 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3DP1 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
39	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	30.00	0.46	14.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	35.00	1.00	35.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.86	1.24	1.07
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	1.50	1.00	1.50
R – RECEPTACLES	0.72	0.99	0.72
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	68.08		52.42

PHASE BALANCE (% OF TOTAL LOAD) A: 97.3% B: 97.3% C: 105.7%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 145.5 A.
X LARGEST UNBALANCED PHASE %: x 1.05
TOTAL: 153.8 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 162.8 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

3L6

BUS NUMBER: 361 AMPERE RATING: 225 VOLTAGE (L–L): 208 PHASE: 3
SERVED FROM: 3L5 MAIN TYPE: MAIN LUGS ONLY VOLTAGE (L–N): 120 WIRE: 4
MOUNTING: SURFACE LUG OPTIONS: SUB–FEED MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR		LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT					BRANCH CIRCUIT					LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR		CKT NO.
	TRIP	P				SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE				TRIP	P	
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.69	L	LIGHTS	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.17	L	LIGHTS	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
39	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	15.00	0.50	7.50
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	17.50	1.00	17.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.86	1.24	1.07
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	0.00	0.00	0.00
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	33.36		26.20

PHASE BALANCE (% OF TOTAL LOAD) A: 100.7% B: 96.0% C: 103.5%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 72.7 A.
X LARGEST UNBALANCED PHASE %: x 1.03
TOTAL: 75.3 A.
+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 84.3 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 90 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

3L1	3L2	3L3
3L4	3L5	3L6

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REVISIONS

No.	Date	Description

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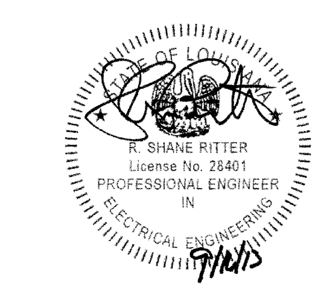

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Third Floor Electrical Panel Schedules

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013
Sheet No. E5.3

Released for
PERMIT ONLY

Hampton Inn and Suites

4L1

BUS NUMBER: 411 | AMPERE RATING: 225 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4DP1 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: SUB–FEED | MIN. KAIC: 10
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	33.00	0.46	15.20
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	53.50	1.00	53.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	89.66		72.33

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 200.7 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 201.0 A.
\+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 210.0 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 225 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

4L2

BUS NUMBER: 421 | AMPERE RATING: 225 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4L1 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: | MIN. KAIC: 10
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.50	N	JACUZZI – GFI TYPE	20	1	18
				D	1.75						1	2	12	12	1/2	1.19	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.21	L	LIGHTS	20	1	22
				D	1.75											5.00	D				
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	3	8	10	3/4	5.00	D	AIR HANDLER #11	50	3	26
				D	1.75											5.00	D				
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	34
				D	1.75						1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	RECEPTACLES	R	0.54	1	2	12	12	1/2						1.75	D				
39	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	53.50	1.00	53.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.40	1.25	1.75
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	62.66		60.13

PHASE BALANCE (% OF TOTAL LOAD) A: 101.7 % B: 96.2 % C: 102.3 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 166.9 A.
X LARGEST UNBALANCED PHASE %: x 1.02
TOTAL: 170.9 A.
\+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 193.4 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 200 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

4L3

BUS NUMBER: 431 | AMPERE RATING: 225 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4DP1 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: SUB–FEED | MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	26
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	30
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	34
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	36
37	20	1	SPARE															SPARE	20	1	38
39	20	1	SPARE															SPARE	20	1	40
41	20	1	SPARE															SPARE	20	1	42

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	33.00	0.46	15.20
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	38.50	1.00	38.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.27	1.25	1.58
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	74.53		57.17

PHASE BALANCE (% OF TOTAL LOAD) A: 100.1% B: 100.1% C: 100.1%

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 158.6 A.
X LARGEST UNBALANCED PHASE %: x 1.00
TOTAL: 158.8 A.
\+ RESERVED FUTURE CAPACITY: + 9.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 167.8 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

4L4

BUS NUMBER: 441 | AMPERE RATING: 225 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4L3 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: | MIN. KAIC: 14
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	2
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	4
5	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	6
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	8
9	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 1	20	1	10
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT APPLNCE 2	20	1	12
13	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.75	B	ROOM RECPT R/R	20	1	14
				D	1.75						1	2	12	12	1/2	0.75	B	ROOM RECPT / LIGHTS	20	1	16
17	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.50	N	JACUZZI – GFI TYPE	20	1	18
				D	1.75						1	2	12	12	1/2	1.06	L	LIGHTS	20	1	20
21	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2	1	2	12	12	1/2	0.21	L	LIGHTS	20	1	22
				D	1.75													SPACE ONLY		1	24
25	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	26
				D	1.75													SPACE ONLY		1	28
29	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	30
				D	1.75													SPACE ONLY		1	32
33	25	2	GUEST ROOM PTU	D	1.75	1	2	10	10	1/2								SPACE ONLY		1	34
				D	1.75						1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				
39	20	1	RECEPTACLES	R	0.54	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41	20	1	RECEPTACLES	R	0.36	1	2	12	12	1/2						1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	6.00	0.50	3.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	38.50	1.00	38.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	1.27	1.25	1.58
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.50	0.99	0.50
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	47.53		44.97

PHASE BALANCE (% OF TOTAL LOAD) A: 100.6 % B: 96.3 % C: 103.3 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 124.8 A.
X LARGEST UNBALANCED PHASE %: x 1.03
TOTAL: 129.0 A.
\+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 151.5 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 175 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F BREAKER TO BE ARC FAULT TYPE O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G BREAKER TO BE GFI TYPE S BREAKER TO BE SHUNT TRIP TYPE

4L5

BUS NUMBER: 451 | AMPERE RATING: 600 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4DP1 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: SUB–FEED | MIN. KAIC: 25
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.75	N	RECPT – VENDING	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.72	R	RECEPTACLES	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						31.33	D				
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	3	350	4	2–1/2	31.33	D	OUTSIDE AIR UNIT #1	300	3	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						31.33	D				
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
39	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	30.00	0.46	14.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	128.99	1.00	128.99
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.86	1.24	1.07
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	1.50	1.00	1.50
R – RECEPTACLES	1.26	1.00	1.26
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	162.61		146.95

PHASE BALANCE (% OF TOTAL LOAD) A: 99.3 % B: 99.3 % C: 101.6 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 407.8 A.
X LARGEST UNBALANCED PHASE %: x 1.01
TOTAL: 414.5 A.
\+ RESERVED FUTURE CAPACITY: + 24.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 438.5 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 450 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

4L6

BUS NUMBER: 461 | AMPERE RATING: 600 | VOLTAGE (L–L): 208 | PHASE: 3
SERVED FROM: 4L5 | MAIN TYPE: MAIN LUGS ONLY | VOLTAGE (L–N): 120 | WIRE: 4
MOUNTING: SURFACE | LUG OPTIONS: SUB–FEED | MIN. KAIC: 25
REMARKS:

CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	BRANCH CIRCUIT SETS	PHASE/NEUT. NO	PHASE/NEUT. SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.
1	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.69	L	LIGHTS	20	1	2
3	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.17	L	LIGHTS	20	1	4
5	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2	1	2	12	12	1/2	0.54	R	RECEPTACLES	20	1	6
7	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	8
9	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	10
11	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	12
13	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	14
15	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	16
17	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	18
19	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	20
21	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2								SPACE ONLY		1	22
23	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	24
25	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
27	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	28
29	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
31	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	32
33	20	1	ROOM RECPT APPLNCE 1	B	0.75	1	2	12	12	1/2						1.75	D				
35	20	1	ROOM RECPT APPLNCE 2	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	36
37	20	1	ROOM RECPT R/R	B	0.75	1	2	12	12	1/2						1.75	D				
39	20	1	ROOM RECPT / LIGHTS	B	0.75	1	2	12	12	1/2	1	2	10	10	1/2	1.75	D	GUEST ROOM PTU	25	2	40
41		1	SPACE ONLY													1.75	D				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.00	0.00	0.00
B – HOTEL/MOTEL LIGHTING	15.00	0.50	7.50
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	17.50	1.00	17.50
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	0.00	0.00	0.00
L – GENERAL LIGHTING	0.86	1.24	1.07
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.00	0.00	0.00
R – RECEPTACLES	0.54	0.99	0.54
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.50	0.25	0.12
	33.90		26.74

PHASE BALANCE (% OF TOTAL LOAD) A: 99.1% B: 94.5 % C: 106.6 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 74.2 A.
X LARGEST UNBALANCED PHASE %: x 1.06
TOTAL: 79.1 A.
\+ RESERVED FUTURE CAPACITY: + 24.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 103.1 A.
MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 110 A. MIN. NEC ART. 220 FEEDER SIZE:

* NON–COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

F – BREAKER TO BE ARC FAULT TYPE O – BREAKER TO BE LOCKABLE IN THE "ON" POSITION
G – BREAKER TO BE GFI TYPE S – BREAKER TO BE SHUNT TRIP TYPE

