

REFERENCE DRAWING	DWG NO.	REV.

- NOTES:
- 1- OPENING DEGREE TO BE SET DURING COMMISSIONING AND LOGGED.
 - 2- SIGNALS ROUT TO DCS.
 - 3- SET TEMPERATURE FOR ELECTRICAL TRACING IS 30°C.

TAP SIZES CONFIRMED PER ME STANDARD DRAWING

8/14/24

TAG NO.	RU0001A-C-01
SERVICE	COMPRESSOR
TYPE	OIL FLOODED SCREW
MANUFACTURER	MAYEKAWA
DESIGN DP (BARG)	23
DESIGN DUTY (kW)	165

REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
00		ISSUED FOR APPROVAL (FA)	A.W.	T.S.H.	A.W.

CLIENT

CONSULTING ENGINEER

PROJECT:

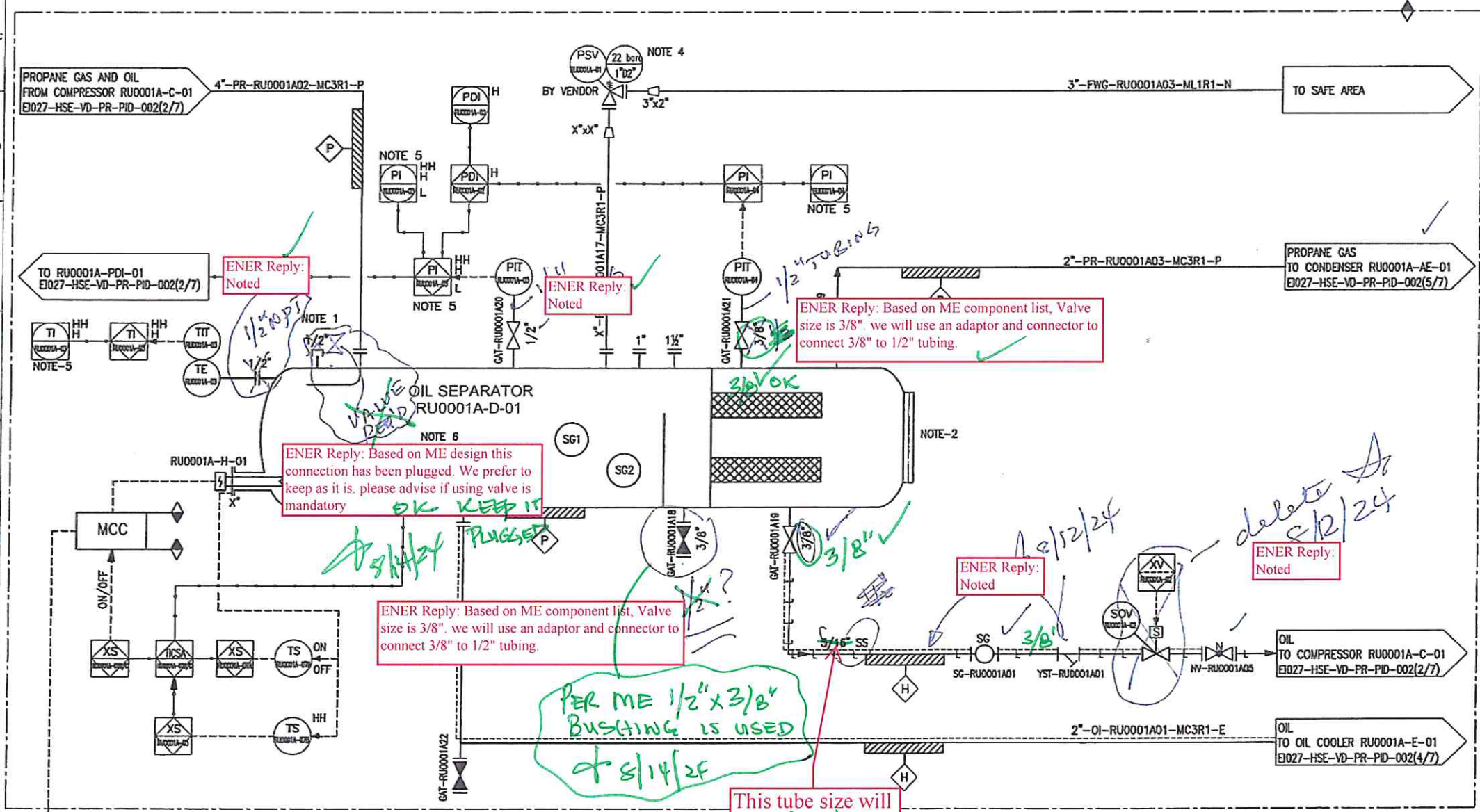
DRAWING TITLE:
PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU

DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	00	A3	NTC	2 of 7

TAG NO.	RU0001A-D-01
SERVICE	OIL SEPARATOR
DESIGN PRESS. (BARG)	22
DESIGN TEMP. (°C)	-29/100
ID x L (mm)	590 x 2250

REFERENCE DRAWING	DWG NO	REV

- NOTES:
- 1- OIL TOP UP & VACUUM CONNECTION.
 - 2- INSPECTION HOLE.
 - 3- STOP CHECK VALVE FOR PREVENT SPIN BACK.
 - 4- SIZE OF PSV WILL BE FINALIZED ON NEXT STAGE.
 - 5- SIGNAL ROUT TO DCS.
 - 6- IN CASE OF LOW OIL LEVEL, THE OIL HEATER TO BE TRIPPED.
 - 7- SET TEMPERATURE FOR ELECTRICAL TRACING IS 30°C.



ENER Reply: Noted

ENER Reply: Noted

ENER Reply: Based on ME component list, Valve size is 3/8". we will use an adaptor and connector to connect 3/8" to 1/2" tubing.

ENER Reply: Based on ME design this connection has been plugged. We prefer to keep as it is. please advise if using valve is mandatory

ENER Reply: Based on ME component list, Valve size is 3/8". we will use an adaptor and connector to connect 3/8" to 1/2" tubing.

ENER Reply: Noted

ENER Reply: Noted

This tube size will be 1/2" 3/8"

TO BE USED TO HELP EXPANDED GAS LIFT OIL TO SUCTION LINE

HOLD:

EQUIPMENT LIST

KEY PLAN:

REV	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
00					

CONSULTING ENGINEER

PROJECT:

DRAWING TITLE:
PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU

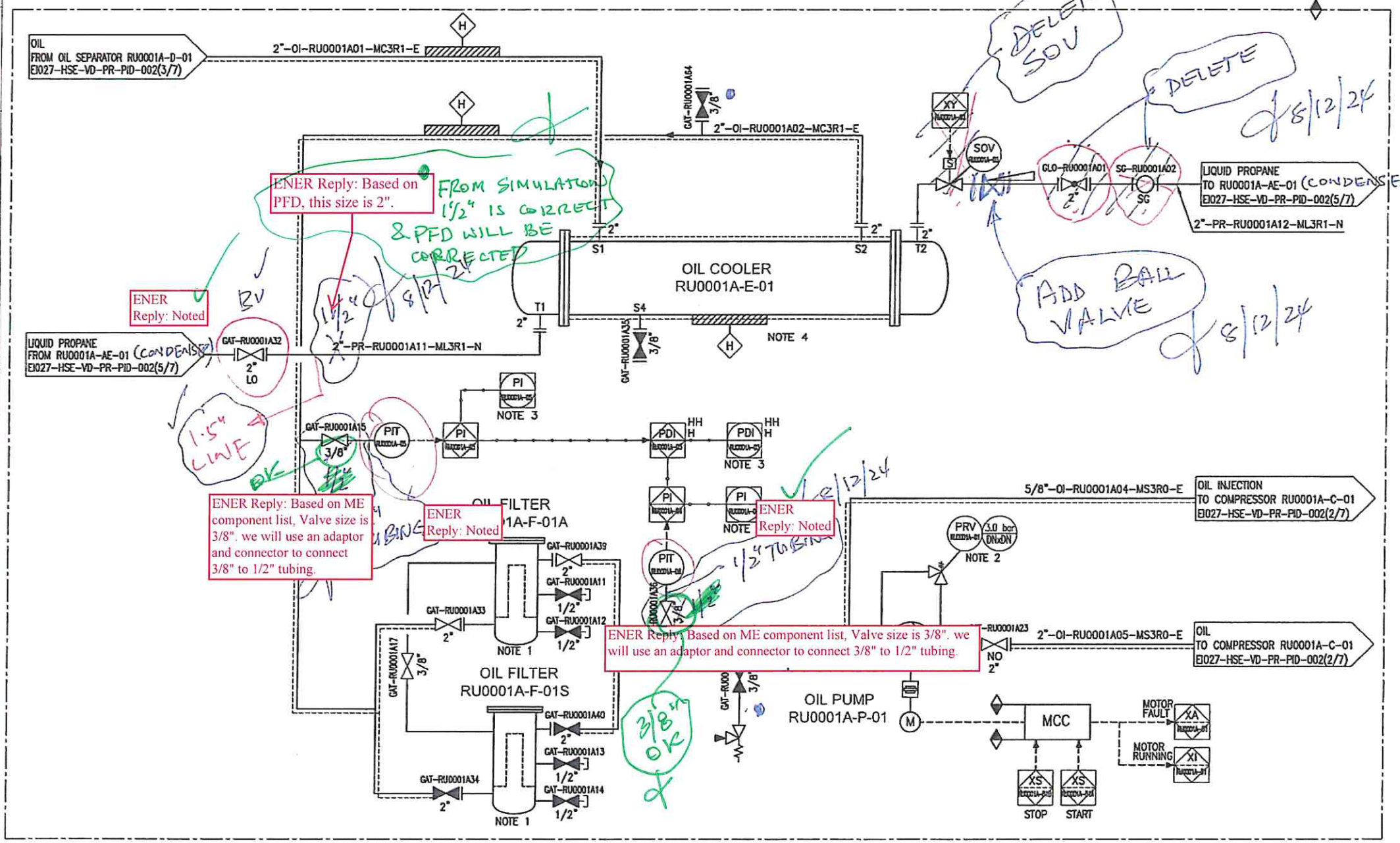
DRAWING NO.	REV	SIZE	SCALE	SHEET
E1027-HSE-VD-PR-PID-002	00	A3	NTC	3 of 7

TAG NO.	RU0001A-E-01
SERVICE	OIL COOLER
DESIGN PRESS. (BARG)	S: 30, T:30
DESIGN TEMP. (°C)	S:5/100, T:-45/100
DESIGN DUTY (kW)	24.7
ID x L (mm)	139.7 x 2200
TYPE	AEH

TAG NO.	RU0001A-P-01
SERVICE	OIL PUMP
TYPE	SCREW PUMP
DESIGN PRESS. (BARG)	23
DESIGN TEMP. (°C)	5 / 100
RATED POWER (kW)	2.5

