

DATE: 08/07/2023 REVISED DATE: 08/30/2023

=2.0

BRANCH CIRCUIT PANELBOARD SCHEDULE BREAKERS USED SPARE TOTAL MOUNTING REMARKS

1-POLE 2-POLE 3-POLE

SURFACE

NOTES:

DESIGNATION

(Building)

1. ALL PANELBOARDS SHALL BE PROVIDED WITH AN ENGRAVED NAMEPLATE ON THE DOOR INDICATING THE PANELBOARD DESIGNATION, VOLTAGE, RATING OF MCB OR MAIN LUGS AND SOURCE OF SUPPLY. ENGRAVED PLATE SHALL BE AS CALLED FOR IN THE SPECIFICATIONS.

2-POLE

UNLESS OTHERWISE SPECIFIED, E.C. SHALL ACQUIRE ALL

BREAKER COUNTS FROM PANEL SCHEDULES. (TYPICAL)

3-POLE

2. ALL PANELBOARDS SHALL BE PROVIDED WITH A TYPED (HAND WRITTEN IS NOT ALLOWED) CIRCUIT DIRECTORY INDICATING THE LOAD FED BY EACH CIRCUIT BREAKER AND ITS LOCATION IN THE BUILDING.

1-POLE

- 3. ALL PANELBOARDS SHALL BE PROVIDED WITH FULL SIZE EQUIPMENT GROUND AND NEUTRAL BUSSES ON EACH SIDE OF THE ENCLOSURE SO AS TO PROVIDE A SEPARATE EQUIPMENT GROUND AND NEUTRAL TERMINAL FOR EACH BRANCH
- 4. SPACES SHALL BE PROVIDED WITH ALL REQUIRED BUSSING, SUPPORTS, CONNECTORS, ETC.. NECESSARY FOR FUTURE INSTALLATION OF CIRCUIT BREAKERS.
- 5. FLUSH MOUNTED PANELBOARDS SHALL BE PROVIDED WITH FIVE (5) EMPTY 1" EMT CONDUITS INSTALLED UP TO ABOVE ACCESSIBLE CEILING FOR FUTURE USE.

