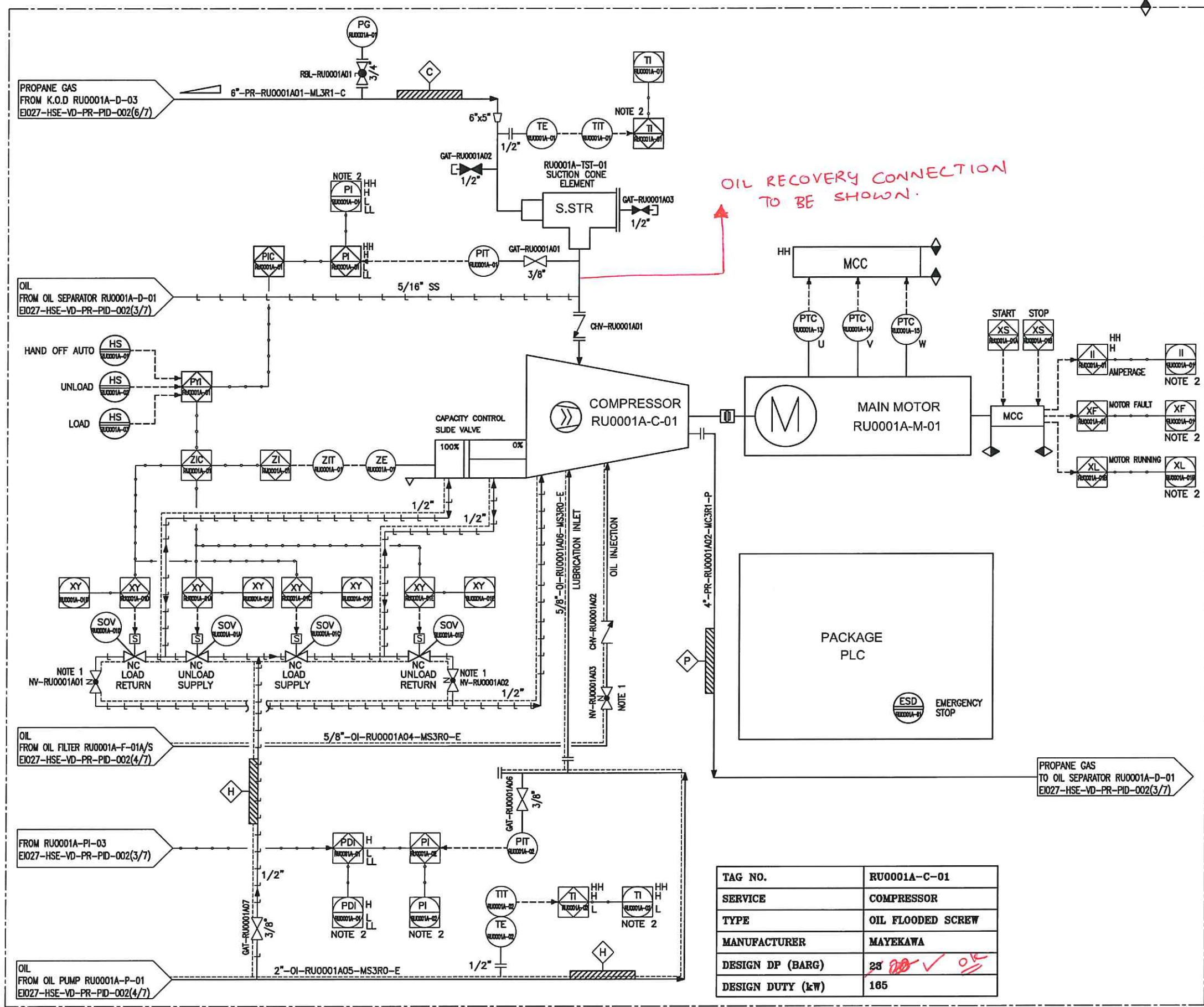


INSTRUMENT NUMBERS
 EACH INSTRUMENT HAS BEEN NAMED AS SHOWN BELON IN THE DOCUMENTATION:
 TAG: TAGNO.001XAA
 WHERE:
 X1 ONE DIGITS, WHICH IDENTIFY THE REF/NO. OF PACKAGE TRAIN (A OR B)
 TAG: INSTRUMENT TAG (ATTACHMENT: P&ID SYMBOLS)
 AA: TWO DIGITS, WHICH IS THE PROGRESSIVE ITEM NUMBER IN THE UNIT FROM 01 TO 99

