

PANEL: "R"																									
VOLTS/PHASE/WIRE:		PANEL SIZE & TYPE:		MAIN SIZE AND TYPE:		FED FROM:		CABINET:		LOCATION:		NOTES:													
120/208V, 3 PH 4 WIRE		22" W x 6" D, BOLT-ON		600 AMPERE MAIN LUGS		RECESSED		FUTURE RESTAURANT 170																	
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR																									
AIC RATING: 22,000																									
NO	OCP	AMP	POLE	BKR	LOAD (KVA)	PHASE LOAD			DESCRIPTION	LOAD (KVA)	CO	PWR	LTG	BKR	OCP	AMP	NO								
						A	B	C																	
1	50	2	0.0	7.0	0.0				FC-12 STRIP HEAT	3.5	0.7						2	15	2						
3	--	--	--	--	--				FC-13R	0.0	1.5	0.0					2	15	2						
5	15	2	0.0	1.5	0.0				FC-12R	0.0	7.0	0.0					2	50	6						
7	--	--	--	--	--				FC-13R STRIP HEAT	0.0	7.0	0.0					2	50	8						
9	50	2	0.0	7.3	0.0				HP-12R	0.0	7.3	0.0					2	50	10						
11	--	--	--	--	--				HP-13R	0.0	7.3	0.0					2	50	10						
13	20	1	GF	0.0	1.6	0.0			ICE MACHINE	1.6	2.0						2	30	14						
15	20	1	GF	0.0	0.5	0.0			EVAP FAN & LIGHTS		0.5	2.0					2	30	16						
17	40	3	GF	0.0	12.6	0.0			DISHWASHER	0.0	5.0	0.0	GF	2			30	18							
19	--	--	--	--	--				DISHWASHER CONTROLS	4.2	2.5						2	15	22						
21	--	--	--	--	--				FC-1R	0.0	0.8	0.0					2	15	22						
23	20	1	GF	0.0	0.4	0.0			DISHWASHER EXHAUST HOOD	0.6	3.5						2	50	26						
25	20	1	ST	0.0	0.6	0.0			RANGE VULCAN	0.5	3.5						2	50	28						
27	20	1	ST	0.0	0.9	0.0			CONVECTION OVEN	0.9	0.7						1	20	30						
29	20	1	ST	0.0	0.4	0.0			RANGE	0.4	0.7						1	20	32						
31	20	1	ST	0.0	0.2	0.0			TILTING SKILLET		0.2	2.6					2	40	34						
33	20	1	ST	0.0	0.9	0.0			ICOMBI STEAMER			0.9	2.6				2	40	34						
35	20	1	GF	0.0	1.2	0.0			FRONT LINE PANTRY FRIDGE	1.2	0.6						1	20	48						
37	25	1	GF	0.0	2.0	0.0			HOOD LIGHTS	0.0	0.8	0.0					1	20	50						
39	20	1	GF	0.0	0.0	1.3			EXTERIOR CO		1.3	0.4					1	20	40						
41	20	1	GF	0.0	0.7	0.0			LOUNGE CO/USB		0.7	0.4					1	20	42						
43	20	1	GF	0.0	0.4	0.0			CO BAR	0.4	0.2						1	20	44						
45	20	1	GF	0.0	0.0	1.1			CO WAITING HALL AND ADA...		1.1	0.9					1	20	46						
47	20	1	GF	0.0	1.2	0.0			FRONT LINE PANTRY FRIDGE	1.2	0.6						1	20	48						
49	20	1	GF	0.0	1.2	0.0			FRONT LINE PANTRY FRIDGE	1.2	0.6						1	20	50						
51	20	1	GF	0.0	0.4	0.0			COMM	0.4	1.2						1	20	52						
53	20	1	GF	0.0	1.5	0.0			LIFT		1.5	1.5					2	20	54						
55	20	1	GF	0.0	0.5	0.0			WALK-IN FRIDGE LTG	0.5	1.5						1	20	56						
57	20	2	GF	0.0	0.5	0.0			WALK-IN FREEZER COILS		0.3	0.5					1	20	58						
59	--	--	--	--	--				WALK-IN FREEZER CONTROLS	0.0	0.5	0.0					1	20	58						
61	20	2	GF	0.0	3.0	0.0			WALK-IN FRIDGE CONDENSOR	1.5	0.5						1	20	60						
63	--	--	--	--	--				CO RECEIVING AREA	1.1	0.0	0.0					1	20	60						
65	20	1	GF	0.0	0.0	0.0			CO PREP AREA	0.5	0.0	0.0					1	20	62						
67	20	1	GF	0.0	0.0	0.0			ELECTRIC HEATER	0.0	4.0	0.0					3	20	64						
69	20	1	GF	0.0	0.0	0.0			LIGHTING RESTAURANT 170	0.9	1.3						1	20	66						
71	20	1	GF	0.0	0.0	0.0			LTG RESTAURANT 170	0.9	1.3						1	20	70						
73	20	1	GF	0.0	0.0	0.0			HOOD LIGHTS	0.0	25.1	0.0					3	100	72						
75	30	3	GF	0.0	5.6	0.0			DH-1	0.0	8.4						0.6	8.4							
77	--	--	--	--	--				EF-1R		1.9	8.4						--	--	74					