TAG NO.	RU0001A-F-01A/S
SERVICE	OIL FILTER
DESIGN PRESS. (BARG)	23
DESIGN TEMP. (°C)	5/100
ID x L (mm)	MAYEKAWA

REFERENCE DRAWING	DWG NO	REV
NOTES		
1- ONE OPERATING / ONE STAND-BY.		
2- DP=3 BAR.		
3- SIGNAL ROUT TO DCS.		
4- HEAT TRACING TO BE TURNED OFF DURING COMPRESSOR START.		
5- SET TEMPERATURE FOR ELECTRICAL TRACING IS 30°C.		
HOLDE:		
EQUIPMENT LIST:		
KEY PLAN:		
CO	ISSUED FOR APPROVAL (IFA)	A.M. F.S.H. A.M.
REV.	ISSUE DATE	DESCRIPTION PREPARED CHECKED APPROVED
CLIENT		
CONSULTING ENGINEER		
PROJECT:		
DRAWING TITLE:		
PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU		
DRAWING NO	REV.	SIZE SCALE SHEET
E027-HSE-VD-PR-PID-002	00	A3 NTC 4 of 7



TAG NO.	RU0001A-AE-01
SERVICE	CONDENSER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
DESIGN DUTY (kW)	257

TAG NO.	RU0001A-D-02
SERVICE	RECEIVER HEADER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
ID x L (mm)	335x5050

REFERENCE DRAWING	DWG NO	REV

NOTES:
 1- SIZE OF PSV WILL BE FINALIZED ON NEXT STAGE.
 2- MANUAL FAN PITCH HAS BEEN CONSIDERED FOR EACH FAN.
 3- SET TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

ENER Reply: Please keep at this location, if possible, if we move as per comment, so we have to consider running by pass as LTCS

EARLY MARKING WAS MADE BY MISTAKE SPR29

ENER Reply: Noted

ENER Reply: Based on PFD, this size is 2".

ENER Reply: No need to this valve, already we have considered a valve before Level control valve

ENER Reply: Based on PFD, this size is 2". Other modification on priority header will be done

