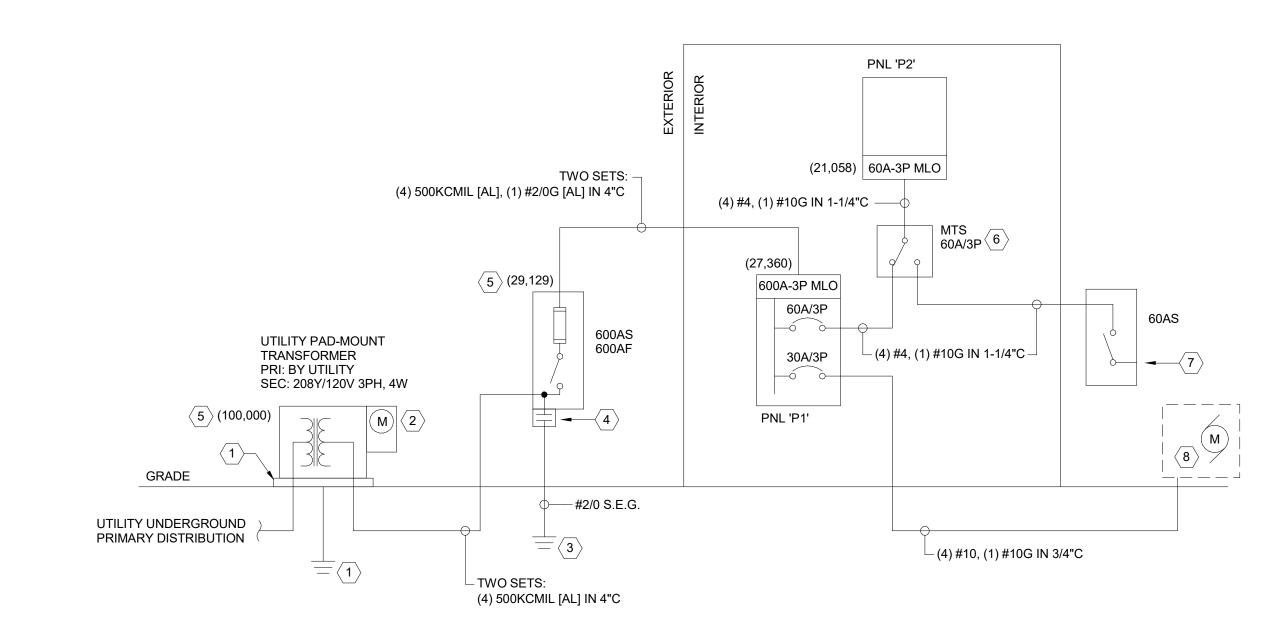
| PANELBOARD P2 SCHEDULE | | | | | | | | AIC RATING: COMMENTS: | | | | 0 TVSS: | N | NEMA: | 1 | | | |
|---|--------------|------|------------------------|-----------------------------|------------------------------|-----------------------|------------------------|--------------------------|------------|-----|--------------------------|-------------|-------------------------------|--------------------------|------------------------------------|-----------------------------|--|--|
| VOLTAGE: 208Y/120V BUS RATING: 60A 3Ф 4W MAIN LUGS ONLY: 60A | | | | | | | LOCATION: MOUNTING: | | | | UTILITY ROOM 118 SURFACE | | | | | | | |
| NOTE | TYPE | LOAD | DESCRIP | | BRANCH | | CIRCUIT E | | | | D | LOAD | TYPE | TON | | | | |
| | | | | C/B | Р | # | Ф | # | C/B | Р | | | | | | | | |
| 1 | E | | RECEP (REFRIG) - EXAM | 20 | 1 | 1 | Α | 2 | 20 | 1 | SPARE | | | | | | | |
| 1 | Е | 1200 | RECEP (FREEZER) - QUA | 20 | 1 | 3 | В | 4 | 20 | 1 | SPARE | | | | | | | |
| 1 | E | 1200 | RECEP (FREEZER) - QUA | 20 | 1 | 5 | С | 6 | 20 | 1 | SPARE | | | | | | | |
| | R | 900 | REC (GENERAL) - OFFIC | 20 | 1 | 7 | Α | 8 | 20 | 1 | SPARE | | | | | | | |
| | L | 389 | LTG - UTIL, STORAGE, C | 20 | 1 | 9 | В | 10 | 20 | 1 | SPARE | | | | | | | |
| | | | SPARE | | 20 | 1 | 11 | С | 12 | 20 | 1 | SPARE | | | | | | |
| | | | SPARE | 20 | 1 | 13 | Α | 14 | 20 | 1 | SPARE | | | | | | | |
| | | | SPARE | | 20 | 1 | 15 | В | 16 | 20 | 1 | SPARE | | | | | | |
| | | | SPARE | | 20 | 1 | 17 | С | 18 | 20 | 1 | SPARE | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| F | R | ı | L XM | M | Н | ı | E | ŀ | | | V | P | PHASE A | CONNECTED = | 1,90 | 0 V | | |
| F 220 | | | L XM 0.45 220.5 | M 430.24 | H 220.51 | 220.: | | ŀ 220 | | | V).57 | P 220.84(C) | | CONNECTED = CONNECTED = | 1,90 1,58 | | | |
| | | | 0.45 220.5 | | 220.51 | 220. | 14(A) | | | | | + | PHASE B | | | 9 V | | |
| |).47 | 220 | 0.45 220.5 | 430.24 | 220.51 | 220.: LOAD | 14(A) | |).56 | 220 | | + | PHASE B PHASE C | CONNECTED = | 1,58 | 9 V. 0 V. | | |
| 220 |).47 | 220 | 0.45 220.5 | 430.24 CONNECTED | 220.51 TOTALS, BY | 220.: LOAD | 14(A) TYPE | 220 |).56 | 220 |).57 | 220.84(C) | PHASE B PHASE C | CONNECTED = | 1,58 1,20 4,68 | 9 V. 0 V. | | |
| 220 |).47 | 220 | 0.45 220.5 | 430.24 CONNECTED | 220.51 TOTALS, BY 0 VA | 220. LOAD 3,40 | 14(A) TYPE 0 VA | 220 |).56 | 220 |).57 | 220.84(C) | PHASE B PHASE C TOTAL (| CONNECTED = CONNECTED = | 1,58 1,20 4,68 | 9 V 0 V 9 V 3 A | | |
| 220 |).47) VA | 389 | 0.45 220.5 | 430.24 CONNECTED 0 VA | 220.51 TOTALS, BY 0 VA | 220.: LOAD 3,40 | 14(A) TYPE 0 VA | 220 |).56 VA | 0 |).57 | 220.84(C) | PHASE B PHASE C TOTAL (| CONNECTED = | 1,58 1,20 4,68 13 4,78 | 9 V/ 0 V/ 9 V/ 3 A | | |



