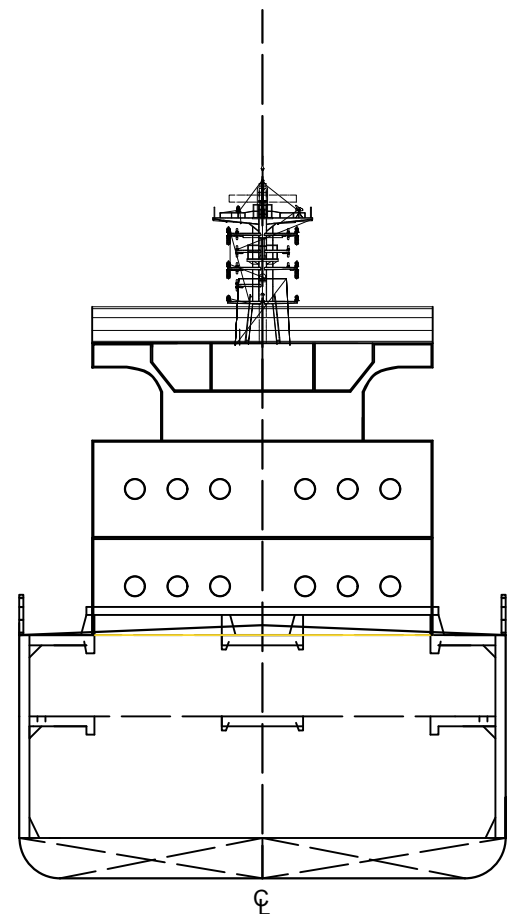
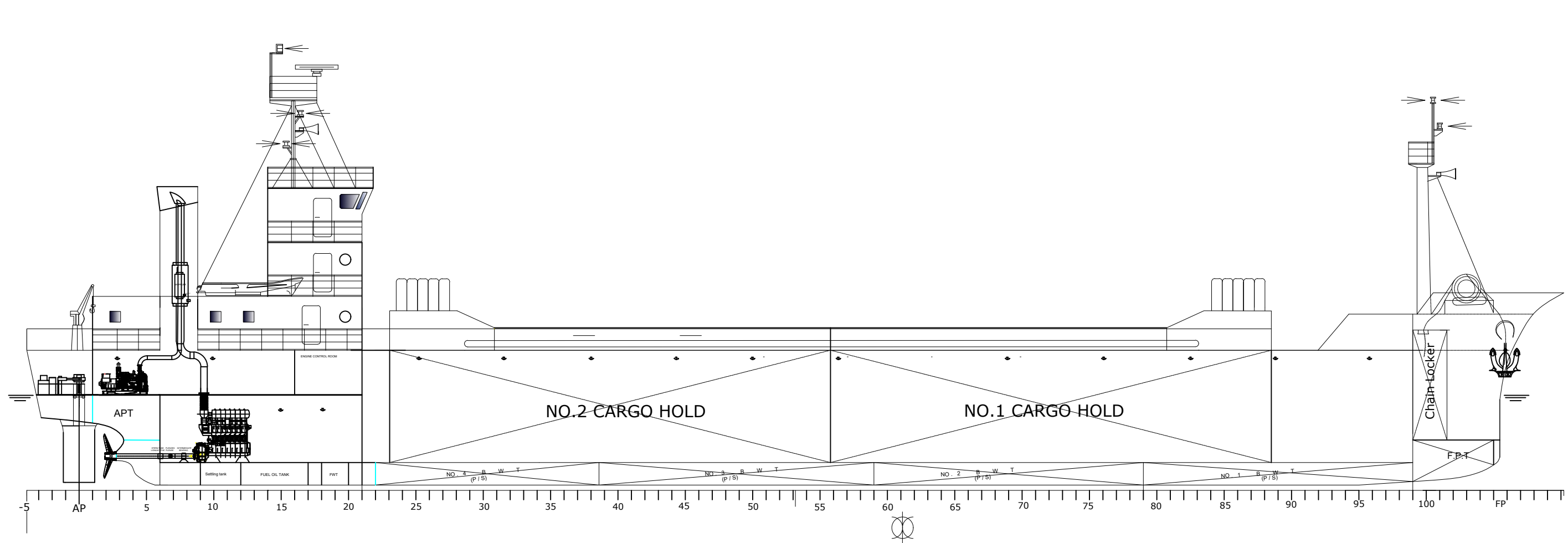


