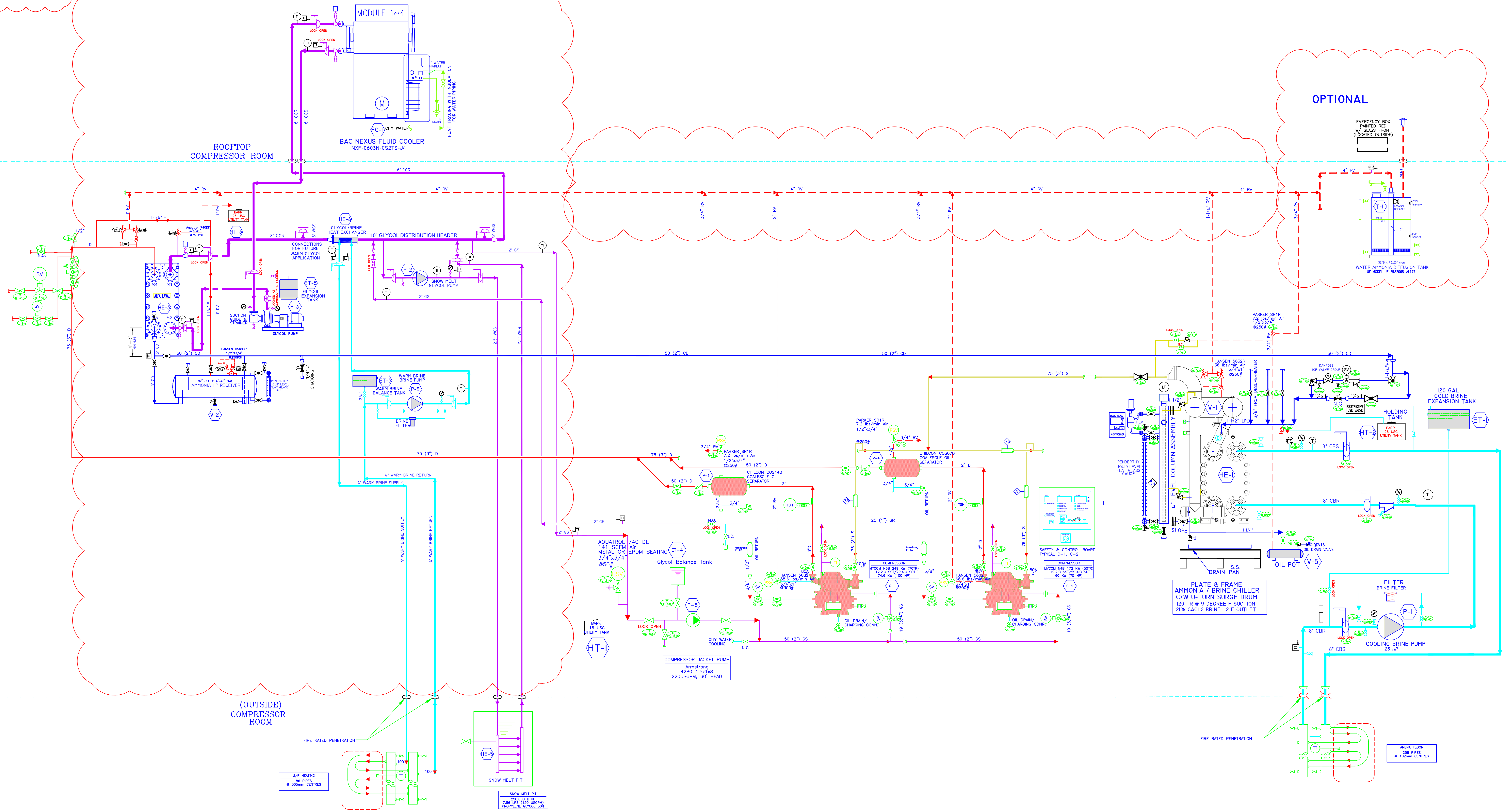
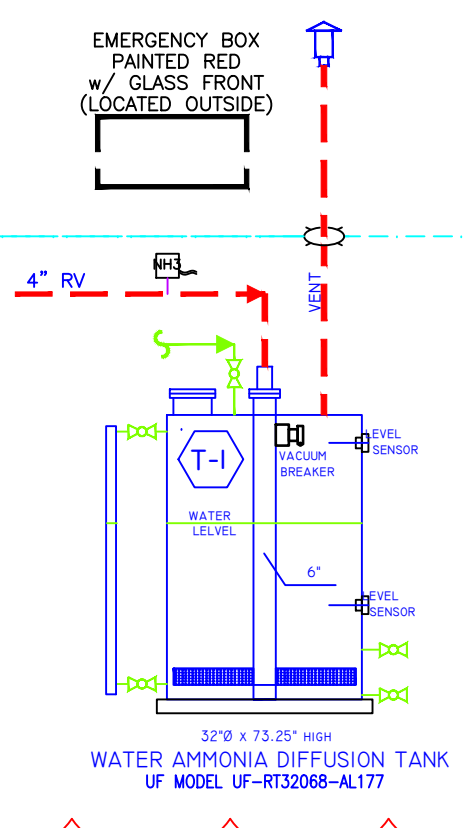