4L1	4L2	4L3
4L4	4L5	4L6

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REVISIONS

No.	Date	Description

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R. SHANE RITTER License No. 28401 PROFESSIONAL ENGINEER IN ELECTRICAL ENGINEERING
9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Fourth Floor Electrical Panel Schedules

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013
Sheet No. E5.4

Released for
PERMIT ONLY

Hampton Inn and Suites

EMERGENCY DIESEL GENERATOR

200KVA 120/208V 3-PHASE 4-WIRE

SERVED FROM: N/A
REMARKS:

VOLTAGE (L-L): 208
VOLTAGE (L-N): 120

CONNECTED LOAD (KVA): 185.0
DEMAND LOAD (KVA): 187.4
CONNECTED LOAD (AMPS): 513.6
DEMAND LOAD (AMPS): 520.2

MARK	LOAD DESCRIPTION	CODE	LOAD KVA	MINIMUM STARTER SIZE	CIRCUIT BREAKER TRIP OR FUSE SIZE	DEVICE TYPE	BRANCH CIRCUIT SETS	BRANCH CIRCUIT PHASE/NEUT. NO	BRANCH CIRCUIT PHASE/NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE	REMARKS
1	FP-1	X	79.6		400	CIRCUIT BRKR	1	3	350	3/0	3	SEE DETAIL 5/E6.4 FOR MORE INFO
2	ATS	X	105.4		400	CIRCUIT BRKR	1	4	500	3	3-1/2	SEE SHEET E4.1 FOR MORE INFO

1E1

BUS NUMBER: 71
SERVED FROM: ATS
MOUNTING: SURFACE
REMARKS:

AMPERE RATING: 400
MAIN TYPE: MAIN LUGS ONLY
LUG OPTIONS: SUB-FEED

VOLTAGE (L-L): 208
VOLTAGE (L-N): 120

PHASE: 3
WIRE: 4
MIN. KAIC: 65

	CKT NO.	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	LOAD DESCRIPTION	CODE	LOAD KVA	BRANCH CIRCUIT SETS	BRANCH CIRCUIT PHASE/NEUT. NO	BRANCH CIRCUIT PHASE/NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	CKT NO.	
S	3	250	3	ELEVATOR MOTOR #1	N	14.41						14.41	N					
					N	14.41	1	3	250	4	2-1/2	14.41	N	ELEVATOR MOTOR #2	250	3	4	S
					N	14.41						14.41	N					
	7		1	SPACE ONLY										SPACE ONLY		1	8	
	9		1	SPACE ONLY										SPACE ONLY		1	10	
	11		1	SPACE ONLY										SPACE ONLY		1	12	
	13		1	SPACE ONLY								0.30	N					
	15		1	SPACE ONLY			1	3	12	12	1/2	0.30	N	SUMP PUMP (ELEV) #2	20	3	16	
	17		1	SPACE ONLY								0.30	N					
S	19	20	2	ELEV #1 LIGHT/CNTRL	M	1.00	1	3	12	12	1/2	0.30	N					
					M	1.00	1	3	12	12	1/2	0.30	N	SUMP PUMP (ELEV) #1	20	3	22	
S	23	20	2	ELEV #2 LIGHT/CNTRL	M	1.00	1	3	12	12	1/2	0.30	N					
					M	1.00						0.72	N	RECPT - MPBX	20	1	26	
O	27	20	1	LIGHTS - FAA	L	0.50	1	2	12	12	1/2	1.00	M	ELEV PREACTION PANEL	20	1	28	O
O	29	20	1	LIGHTS - FAA	L	0.50	1	2	12	12	1/2	0.50	M	FIRE ALARM PANEL	20	1	30	O
					N	2.10						1.00	M	RECPT - TELECOM	20	1	32	
	33	35	3	GRINDER PUMP #1	N	2.10	1	3	8	10	3/4	1.00	L	LIGHTS - STAIRS	20	1	34	
					N	2.10						1.00	L	LIGHTS - STAIRS	20	1	36	
	37	20	1	SPARE										SPARE	20	1	38	
	39	20	1	SPARE										SPARE	20	1	40	
	41	20	1	SPARE										SPARE	20	1	42	

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X	NEC ART. 220 FEEDER SIZING FACTOR	=	NEC ART. 220 FEEDER SIZING LOAD (KVA)
A - HOSPITAL LIGHTING	0.00		0.00		0.00
B - HOTEL/MOTEL LIGHTING	0.00		0.00		0.00
C - SPACE COOLING*	0.00		0.00		0.00
D - OTHER HVAC LOADS	0.00		0.00		0.00
H - SPACE HEATING*	0.00		0.00		0.00
K - KITCHEN APPLIANCES	0.00		0.00		0.00
L - GENERAL LIGHTING	3.00		1.25		3.75
M - MISC. CONTINUOUS	6.50		1.25		8.12
N - MISC. NONCONTINUOUS	95.28		0.90		85.75
R - RECEPTACLES	0.00		0.00		0.00
W - WAREHOUSE LIGHTING	0.00		0.00		0.00
LARGEST MOTOR**	40.00		0.25		10.00
	104.78				107.62

PHASE BALANCE (% OF TOTAL LOAD)
A: 101.0 % B: 100.3 % C: 98.9 %

BALANCED NEC ART. 220 FEEDER SIZING LOAD (AMPS): 298.7 A.
X LARGEST UNBALANCED PHASE %: x 1.01
TOTAL: 301.7 A.
+ RESERVED FUTURE CAPACITY: + 20.0 A.
TOTAL UNBALANCED NEC ART. 220 FEEDER SIZING LOAD: 321.7 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 350 A.
MIN. NEC ART. 220 FEEDER SIZE:

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS PANEL.

A BREAKER TO BE ARC FAULT TYPE
G BREAKER TO BE GFI TYPE
O BREAKER TO BE LOCKABLE IN THE "ON" POSITION
S BREAKER TO BE SHUNT TRIP TYPE

SWITCHBOARD SCHEDULE

MSB

BUS NUMBER: 50
SERVED FROM: UTIL
MINIMUM KAIC: 85
REMARKS: SOLID STATE MAIN WITH GFI PROTECTION

AMPERE RATING: 4000
MAIN TYPE: MAIN BREAKER

VOLTAGE (L-L): 208
VOLTAGE (L-N): 120

PHASE: 3
WIRE: 4

MARK	LOAD DESCRIPTION	CODE	LOAD KVA	CIRCUIT BREAKER FRAME OR FUSED SWITCH SIZE	CIRCUIT BREAKER TRIP OR FUSE SIZE	DEVICE TYPE	FEEDER SETS	FEEDER PHASE/NEUT. NO	FEEDER PHASE/NEUT. SIZE	FEEDER GND SIZE	FEEDER MIN CND SIZE	REMARKS
1	ATS	X	104.7	600	400	CIRCUIT BRKR	1	4	500	3	3-1/2	
2	1L1	X	66.7	400	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
3	1L3	X	75.0	400	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
4	1M1	X	227.0	800	800	CIRCUIT BRKR	2	4	500	1/0	3-1/2	
5	1P1	X	106.5	400	400	CIRCUIT BRKR	1	4	500	3	3-1/2	
6	1S1	X	35.3	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
7	2L1	X	87.4	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
8	2L3	X	54.3	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
9	2L5	X	42.0	400	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
10	3L1	X	89.4	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
11	3L3	X	74.2	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
12	3L5	X	68.0	400	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
13	4L1	X	89.6	225	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
14	4L3	X	74.5	400	225	CIRCUIT BRKR	1	4	4/0	4	2-1/2	
15	4L5	X	162.6	800	600	CIRCUIT BRKR	2	4	350	1	3	
16	SPARE			400	225							
17	SPACE			400								

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)***	X	NEC ART. 220 FEEDER SIZING FACTOR	=	NEC ART. 220 FEEDER SIZING LOAD (KVA)
A - HOSPITAL LIGHTING	0.00		0.00		0.00
B - HOTEL/MOTEL LIGHTING	276.00		0.34		94.80
C - SPACE COOLING*	0.00		0.00		0.00
D - OTHER HVAC LOADS	740.46		1.00		740.46
H - SPACE HEATING*	15.00		1.25		18.75
K - KITCHEN APPLIANCES	23.59		0.65		15.33
L - GENERAL LIGHTING	63.27		1.25		79.08
M - MISC. CONTINUOUS	45.23		1.25		56.53
N - MISC. NONCONTINUOUS	165.55		0.70		115.88
R - RECEPTACLES	28.80		0.67		19.40
W - WAREHOUSE LIGHTING	0.00		0.00		0.00
LARGEST MOTOR**	40.00		0.25		10.00
	1357.90				1150.25

BALANCED 3 PHASE NEC ART. 220 FEEDER SIZING LOAD (AMPS): 3192.7 A.
+ RESERVED FUTURE CAPACITY: + 400.0 A.
TOTAL NEC ART. 220 FEEDER SIZING LOAD: 3592.7 A.

MIN. NEC ART. 220 OVERCURRENT PROTECTION:
MIN. NEC ART. 220 FEEDER SIZE:

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS. *** SUM OF ALL LOADS FED FROM THIS DEVICE.

