POWER SOURCES

A. NORMAL POWER SHALL BE FED FROM PANEL "XX-1" UNLESS NOTED OTHERWISE, SEE DRAWING EP101 FOR PANEL LOCATION.

B. EMERGENCY LIFE SAFETY BRANCH SHALL BE FED FROM PANEL "XX-ES1" UNLESS NOTED OTHERWISE, SEE DRAWING EP101 FOR PANEL LOCATION.

C. EMERGENCY CRITICAL BRANCH SHALL BE FED FROM PANEL "XX-EC1" UNLESS NOTED OTHERWISE, SEE DRAWING EP101 FOR PANEL LOCATION.

GENERAL ELECTRICAL POWER PLAN NOTES

A. REFER TO E-001 FOR ELECTRICAL LEGEND, GENERAL NOTES, AND ABBREVIATIONS.

B. ALL CONDUITS TO BE CONCEALED WITHIN ALL WALLS UNLESS NOTED OTHERWISE.

C. ALL CONDUIT USED SHALL BE 3/4" MINIMUM.

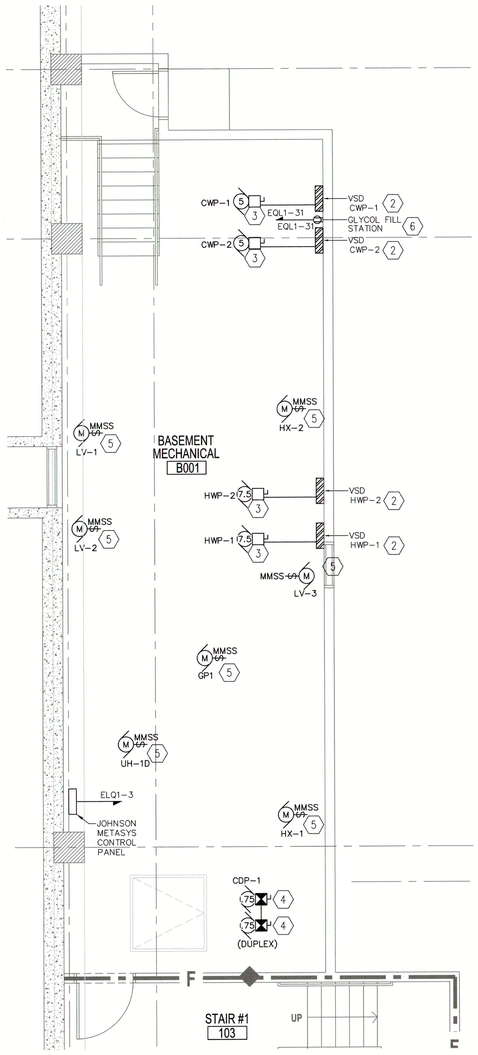
D. SOME WORK UNDER THIS CONTRACT WILL REQUIRE WORK DUTIES TO BE PERFORMED AFTER NORMAL WORKING HOURS. DETERMINATION OF SPECIFIC WORK DUTIES TO BE PERFORMED AFTER HOURS SHALL BE MADE BY VA STAFF AT THEIR CONVENIENCE. POSSIBLE WORK REQUIRING AFTER HOURS APPROVAL INCLUDE: POWER OUTAGES, DISRUPTION OF SERVICES, EXTREME NOISE AND / OR VIBRATION, CUTTING AND PATCHING OF CONCRETE AND DELIVERIES OF EQUIPMENT.

