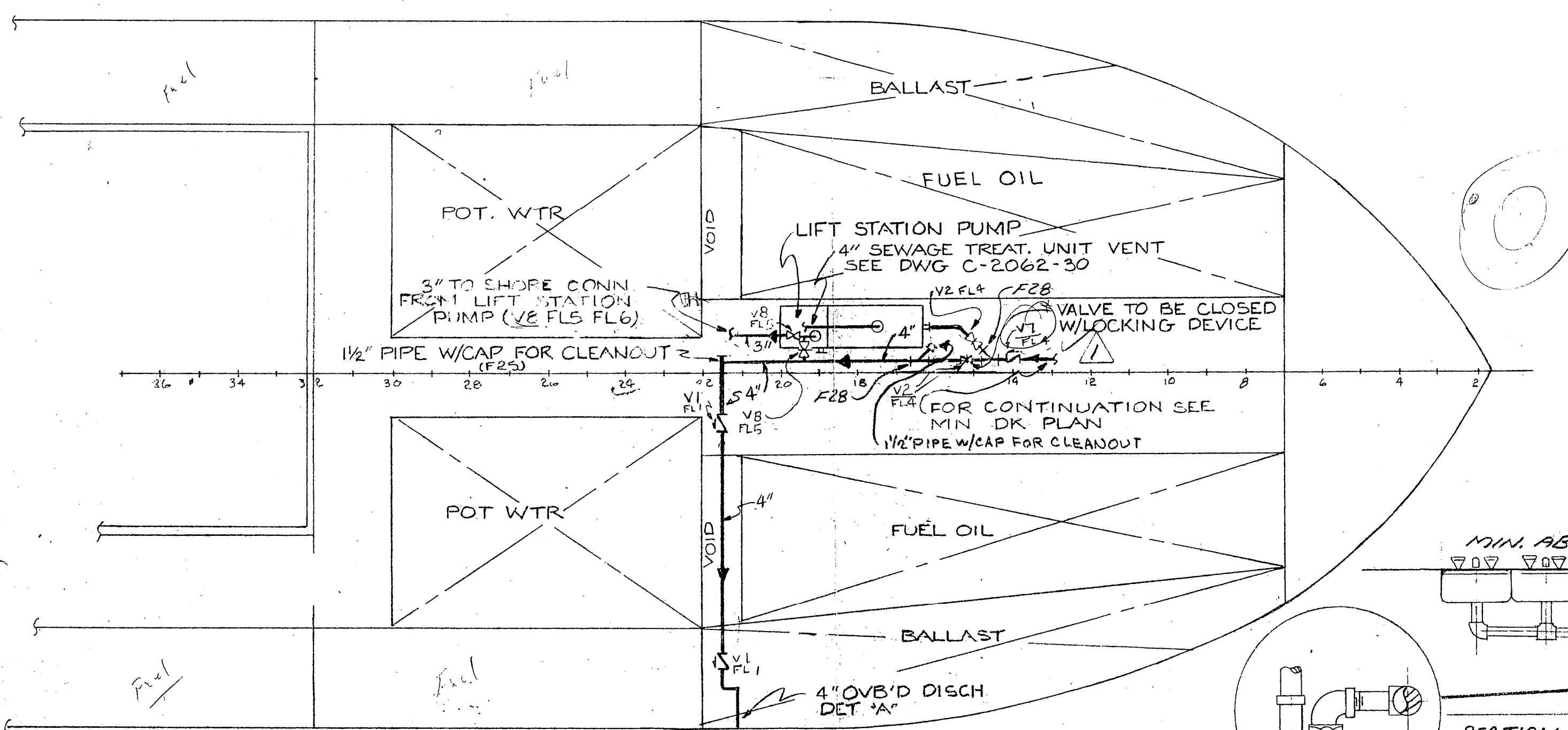
