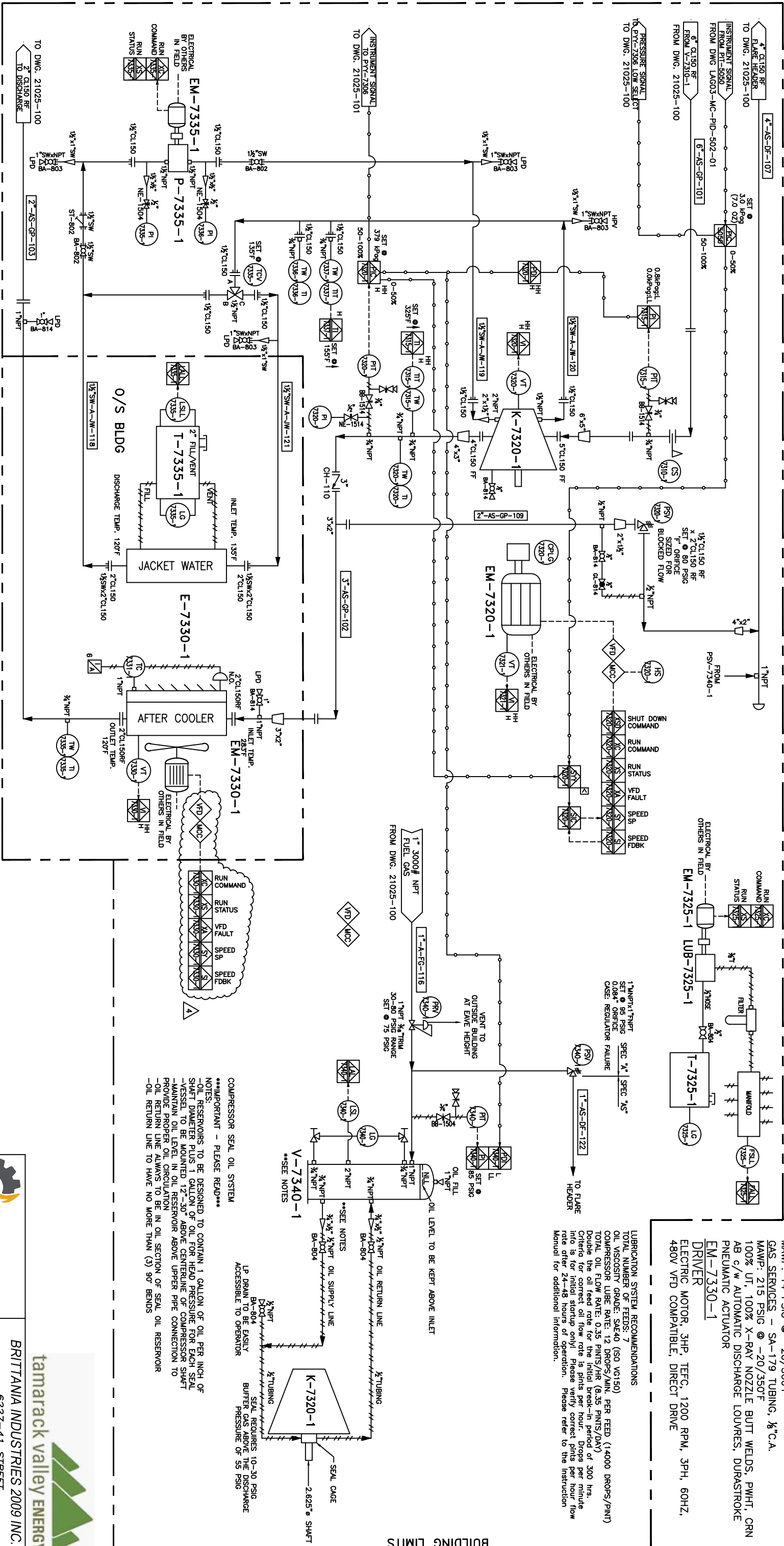


K-7320-1 COMPRESSOR RO-FLO 10G ROTARY VANE MAWP: 80 PSIG MAX. TEMPERATURE: 350°F SPEED RANGE: 450-1300 RPM	EM-7320-1 DRIVER TECO-WESTINGHOUSE ELECTRIC MOTOR 150HP, 445T FRAME, OPTIM PDH1504 TEFC, 1800 RPM, 3PH, 60HZ, 460V, CLASS 1, DIV. 2 VFD COMPATIBLE	LUB-7325-1 OIL DAY TANK OCMI 7-P-POINT KEMCO, 16'0Dx22'Lg	I-7325-1 JACKET WATER PUMP Viking H475 SERIES PUMP 12.0 USGPM CAPACITY	P-7335-1 VFD 1HP, 3PH, TEFC, 230/460V, 1800 RPM, ELECTRIC MOTOR	I-7335-1 GLYCOL SURGE TANK 4.6 US GALLON c/w VENT CAP BRITANIA STOCK, 8'0Dx24'Lg	V-7340-1 OIL RESERVOIR NPS 8" x 27" OAL, 1/8" CA MAWP: 285 PSIG @ 650°F MDMT: -20°F @ 285 PSIG CRN: OH22853.21345 VOLUME: 0.72 FT ³ (5.4 GALLONS)	E-7330-1 COOLING SYSTEM AIR-X MODEL 36W INDUCED DRAFT AIR COOLER (1) MOORE-10K-12SC 36"DIA. FAN, 2.7 HP/FAN, 1160 RPM, 10932 TI/SPD, BUG SCREENS WATER SERVICES - SA-214 TUBING, 1"NPT VENT, MANUAL DISCHARGE LOUVER MAWP: 14 PSIG @ -20/300°F GAS SERVICES - SA-179 TUBING, ½"C.A. MAWP: 215 PSIG @ -20/350°F 100% UT, 100% X-RAY NOZZLE BUTT WELDS, PWHT, CRN AB c/w AUTOMATIC DISCHARGE LOUVER, DURASTROKE PNEUMATIC ACTUATOR
--	--	---	--	---	--	---	---

EM-7330-1
DRIVER
ELECTRIC MOTOR, 3HP, TEFC, 1200 RPM, 3PH, 60HZ, 480V VFD COMPATIBLE, DIRECT DRIVE

LUBRICATION SYSTEM RECOMMENDATIONS
TOTAL NUMBER OF FEEDS: 7
OIL VISCOSITY GRADE: SAE40 (ISO VG150)
COMPRESSOR LUBE RATE: 12 DROPS/MIN. PER FEED (14000 DROPS/PINT)
TOTAL OIL FLOW RATE: 0.35 PINTS/HR (8.35 PINTS/DAY)
Double the oil feed rate for the initial break-in period of 300 hrs.
Criteria for correct oil flow rate is pints per hour. Drops per minute info is for initial startup only. Please verify correct pints per hour flow rate after 24-48 hours of operation. Please refer to the instruction Manual for additional information.