MOTOR INSTRUMENT NUMBERS
 IF AN INSTRUMENT OR A FUNCTION IS INSTALLED ON A ELECTRIC DRIVER OF A MACHINERY WHICH NAME IS TAGNO.001XAA, THE INSTRUMENT NAME IS TAGNO.001XAA

PIPE LINE NUMBERING
 DN: DN100/00200/00400/00800/01600/03200/06400/12800/25600/51200/102400/204800/409600/819200/1638400/3276800/6553600/13107200/26214400/52428800/104857600/209715200/419430400/838860800/1677721600/3355443200/6710886400/13421772800/26843545600/53687091200/107374182400/214748364800/429496729600/858993459200/1717986918400/3435973836800/6871947673600/13743895347200/27487790694400/54975581388800/109951162777600/219902325555200/439804651110400/879609302220800/1759218604441600/3518437208883200/7036874417766400/14073748835532800/28147497671065600/56294995342131200/112589990684262400/225179981368524800/450359962737049600/900719925474099200/1801439850948198400/3602879701896396800/7205759403792793600/14411518807585587200/28823037615171174400/57646075230342348800/115292150460684697600/230584300921369395200/461168601842738790400/922337203685477580800/1844674407370955761600/3689348814741911523200/7378697629483823046400/14757395258967646092800/29514790517935292185600/59029581035870584371200/118059162071741168742400/236118324143482337484800/472236648286964674969600/944473296573929349939200/1888946593147858699878400/3777893186295717399756800/7555786372591434799513600/15111572745182869599027200/30223145490365739198054400/60446290980731478396108800/120892581961462956792217600/241785163922925913584435200/483570327845851827588870400/967140655691703655177740800/1934281311383407311355481600/3868562622766814622710923200/7737125245533629245421846400/1547425049106725848084387200/3094850098213451696068774400/6189700196426903392137548800/123794003928538067842711996800/24758800785707613568543993600/49517601571415227137086987200/99035203142830454274173974400/198070406285660908488347948800/396140812571321816976695897600/792281625142643633953391795200/1584563250285287267906783590400/3169126500570574535813567180800/6338253001141149071627137361600/126765060022822981432427547323200/253530120045645962864855094646400/5070602400912919257297101193172800/1014120480182583851458420386345600/202824096036516770291684077268800/405648192073033540583368154537600/811296384146067081166737630867200/162259276829213416233345261734400/324518553658426832466690523468800/649037107316853664933381046937600/1298074214633707329866762083875200/2596148429267414659733524167750400/5192296858534829319467048335500800/10384593717069658638934096671001600/2076918743413931727786819334203200/4153837486827863455573638668406400/8307674973655726911147277336812800/16615349947311453822294454673625600/33230699894622907644489109347251200/66461399789245815288978218694502400/13292279957849163077995643738904800/2658455991569832615599128747780800/5316911983139665231198257495561600/106338239662793304239751499112230400/212676479325586608479502998224460800/425352958651173216959005976448921600/850705917302346433918011952889843200/170141183460469286783602390577966400/340282366920938573567204781155932800/6805647338418771471344095623118665600/136112946768375429426881924423732800/272225893536750858853763884647465600/544451787073501717707527769294931200/108890357414700343541505553858982400/217780714829400687083011107717964800/43556142965880137416602221543593600/87112285931760274833204442887187200/17422457183552054766640889575374400/34844914367104109533281777150748800/69689828734208219066563554301497600/13937965746841643813312710860395200/27875931493683287626625421720790400/55751862987366575253250843441580800/11150372597473315050651688688361600/22300745194946630101303377776723200/44601490389893260202606755553446400/8920298077978652040521351110688000/178405961559573040810427222213772800/356811923119146081620854444427548800/713623846238292163241708888855097600/14272476924765843264834177777110150400/285449538495316865296683555542201600/570899076990633730593367111084403200/11417981539812674611867342222168806400/228359630796253492237348444