E. REFER TO SHEET EM601 FOR ADDITIONAL MOTOR INFORMATION.

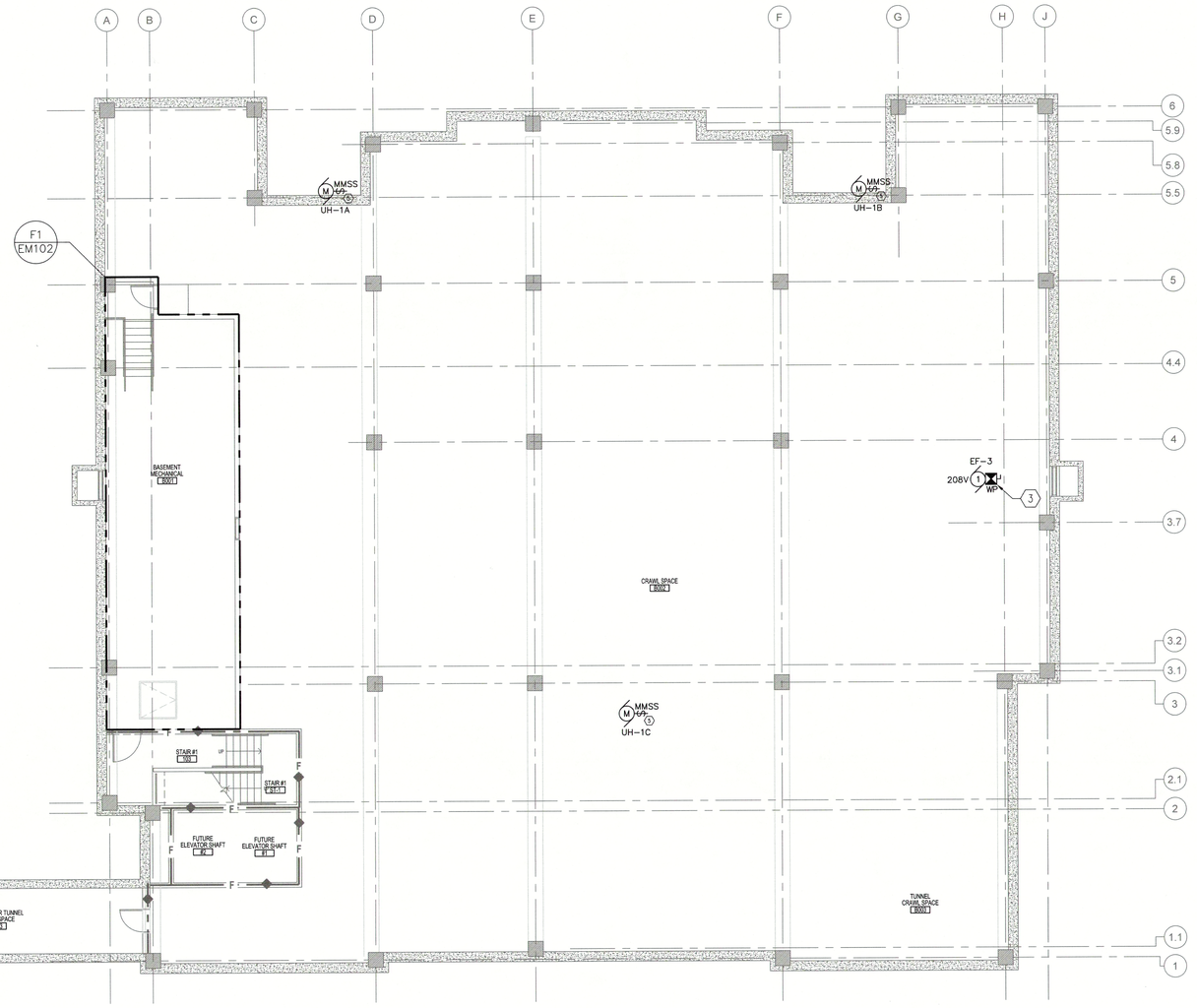
F. REFER TO DETAIL F1/EP501 FOR MOTOR STARTER WIRING DIAGRAM.

ELECTRICAL POWER PLAN NOTES ⬡

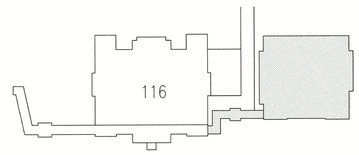
1. FIELD COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. PROVIDE MANUAL MOTOR STARTER SWITCH AS INDICATED, REFER TO SHEET EM601 FOR FURTHER INFORMATION. (TYPICAL)
2. VARIABLE SPEED DRIVE (VSD) SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. REFER TO SCHEDULE ON SHEET EM601 FOR FURTHER INFORMATION.
3. PROVIDE 30 AMP, DISCONNECT SWITCH, NON-FUSED, NEMA 1 ENCLOSURE AT MOTOR.
4. PROVIDE SIZE 0 FVNR, NEMA 1, COMBINATION DISCONNECT SWITCH AND STARTER AS INDICATED.
5. PROVIDE MANUAL MOTOR STARTER SWITCH WITH THERMAL OVER LOADS IN NEMA 1 ENCLOSURE.
6. PROVIDE DUPLEX RECEOTACLE AS INDICATED FOR GLYCOL FILL STATION.