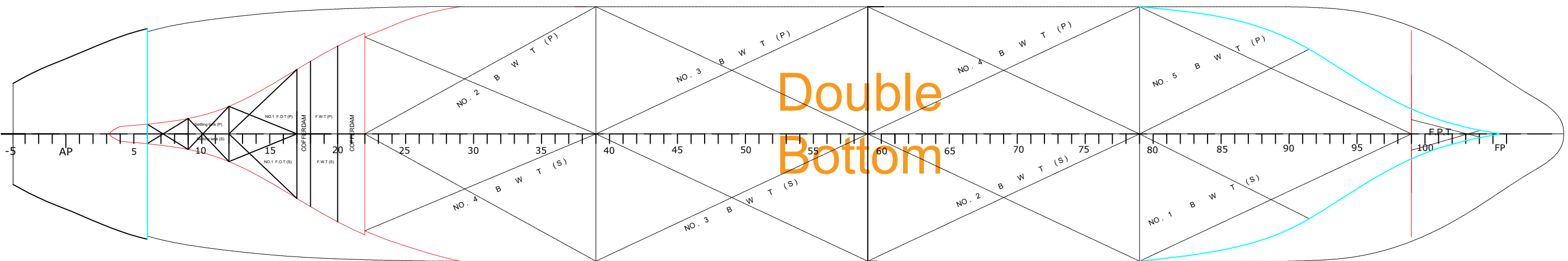
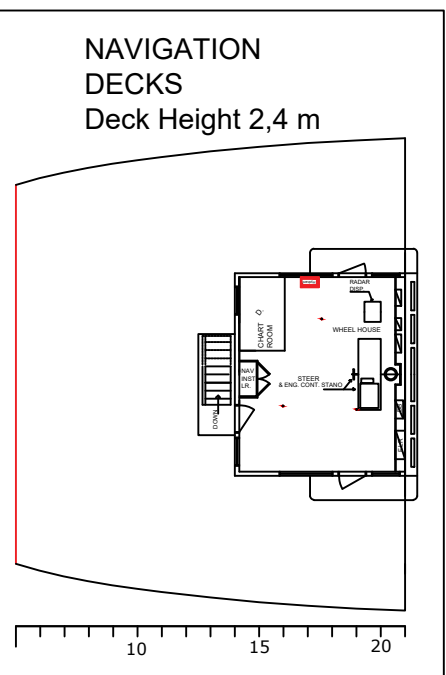
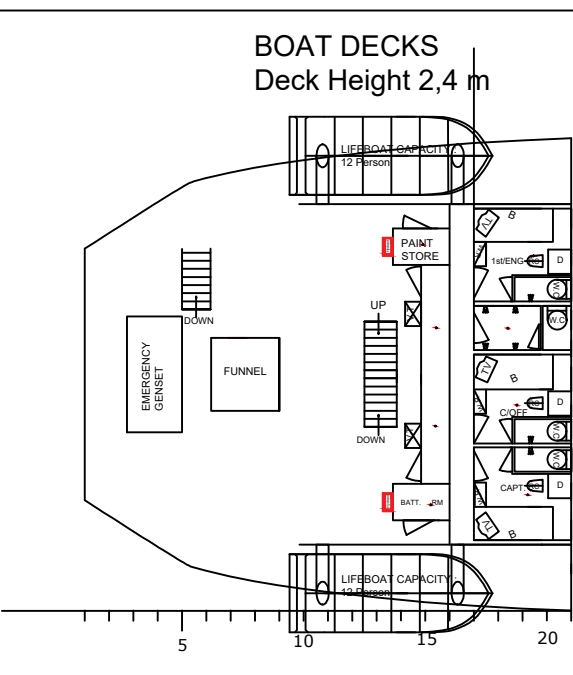
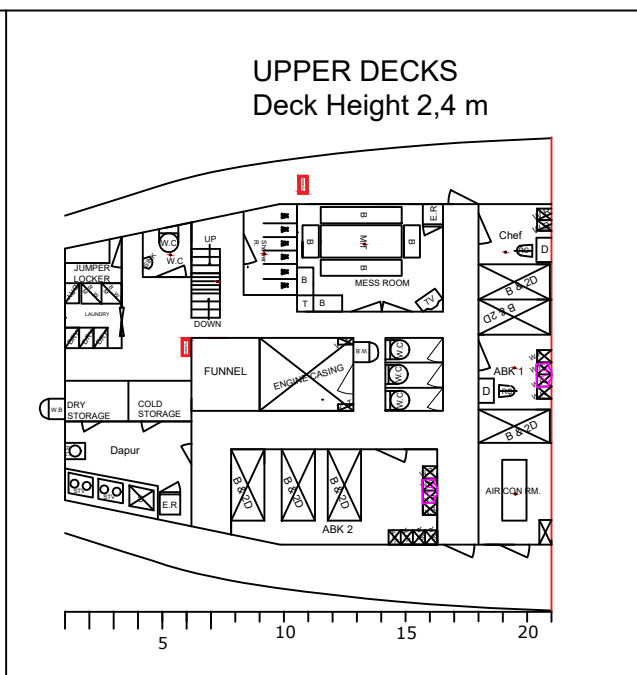
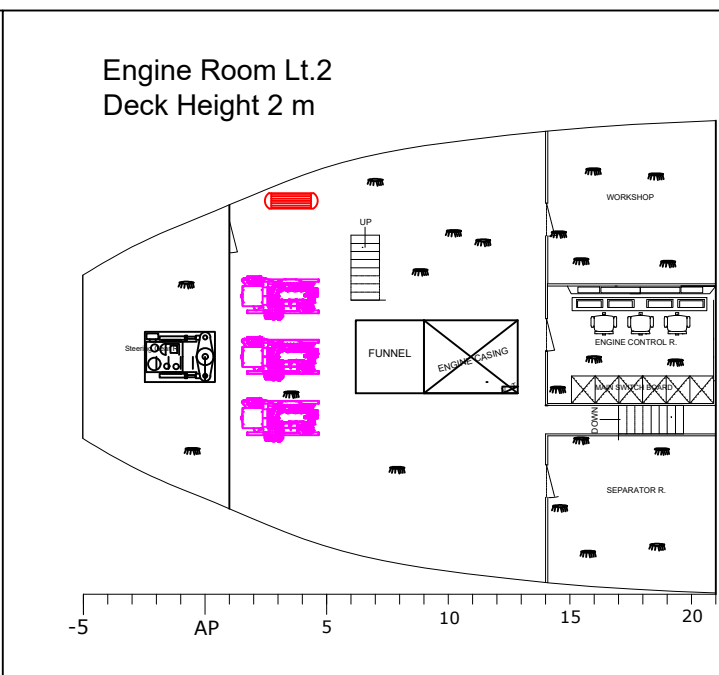
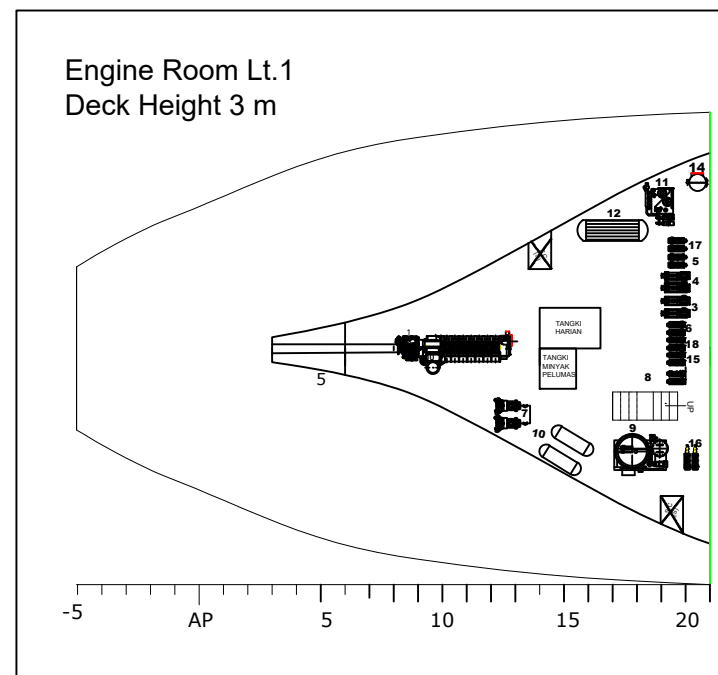
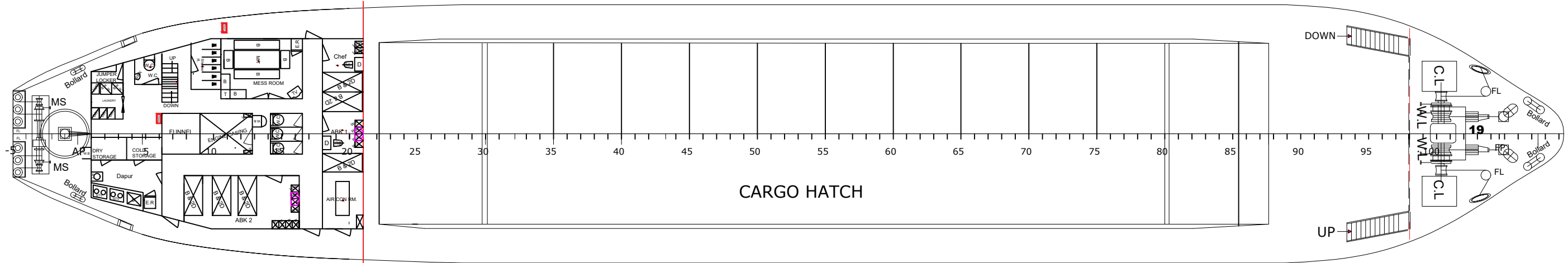
PANJANG SELURUH	68.45 M
PANJANG GARIS TEGAK	63.03 M
TINGGI	6.00 M
SARAT AIR	4.00 M
MESIN UTAMA	CATEPILLAR 3508 B 1000 HP
KECEPATAN	11 KNOT
ABK	21P

	METRIC	 Universiti Darul Perdana Fakulti Teknologi Kelautan Tahap Sistem Perkapalan	SHIP YARD				-		
	HYBRID METRIC/INCH		NAME	INITIAL	DATE				
			drawing by JACKSON ROBERTO W						
			checked by MOCH. RICKY D. S.T						
			approved by MOCH. RICKY D. S.T			LINES PLAN MV. PULAU NAGA GENERAL CARGO 1700 DWT			
					RENCANA GARIS		BALFT		
							BL		
	NEXT ASSY	USED ON			CODE	SCALE 1:100	WT	SH	A1

A



Deck

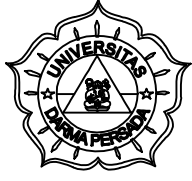
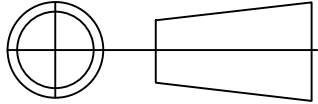


