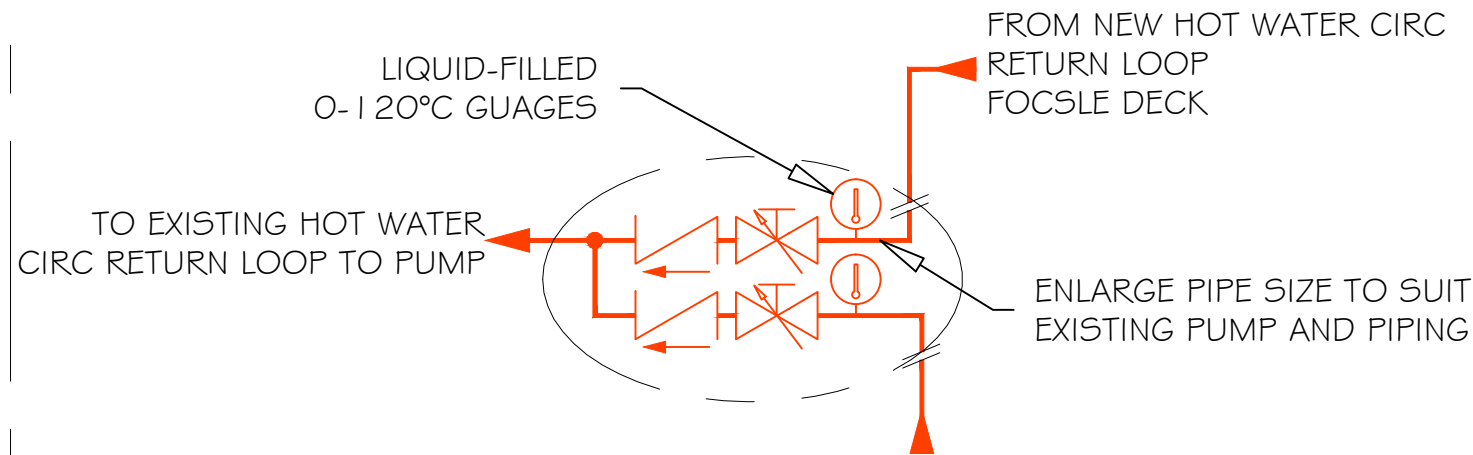




## HOT WATER CIRC SYSTEM BALANCE VALVES

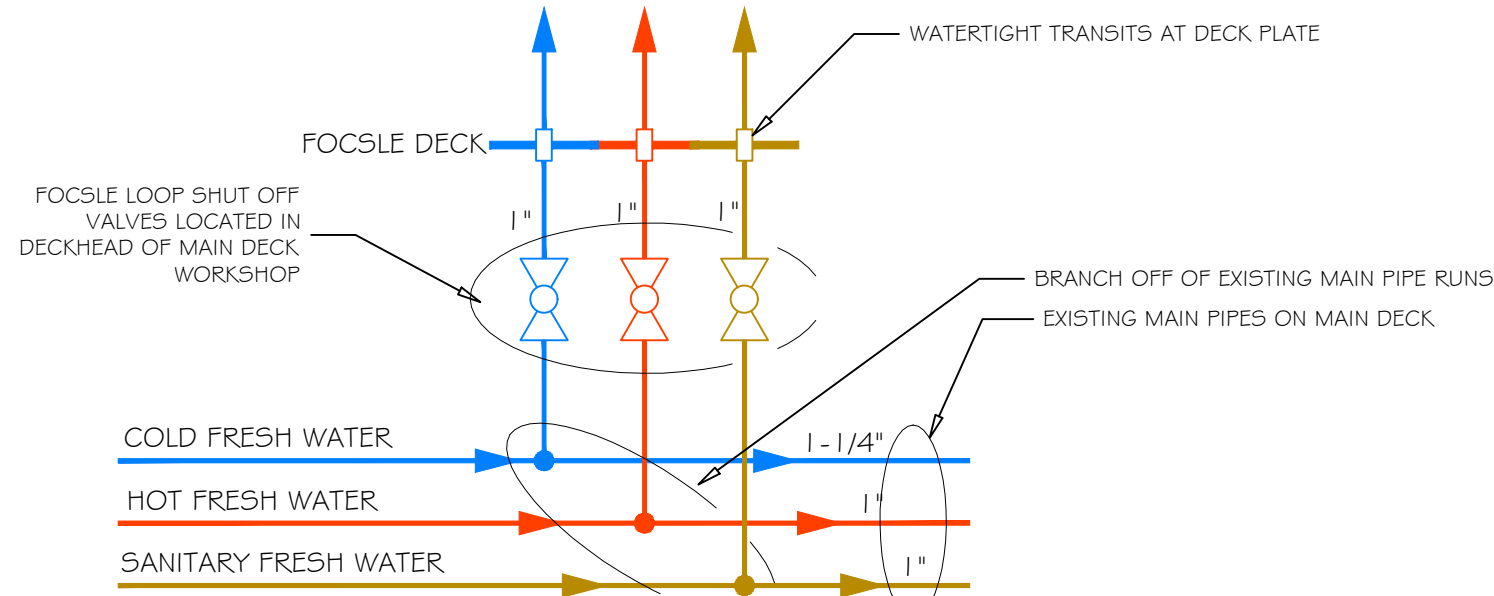
BALANCE VALVE ASSEMBLY TO BE PLACED IN ACCESSIBLE LOCATION PRIOR TO THE INLET OF THE CIRCULATION PUMP