F1 PARTIAL BASEMENT PLAN - BASEMENT MECHANICAL ROOM B001
1/4" = 1'-0"



F2 BASEMENT PLAN
1/8" = 1'-0"



KEY PLAN
NTS

FULLY SPRINKLED
BID DOCUMENTS
FOR CONSTRUCTION

Revisions	Date
⚠1 ADDENDUM 1 - BID AND CONSTRUCTION DOCUMENTS	05/29/20

CONSULTANTS:

ARCHITECT/ENGINEERS:

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200 Envoy Circle #201, Louisville KY 40299 – PH: 502.339.8511 – www.paradigmusa.com

STATE OF KENTUCKY
BLAINE CAMIEL VAN GANSBEKE
24,788
LICENSED
PROFESSIONAL ENGINEER
7/7/2020

Drawing Title	ELECTRICAL POWER PLAN - MOTORS BASEMENT
Approved Project Director	
Project Title	ST CLOUD ADH AND EC SUPPORT
Location	ST CLOUD VA HEALTH CARE SYSTEM, 4801 VETERANS DRIVE, ST. CLOUD MN 56303
Date	12-27-2019
Checked	WLM
Drawn	MMF
Project Number	656-343
Building Number	---
Drawing Number	⚠1 EM102

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

GENERAL ELECTRICAL POWER PLAN NOTES

A. REFER TO E-001 FOR ELECTRICAL LEGEND, GENERAL NOTES, AND ABBREVIATIONS.

B. ALL CONDUITS TO BE CONCEALED WITHIN ALL WALLS UNLESS NOTED OTHERWISE.

C. ALL CONDUIT USED SHALL BE 3/4" MINIMUM.

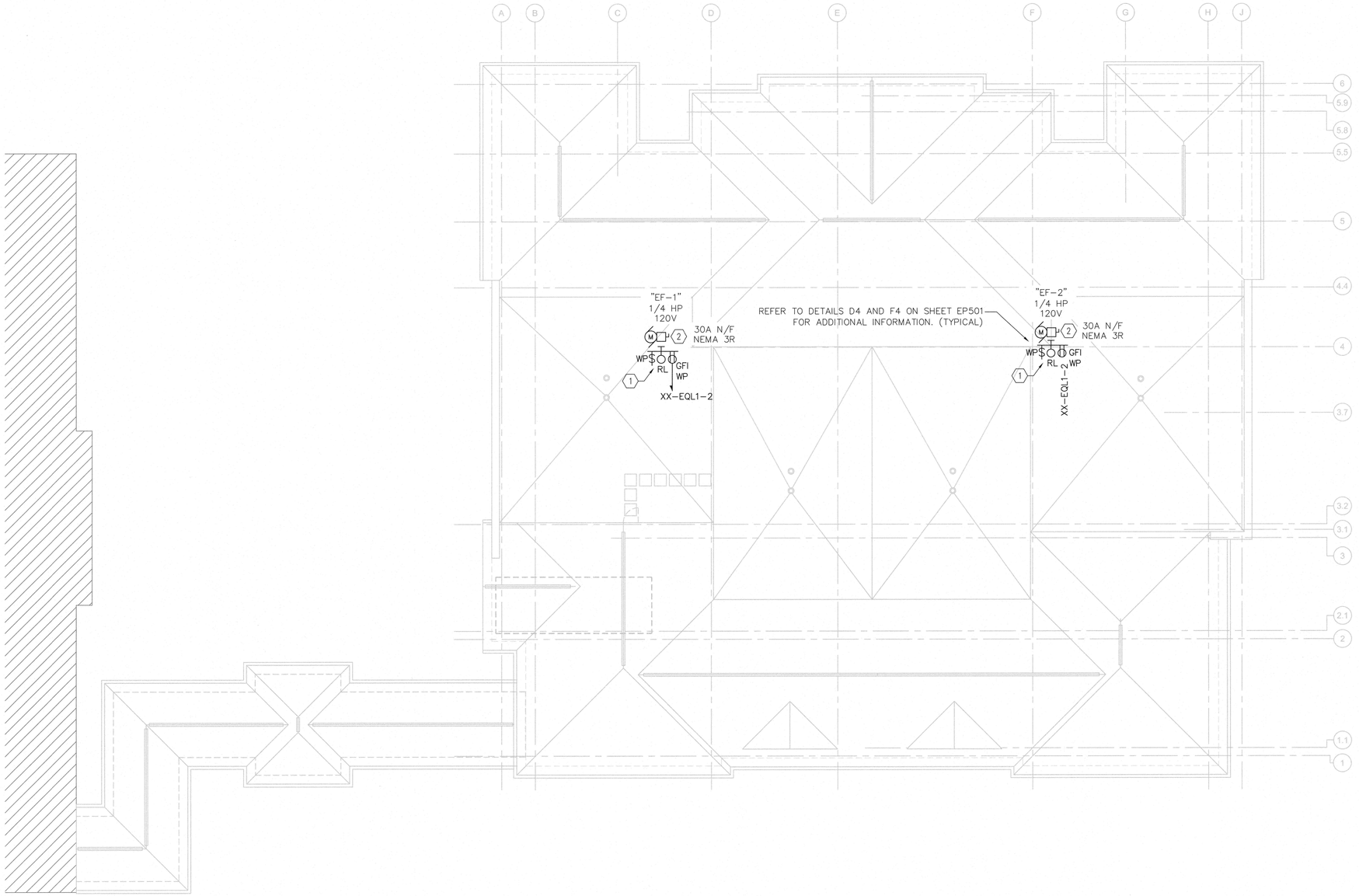
D. SOME WORK UNDER THIS CONTRACT WILL REQUIRE WORK DUTIES TO BE PERFORMED AFTER NORMAL WORKING HOURS. DETERMINATION OF SPECIFIC WORK DUTIES TO BE PERFORMED AFTER HOURS SHALL BE MADE BY VA STAFF AT THEIR CONVENIENCE. POSSIBLE WORK REQUIRING AFTER HOURS APPROVAL INCLUDE: POWER OUTAGES, DISRUPTION OF SERVICES, EXTREME NOISE AND / OR VIBRATION, CUTTING AND PATCHING OF CONCRETE AND DELIVERIES OF EQUIPMENT.