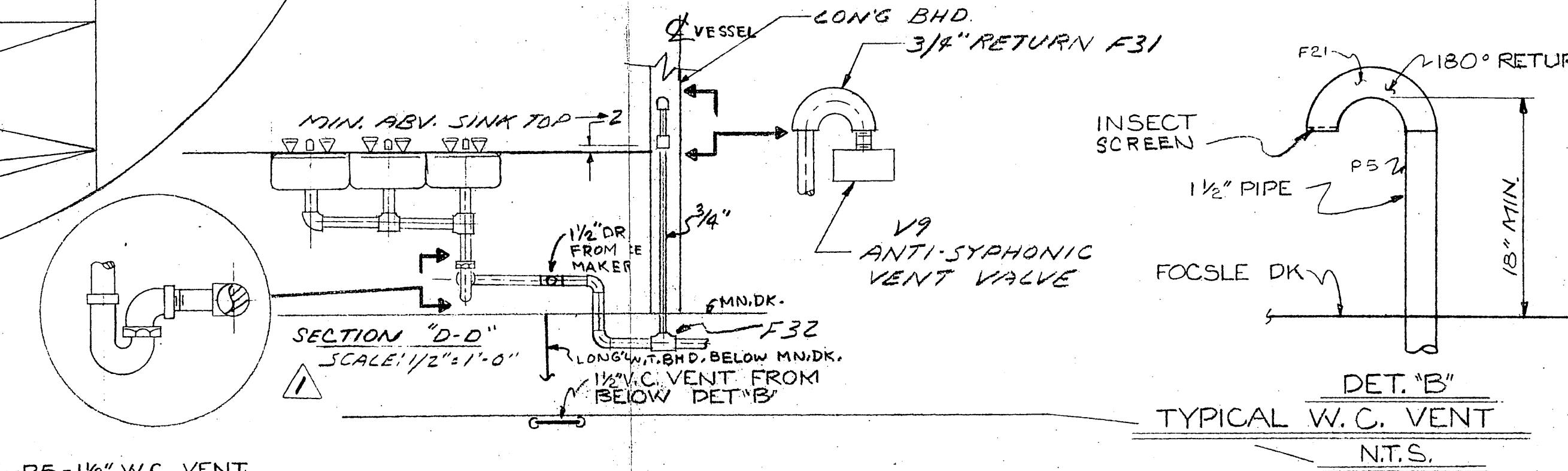