FEEDER & CONDUIT

3#600KCMIL + 1#1/0 GND. IN 3-1/2" C

6. ALL PANELBOARDS SHALL HAVE HINGED "DOOR-IN-DOOR" TYPE COVERS.

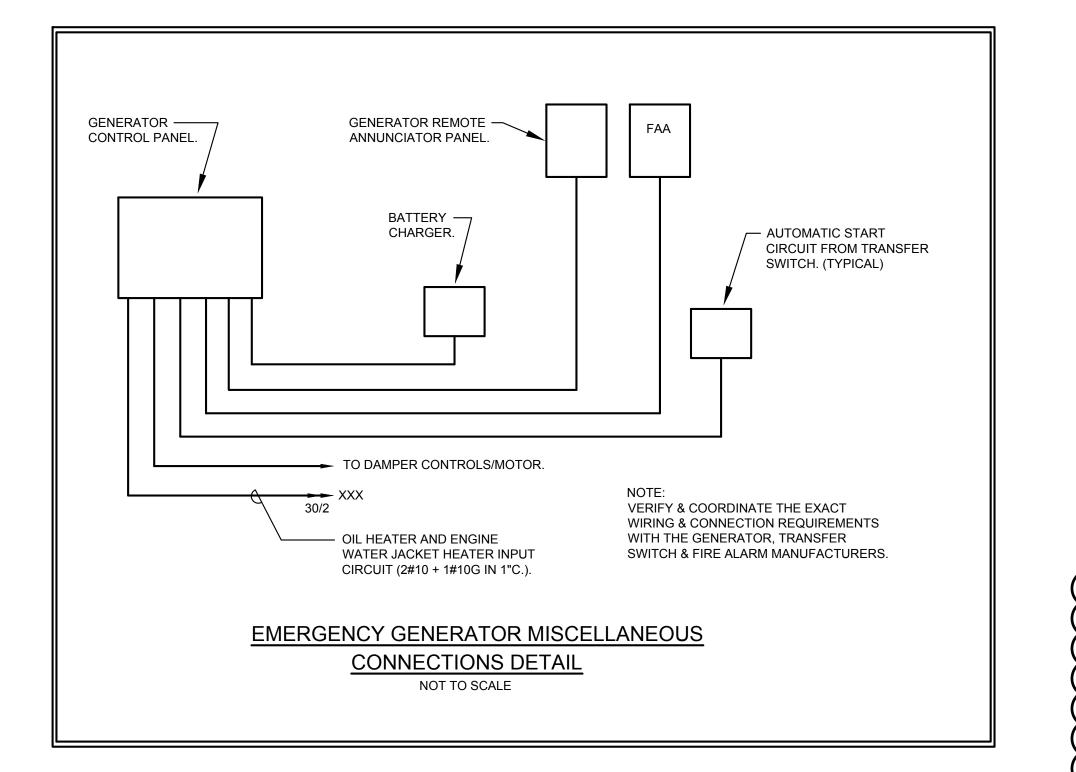
LOCATION VOLTAGE

120/208

SEE FLR.

PLANS

7. REFER TO THE SPECIFICATIONS FOR ALL OTHER PANELBOARD REQUIREMENTS.



OF: 3#600kcmil IN 4" C. TO NEW

UTILITY C/T CABINET & METER SOCKET. FIELD VERIFY EXACT

REQT'S. WITH UTILITY CO.

UTILITY COMPANY ----

RISER POLE.

GRADE

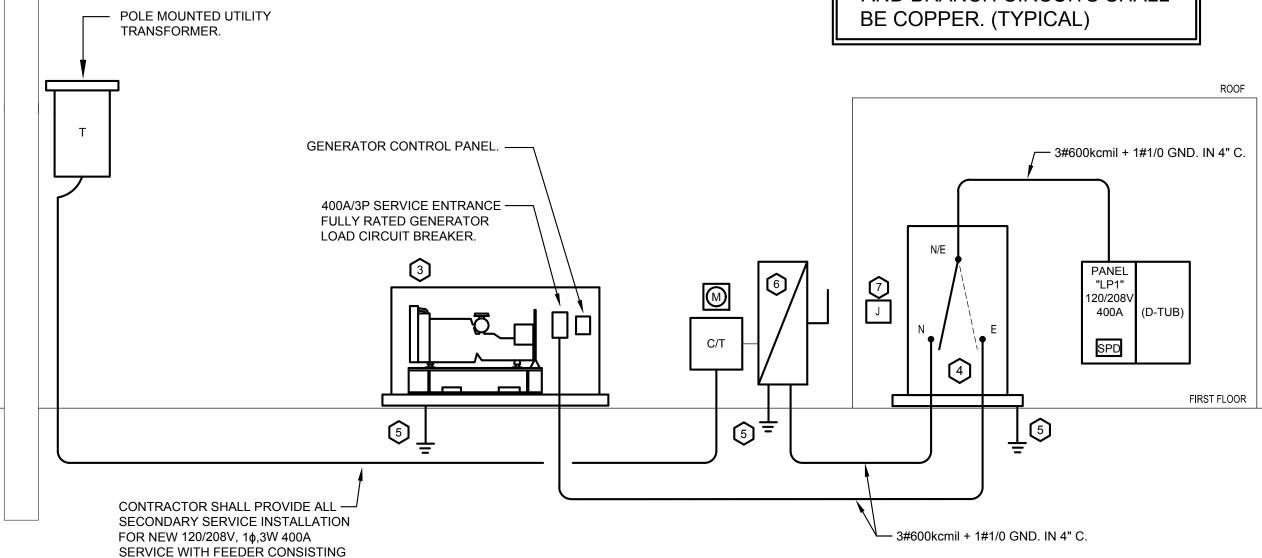
(PANEL / SWITCHBOARD / SERVICE) FEEDER SIZING TYPE (XHHW) COPPER **AMPERES** POLES CONDUCTORS 30A 4#10 + 1#8 GND. IN 3/4" CONDUIT 60A 3#4 + 1#8 GND. IN 1" CONDUIT 2 60A 4#4 + 1#8 GND. IN 1-1/4" CONDUIT 100A 3#1 + 1#6 GND. IN 1-1/4" CONDUIT 100A 4#1 + 1#6 GND. IN 1-1/2" CONDUIT 125A, 150A 3#1/0 + 1#6 GND. IN 1-1/2" CONDUIT 125A, 150A 4#1/0 + 1#6 GND. IN 2" CONDUIT 200A 3#3/0 + 1#4 GND. IN 2" CONDUIT 200A 4#3/0 + 1#4 GND. IN 2" CONDUIT 225A 4#4/0 + 1#2 GND. IN 2-1/2" CONDUIT 300A 4#350kcmil + 1#2 GND. IN 3" CONDUIT 400A 4#600kcmil + 1#1/0 GND. IN 3-1/2" CONDUIT 2 SETS OF: (4#350kcmil + 1#2 GND.) IN TWO (2) 3" CONDUITS 600A 2 SETS OF: (4#600kcmil + 1#1/0 GND.) IN TWO (2) 3-1/2" CONDUITS 800A 3 SETS OF: (4#400kcmil + 1#1/0 GND.) IN THREE (3) 3" CONDUITS 1000A