443772800/456719261592506984474696888887545600/913438523185013969749393777775110400/182687704637002793949887555554220800/365375409274005587899775111084403200/7307508185480111757995502222168806400/146150163709602231599900444443772800/292300327419204463199800888887545600/584600654838408926399601777775110400/116920130967681726399920355554220800/2338402619353634527998407111084403200/4676805238707269055996814222168806400/935361047741453811199362844443772800/187072209548290722398724688887545600/374144419096581444797449377775110400/74828883819316288959489675554220800/14965776763663257911899793511084403200/29931553527326515823799580222168806400/59863107054653031647599960444443772800/11972621411330603295199920888887545600/2394524282266120659039984177775110400/478904856453224131807996835554220800/957809712906448263615936711084403200/1915619425812895267231973222168806400/383123885162579053446394644443772800/76624777032515810689278928887545600/1532495540650316217845577775110400/306499108130063243579115554220800/6129982162601264871582311084403200/122599643252025297431646222168806400/245199286504050594863292444443772800/4903985730081011897265488887545600/9807971460162023794530977775110400/196159429203240475890619554220800/39231885840648095178123911084403200/784637716812961903562478222168806400/156927543362592380712448444443772800/31385508672518476142488887545600/62771017345036952284977775110400/1255420346900739045795554220800/25108406938014780915911084403200/502168138760295618318222168806400/1004336277400591236396444443772800/20086725552011824727928887545600/40173451104023647547857775110400/80346902208047295095711084403200/1606938044160945901915222168806400/3213876088321891803830444443772800/64277521766437836076608887545600/128555043532875672153217775110400/25711008706575134430643554220800/51422017413150268861288911084403200/1028440348263005372225578222168806400/205688069652601074445115554220800/4113761393052021488902311084403200/82275227861040429778046222168806400/164550457722080859556092444443772800/32910091544416171911219554220800/6582018308883234382243911084403200/13164036617766468744488887545600/26328073235532937488977775110400/526561464710658749775554220800/1053122929421317495511084403200/210624585884263499103222168806400/421249171768526998206444443772800/84249834353705399641288887545600/16849966870741079928257775110400/336999337414821593765554220800/6739986748296431875311084403200/134799734965928637506222168806400/269599469931857275012444443772800/53919893986371455002488887545600/10783978797274291000497775110400/2156795759454858200099554220800/431359151890971640019911084403200/8627183037819432800398222168806400/17254366075638865600796444443772800/3450873215127773120159288887545600/6901746430255546240318577775110400/138034928605110924806315554220800/276069857210221856126311084403200/5521397144204437122526222168806400/1104279428440887425052444443772800/220855885688177485010488887545600/44171177137635497002097775110400/8834235427527099400419554220800/1766847085505419880083911084403200/35336941710108397601678222168806400/70673883420216795203356444443772800/141347766840433590406713554220800/282695533680867180813457775110400/565391067361734361627115554220800/1130782134723468723254311084403200/22615642694469374465086222168806400/45231285388938748930172444443772800/9046257077787749786034488887545600/1809251415557549957206897775110400/36185028311150999144139554220800/7237005662230199828827911084403200/14474011324460399557658222168806400/28948022648920799115316444443772800/578960452978415982306388887545600/115792090595683196461277775110400/2315841811913663929225554220800/46316836238273278584511084403200/926336724765465571690222168806400/1852673449530931737380444443772800/370534689906186347476088887545600/74106937981237269495217775110400/14821387596247453899035554220800/296427751924949077980711084403200/5928555038498981559614222168806400/1185711007699796311932288887545600/237142201539959262386457775110400/474284403079918524772911084403200/9485