--	GEN	MSB
--	1E1	--

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REVISIONS

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SEAL
9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
MSB & Distribution Panel Schedules

Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013

Sheet No.
E5.5

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Hampton Inn and Suites

PROJECT EQUIPMENT CONNECTION SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS	PHASE	LOAD INFORMATION						STARTER INFORMATION							DISCONNECT INFORMATION							CIRCUIT INFORMATION									CONNECTION NOTES	CONNECTION DESIGNATION
				HP	KVA	AMPS	MCA	MOCP	EMERG. POWER REQD.	FURN. BY	INST. BY	NEMA SIZE	TYPE	STARTER DISCONNECT TYPE	TRIP OR FUSE SIZE	NEMA ENCL TYPE	FURN. BY	INST. BY	TYPE	SWITCH RATING	POLE	FUSE OR TRIP RATING	NEMA ENCL TYPE	CIRCUIT ID	CIRCUIT BRKR TRIP	CIRCUIT BRKR P	BRANCH CIRCUIT S	BRANCH CIRCUIT S	BRANCH CIRCUIT PHASE/NEUT. NO	BRANCH CIRCUIT PHASE/NEUT. SIZE	BRANCH CIRCUIT GND SIZE	BRANCH CIRCUIT MIN CND SIZE		
AHU-01	AIR HANDLER #1	208	3	N/A	11.00	30.5	32.5	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-3	35	3	1	3	8	10	3/4	1 3 10	AHU-01
AHU-02	AIR HANDLER #2	208	3	N/A	16.00	44.4	47.5	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-4	50	3	1	3	8	10	3/4	1 3 10	AHU-02
AHU-03	AIR HANDLER #3	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-9	50	3	1	3	8	10	3/4	1 3 10	AHU-03
AHU-04	AIR HANDLER #4	208	3	N/A	12.00	33.3	38	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-10	40	3	1	3	8	10	3/4	1 3 10	AHU-04
AHU-05	AIR HANDLER #5	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-15	50	3	1	3	8	10	3/4	1 3 10	AHU-05
AHU-06	AIR HANDLER #6	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-16	50	3	1	3	8	10	3/4	1 3 10	AHU-06
AHU-07	AIR HANDLER #7	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-21	50	3	1	3	8	10	3/4	1 3 10	AHU-07
AHU-08	AIR HANDLER #8	208	3	N/A	10.00	27.7	31	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	1M2-22	35	3	1	3	8	10	3/4	1 3 10	AHU-08
AHU-09	AIR HANDLER #9	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	2L2-26	50	3	1	3	8	10	3/4	1 3 10	AHU-09
AHU-10	AIR HANDLER #10	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	3L2-26	50	3	1	3	8	10	3/4	1 3 10	AHU-10
AHU-11	AIR HANDLER #11	208	3	N/A	15.00	41.6	46	50	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	1	4L2-26	50	3	1	3	8	10	3/4	1 3 10	AHU-11
BP-1	BOOSTER PUMP #1	208	3	3/4	1.33	3.7	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	3R	1M2-40	20	3	1	3	12	12	1/2		BP-1
CB-1	COFFEE BREWER #1	208	3	N/A	15.10	41.9	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1L3-22	60	3	1	3	6	10	1	1 2 4	CB-1
CO-1	CONVECTION OVER #1	208	1	N/A	2.90	13.9	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1L3-23	20	2	1	2	12	12	1/2	1 2 4	CO-1
CP-1	RECIRC PUMP #1	120	1	1/6	0.52	4.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	MOTOR-RTD SWITCH	30	1	N/A	3R	1M2-33	20	1	1	1	12	12	1/2	1 2 4	CP-1
CP-2	RECIRC PUMP #2	120	1	3/4	1.65	13.8	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	MOTOR-RTD SWITCH	30	1	N/A	3R	1M2-35	25	1	1	1	10	10	1/2	1 2 4	CP-2
D-1	CLOTHES DRYER #1	208	3	N/A	8.00	22.2	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	1	1L3-4	30	3	1	4	10	10	3/4	1 2 5	D-1
D-2	CLOTHES DRYER #2	208	3	N/A	8.00	22.2	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	1	1L3-10	30	3	1	4	10	10	3/4	1 2 5	D-2
D-3	CLOTHES DRYER #3	208	3	N/A	8.00	22.2	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	1	1L3-16	30	3	1	4	10	10	3/4	1 2 5	D-3
D-4	CLOTHES DRYER #4	208	1	N/A	5.00	24.0	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1L1-10	30	2	1	3	10	10	3/4	1 2 5	D-4
D-5	CLOTHES DRYER #5	208	1	N/A	5.00	24.0	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1L1-14	30	2	1	3	10	10	3/4	1 2 5	D-5
DHP-1	DHP-1	208	1	N/A	3.50	16.8	18	30	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	2	N/A	3R	1M2-29	30	2	1	2	10	10	1/2	1 4 15	DHP-1
DHP-2	DHP-2	208	1	N/A	2.50	12.0	13	20	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	2	N/A	3R	1M2-25	20	2	1	2	12	12	1/2	1 4 15	DHP-2
EF-1	EXHAUST FAN #1	120	1	N/A	0.03	0.2	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	MOTOR-RTD SWITCH	30	1	N/A	1		20	1	1	2	12	12	1/2	1 2 3 7 11	EF-1
EL-1	ELEV #1 LIGHT/CNTRL	208	1	N/A	2.00	9.6	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	FUSED SWITCH	30	2	20	1	1E1-19	20	2	1	3	12	12	1/2	1 2 4 9 12 14	EL-1
EL-2	ELEV #2 LIGHT/CNTRL	208	1	N/A	2.00	9.6	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	FUSED SWITCH	30	2	20	1	1E1-23	20	2	1	3	12	12	1/2	1 2 4 9 12 14	EL-2
EM-1	ELEVATOR MOTOR #1	208	3	40	43.23	120.0	N/A	N/A	YES	EQ. MFR.	DIV. 16	4	SEE NOTES	N/A		1	DIV. 16	DIV. 16	ENCLOSED CB	N/A	3	300	1	1E1-3	250	3	1	3	250	4	2-1/2	1 4 9 12 14	EM-1
EM-2	ELEVATOR MOTOR #2	208	3	40	43.23	120.0	N/A	N/A	YES	EQ. MFR.	DIV. 16	4	SEE NOTES	N/A		1	DIV. 16	DIV. 16	ENCLOSED CB	N/A	3	300	1	1E1-4	250	3	1	3	250	4	2-1/2	1 4 9 12 14	EM-2
FP-1	FIRE PUMP #1	208	3	75	79.61	221.0	N/A	N/A	YES	EQ. MFR.	DIV. 16	5	SEE NOTES	N/A		3R	DIV. 16	DIV. 16	FUSED SWITCH	1200	3	SEE NOTES	3R	FP-1-UT	600	3	1	4	300	1	3	1 4 13	FP-1
GP-1	GRINDER PUMP #1	208	3	5	6.30	17.5	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1E1-33	35	3	1	3	8	10	3/4	1 4	GP-1
HP-01A	HEAT PUMP #1A	208	3	N/A	7.50	20.8	21	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-3	35	3	1	3	8	10	3/4	1 4	HP-01A
HP-01B	HEAT PUMP #1B	208	3	N/A	7.50	20.8	21	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-4	35	3	1	3	8	10	3/4	1 4	HP-01B
HP-02A	HEAT PUMP #2A	208	3	N/A	7.50	20.8	21	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-9	35	3	1	3	8	10	3/4	1 4	HP-02A
HP-02B	HEAT PUMP #2B	208	3	N/A	7.50	20.8	21	35	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-10	35	3	1	3	8	10	3/4	1 4	HP-02B
HP-03	HEAT PUMP #3	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-15	40	3	1	3	8	10	3/4	1 4	HP-03
HP-04	HEAT PUMP #4	208	3	N/A	3.80	10.5	11	20	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	3R	1M1-16	20	3	1	3	12	12	1/2	1 4	HP-04
HP-05	HEAT PUMP #5	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-21	40	3	1	3	8	10	3/4	1 4	HP-05
HP-06	HEAT PUMP #6	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-22	40	3	1	3	8	10	3/4	1 4	HP-06
HP-07	HEAT PUMP #7	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-27	40	3	1	3	8	10	3/4	1 4	HP-07
HP-08	HEAT PUMP #8	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-28	40	3	1	3	8	10	3/4	1 4	HP-08
HP-09	HEAT PUMP #9	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-33	40	3	1	3	8	10	3/4	1 4	HP-09
HP-10	HEAT PUMP #10	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-34	40	3	1	3	8	10	3/4	1 4	HP-10
HP-11	HEAT PUMP #11	208	3	N/A	8.00	22.2	24	40	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	60	3	N/A	3R	1M1-39	40	3	1	3	8	10	3/4	1 4	HP-11
IC-1	ICE MAKER #1	208	1	N/A	3.00	14.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	3R	1L3-19	30	2	1	2	10	10	1/2	1 2 4	IC-1
OAU-1	OUTSIDE AIR UNIT #1	208	3	N/A	90.00	249.8	271	300	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	400	3	N/A	3R	4L5-16	300	3	1	3	350	4	2-1/2	1 4 8 10	OAU-1
PTU	PACK. TERMINAL UNIT	208	1	N/A	3.50	16.8	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A				25	2	1	3	10	10	3/4	1 2 5 6 11	PTU
SP-1	SUMP PUMP (ELEV) #1	208	3	1/2	0.90	2.5	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	5	1E1-22	20	3	1	3	12	12	1/2	1 2 4 9	SP-1
SP-2	SUMP PUMP (ELEV) #2	208	3	1/2	0.90	2.5	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	5	1E1-16	20	3	1	3	12	12	1/2	1 2 4 9	SP-2
W-1	CLOTHES WASHER #1	208	3	N/A	4.00	11.1	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	5	1L3-3	20	3	1	3	12	12	1/2	1 4 5	W-1
W-2	CLOTHES WASHER #2	208	3	N/A	4.00	11.1	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	5	1L3-9	20	3	1	3	12	12	1/2	1 4 5	W-2
W-3	CLOTHES WASHER #3	208	3	N/A	4.00	11.1	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 16	DIV. 16	NON-FUSED SWITCH	30	3	N/A	5	4L5-16	20	3	1	3	12	12	1/2	1 4 5	W-3

