DRAWING NOTES

(APPLY TO THIS DRAWING ONLY)

(1) THE EXISTING BREAKERS FOR THE EXISTING CHILLERS ARE EITHER ADJUSTABLE BREAKERS WITH LOWEST SETTING AT 250 AMPS OR ARE NON-ADJUSTABLE AT 250 AMPS, THEREFORE, THE E.C. SHALL FURNISH AND INSTALL NEW 200-AMP CIRCUIT BREAKERS AND PROVIDE NEW WIRING, SIZE: 3-#3/0 & 1 #6 GROUND IN 2" CONDUIT. AS AN ALTERNATIVE, THE E.C. MAY SET THE EXISTING CIRCUIT BREAKER TO THE MINIMUM 250 AMPS AND UTILIZED A 200AMP/3POLE FUSED DISCONNECT SWITCH FUSED AT 200 AMPS AT THE CHILLER (WHICH CAN REPLACE THE H.C. PROVIDED DISCONNECT SWITCH IF DESIRABLE) - FIRST COORDINATED OPTION WITH OWNER. IF THIS LATTER OPTION IS SELECTED, E.C. SHALL ENSURE THAT WIRE TO/FROM THE 'MDS' TO THE NEW FUSED DISCONNECT SWITCH IS APPROPRIATELY SIZED (MINIMUM OF 250KCMIL WITH #4 GROUND) AND CAN BE REUSED WITHOUT SPLICES AND/OR ADDITIONS - IF SPLICING AND/OR ADDITIONAL WIRE IS NEEDED, E.C. TO PROVIDE ALL NEW WIRE THE ENTIRE LENGTH.

(2) THE EXISTING CIRCUIT BREAKERS, WIRES SIZES, AND DISCONNECT SIZES TO THE EXISTING PUMPS (BASED ON LIMITED SURVEY) APPEARS TO BE UNCONVENTIONAL AND NOT COORDINATED. IT APPEARS AS THOUGH:
- EXISTING PUMP-2 HAS A FIXED 100AMP CIRCUIT BREAKER IN THE MCC, IS SERVED BY #4 WIRE AT THE CIRCUIT BREAKER AND #6 OR #8 WIRE AT THE DISCONNECT SWITCH,, AND CONNECTS TO A 30AMP DISCONNECT SWITCH PRIOR TO THE PUMP.
- EXISTING PUMP-3 HAS FIXED 100AMP CIRCUIT BREAKER IN THE MCC, IS SERVED BY #4 WIRE AT THE CIRCUIT BREAKER AND #6 WIRE AT THE DISCONNECT SWITCH, AND CONNECTS TO A 100AMP DISCONNECT SWITCH PRIOR TO THE PUMP.
- EXISTING PUMP-4 HAS A FIXED 50AMP CIRCUIT BREAKER IN THE MCC, IS SERVED BY #6 WIRE AT THE CIRCUIT BREAKER AND #10 WIRE AT THE DISCONNECT SWITCH, AND CONNECTS TO A 30AMP DISCONNECT SWITCH PRIOR TO THE PUMP.
- EXISTING PUMP-5 HAS A FIXED 50AMP CIRCUIT BREAKER, IS SERVED BY #8 WIRE AT THE DISCONNECT SWITCH (UNKNOWN AT THE CIRCUIT BREAKER), AND CONNECTS TO A 60AMP DISCONNECT SWITCH PRIOR TO THE PUMP.

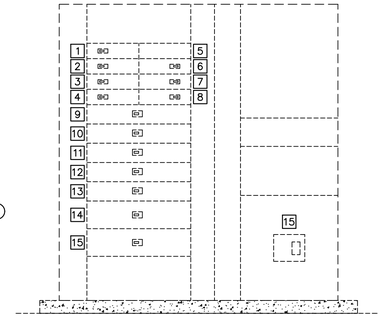
NEW PUMPS P2 & P3 REQUIRE A 20AMP CIRCUIT BREAKERS, MINIMUM #12 WIRE, AND NEW 30AMP/3P DISCONNECT SWITCHES ALL FURNISHED AND INSTALLED BY THE E.C. AS AN ALTERNATIVE (IF ACCEPTABLE TO OWNER AND INSPECTOR) THE EXISTING WIRE AND DISCONNECT MAY BE REUSED (ASSUMING NO SPLICING/EXTENDING OF EXISTING WIRING. ALSO THE WIRING MAY NOT BE APPROPRIATELY SIZED FOR THE LUGS OF THE NEW CIRCUIT BREAKERS AND/OR EXISTING DISCONNECT SWITCH - E.C. TO VERIFY WITH MANUFACTURER OF NEW CIRCUIT BREAKER AND DISCONNECT SWITCH AND PROVIDE NEW AS REQUIRED AS PER MANUFACTURER'S AND NEC REQUIREMENTS).
NEW PUMPS P4 & P5 REQUIRE NEW 40AMP CIRCUIT BREAKERS, MINIMUM #8 WIRE (& #10 GROUND), AND 60AMP/3P DISCONNECT SWITCHES ALL FURNISHED AND INSTALLED BY THE E.C. AS AN ALTERNATIVE, (IF ACCEPTABLE TO OWNER AND INSPECTOR) THE EXISTING CIRCUIT BREAKERS FOR P4 & P5 (AT 50AMPS) MAY BE REUSED IF PROVIDING A FUSED DISCONNECT SWITCH AT THE PUMPS, FUSED AT 40 AMPS, OTHERWISE PROVIDE NEW 40AMP CIRCUIT BREAKER. THE EXISTING WIRE SIZE AND DISCONNECT SWITCH FOR NEW PUMP-4 APPEARS TO BE UNDERSIZED AND SHALL BE CHANGED AS INDICATED ABOVE. THE EXISTING WIRE SIZE AND DISCONNECT SWITCH FOR NEW PUMP-5 APPEARS TO BE APPROPRIATELY SIZE (E.C. TO FIELD VERIFY, AND REPLACE WIRE IF SPLICING OR EXTENSION IS REQUIRED).