LINE NUMBERING SYSTEM	
CLASS: 2"-A-GP-100	CLASS: AS=150# ANSI BS=300# ANSI GP=PROCESS GAS DF=PROCESS FLARE DH=HYDROCARBON LIQUIDS DRAIN FC=FUEL GAS

SIGNAL TO/FROM PANEL	LOCALLY MOUNTED
MAIN CONTROL PANEL	LOCAL GAUGE PANEL
PNEUMATIC SIGNAL	ELECTRIC SIGNAL
CAPILLARY SIGNAL	

4	REVISED AS SHOWN	01/06/26	MR
3	UPDATED PER CLIENT	23/04/26	MR
2	AS BUILT	06/02/26	MR
1	REVISED AS NOTED	22/12/25	MR
0	ISSUED FOR CONSTRUCTION	12/11/25	MR
A	ISSUED FOR CLIENT APPROVAL	16/10/25	MR
REV	DESCRIPTION	DATE	BY

REVISION HISTORY

CP-7300-1
COMPRESSOR PANEL
ALLEN BRADLEY MICROLOGIX 1400 PLC,
PRO-FACE 5.7" TFT COLOR TOUCH
SCREEN HMI, RITTAL WM SERIES
WALL-MOUNT CONTROL CABINET, ESD
PUSHBUTTON, 120VAC SUPPLY
CLASS 1, DIV.2, GROUP C,D

BH-7385A-1/7385B-1
BUILDING HEATER
HAZLOC
XEU1-12-050-480360-A-Y-B-T1
5KW, 480V ELECTRIC, 12" FAN
c/w BUILT IN THERMOSTAT

EF-7390A-1/EF-7390B-1
BUILDING EXHAUST FAN
CANARM 12" EX. PROOF, RATED FOR
12 ACPH c/w MARATHON
56C17G15556A EPFC ELECTRIC
MOTOR, 1/2HP, 1PH, 60HZ, 115/230V

V-7310-1
INLET SCRUBBER
SIZE: 24"OD x 6'-0"S/S
MAWP: 230 PSIG @ 300°F
MDMT: -20°F @ 230 PSIG
C.A.: 1/8" SOUR
CRN: AB, BC

P-7312-1
CONDENSATE PUMP
GRACO/HUSKY 1050S
AIR OPERATED, DIAPHRAGM
PUMP, 1"NPT
MAWP: 125 PSIG

GENERAL NOTES

1. PIPING CONSTRUCTED TO ASME B31.3-2023 NORMAL SERVICE, SOUR FLUID.
2. MATERIALS:
SPEC. 'AS'
SPEC 'AS' MATERIAL TO BE NACE MR017/ISO 15156 COMPLIANT
BUTT WELDED:
PIPE: SA-106-B SMLS, 2" SCH.80, 3"-6" SCH.40
FITTINGS: SA-234-WPB, 2" SCH.80, 3"-6" SCH.40
FLANGES: SA-105N, CL150 RFWN, BORE TO MATCH PIPE
GASKETS: CL150 RF SPIRAL WOUND, GRAPHITE FILLER c/w INNER RING, 1/8" THK, 316SS
BOLTING: SA-193-B7 STUDS, SA-194-2H NUTS
THREADED PIPING:
PIPE: SA-106-B SMLS, 3/4" TO 1 1/2" SCH.160
UNIONS / FITTINGS: SA-105N, CL3000 NPT
TUBING:
1/4" O.D.-3/8" O.D. 0.035" WALL
1/2" O.D.-0.049" WALL
5/8" O.D.-3/4" O.D.-0.065" WALL
FULLY ANNEALED, ASTM A269-TP316/316L SMLS
TUBING FITTINGS:
1/4"-3/4" ASTM A182-F316 SS SWAGelok

- SPEC. 'A'
- SOCKET WELDED:
PIPE: SA-106-B SMLS, 1 1/2" TO 2" SCH.80
FITTINGS: SA-105N CL3000 SW
FLANGES: SA-105N, CL150 RFWN, BORE TO MATCH PIPE
GASKETS: CL150 RF SPIRAL WOUND, GRAPHITE FILLER c/w INNER RING, 1/8" THK, 316SS
THREADED PIPING:
PIPE: SA-106-B SMLS, 3/4" TO 1 1/2" SCH.80
UNIONS / FITTINGS: SA-105N, CL3000 NPT

3. DESIGN:
- SPEC. 'AS' MAWP: 285 PSIG(1965 kPag) @ 100°F(38°C)
MDMT: -20°F(-29°C) @ 285 PSIG(1965 kPag)
CORROSION ALLOWANCE: 3.2 mm (1/8")
- BUTT WELD NDE:
HYDROTEST: 428 PSIG(2951 kPag) @ AMBIENT TEMPERATURE
PWHT: NONE
RADIOGRAPHY: 100% BW; 10% SW (CHECK FIT-UP GAP)
MPI: 100% FILLET WELD & SW
- THREADED NDE:
AIRTEST: 314 PSIG(2165 kPag) @ AMBIENT TEMPERATURE
- SPEC. 'A' MAWP: 285 PSIG(1965 kPag) @ 100°F(38°C)
MDMT: -20°F(-29°C) @ 285 PSIG(1965 kPag)
CORROSION ALLOWANCE: 1.6 mm (1/16")
- BUTT WELD NDE:
HYDROTEST: 428 PSIG(2951 kPag) @ AMBIENT TEMPERATURE
RADIOGRAPHY: 15% BW; 10% SW (CHECK FIT UP GAP)
MPI: 15% FILLET WELD & SW
- THREADED NDE:
AIRTEST: 314 PSIG(2165 kPag) @ AMBIENT TEMPERATURE
4. THIS PRESSURE PIPING SYSTEM HAS A CAPACITY OF LESS THAN 0.5 CUBIC METRES.
 5. PACKAGE IS CLASSIFIED AS CLASS I, DIVISION II.
 6. ALL CONTROL VALVES TO BE VENTED TO FLARE HEADER.
 7. PROCESS AND INSTRUMENTATION DIAGRAM TO BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT DRAWING AND BILL OF MATERIALS.
 8. ALL EQUIPMENT & INSTRUMENTATION SHALL BE FITTED WITH STAINLESS STEEL TAGS.
 9. PIPE SUPPORTS SHALL NOT BE U-BOLT TYPE. HEAVY DUTY CLAMPS SHOULD BE USED TO PREVENT VIBRATION.
 10. ALL PROCESS TRANSMITTERS TO BE LOCATED ON RACK NEAR PANEL.



2025.12.23

Note:
Piping design per
ASME B31.3.

