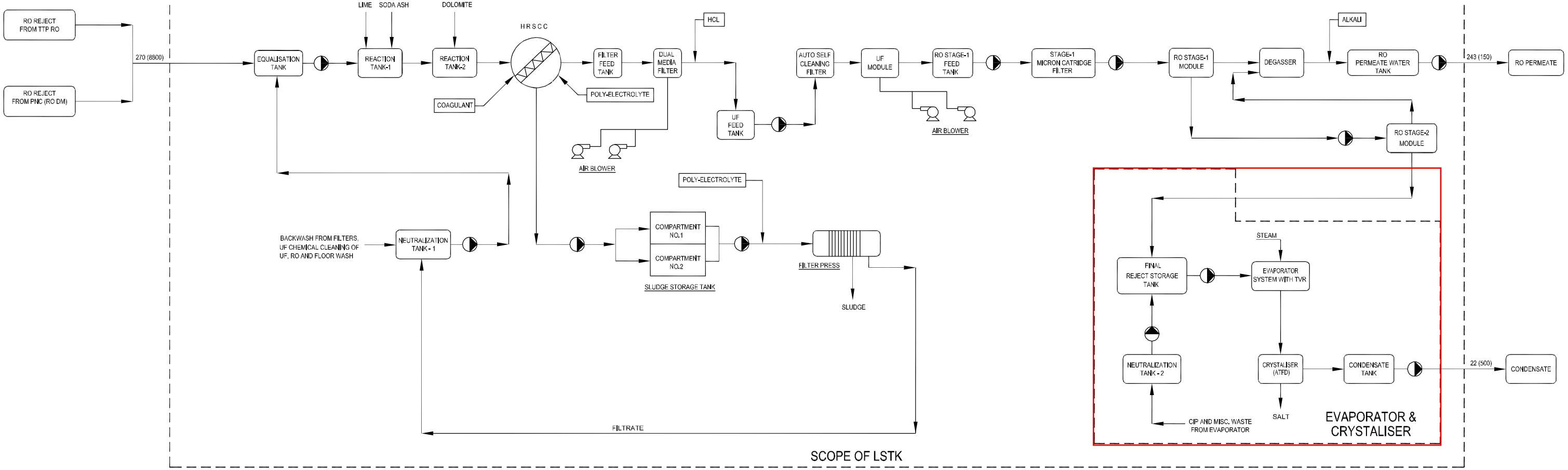
DRG. NO. 28959-000-000-WTS-0110



LEGEND:-

— PUMP

— BLOWER

FLOW CUM / HR.(TDS IN PPM)

DISTRIBUTION			
CUSTOMER		COS	
		ENV	
CONTRACTOR		MNB	
CVL		NFE	
ELE		PWR	
IAC		CNT	
LTL		INS	
STR		PRS	
UTL		CON	
WTS			
COB		CHN–	
CRF		CHN–	
IRM		CHN–	
MMH		MUM–	
PML		MUM–	
RLM		PM	
STM		SITE	

NOTES :–

1. DURING ENGGINEERING CONTRACTOR TO SUBMIT THE PFD INDICATING PRESSURE, FLOW RATE, TEMPERATURE AND DIFFERENT WATER QUALITY PARAMETER IN EACH STREAM AT TOP AND VARIOUS INTERMEDIATE LOCATION.

REV.	DATE	DETAIL OF REVISION	BY	CHD.	APP.	ACKD.	REF. DRAWING NO.	DETAIL OF REF. DRAWING

APPROVAL

DEPT	BY	DATE

FOR TENDER PURPOSE ONLY

DASTUR

M. N. DASTUR & COMPANY (P) LTD
CONSULTING ENGINEERS, KOLKATA

VENDOR NAME AND LOGO

CONTRACT / ORDER REF.