AMP / POLE PANEL / SERVICE	POLES	TYPE (XHHW) COPPER CONDUCTORS
15A, 20A	1 (or) 2	2#12 + 1#12 GND. IN 3/4" CONDUIT
15A, 20A	3	3#12 + 1#12 GND. IN 3/4" CONDUIT
25A, 30A	1 (or) 2	2#10 + 1#10 GND. IN 3/4" CONDUIT
25A, 30A	3	3#10 + 1#10 GND. IN 3/4" CONDUIT
35A, 40A	1 (or) 2	2#8 + 1#10 GND. IN 3/4" CONDUIT
35A, 40A	3	3#8 + 1#10 GND. IN 3/4" CONDUIT
45A, 50A, 55A	1 (or) 2	2#6 + 1#10 GND. IN 3/4" CONDUIT
45A, 50A, 55A	3	3#6 + 1#10 GND. IN 3/4" CONDUIT
60A	2	2#4 + 1#10 GND. IN 1" CONDUIT
60A	3	3#4 + 1#10 GND. IN 1" CONDUIT
70A	3	3#4 + 1#8 GND. IN 1" CONDUIT
80A	3	3#3 + 1#8 GND. IN 1-1/4" CONDUIT
90A	3	3#2 + 1#8 GND. IN 1-1/4" CONDUIT
100A, 110A	3	3#1 + 1#6 GND. IN 1-1/4" CONDUIT
125A, 150A	3	3#1/0 + 1#6 GND. IN 1-1/2" CONDUIT
175A	3	3#2/0 + 1#6 GND. IN 2" CONDUIT
200A	3	3#3/0 + 1#4 GND. IN 2" CONDUIT

(EQUIPMENT) SIZING CIRCUIT

TYPICAL NOTE:

ALL NEW ELECTRICAL EQUIPMENT BUSSING, FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER. (TYPICAL)



ELECTRICAL ONE-LINE DIAGRAM
(NEW WORK)

POWER ONE-LINE NOTES:

- NEW UTILITY COMPANY TRANSFORMER NOTES:

 a. TRANSFORMER FURNISHED AND INSTALLED BY UTILITY COMPANY.
 - b. (NOT USED)
 - c. PRIMARY CABLE AND CONNECTIONS BY UTILITY COMPANY. d. SECONDARY CABLE & CONNECTIONS AT TRANSFORMER BY UTILITY COMPANY.

65,000 A.I.C. DOUBLE-TUB. PROVIDE WITH SURGE PROTECTION

DEVICE (SEE SPD NOTES ON THIS DRAWING).