688061598370495548222168806400/18971376123967540991096444443772800/3794275224793508198219388887545600/75885504495870163964387775110400/151771008951740327928875554220800/303542017913480655857711084403200/6070840358269613117154222168806400/121416807165392262343088887545600/242833614331782524686911084403200/4856672286635650493738222168806400/9713344573271300987476444443772800/1942668914654260197495288887545600/388533782930852039499057775110400/777067565861704078998115554220800/15541351317236081579962311084403200/310827026344721631599246222168806400/621654052689443263198492444443772800/124330810537888652639698488887545600/24866162107577730527939697775110400/497323242151554610558793554220800/99464648430310922111758222168806400/19892929686062184222356444443772800/3978585937212436844471288887545600/795717187442487368894257775110400/15914343748849747377885554220800/318286874976994947557711084403200/6365737499539898951154222168806400/127314749990797979023088887545600/25462949998159595804617775110400/50925899996319191609235554220800/1018517999926383832044711084403200/2037035999852767664088222168806400/4074071999705535328176444443772800/814814399941107065635288887545600/162962879982221413131057775110400/325925759964442826262115554220800/651851519928885652524311084403200/1303703039489771305048222168806400/2607406078979542610096444443772800/521481215795908522019388887545600/10429624317918170420387775110400/20859248635836340840775554220800/417184972716726816801511084403200/8343699454334536368030222168806400/16687398908669072736060444443772800/3337479781733814547212088887545600/667495956346762909442417775110400/13349919126935258188848222168806400/26699838253870516377696444443772800/5339967650774103275539288887545600/10679935301548206551177775110400/2135987060309641310235554220800/42719741206192826204711084403200/854394824123956524094222168806400/1708789648247913048188444443772800/341757929649582609637688887545600/68351585929916461927537775110400/136703171859832923855075554220800/2734063437196658477101511084403200/54681268743933169542030222168806400/10936253747926633908406444443772800/2187250749585326781681288887545600/437450149917165356336257775110400/874900299834330712672511084403200/17498005996686614534450222168806400/3499601199337322906890444443772800/699920239867464581378088887545600/139984039873492916277817775110400/27996807974698583255563554220800/5599361594939716651111084403200/111987239898795665022222168806400/2239744797975913300444443772800/447948959595182660088887545600/89589791919036532017775110400/179179583738073064035554220800/3583591674761461280711084403200/71671833495229225614222168806400/1433436669724584512288887545600/286687333944916902457775110400/573374667889833804915554220800/11467493357796676098311084403200/229349867155933521966222168806400/458699734311873443932444443772800/91739946862374688786488887545600/18347989372475137757297775110400/3669597874495027551459554220800/7339195748990055102911084403200/146783914979801100458222168806400/293567829959602200916444443772800/58713565991920440183288887545600/11742713198384088036657775110400/23485426396768170373315554220800/469708527935363407466311084403200/9394170558707268149326222168806400/18788341117414536975450444443772800/375766822348290739509088887545600/75153364469658147901817775110400/15030672893931629580363554220800/3006134578786325916072711084403200/6012269157572651832144222168806400/1202453831514530366428444443772800/240490766302906073285688887545600/48098153260581214657137775110400/9619630652116242931435554220800/192392613042344858628711084403200/3847852260846897172574222168806400/7695704521693794345148444443772800/153914090433875886909688887545600/3078281808677517738197775110400/6156563617355035476395554220800/123131272347100709527911084403200/2462625446942014190558222168806400/4925250893884028381116444443772800/985050178776405676223688887545600/19701003775528113524517775110400/39402007551056227245035554220800/788040151021124544900711084403200/15760803020422490898



