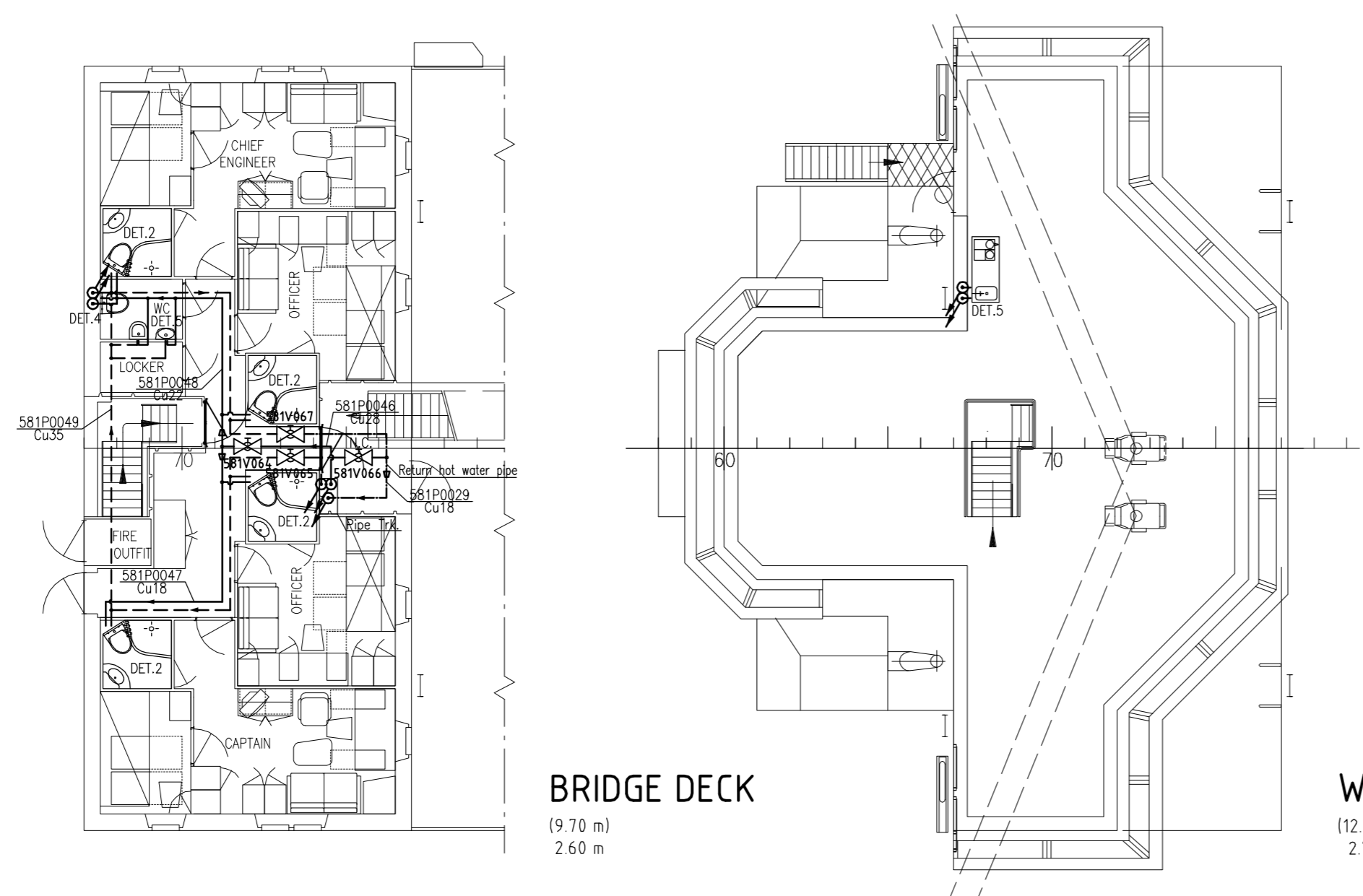


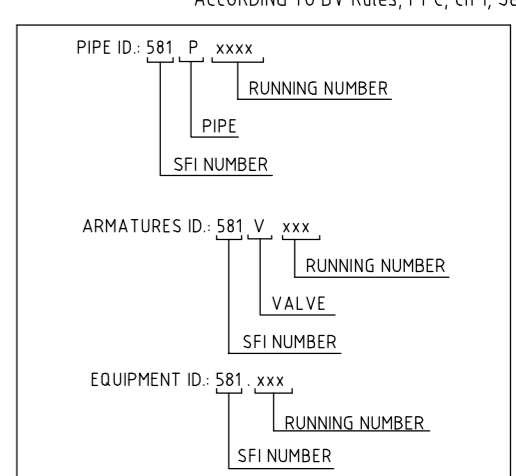
Rev. Versio	Part no. Osasto	Field Kenttä	Alteration or remark Muutos tai huomautus	Date Pvm.	