LIST OF MACHINE

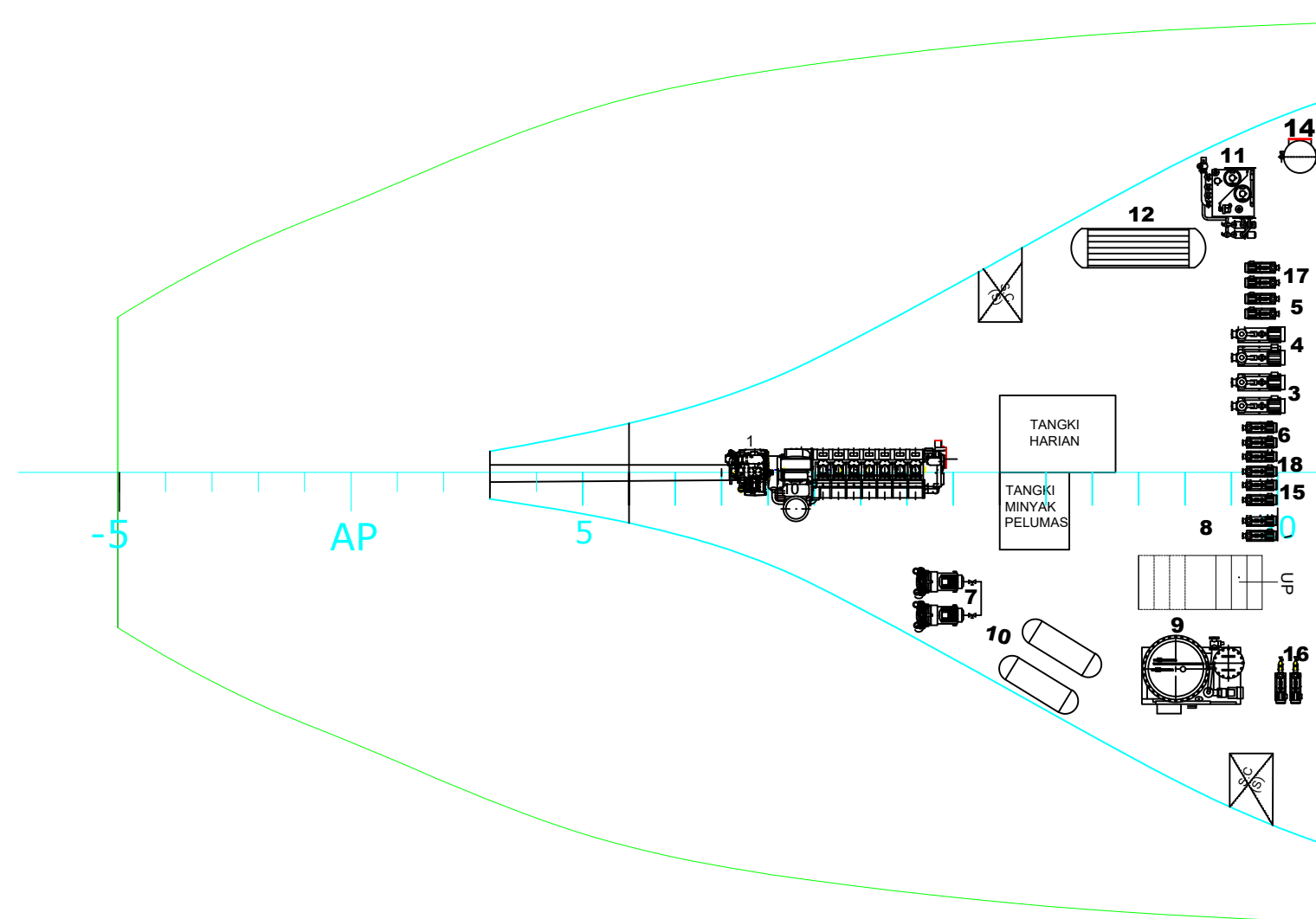
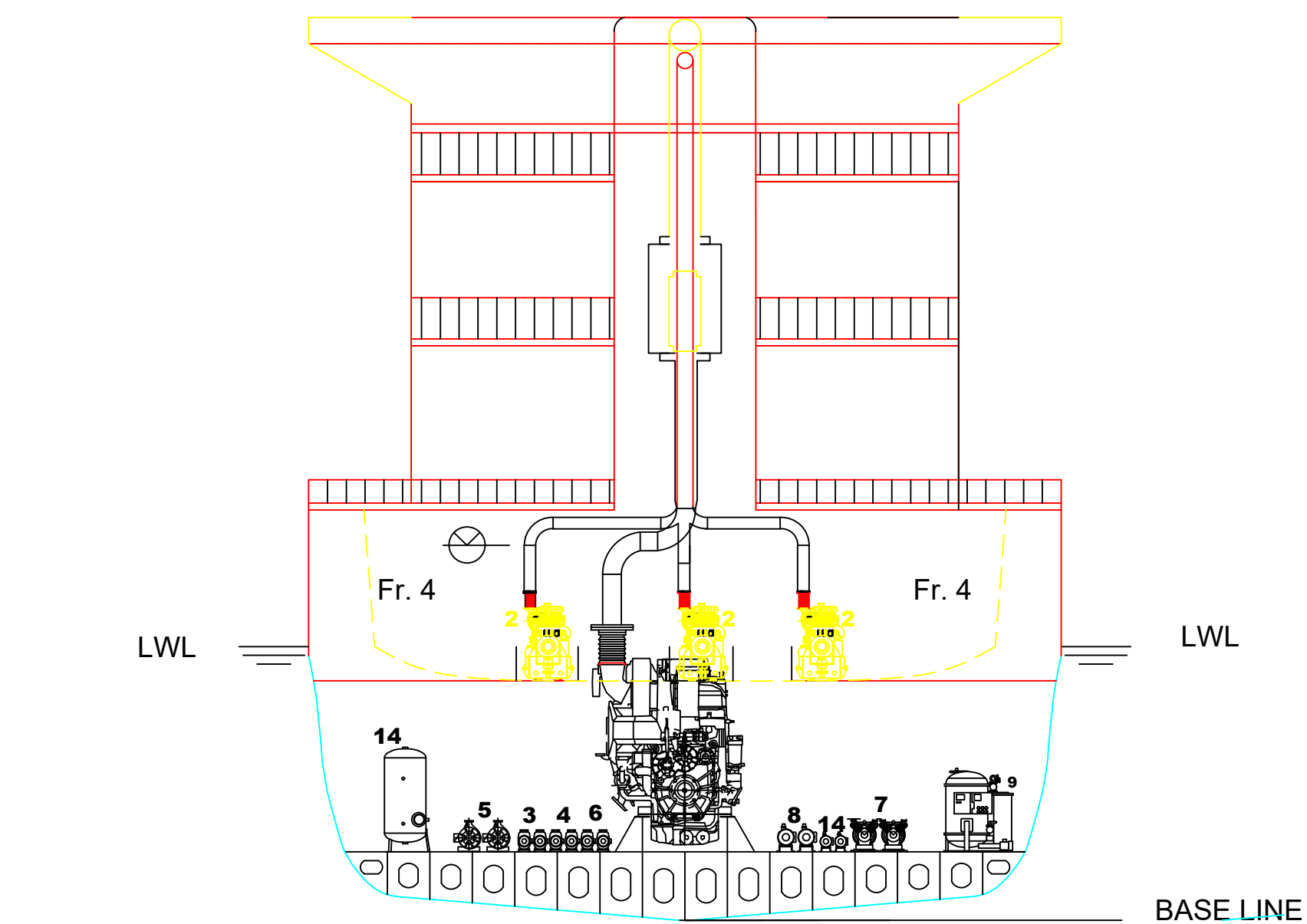
20			
19	WINDLASS	1	18,6425 kW
18	FW SANITARY PUMP	2	CENTR, 2 - 6.5 m³/h 0.75 kW
17	SW SANITARY PUMP	2	CENTR, 2 - 6.5 m³/h 0.75 kW
16	BILGE PUMP	3	CENTR, 35 - 55 m³/h , 3.7 kW
15	TRANSFER FUEL PUMP	2	6 m³/h, 1.5 kW, 50 Hz, 1500 RPM
14	HYDROPHORE	1	80 m³/h
13	COOLER FOR A/E	1	
12	COOLER FOR M/E	1	
11	SEWAGE TREATMENT	1	5 m3
10	MAIN AIR RECEIVED	2	0,2145 m3
9	OILY WATER SEPARATOR	1	0.75 kW
8	F.O. SUPPLY PUMP	2	1.8 m³/h, 0.75 kW, 50 Hz, 1500 RPM
7	AIR COMPRESSOR	2	43.5 m³/h, 11 kW, 50 Hz, 1500 RPM
6	S.W. COOLING PUMP	2	CENTR, 42 m³/h 5.5 kW
5	F.W. COOLING PUMP	2	CENTR, 42 m³/h 5.5 kW
4	BALLAST PUMP	2	CENTR, 148 m³/h 18.5 kW
3	FIRE & G.S PUMP	2	CENTR, 35 - 55 m³/h 11 kW
2	GENERATOR SET	3	150 kW, 188 kVA, 1500 RPM
1	MAIN ENGINE	1	1000 HP, 1600 RPM
No.	DESCRIPTION	QTY	REMARKS

UKURAN UTAMA

PANJANG SELURUH	68.45 M
PANJANG GARIS TEGAK	63.03 M
TINGGI	6.00 M
SARAT AIR	4.00 M
MESIN UTAMA	CATEPILLAR 3508 B 1000 HP
KECEPATAN	11 KNOT
ABK	21P