- e. (NOT USED) f. (NOT USED)
- g. E.C. SHALL PROVIDE ALL LABOR & MATERIAL REQUIRED BY "RI ENERGY", FOR UTILITY COMPANY METERING.
- TYPICAL UNDERGROUND SECONDARY ELECTRICAL SERVICE LATERAL. COORDINATE WITH LOCAL ELECTRICAL UTILITY COMPANY. CONTRACTOR TO PROVIDE AND INSTALL ALL GEAR, CONDUIT AND CONDUCTORS. ELECTRICAL UTILITY COMPANY WILL FURNISH AND INSTALL PRIMARY CONDUCTORS AND TRANSFORMERS. (ELECTRICAL CONTRACTOR SHALL QUALIFY HIS/HER RESPONSIBILITIES WITH REGARD TO THIS IN HIS/HER INITIAL BID FOR ALL WORK RELATED TO THE PROJECT.) SEE POWER ONE-LINE DIAGRAM DRAWINGS FOR WIRE & CONDUIT SIZES.
- DIESEL-FIRED, ENGINE DRIVEN 100kw @120/208VOLT, 1-PHASE EMERGENCY GENERATOR (AS MANUFACTURED BY CATERPILLAR, KOHLER OR CUMMINS) IN MANUFACTURERS LEVEL 2 SOUND ATTENUATED WEATHERPROOF ENCLOSURE WITH A DBA RATING OF 75 AT 23'-0". PROVIDE REMOTE GENERATOR ANNUNCIATOR PANEL AT LOCATION DETERMINED BY THE FIRE DEPARTMENT & OWNER. PROVIDE GROUNDING AS REQUIRED PER NEC. THE EXACT LOCATION SHALL BE COORDINATED WITH THE BUILDING OWNER. UNIT SHALL BE TESTED TO MAXIMUM LOAD BEFORE DELIVERY TO THE SITE IN AN ISO 9001 CERTIFIED FACILITY. UNIT SHALL HAVE A FUEL EFFICIENCY, DESIGNED TO MEET EPA STATIONARY EMERGENCY (TIER 3) EMISSIONS STANDARDS. SEISMIC CERTIFICATION SHALL BE REQUIRED. PROVIDE WITH EMCP 4.2 CONTROL PANEL, WITH A USER-FRIENDLY INTERFACE. PROVIDE A 24-HOUR BASE FUEL TANK. PROVIDE REINFORCED CONCRETE PAD.
- 400A/2-POLE AUTOMATIC TRANSFER SWITCH SHALL BE EQUAL TO ASCO SERIES 300 SE. PROVIDE GROUNDING AS REQUIRED PER NEC.
- GROUND PER NATIONAL ELECTRICAL CODE, ARTICLE 250. (TYPICAL)
- 6 400AF/400AT/2P/NEMA-3R FUSED DISCONNECT SWITCH, "SERVICE ENTRANCE RATED".
- PROVIDE (2) 1-1/2" RIGID METAL CONDUITS FOR CONTROL WIRING BETWEEN THE J-BOX, AUTOMATIC TRANSFER SWITCH AND GENERATOR REMOTE ANNUNCIATOR PANEL.

SHORT CIRCUIT ANALYSIS NOTES:

THE E.C. SHALL PROVIDE A SHORT CIRCUIT ANALYSIS. REFER TO SPECIFICATIONS SECTION 26 00 00, "2.26 SHORT CIRCUIT/COORDINATION STUDY AND ARC FLASH RICK ASSESSMENT" FOR THE SCOPE OF WORK. THE WORK WILL BE PERFORMED BASED ON A DESIGN/BUILD APPROACH IN WHICH THE ELECTRICAL SUB-CONTRACTOR PROVIDES THE ENGINEERING NEEDED TO SATISFY PERFORMANCE CRITERIA AND OTHER REQUIREMENTS LISTED HEREIN. THE CRITERIA AND REQUIREMENTS ARE MEANT TO ESTABLISH THE GENERAL INTENT AND DO NOT ALWAYS GIVE SPECIFIC SIZES AND TYPES. THIS PROPOSAL MUST THEREFORE INCLUDE BOTH SYSTEM DESIGN AND ENGINEERING SERVICES.

SURGE PROTECTION DEVICE NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE SURGE PROTECTION DEVICES FOR ALL PANELBOARDS FOR THIS PROJECT.

2. PANELBOARDS SHALL BE PROVIDED WITH SIEMENS SURGE PROTECTIVE DEVICE MODEL #TPS3 11-15 FOR 208Y/120VOLT, 3-PHASE 4-WIRE INSTALLATION.