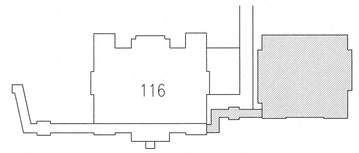
E. REFER TO SHEET EM601 FOR ADDITIONAL MOTOR INFORMATION.

ELECTRICAL POWER PLAN NOTES ⬡

1. PROVIDE UNI-STRUT MOUNTING SYSTEM TO INSTALL WEATHER PROOF SWITCH, LIGHT, AND GFI WEATHER PROOF RECEPTACLE. MOUNT IMMEDIATELY ADJACENT TO MOTOR.

2. PROVIDE 208 VOLT, 3-POLE, NEMA 3R DISCONNECT SWITCH, ROUTE BRANCH CIRCUIT THROUGH (2) OF THE (3) POLES AND CONNECT CIRCUITING TO MOTOR.





KEY PLAN
NTS

F1 FIRST FLOOR PLAN
1/8" = 1'-0"

FULLY SPRINKLED
BID DOCUMENTS
FOR CONSTRUCTION

Revisions	Date
⚠1 ADDENDUM 1 – BID AND CONSTRUCTION DOCUMENTS	05/29/20

CONSULTANTS:

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STATE OF KENTUCKY
BLAINE CAMIEL VAN GANSBEKE
24,788
LICENSED
PROFESSIONAL ENGINEER

