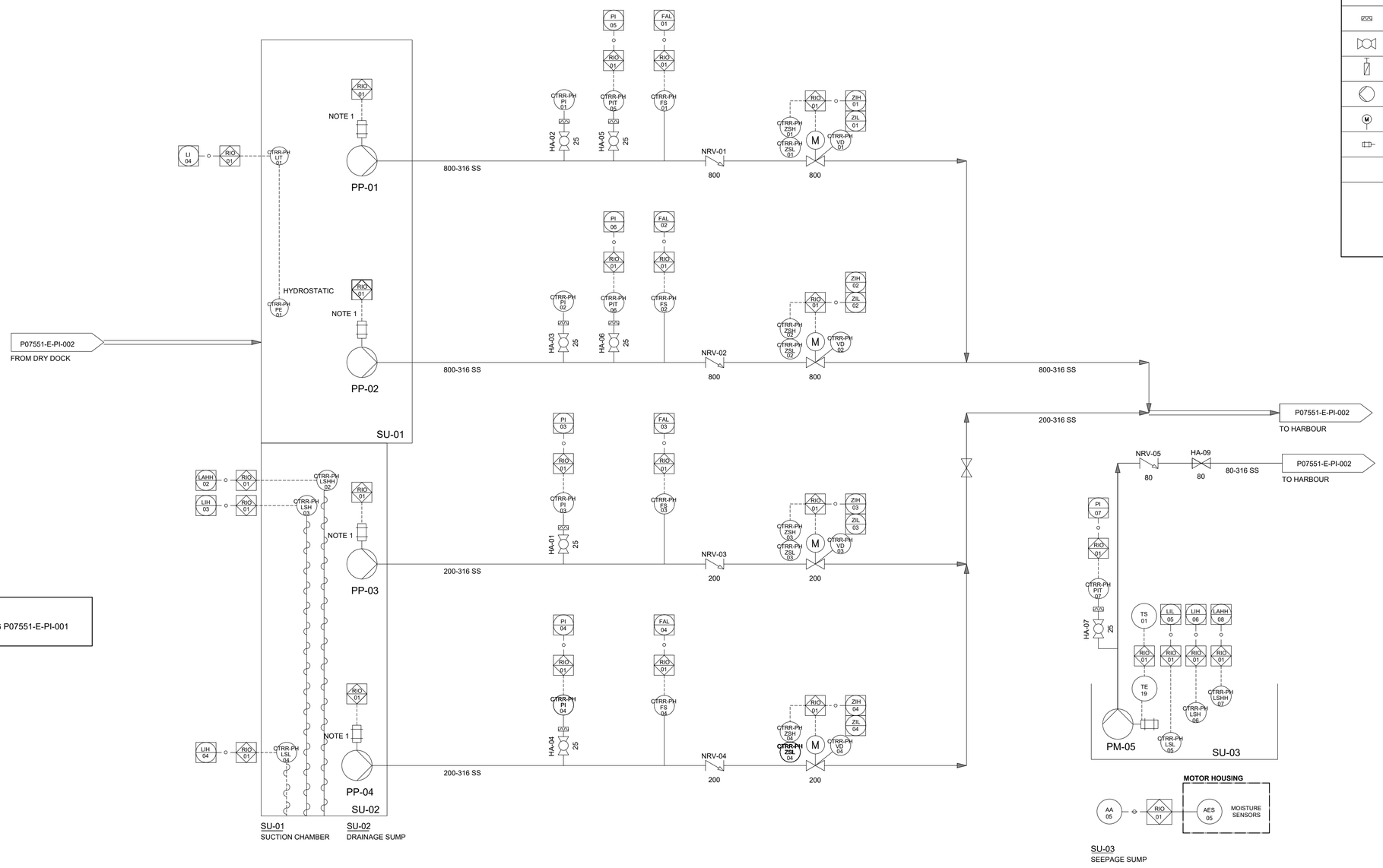
PP-01	PP-02	PP-03	PP-04	PM-05
MAIN DEWATERING PUMP 01	MAIN DEWATERING PUMP 02	DRAINAGE PUMP 03	DRAINAGE PUMP 04	SEEPAGE PUMP 05
RATED POWER: 220 kW	RATED POWER: 220 kW	RATED POWER: 15 kW	RATED POWER: 15 kW	RATED POWER: 2 kW