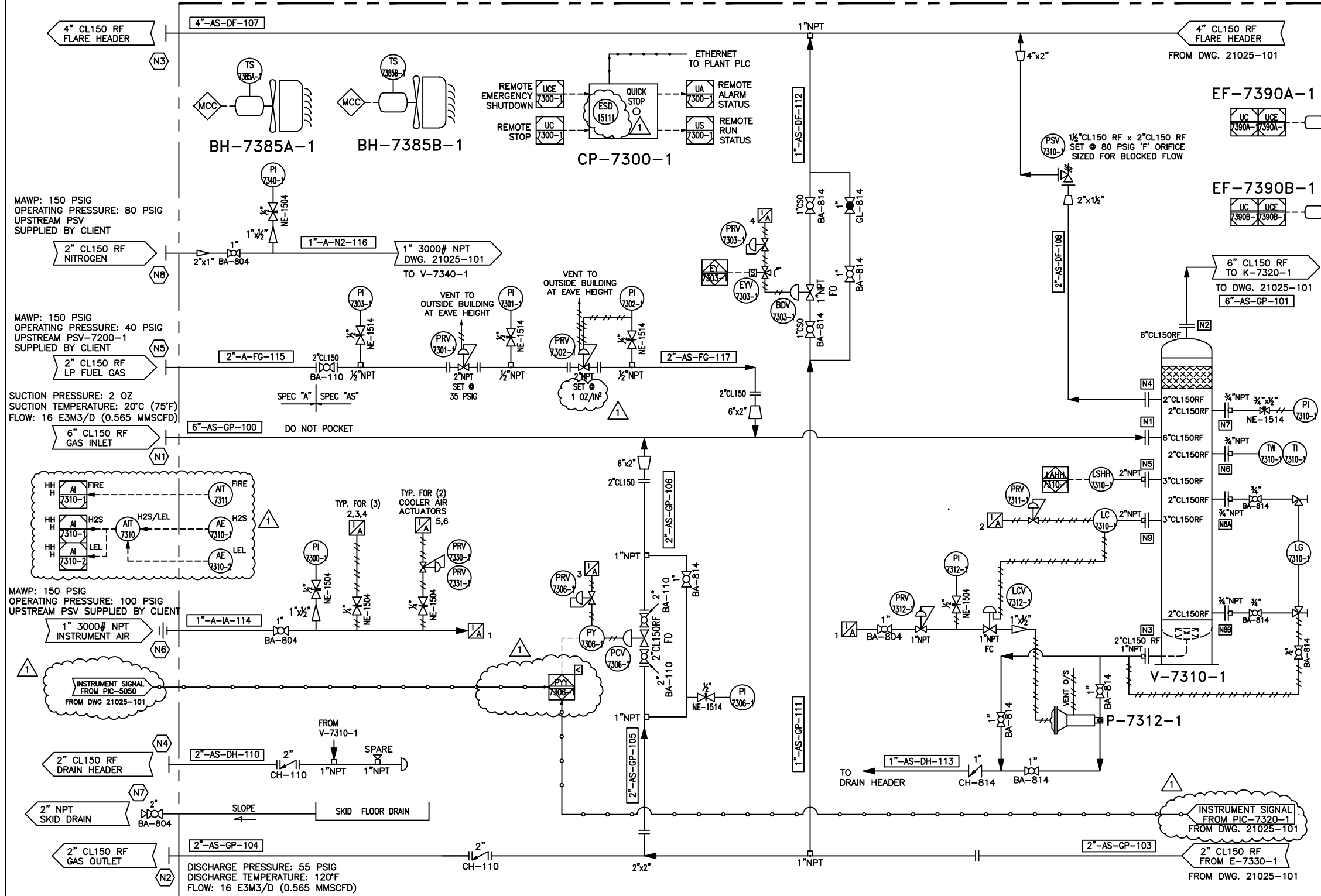


BRITANNIA INDUSTRIES 2009 INC.
6227-41 STREET
LEDUC, AB T9E 0V7
PH. 780-986-5955
FAX: 780-986-7113
TOLL FREE: 866-955-7524

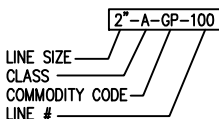
PROCESS & INSTRUMENTATION DIAGRAM
RO-FLO 10G / 150HP ELECTRIC VRU
PROJECT: 25241 SADDLE HILLS
LSD: 05-21-075-07 W6M
TAG:

CUSTOMER TAMARACK VALLEY ENERGY
c/o MILLENIA ENGINEERING

DWG NO. 21025-100
REV. 1



LINE NUMBERING SYSTEM



CLASS: AS=150# ANSI
BS=300# ANSI
COMMODITY: GP=PROCESS GAS
DF=PROCESS FLARE
DH=HYDROCARBON LIQUIDS DRAIN
IA=INSTRUMENT AIR
FG=FUEL GAS

SIGNAL TO/FROM PANEL
LOCALLY MOUNTED
MAIN CONTROL PANEL
LOCAL GAUGE PANEL
PNEUMATIC SIGNAL
ELECTRIC SIGNAL
CAPILLARY SIGNAL

BA = BALL VALVE
CH = CHECK VALVE
GA = GATE VALVE
GL = GLOBE VALVE
NE = NEEDLE VALVE

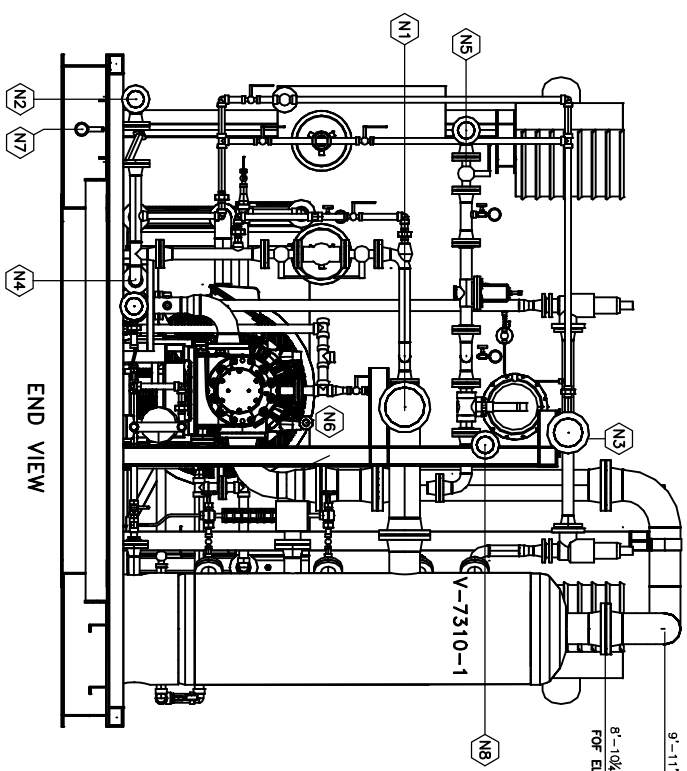
0 = SWEET SERVICE
1 = NACE
1 = ANSI 150#
2 = ANSI 300#
3 = ANSI 600#
4 = CLASS 800
5 = ANSI 900#
6 = CLASS 1500

BALL VALVE
CHECK VALVE
GATE VALVE
GLOBE VALVE
NEEDLE VALVE

REV	DESCRIPTION	DATE	BY
1	REVISED AS NOTED	22/12/25	MRB
0	ISSUED FOR CONSTRUCTION	12/11/25	MRB
A	ISSUED FOR CLIENT APPROVAL	16/10/25	MRB