79	--	--	--	--	--				EF-2R		0.0	0.5	0.0				1	20	78						
81	20	1	GF	0.0	0.0	1.9			CO MECH RM	0.5	0.0	0.0					1	20	80						
83	20	1	GF	0.0	0.0	0.5			CO BAR UNDERCOUNTER	1.9	1.9						1	20	82						
85	20	1	GF	0.0	0.0	0.5			CO BAR	0.5	1.0						0.5	1.0							
87	20	1	GF	0.0	0.0	0.0			CO BAR											86					
89	20	1	GF	0.0	0.0	0.0			SPARE		0.0	0.4						0.0	0.4						
91	20	1	GF	0.0	0.0	0.7			CO RESTAURANT	0.4	0.0	0.0					1	20	88						
93	--	--	--	--	--				CO RESTAURANT	0.4	0.0	0.0					1	20	90						
95	--	--	--	--	--				CO	0.7										92					
97	--	--	--	--	--				SPACE	0.0	0.0	0.0					1	--	--	94					
99	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	96					
101	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	98					
103	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	100					
105	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	102					
107	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	104					
109	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	106					
111	20	1	GF	0.0	0.0	0.0			SPACE	0.0	0.0	0.0					1	--	--	108					
TOTALS:									CONNECTED KVA PER PHASE	48	81	47					CONNECTED TOTAL KVA =	146							
									CONNECTED AMPS PER PHASE	404	423	392					AVERAGE CONNECTED AMPS PER PHASE =	405							
NEC DIVERSIFIED LOAD CALCULATIONS																									
LIGHTING & CONTINUOUS LOADS: 1.0 KVA @ 125% = 1.2 KVA														100% CONNECTED LOAD PLUS 25%						DIVERSIFIED TOTAL KVA = 149					
RECEPTACLES: 16.1 KVA @ 81% = 13.0 KVA														FIRST 10KVA @ 100%, REMAINDER @ 50%						AVERAGE AMPS PER PHASE = 415					
ALL OTHER LOADS @ 100%: 132.6 KVA														MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC											
BKR: GF=GF, GF3=30mA GF3I CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AF, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GF3I																									

INTERIOR LIGHTING FIXTURE SCHEDULE													
GENERAL NOTES													
<p>1. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.</p> <p>2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.</p> <p>3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.</p> <p>4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.</p> <p>5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.</p> <p>6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.</p> <p>7. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.</p>													
ID	DESCRIPTION	DELIVERED DIRECT LUMENS	COLOR TEMP	CRI	TYPE	VOLTAGE	WATTS	MANUFACTURER (CATALOG SERIES)					
GS-4	DESCRIPTION: RESTAURANT 2X4 FLAT PANEL MOUNTING: RECESSED FINISH: SCBA OPTICS: NONE EM: NONE	5,000	3500K	80	LED (0-10V DIMMING)	120/277V	45	METALUX 24P4735 HE WILLIAMS LP-2-LL-50-8-35 LITHONIA CPX 2X4 5000LM 35K M2 COLUMBIA CFP24-4135-HE					
ES-1	DESCRIPTION: EXIT SIGN, EDGE LIT, SINGLE SIDED MOUNTING: CEILING, WALL FINISH: SCBA OPTICS: NONE EM: BATTERY		GREEN		LED	120/277V	5	ISOLITE (JEL) EVENLITE (SOV) EMERGENSEE (SEEXLRN)					
TH-7	DESCRIPTION: RESTAURANT TRACK LIGHT MOUNTING: FINISH: SCBA EM: NONE	1,800	3500K	80	LED	120V	20	JUNO T238L					
