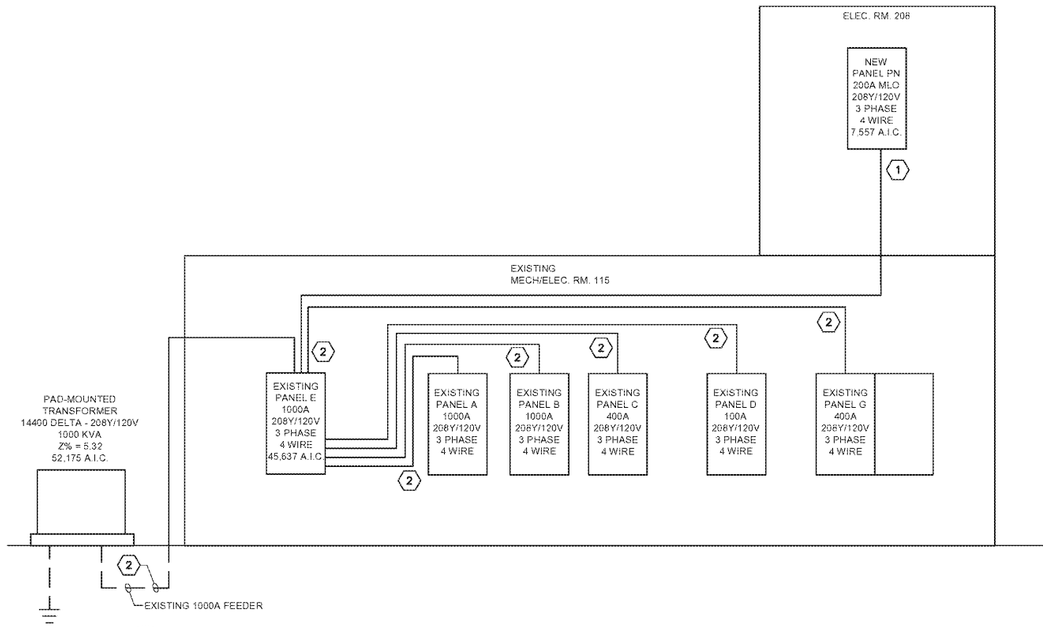

1 E-601 POWER RISER DIAGRAM N.T.S

GENERAL RISER NOTES

1. CONTRACTOR TO MARK ALL EMPTY CONDUITS, AND SLEEVES WITH IDENTIFICATION TAGS LOCATION SERVED FROM.
2. ALL FUSES TO BE UL SERIES RATED WITH SPECIFIC DOWNSTREAM BREAKERS. CONTRACTOR SHALL SUBMIT INFORMATION WITH SHOP DRAWINGS FOR COR'S REVIEW.
3. CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE NEW ELECTRICAL EQUIPMENT IN BUILDING SHALL MAINTAIN WORKING CLEARANCES
4. PROVIDE FAULT CURRENT SIGN ON ALL NEW GEAR PER NEC 110.24
5. MARK ALL PANELS TO INDICATE WHERE THE POWER SUPPLY ORIGINATES PER NEC 408.4(B).
6. ALL PANELS ARE 42 POLES UNLESS NOTED OTHERWISE.
7. ALL FEEDERS TO EXISTING EQUIPMENT SHALL REMAIN AS IS UNLESS NOTED OTHERWISE.

POWER RISER DIAGRAM KEY NOTES

1. PROVIDE NEW 200 AMP FEEDER (4 #4/0, 1#4G -2 1/2" C.) FROM NEW 200 AMP, 3 POLE BREAKER IN PANEL PN.
2. EXISTING CIRCUITS TO REMAIN.