REVISION HISTORY

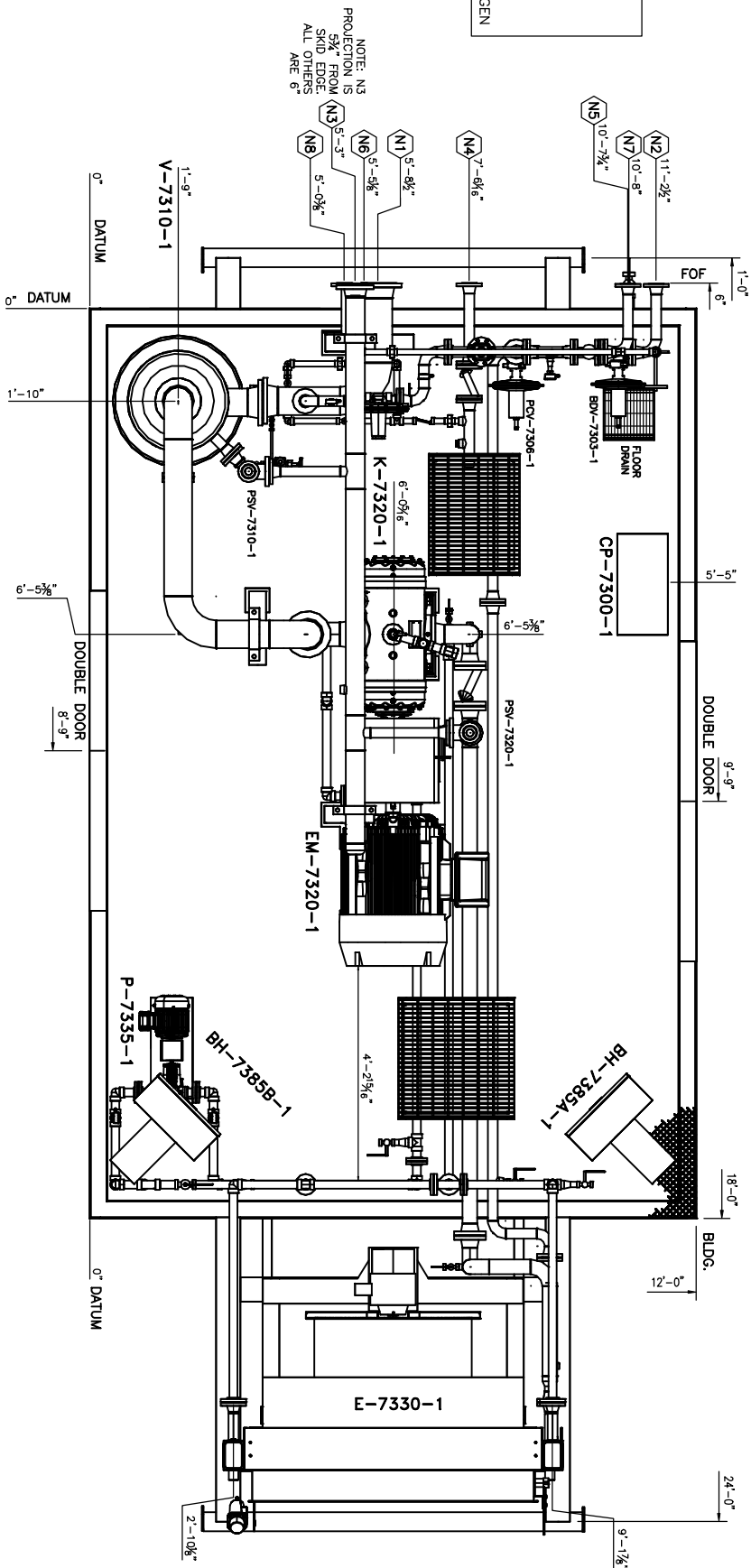
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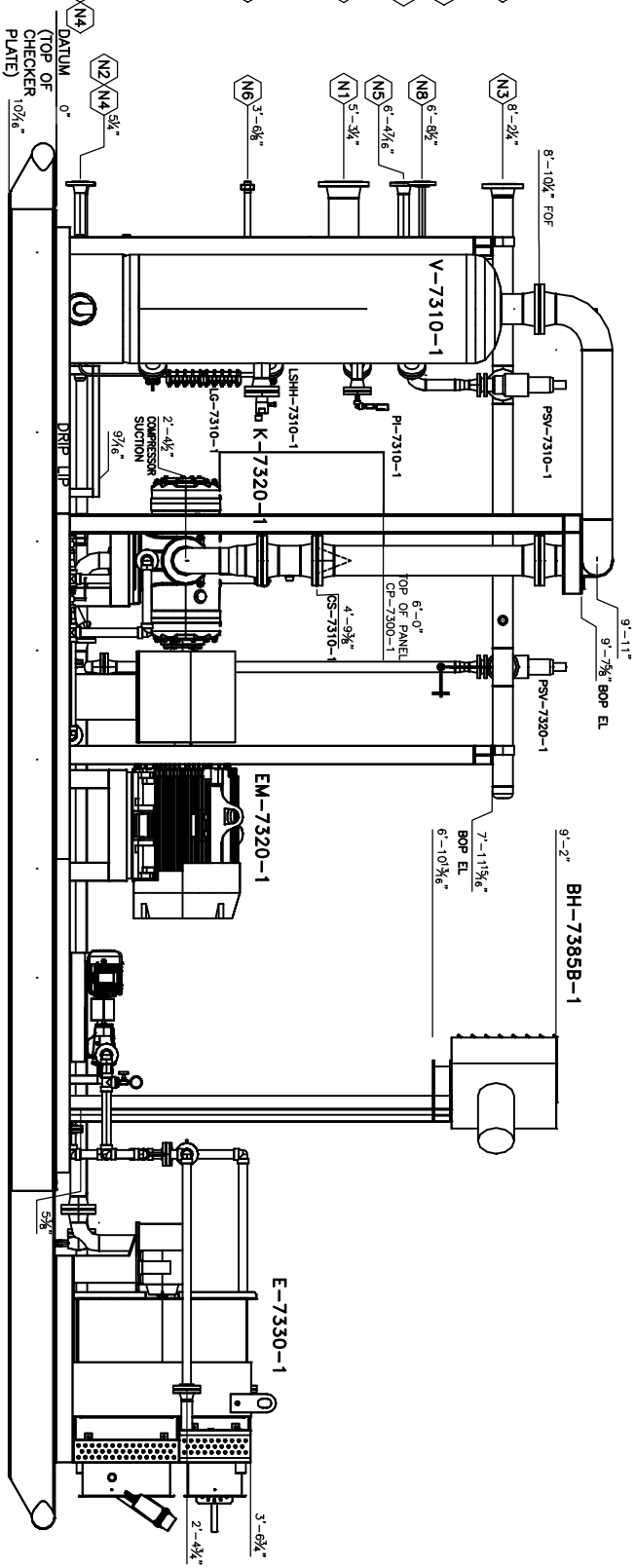
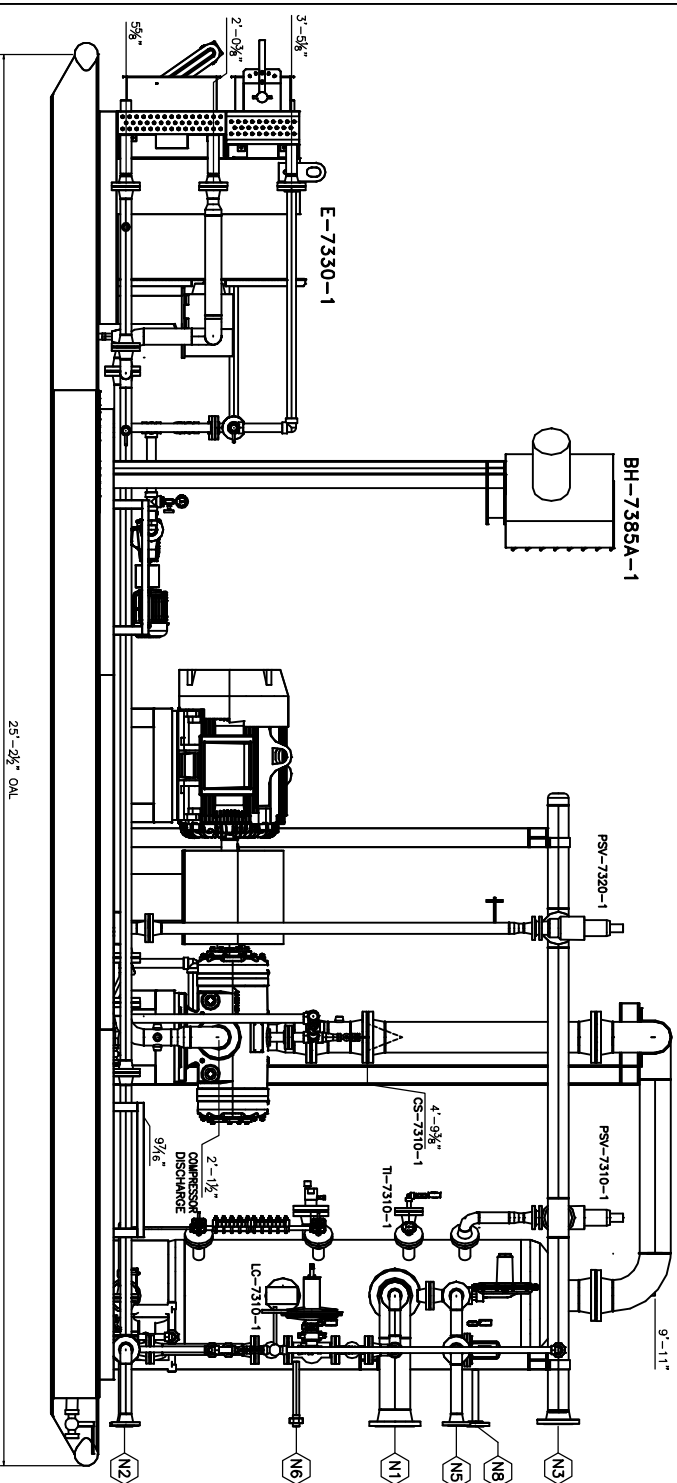
SKID CONNECTIONS	
N1	6" CL150 RFWM GAS INLET
N2	2" CL150 RFWM GAS OUTLET
N3	4" CL150 RFWM FLARE HEADER
N4	2" CL150 RFWM DRAIN HEADER
N5	2" CL150 RFWM LP FUEL GAS
N6	1" CL3000 NPT INSTRUMENT AIR
N7	2" CL3000 NPT FLOOR DRAIN
N8	2" CL150 RFWM X 1" NPT HP NITROGEN