ENER Reply: Noted

IT WAS ADVISED EARLIER BY AMIN THAT ONE PORTABLE FILTER/DRYER USED FOR

BOTH UNIT. CHECK WITH AMIN

AG REED TO DELETE. IGNORE COMMENT
 NOZZLE ON RECEIVER WILL BE DELETED

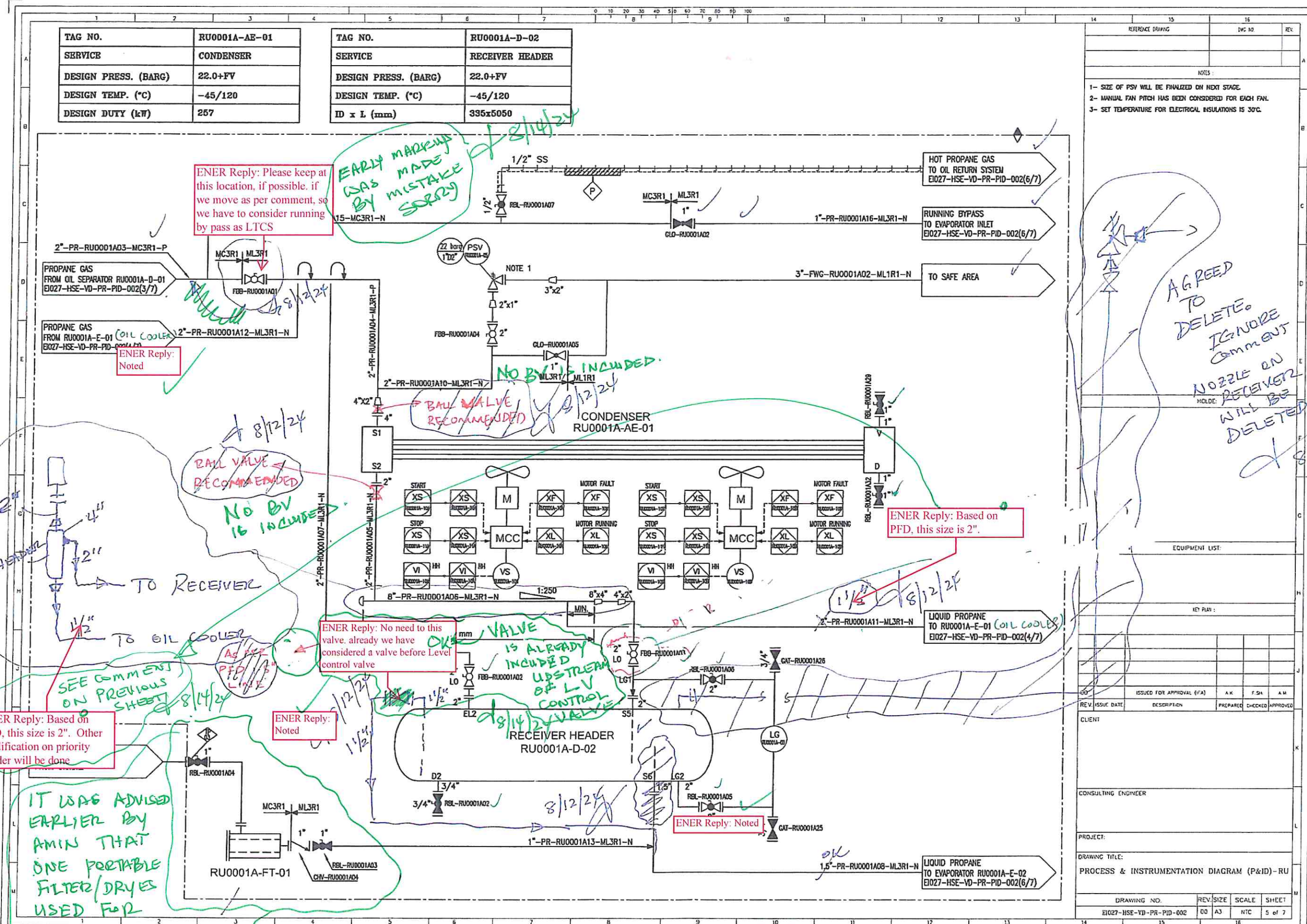
8/12/24
 BALL VALVE RECOMMENDED
 NO BV IS INCLUDED
 SEE COMMENT ON PREVIOUS SHEET
 8/14/24

VALVE IS ALREADY INCLUDED UPSTREAM OF LV CONTROL

8/12/24

1 1/2" 8/12/24

8/12/24



EQUIPMENT LIST:				
KEY PLAN:				
NO	ISSUED FOR APPROVAL (IFA)	A.K	F.SI	A.M
REV	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED
CLIENT:				
CONSULTING ENGINEER:				
PROJECT:				
DRAWING TITLE: PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU				
DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	00	A3	NTC	5 of 7

TAG NO.	RU0001A-E-02
SERVICE	EVAPORATOR
DESIGN PRESS. (barg)	S: 22.0+FV, T: 6.8+FV
DESIGN TEMP. (°C)	S: -45/120, T: 85
DESIGN DUTY (kW)	166.8
SHELL ID x TUBE L (mm)	600-925 x 2300
TEMA TYPE	BKU

REFERENCE DRAWING	DWG NO	REV

- NOTES:
- 1- TRAVEL DOWN BLOCK TO BE SET AND LOCKED AT MINIMUM OPENING DURING COMMISSIONING (2 ~ 5%).
 - 2- SIZE OF PSV WILL BE FINALIZED ON NEXT STAGE.
 - 3- AT STAND STILL CONDITION, VALVE NEEDS TO BE CLOSED COMPLETELY DURING START-UP VALVE TO BE OPENED SMOOTHLY.
 - 4- SET TEMPERATURE FOR ELECTRICAL INSULATIONS IS 30°C.