NOTE

1. REFER TO DRAWING P07551-E-PI-001

LEGEND

PROCESS LINES		INSTRUMENTATION BASED ON ISA 55.1				
	CULVERT	PROGRAMMABLE LOGIC CONTROL	COMPUTER FUNCTION	SHARED DISPLAY, SHARED CONTROL	DISCRETE INSTRUMENTS	
	PROCESS LINE					
	ELECTRCIAL SIGNAL	XX XXX	XX XXX	XX XXX	XXXX XX XX	FIELD MOUNTED
	UNGUIDED SIGNAL					
	GUIDED SIGNAL	XX XXX	XX XXX	XX XXX	XX XXX	PRIMARY LOCATION NORMALLY ACCESSIBLE TO OPERATOR
	SOFTWARE CONNECTION					
	VALVE	TAGGING STRUCTURE			LIST OF ISA ABB USED	
	NON RETURN VALVE	NNN-AA PIPE SIZE - PIPE SPEC		PIPELINES	AA ANALYSIS ALARM AES ANALYSIS ELEMENT STOP FAL FLOW ALARM HIGH FS FLOW SWITCH LAHH LEVEL ALARM HIGH HIGH LI LEVEL INDICATION LIH LIVEL INDICATION HIGH LIT LEVEL INDICATION AND TRANSMITTER LS LEVEL SWITCH LSH LEVEL SWITCH HIGH LSHH LEVEL SWITCH HIGH HIGH LSL LEVEL SWITCH LOW PE PRESSURE ELEMENT PI PRESSURE INDICATION PIT PRESSURE INDICATION AND TRANSMITTER TE TEMPERATURE ELEMENT TT TEMPERATURE TRANSMIT TS TEMPERATURE SWITCH VE VIBRATION ELEMENT VT VIBRATION TRANSMITTER XV CONTROL VALVE ZA POSITION ALARM ZIH POSITION INDICATION HIGH ZIL POSITION INDICATION LOW ZS POSITION SWITCH ZSH POSITION SWITCH HIGH ZSL POSITION SWITCH LOW ZT POSITION INDICATION
	CHEMICAL SEAL					
	BALL VALVE	DRAWING NO. DESTINATION OR SOURCE		OFF PAGE CONNECTOR		
	PENSTOCK					
	PUMP	TYPE-NN SIZE		PIPELINES		
	ELECTRICAL ACTUATOR					
	ELECTRICAL MOTOR	TYPE-NN		EQUIPMENT CODE		

Acceptance	Name	Signature	Date
Senior Engineer Transnet			
Project Engineer Transnet			
Managing Contractor WSP			

FOR CONSTRUCTION

"The *Employer* may use and copy the *Contractor's* design for any purpose connected with construction, use, alteration or demolition of the *works* unless otherwise stated in the Works Information and for other purposes as stated in the Works Information."

All dimensions must be verified on site before the works commence. Refer any discrepancies to the Engineer.

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REVISION SCHEDULE

No	DATE	DESCRIPTION	DRW	CHK
1	25/04/22	Added valve to seepage system. Changed pipe dia. to 800mm for Drainage system. Updated pump power ratings.	SCS	WMS
07	09/09/22		SCS	WMS
2	16/05/22	For Approval	SCS	WMS
3	06/06/22	Numbering and pipes dia updated	SCS	WMS
4	08/07/22	Issued for Construction	SCS	WMS
5	15/07/22	Copyright updated	SCS	WMS
6	02/09/22	Seapage Pums monitoring added	SCS	WMS
7	09/09/22	PLC tag number added.	SCS	WMS

CONSULTING ENGINEER

SIGNATURE	PR No	DATE
	W Snyman 20050166	09/09/2022

CLIENT

SIGNATURE	NAME	DATE

DESIGNED	DRAWN	CHECKED
WMS	SCS	WS

CONSULTANT

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Tygerberg Valley Rd,
Durbanville, Cape Town
7550

CLIENT

TRANSNET

PROJECT

ROBINSON DRY DOCK DEWATERING SYSTEMS

DRAWING DESCRIPTION

PIPING AND INSTRUMENTATION DIAGRAM DEWATERING & DRAINAGE PUMPS

SCALE FOR REDUCED PLAN

0 5 10 20 30 40 50

50mm ON ORIGINAL PLAN

DATE	SCALE	ORIGINAL SIZE
11/02/2022	NTS	A1

DRAWING NUMBER	REV
P07551-E-PI-003	7