3. PANELBOARDS SHALL BE PROVIDED WITH SIEMENS SURGE PROTECTIVE DEVICE MODEL #TPS3 11-20 FOR 480Y/277VOLT, 3-PHASE 4-WIRE INSTALLATION.

4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH SURGE PROTECTIVE DEVICE MANUFACTURER FOR INSTALLATION & CONNECTION REQUIREMENTS PRIOR TO INSTALLATION.

COORDINATION NOTES:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL DISTRIBUTION PANELBOARDS, BRANCH PANELBOARDS, LOADCENTERS, DISCONNECT SWITCHES, METERING EQUIPMENT, ACCESSORIES, ETC NEEDED FOR A COMPLETE INSTALLATION WITH BRIAN KELLEY OF SIEMENS PRIOR TO BID. DETAILS, SIZES, NOTATIONS SHOWN ON ALL DRAWINGS ARE SUBJECT TO REVIEW AND COORDINATION WITH SIEMENS.

CONTACT INFORMATION FOR SIEMENS IS AS FOLLOWS: SIEMENS - BRIAN KELLEY

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SHEET CONTENTS:

ELECTRICAL SCHEDULES & DETAILS

PROJECT # 4222

DATE: 08/07/2023 REVISED DATE: 08/30/2023

							ME	CHANI	CAL E	QUIPMENT ELECTF	RICA	L C	NNC	ECT	TION SCHEDULE	
XXX ##	DESCRPITION	LOCATION	EQU VOLTS	1	CHARAG			CIRCUIT	CIRCUIT BREAKER (HACR TYPE)	FEEDER & CONDUIT		CONNEC			MANUAL MOTOR CONTROLLER	REMARKS
ITEM No. FC-1	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-2	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-3	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5	LP1/ 43,45	15/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-4	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-5	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-6	FAN COIL UNIT	(SEE PLANS)	208	1	60	_	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-7	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	_	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-8	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	_	0.5	LP1/ 69,71	15/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-9	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	_	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-10	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60		0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	_	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-11	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60		0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	_	_	_	_	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	
	(INDOOR) FAN COIL UNIT	,		'		-					_	_			SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-12	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT		_			SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-13	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	-	0.5	LP1/ 73,75	15/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-		SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-14	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-15	(INDOOR) FAN COIL UNIT	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
FC-16	(INDOOR)	(SEE PLANS)	208	1	60	-	0.5			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-17	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5	- LP1/ 77,79 15/2P		2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-18	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.5		15/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-19	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.21			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-20	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	0.21			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
RLD-#	REFRIGERANT LEAK DETECTION	(SEE PLANS)	120	1	60	-	-			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	REFER TO FLOOR PLANS FOR LOCATIONS AND EXACT QUANTITIES OF DETECTORS.
CU-1	HEAT PUMP (OUTDOOR)	(SEE PLANS)	208	1	60	1	47.0	LP1/44,46	50A/2P	2#6 + 1#10 GND. IN 1" CONDUIT	60	50	3	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	SEE BELOW