ENER Reply: Noted ✓

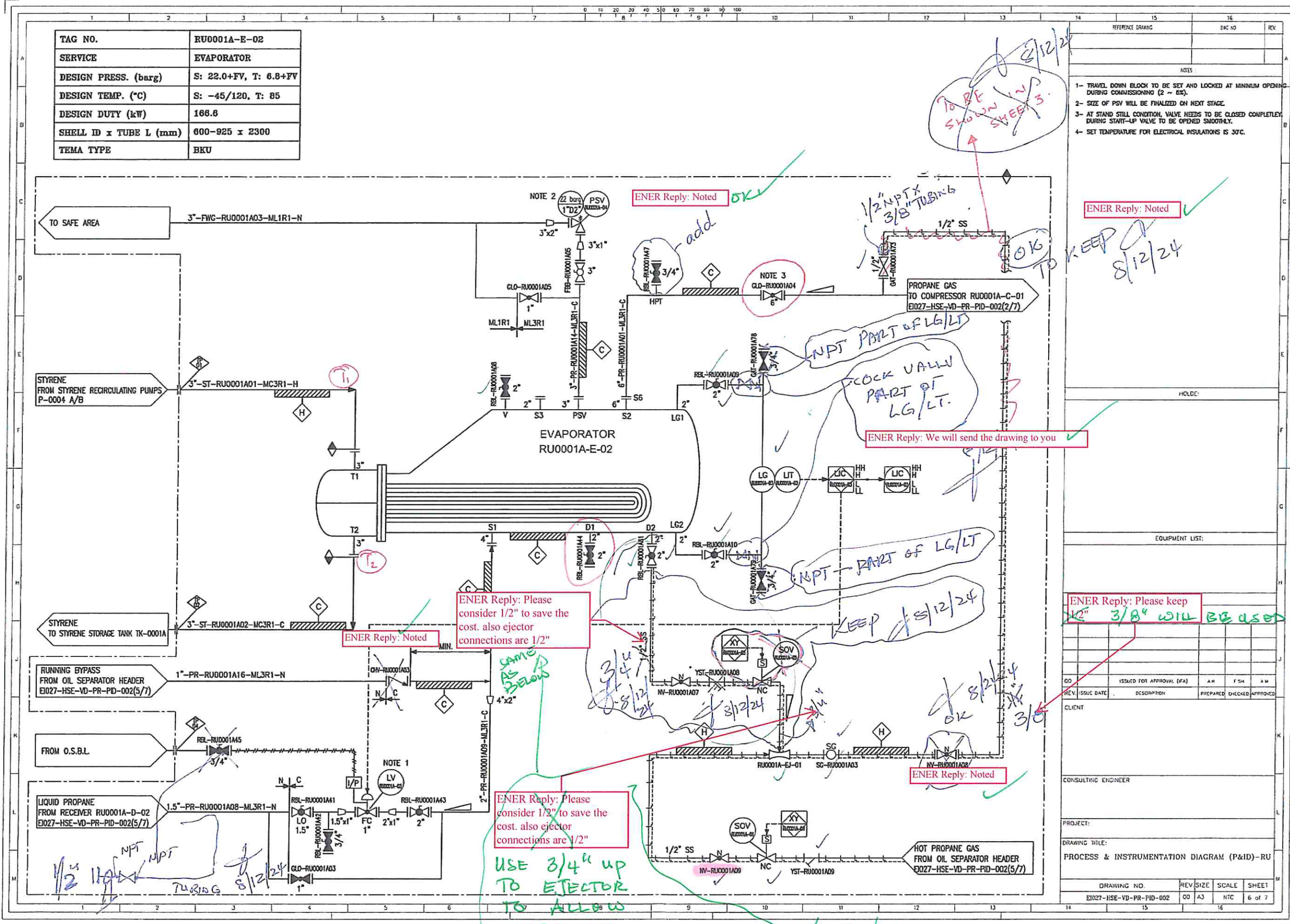
KEEP 8/12/24

ENER Reply: Please keep 1/2" 3/8" WILL BE USED

TO HELP PUSHING THE UPWARD SINCE COMP IS TOO SMALL & FLOW IS EXTREMELY LOW.