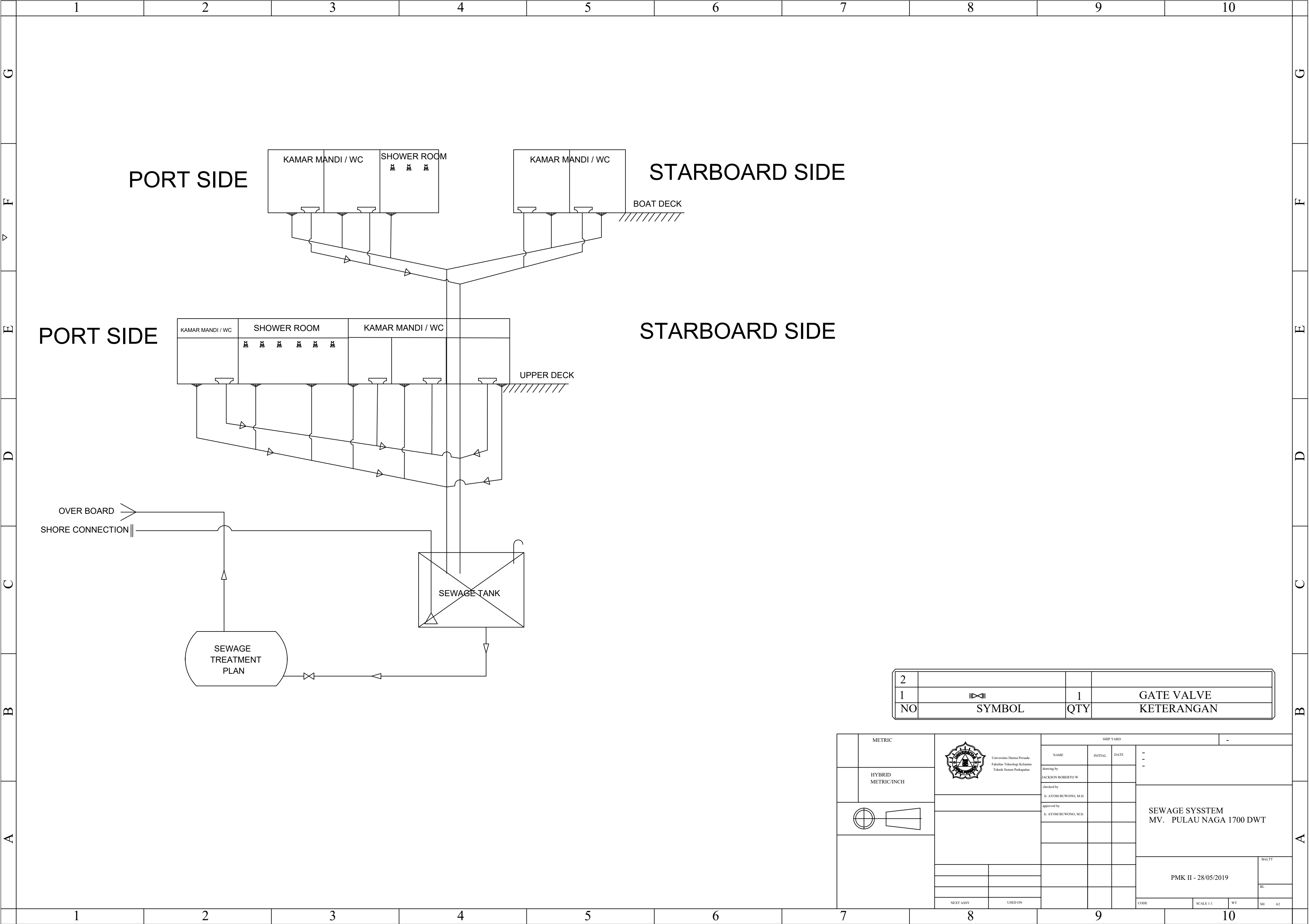
METRIC	 Universitas Dharma Peranda Fakultas Teknologi Kelautan Teknik Sistem Perkapalan	SHIP YARD				-
HYBRID METRIC/INCH		NAME	INITIAL	DATE	GENERAL ARRANGEMENT MV. PULAU NAGA GENERAL CARGO 1700 DWT	BALTT BL SH A1
		drawing by JACKSON ROBERTO W				
		checked by MUSWAR MUSLIM, S.T, M.Sc				
		approved by MUSWAR MUSLIM, S.T, M.Sc				
						
NEXT ASSY	USED ON					

PMK II -21/06/2019

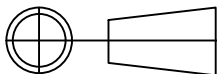
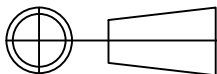


No.	DESCRIPTION	QTY	REMARKS
18	FW SANITARY PUMP	2	CENTR, 2 - 6.5 m ³ /h 0.75 kW
17	SW SANITARY PUMP	2	CENTR, 2 - 6.5 m ³ /h 0.75 kW
16	BILGE PUMP	3	CENTR, 35 - 55 m ³ /h , 3.7 kW
15	TRANSFER FUEL PUMP	2	6 m ³ /h, 1.5 kW, 50 Hz, 1500 RPM
14	HYDROPHORE	1	500L
13	COOLER FOR A/E	1	
12	COOLER FOR M/E	1	
11	SEWAGE TREATMENT	1	
10	MAIN AIR RECEIVED	2	0,2145 m3
9	OILY WATER SEPARATOR	1	0.75 kW
8	F.O. SUPPLY PUMP	2	1.8 m ³ /h, 0.75 kW, 50 Hz, 1500 RPM
7	AIR COMPRESSOR	2	43.5 m ³ /h, 11 kW, 50 Hz, 1500 RPM
6	S.W. COOLING PUMP	2	CENTR, 42 m ³ /h 5.5 kW
5	F.W. COOLING PUMP	2	CENTR, 42 m ³ /h 5.5 kW
4	BALLAST PUMP	2	CENTR, 148 m ³ /h 18,5 kW
3	FIRE & G.S PUMP	2	CENTR, 35 - 55 m ³ /h 11 kW
2	GENERATOR SET	3	150 kW, 188 kVA, 1500 RPM
1	MAIN ENGINE	1	1000 HP, 1600 RPM

	METRIC		Universitas Darussalam Perlis Fakultas Teknologi Kelautan Teknik Sistem Perkapalan	SHIP YARD			-		
				NAME	INITIAL	DATE	-		
				drawing by JACKSON ROBERTO W			-		
				checked by MUSWAR MUSLIM, S.T., M.Sc			LAYOUT KAMAR MESIN MV. PULAU NAGA GENERAL CARGO 1700 DWT		
				approved by MUSWAR MUSLIM, S.T., M.Sc					