(3) EXISTING WATER HEATER TO BE REPLACED IN KIND (3-PHASE, 480V., 18W). E.C. TO VERIFY THAT THE EXISTING CIRCUIT BREAKER IS 30AMPS AND WIRE SIZE IS AT LEAST #10 WIRING - IF NOT, E.C. SHALL REPLACE CIRCUIT BREAKER AND/OR WIRING WITH NEW (OR AS AN ALTERNATIVE, IF CIRCUIT BREAKER IN MCC IS LARGER, AND THE AMPACITY OF THE WIRING MATCHES OR EXCEEDS THE CIRCUIT BREAKER WIRING, THE E.C. MAY PROVIDE A FUSED DISCONNECT SWITCH AT THE WATER HEATER, FUSED AT 30 AMPS).

EXISTING 'MDS'

POSITION	CIRCUIT BREAKER	EQUIPMENT
1	60A-3P	SURGE PROTECTOR
2	100A-3P	PANEL 'LP-1A'
3	80A-3P	ELEVATOR
4	250A-3P	XFMR 'T3'
5	N/A	SPACE
6	100A-3P	PANEL 'LP-1B'
7	250A-3P	PANEL 'LP-G'
8	250A-3P	SPARE
9	400A-3P	SPARE
10	400A-3P	XFMR 'T4'
11	400A-3P	XFMR 'T1'
12	~~400A-3P~~ 200A-3P ~~EX. CHILLER 2~~	NEW CHILLER 2
13	~~400A-3P~~ 200A-3P ~~EX. CHILLER 1~~	NEW CHILLER 1 (1)
14	600A-3P	PANEL 'KPPA'
15	600A-3P	'MCC'
16	2000A-3P	MAIN CIRCUIT BREAKER

CUTLER-HAMMER
WESTINGHOUSE POW-R-LINE C
3ø-4W-277/480V.
2000A



EX. 'MDS' ELEVATION

NO SCALE

EXISTING 'MCC'

SECTION 1

POSITION	EQUIPMENT
1	AHU-1 EXHAUST
2	AHU-2 EXHAUST
3	AHU-3 EXHAUST

SECTION 1

POSITION	EQUIPMENT
4	~~HWG-1~~ NEW WATER HEATER (3)
5	HWG-2
6	MUAU-1
7	MUAU-2

SECTION 3

POSITION	EQUIPMENT
8	CT-1
9	AHU-4
10	AHU-5
11	AHU-6
12	AHU-7

SECTION 4

POSITION	EQUIPMENT
13	~~EX. PUMP P-2 (100A CB)~~ NEW PUMP P-2 (PH 1), 20A-3P
14	~~EX. PUMP P-3 (100A CB)~~ NEW PUMP P-3 (PH 1), 20A-3P
15	~~EX. PUMP P-4 (50A CB)~~ NEW PUMP P-3 (PH 1), 45A-3P
16	~~EX. PUMP P-5 (50A CB)~~ NEW PUMP P-4 (PH 2), 45A-3P (2)

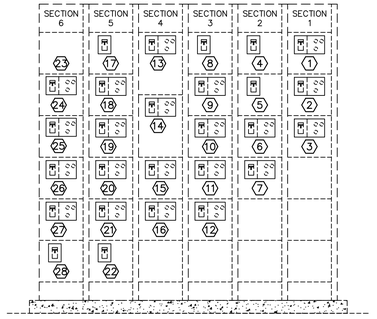
SECTION 5

POSITION	EQUIPMENT
17	AHU-2 SUPPLY
18	AHU-3 SUPPLY
19	B-1
20	B-2
21	F-8
22	CT-2

SECTION 5

POSITION	EQUIPMENT
23	MAIN LUGS
24	ATC COMPRESSOR
25	ATC COMPRESOR
26	PUMP P-1
27	PUMP P-1A
28	AHU-1 SUPPLY

CUTLER-HAMMER
FREEDOM 2100 MOTOR
CONTROL CENTER 'MCC'
600A-3ø-3W-480V
SEC 1 - 600A
SEC 2 THRU 6 - 300A



EX. 'MCC' ELEVATION

NO SCALE

SCHEDULES AND WIRING DIAGRAMS - ELECTRICAL

CHILLER REPLACEMENT
COLLEGE CENTER
FOR
ALLEGANY COMMUNITY COLLEGE
WILLOWBROOK ROAD, CUMBERLAND, MD 21502

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REVISIONS		
MARK	BY	DATE

DATE: 10-17-2025
DRAWN BY: J.L.L.
CHECKED BY: B.N.Y.
PROJECT NO. 25-015
DRAWING NO. E0.2

October 17, 2025 - 3:13pm T:\Projects\2025\25-015 - ACM College Center Chiller\Drawings\25-015 - E0.2.dwg

ORIGINAL DRAWING SIZE = 24"x36"

NOTE: DO NOT SCALE DRAWING - EACH CONTRACTOR IS TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE THEIR WORK WITH THAT OF OTHERS. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.