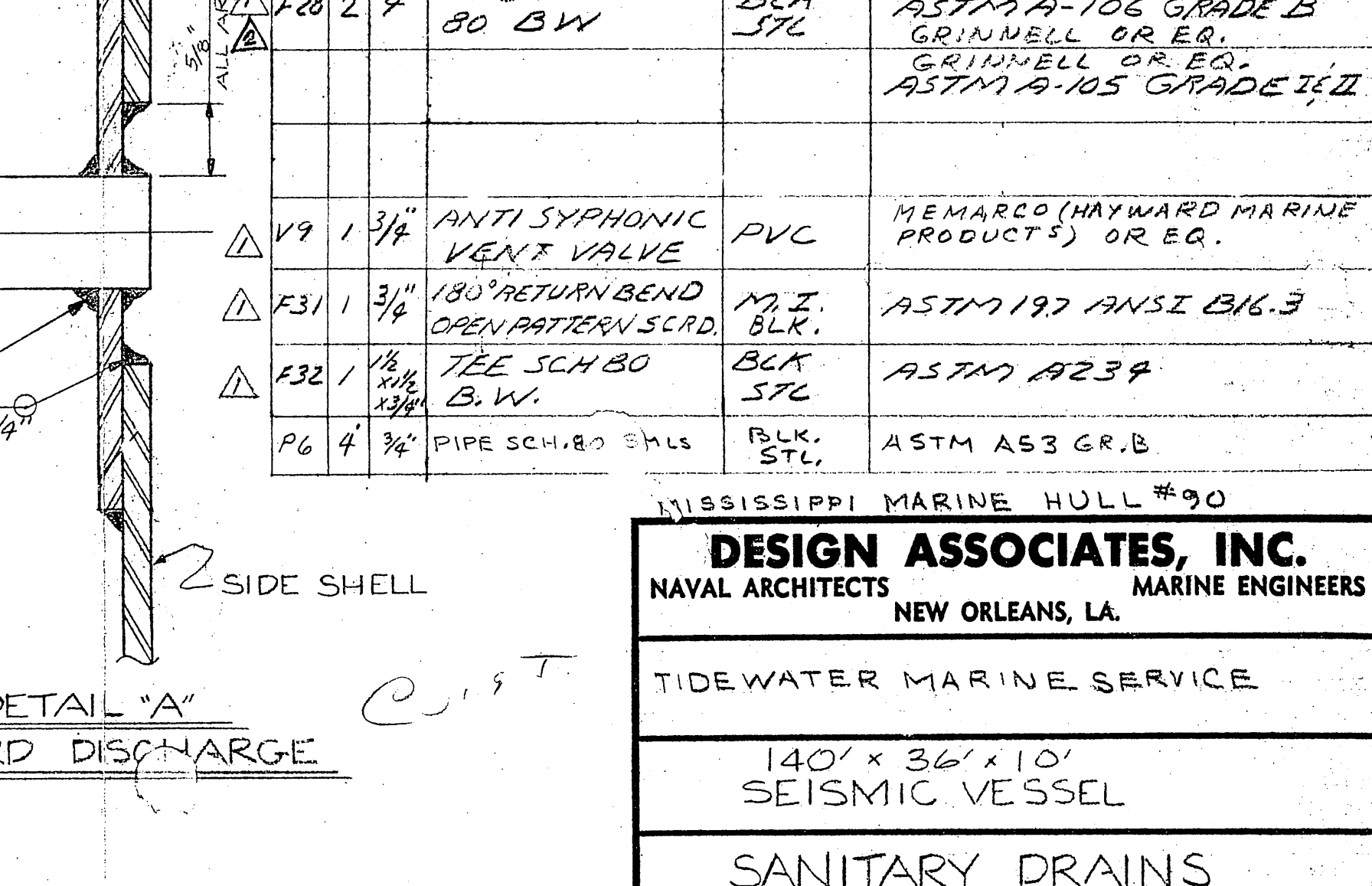