PACKAGING WEIGHTS:	
K-7330-1 COMPRESSOR	1,350 LBS
EM-7320-1 MOTOR	1,800 LBS
E-7330-1 COOLER	2,000 LBS
BH-7330-1 SCRUBBER	1,100 LBS
V-7385A/B-1 HEATERS	320 LBS
PIPING, VALVES, ETC	2,600 LBS
MAIN SKID	8,144 LBS
BUILDING	4,388 LBS
PIPE SUPPORTS, MISC	877 LBS
COMPRESSOR BASE	145 LBS
MOTOR BASE	209 LBS
MISC AND INSTRUMENTS	446 LBS
TOTAL PACKAGE WEIGHT	23,319 LBS

NOTE: N3
PROJECTION IS
5 3/4" FROM
SKID EDGE.
ALL OTHERS
ARE 6"



PLAN VIEW



FRONT ELEVATION VIEW

GENERAL NOTES:

- SHOP TO FIT ALL THREADED AND SOCKET WELDED PIPING
- SHOP TO FIT SW JACKET WATER PIPING AND T-7335-1 AS PER DWG 21025-101
- SHOP TO FIT THREADED LOW POINT TO OIL RESERVOIR V-7340-1 AS PER DWG 21025-101
- HIGH POINT VENT AND LOW POINT DRAINS TO BE PROVIDED WHERE REQUIRED
- INSTRUMENTS AND MANUAL VALVES TO BE EASILY ACCESSIBLE FOR OPERATION
- SHOP TO LOCATE LUB-7325-1, T-7335-1, V-7325-1, V-7340-1, AND P-7335-1 SO THEY ARE EASILY ACCESSIBLE FOR OPERATION
- ACCESSIBLE FOR OPERATION
- PIPING, VESSELS, AND STRUCTURAL STEEL TO BE SANDBLASTED TO SSPC-SP6C WITH PRIMER COAT AND FINISH COAT WARM GREY ENAMEL

BRITANNIA TO SUPPLY AND INSTALL THE FOLLOWING:

- ALL PIPE SUPPORTS
- DRIP LIP AROUND SKID PERIMETER

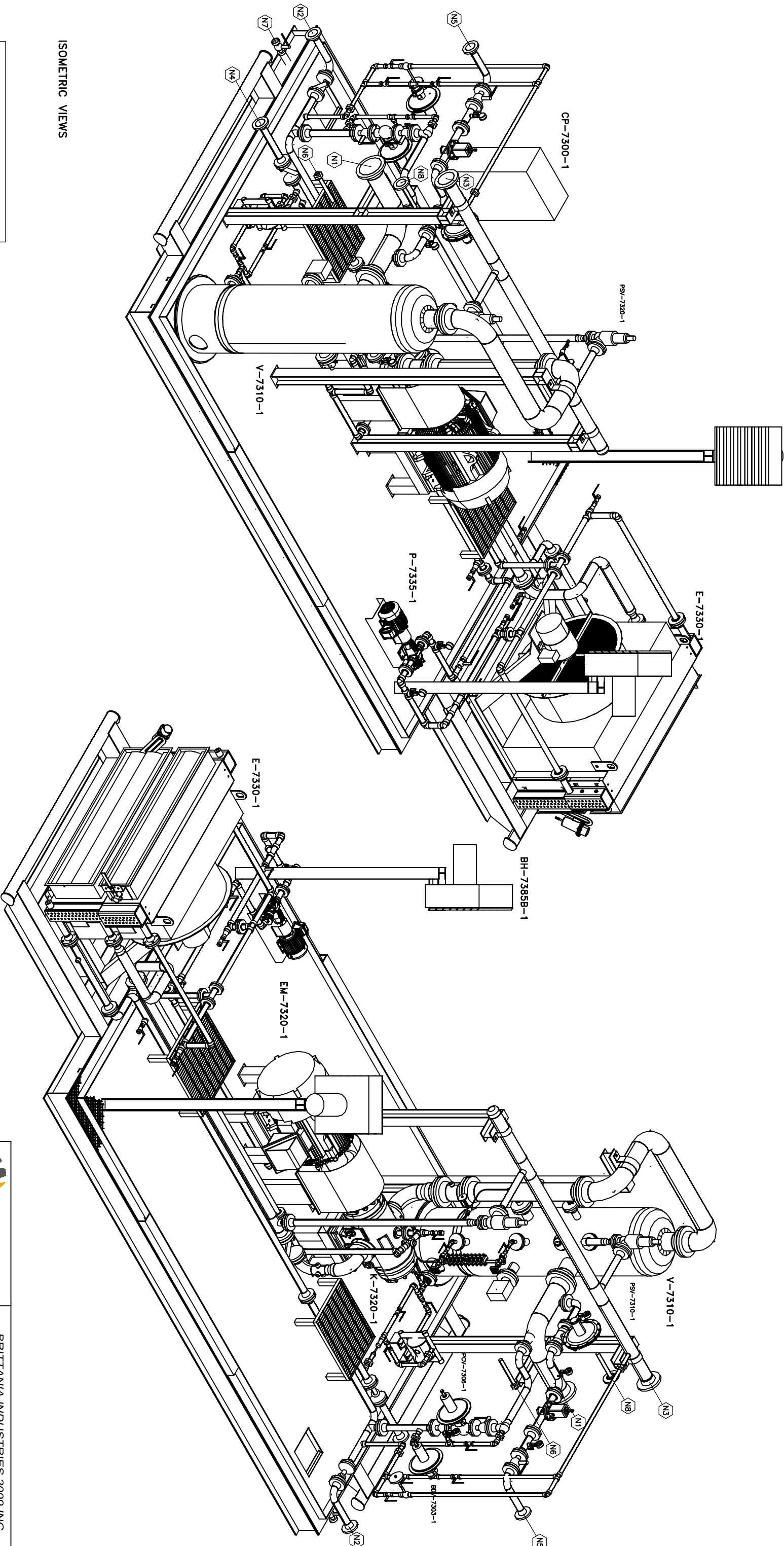
APPROX. SHIPPING WEIGHT: 23,319 LBS

APPROX. SHIPPING DIMENSIONS: 12'-6"W X 25'-2 1/2"LG X 13'-11"HIGH

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	AS BUILT	05/02/26	MRB
0	ISSUED FOR CONSTRUCTION	12/11/25	MRB
A	ISSUED FOR APPROVAL	17/10/25	MRB