8/14/24

DRAWING NO.	REV	SIZE	SCALE	SHEET
E027-HSE-VD-PR-PID-002	00	A3	HTC	6 of 7



ENER Reply: Noted OK ✓

ENER Reply: We will send the drawing to you ✓

ENER Reply: Please consider 1/2" to save the cost. also ejector connections are 1/2"

ENER Reply: Please consider 1/2" to save the cost. also ejector connections are 1/2"

USE 3/4" UP TO EJECTOR TO ALLOW MORE OIL TO BE EJECTED & TO REDUCE PRESSURE DROP

NPT PART OF LG/LT
STOCK VALVE PART OF LG/LT.

NPT PART OF LG/LT
KEEP 8/12/24

ENER Reply: Noted ✓

8/14/24

TO SAFE AREA

STYRENE FROM STYRENE RECIRCULATING PUMPS P-0004 A/B

STYRENE TO STYRENE STORAGE TANK TK-0001A

RUNNING BYPASS FROM OIL SEPARATOR HEADER E027-HSE-VD-PR-PID-002(5/7)

FROM O.S.B.L.

LIQUID PROPANE FROM RECEIVER RU0001A-D-02 E027-HSE-VD-PR-PID-002(5/7)

PROPANE GAS TO COMPRESSOR RU0001A-C-01 E027-HSE-VD-PR-PID-002(2/7)

HOT PROPANE GAS FROM OIL SEPARATOR HEADER E027-HSE-VD-PR-PID-002(5/7)

3"-FWG-RU0001A03-ML1R1-N

3"-ST-RU0001A01-MC3R1-H

3"-ST-RU0001A02-MC3R1-C

1"-PR-RU0001A16-ML3R1-N

REL-RU0001A15

1.5"-PR-RU0001A08-ML3R1-N

NOTE 2 22 barg PSV 1" D2

CLO-RU0001A05

ML1R1 ML3R1

3"-PR-RU0001A14-ML3R1-C

6"-PR-RU0001A01-ML3R1-C

REL-RU0001A08

2" S3

3" PSV

6" S6

EVAPORATOR RU0001A-E-02

T1 T2

3" S1

4" S2

D1 2"

D2 2"

REL-RU0001A10

2" S5

MIN.

OH-RU0001A03

4"x2"

2"-PR-RU0001A09-ML3R1-C

REL-RU0001A11

1.5"x1"

FC

2"x1"

2"

REL-RU0001A13

1"

CLO-RU0001A03

1"