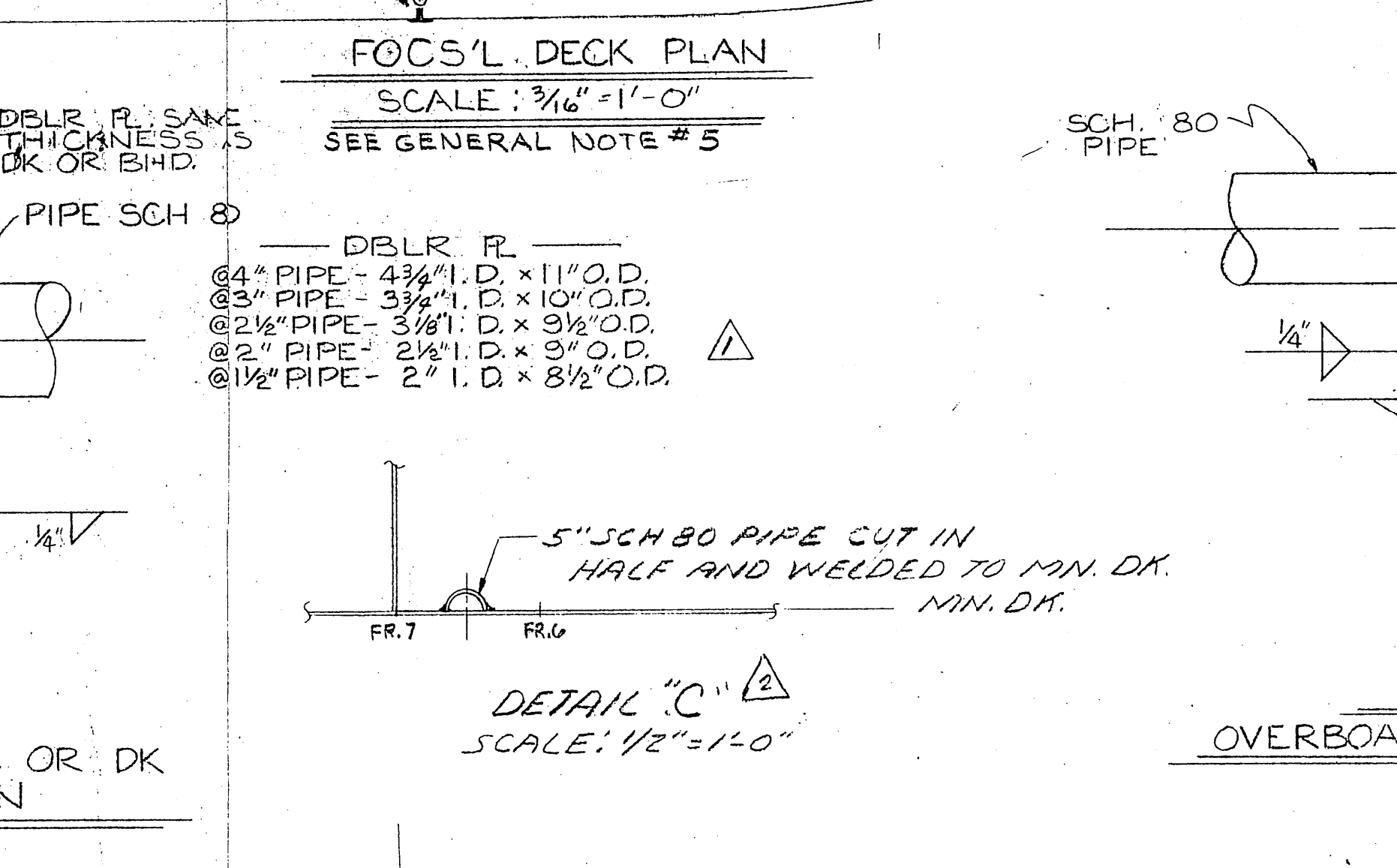
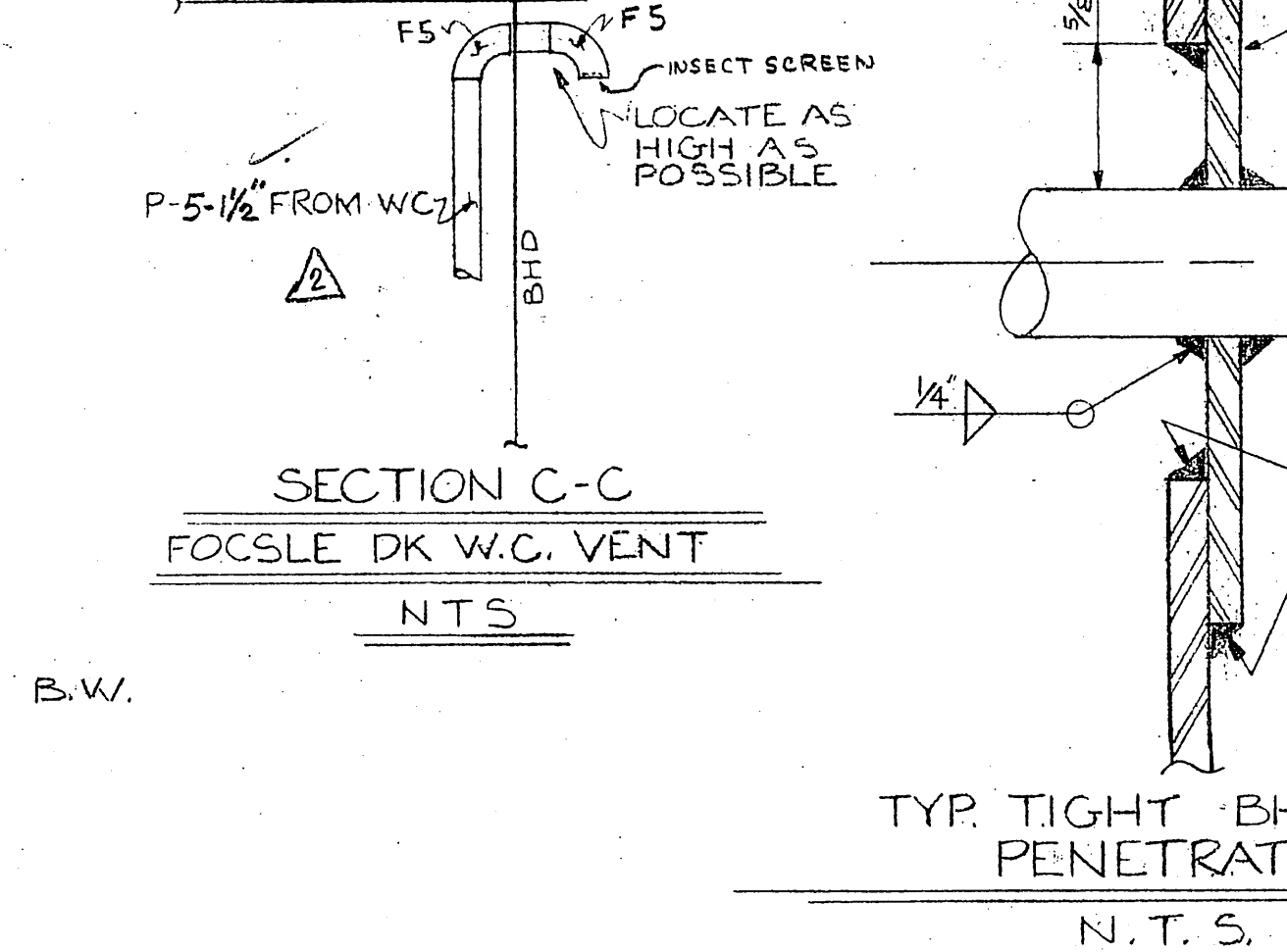