1. VERIFY EQUIPMENT LOCATIONS AND REQUIREMENTS BEFORE ROUGH IN.
2. CONNECT THROUGH JUNCTION BOX MOUNTED ON OR ADJASCENT TO EQUIPMENT.
3. MAKE FINAL CONNECTION USING FLEXIBLE METALLIC CONDIUT.
4. MAKE FINAL CONNECTION USING LIQUID TIGHT FLEXIBLE CONDIUT.
5. CONNECT THROUGH SINGLE RECEPTACLE. PROVIDE CONFIGURATION AS REQUIRED.
6. UNIT MOUNTED ON SIDE WALL.
7. UNIT LOCATED IN OR ABOVE CEILING.
8. UNIT LOCATED ON ROOF.
9. BREAKER SUPPLYING THIS LOAD TO BE SHUNT TRIP TYPE.
10. INSTALL DUCT TYPE SMOKE DETECTOR (SEE DETAIL 2/E6.3)
11. SEE FLOOR PLANS FOR CIRCUIT ASSIGNMENT FOR EACH OCCURANCE.
12. SEE DETAIL 3/E6.3 FOR INFORMATION ON ELEVATOR CONNECTION.
13. ELECTRICAL ALTERNATE #1 – SEE DETAIL 5/E6.4 & RISER DIAGRAM (E4.1).
14. DISCONNECT (OR BREAKER) TO HAVE 2 NO & 2 NC AUX CONTACTS
15. INDOOR UNIT (DAHU) TO BE POWERED FROM THIS UNT.

EQ. SCHED.

– –	– –	– –

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REVISIONS		
No.	Date	Description

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NORTH CAROLINA
R. SHANE RITTER
License No. 23401
PROFESSIONAL ENGINEER
ELECTRICAL ENGINEERING
9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Equipment Connection Schedule

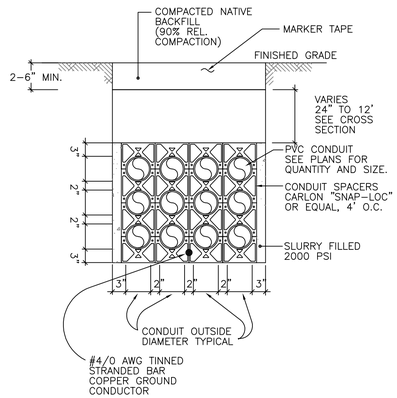
Phase
Construction Documents

Project No. 12-111
Prepared by RSR
Checked by RSR
Date Sept. 16, 2013

Sheet No. E5.6

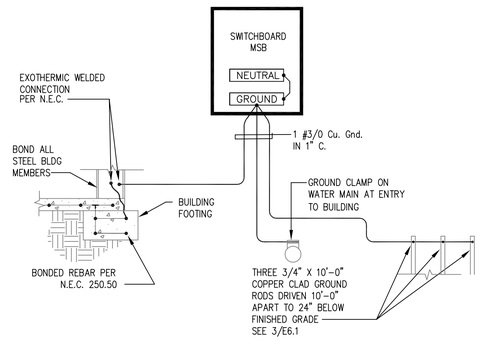
Released for
PERMIT ONLY

Hampton Inn and Suites



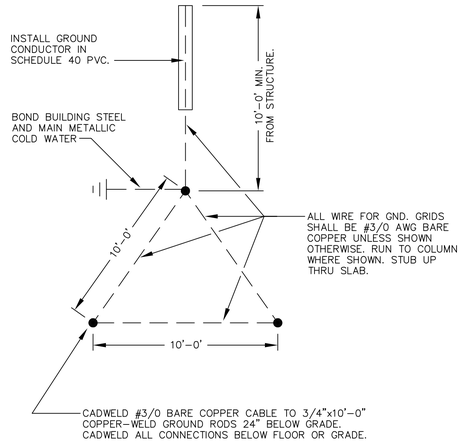
1 E6.1 SERVICE DUCT BANK

SCALE: NO SCALE



2 E6.1 GROUND DETAIL

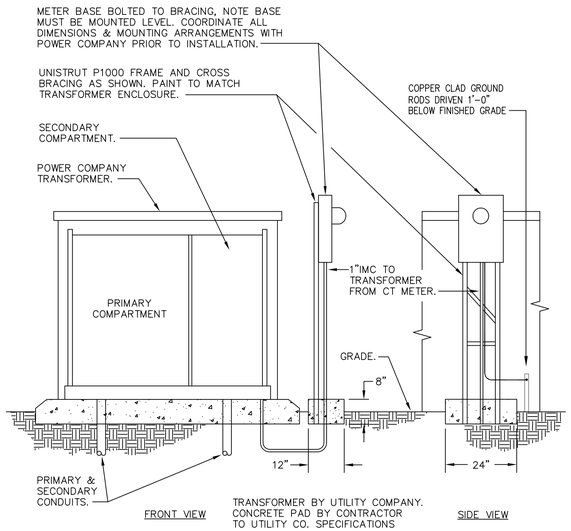
SCALE:NO SCALE



NOTE:
PROVIDE A COMPLETE GROUNDING SYSTEM MEETING ALL REQUIREMENTS OF NEC ARTICLE 250.50 PARTS a,b,c, AND d.

3 E6.1 SERVICE GROUNDING GRID

SCALE: NO SCALE



4 E6.1 TRANSFORMER / METERBASE

SCALE: NO SCALE

TABLE "A" - WORKING CLEARANCES			
VOLTAGE TO GROUND, NOMINAL	CONDITION: 1	2	3
	MIN. CLEAR DISTANCE (FT)		
0-150	3	3	3
151-600	3	3 1/2	4

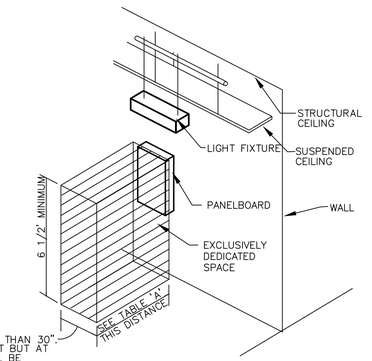
WHERE THE CONDITIONS ARE AS FOLLOWS:
1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300 VOLTS SHALL NOT BE CONSIDERED LIVE PARTS.

2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.

3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

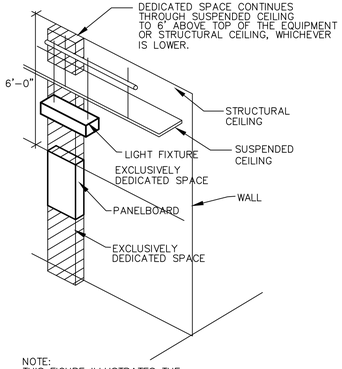
30" OR WIDTH OF EQUIPMENT IF EQUIPMENT IS WIDER THAN 30" DOES NOT HAVE TO BE CENTERED ON THE EQUIPMENT BUT AT LEAST EVEN WITH ONE EDGE. EQUIPMENT DOOR SHALL BE ABLE TO OPEN AT LEAST 90 DEG.

NOTE: THIS INCLUDES BUT IS NOT LIMITED TO PANELBOARDS, SAFETY SWITCHES, MOTOR STARTERS, JUNCTION BOXES AND OTHER ELECTRIC EQUIPMENT.



NOTE: THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF ELECTRIC EQUIPMENT REQUIRED BY SECTION 110-26 (a) OF THE NATIONAL ELECTRIC CODE.

ALL ELECTRIC EQUIPMENT



NOTE:
THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER PANELBOARDS FOR CABLES, RACEWAYS, ETC. TO AND FROM PANELBOARDS REQUIRED BY SECTION 110-26 (f) OF THE NATIONAL ELECTRICAL CODE.

PANELBOARDS

NOTE: NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH THE DEDICATED SPACES SHOWN ABOVE.