2026 UPGRADE



OPTIONAL



1	05NOV2025	FT
1	25OCT2025	FIRST REVISION FOR REVIEW
No.	DATE	DESCRIPTION
ISSUES AND REVISIONS		

REFRIGERATION DRAWINGS ARE THE PROPERTY OF JS REFRIGERATION ENGINEERING AND MAY NOT BE REPRODUCED WITHOUT THE JS REFRIGERATION ENGINEERING'S PERMISSION.

2026 HIGH SIDE REPLACEMENT UPGRADE REFRIGERATION CONSULTANTS
 JS REFRIGERATION ENGINEERING INC.
 PERMIT TO PRACTICE #10888 VANCOUVER, B.C.
 TEL: (604) 437-3333 CELL: (778) 317-9633 WWW.JSERE.CO

2024 CHILLER REPLACEMENT UPGRADE REFRIGERATION CONSULTANTS
 JS REFRIGERATION ENGINEERING INC.
 PERMIT TO PRACTICE #10888 VANCOUVER, B.C.
 TEL: (604) 437-3333 CELL: (778) 317-9633 WWW.JSERE.CO

PROJECT LOCATION
 GIBSONS AREA COMMUNITY CENTER
 SUNSHINE COAST, B.C.

REGISTRATION DATA	
1. AMMONIA PIPING TO CONFORM TO:	CSA B52 MECHANICAL REFRIGERATION CODE (LATEST EDITION) ASME/ANSI B31.5 (LATEST EDITION)
2. CLASSIFICATION OF REFRIGERANT:	GROUP B2 R-717
3. WEIGHT OF REFRIGERANT CHARGE IN SYSTEM:	120 LBS.
4. CLASSIFICATION OF REFRIGERATION SYSTEM BY TYPE:	INDIRECT
5. CLASSIFICATION OF OCCUPANCY:	MIXED
6. REFRIGERATION CAPACITY:	120 TR
7. SYSTEM OPERATING TEMPERATURES:	SUCTION = +9 Deg. F CONDENSING = +87 Deg. F
8. TESTING PRESSURE/MEDIUM:	275 PSIG/NITROGEN GAS
9. SYSTEM PRESSURE:	DESIGN: 250 PSIG OPERATING: 157.3 PSIG TEST: 275 PSIG HIGH SIDE: 250 PSIG LOW SIDE: 22.8 PSIG
10. MACHINERY ROOM CLASSIFICATION:	CLASS 1
11. MACHINERY ROOM VENTILATION:	MINIMUM/EMERGENCY 400/1,850 CFM