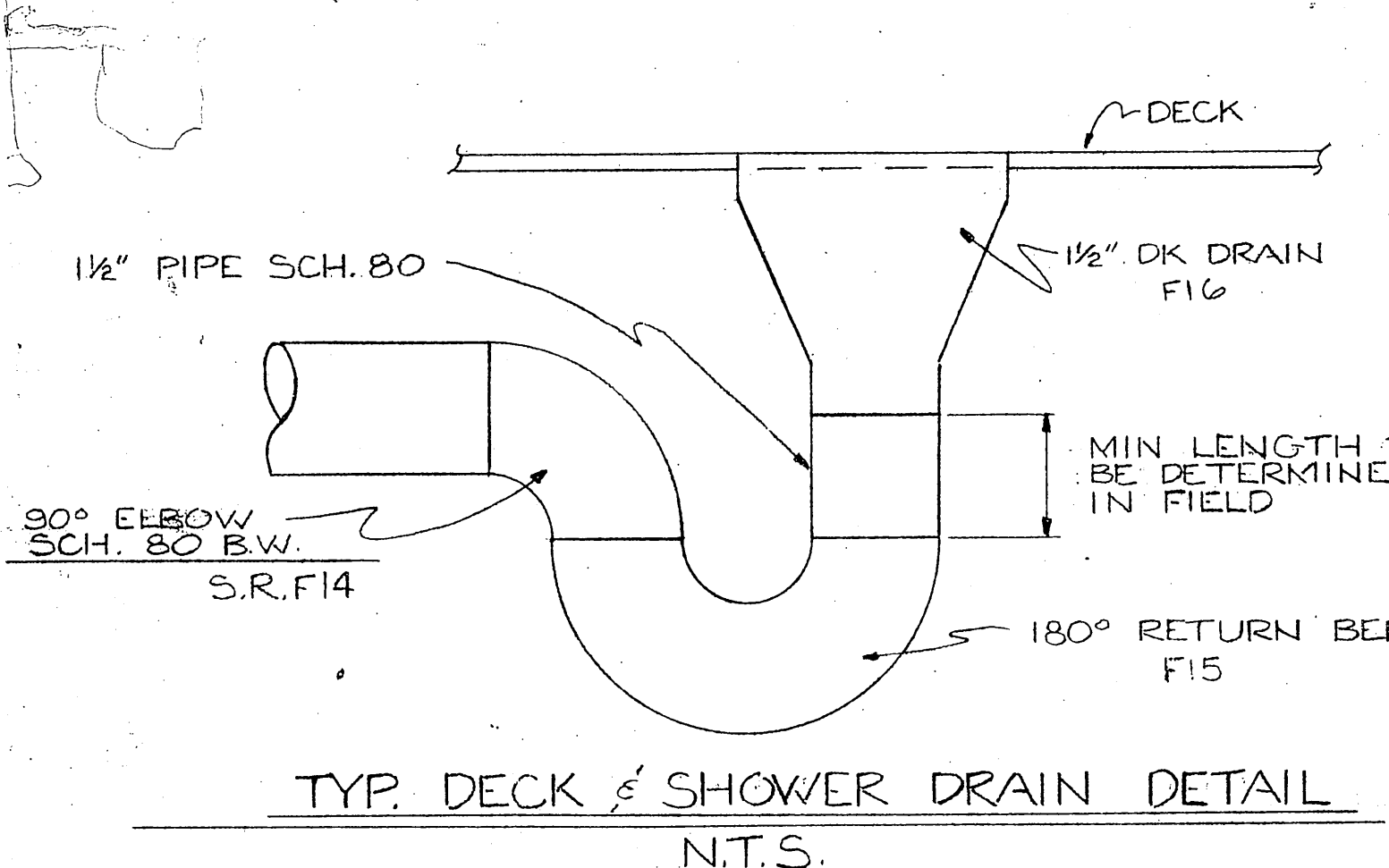