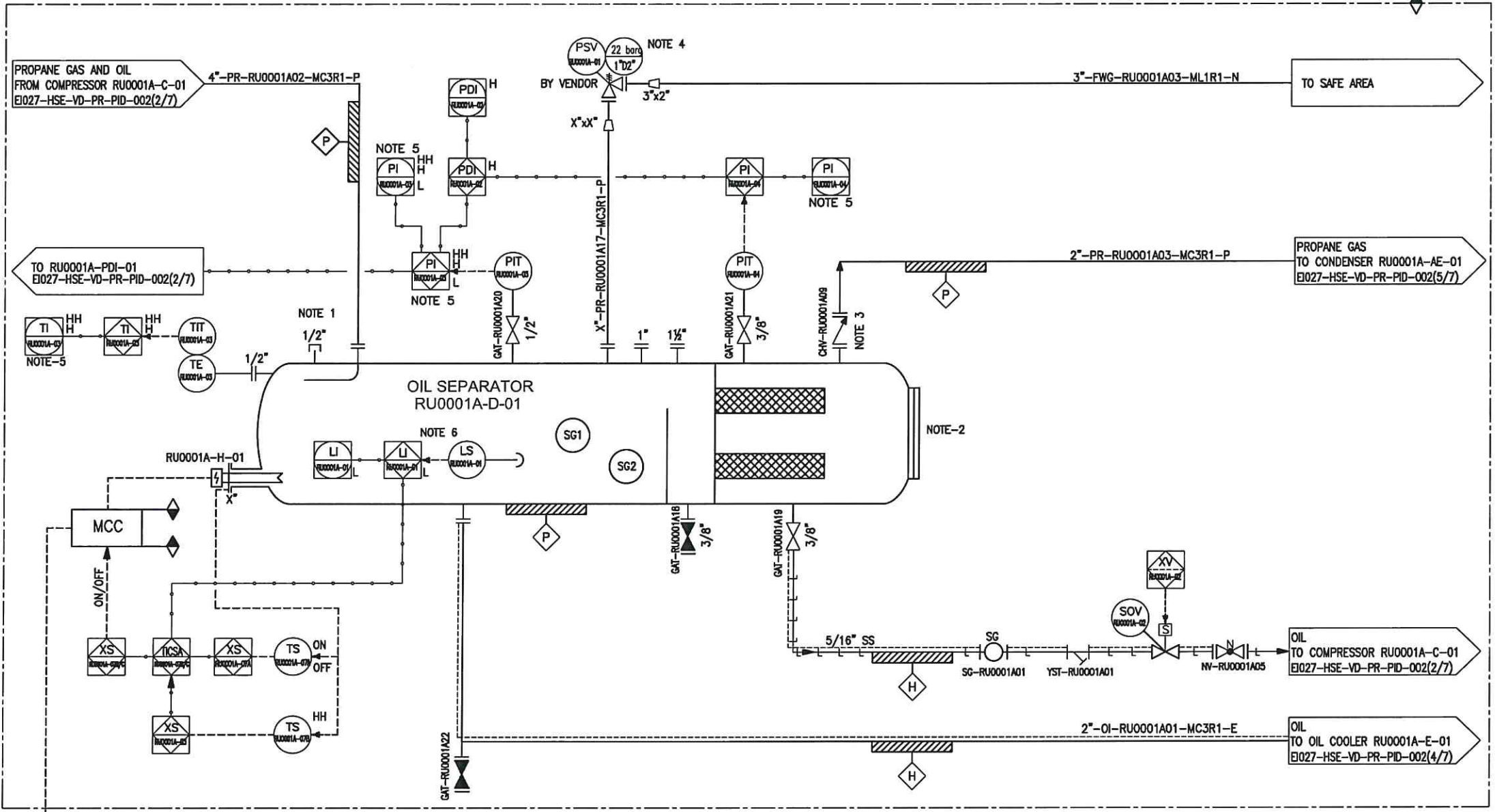
TAG NO.	RU0001A-C-01
SERVICE	COMPRESSOR
TYPE	OIL FLOODED SCREW
MANUFACTURER	MAYEKAWA
DESIGN DP (BARG)	25 <i>OK ✓</i>
DESIGN DUTY (kW)	185