Drawing Title: ELECTRICAL POWER PLAN - MOTORS ROOF

Approved Project Director

Project Title: ST CLOUD ADH AND EC SUPPORT

Location: ST CLOUD VA HEALTH CARE SYSTEM
4801 VETERANS DRIVE, ST. CLOUD MN 56303

Date: 12-27-2019 | Checked: WLM | Drawn: MMF

Project Number: 656-343

Building Number: ---

Drawing Number: EM103

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

ITEM	DESCRIPTION	STEP-DOWN TRANSFORMER	VOLTAGE	PHASE	VA	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER	NOTES
1	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 1,2,3	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	6	3/4"	2#12	1#12	20/1	1
2	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	6	3/4"	2#12	1#12	–	1
3	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	6	3/4"	2#12	1#12	–	1
4	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 4,5,6	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	8	3/4"	2#12	1#12	20/1	1
5	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	8	3/4"	2#12	1#12	–	1
6	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	8	3/4"	2#12	1#12	–	1
7	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 7,8,9	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	10	3/4"	2#12	1#12	20/1	1
8	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	10	3/4"	2#12	1#12	–	1
9	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	10	3/4"	2#12	1#12	–	1
10	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 10,11,12	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	12	3/4"	2#12	1#12	20/1	1
11	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	12	3/4"	2#12	1#12	–	1
12	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	12	3/4"	2#12	1#12	–	1
13	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 13,14,15	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	14	3/4"	2#12	1#12	20/1	1
14	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	14	3/4"	2#12	1#12	–	1
15	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	14	3/4"	2#12	1#12	–	1
16	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 16,17,18	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	16	3/4"	2#12	1#12	20/1	1
17	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	16	3/4"	2#12	1#12	–	1
18	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	16	3/4"	2#12	1#12	–	1
19	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 19,20,21	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	18	3/4"	2#12	1#12	20/1	1
20	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	18	3/4"	2#12	1#12	–	1
21	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	18	3/4"	2#12	1#12	–	1
22	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 22,23,24	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	11	3/4"	2#12	1#12	20/1	1
23	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD CEILING SPACE	XX-EQL1	11	3/4"	2#12	1#12	–	1
24	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	11	3/4"	2#12	1#12	–	1
25	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 25,26,27	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	XX	3/4"	2#12	1#12	20/1	1
26	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	13	3/4"	2#12	1#12	–	1
27	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	13	3/4"	2#12	1#12	–	1
28	TERMINAL UNIT	120 VOLT POWER TO XFMR. POWERS T.U. No. 28,29,30	120	1	300	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	ACCESSIBLE CEILING SPACE	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	13	3/4"	2#12	1#12	20/1	1
29	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	TUNNEL SYSTEM SURFACE MOUNT	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	15	3/4"	2#12	1#12	–	1
30	TERMINAL UNIT	–	24	1	–	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	TUNNEL SYSTEM SURFACE MOUNT	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	15	3/4"	2#12	1#12	–	1

NOTES:
1. PROVIDE 120 VOLT CONNECTION TO STEP-DOWN TRANSFORMER, THE LOW VOLTAGE REMPERATURE CONTROL CONTRACTOR SHALL ROUTE LOW VOLTAGE CABLING FROM XFMR TO THREE TERMINAL UNITS, REFER TO DRAWING EM101 FOR LOCATIONS OF TERMINAL UNITS AND QUANTITY OF TRANSFORMERS.

D1 AIR TERMINAL SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	VA	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SWITCH SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER
UH-1A	UNIT HEATER	120	1	100	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	CRAWL SPACE B002	FLEXIBLE CONDUIT FROM DISCONNECT TO MOTOR	FIELD COORDINATE	XX-EQL1	1	3/4"	2#12	1#12	20/1
UH-1B	UNIT HEATER	120	1	100	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	CRAWL SPACE B002	FLEXIBLE CONDUIT FROM DISCONNECT TO MOTOR	FIELD COORDINATE	XX-EQL1	1	3/4"	2#12	1#12	20/1
UH-1C	UNIT HEATER	120	1	100	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	CRAWL SPACE B002	FLEXIBLE CONDUIT FROM DISCONNECT TO MOTOR	FIELD COORDINATE	XX-EQL1	1	3/4"	2#12	1#12	20/1
UH-1D	UNIT HEATER	120	1	100	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	CRAWL SPACE B002	FLEXIBLE CONDUIT FROM DISCONNECT TO MOTOR	FIELD COORDINATE	XX-EQL1	1	3/4"	2#12	1#12	20/1

E1 UNIT HEATER SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	VA	LOCATION	DISCONNECT MEANS	DISCONNECT SWITCH SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER	CIRCUIT BREAKER
AC-1	AIR CURTAIN	120	1	250	CORRIDOR CONNECTION 0100	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1	LOCATED AT MOTOR	CONNECTING CORRIDOR 0100	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	ACCESSIBLE CEILING SPACE	XX-1-EQL1	5	3/4"	2#12	1#12	20/1	1
AC-2	AIR CURTAIN	120	1	250	CORRIDOR CONNECTION 0100	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1	LOCATED AT MOTOR	CONNECTING CORRIDOR 0100	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	ACCESSIBLE CEILING SPACE	XX-1-EQL1	5	3/4"	2#12	1#12	20/1	1