CU-2	HEAT PUMP (OUTDOOR)	(SEE PLANS)	208	1	60	1	47.0	LP1/68,70	50A/2P	2#6 + 1#10 GND. IN 1" CONDUIT	60	50	3	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	SEE BELOW
ERV-1	ENERGY RECOVERY UNIT	(SEE PLANS)	208	1	60	1	5.2	LP/47,49	15A/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	1	-	-	1	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
BC-1	BRANCH CONTROLLER	(SEE PLANS)	208	1	60	-	1.0	LP1/50,52 15A/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	1	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW	
BC-2	BRANCH CONTROLLER	(SEE PLANS)	208	1	60	1	1.0		454/00	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
BC-3	BRANCH CONTROLLER	(SEE PLANS)	208	1	60	ı	1.0		15A/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
BC-4	BRANCH CONTROLLER	(SEE PLANS)	208	1	60	-	1.0			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
FC-21	FAN COIL UNIT (INDOOR)	(SEE PLANS)	208	1	60	-	1.0			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
CU-3	HEAT PUMP (OUTDOOR)	(SEE PLANS)	208	1	60	-	15.0	LP1/51,53	15A/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	30	15	2	3R	PROVIDE "WP" DISCONNECT SWITCH WITH FUSING AS INDICATED.	SEE BELOW
EWH-1	ELECTRIC WALL HEATER	(SEE PLANS)	208	1	60	(2.0)	10.0	LP1/54,56	15A/2P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
EWH-2	ELECTRIC WALL HEATER	(SEE PLANS)	120	1	60	(1.5)	12.9	LP1/55	20A/1P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERRIDES.	SEE BELOW
GUH-1	GAS UNIT HEATER	(SEE PLANS)	120	1	60	0.6	2.4			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	PROVIDE MOTOR RATED TOGGLE	SEE BELOW
GUH-2	GAS UNIT	(SEE PLANS)	120	1	60	0.6	2.4	LP1/57	15A/1P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERBIDES	SEE BELOW
GUH-3	HEATER GAS UNIT	(SEE PLANS)	120	1	60	0.6	2.4			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE SWITCH WITH THERMAL OVERBIDES.	SEE BELOW
GUH-4	HEATER GAS UNIT	(SEE PLANS)	120	1	60	0.6	2.4	LP1/58	15A/1P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
EF-1	HEATER EXHAUST FAN	(SEE PLANS)	120	1	60	1/4	5.8	LP1/59	20A/1P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
EF-2	EXHAUST FAN	(SEE PLANS)	120	1	60	3/4	13.8	LP1/60		2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
DF-1	DESTRAT. FAN	(SEE PLANS)	120	1	60	3/4	13.8	LP1/61		2#12 + 1#12 GND. IN 3/4" CONDUIT	-	_	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
DF-1	DESTRAT. FAN	(SEE PLANS)	120	1	60	3/4	13.8	LP1/61		2#12 + 1#12 GND. IN 3/4" CONDUIT	_	_	_	_	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
	MOTORIZED	(SEE PLANS)									_	_	_	_	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	
M-1	DAMPERS ELECTRIC	,	120	1 .	60	3/4	13.8	LP1/63	-	2#12 + 1#12 GND. IN 3/4" CONDUIT					SWITCH WITH THERMAL OVERRIDES. PROVIDE "WP" DISCONNECT SWITCH	SEE BELOW
WH-1	WATER HEATER ELECTRIC	(SEE PLANS)	208	¹	60	-	30.0	LP1 / 65,67	30A/2P	3#10 + 1#10 GND. IN 3/4" CONDUIT.	30	30	2	3R	WITH FUSING AS INDICATED. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
WH-2	WATER HEATER	(SEE PLANS)	120	1	60	-	-	LP1/66	20A/1P	2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES. PROVIDE MOTOR RATED TOGGLE	SEE BELOW
RC-1	RECIRC. PUMP	(SEE PLANS)	120	1	60	-	-			2#12 + 1#12 GND. IN 3/4" CONDUIT	-	-	-	-	SWITCH WITH THERMAL OVERRIDES.	SEE BELOW

NOTES:

- 1. COORDINATE WITH HVAC CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
- 2. COORDINATE WITH PLUMBING CONTRACTOR & DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING EQUIPMENT PRIOR TO INSTALLING ELECTRICAL COMPONENTS.
- 3. ALL DISCONNECTING MEANS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- 4. ALL STARTERS, VFD'S ETC. SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE ALL HVAC EQUIPMENT.
- 5. ALL HVAC CONTROL WIRING SHALL BE PROVIDED BY OTHERS.