POWER RISER DIAGRAM NOT TO SCALE

| | | | | | E | QUIF | PMEN [®] | T CON | INEC | TION | SCHE | DULE | (ECS |) | | | | | | |
|-----------------|-----------------------------------|-------------------------------|---------------|-----------|------------|-------|-------------------|-------------|-----------|---------------|-----------------------------------|------------|---------------|--------------|--------------------------|----------------------------|------------------|----------------------|----------------------|---------|
| | EQUIPMENT DISCONNECT | | | | CONTROLLER | | | | CIRCUI | ΓING | FIRE ALARM INTERCONNECTION | | | | | | | | | |
| EQUIP. # | DESCRIPTION | LOCATION | HP/kW* | MCA | VOLT | PHASE | LOCATION | RATING | TYPE | NEMA ENCL. | LOCATION | TYPE | NEMA ENCL. | PANEL | CIRCUIT BREAKER | WIRING | FAN SHUT DOWN | RETURN DUCT SMOKE | SUPPLY DUCT SMOKE | REMARKS |
| MECHANICAL EC | UIPMENT - REFER TO ASSOCIATED DI | ISICPLINE DRAWINGS FOR AD | DITIONAL INFO | DRMATION. | | | | | | | | | | | | | | | | |
| DOAS-1 | PACKAGED UNIT | EXTERIOR, GRADE | | 148.2 | 208 | 3 | AU | 200A | NF | 3R | INTEGRAL TO UNIT | | P1-80,82,24 | 150A/3P | (3) #1/0, (1) #6G, 2"C | Х | Х | Х | | |
| EF-1 | EXHAUST FAN | GARAGE | | 2.1 | 120 | 1 | AU | 15A | NF | 1 | INTEGRAL TO UNIT | | P1-24 | 15A/1P | (2) #12, (1) #12G, 3/4"C | | | | | |
| EF-2 | EXHAUST FAN | ROOF | 2 HP | 15.6 | 208 | 1 | AU | 30A | NF | 3R | INTEGRAL TO UNIT | | P1-68,70 | 25A/2P | (2) #10, (1) #10G, 3/4"C | | | | | |
| EDH-1 | ELECTRIC DUCT HEATER | GARAGE | 3.3 KW | | 208 | 1 | AU | 20A | NF | 1 | INTEGRAL TO UNIT | | P1-72,74 | 20A/2P | (2) #12, (1) #12G, 3/4"C | | | | | |
| EH-1 | ELECTRIC UNIT HEATER | UTILITY ROOM 118 | 2.25 KW | | 208 | 1 | AU | 15A | NF | 1 | INTEGRAL TO UNIT | | P1-76,78 | 15A/2P | (2) #12, (1) #12G, 3/4"C | | | | | |
| HP-1 | SPLIT SYSTEM INDDOR UNIT | EXTERIOR, GRADE | | 16 | 208 | 1 | AU | 30A | NF | 3R | INTEGRAL TO UNIT | | P1-71,73 | 25A/2P | (2) #10, (1) #10G, 3/4"C | | | | | |
| AHU-1 | SPLIT SYSTEM OUTDOOR UNIT | MECH ROOM 121 | | 44.7 | 208 | 1 | AU | 60A | NF | 1 | INTEGRAL TO UNIT | | P1-75,77 | 45A/2P | (2) #6, (1) #10G, 1"C | | | | | |