F1 AIR CURTAIN SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	HP	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER	NOTE
CWP-1	CHILLED WATER PUMP	480	3	5	SIZE 0 FVNR NEMA 1	COMBINATION STARTER AND DISCONNECT SWITCH	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL ROOM NO. B001	FLEXIBLE CONDUIT FROM STARTER TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	3#12	1#12	15/3	1
CWP-2	CHILLED WATER PUMP	480	3	5	SIZE 0 FVNR NEMA 1	COMBINATION STARTER AND DISCONNECT SWITCH	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL ROOM NO. B001	FLEXIBLE CONDUIT FROM STARTER TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	3#12	1#12	15/3	1
HWP-1	HOT WATER PUMP	480	3	5	VFD FURNISHED BY ELEC. CONTRACTOR	DISCONNECT SWITCH WITHIN VFD	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL ROOM NO. B001	EMT CONDUIT FROM VFD TO J-BOX FLEXIBLE CONDUIT FROM J-BOX TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	3#12	1#12	15/3	2
HWP-2	HOT WATER PUMP	480	3	5	VFD FURNISHED BY ELEC. CONTRACTOR	DISCONNECT SWITCH WITHIN VFD	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL B001	EMT CONDUIT FROM VFD TO J-BOX FLEXIBLE CONDUIT FROM J-BOX TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	3#12	1#12	15/3	2
CDP1	CONDENSATE PUMP	480	3	(2) 3/4	SIZE 00 FVNR NEMA 1	COMBINATION STARTER AND DISCONNECT SWITCH	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL TOOM NO. B001	FLEXIBLE CONDUIT FROM STARTER TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	2#12	1#12	15/3	
DCWP-1	DOMESTIC COLD WATER PUMP	120	1	3/4	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	MECHANICAL ROOM NO. 0160	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	24	3/4"	2#12	1#12	20/1	3
DCWP-2	DOMESTIC COLD WATER PUMP	120	1	3/4	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	MECHANICAL ROOM NO. 0160	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	26	3/4"	2#12	1#12	20/1	3
DHWP-1	DOMESTIC HOT WATER PUMP	120	1	3/4	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	MECHANICAL ROOM NO. 0160	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	28	3/4"	2#12	1#12	20/1	3
DHWP-2	DOMESTIC HOT WATER PUMP	120	1	3/4	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	MECHANICAL ROOM NO. 0160	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-EQL1	30	3/4"	2#12	1#12	20/1	3

NOTES:
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMBINATION STARTER AND DISCONNECT SWITCH, REFER TO SCHEDULE FOR NEMA TYPE.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMBINATION VFD (VARIABLE FREQUENCY DRIVE) AND DISCONNECT SWITCH.
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MANUAL MOTOR STARTER SWITCH AT MOTOR AS INDICATED, SEE FLOOR PLAN FOR LOCATION OF MOTORS.

A5 PUMP SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	HP	STARTER SIZE	DISCONNECT MEANS	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER	NOTE
EF-1	EXHAUST FAN (ON ROOF)	120	1	1/6	NONE	20 AMP M.M.S.S.	MOUNTED AT MOTOR	ROOF	FLEXIBLE CONDUIT FROM DISCONNECT SWITCH TO MOTOR	FIELD COORDINATE	XX-EQL1	17	3/4"	2#12	1#12	20/1	2
EF-2	EXHAUST FAN (ON ROOF)	208	1	1 1/2	FVNR SIZE 0 NEMA 3R	30 AMP N/F NEMA 3R	MOUNTED AT MOTOR	ROOF	FLEXIBLE CONDUIT FROM DISCONNECT SWITCH TO MOTOR	FIELD COORDINATE	XX-EQL1	21,23	3/4"	2#12	1#12	20/2	1
EF-3	EXHAUST FAN (BASEMENT)	120	3	1/2	NONE	20 AMP M.M.S.S.	MOUNTED AT MOTOR	ROOF	FLEXIBLE CONDUIT FROM DISCONNECT SWITCH TO MOTOR	FIELD COORDINATE	XX-EQL1	19	3/4"	2#12	1#12	20/1	3

NOTES:
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF COMBINATION DISCONNECT SWITCH AND MOTOR STARTER MOUNTED AT MOTOR, REFER TO FLOOR PLAN FOR LOCATION OF MOTOR.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF NEMA 1 MANUAL MOTOR STARTER SWICT WITH THERMAL OVER LOADS, REFER TO FLOOR PLAN FOR LOCATION.
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 30 AMP. NON-FUSED, NEMA 1 ENCLOSURE DISCONNECT SWITCH AT MOROT.