	LIGHTING FIXTURE SCHEDULE												
TYPE	MANUFACTURER	CATALOG No.	MOUNTING	L	AMPING		VOLTAGE	DESCRIPTION / REMARKS					
	WARTER ACTORIZED	<i>5/11/1200</i> 110.	MOGIVINO	TYPE	WATTAGE	QUANTITY	V021710E	BEGGINI FIGHT REIMAINIC					
Α	LITHONIA LIGHTING	2VTL2 40L ADPT EZ1 LP80	RECESSED	LED	20/28/39	1	120	2X2 RECESSED LED PANEL					
В	LITHONIA LIGHTING	CPHN 24LM MVOLT 50K	HUNG	LED	174	1	120	HIGH BAY LED FIXTURE					
С	LITHONIA LIGHTING	LDN6-AL02-SWW1-MVOLT-UGZ-HSG	RECESSED	LED	19	1	120	6" RECESSED DOWN LIGHT, SUITABLE FOR WET LOCATIONS.					
D	LITHONIA LIGHTING	WDGE LED P2 35K 80CRI MVOLT	WALL	LED	4	1	120	EXTERIOR 9" WALL MOUNT LED FIXTURE					
E	LITHONIA LIGHTING	WDGE3 LED P2 40K 80CRI MVOLT	WALL	LED	4	1	120	EXTERIOR 18" WALL MOUNT LED FIXTURE					
F	LITHONIA LIGHTING	W 2 17 MVOLT LP835	WALL	LED	4	1	120	24" WALL MOUNT LED FIXTURE					
G	NUTONE LIGHTING	MODEL 763N	RECESSED	LED	1.6	1	120	RECESSED VENTILATION FAN WITH LIGHT, SUITABLE FOR WET LOCATIONS.					

NOTES:

1. PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR ALL FIXTURES.

2. ALL FIXTURE/ACCESSORY COLORS NOT INDICATED ON DRAWING'S SHALL BE SELECTED BY ARCHITECT.
3. PROVIDE LAMPING FOR ALL FIXTURES UNLESS LAMPING IS INCLUDED WITH FIXTURE AS INDICATED IN SCHEDULE.
4. PROVIDE TYPICAL UNIT MOCK UP FOR LIGHT FIXTURE HANGING HEIGHTS AND EXPOSED ELECTRICAL CONDUIT LAYOUT TO BE REVIEWED BY ARCHITECT. 5. FIXTURE TO BE WIRED TO PHOTO CELL AND TIME CLOCK PROVIDED BY G.C.

6. ALL LIGHT FIXTURES WITH INCANDESCENT LAMPING SHALL BE PROVIDED W/ CFL/LED LAMP IN LIEU OF INCANDESCENT LAMP.

7. THE ELECTRICAL CONTRACTOR SHALL VERIFY COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.
8. CC = CUSTOM COLOR TO BE SELECTED BY ARCHITECT (THE ELECTRICAL CONTRACTOR SHALL VERIFY CUSTOM COLOR & FINISH WITH ARCHITECT PRIOR TO SUBMITTAL OF SHOP DRAWINGS.

MANUFACTURER CONTACT:
BOSTON LIGHT SOURCE
LIZ McDONOUGH1-617-788-2400
EMAIL: LMCDONOUGH@bostonlightsource.com