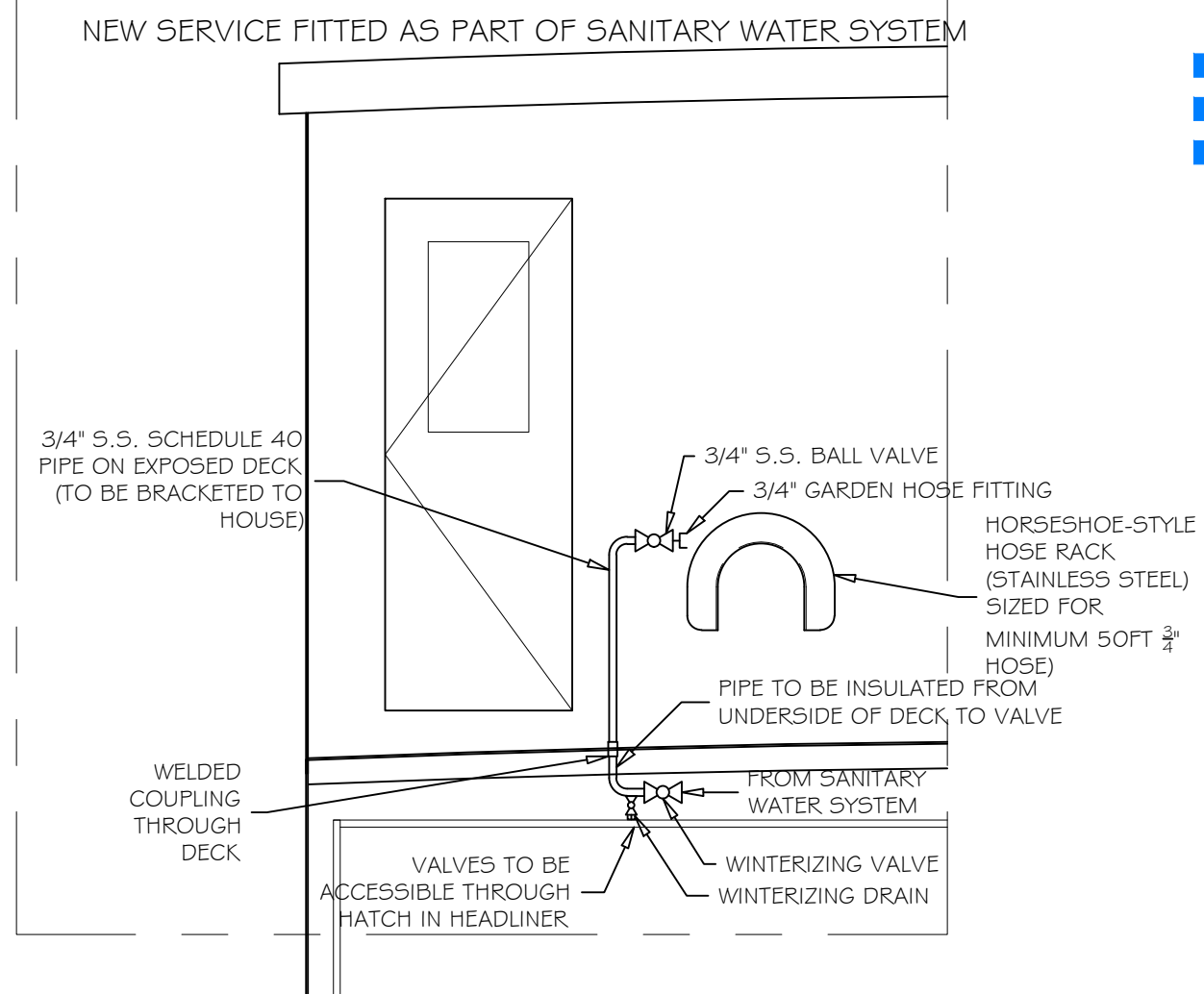
NOTE:  
EXISTENCE OF AN EXPANSION TANK IN THE HOT WATER CIRC SYSTEM TO BE CONFIRMED. IF NONE EXISTS, CONTRACTOR TO INSTALL ONE AMTROL 102-1 OR EQUAL UNIT