B5 EXHAUST FAN SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	VA	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER
CUH-1A	CABINET UNIT HEATER	120	1	200	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	VESTIBULE 0105	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-1-EQL1	7	3/4"	2#12	1#12	20/1
CUH-1B	CABINET UNIT HEATER	120	1	200	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	VESTIBULR 0105	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-1-EQL1	7	3/4"	2#12	1#12	20/1
CUH-2A	CABINET UNIT HEATER	120	1	200	NONE	MANUAL MOTOR STARTER SWITCH (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	CORRIDOR 0101	FLEXIBLE CONDUIT FROM MMSS TO MOTOR	FIELD COORDINATE	XX-1-EQL1	7	3/4"	2#12	1#12	20/1

C5 CABINET UNIT HEATER SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	MCA	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SWITCH SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER	NOTE
SF-1	SUPPLY FAN	480	3	47.5	VFD FURNISHED BY ELEC. CONTRACTOR	DISCONNECT SWITCH WITHIN VFD	50 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL ROOM NO. B001	EMT CONDUIT FROM FVD TO J-BOX FLEXIBLE CONDUIT FROM J-BOX TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	1"	3#4	1#8	80/3	1
RF-1	RETURN FAN	480	3	19.9	VFD FURNISHED BY ELEC. CONTRACTOR	DISCONNECT SWITCH WITHIN VFD	30 AMP NON-FUSED NEMA 1	LOCATED AT MOTOR	BASEMENT MECHANICAL ROOM NO. B001	FLEXIBLE CONDUIT FROM MOTOR TO STARTER FROM J-BOX TO MOTOR	FIELD COORDINATE	XX-EQH1	SEE PANEL SCHEDULE "EHEQ"	3/4"	3#8	1#10	35/3	1

NOTES:
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE VFD AND A DISCONNECT SWITCH AT MOTOR.

D5 FAN SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	MCA	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SWITCH SIZE	DISCONNECT LOCATION	MOTOR LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER
ACH1	CHILLER	480	3	105.7	INCLUDED WITH CHILLLER	DISCONNECT SWITCH	200 AMP NON-FUSED NEMA 3R	LOCATED AT CHILLER	EXTERIOR	FLEXIBLE CONDUIT FROM DISCONNECT SWITCH TO MOTOR	CONCRETE PAD	XX-EQH1	2"	3#1	1#6	125/3

E5 CHILLER SCHEDULE
NO SCALE

ITEM	DESCRIPTION	VOLTAGE	PHASE	VA	MOTOR LOCATION	STARTER SIZE	DISCONNECT MEANS	DISCONNECT SWITCH SIZE	DISCONNECT LOCATION	CONNECTION TYPE	MOUNTING HEIGHT	PANEL FED FROM	CIRCUIT NUMBER	CONDUIT SIZE	WIRE SIZE	GROUND SIZE	CIRCUIT BREAKER
LV-1	MOTORIZED DAMPER	120	1	50	CRAWL SPACE B002	NONE	MANUAL MOTOR STARTER SWITCH AT MOTOR (MMSS)	20 AMP NEMA 1 WITH THERMAL OVERLOADS	LOCATED AT MOTOR	FLEXIBLE CONDUIT FROM DISCONNECT TO MOTOR	FIELD COORDINATE	XX-1-EQL1	9	3/4"	2#12	1#12	20/1

F5 MOTORIZED LOUVER SCHEDULE
NO SCALE

FULLY SPRINKLED
BID DOCUMENTS
FOR CONSTRUCTION

Revisions	Date
ADDENDUM 1 – BID AND CONSTRUCTION DOCUMENTS	05/29/20

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STATE OF KENTUCKY
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24,788
LICENSED PROFESSIONAL ENGINEER
2 Mar 2020

Drawing Title: ELECTRICAL EQUIPMENT SCHEDULES

Approved Project Director

Project Title: ST CLOUD ADH AND EC SUPPORT

Location: ST CLOUD VA HEALTH CARE SYSTEM
4801 VETERANS DRIVE, ST. CLOUD MN 56303

Date: 12-27-2019 | Checked: WLM | Drawn: MMF

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