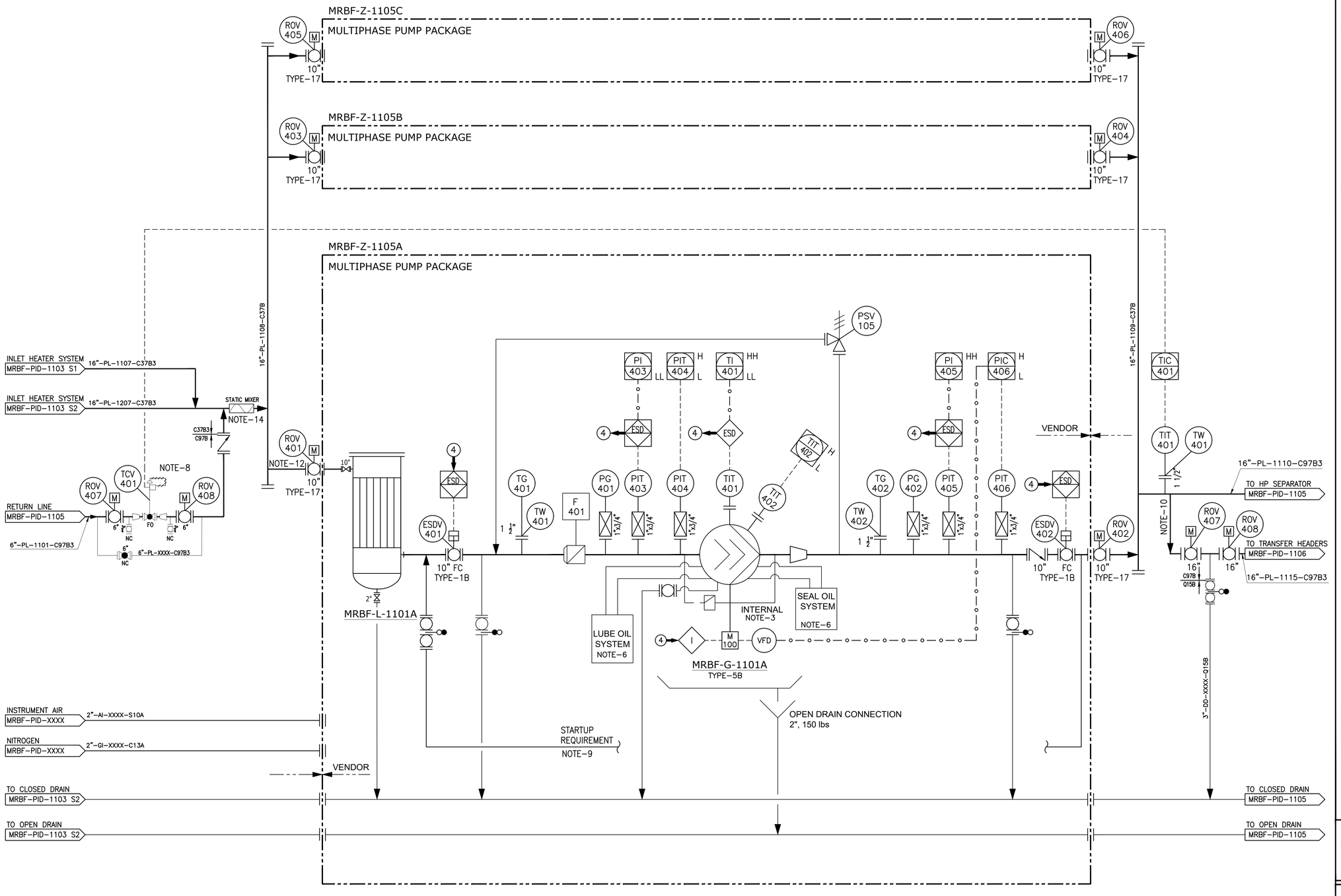
MRBF-Z-1105A/B/C
MULTIPHASE PUMP PACKAGE

MRBF-G-1101A/B/C
MULTIPHASE PUMP (3X50%)

OIL	: 30 mbopd
GAS	: 30 mmscfd
WATER	: 0-10 mmscfd
DISCHARGE PRESSURE (psig)	: 1200 psig
DESIGN PRESSURE (psig)	: 1350/FV

MRBF-L-1101A/B/C
SOLID FILTERS
NOTE-13



GENERAL NOTES:

A. THIS DRAWING INDICATES THE PROCESS FLOW, UNIT OPERATIONS,INSTRUMENTATION AND PIPING MATERIAL SPECIFICATION REQUIREMENTS. CONTRACTOR SHALL DEVELOP DETAILED DRAWINGS BASED ON VENDOR/LICENSOR/PACKAGER ENGG.,DETAILED ENGG., CONTRACT SPECIFICATION AND HSE ENGG. REQUIREMENTS AS APPLICABLE AND SUBMIT TO COMPANY FOR REVIEW AND APPROVAL.

B. EQUIPMENT SKID / PACKAGE LIMITS INDICATED IN THE DRAWING ARE TENTATIVE CONTRACTOR SHALL FINALIZE BASED ON SKID / PACKAGE SUPPLIER DETAILS DURING DETAIL ENGINEERING PHASE.

C. TAG NUMBERS INDICATED IN THIS DRAWING ARE TENTATIVE ONLY. ALL EQUIPMENT / INSTRUMENT TAG NUMBERS SHALL BE PREFIXED BY LOCATION FACILITY NUMBER. FINALIZATION OF TAG NUMBERS SHALL BE DONE AS A PART OF DETAILED ENGINEERING WORKS BY TAKING PRIOR APPROVAL FROM COMPANY.