REVISION HISTORY

		BRITTANIA INDUSTRIES 2009 INC. 6227-41ST STREET LEDUC, AB T9E 0V7 PH: 780-986-5955 FAX: 780-986-7113 TOLL FREE: 866-955-7524	
DRAWN MRB	DATE 10/10/25	GENERAL ARRANGEMENT DRAWING RO-FLO 106 / 150HP ELECTRIC SOUR VRU PROJECT: 25241-12 SADDLE HILLS LOCATION: 05-21-075-07 W6M TAG: TBD	
APPROVED	DATE		
SCALE	CLIENT PO		
NTS 25098-12-PO-12-001	JOB NO. 21025		
CUSTOMER TAAPARACK VALLEY ENERGY c/o MILLENNIA ENGINEERING		DWG NO. 21025-200 Pg.1/2	REV. 1



ISOMETRIC VIEWS

- SKID CONNECTIONS
- N1

6" CL150 RFWN GAS INLET
- N2

2" CL150 RFWN GAS OUTLET
- N3

4" CL150 RFWN FLARE HEADER
- N4

2" CL150 RFWN DRAIN HEADER
- N5

2" CL150 RFWN LP FUEL GAS
- N6

1" CL3000 NPT INSTRUMENT AIR
- N7

2" CL3000 NPT FLOOR DRAIN
- N8

2" CL150 RFWN X 1" NPT NITROGEN

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REV	DESCRIPTION	DATE	BY
1	AS BUILT	05/02/26	MRB
0	ISSUED FOR CONSTRUCTION	12/11/25	MRB
A	ISSUED FOR APPROVAL	17/10/25	MRB

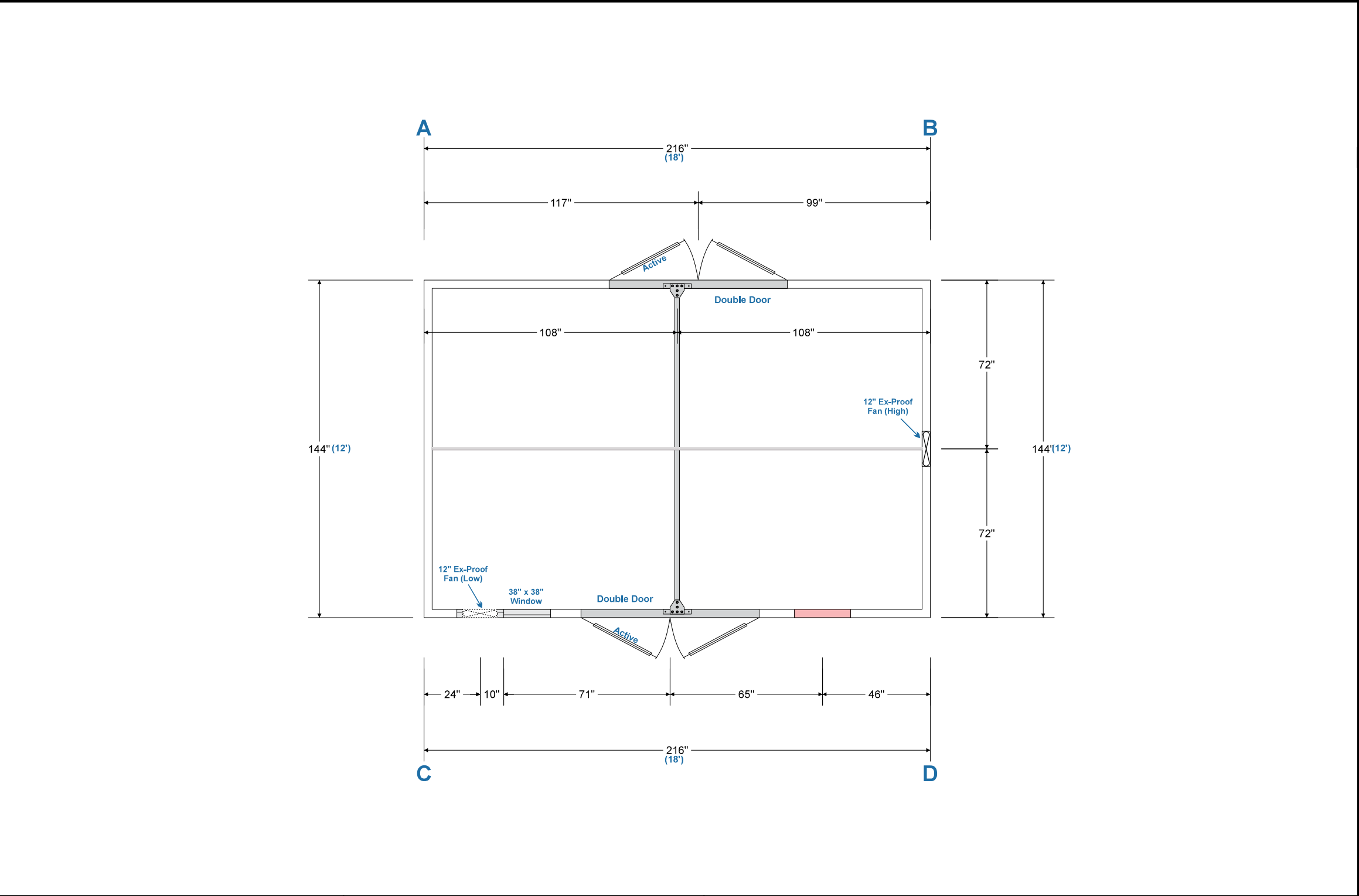
DRAWN	DATE	GENERAL ARRANGEMENT DRAWING
MRB	10/10/25	RO-FLO 10G / 150HP ELECTRIC SOUR VRU
APPROVED	DATE	
MRB		PROJECT: 25241-12 SADDLE HILLS
SCALE	CLIENT PO	
NTS	25008-12-PO-12-001	LOCATION: 05-21-075-07 W6M
JOB No.	CUSTOMER	
21025	TAMARACK VALLEY ENERGY c/o MILLENNIA ENGINEERING	TAG: TBD



BRITANIA INDUSTRIES

BRITANIA INDUSTRIES 2009 INC.

6227-41ST STREET
LEDUC, AB T9E 0V7
PH: 780-986-5955
FAX: 780-986-7113
TOLL FREE: 866-955-7524



Building Components & General Notes	
1	Type
SIZE: 12'-0"W x 18'-0"L x 10'-6"H @ 4:12	
(1) 22ga Galvalume, Gable Style Metal Building, Erected at your shop, Base by others	
Wall - Tan (QC8315) Roof - Tan (QC8315) Trim - Tan (QC8315)	
2	Interior
6mil Vapour Barrier 24ga White Fluted Aluminum Lining c/w White Screws R12 Fiberglass Insulation in the walls R20 Fiberglass Insulation in the roof (1) Tie Rod	
3	Exterior
(2) Eavestroughs - Tan (QC8315) (2) Downspouts - Tan (QC8315) (2) Icerake - Tan (QC8315)	
4	Doors
(2) 6ft x 7ft 20ga Double Door c/w 16ga Frame Doors Complete c/w Closure, Check Chain, Weatherstripping, Sweeps, Locking Panic Hardware, Aluminum Thresholds, hydraulic closure and 20"x20" IWG windows (Door and Frames painted Tan - QC8315)	
5	Windows
(1) 38" x 38" Double Glazed Sliding Windows	
6	Ventilation
(1) 24" x 24" Manually Adjustable Louvre c/w Bird Screen, Inside Controls and weather hood (2) 12" Explosion Proof Fan, 1/3 HP Motor (120-208 VAC, 1 PH, 60 HZ) c/w bird screen and Weatherhood Weather Hood Tan (QC8315)	
7	Other:
Ventilation placement is to be installed to avoid vertical ribs for structural Integrity.	