VENDOR DRG.NO. — REV. 0

SCALE 1:1

TSA	20.05.2021	DBMO	20.05.2021	DBMO	20.05.2021
DRN.	DATE	CHKD.	DATE	APPD.	DATE

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IndianOil

INDIAN OIL CORPORATION LTD.
PANIPAT REFINERY

PROJECT	MULTIPLE EFFECT EVAPORATOR PLANT IN ETP–1 & 2 AT PANIPAT REFINERY
DWG. TITLE	PROCESS FLOW DIAGRAM
SHT. SIZE	A1
DRG. NO.	28959-000-000-WTS-0110
REV.	0

CADD SOFTWARE AutoCAD

DRG. NO. 28959-000-000-WTS-0118

DO NOT SCALE, ASK IF IN DOUBT

FINAL REJECT FROM STAGE-2 RO
CONTINUATION DRAWING NO. 28959-000-000-WTS-0117

FROM OFF-SPEC LINE BEFORE RO HIGH PRESSURE PUMPS STAGE-2
CONTINUATION DRAWING NO. 28959-000-000-WTS-0117

TO INTERNAL USE

LP STEAM

POTABLE WATER

MP STEAM

COOLING WATER SUPPLY

COOLING WATER RETURN

FROM INTERNAL USE

FINAL REJECT STORAGE TANK
QTY. 1 NO. (1W)

FEED PUMP FOR EVAPORATOR SYSTEM
QTY. 2 NOS. (1W+1S)

MULTIPLE EFFECT EVAPORATOR AND CRYSTALISER UNITS

SERVICE WATER
CONTINUATION DRAWING NO. 28959-000-000-WTS-0119

PROCESS DRAIN FROM EVAPORATOR & CRYSTALISER UNITS AND CIP

FROM HCL DOSING PUMPS
CONTINUATION DRAWING NO. 28959-000-000-WTS-0123

FROM CAUSTIC DOSING PUMPS
CONTINUATION DRAWING NO. 28959-000-000-WTS-0124

SUCTION TANK

NEUTRALIZATION TANK-2 EFFLUENT PUMPS
QTY. 2 NOS. (1W+1S)

NEUTRALIZATION TANK-2
(UNDERGROUND)
QTY. 1 NO. (1W)

CONDENSATE TANK
QTY. 1 NO. (1W)

CONDENSATE TRANSFER PUMP
QTY. 2 NOS. (1W+1S)

CONDENSATE

DISTRIBUTION			
CUSTOMER		COS	
		ENV	
CONTRACTOR		MNB	
CVL		NFE	
ELE		PWR	
IAC		CNT	
LTL		INS	
STR		PRS	
UTL		CON	
WTS			
COB		CHN–	
CRF		CHN–	
IRM		CHN–	
MMH		MUM–	
PML		MUM–	
RLM		PM	
STM		SITE	

NOTES :–

1. P&ID IS NDICATIVE AND FOR GUIDANCE ONLY. DURING ENGINEERING CONTRACTOR TO SUBMIT THE P&ID INDICATING THE FOLLOWING:
   - LINE IDENTIFICATION INDICATING LINE NUMBER, LINE SIZE, MOC, PIPE MATERIAL SPECIFICATION AND INSULATION CLASS.
   - INSTRUMENT TAG NOS.
   - TAG NOS FOR TANKS AND EQUIPMENT.
   - INTERFACE CONNECTION AND LOGIC.
2. DURING ENGGINEERING CONTRACTOR TO SUBMIT CAUSE AND EFFECT DIAGRAM, TYPE OF INSTRUMENTATION, SAFETY SYSTEM, UTILITY SUPPLY SYSTEM, TYPE OF FLOW METERS, CONTROL VALVES SIZE ETC.

REV.	DATE	DETAIL OF REVISION	BY	CHD.	APP.	ACKD.	REF. DRAWING NO.	DETAIL OF REF. DRAWING

APPROVAL

	DEPT	BY	DATE

FOR TENDER PURPOSE ONLY

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DASTUR

M. N. DASTUR & COMPANY (P) LTD
CONSULTING ENGINEERS, KOLKATA

VENDOR NAME AND LOGO

CONTRACT / ORDER REF.

VENDOR DRG.NO.

REV. 0

SCALE 1:1

TSA	20.05.2021	DBMO	20.05.2021	DBMO	20.05.2021
DRN.	DATE	CHKD.	DATE	APPD.	DATE

IndianOil

INDIAN OIL CORPORATION LTD.
PANIPAT REFINERY

PROJECT	MULTIPLE EFFECT EVAPORATOR PLANT IN ETP-1 & 2 AT PANIPAT REFINERY
DWG. TITLE	P&I DIAGRAM FOR RO REJECT HANDLING SYSTEM
SHT. SIZE	A1
DRG. NO.	28959-000-000-WTS-0118
REV.	0
CADD SOFTWARE	AutoCAD