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.				
HOLDE:				
EQUIPMENT LIST:				
KEY PLAN:				
DD	ISSUED FOR APPROVAL (IFA)	A.K. F.SH. 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
E1027-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)	-20/100
ID x L (mm)	590 x 2250

REFERENCE DRAWING	DWG NO.	REV.

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



HOLDE:

EQUIPMENT LIST:

KEY PLAN:

DO	ISSUED FOR APPROVAL (IFA)	A.M.	F.SH.	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
EI027-HSE-VD-PR-PID-002	00	A3	NTC	3 of 7

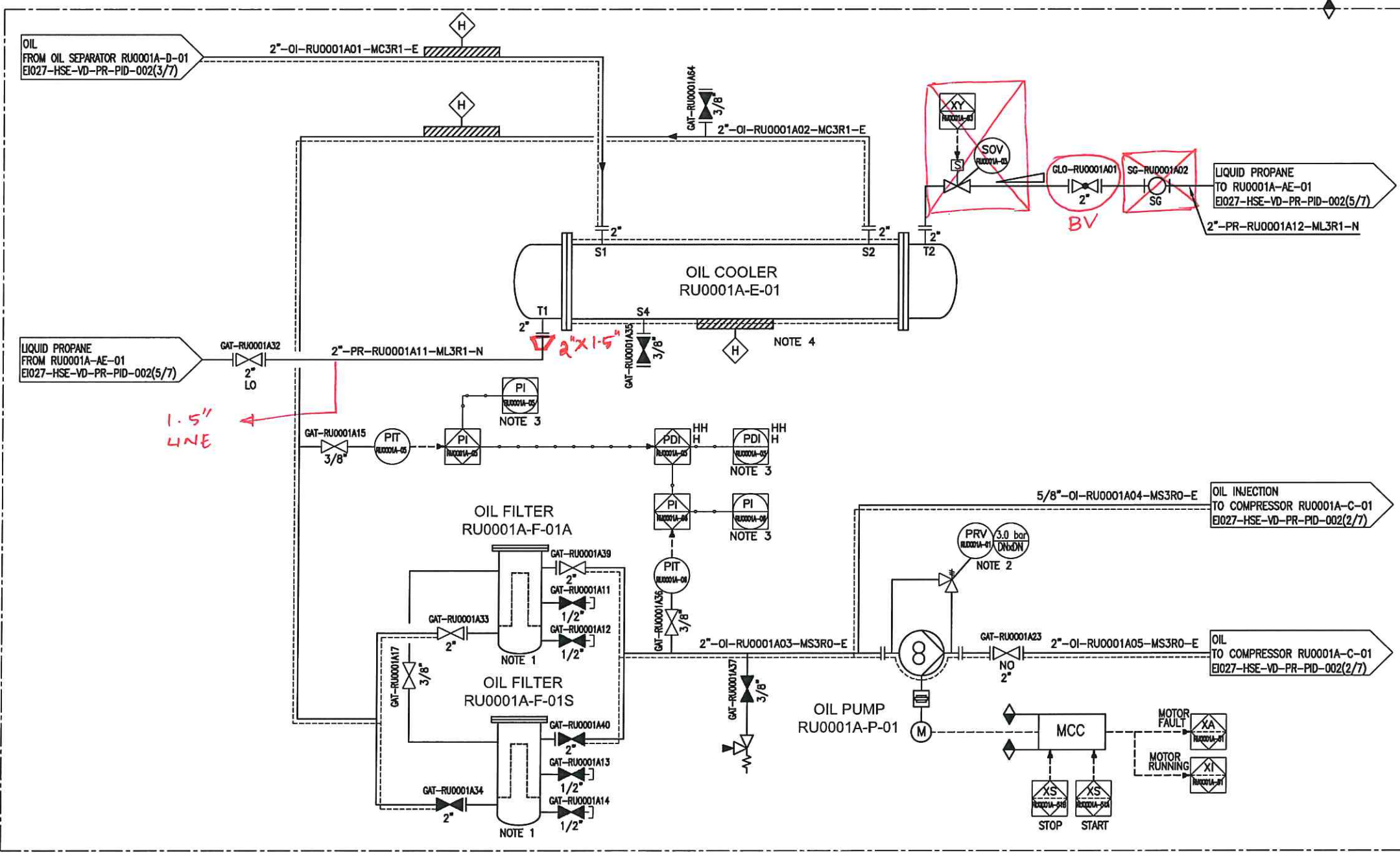
TAG NO.	RU0001A-E-01
SERVICE	OIL COOLER
DESIGN PRESS. (BARG)	S: 30, T:30
DESIGN TEMP. (°C)	S:5/100, T:-45/100
DESIGN DUTY (kW)	24.7
ID x L (mm)	139.7 x 2200
TYPE	AEH

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:
- ONE OPERATING / ONE STAND-BY.
 - DP=3 BAR.
 - SIGNAL ROUT TO DCS.
 - HEAT TRACING TO BE TURNED OFF DURING COMPRESSOR START.
 - SET TEMPERATURE FOR ELECTRICAL TRACING IS 30°C.



HOLDE:

EQUIPMENT LIST:

KEY PLAN:

REV.	ISSUE DATE	ISSUED FOR APPROVAL (IFA)	A.K.	F.SH.	A.M.