Schedule of Fasteners	Material & Design Specifications
Base Channel Anchoring: #14 x 1 1/2" Staggered @ 8" OC	Pre-Painted Steel with Galvanized Substrate A653, Q90, QR37
Wall Panel to Base Channel: #8 x 1/2" @ Low Flutes	Pre-Painted Steel with Galvalume Substrate A792, AZ150, QR37
Wall Panel Rib Base & Top Channel: #8 x 1/2" Top & Bot	Plain Galvanized Steel A653, Q90, QR37
Wall Panel to Top Channel: #8 @ Every High Flute	Plain Galvalume Steel A792, Az165, AZ150, QR37
Roof Panel to Gable Channel: #10 x 3/4" @ 24" OC	Approximate Weight: 2909 lbs
Roof Panel to Ridge: #10 x 3/4" @ 5 per 20" Panel	38"w x 36"h Window - R. O. is 40"w x 37"h
Back Drip to Top Channel: #8 x 1/2" @ 6" Staggered Centres	72"w x 84"h Double Door - R. O. is 74"w x 85"h (Plus Containment)
Tie-Rod / Wall Connection: 4 - 3/8" Bolt Complete on each end	Design Calculations Not Included
Wall Panel Rib Stitch Screws: #8 x 1/2" @ 20" OC Top & Bot	AB P.Eng Stamp Required
Roof Panel Rib Stitch Screws: #10 x 3/4" @ 20" OC Top & Bot	On-Site Engineer Inspections not included
Roof Panel to Back Drip: #14 x 7/8" @ 5 Per Panel	
Liner Panel: #8 x 1/2" @ Every second flute	
Icerake to Roof Panel: #10 x 3/4" @ Every Rib both sides	

Engineering Stamp & Permit to Practice

PERMIT TO PRACTICE

STEEL STRUCTURES CONSULTING LTD.

