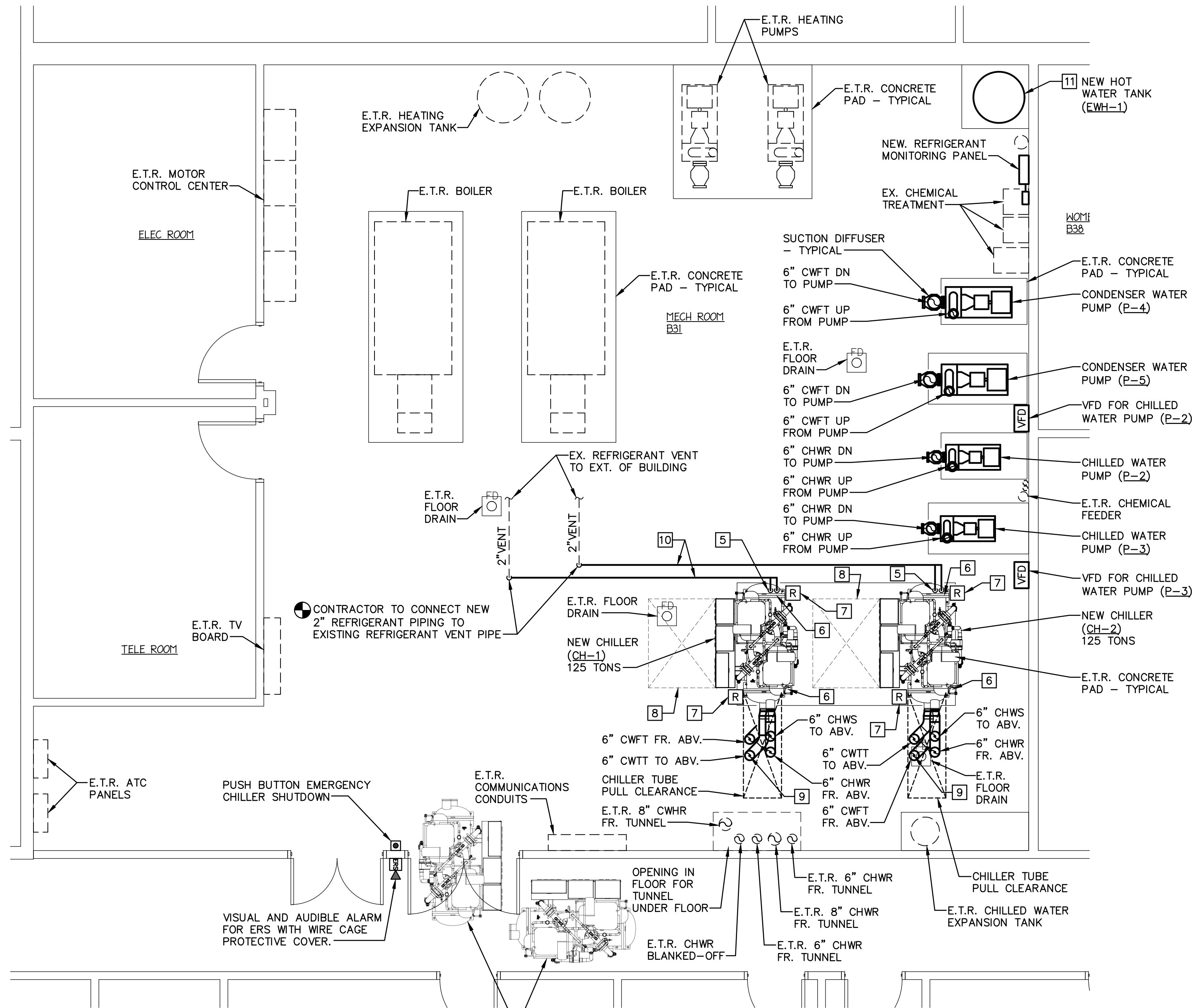


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October 17, 2025 - 1:46pm



CHILLER ROOM LOWER LEVEL PLAN - HVAC

SCALE: 1/4"= 1'-0"

MECHANICAL VENTILATION REQUIRED			
DESIGNATION	ASHRAE STANDARD 15 - CHAPTER 8; INSTALLATION RESTRICTION; PARAGRAPH 8.11.5		
	CODE REQUIRED: Q = 100 x G ^{0.5}	REQUIRED VENTILATION	PROVIDED VENTILATION
NEW CHILLER CH-1 OR 2	Q = 100 x 265 ^{0.5}	1,628 CFM	EX. EXHAUST FAN EF-11 EXHAUSTS 2,740 CFM OF AIR DIRECTLY TO THE OUTDOORS.