| PLUMBING EQUI | PMENT - REFER TO ASSOCIATED DISIC | CPLINE DRAWINGS FOR ADDIT | TIONAL INFORM | NATION. | | | | | | | | | | | | | | | | |
| CP-1 | HOT WATER RECIRC. PUMP | UTILITY ROOM 118 | 1/6 HP | | 120 | 1 | AU | 15A | NF | 1 | INT | EGRAL TO L | INIT | | | (2) #12, (1) #12G, 3/4"C | | | | |
| CP-2 | HOT WATER RECIRC. PUMP | UTILITY ROOM 118 | 1/6 HP | | 120 | 1 | AU | 15A | NF | 1 | INTEGRAL TO UNIT INTEGRAL TO UNIT | | P1-67 | P1-67 20A/1P | (2) #12, (1) #12G, 3/4"C | | | | | |
| EMV-1 | MIXING VALVE | UTILITY ROOM 118 | .02 KW | | 120 | 1 | AU | 15A | NF | 1 | | | | | (2) #12, (1) #12G, 3/4"C | | | | | |
| GWH-1 | GAS WATER HEATER | UTILITY ROOM 118 | .02 KW | | 120 | 1 | AU | 15A | RECE | PTACLE | INTEGRAL TO UNIT | | P1-69 | 15A/1P | (2) #12, (1) #12G, 3/4"C | | | | | |
| SITE/CIVIL EQUI | PMENT - REFER TO ASSOCIATED DISIC | PLINE DRAWINGS FOR ADDIT | IONAL INFORM | ATION. | | • | <u>'</u> | | | | 1 | | | | | | • | | | |
| SAN | ITARY SEWER GRINDER PUMP | EXTERIOR | 1 HP | | 120 | 1 | INTE | GRAL TO PUI | MP CONTRO | OLLER | INT | EGRAL TO U | INIT | P1-69 | 30A/1P | (2) #10, (1) #10G, 1-1/4"C | | | | 1 |
| | | | | | | 1 | | | | | 1 | | | | 1 | | | | | |

GENERAL NOTES, EQUIPMENT CONNECTION SCHEDULE

1. SCHEDULE IS TO INDICATE CONNECTIONS TO MECHANICAL DEVICES, AUXILIARY DEVICES, AND OTHER SUCH UTILIZATION EQUIPMENT. DISTRIBUTION EQUIPMENT, INCLUDING BUT NOT LIMITED TO PANELBOARDS, TRANSFORMERS, AND STARTERS ARE GENERALLY SHOWN

SPARE CAPACITY =

ON PLANS AND ONE-LINE DIAGRAMS.

2. COORDINATE FINAL EQUIPMENT LOCATIONS WITH APPLICABLE DRAWINGS AND TRADE.

3. ALL FIXTURES TO BE PROVIDED WITH REQUIRED MOUNTING HARDWARE FOR INSTALLATION TYPE SHOWN.

4. NOT ALL REQUIRED CIRCUITING AND WORK IS NECESSARILY SHOWN ON SCHEDULE. PROVIDE ALL WORK AS SHOWN AND AS INDICATED ELSEWHERE. 5. PROVIDE CIRCUITING COMPLETE FROM SOURCE TO EQUIPMENT (LOAD). CIRCUIT SHALL BE PROVIDED TO AND FROM ALL CONTROLLERS, DISCONNECTS, AND AS OTHERWISE INDICATED OR SHOWN.

6. EQUIPMENT SHOWN PER BASIS OF DESIGN. COORDINATE ALL WIRING, OVERCURRENT PROTECTION, DISCONNECTS, CONTROLLERS, AND LOCATIONS WITH ACTUAL INSTALLED EQUIPMENT.