		PANEL	BOARD	SCH	łΕC	DUL	E "LP1" (1 of 2)		
	(Fully Ra	ted)			V	OLTAGE:	120/208			
					AIC	65k				
							LOAD			
DESCRIPTION	%A	⊗ B	breaker	NO.	ø	NO.	breaker	Αø	⊗ B	DESCRIPTION
OVERHEAD DOOR 1	1.00		20/1	1	Α	2	20/1	1.00		OVERHEAD DOOR 2
OVERHEAD DOOR 3		1.00	20/1	3	В	4	20/1		1.00	OVERHEAD DOOR 4
GARAGE REC.	1.20		20/1	5	Α	6	20/1	1.00		FAN SPEED CONTROL
ELECTRIC GFI		0.20	20/1	7	В	8	20/1		1.40	GARAGE REC. 2
RLD.	0.40		20/1	9	Α	10	20/1	1.00		OFFICE 10 REC.
OFFICE 9 REC.		1.00	20/1	11	В	12	20/1		1.20	CORRIDOR REC.
IT PRINT REC.	1.20		20/1	13	Α	14	20/1	0.60		WOMAN LOCKER REC.
MEN LOCKER REC.		0.80	20/1	15	В	16	20/1		1.00	OFFICE 3 REC.
OFFICE 4 REC.	1.00		20/1	17	Α	18	20/1	1.00		OFFICE 5 REC.
OFFICE 6 REC.		1.00	20/1	19	В	20	20/1		1.00	OFFICE 7 REC.
OFFICE 8 REC.	1.00		20/1	21	Α	22	20/1	1.00		OFFICE 1 REC.
OFFICE 2 REC.		1.00	20/1	23	В	24	20/1		1.20	SCADA REC.
METER TEST. REC.	0.60		20/1	25	Α	26	20/1	1.40		CONF. REC
BREAK 1 REC.		1.00	20/1	27	В	28	20/1		0.20	FRIDGE 1.
BREAK 2 REC.	1.00		20/1	29	Α	30	20/1	0.20		FRIDE 2.
BOTTLE FILLING REC.		0.20	20/1	31	В	32	20/1		-	(SPARE BRKR.)
(SPARE BRKR.)	-		20/1	33	Α	34	20/1	-		(SPARE BRKR.)
EXTERIOR LIGHTING		1.00	20/1	35	В	36	20/1		1.00	FC-
LIGHTS 2	1.60		20/1	37	Α	38	20/1	0.60		Mezz Lights
Mezz. 1 Rec.		1.00	20/1	39	В	40	20/1		0.80	Mezz. 2 Rec.
(SPARE BRKR.)	-		20/1	41	Α	42	20/1	-		(SPARE BRKR.)
	9.00	E→	7.80	8.80						

TOTAL (KVA): 33.80 **TOTAL AMP:** 162.50

		PANEL	BOARD	SCH	IEC	DULI	E "LP1" ((2 of 2)				
	VOLTAGE : 120/208											
	BUSSING:	400A		AIC RATING: 65k								
	LOAD								LOAD			
DESCRIPTION	•A.er	⊗ B	breaker	NO.	0	NO.	breaker	Αæ	⊗ B	DESCRIPTION		
FC1 - FC5	0.26		15/2	43	Α	44	50/2	4.88		CU-1		
		0.26	13/2	45	В	46	30,2		4.88			
ERV-1	0.52		15/2	47	Α	48	20/1	-		(SPARE BRKR.)		
LIV I		0.52	13/2	49	В	50	15/2		0.42	BC-1/2/3/4		
FC-21/CU-3	1.56		15/2	51	Α	52	13/2	0.42				
		1.56	13,2	53	В	54	20/1		1.00	EWH-1		
EWH-2	1.50		20/1	55	Α	56	20, 1	1.00				
GUH-1/GUH-2		0.60	15/1	57	В	58	15/1		0.60	GUH-3/GUH-4		
EF-1	0.70		20/1	59	Α	60	20/1	1.70		EF-2		
DF-1		1.70	20/1	61	В	62	20/1		1.70	DF-2		
M-1	0.10		20/1	63	Α	64	20/1	0.20		HVAC RECEPT.		
WH-1		1.95	30/2	65	В	66	20/1		0.20	WH-1 / RC-1		
VVII 1	1.95		30/2	67	Α	68	50/2	4.88		CU-2		
FC-6 - FC-10		0.26	15/2	69	В	70	30,2		4.88			
100 1010	0.26		13/2	71	Α	72	20/1	-		(SPARE BRKR.)		
FC-11 - FC-16		0.32	15/2	73	В	74	20/1		-	(SPARE BRKR.)		
10-11-10-10	0.32		13/2	75	Α	76	20/1	-		(SPARE BRKR.)		
FC-17 - 20		0.26	15/2	77	В	78	20/1		_	(SPARE BRKR.)		
10-17 - 20	0.26		13/2	79	Α	80	20/1	-		(SPARE BRKR.)		
SPARE BRKR.)		_	20/1	81	В	82	20/1		-	(SPARE BRKR.)		
SPARE BRKR.)	-		20/1	83	Α	84	20/1	-		(SPARE BRKR.)		

TOTAL (KVA): 41.62 **TOTAL AMP:** 200.10

PROJECT # 4222

SHEET CONTENTS:

ELECTRICAL

SCHEDULES

DETAILS

DATE: 08/07/2023 REVISED DATE: 08/30/2023