TX-1	DESCRIPTION: TAPE LIGHT MOUNTING: SURFACE FINISH: SCBA EM: NONE	400	3000K	80	LED	120V	4	LUMINI (MK-XX-72HO-30K-F-CB-WHE-1)					
TX-4	DESCRIPTION: RESTAURANT BAR PENDANT MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
TX-5	DESCRIPTION: RESTAURANT 6" SQUARE DOWNLIGHT MOUNTING: RECESSED, CEILING FINISH: SCBA OPTICS: MEDIUM WIDE BEAM, CLEAR REFLECTOR, MATTE DIFFUSE EM: NONE	2,000	3500K	80	LED (0-10V DIMMING) 1%	120/277V	20	LITHONIA LDMSO-35-20-L56-AR-LD-MVOLT-G210 HALO PRS6-FS12-D010 PRESCOLITE LTR-6SOD-H-ML-DM1-LTR-6SOD-T-SL-35-8-MD-SS HE WILLIAMS 6DS-L20835-DIM1-UNV-RM-OF-CS-A-F1					
TX-6	DESCRIPTION: RESTAURANT HEAT LAMP MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
TX-7	DESCRIPTION: RESTAURANT LOBBY PENDANT MOUNTING: PENDANT EM: NONE	2,000	3000K	80	LED (0-10V DIMMING) 1%	120/277V	20	OWNER FURNISHED, CONTRACTOR INSTALLED					
WB-2	DESCRIPTION: RESTAURANT VANITY MOUNTING: FINISH: SCBA EM: NONE	1,500	3000K	80	LED	120V	20	OXYGEN 3-571-24-120V-3500K-15					

EQUIPMENT SCHEDULE																										
EQUIPMENT SCHEDULE KEY																										
NOTES:																										
GENERAL NOTES:																										
<p>1. NEMA 3R</p> <p>2. TOGGLE SWITCH W/ THERMAL OVERLOAD.</p> <p>3. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP.</p> <p>4. CONTRACTOR TO PERFORM FINAL CONNECTION TO LINE VOLTAGE THERMOSTATS.</p> <p>5. TOGGLE SWITCH W/BACNET INTERFACE.</p> <p>6. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH.</p> <p>7. PROVIDE SWITCH WITH BACNET MS/TP CAPABILITY.</p> <p>8. PROVIDE LABEL ON DISCONNECT "DISCONNECT OUTDOOR UNIT PRIOR TO INDOOR."</p> <p>9. LINE VOLTAGE THERMOSTAT ON WALL.</p> <p>10. PROVIDE EXPLOSION PROOF DEVICES AND WIRING METHODS.</p> <p>11. PROVIDE DUAL-REDUNDANT 100% RATED VFD'S FOR AIR HANDLER.</p> <p>12. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL.</p>																										
<p>1. WHERE DISCONNECTS, STARTERS, OR VFCs ARE BEING PROVIDED BY ELECTRICAL CONTRACTOR, LOCATE EQUIPMENT IN ACCESSIBLE LOCATION, SUCH THAT IT IS WITHIN SITE OF THE MECHANICAL EQUIPMENT IT IS SERVING, AND COMPLIES WITH N.E.C. REQUIRED CLEARANCES.</p>																										
MARK	QTY	ITEM DESCRIPTION	HP	KW	MCA	FLA	VOLT	PH	Hz	WIRE AND CONDUIT SIZE	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	SIZES	SELECTOR SWITCH	PILOT LAMP	NORMALLY OPEN CONTACT	NORMALLY CLOSED CONTACT	PHASE FAILURE RELAY	NOTES	MARK
CUH	1	ELECTRIC HEATER	-	-	-	11.1	208	3	60	3 #12, 12 GR 0.75" CND	E	20/3 CB	R	E	TOGGLE SWITCH	R	Q	-	-	-	-	-	-	-	-	CUH
DH-1	1	DUCT HEATER	-	-	-	0.5	120	1	60	2 #12, 12 GR 0.75" CND	E	15/1 CB	R	E	TOGGLE SWITCH	R	Q	-	-	-	-	-	-	-	-	DH-1
EF-1R	1	EXHAUST FAN	-	-	-	15.5	208	3	60	3 #10, 10 GR 0.75" CND	E	30/3 CB	R	E	30A/3P FRN-25	R	Q	-	-	-	-	-	-	-	-	EF-1R
EF-2R	1	EXHAUST FAN	1/3	-	-	7.2	120	1	60	2 #12, 12 GR 0.75" CND	E	20/1 CB	R	E	TOGGLE SWITCH	R	Q	-	-	-	-	-	-	-	-	EF-2R
EF-R	3	EXHAUST FAN	-	-	-	0.5	120	1	60	2 #12, 12 GR 0.75" CND	E	15/1 CB	R	E	TOGGLE SWITCH	R	Q	-	-	-	-	-	-	-	-	EF-R
FC-1R	1	FAN COIL UNIT	-	-	-	4	208	1	60	2 #12, 12 GR 0.75" CND	E	15/2 CB	R	E	30A/2P FRN-10	R	Q	-	-	-	-	-	-	-	-	FC-1R
FC-1RH	1	FAN COIL UNIT	-	-	-	36	208	1	60	2 #6, #10 GR 1" CND	E	50/2 CB</														