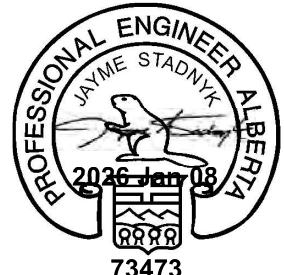
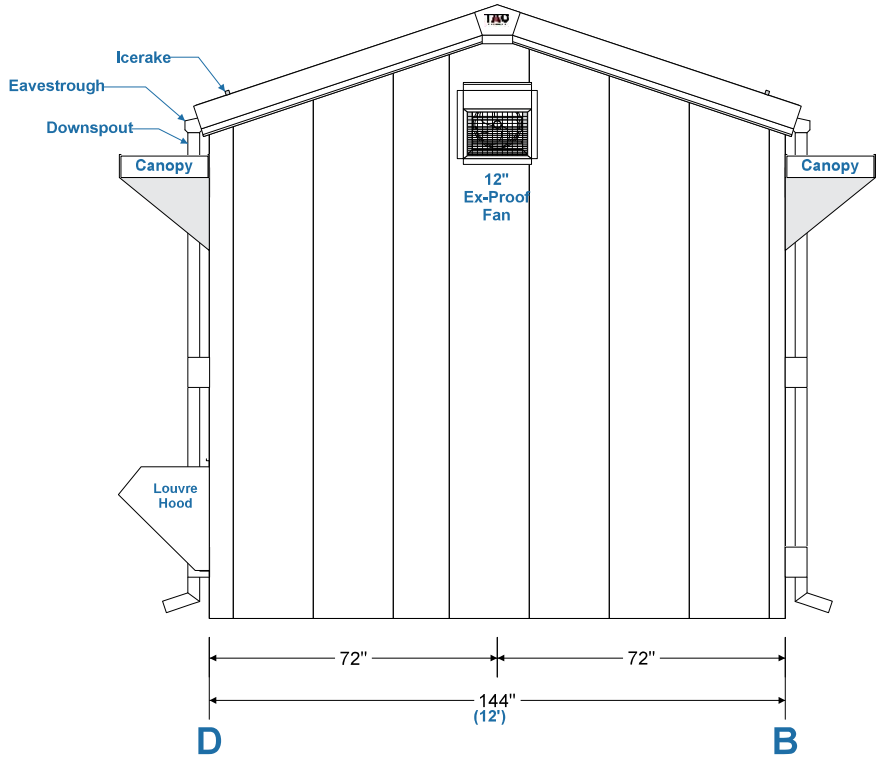
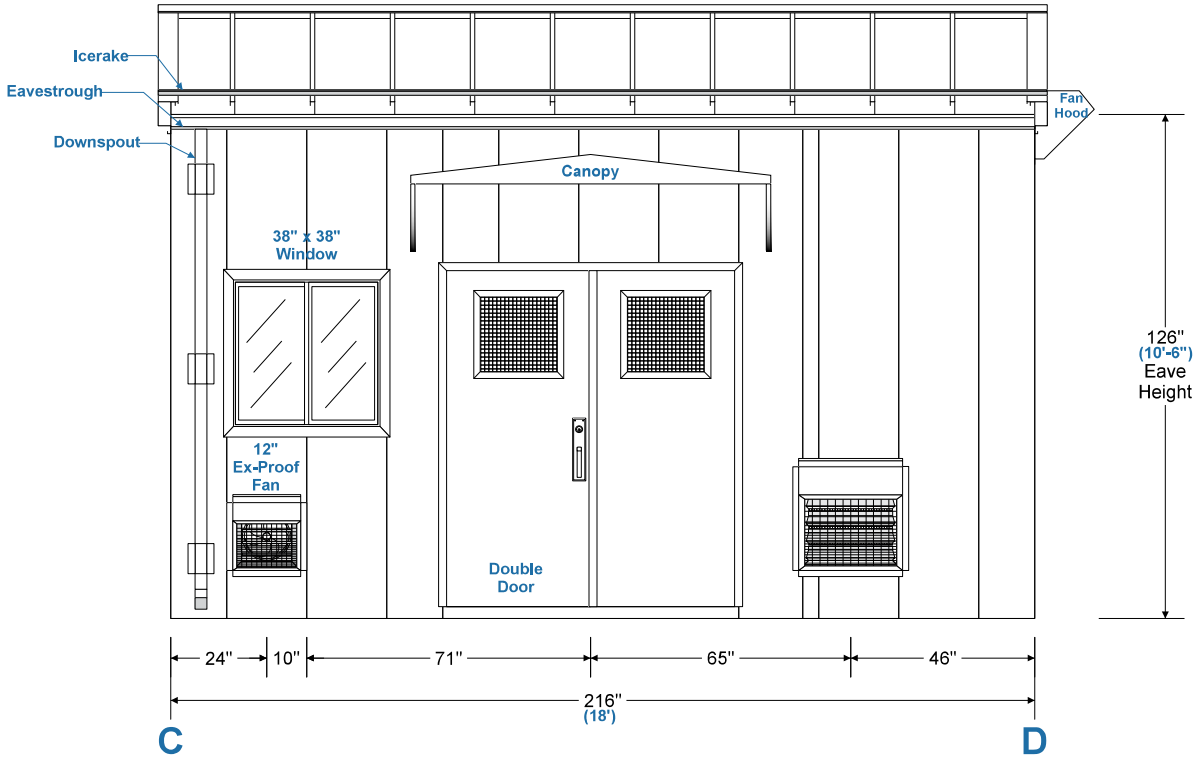
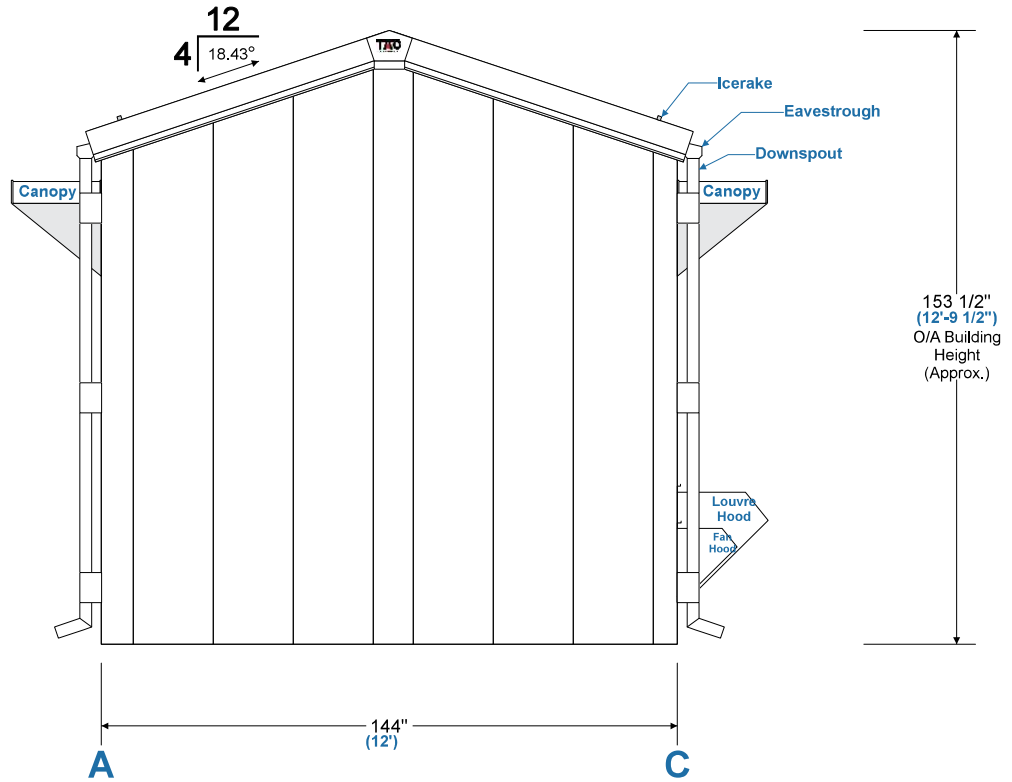
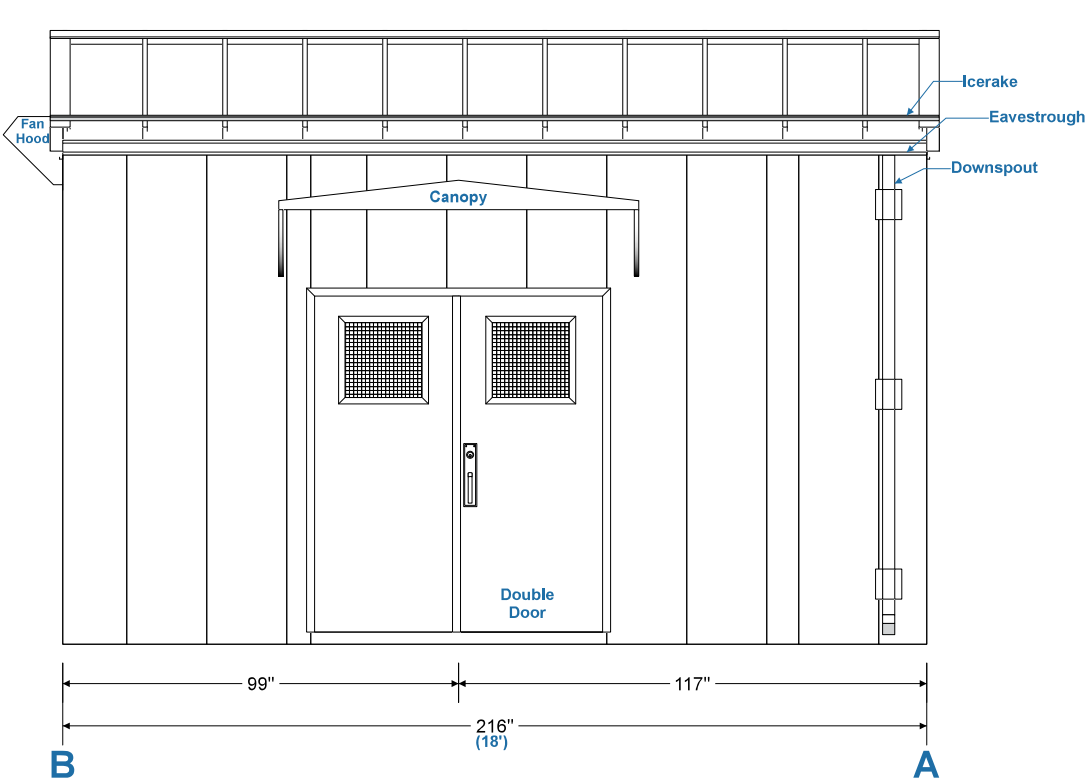
Signature: *Jayme Stadnyk*

Date: 2026 Jan 08

PERMIT NUMBER: P14629

The Association of Professional Engineers and Geoscientists of Alberta

REV		BY	DATE	COMMENT
0	CA	Nov.25.2025	Issued for Approval	
1	CA	Dec.23.2025	Issued for Construction	
 TAC Industries Ltd. Box 208, Busby, Ab T0G 0H0 (780) 405-6175 www.tacbuild.com admin@tacbuild.com   CERTIFIED CSA A660 Certification#: TACINO				
Project: Tamarack Valley Energy c/o Millenia Engineering 150 HP Electric Sour VRU				
Client: Brittania Industries 2009 Inc.				
Date: Nov.25.2025		Scale: 1/4"=1'	Dwg No: #2050-25C	Customer # 21025
Drawn: CA		Checked: KA	Location: LSD: 05-21-075-07 W6M 25241-12 Saddle Hills	Page 1 of 3



PERMIT TO PRACTICE
STEEL STRUCTURES CONSULTING LTD.
Signature: *Jayme Stadnyk*
Date: 2026 Jan 08
PERMIT NUMBER: P14629
The Association of Professional Engineers and Geoscientists of Alberta

REV	BY	DATE	COMMENT
0	CA	Nov.25.2025	Issued for Approval
1	CA	Dec.23.2025	Issued for Construction

Box 208, Busby, Ab
T0G 0H0
(780) 405-6175
www.tacbuild.com
admin@tacbuild.com

Certification#: TACIND

Project: Tamarack Valley Energy c/o Millenia Engineering
150 HP Electric Sour VRU

Client: **Brittania Industries 2009 Inc.**

Date: Nov.25.2025
Scale: 1/4"=1'
Dwg No: #2050-25C
Customer #: 21025

Drawn: CA
Checked: KA
Location: LSD: 05-21-075-07 W6M
25241-12 Saddle Hills

Page 2 of 3