5 E6.1 DEDICATED WORKING SPACE FOR EQUIPMENT

SCALE: NO SCALE

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9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Service, Grounding, and Power Details

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No. E6.1

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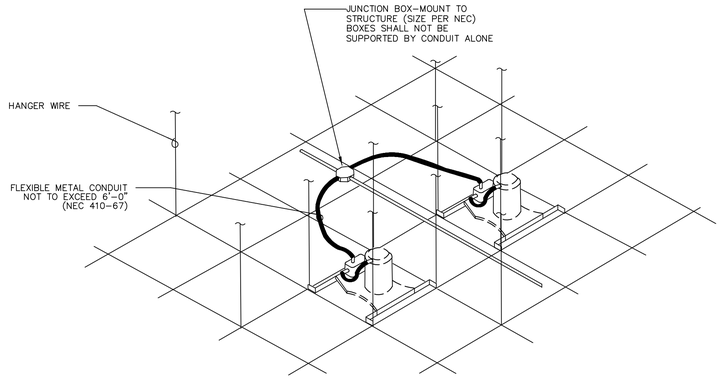
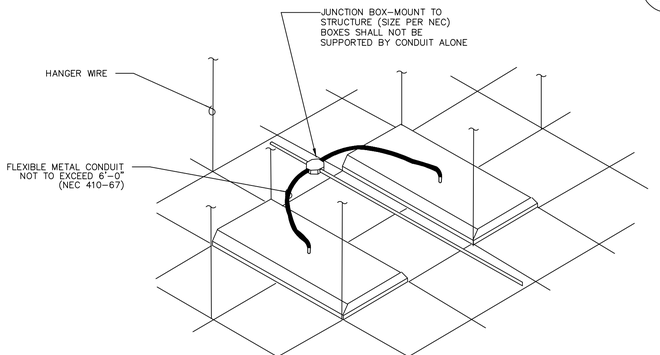


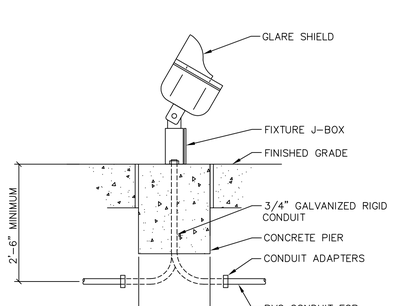
NOTE:
1. LIGHTING FIXTURE SHALL BE FASTENED TO THE CEILING FRAMING MEMBER BY MECHANICAL MEANS, SUCH AS BOLTS, SCREWS, OR RIVETS. IN NON–ACCESSIBLE CEILINGS, CENTER IN FACE ELEMENT OF CEILING AS DIRECTED BY ARCHITECT.

1 E6.2 RECESSED DOWNLIGHT
SCALE: NO SCALE

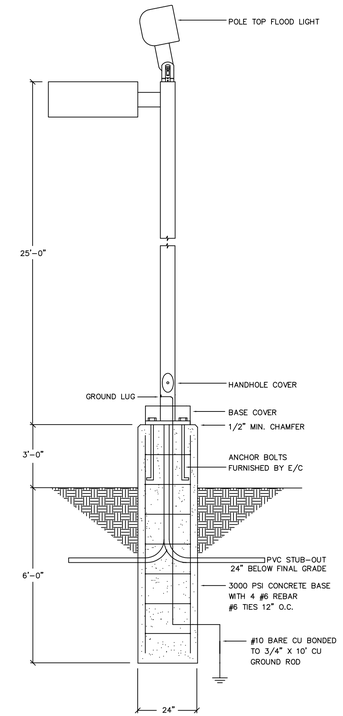


NOTE:
1. LIGHTING FIXTURE SHALL BE FASTENED TO THE CEILING FRAMING MEMBER BY MECHANICAL MEANS, SUCH AS BOLTS, SCREWS, OR RIVETS. CLIPS IDENTIFIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER(S). AND FIXTURE(S) SHALL ALSO BE PERMITTED.

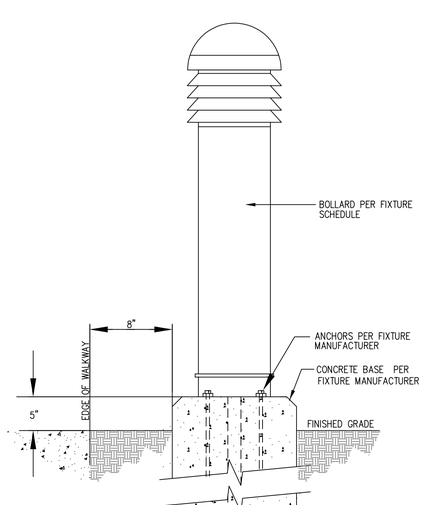
4 E6.2 2X4 LAY–IN FIXTURE
SCALE: NO SCALE



3 E6.2 FLAG POLE LIGHT DETAIL
SCALE: NO SCALE



2 E6.2 POLE LIGHT DETAIL
SCALE: NO SCALE



5 E6.2 BOLLARD DETAIL
SCALE: NO SCALE

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

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Drawing Title
Electrical Lighting Details

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
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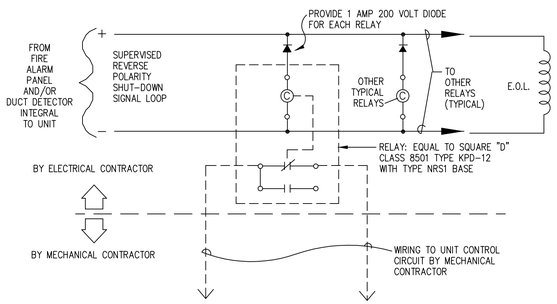
ELECTRICAL CONTRACTOR TO PROVIDE, INSTALL, AND WIRE RELAYS, WIRED AS SHOWN, ONE FOR EACH HEAT PUMP/ AIR HANDLING UNIT IN MECHANICAL DESIGN. RELAYS TO BE INSTALLED IN NEMA-1 ENCLOSURE ADJACENT TO MECHANICAL CONTROLS.

COORDINATE NUMBER AND LOCATION OF RELAYS IN EACH MECHANICAL ROOM WITH MECHANICAL CONTRACTOR.

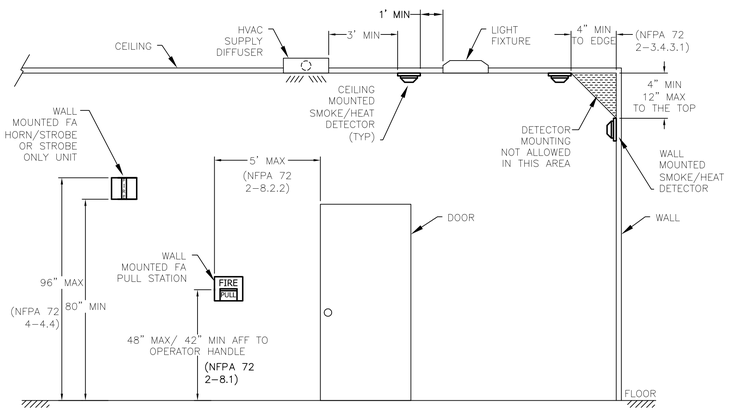
SHUTDOWN SIGNAL CIRCUIT POWER SUPPLY SHALL BE CAPABLE OF PROVIDING POWER TO (35) 3.5 WATT, 24 VOLT D.C. RELAYS IN ADDITION TO OTHER NORMAL FIRE ALARM POWER REQUIREMENTS.

UNITS GREATER THAN 2000CFM MUST HAVE INTEGRAL DUCT DETECTOR THAT SHUTS UNIT DOWN



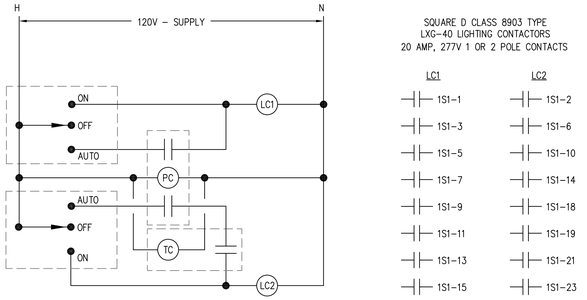
2 E6.3 FIRE ALARM SHUT DOWN CIRCUITRY FOR HVAC