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	4 of 7

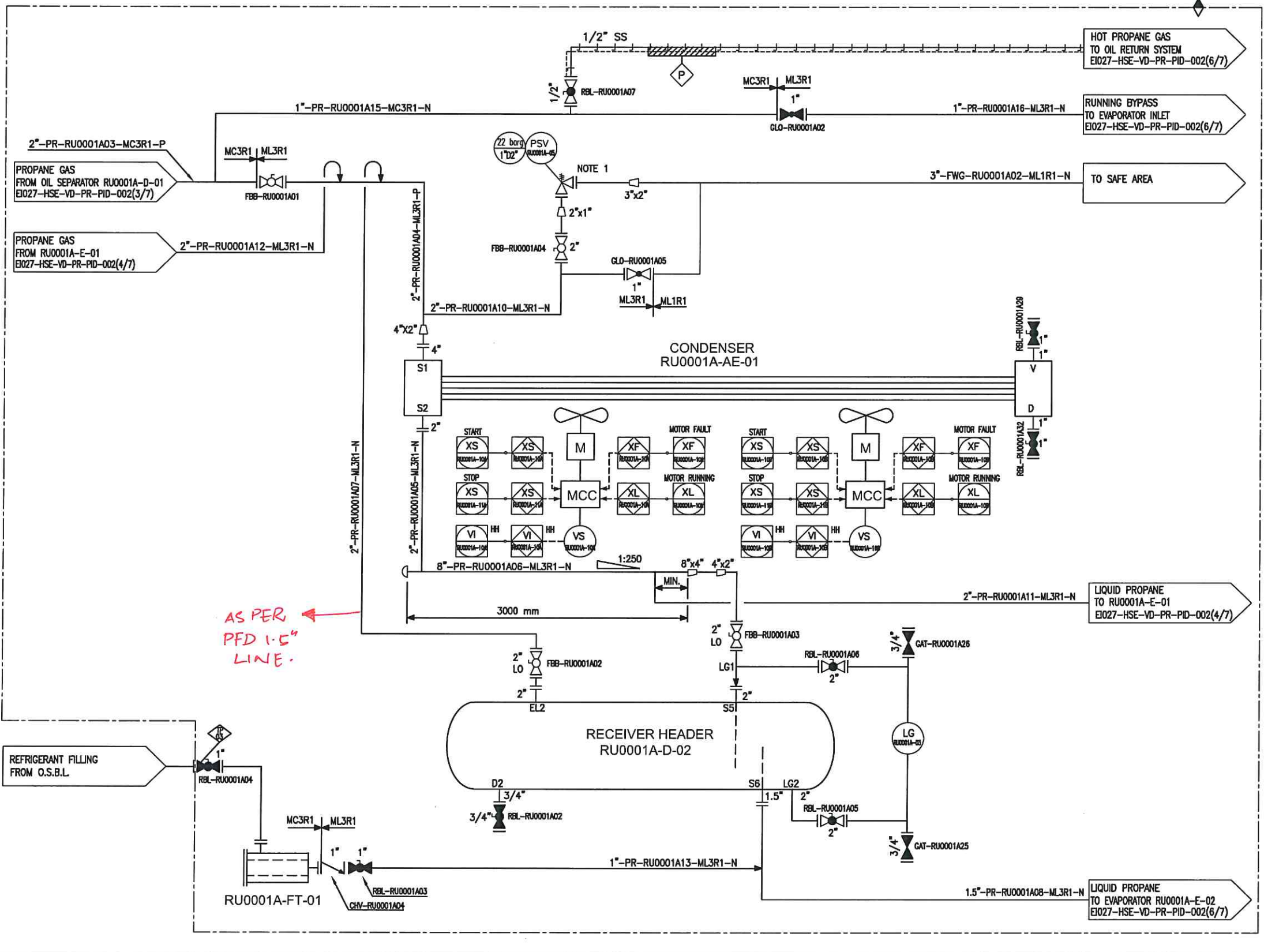
TAG NO.	RU0001A-AE-01
SERVICE	CONDENSER
DESIGN PRESS. (BARG)	22.0+FV
DESIGN TEMP. (°C)	-45/120
DESIGN DUTY (kW)	257

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.



AS PER
PFD 1.5"
LINE.