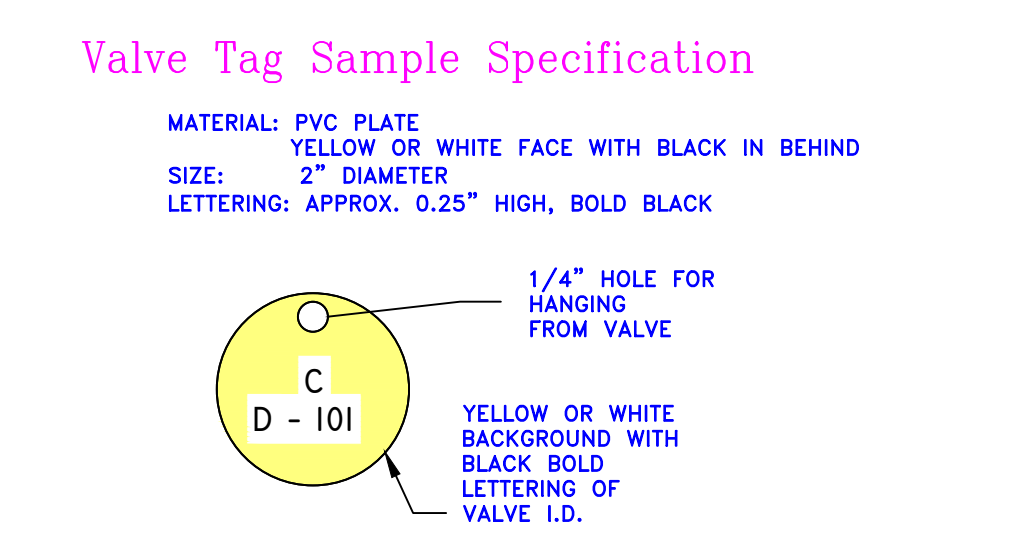
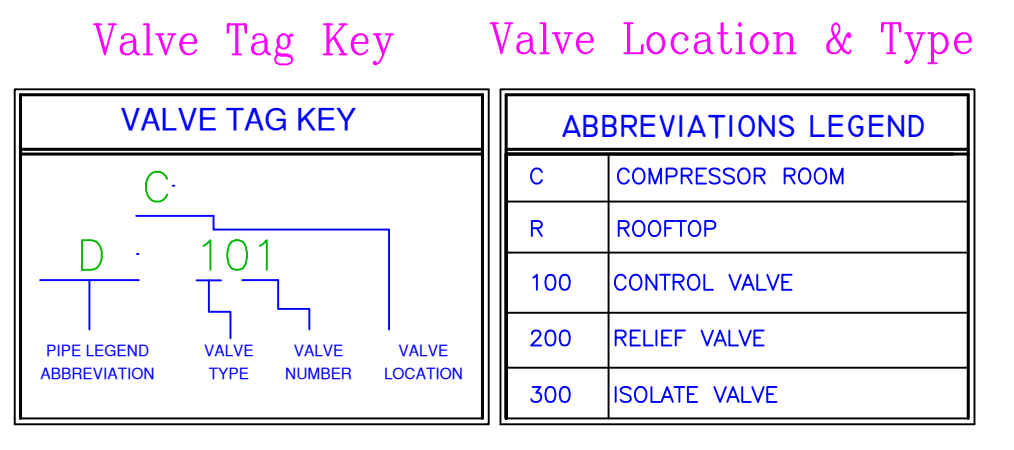
EQUIPMENT IDENTIFICATION	
C-1	MYCOM NEWB COMPRESSOR C/W 100 HP MOTOR, 2006
C-2	MYCOM N4WB COMPRESSOR C/W 75 HP MOTOR, 2006
HE-1	ALFA LAVAL PLATE & FRAME AMMONIA/BRINE CHILLER 120 TR, 9 F SUCTION, 2024
HE-2	DOUCETTE INDUSTRIES CADS 22M5.5/P-8T(c), 2006 DECOMMISSIONED AND ISOLATED
HE-3	P&C CONDENSER ALFA LAVAL M108W-FQ, 2026
HE-4	ULTIMATE FABRICATION GLYCOL/BRINE HEAT EXCHANGER, 2026
HE-5	SNOW MELT HEATING COIL, 2006
GC-1	GLYCOL FLUID COOLER - BAC NXF-0603N-CS2IS-J4, 2026
V-1	ALFA LAVAL CHILLER U-TURN SURGE DRUM, 2024
V-2	PICOT HIGH PRESSURE RECEIVER, 2026
V-3	CHL-COM C05140 OIL SEPARATOR, 2006
V-4	CHL-COM C05070 OIL SEPARATOR, 2006
V-5	EXTERNAL OIL POT, 2024
ET-1	COLD BRINE EXPANSION TANK, 120GAL, 2024
ET-2	U/S WARM BRINE EXPANSION TANK, 2006
ET-3	COMPRESSOR GLYCOL EXPANSION TANK, 2006
ET-4	WARM GLYCOL EXPANSION TANK, 2026
HT-1	HOLDING TANK FOR GLYCOL RELIEF VALVE, 2021
HT-2	HOLDING TANK FOR BRINE RELIEF VALVE, 2024
HT-3	HOLDING TANK FOR GLYCOL RELIEF VALVE, 2026
HT-4	WATER AMMONIA DIFFUSION TANK, 2026
P-1	ARMSTRONGS COLD BRINE PUMP, 25 HP, 2024
P-2	SNOW MELT GLYCOL PUMP, 2006
P-3	ARMSTRONGS U/S WARM BRINE PUMP, 2006
P-4	SNOW MELT GLYCOL PUMP, 2024
P-5	COMPRESSOR OIL COOLING GLYCOL PUMP, 2024
P-6	WARM GLYCOL CIRCULATING PUMP, 2006

SYMBOL LEGEND	
(PSV)	PRESSURE SAFETY VALVE
(PCV)	PRESSURE CONTROL VALVE
(M)	MOTOR
(SH)	LEVEL SWITCH - HIGH
(SV)	SOLENOID VALVE
(PI)	PRESSURE INDICATOR
(TI)	TEMPERATURE INDICATOR
(TT)	TEMPERATURE TRANSMITTER
(PT)	PRESSURE TRANSMITTER
(LI)	LEVEL INDICATOR
(G)	GATE VALVE
(N)	NEEDLE VALVE
(G)	GLOBE VALVE
(A)	ATMOSPHERIC RELIEF VALVE