SCALE: NO SCALE



1 E6.3 FIRE ALARM DEVICE MOUNTING

SCALE: NO SCALE



(PC) PHOTOELECTRIC CONTROL - TORK #2104 OR EQUAL MOUNT ON ROOF FACING NORTH

(TC) CPU BASED TIME CLOCK WITH BATTERY BACK-UP POWER

(LC#) LIGHTING CONTACTOR COIL TO CONTROL LIGHTING CONTACTORS

SQUARE D CLASS 8903 TYPE LXG-40 LIGHTING CONTACTORS 20 AMP, 277V 1 OR 2 POLE CONTACTS

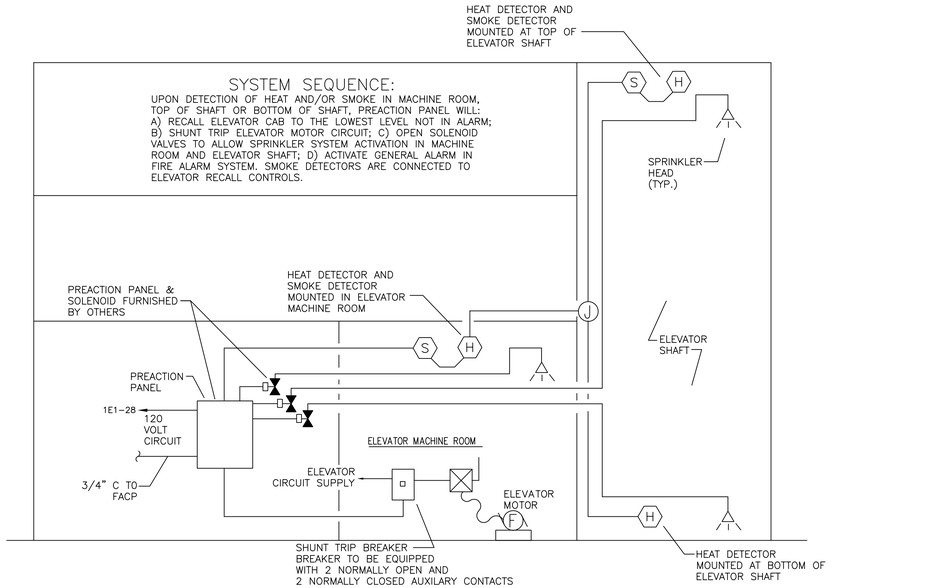
LC1	LC2
1S1-1	1S1-2
1S1-3	1S1-6
1S1-5	1S1-10
1S1-7	1S1-14
1S1-9	1S1-18
1S1-11	1S1-19
1S1-13	1S1-21
1S1-15	1S1-23
1S1-17	1S1-25
SPARE	1S1-22
1S1-31	1S1-26
1S1-35	1S1-30
1S1-39	1S1-34
3 SPARE	3 SPARE
PHOTO CONTROL ONLY	PHOTO CONTROL AND TIME CLOCK

NOTES:

1. PROVIDE MECHANICALLY HELD CONTACTORS WITH ASSOCIATED CONTROL MODULES AND HOA SWITCHES.

4 E6.3 EXTERIOR LIGHT CONTROLS

SCALE: NO SCALE



3 E6.3 PREACTION PANEL RISER & SYSTEM OPERATION DETAIL

SCALE: NO SCALE

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9/16/13

KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Systems Details

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

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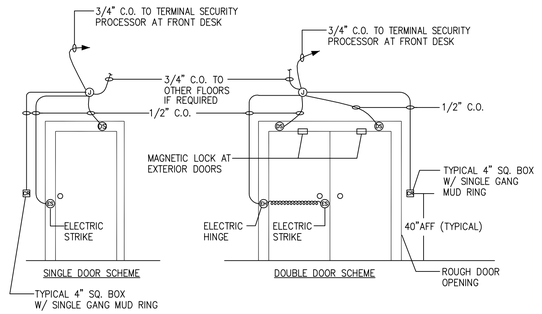
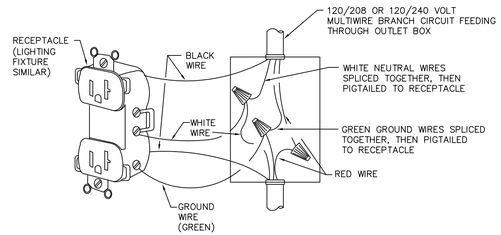
NOTES:

1. ALL CONDUIT ROUTING INDICATED ON THIS PLAN SHALL BE 3/4" C.O., UNLESS OTHERWISE NOTED.
2. FOR EXACT LOCATION AND MOUNTING HEIGHTS OF DEVICE JUNCTION BOXES REFER TO ARCHITECTURAL DWGS.
3. COORDINATE EXACT LOCATION AND MOUNTING REQUIREMENTS OF SECURITY DEVICES WITH THE SECURITY CONSULTANT.
4. PROVIDE DOOR SWITCH (S) CONDUITS AS REQ'D. COORDINATE WITH SECURITY CONSULTANT.

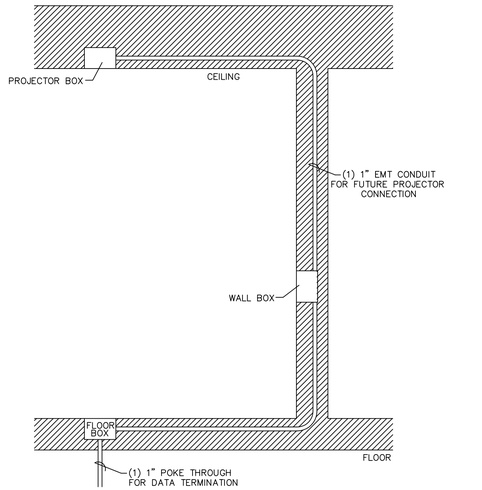


1 E6.4 CARD ACCESS DETAIL
SCALE: NO SCALE

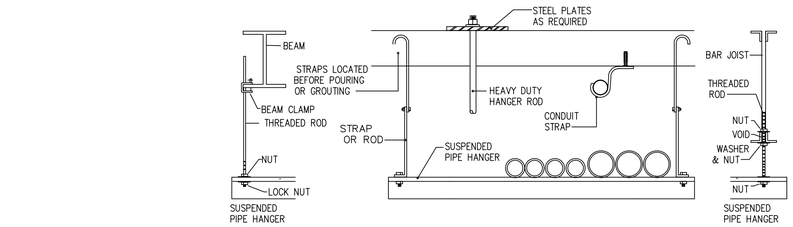


NOTE:
THIS DETAIL APPLIES ONLY WHERE MULTIWIRE CIRCUITS FEED RECEPTACLES OR LAMPHOLDERS. IT DOES NOT APPLY TO CIRCUITS WITHOUT A NEUTRAL OR TWO WIRE CIRCUITS.

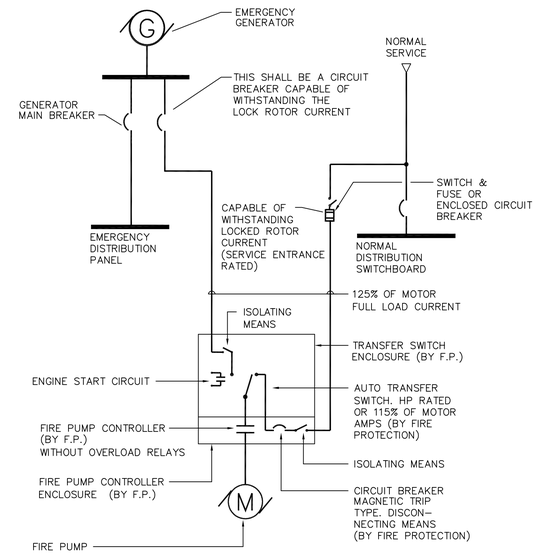
2 E6.4 BRANCH CIRCUIT WIRING
SCALE: NO SCALE



3 E6.4 CEILING PROJECTOR PROVISION
SCALE: NO SCALE



5 E6.4 TYPICAL CONDUIT HANGING METHODS
SCALE: NO SCALE



4 E6.4 FIRE PUMP CONNECTION
SCALE: NO SCALE

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Electrical Miscellaneous Details

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

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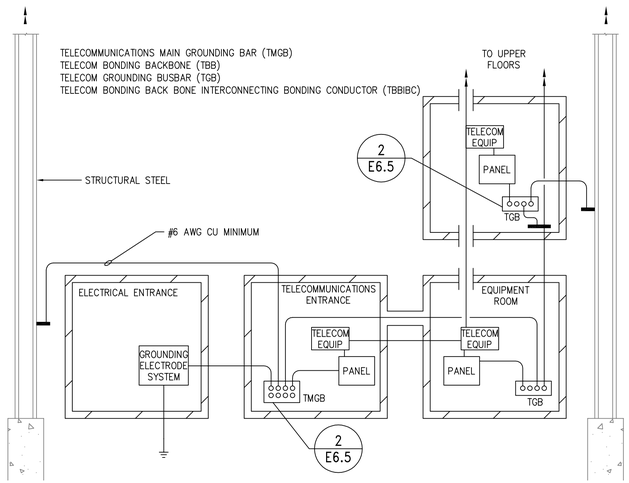
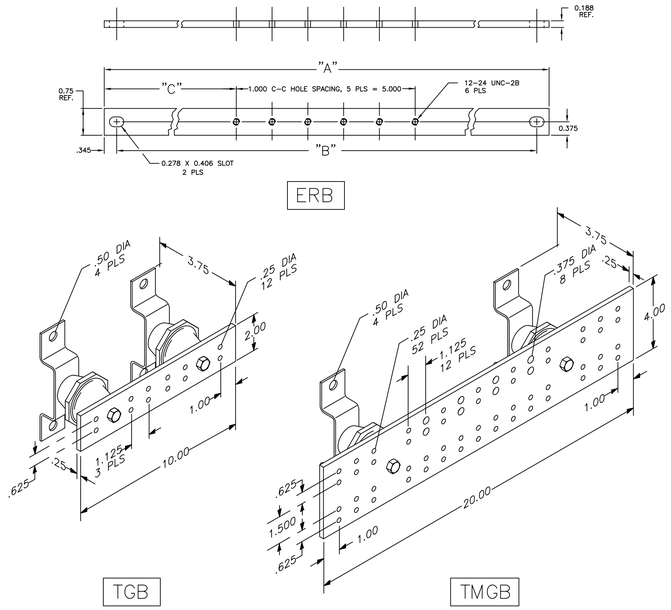