2" S4

REL-RU0001A09

1/2" SS

SOV

REL-RU0001A07

NY-RU0001A07

NY-RU0001A09

YST-RU0001A08

SC-RU0001A03

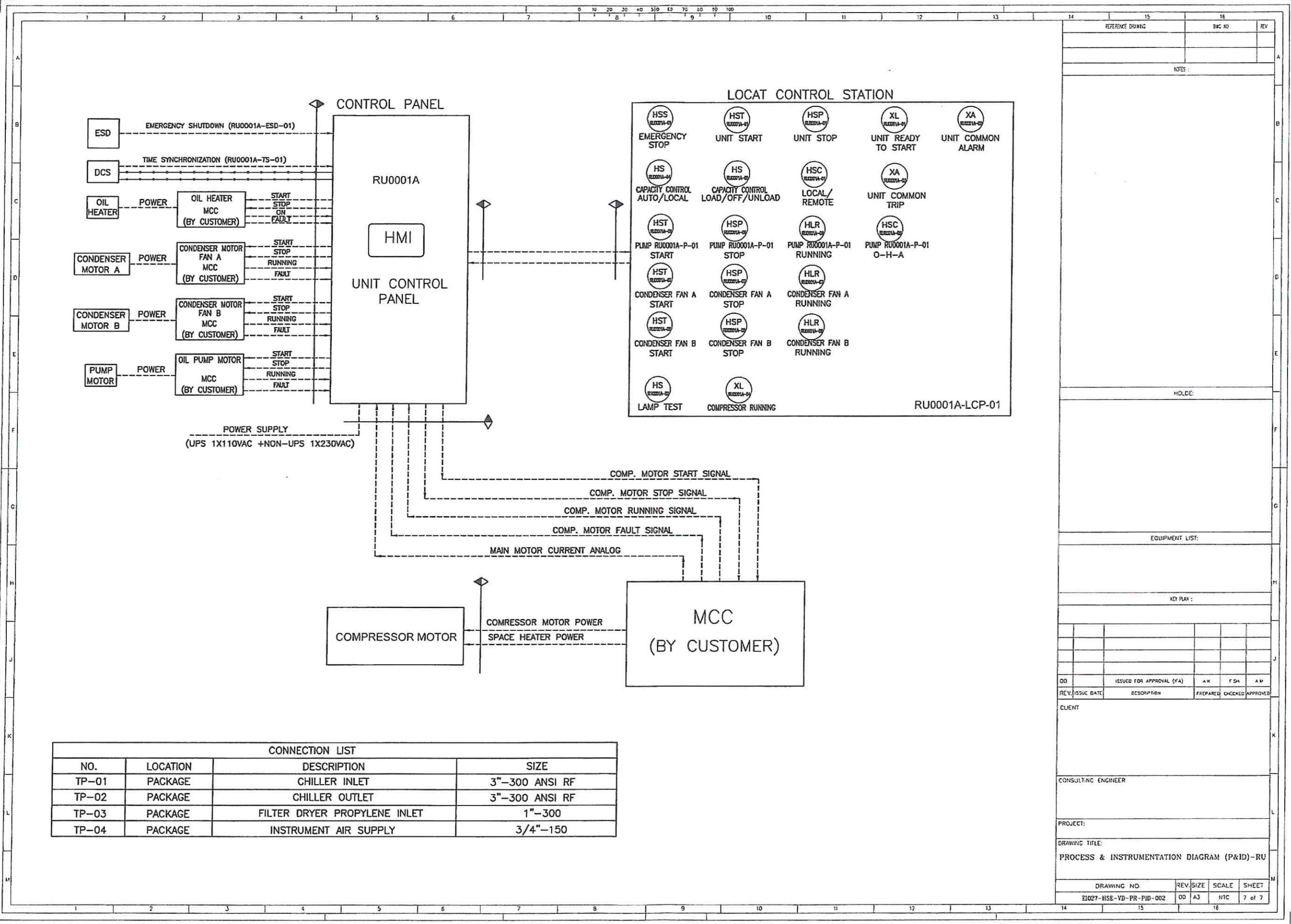
RU0001A-EI-01

NY-RU0001A08

REL-RU0001A09

NY-RU0001A09

YST-RU0001A09



REFERENCE DRAWING	DWG NO	REV

NOTES:

HOLDER:

EQUIPMENT LIST:

KEY P&ID:

DD	ISSUED FOR APPROVAL (FA)	AK	FSA	AM

REV. ISSUE DATE DESCRIPTION PREPARED CHECKED APPROVED

CLIENT

CONSULTING ENGINEER

PROJECT:

DRAWING TITLE:
PROCESS & INSTRUMENTATION DIAGRAM (P&ID)-RU

CONNECTION LIST			
NO.	LOCATION	DESCRIPTION	SIZE
TP-01	PACKAGE	CHILLER INLET	3"-300 ANSI RF
TP-02	PACKAGE	CHILLER OUTLET	3"-300 ANSI RF
TP-03	PACKAGE	FILTER DRYER PROPYLENE INLET	1"-300
TP-04	PACKAGE	INSTRUMENT AIR SUPPLY	3/4"-150

DRAWING NO	REV	SIZE	SCALE	SHEET
E1027-HSE-YD-PR-PID-002	00	A3	1:1C	7 of 7