SCHEDULE OF 'PN'

VOLTAGE: 208 / 120 — PHASE: 3 — WIRE: 4
BUS AMPS: 200 A — DEVICE AMPS: 200 A — MLO — NEMA: 1
A.I.C RATING: 10,000 A — MOUNTING: SURFACE

LOCATION DESCRIPTION	LOAD (KVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (KVA)	LOCATION DESCRIPTION
LIGHTING	1.2	A	20/1	1	A	2	20/1	B	0.2	RECEPTACLES
LIGHTING	1.2	A	20/1	3	B	4	20/1	B	1.1	RECEPTACLES
SPARE			20/1	5	C	6	20/1	B	0.7	RECEPTACLES
RECEPTACLES	1.5	B	30/1	7	A	8	20/1			SPARE
RECEPTACLES	1.0	B	20/1	9	B	10	20/1	B	0.7	RECEPTACLES
AHU-1	2.2	H	30/2	11	C	12	20/1	B	0.9	RECEPTACLES
"	2.2	H	"	13	A	14	20/1	B	0.7	RECEPTACLES
AHU-2	2.2	H	30/2	15	B	16	20/1	B	0.7	RECEPTACLES
"	2.2	H	"	17	C	18	20/1	B	1.1	RECEPTACLES
AHU-3	2.2	H	30/2	19	A	20	20/1	B	0.9	RECEPTACLES
"	2.2	H	"	21	B	22	20/1	B	0.7	RECEPTACLES
AHU-4	4.2	H	60/2	23	C	24	20/1			SPARE
"	4.2	H	"	25	A	26	20/1			SPARE
HP-1	1.3	E	20/2	27	B	28	20/1	B	0.8	RECEPTACLES
"	1.3	E	"	29	C	30	20/1			SPARE
HP-2	1.3	E	20/2	31	A	32	20/1			SPARE
"	1.3	E	"	33	B	34	20/1	B	0.8	RECEPTACLES
HP-3	1.3	E	20/2	35	C	36	20/1			SPARE
"	1.3	E	"	37	A	38	20/1	B	0.8	RECEPTACLES
HP-4	1.3	E	30/2	39	B	40	20/1	B	0.9	RECEPTACLES
"	1.3	E	"	41	C	42	20/1			SPARE

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. KVA	Demand KVA	Load Type	DESCRIPTION	Conn. KVA	Demand KVA	
A	Lighting	7.4	3.0	E	Heating	11.6	11.6	
B	Receptacles	7.7	12.4	F	Largest Motor	0.0	0.0	
C	Kitchen Equipment	0.0	0.0	G	Other Motors	0.0	0.0	
D	Air Conditioning	11.1	0.0	H	Other Loads	21.6	21.6	
	Phase A Connected Load	17.4 KVA	Notes:		TOTAL CONNECTED LOAD	50.3 KVA		139.6 AMPS
	Phase B Connected Load	16.3 KVA			TOTAL DEMAND LOAD	48.6 KVA		134.8 AMPS
	Phase C Connected Load	16.4 KVA						