SYMBOL LEGEND	
(S)	SOLENOID VALVE
(B)	BUTTERFLY VALVE
(C)	CONTROL VALVE
(Z)	CHECKVALVE
(Z)	CHECKVALVE WITH MANUAL LIFT STEM
(P)	PUMP
(S)	STRAINER
(E)	END CAP
(S)	SCREWED CAP
(D)	DEADMAN VALVE
(S)	PLUGGED VALVE
(B)	BALL VALVE
(C)	CORROSION COUPON

ABBV.	LEGEND
BB	BRINE BALANCE
BP	BY-PASS
CBR	COLD BRINE RETURN
CBS	COLD BRINE SUPPLY
CD	CONDENSER DRAIN
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
D	DISCHARGE
DR	DRAIN
E	EQUALIZING
F	FIRE
GR	GLYCOL RETURN
GS	GLYCOL SUPPLY
H/A	HIGH/LOW ALARM

ABBV.	LEGEND
HPL	HIGH PRESS. LIQUID
LPL	LOW PRESS. LIQUID
OL	OIL RETURN
OF	OVERFLOW
PSH	PRESS. SWITCH (HIGH)
PSL	PRESS. SWITCH (LOW)
RV	RELIEF VENT
S	SUCTION
TSH	TEMP. SWITCH (HIGH)
V	VENT
WS	WATER SUPPLY
WR	WATER RETURN
(I)	INSULATION THICKNESS



ABBREVIATIONS LEGEND		VALVE LEGEND		SYMBOL LEGEND	
CBR	COLD BRINE RETURN	(S)	SOLENOID VALVE	(LFS)	LIQUID FLOAT SWITCH
CBS	COLD BRINE SUPPLY	(HEV)	HAND EXPANSION VALVE	(P)	PUMP
CD	CONDENSATE DRAIN	(S)	SOLENOID	(IT)	INSULATION THICKNESS
ED	EQUALIZER LINE	(S)	STRAINER	(TI)	TEMPERATURE INDICATOR
F	FIRE LINE	(I-L)	IN-LINE CHECK	(T)	TEMPERATURE TRANSMITTER
HPL	HIGH PRESSURE LIQUID	(B)	BALL VALVE	(L)	LEVEL TRANSMITTER
OR	OIL RETURN	(R)	RELIEF VENT	(L)	LEVEL CONTROLLER
RV	RELIEF VENT	(R)	RESEATING RELIEF		
SSS	SINGLE STAGE SUCTION	(D)	DEAD MAN VALVE		
SSD	SINGLE STAGE DISCHARGE	(B)	BUTTERFLY VALVE		
CWR	COOLING WATER RETURN	(M)	MOTORIZED VALVE		
CWS	COOLING WATER SUPPLY				

- NOTES:
- PLANT OPERATION & MAINTENANCE MUST FOLLOW PROCEDURES & SOPs.
 - ONLY CERTIFIED PEOPLE ARE ALLOWED TO DO PLANT OPERATION & MAINTENANCE.
 - THE RESTRICT USE VALVES MUST BE OPERATED IN PROCEDURES & SOPs AND BY CERTIFIED PEOPLE ONLY.
 - PROVIDE BLOW-DOWN VALVES FOR STRAINERS.
 - ALL SOLENOIDS TO HAVE ENCAPSULATED PILOT LIGHTS.
 - CONTRACTOR TO SIZE RV VALVE, LINE AND RELIEF HEADER SIZE AFTER EQUIPMENT ARE SELECTED.
 - CONTRACTOR TO SIZE CONTROL VALVE SIZE BASED ON REQUIRED CAPACITY AND OPERATING CONDITIONS.
 - CONTRACTOR TO SUPPLY AND INSTALL VALVE TAGS & EQUIPMENT TAGS FOR THE NEW INSTALLED VALVES AND EQUIPMENT.
 - CONTRACTOR TO UPDATE THE VALVE LIST PER THE FINAL INSTALLATION.

PROJECT: GIBSONS AREA COMMUNITY CENTER
 ICE PLANT REFRIGERATION
 2026 UPGRADES
 DRAWING TITLE: REFRIGERATION P & I DIAGRAM

DATE PLOTTED: _____
 SCALE: N T S
 DRAWN: JH
 REVIEWED: GS

PROJECT No: 3185
 REV No: _____ DWG No: _____
 2 3185-R1