Changed by Muutettiin	Approved by Hyväksytti
B			UPDATED ACC. TO CLASS AND OWNER COMMENTS AND ACC. TO DESIGN	2009-11-12	AARC/OLE	GLB/MaNu



COPPER TUBES			
Pipe diameter			Wall thickness
ND	INCH	OD	in General
Cu8	1/4"	ø 8	1,0
Cu10	3/8"	ø 10	1,2
Cu12	3/8"	ø 12	1,2
Cu18	1/2"	ø 18	1,2
Cu22	3/4"	ø 22	1,5
Cu28	1"	ø 28	1,5
Cu35	1 1/4"	ø 35	1,5
Cu42	1 1/2"	ø 42	1,5

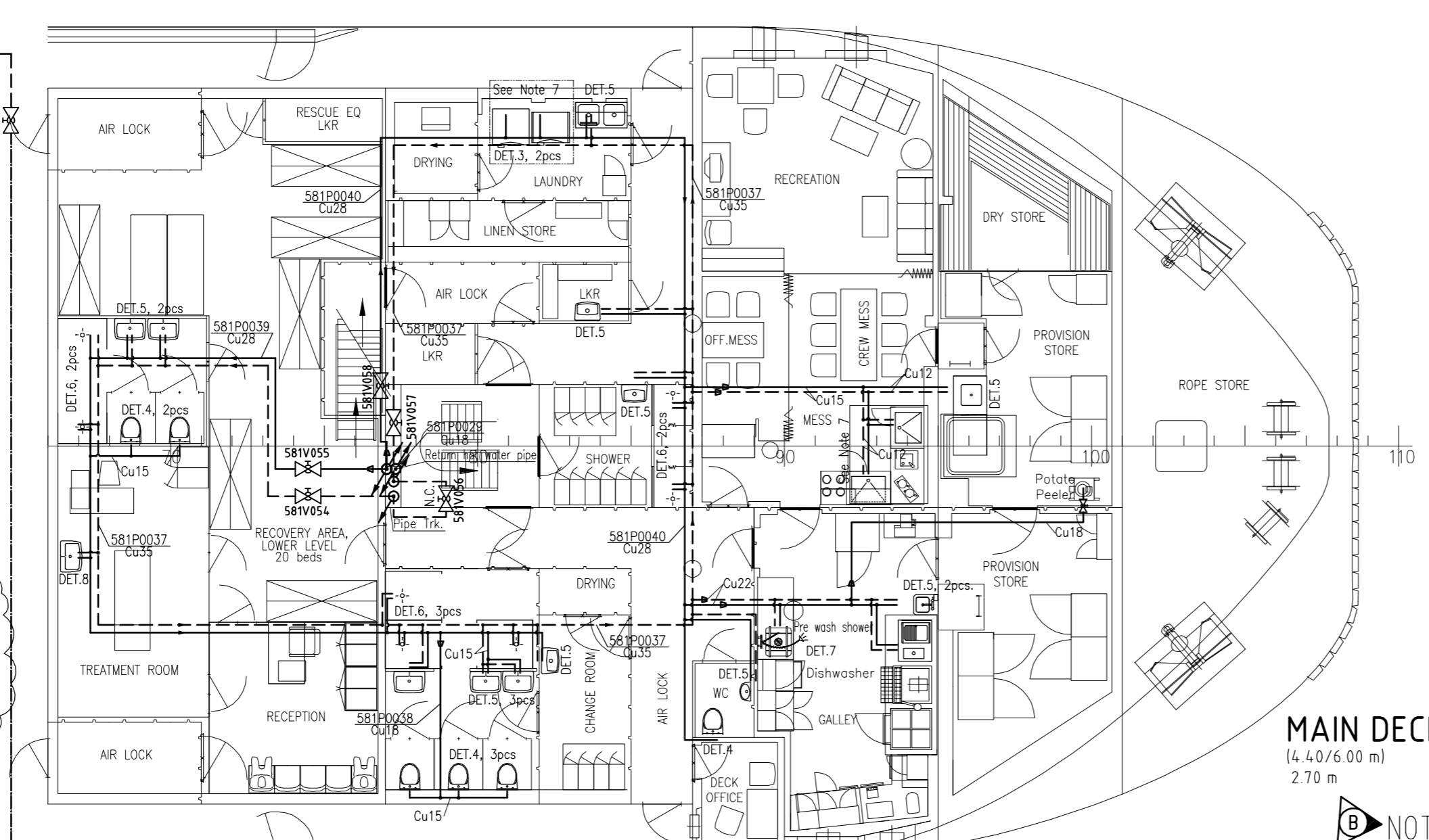
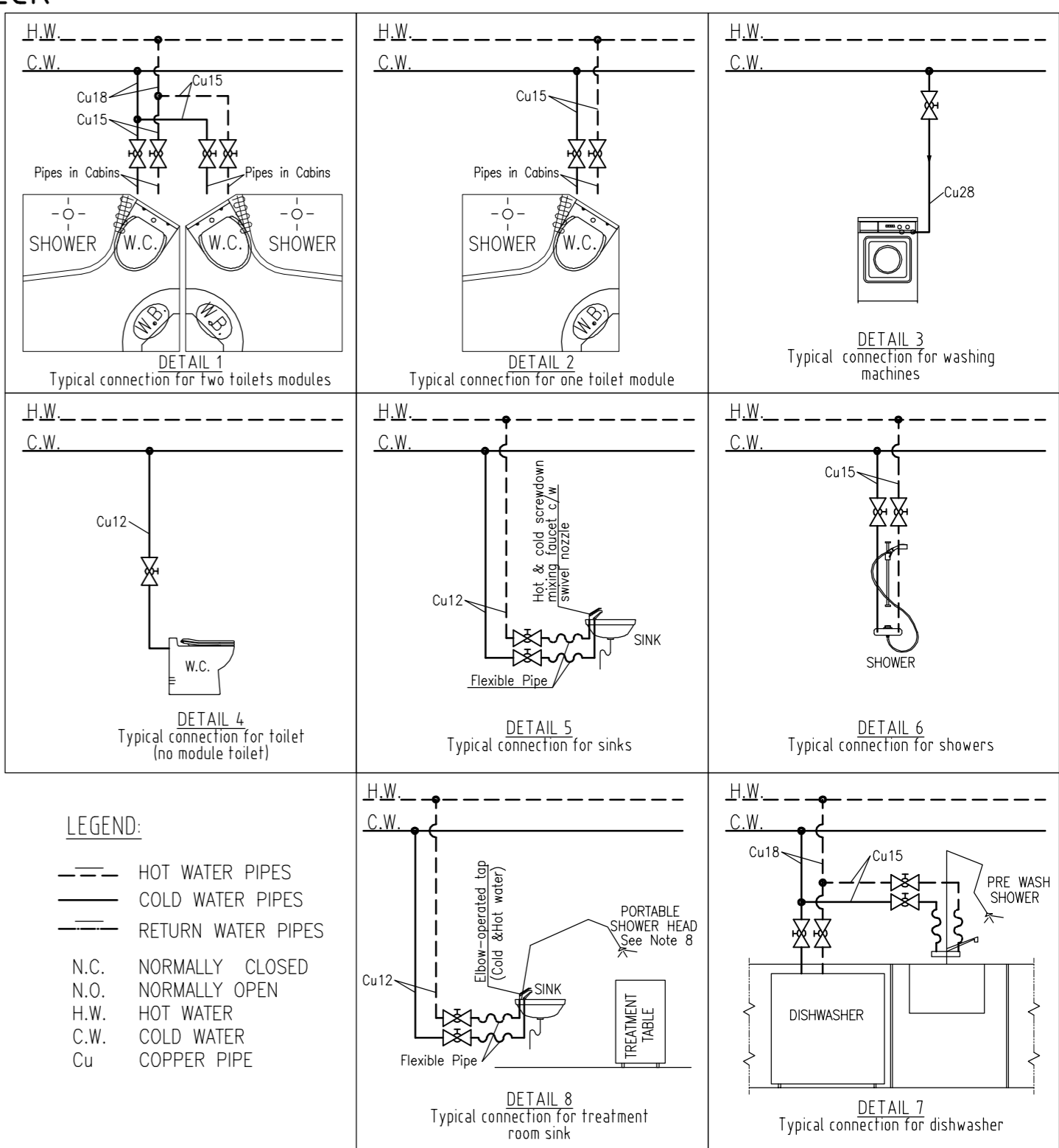
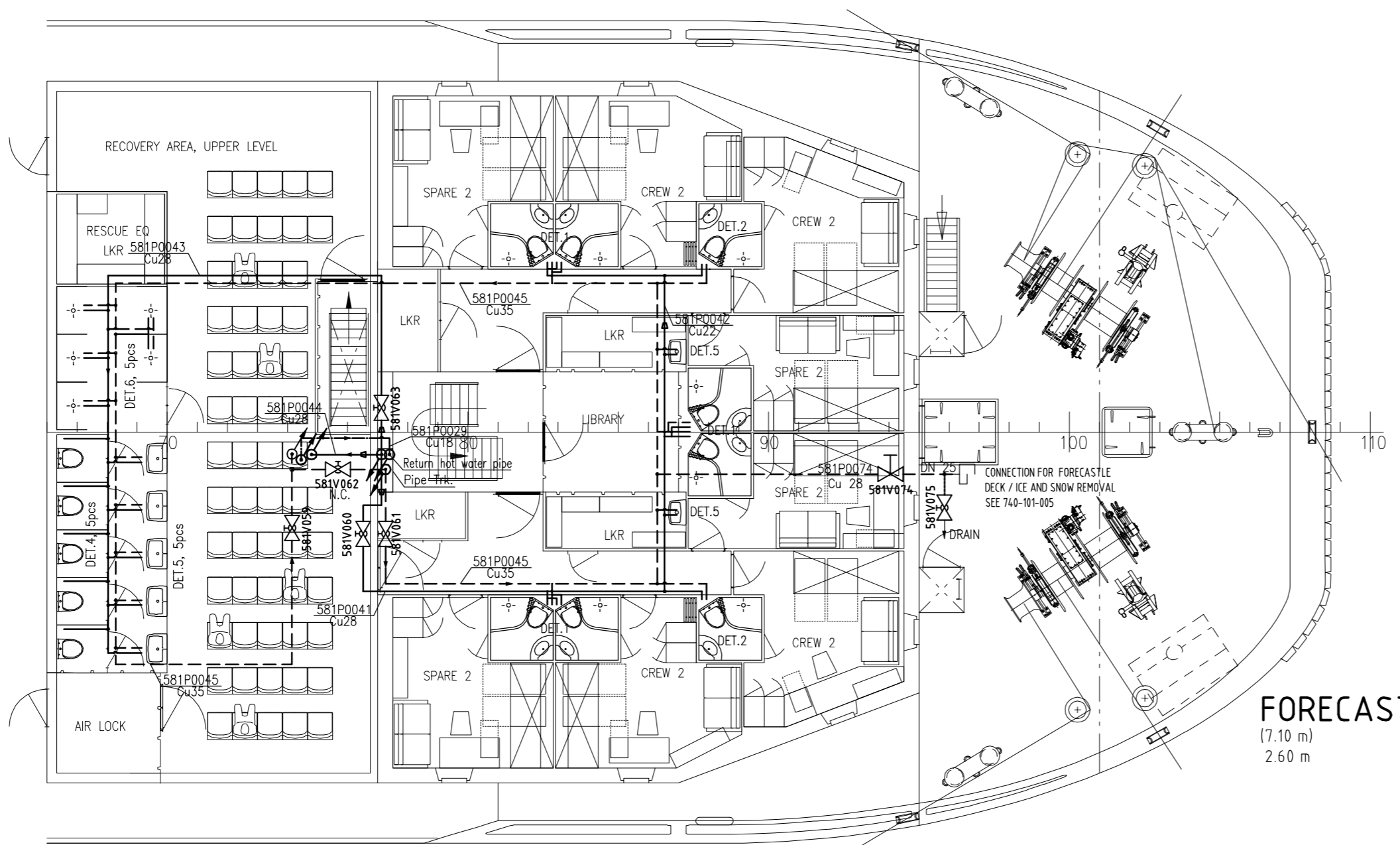
GALVANIZED STEEL PIPES MATERIAL : St.37.0.			