2			
1	II<II	1	GATE VALVE
NO	SYMBOL	QTY	KETERANGAN

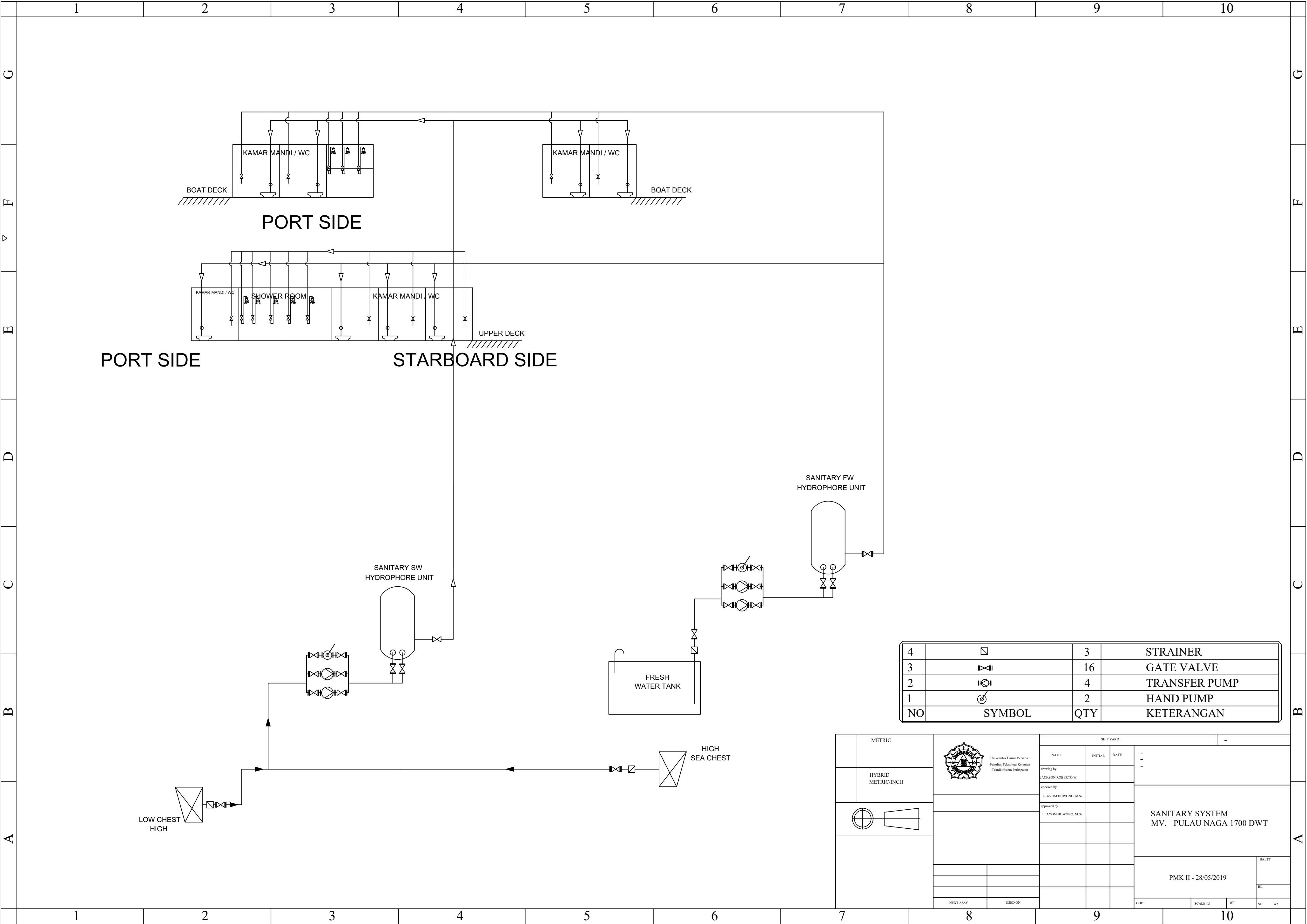
METRIC		SHIP YARD			-
		NAME	INITIAL	DATE	
HYBRID METRIC/INCH		drawing by	JACKSON ROBERTO W		
		checked by	I. AYOM BUWONO, M.Si		
		approved by	I. AYOM BUWONO, M.Si		
					
NEXT ASSY	USED ON				

SEWAGE SYSSTEM
MV. PULAU NAGA 1700 DWT

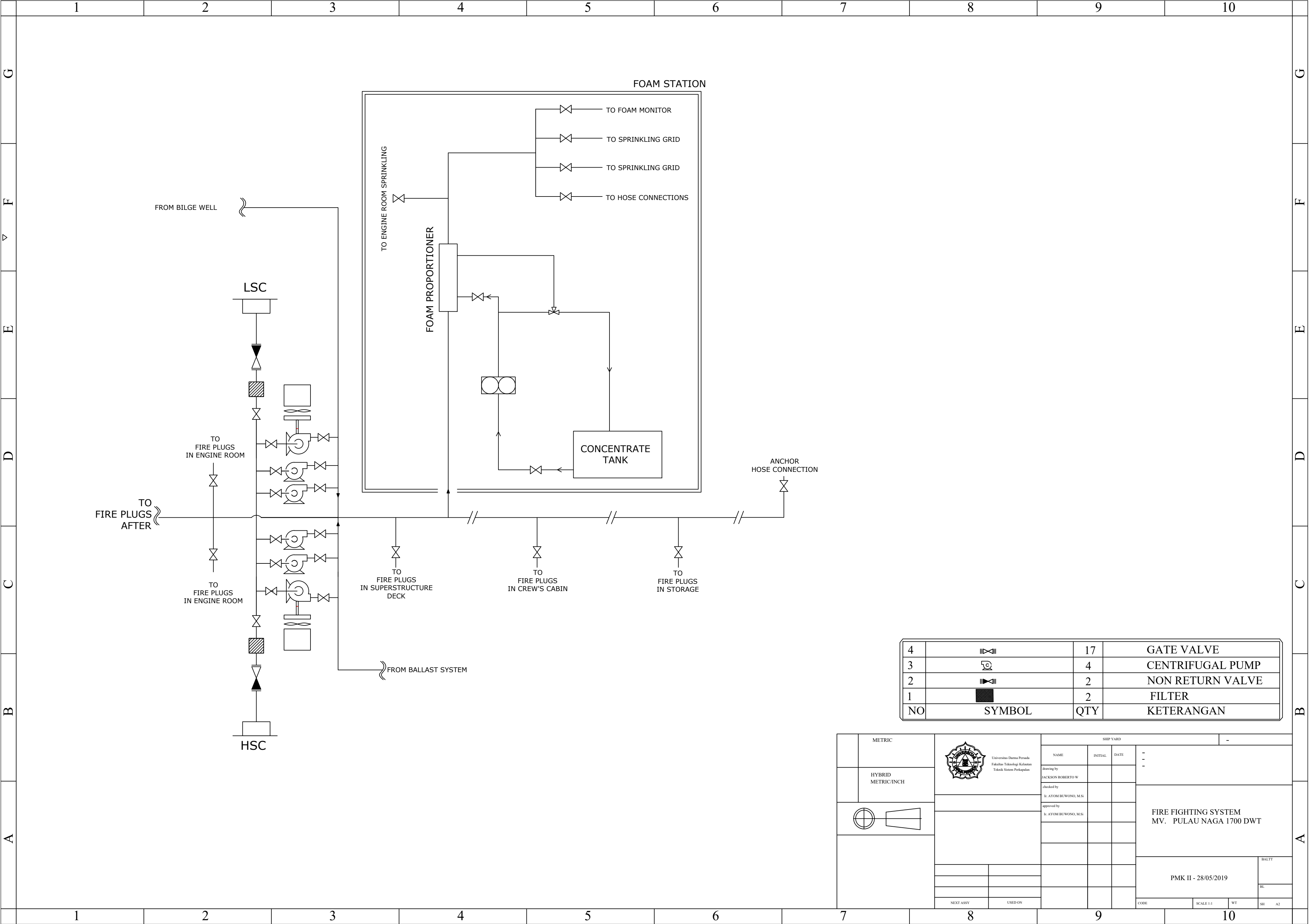
PMK II - 28/05/2019

BALTT
BL
SH A2

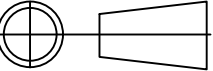
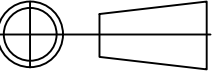
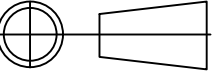
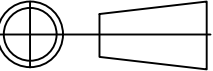
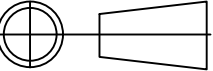
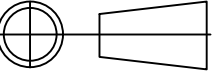
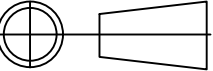
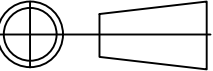
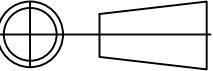
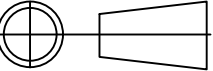
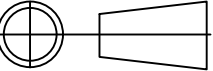
CODE	SCALE 1:1	WT
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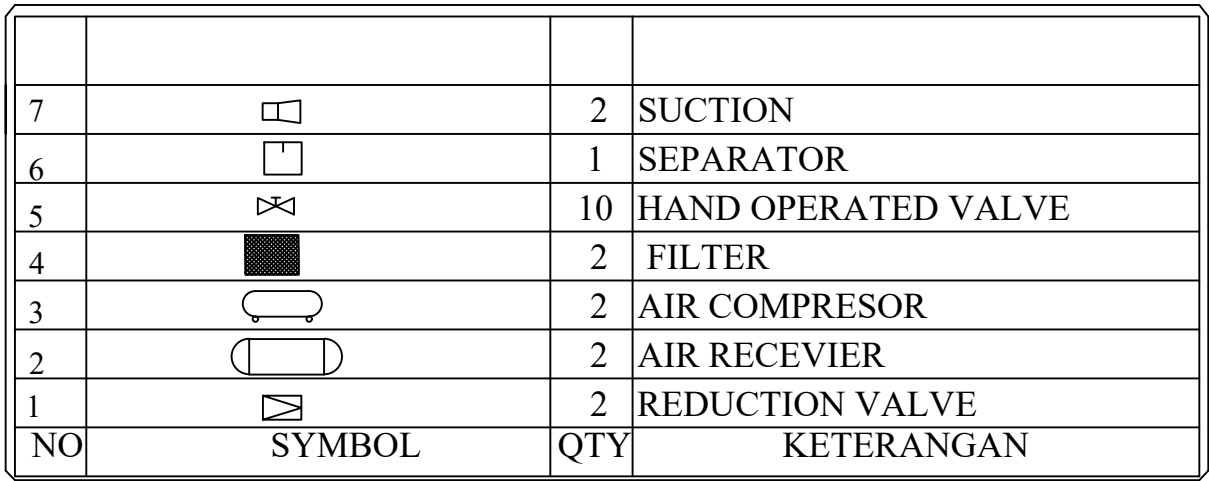