FROM EXISTING HOT WATER CIRC RETURN LOOP FROM THE LOWER DECK

## VESSEL TIE-IN



## BRIDGE DECK WASHDOWN



PIPING SYSTEM IDENTIFICATION COLOURS					
LINE	MAIN MEDIA	MARKING	SPECIFIC MEDIA	COLOUR	
	FRESH WATER		FRESH WATER, SANITARY	BU - BN - BU	
	FRESH WATER		POTABLE	BU - GN - BU	
	FRESH WATER		POTABLE, HOT	BU - RD - BU	

PIPING SYSTEM CONVENTIONAL SIGNS					
PIPE	DIRECTION OF FLOW	CROSSING PIPES, NOT CONNECTED	CROSSING PIPES, CONNECTED	PIPE TEE	
WATERTIGHT TRANSIT	NON-WATERTIGHT TRANSIT	PIPE GOING UPWARDS	PIPE GOING DOWNWARDS	REDUCE / ENLARGE PIPE SIZE	
BALL VALVE NORMALLY OPEN	BALL VALVE NORMALLY CLOSED	GLOBE VALVE NORMALLY OPEN	GLOBE VALVE NORMALLY CLOSED	CHECK VALVE	
GLOBE VALVE SDNR, STRAIGHT	GLOBE VALVE SDNR, ANGLE	THREE-WAY T-PORT VALVE	THREE-WAY T-PORT VALVE	BUTTERFLY VALVE	
PUMP	FLANGE CONNECTION	FLEXIBLE HOSE	FLEXIBLE BELLOW(S)	STRAUB-TYPE COUPLER	
QUICK RELEASE COUPLER	CAPPED PIPE	AIR PIPE	SIPHON BREAK	TRAP	
SOUNDING OR FILLING FITTING	FILTER OR STRAINER	GAUGE	LEVEL SENSOR	LEVEL ALARM	