1 E6.5 TELECOM GROUNDING SCHEMATIC

SCALE: NO SCALE

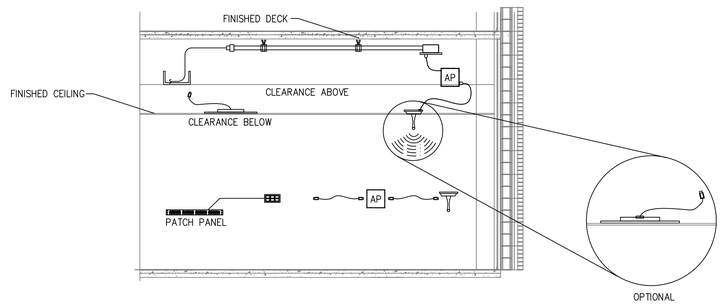


2 E6.5 TELECOM GROUND BAR DETAILS

SCALE: NO SCALE

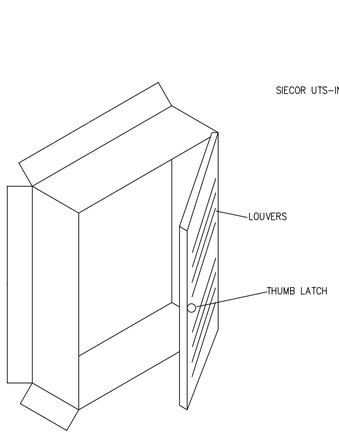
NOTES

1. TYPICAL BUSBARS, INSULATORS AND BACKBOARD MOUNT BRACKETS SHOWN HERE REFLECT TIA STANDARDS-COMPLIANT DIMENSIONS.
2. MOUNT BACKBOARD-MOUNTED BUSBARS @ 8'-6" AFF UNLESS DIRECTED OTHERWISE BY OWNER.



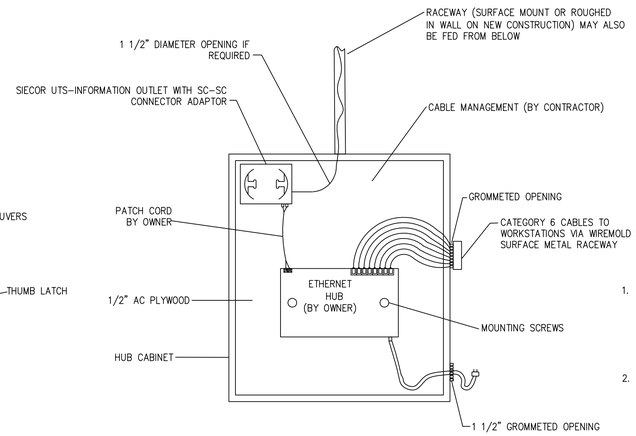
3 E6.5 TELECOM WI-FI ACCESS POINT DETAIL

SCALE: NO SCALE



HUB CABINET DETAIL

NOT TO SCALE



HUB CABINET EQUIPMENT ARRANGEMENT

NOT TO SCALE

NOTES:

1. CABINET SHALL BE CONSTRUCTED FROM 16 GAUGE COLD ROLLED STEEL. HINGES SHALL BE FORMED STEEL TYPE OR EQUIVALENT AND SWING FROM SIDE OR BOTTOM. FRONT PANEL TO HAVE LOUVERS TO AID IN THE DISSIPATION OF HEAT. UNIT SHALL HAVE THUMB LATCH DEVICE. UNIT SHALL HAVE A POLYESTER POWDER ENAMEL, OR EQUIVALENT TYPE FINISH. MOUNT CABINET WITH LOUVERS HORIZONTAL REGARDLESS OF DOOR SWING.
2. CABINET SHALL HAVE 1/2" PLYWOOD BACKBOARD TO MOUNT EQUIPMENT. CABINET TO CONTAIN SIECOR OUTLET BOX FOR CABLE MANAGEMENT. CABINET SHALL HAVE SEALED RUBBER CABLE ENTRY GROMMETS WHERE REQUIRED. OWNER TO SUPPLY AND INSTALL ELECTRONICS ONLY.
3. CONTRACTOR TO SUPPLY CATEGORY 5e CABLE FROM HUB CABINET TO DEVICES IN RACEWAY OR BOX.
4. CONTRACTOR TO SUPPLY CABLE MANAGEMENT DEVICE AS SHOWN AND PROVIDE A MINIMUM OF 6" OF SLACK FIBER CONTRACTOR TO TERMINATE FIBER WITH ST CONNECTORS.
5. CABINET SHALL BE MOUNTED TO WALL WITH FOUR (4) 1/4" BOLTS INTO WALL ANCHORS. USE TOGGLE BOLTS FOR HOLLOW PARTITIONS AND LEAD ANCHORS FOR SOLID MASONRY WALLS. BOLTS SHALL PASS THROUGH THE 1/2" PLYWOOD CABINET BACKBOARD, THE CABINET AND INTO THE WALL ANCHOR.
6. CABLE SHALL BE ROUTED TO CABINET AS FOLLOWS:
   NEW CONSTRUCTION: 3/4" EMT ROUGHED IN WALL TO A SINGLE GANG OUTLET BOX. CABINET SHALL HAVE A 1-1/2" DIA. OPENING IN BACK AND BE MOUNTED DIRECTLY OVER OUTLET BOX.
   EXISTING WALL - HOLLOW PARTITION: CABINET SHALL HAVE A 1 1/2" DIA. OPENING IN BACK AND BE MOUNTED DIRECTLY OVER A 1 1/2" DIA. OPENING IN WALL. CABLE TO BE ROUTED IN WALL AS STATED IN SPECIFICATIONS.
   EXISTING WALL - SURFACE MOUNT: ROUTE CABLE DOWN WALL IN SURFACE METAL RACEWAY MECHANICALLY FASTENED TO WALL INTO TOP OF CABINET. USE A SURFACE METAL RACEWAY TYPE CONNECTOR.

4 E6.5 TELECOM HUB CABINET DETAILS

SCALE: NO SCALE

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REVISIONS

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KEY PLAN

Southern Hospitality Services

Hampton Inn and Suites

5400 I-20 & Frontage Rd.
Monroe, LA 71201

Drawing Title
Telecommunications Details

Phase
Construction Documents

Project No.	12-111
Prepared by	RSR
Checked by	RSR
Date	Sept. 16, 2013

Sheet No.
E6.5

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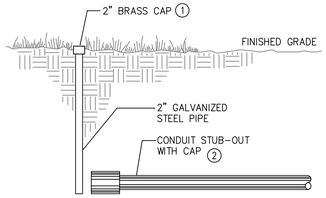
Hampton Inn and Suites



NOTES:

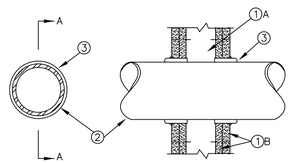
1. ENGRAVE BRASS CAP INDICATING FUNCTION AND FINAL DESTINATION.
2. RECORD ALL ACTUAL STUB-OUT LOCATIONS ON AS-BUILT DRAWINGS.

1 / E6.6 TYPICAL STUB-OUT DETAIL

SCALE: NO SCALE

SYSTEM NO. W-L-1001
(FORMERLY SYSTEM NO. 147)

F RATINGS – 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS – 0, 1, 2, 3 AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT – LESS THAN 1 CFM PER SQ. FT.
L RATING AT 400°F – LESS THAN 1 CFM PER SQ. FT.



SECTION A–A

1. WALL ASSEMBLY – THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS – WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACE 16 IN. OC WITH NOM 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED MAX 24 IN. OC.

B. WALLBOARD, GYPSUM* – NOM 1/2 OR 5/8 IN. THICK, 4 FT. WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 13-1/2 IN.

2. PIPE OR CONDUIT – NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 12 IN. DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN. DIAM (OR SMALLER) CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE, NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT, NOM 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING, NOM 6 IN. DIAM (OR SMALLER) TYPE L OR (OR HEAVIER) COPPER TUBING OR NOM 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE IS USED, MAX F RATING OF FIRESTOP SYSTEM (ITEM 3) IS 2 H. STEEL PIPES OR CONDUITS LARGER THAN NOM 4 IN. DIAM MAY ONLY BE USED IN WALLS CONSTRUCTED USING STEEL CHANNEL STUDS. A MAX OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

3. FILL, VOID OR CAVITY MATERIAL* – CAULK – CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MIN 1/4 IN. DIAM BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAX PIPE OR CONDUIT DIAM IN	ANNULAR SPACE IN.	F RATING, HR.	T RATING, HR.
1	0 TO 3/16	1 OR 2	0+, 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1/4	1 OR 2	0
4	0 TO 1-1/2#	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

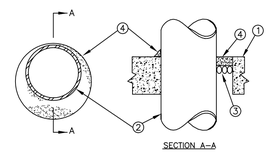
+ WHEN COPPER PIPE IS USED, T RATING IS 0 HR.
# 0 TO 1-1/2 IN. ANNULAR SPACE APPLIES ONLY WHEN TYPE CP-25WB+ CAULK IS USED, AND ONLY WHEN THE MIN THICKNESS OF THE GYPSUM WALLBOARD IS 5/8 IN. FOR 1 HR RATED WALLS AND 1-1/4 IN. FOR 2 HR RATED WALLS.