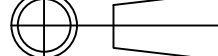
METRIC		 Universitas Dharma Purnama Fakultas Teknologi Kelautan Teknik Sistem Perkapalan		SHIP YARD				-	
HYBRID METRIC/INCH				NAME	INITIAL	DATE	- -<		

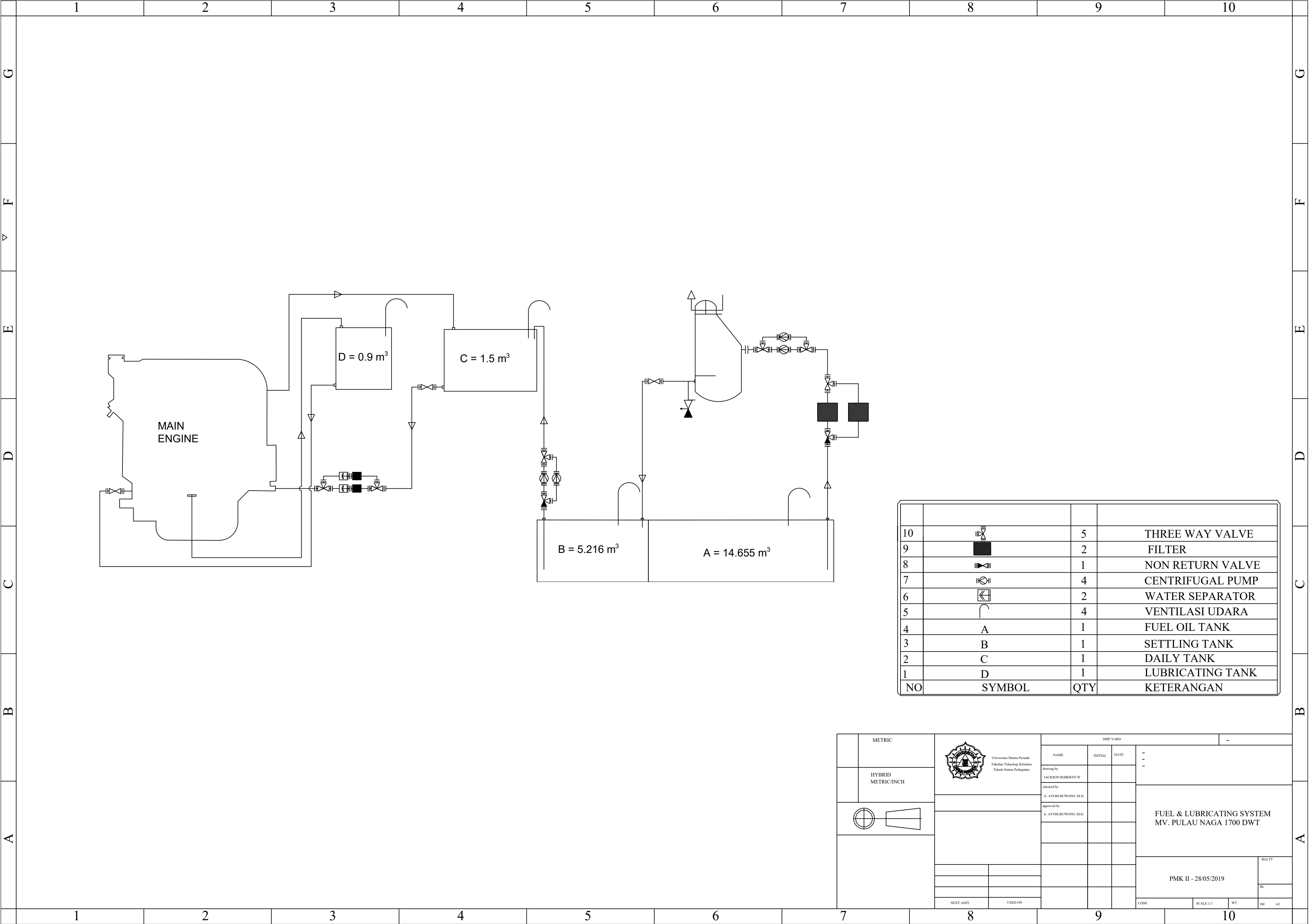


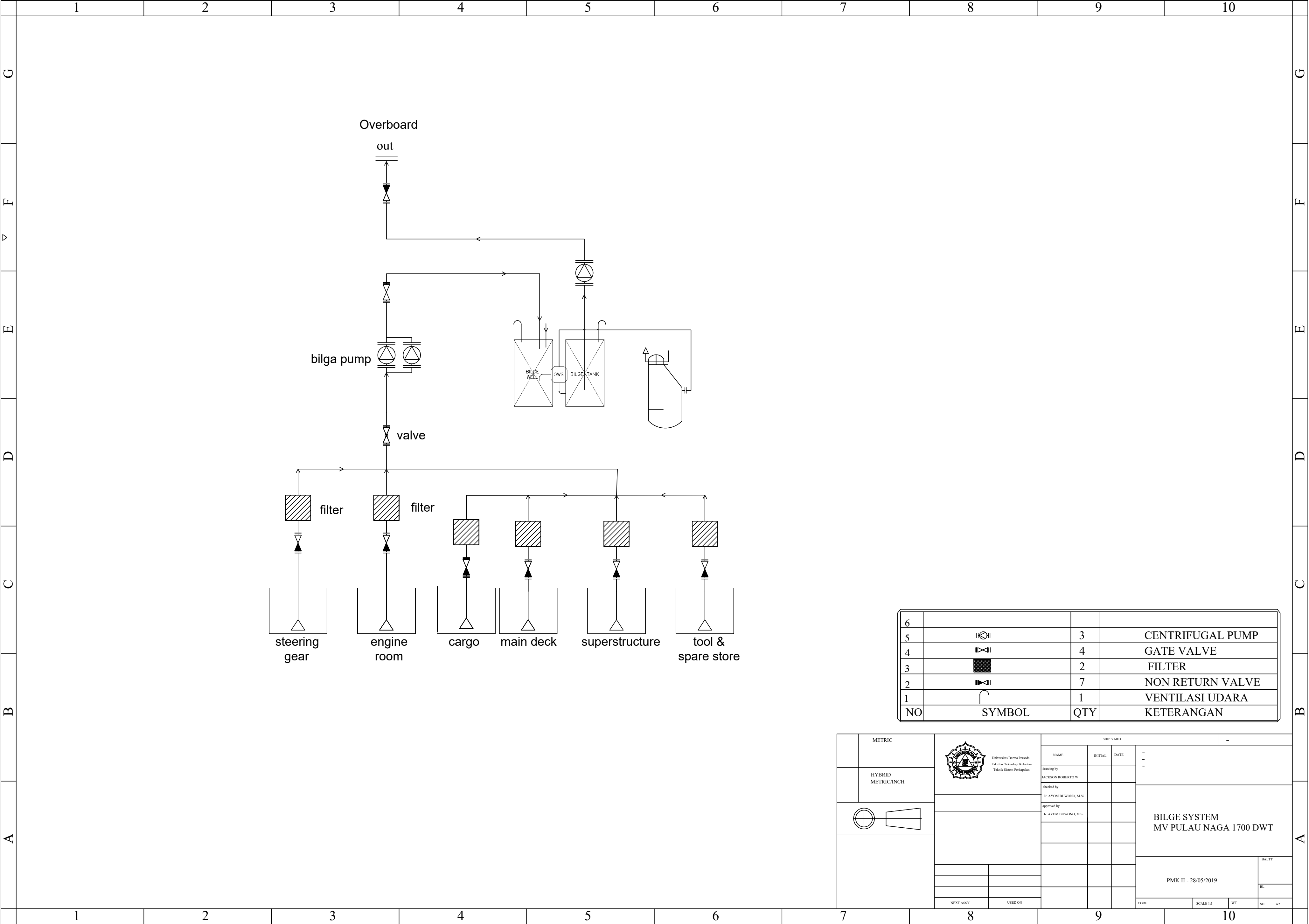
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3		4	CENTRIFUGAL PUMP
2		2	NON RETURN VALVE
1		2	FILTER
NO	SYMBOL	QTY	KETERANGAN