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	LAMP	VOLTAGE	WATTAGE	MOUNTING	NOTES
A	2' BY 4' LAY-IN LED TROFFER	EATON/METALUX	24GR-LD542-F1-UNV-L835-CD1	LED, 3500K	120/277 VAC	34.8	RECESSED	2
AE	2' BY 4' LAY-IN LED TROFFER W/ EMERGENCY BACKUP	EATON/METALUX	24GR-LD542-F1-UNV-L835-EL14W-CD1	LED, 3500K	120/277 VAC	34.8	RECESSED	1,2
A1	2' BY 4' LAY-IN LED TROFFER	EATON/METALUX	24GR-LD548-F1-UNV-L835-CD1	LED, 3500K	120/277 VAC	37.4	RECESSED	2
A1E	2' BY 4' LAY-IN LED TROFFER W/ EMERGENCY BACKUP	EATON/METALUX	24GR-LD548-F1-UNV-L835-EL14W-CD1	LED, 3500K	120/277 VAC	37.4	RECESSED	1,2
B	2' BY 2' LAY-IN LED TROFFER	EATON/METALUX	22GR-LD520-F1-UNV-L835-CD1	LED, 3500K	120/277 VAC	16.1	RECESSED	2
BE	2' BY 2' LAY-IN LED TROFFER WITH EMERGENCY BACKUP	EATON/METALUX	22GR-LD520-F1-25-UNV-L835-EL14W-CD1	LED, 3500K	120/277 VAC	16.2	RECESSED	1,2
CE	4' LED WALL BRACKET	EATON/METALUX	4-BCLED-ED4-20SL-F-UNV-EL14W-L835-CD1	LED, 3500K	120/277 VAC	22	SURFACE / WALL	1,2
X	EXIT SIGN	EATON / SURE-LITES	LPX7	LED	120/277 VAC	1	SURFACE	1,2
F	4' LED LENSED STRIP	EATON/METALUX	48SLED-LDS-87SL-UW-L835-CD1	LED, 3500K	120/277 VAC	31	SURFACE	2
HB	HIGH BAY LED	EATON/METALUX	SSLED-LDS-24-M-UNV-L840-CD2	LED, 4000K	120/277 VAC	224	PENDANT	2
HBE	HIGH BAY LED WITH EMERGENCY BACKUP	EATON/METALUX	SSLED-LDS-24-M-UNV-L840-EL20W	LED, 4000K	120/277 VAC	224	PENDANT	2

EQUIPMENT CONNECTION SCHEDULE

ITEM NO.	EQUIPMENT NO.	EQUIPMENT DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTAGE	PHASE	HP	KW	FLA	MCA	MOCP	CIRCUIT	FEEDER	BREAKER (TRIP/POLE)	DISCONNECT SWITCH SIZE	POLE	FUSE	FEATURES	NOTES
1	AHU-1	AIR HANDLING UNIT	208	1				27.00	30	PN-11,13	2#10&1#10G-1/2"C	30/2	30	2	NF	NEMA 1	
2	AHU-2	AIR HANDLING UNIT	208	1				27.00	30	PN-15,17	2#10&1#10G-1/2"C	30/2	30	2	NF	NEMA 1	
3	AHU-3	AIR HANDLING UNIT	208	1				27.00	30	PN-19,21	2#10&1#10G-1/2"C	30/2	30	2	NF	NEMA 1	
4	AHU-4	AIR HANDLING UNIT	208	1				50.00	60	PN-23,25	2#6&1#10G-3/4"C	60/2	60	2	NF	NEMA 1	
5	HP-1	HEAT PUMP	208	1				15.20	20	PN-27,29	2#12&1#12G-1/2"C	20/2	30	2	20A	NEMA 3R	
6	HP-2	HEAT PUMP	208	1				15.20	20	PN-31,33	2#12&1#12G-1/2"C	20/2	30	2	20A	NEMA 3R	
7	HP-3	HEAT PUMP	208	1				15.20	20	PN-35,37	2#12&1#12G-1/2"C	20/2	30	2	20A	NEMA 3R	
8	HP-4	HEAT PUMP	208	1				29.80	30	PN-39,41	2#10&1#10G-1/2"C	30/2	30	2	30A	NEMA 3R	

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CONSTRUCTION

REV	DATE	DESCRIPTION
A	2017-11-03	10% CONCEPT DESIGN
B	2017-12-22	95% SUBMITTAL
C	2018-02-23	95% SUBMITTAL
0	2018-04-13	FOR CONSTRUCTION
1	2018-06-01	FOR CONSTRUCTION

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ELECTRICAL DETAILS AND SCHEDULES

PROJECT CONTACT:
ROBERT ERNST - DSN 625-3112
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PROJECT	LOCATION	DRAWING	CONTACT

PROJECT No	2017-238
PROJ. OFFICER	J. MORGAN
DESIGNED	R. LESTER
CHECKED	J. MORGAN
DATE	2017-02-23
DRAWING	45 OF 45

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