### NOTES:

- ALL PIPING ROUTES INDICATED ARE FOR REFERENCE ONLY. ACTUAL ARRANGEMENT TO BE DETERMINED ON SITE BASED UPON AVAILABLE SPACE AND EXISTING CONNECTIONS
- CONNECTION POINTS TO EXISTING PIPING IN THE VESSEL ARE SAMPLES ONLY. EXISTING VESSEL DRAWINGS ARE INCOMPLETE OR OUTDATED. THE INSTALLER IS TO ENSURE THAT ALL EXISTING CONNECTIONS TO OTHER SERVICES ARE MAINTAINED. PIPING ROUTES AND OR CONFIGURATIONS MAY BE REQUIRED TO CHANGE FROM WHAT IS PICTURED IN ORDER TO ACCOMPLISH THIS
- THE INSTALLER IS TO PROVIDE AN AS BUILT SKETCH OF THE FINAL SYSTEM TO THE VESSEL FOR ITS RECORDS
- CONNECTIONS TO EXISTING PIPING TO BE DETERMINED BY THE INSTALLER
- SHOWER SHUT-OFF VALVES TO BE LOCATED ABOVE THE HEADLINER, SINK SHUTOFF VALVES TO BE LOCATED IN THE SINK CABINETS
- CONNECTION TO SINK FAUCETS AND TOILETS TO BE VIA STAINLESS STEEL BRAIDED HOSE CONNECTORS
- SHOWER MIXER VALVES TO BE EXTERNAL (EXPOSED) STYLE
- TOILET SHUT-OFF VALVES TO BE LOCATED TO THE LEFT OF THE TOILET ON THE INTERIOR PANEL

### MATERIALS:

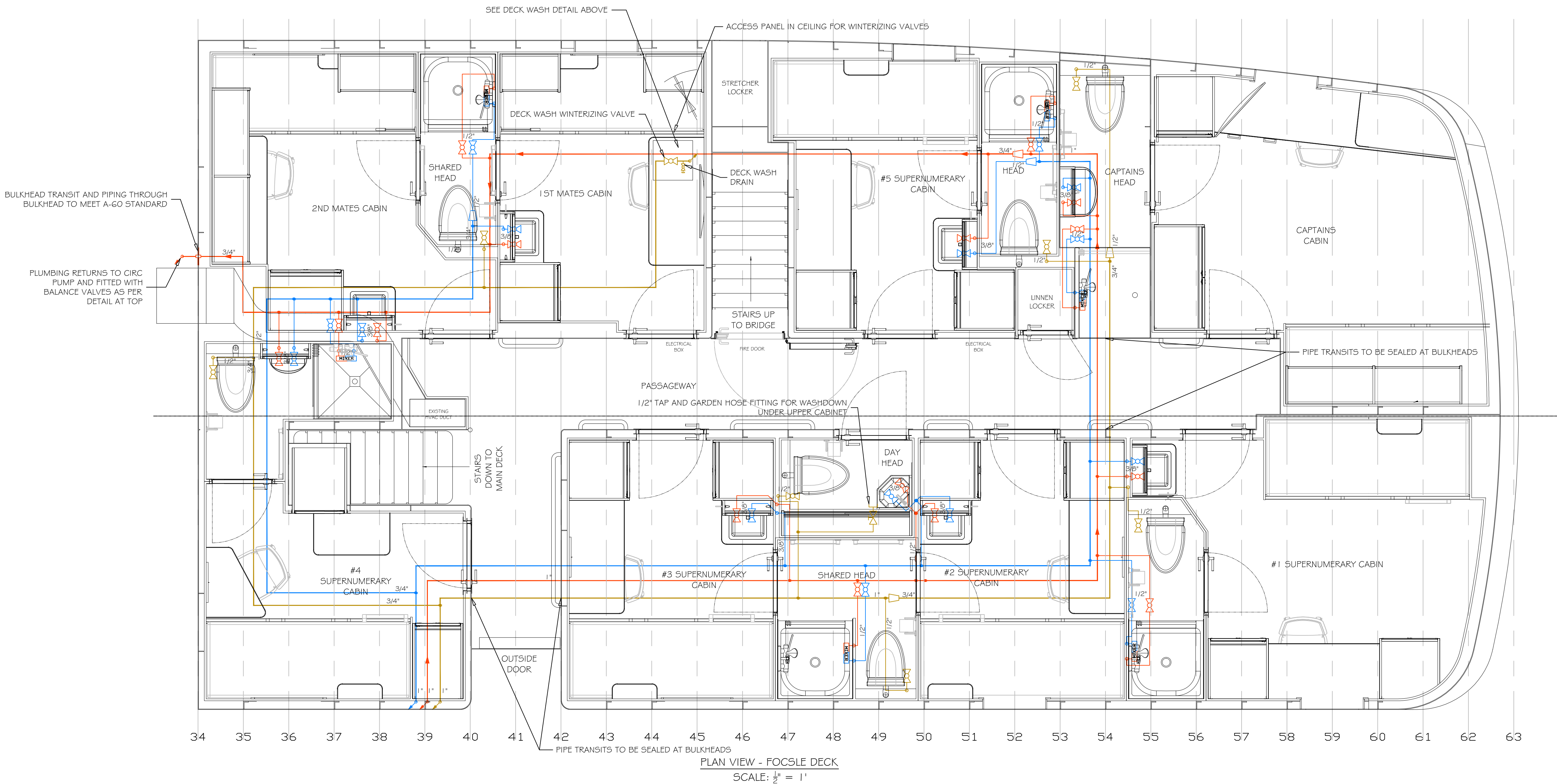
- ALL MATERIALS USED TO BE SUITABLE FOR POTABLE WATER SYSTEMS AND THE INTENDED PRESSURE AND TEMPERATURES
- PIPING TO BE APPROVED PEX TUBING, WATTS WATERPEX OR EQUAL
- SIZES LISTED ARE NOMINAL
- THE INSTALLER IS TO ENSURE THAT NEW PIPE JOINT METHODS ARE COMPATIBLE WITH EXISTING VESSEL METHODS AND EQUIPMENT. SPECIALIZED TOOLS REQUIRED FOR PIPE CONNECTIONS ARE TO BE SUPPLIED TO THE VECTOR IF THE EQUIPMENT DOES NOT ALREADY EXIST ON BOARD
- TRANSITION JOINTS BETWEEN OLD AND NEW PIPING ARE TO EXCEED THE STRENGTH OF THE ORIGINAL PIPING
- PIPING TO BE WELL SUPPORTED AT REGULAR INTERVALS, AND SUPPORTED SUCH THAT NO RATTLING OF PIPES OCCUR DURING USE OR WHEN SHUT OFF.
- HOT WATER PIPING TO BE INSULATED WITH MIN.  $\frac{1}{2}$ " W.T. ARMAFLEX 'CLASS 0' OR EQUIVALENT INSULATION