HOLDE:

EQUIPMENT LIST:

KEY PLAN:

DO	ISSUED FOR APPROVAL (IFA)	A.K.	F.SH.	A.M.
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED APPROVED

CLIENT

CONSULTING ENGINEER

PROJECT:

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

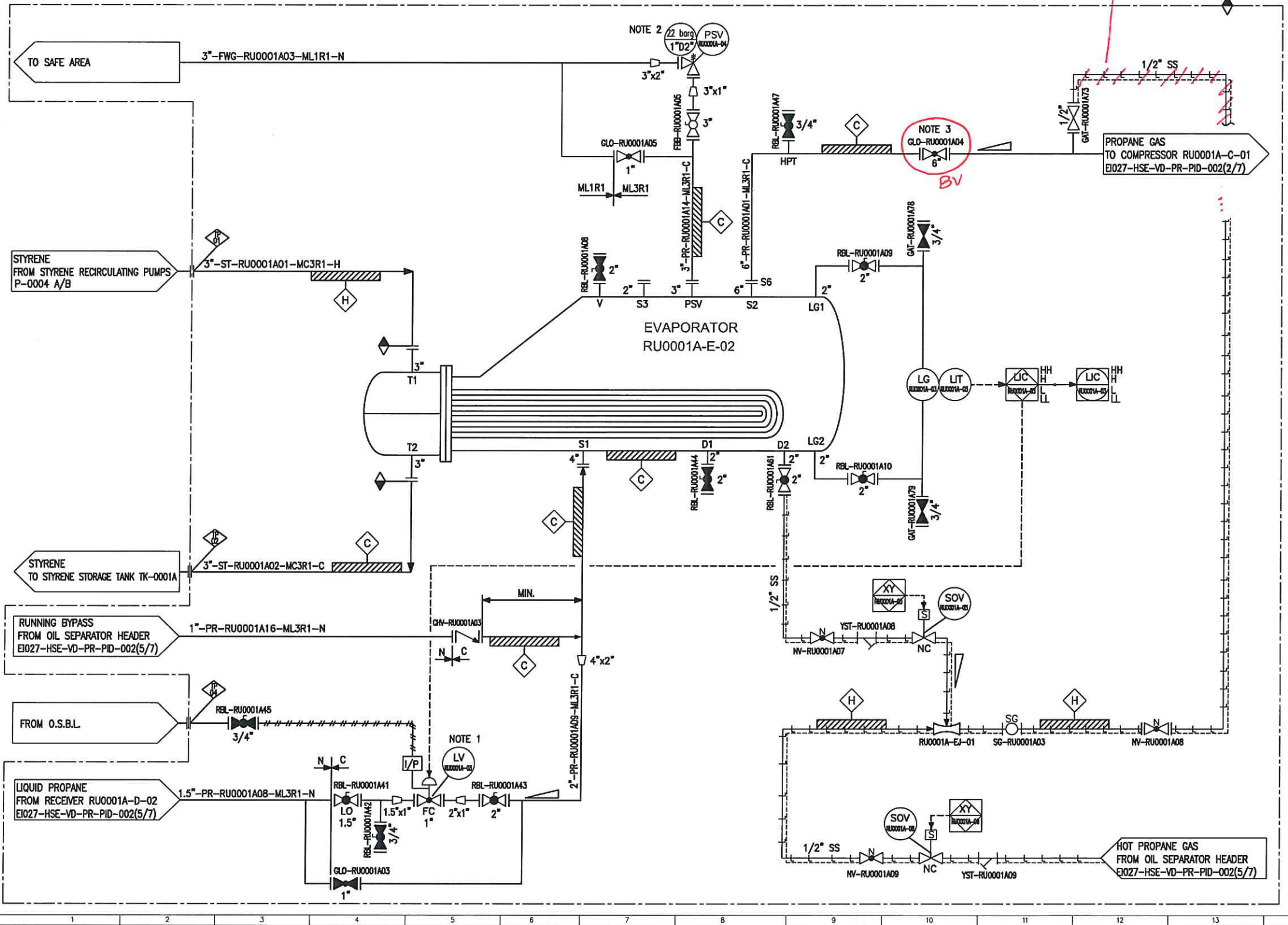
DRAWING NO.	REV.	SIZE	SCALE	SHEET
EI027-HSE-VD-PR-PID-002	00	A3	NTC	5 of 7

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)	166.6
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.

TO BE SHOWN
↑ IN SHEET-3.



HOLDEE:

EQUIPMENT LIST:

KEY PLAN:

OD	ISSUED FOR APPROVAL (FA)	A.K.	F.SH.	A.M.
REV.	ISSUE DATE	DESCRIPTION	PREPARED	CHECKED APPROVED

CLIENT

CONSULTING ENGINEER

PROJECT:

DRAWING TITLE:

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