MINNESOTA MINING & MFG. CO.– TYPECP-25 WB+

* BEARING THE UL CLASSIFICATION MARKING.

SYSTEM NO. C-AJ-1044
(FORMERLY SYSTEM NO. 319)

F RATINGS – 2, 3 AND 4 HR (SEE ITEMS 2A AND 4)
T RATINGS – 0 HR
L RATING AT AMBIENT – 2 CFM PER SQ. FT.
L RATING AT 400°F – LESS THAN 1 CFM PER SQ. FT.



SECTION A–A

1. FLOOR OR WALL ASSEMBLY – LIGHTWEIGHT OR NORMAL WEIGHT (100–150 PCF) CONCRETE. EXCEPT AS NOTED IN TABLE UNDER ITEM 4, MIN THICKNESS OF SOLID CONCRETE FLOOR OR WALL ASSEMBLY IS 4–1/2 IN. FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW–CORE PRECAST CONCRETE UNITS*. WHEN FLOOR IS CONSTRUCTED OF HOLLOW–CORE PRECAST CONCRETE UNITS, PACKING MATERIAL (ITEM 3) AND CAULK FILL MATERIAL (ITEM 4) TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF FLOOR, FLUSH WITH FLOOR SURFACE. WALL ASSEMBLY MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS IN SOLID LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR IS 32 IN. MAX DIAM OF OPENING IN FLOOR CONSTRUCTED OF HOLLOW–CORE PRECAST CONCRETE UNITS IS 7 IN.

SEE CONCRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORIES IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE–(OPTIONAL, NOT SHOWN) – MAX 15 IN. ID (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 2 IN. ABOVE TOP OF FLOOR OR BEYOND EITHER SURFACE OF WALL. MAX 16 IN. ID (OR SMALLER) MIN 0.028 WALL THICKNESS (OR HEAVIER) GALVANIZED STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 1/2 IN. BEYOND EITHER SURFACE OF FLOOR OR WALL.

2. THROUGH PENETRANTS – ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. MAX ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND EDGE OF THROUGH OPENING OR SLEEVE IS DEPENDENT ON THE PARAMETERS SHOWN IN ITEM 4. MIN. ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS ZERO IN. (POINT CONTACT). PIPE CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. STEEL PIPE– NOM 30 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE– NOM 30 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. CONDUIT– NOM 6 IN. DIAM (OR SMALLER) RIGID STEEL CONDUIT.
D. CONDUIT– NOM 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
E. COPPER TUBING– NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE.
F. COPPER PIPE– NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

3. PACKING MATERIAL – POLYETHYLENE BACKER ROD OR NOM 1 IN. THICKNESS OF TIGHTLY–PACKED MINERAL WOOL BATT OR GLASS FIBER INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4).

4. FILL, VOID OR CAVITY MATERIAL* – CAULK – APPLIED TO FILL THE ANNULAR SPACE FLUSH WITH TOP SURFACE OF FLOOR, IN WALL ASSEMBLIES, REQUIRED CAULKED THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL, FLUSH WITH WALL SURFACE AT POINT CONTACT LOCATION BETWEEN PENETRANT AND SLEEVE OR BETWEEN PENETRANT AND CONCRETE, A MIN 1/4 IN. DIAM BEAD OF CAULK SHALL BE APPLIED AT TOP SURFACE OF FLOOR AND AT BOTH SURFACES OF WALL. THE HOURLY F RATINGS AND THE MIN REQUIRED CAULK THICKNESSES ARE DEPENDENT UPON A NUMBER OF PARAMETERS, AS SHOWN IN THE FOLLOWING TABLE:

MIN FLOOR OR WALL THKNS, IN.	NOM PIPE TUBE OR CONDUIT DIAM, IN.	MAX ANNULAR SPACE IN.	MIN. CAULK THKNS IN	F RATING HR.
2-1/2	1/2 – 12	1-3/4	1/2	2
2-1/2	1/2 – 12	1-3/4	1	3
4-1/2	1/2 – 6	1-3/8	1/4(A)	2
4-1/2	1/2 – 12	1-1/4	1/2	3
4-1/2	1/2 – 20	2	1	3
4-1/2	1/2 – 12	3-1/4	1	3
4-1/2	22–30	2	2	3
5-1/2	1/2 – 6	1-3/8	1(B)	4

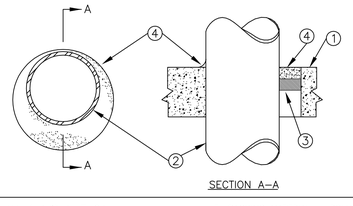
(A) MIN 2 IN THICKNESS OF MINERAL WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE.
(B) MIN 1 IN. THICKNESS OF MINERAL WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. MIN 1 IN. THICKNESS OF CAULK TO BE INSTALLED FLUSH WITH EACH SURFACE OF FLOOR OR WALL ASSEMBLY.

MINNESOTA MINING & MFG. CO.– CP 25 WB+

* BEARING THE UL CLASSIFICATION MARKING.

SYSTEM NO. C-AJ-1001
(FORMERLY SYSTEM NO. 49)

F RATINGS – 3 HR
T RATINGS – 0 HR



SECTION A–A

1. FLOOR OR WALL ASSEMBLY – MIN 4–1/2 IN. THICK LIGHTWEIGHT OR NORMAL WEIGHT (100–150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF CIRCULAR THROUGH OPENING IS 22–1/2 IN.

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE – (OPTIONAL, NOT SHOWN) – NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2. PIPE OR CONDUIT – NOM 20 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIAM (OR SMALLER) RIGID STEEL CONDUIT OR TYPE L (OR HEAVIER) COPPER TUBE, NOM 4 IN. DIAM (OR SMALLER) CAST IRON PIPE OR STEEL EMT. MAX ONE PIPE OR CONDUIT PER THROUGH OPENING. MAX ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING NOT TO EXCEED 2–1/2 IN. MIN ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS ZERO IN. (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

3. PACKING MATERIAL – POLYETHYLENE BACKER ROD OR NOM 1 IN. THICKNESS OF TIGHTLY–PACKED CERAMIC (ALUMINA SILICA) FIBER BLANKET, MINERAL WOOL BATT OR GLASS FIBER INSULATION MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF SOLID CONCRETE OR CONCRETE BLOCK WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). AS AN ALTERNATE WHEN MAX PIPE SIZE IS 10 IN. DIAM AND WHEN MAX ANNULAR SPACE IS 1 IN., A MIN 1 IN. THICKNESS OF TIGHTLY–PACKED CERAMIC FIBER BLANKET OF MINERAL WOOL BATT PACKING MATERIAL MAY BE RECESSED MIN 1/2 IN. FROM BOTTOM SURFACE OF FLOOR OR FROM EITHER SIDE OF SOLID CONCRETE WALL.

4. FILL, VOID OR CAVITY MATERIALS* – CAULK – APPLIED TO FILL THE ANNULAR SPACE TO THE MIN THICKNESS SHOWN IN THE FOLLOWING TABLE:

MAX PIPE DIAM IN	MAX ANNULAR SPACE IN.	PACKING MATERIAL TYPE (A)	MIN. CAULK THKNS IN
10	1	BR, CF, GF OR MW	1/2 (B)
10	1	CF OR MW	1/2 (C)
20	2–1/2	BR, CF, GF OR MW	1 (B)

(A) BR= POLYETHYLENE BACKER ROD.
CF= CERAMIC FIBER BLANKET.
GF= GLASS FIBER INSULATION.
MW= MINERAL WOOL BATT

(B) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.

(C) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF SOLID (NON–CONCRETE BLOCK) WALL.

MINNESOTA MINING & MFG. CO.– TYPE CP–25 N/S

* BEARING THE UL CLASSIFICATION MARKING.

FIRE RATED WALL PENETRATION		
PENETRATION	BARRIER	U.L. SYSTEM
INSUL. STEEL PIPE (30")	2–HR CONC. FLOOR	C–AJ–5002
INSUL. STEEL PIPE	1 OR 2 HR CONC. OR CONC. BLOCK WALL	C–AJ–5002
INSUL. COPPER PIPE (4")	2–HR CONC. FLOOR	C–AJ–5034
INSUL. COPPER PIPE	1 OR 2 HR CONC. OR CONC. BLOCK WALL	C–AJ–5034
INSUL STEEL (12") COPPER (4")	1 OR 2 HR STUD WALL	W–L–5001
UNINSUL. STEEL (12") COPPER (4") CONDUIT (6")	1 OR 2 HR STUD WALL	W–L–1001
UNINSUL STEEL (20") COPPER (4") CONDUIT (6")	2 HR CONC. FLOOR OR WALL	C–AJ–1001
UNINSUL STEEL (30") COPPER (4") CONDUIT (6")	4 HR CONC. OR CONC BLOCK FLOOR OR WALL	C–AJ–1044
NOTE: ALL FIRE RATED WALL PENETRATIONS MAY NOT APPLY; REFER TO ARCHITECT DRAWINGS FOR FIRE RATED WALL TYPES.		

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