METRIC		SHIP YARD				FIRE FIGHTING SYSTEM MV. PULAU NAGA 1700 DWT
		NAME	INITIAL	DATE		
HYBRID METRIC/INCH		drawing by				PMK II - 28/05/2019
		JACKSON ROBERTO W				
		checked by				
		H. AYOM BUWONO, M.Si				
		approved by				
		H. AYOM BUWONO, M.Si				
						
						
		NEXT ASSY	USED ON			

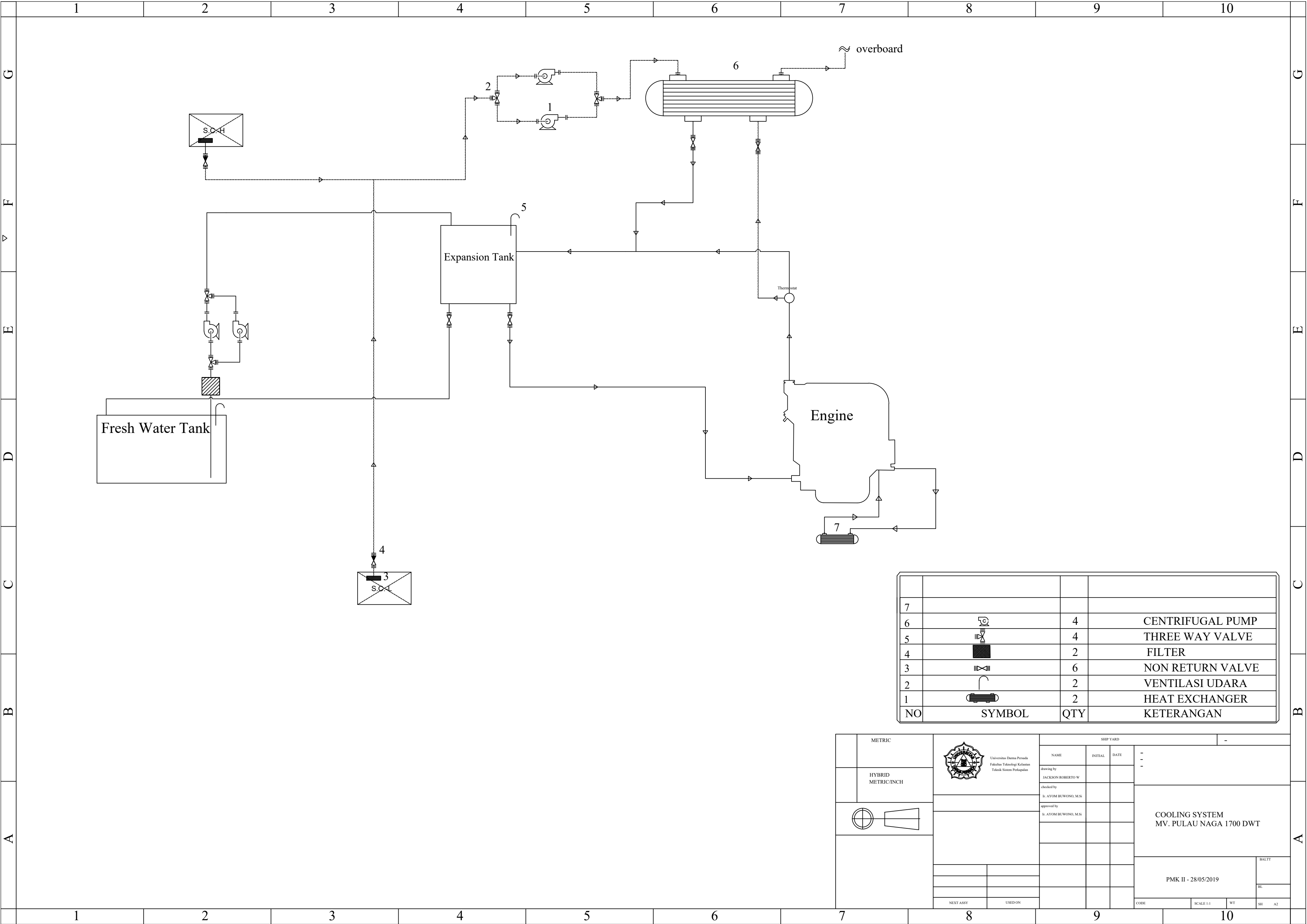


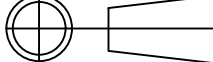
METRIC			SHIP YARD			-			
HYBRID METRIC/INCH	NAME		INITIAL	DATE	1 2 3 4 5 6 7 8 9 10 11 12 drawing by JACKSON ROBERTO W checked by Ir. AYOM BUWONO, M.Si approved by Ir. AYOM BUWONO, M.Si				
	drawing by								
	checked by								
					STARTING SYSTEM MV. PULAU NAGA 1700 DWT				
					PMK II - 28/05/2019		HALFT		
							BL		
	NEXT ASSY	USED ON			CODE	SCALE 1:1	WT	SH	A2