### NOTES ON FRESH WATER SUPPLIES ABOVE THE FOC'SLE DECK:

- CONNECTIONS TO FRESH OR SANITARY WATER USERS ABOVE THE FOC'SLE DECK HAVE NOT BEEN SHOWN DUE TO LACK OF ORIGINAL DOCUMENTATION OR ACCESSIBILITY PRIOR TO DISASSEMBLY
- WHERE THE CONTRACTOR DISCOVERS SERVICES LEADING ABOVE THE FOC'SLE DECK, THE EXISTING PIPES ARE TO BE RE-ROUTED TO TIE INTO THE NEW PIPING LOOPS INSTALLED AS PART OF THE REFIT
- SERVICES ABOVE THE FOC'SLE DECK ARE TO BE FITTED WITH SHUT OFF VALVES LOCATED IN AN EASILY ACCESSIBLE LOCATION AND NOTED ON PLANS AND LABELED ACCORDINGLY

### LABELLING:

- PIPING TO BE LABELED AS TO THE CONTENTS AND DIRECTION OF FLOW. LABELS TO MATCH LEGEND OR THE TYPICAL PIPE MARKINGS AS USED ON VESSEL
- WHERE SHUT OFF VALVES ARE FITTED IN CONCEALED LOCATIONS, THEY ARE TO BE MARKED AS TO THEIR PURPOSE, WITH A SMALL LABEL ON THE EXTERIOR OF THE CONCEALING PANEL INDICATING THEIR PRESENCE.



PLAN VIEW - FOC'SLE DECK  
SCALE:  $\frac{1}{2}$ " = 1'

REVISION	REVISION DATE	ISSUED : April 12, 2018	DRAWING BY : MD	CHECKED BY : MD
A: ADDITION OF WASHDOWN FITTING IN DAY HEAD	APRIL 13, 2018			

CCG VECTOR  
FOC'SLE DECK

STATUS:	FOR REVIEW	REV A
SHEET# 1/1	1146-04-506-01 FOC'SLE FRESH WATER SYSTEM	