ASHRAE PARAGRAPH 8.11.5 THE MECHANICAL VENTILATION REQUIRED TO EXHAUST AN ACCUMULATION OF REFRIGERANT DUE TO LEAKS OR A RUPTURE OF THE SYSTEM SHALL BE CAPABLE OF REMOVING AIR FROM THE MACHINERY ROOM IN NOT LESS THAN THE FOLLOWING QUANTITY:

$$Q = 100 \times G^{0.5}$$

WHERE

Q = AIRFLOW, CFM

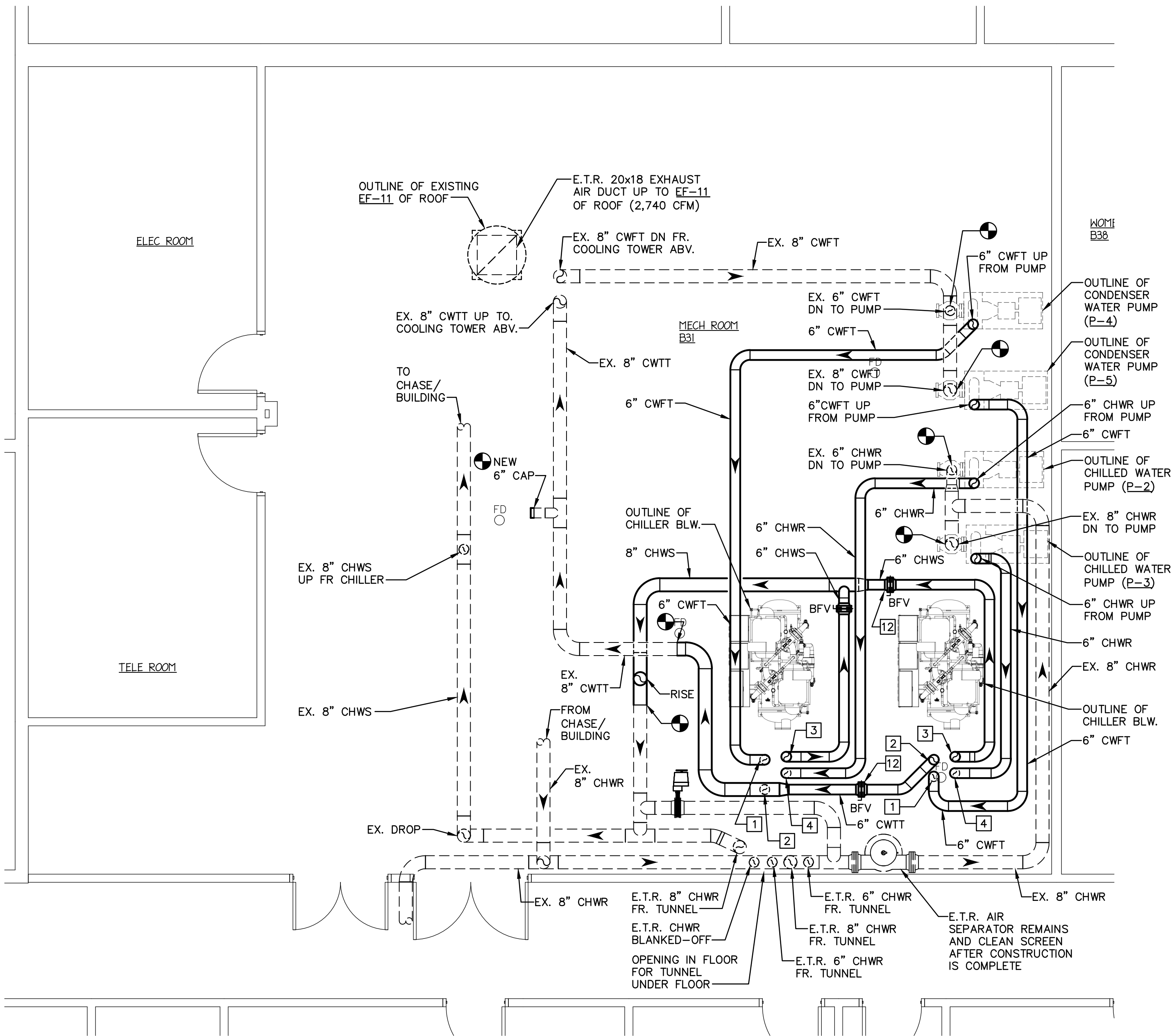
G = MASS OF REFRIGERANT IN THE LARGEST SYSTEM, ANY PART OF WHICH IS LOCATED IN THE MACHINERY ROOM, LB