D. TWO PSV'S OF 100% CAPACITY EACH SHALL BE PROVIDED WITH MECHANICAL KEY INTER LOCK SYSTEM TO FACILITATE ON LINE MAINTENANCE/CALIBRATION OF EACH PSV.

E. REFER LEGENDS P&ID NO- MRBF-PID-0100 (SH 01 OF 06 TO SH 06 OF 06) FOR LEGENDS AND SYMBOLS.

F. REFER KOC-MP-010 AND ITS ADDENDUM FOR PIPING MATERIAL SPECIFICATIONS. LINE SIZE SHOWN FOR GUIDANCE ONLY. CONTRACTOR SHALL FINALIZE THE SAME DURING DETAIL ENGG.. BASED ON CONTRACTUAL REQUIREMENT.

G. FOR EQUIPMENT MATERIAL REQUIREMENT, CORROSION ALLOWANCE, NACE, HIC, INTERNAL LINING / CLADDING, INTERNALS METALLURGY, EXTERNAL/INTERNAL PAINTING & COATING AND CATHODIC PROTECTION REQUIREMENT REFER TO TECHNICAL SPECIFICATION.

H. SLOPING REQUIREMENTS FOR PIPING SHALL BE PROVIDED AS PER TECHNICAL SPECIFICATION.

I. OPERATION/ISOLATION/MAINTENANCE REQUIREMENTS, AND INSTRUMENTS ISOLATION REQUIREMENTS SHALL BE REVIEWED AND FINALIZED BASED ON APPROVED VENDOR ENGINEERING, LAY OUT REVIEW, 3D-MODELLING REVIEWS, HSE STUDY RECOMMENDATIONS, START-UP/SHUT DOWN REQUIREMENTS.

J. THE DISTRIBUTION/NETWORK/SYSTEM PIDs SHALL BE DEVELOPED BY CONTRACTOR DURING ENGINEERING PHASE BASED ON VENDOR/PACKAGER/ENGINEERING/HSE REQUIREMENTS.

NOTES:

1. CHEMICAL INJECTION AND CC/CP DETAILS SHALL BE PROVIDED BY CONTRACTOR/VENDOR BASED ON CORROSION AND RISK ASSESSMENT STUDY.
2. PSV SIZING,LINE SIZING AND PSV OUT LET LINE MATERIAL SPEC SHALL BE FINALIZED BASED ON RELIEF AND BLOW DOWN STUDY REPORT AND HYDRAULIC STUDY.
3. MULTIPHASE PUMP INTERNALS AND CONTROL SCHEME SHALL BE AS PER VENDOR RECOMMENDATION.
4. PUMP VENDOR SHALL PROVIDE THE UTILITY REQUIREMENT.
5. DETAILS SHOWN ARE TYPICAL FOR PUMP-A SIMILAR P&ID SHALL BE DEVELOPED FOR PUMP-B & C.
6. DETAILS SHALL BE DEVELOPED AS PER VENDOR RECOMMENDATION.
7. INSTRUMENT TAG NUMBERS SHALL BE SUFFIXED WITH A/B/C FOR PUMP MRBF-G-1101A/B/C RESPECTIVELY.
8. REQUIREMENT OF CONTROL VALVE OR OTHER CONFIGURATION INCLUDING AIR COOLERS, HEAT EXCHANGER SHALL BE FINALIZED DURING DETAIL ENGINEERING.
9. BYPASS REQUIREMENT / LOCATION SHALL BE FINALIZED BY VENDOR.
10. STARTUP REQUIREMENT FINALIZED DURING DETAIL ENGINEERING.
11. LOCAL CONTROL PANEL AS PER VENDOR SHALL BE PROVIDED.
12. LINE SIZE SHALL BE FINALIZED DURING DETAIL ENGINEERING.
13. TYPE OF FILTER SHALL BE FINALIZED DURING DETAIL ENGINEERING.
14. REQUIREMENT OF STATIC MIXER AT THE HEADER SHALL BE FINALIZED DURING DETAIL ENGINEERING TO ENSURE HOMOGENEOUS FLUID AT PUMP SUCTION.

KUWAIT OIL CO. K. S. C.
شركة نفط الكويت ش.م.ك.
A Subsidiary of Kuwait Petroleum Corporation

MUTRIBA REMOTE BOOSTING FACILITY (MRBF)
PIPING & INSTRUMENTATION DIAGRAM
MULTIPHASE PUMPING SYSTEM

REF. DWGS. NO.	REFERENCE DRAWINGS TITLE
MRBF-PID-0100	LEGENDS AND SYMBOLS.

REV	AMENDMENTS	DRAWN	APPR'D	DATE
0	ISSUED FOR TENDER	DAVID	BINDU	6-8-24

ENGINEERING DESIGN			
CHECKED	PROJ.ENG.	MURALI / BINDU	
APPR'D	SNR.ENG.	MOHAMMAD AL-SALEH	
APPR'D	T.L.G.P-II	FAISAL AL-KANDARI	
PROJECT REFERENCE		MRBF	

DRAUGHTING DESIGN			
DRAWN	D.D/MAN	DAVID	18-Feb-24
CHECKED	S.D.D/MAN		
CHECKED	L.D.D/MAN		
SCALE:		NTS	

APPROVALS			
DESIGNATION TEAM/GROUP	NAME	SIGNATURE	DATE

KOC DRAWING NO. MRBF-PID-1104
SHEET 1 OF 1
REV. 0

DO NOT SCALE IF IN DOUBT ASK

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