7. CIRCUIT NUMBERS ARE TO INDICATE PIECES OF EQUIPMENT CIRCUITED TOGETHER. PROVIDE CIRCUIT NUMBERING AS REQUIRED TO BALANCE LOADS ACROSS ALL PHASES. 8. NOT ALL DISCONNECT LOCATIONS SHOWN ON PLANS. WHERE NOT SHOWN, INSTALL WITHIN SITE OF EQUIPMENT AND PER ALL NEC REQUIREMENTS FOR DISCONNECT LOCATIONS, INCLUDING DISTANCE FROM EQUIPMENT.

9. "AU" INDICATES AT UNIT. "NF" INDICATES NOT FUSED. "SNAP" INDICATES MOTOR-RATED SNAP ON/OFF SWITCH. "MAN" INDICATES MANUAL MOTOR STARTER WITH AUXILIARY CONTACTS.

10. UNLESS NOTED OTHERWISE, DUCT SMOKE DETECTORS INDICATE FIRE ALARM CONNECTION TO DEVICES PROVIDED BY OTHERS.

11. UNLESS NOTED OTHERWISE, DISCONNECTS AND CONTROLLERS SHALL BE FURNISHED AND INSTALLED BY EC. * HEATING ELEMENT kW VALUE SHOWN IS DERATED VALUE FOR VOLTAGE SPECIFIED.

REMARKS, EQUIPMENT CONNECTION SCHEDULE 1. PUMP PROVIDED WITH ALARM SYSTEM. COORDINATE ALL POWER AND ALARM WIRING WITH EQUIPMENT VENDOR.

GENERAL NOTES POWER RISER DIAGRAM IS DIAGRAMMATIC ONLY, AND IS INTENDED TO ILLUSTRATE SCOPE OF WORK. REFER TO FLOOR PLANS FOR LOCATIONS OF

> NOT ALL REQUIRED INFORMATION IS SHOWN HERE (INCLUDING, BUT NOT LIMITED TO QUANTITY AND TYPE OF CIRCUIT BREAKERS, KAIC RATINGS, BUS RATINGS, ETC.). REFER TO EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION AND EQUIPMENT REQUIREMENTS.

EQUIPMENT, FEEDER RUN LENGTHS, ETC.

UNLESS SPECIFICALLY NOTED OTHERWISE, FEEDER SIZES INDICATED ARE BASED UPON COPPER CONDUCTORS. ALUMINUM CONDUCTORS MAY BE ALLOWED WITH PRIOR OWNER AND AHJ AUTHORIZATION. IF ALUMINUM CONDUCTORS ARE SUBSTITUTED FOR THE COPPER CONDUCTORS INDICATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE FOLLOWING TO THE ENGINEER FOR REVIEW AND APPROVAL: REVISED FEEDER SIZES, VOLTAGE DROP CALCULATIONS, AND REVISED KAIC CALCULATIONS.

PROVIDE GROUNDING FOR ALL TRANSFORMERS PER NEC GROUNDING REQUIREMENTS.

ALL EXTERIOR EQUIPMENT TO PROVIDED IN LOCKABLE NEMA 3R ENCLOSURE.

> KEYED NOTES

UTILITY SERVICE TRANSFORMER FURNISHED BY UTILITY COMPANY. PROVIDE CONCRETE PAD AND GROUNDING PER UTILITY REQUIREMENTS FOR UTILITY-PROVIDED SERVICE TRANSFORMER. COORDINATE WITH SITE CONTRACTOR AND UTILITY

COORDINATE CONDUIT AND WIRING REQUIREMENTS OF METERED TRANSFORMER WITH UTILITY.

PROVIDE SERVICE ENTRANCE GROUNDING PER DETAILS AND NEC REQUIREMENTS; SIZED AS INDICATED. BOND ALL BUILDING SERVICE GROUNDS TOGETHER PER NEC.

PROVIDE TYPE I SURGE ARRESTOR SUITABLE FOR SERVICE ENTRANCE SIZE INDICATED.

VALUE IN PARENTHESIS INDICATES AVAILABLE FAULT CURRENT AT BUS LOCATION. FAULT CURRENT AT UTILITY TRANSFORMER ESTIMATED FOR DESIGN PURPOSES, ONLY. CONFIRM AVAILABLE FAULT CURRENT WITH UTILITY UPON FINALIZED DESIGN AND INFORM ENGINEER IF IFFERENT THAN VALUE

PROVIDE MANUAL TRANSFER SWITCH TO SERVE OPTIONAL STANDBY PANEL.

PROVIDE NEMA 3R, 60A/3P NON-FUSED DISCONNECT FOR CONNECTION TO PORTABLE GENERATOR.

PROVIDE CONNECTION TO SITE LIFT STATION PUMP CONTROLLER.

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