A PART OF THE REFRIGERATING MACHINERY ROOM MECHANICAL VENTILATION SHALL BE

a. OPERATED, WHEN OCCUPIED, TO SUPPLY AT LEAST 0.5 CFM/FT² OF MACHINERY ROOM AREA OR 20 CFM PER PERSON AND

b. OPERABLE, WHEN OCCUPIED AT A VOLUME REQUIRED TO NOT EXCEED THE HIGHER OF A TEMPERATURE RISE OF 18°F ABOVE INLET AIR TEMPERATURE OR A MAXIMUM TEMPERATURE OF 122°F

DEDUCT ALTERNATE BID NOTE:
ALL WORK INDICATED ON THE PLANS IN THIS SET IS TO BE INCLUDED IN THE BASE BID FOR THIS PROJECT. UNDER DEDUCT ALTERNATE H-1, REMOVE INSTALLATION OF CHILLER CH-2, PUMPS P-2 & P-4. SEE FLOW DIAGRAM ON DRAWING H0.5 FOR MORE INFORMATION.



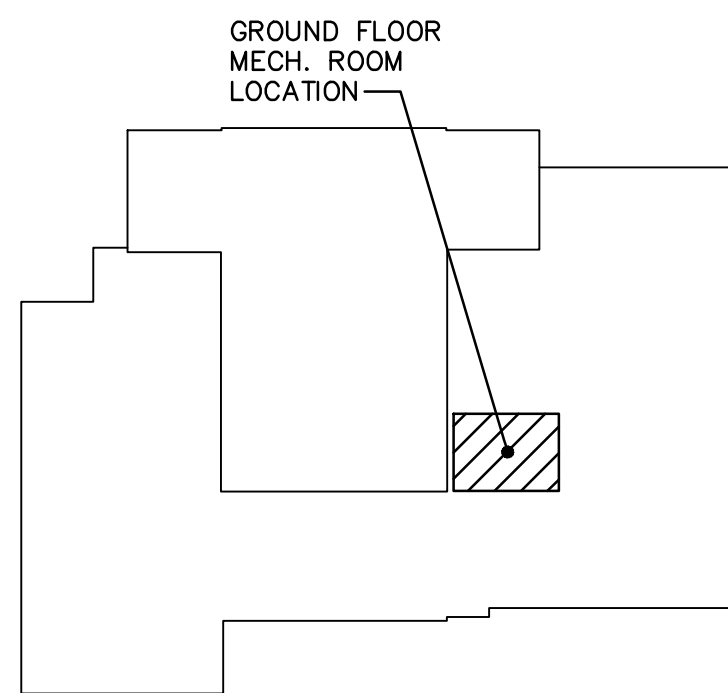
CHILLER ROOM UPPER LEVEL PLAN - HVAC

SCALE: 1/4"= 1'-0"

SPECIFIC NOTES - HVAC

(APPLY TO THIS DRAWING ONLY)

- 6" CWFT DOWN TO CHILLER.
- 6" CWTT UP FROM CHILLER.
- 6" CHWS UP FROM CHILLER.
- 6" CHWR DOWN TO CHILLER.
- 1" REFRIGERANT VENT DOWN AND CONNECT TO CHILLER SUPPLIED SAFETY RELIEF VALVE - TYPICAL OF 2. ONE (1) RELIEF VALVE ON EVAPORATOR AND ONE (1) ON CONDENSER.
- CONTRACTOR TO INSTALL ISOLATION PADS PER CHILLER SUPPORT - TYPICAL.
- INFRARED REFRIGERANT GAS SENSOR MOUNTED AT BASE OF CHILLER.
- MAINTAIN MANUFACTURERS RECOMMENDED CLEARANCES - TYPICAL.
- PIPE STANCHION SUPPORTING 90 DEGREE BELOW - TYPICAL.
- CONTRACTOR TO EXTEND EXISTING CHILLER REFRIGERANT VENT PIPING OVER AND CONNECT TO NEW CHILLER REFRIGERANT RELIEF VENTS.
- DIRECTLY REPLACE EXISTING ELECTRIC WATER HEATER. PIPE TO EXISTING LEAVING ALL EXISTING ACCESSORIES.
- LIMIT OF INSTALLED PIPE IF DEDUCT ALTERNATE IS TAKEN BY OWNER. INSTALL BUTTERFLY VALVE WITH CAPPED BLIND FLANGE.



KEY PLAN

NO SCALE

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.



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19273, EXPIRATION DATE: 10/17/2025.
CHRISTOPHER G. ALBRIGHT DATE: 10/17/2025

CHILLER ROOM PLANS - HVAC NEW WORK

CHILLER REPLACEMENT
COLLEGE CENTER

FOR
ALEGANY COMMUNITY COLLEGE
WILLOWBROOK ROAD, CUMBERLAND, MD 21502



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REVISIONS

MARK	BY	DATE

DATE:

10-17-2025

DRAWN BY:

C.G.A.

CHECKED BY:

C.G.A.

PROJECT NO.

25-015

DRAWING NO.

H2.0