Pipe diameter			Wall thickness
ND	OD	InGeneral	InTanks
ND 20	ø 26.9 x	4	
ND 25	ø 33.7 x	4.5	
ND 32	ø 42.4 x	4.5	
ND 40	ø 48.3 x	4.5	6.3
ND 50	ø 60.3 x	4.5	6.3
ND 65	ø 76.1 x	4.5	6.3
ND 80	ø 88.9 x	4.5	8.0
ND 100	ø 114.3 x	4.5	8.8
ND 125	ø 139.7 x	4.5	8.8
ND 150	ø 168.3 x	4.5	8.8
ND 200	ø 219.1 x	6.3	8.8

MATERIALS AND TYPE OF VALVES	
VALVES COLD WATER-Engine Room	
NON RETURN VALVES- WATER TYPE	
BODY:	CAST IRON
DISC:	ALUMINUM BRONZE
SPINDLE:	MONEL
OTHER VALVES:	
BODY:	BRONZE
VALVES COLD/ WARM WATER-Accommodation	
BALL VALVES:	
BODY:	BRONZE



	FLEXIBLE PIPE
	BALL VALVE
	FILLING PIPE
	NON-RETURN VALVE, SCREW DOWN
	GLOBE VALVE/STOP VALVE
	FILTER OR STRAINER
	150 MM PENETRATION PIECE
	INSULATED PIPE
	CENTRIFUGAL PUMP
	UV-FILTER
SYMBOLS	

	HOSE CONNECTION
	CARBON FILTER
	SPRING LOADED (RELIEF VALVE)
	WASHBASIN
	SHOWER
	WATER CLOSET
	WASHING MACHINE
	SOLENOID VALVE
	REDUCER
	3-WAY THERMO CONTROLLED VALVE A=controlled water temperature outlet B=hot water inlet C=cold water inlet
SYMBOLS	



- NOTES:**
- ALL VALVES, COCKS AND CONNECTIONS SHALL BE READILY ACCESSIBLE FOR MAINTENANCE AND OPERATION. ISOLATING AND DRAIN-VALVES TO BE LOCATED INDOORS.
  - WARM WATER MAIN PIPES TO BE INSULATED.
  - FRESH WATER PIPES ARE NOT TO PASS THROUGH FUEL OIL OR LUBRICATING OIL TANKS.
  - AN ANTI-SCALING DEVICE TO BE INSTALLED TO SUCTION SIDE OF HYDROPHORE PUMP.
  - FRESH WATER SUCTION TO BE LOCATED ABOVE WATER MIST SUCTION AT THE PROPER ELEVATION SO THAT TO RESERVE THE WATER CAPACITY FOR WATER MIST SYSTEM (SEE MAKER RECOMMENDATION, DRW.740-813-200 WATER MIST DIAGRAM).
  - THE BUNKERING CONNECTIONS (AND PIPE) ON MAIN DECK TO HAVE HEATING AND TODO CONNECTION (3" MALE FLANGED).
  - EQUIPMENT CONNECTIONS TO BE CHECKED WHEN INFORMATION ARE AVAILABLE.
  - PORTABLE SHOWER HEAD TO BE PROVIDED WITH THERMOSTATICALLY REGULATED WATER SUPPLY VIA AN EXTENDED HOSE CAPABLE OF REACHING BOTH ENDS OF THE TREATMENT TANK.
  - ALL HOSES /PVC PIPES, IF ANY, MUST BE BV TYPE APPROVED
  - REFERENCE DRAWINGS:
    - 740-600-001 MACHINERY ARRANGEMENT
    - 740-721-100 SEA WATER COOLING SYSTEM
    - 740-722-100 FRESH WATER COOLING DIAGRAM
    - 740-803-100 BILGE WATER DIAGRAM
    - 740-813-200 WATER MIST SYSTEM
    - 740-515-020 WHEELHOUSE WINDOW SCHEME
    - 740-578-010 WATER HEATING PLAN
    - 740-101-005 WINTERIZATION PLAN GUIDELINES FOR BASIC DESIGN