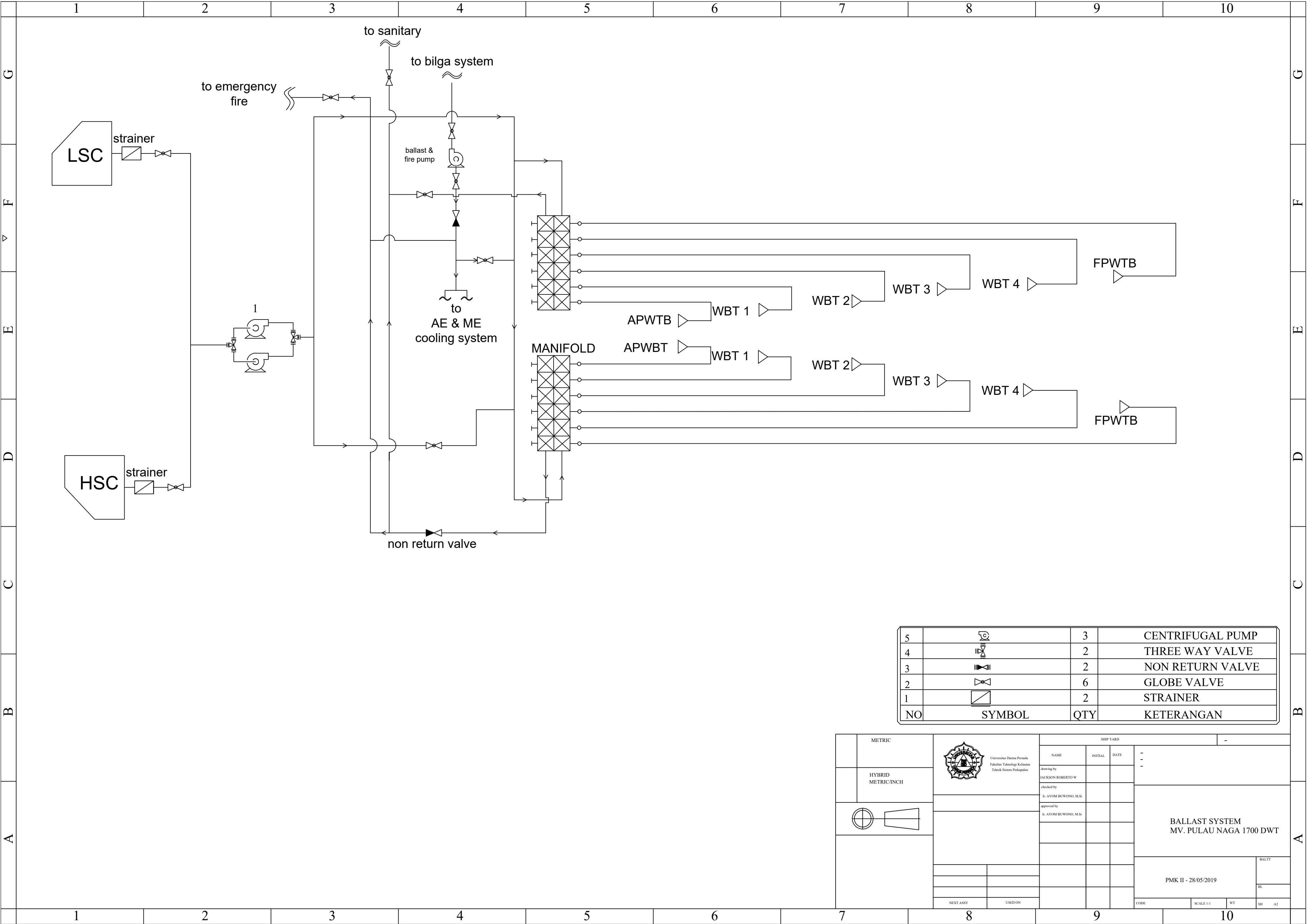




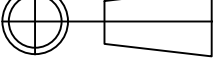
METRIC		SHIP YARD				-
		NAME	INITIAL	DATE		
HYBRID METRIC/INCH		drawing by	JACKSON ROBERTO W			BILGE SYSTEM MV PULAU NAGA 1700 DWT
		checked by	H. AYOM BUWONO, M.Si			
		approved by	H. AYOM BUWONO, M.Si			PMK II - 28/05/2019
						BALUT
						BL
		NEXT ASSY	USED ON			SH A2



METRIC			SHIP YARD		-	
HYBRID METRIC/INCH			NAME	INITIAL	DATE	- - -
			drawing by JACKSON ROBERTO W			
		checked by Ir. AYOM BUWONO, M.Si			COOLING SYSTEM MV. PULAU NAGA 1700 DWT	
		approved by Ir. AYOM BUWONO, M.Si				
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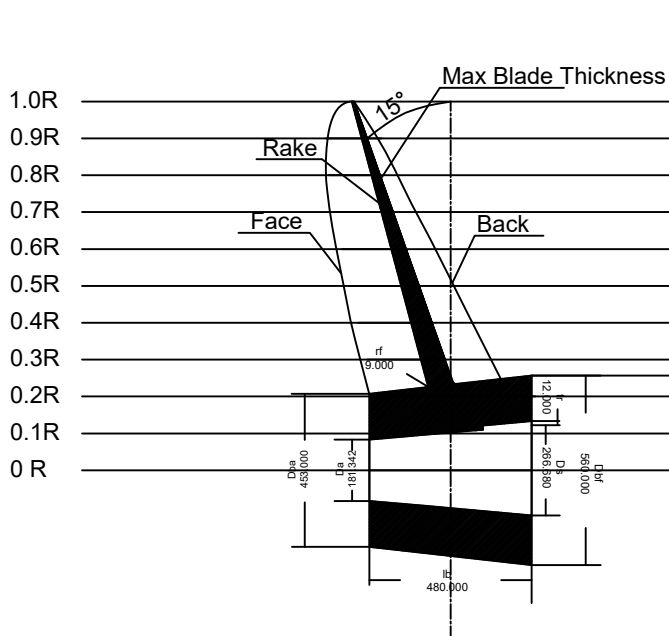


5		3	CENTRIFUGAL PUMP
4		2	THREE WAY VALVE
3		2	NON RETURN VALVE
2		6	GLOBE VALVE
1		2	STRAINER
NO	SYMBOL	QTY	KETERANGAN

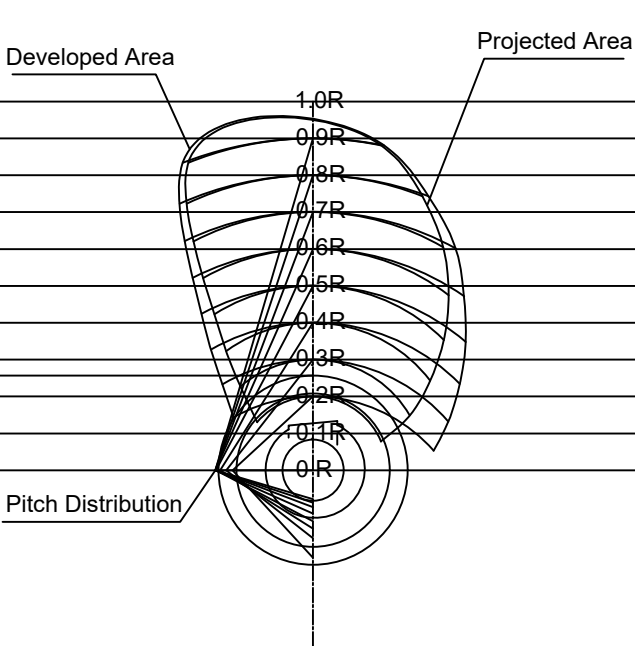
METRIC			SHIP YARD			-	
HYBRID METRIC/INCH			NAME	INITIAL	DATE		
			drawing by				
			JACKSON ROBERTO W				
		checked by			BALLAST SYSTEM MV. PULAU NAGA 1700 DWT		
		Ir. AYOM BUWONO, M.Si					
		approved by					
		Ir. AYOM BUWONO, M.Si					
			</				

B4-70 PROPELLER ARRANGEMENT

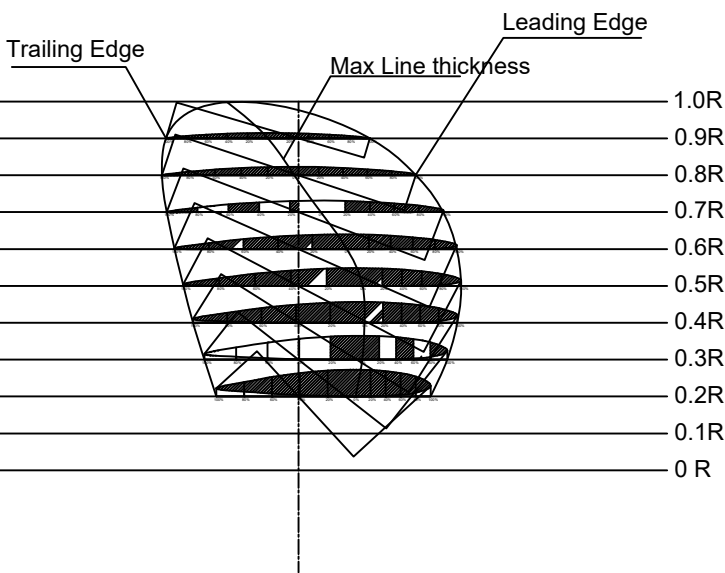
SIDE VIEW



DEVELOPED & PROJECTED AREA

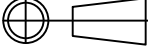


EXPANDED AREA



PRINCIPAL DIMENSION	
TIPE PROPELLER	: B4-70
DIAMETER PROPELLER	: 1.952 m
PITCH RATIO PROPELLER (Ho/D)	: 0.740
DEVELOPED BLADE RATIO (fp/fa)	: 0.898
EFISIENSI PROPELLER	: 51.70%
KONSTANTA KAVITASI (σ 0,7)	: 0,470
KOEFISIEN GAYA DORONG (τ)	: 0,166
JUMLAH DAUN PROPELLER	: 4

PRINCIPAL DIMENSION	
L.O.A	: 68.45 m
L.W.L	: 64.29 m
L.B.P	: 63.03 m
BREADTH (B)	: 11.23 m
DEPTH (H)	: 6 m
DRAFT (T)	: 4 m

METRIC				SHIP YARD			-				
HYBRID METRIC/INCH				NAME	INITIAL	DATE					
		designed by		JACKSON ROBERTO W						PROPELLER ARRANGEMENT B4-70 MV. PULAU NAGA 1700 DWT	
		checked by									
		Dr. Danny Fatuschamus, M.T									
		approved by									
		Dr. Danny Fatuschamus, M.T									
							PMK 1 - 28/05/2019				
							BALT				
							TL				
NEXT ASSY		USED ON					CODE	SCALE 1:1	WT	SH	A2