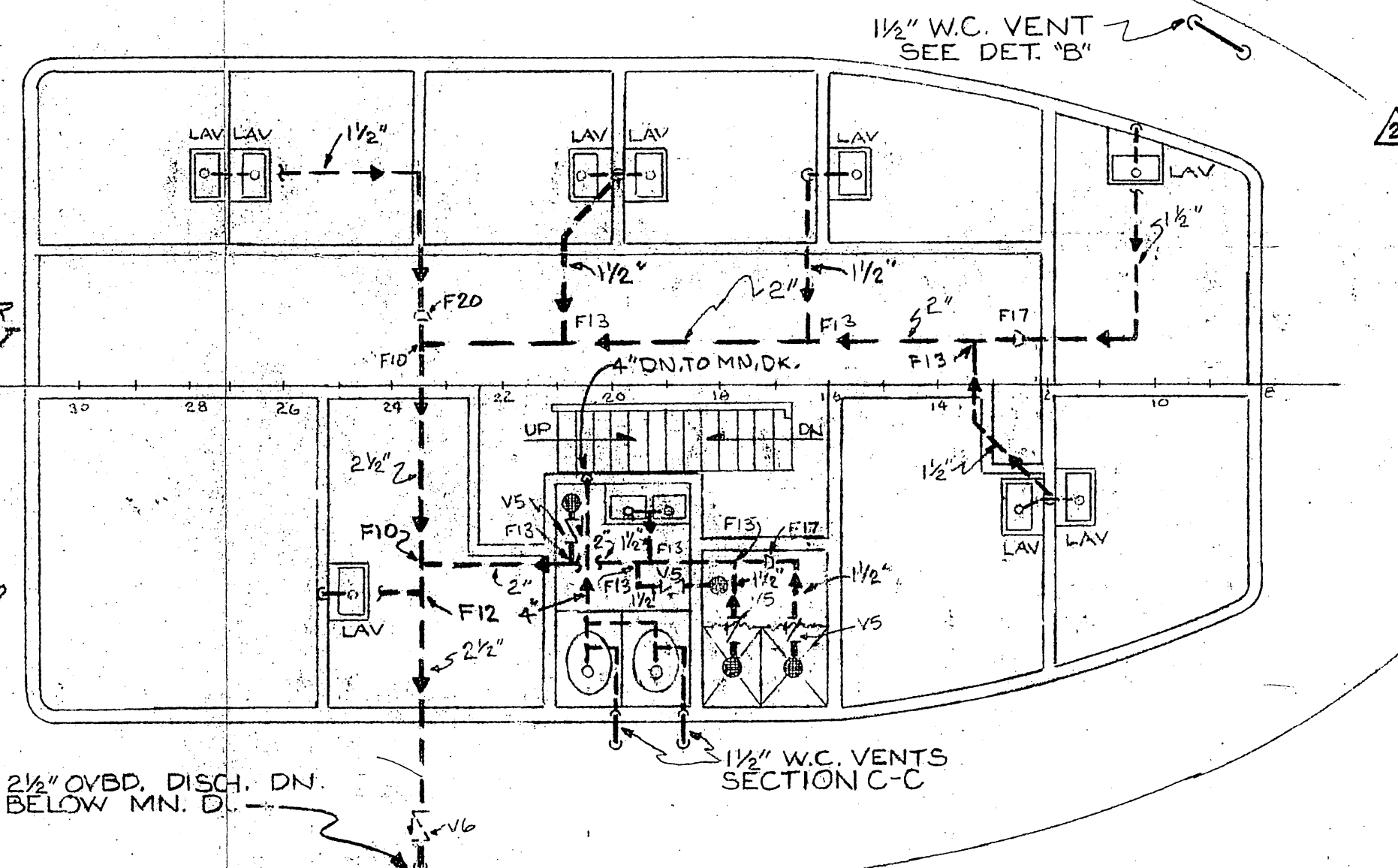
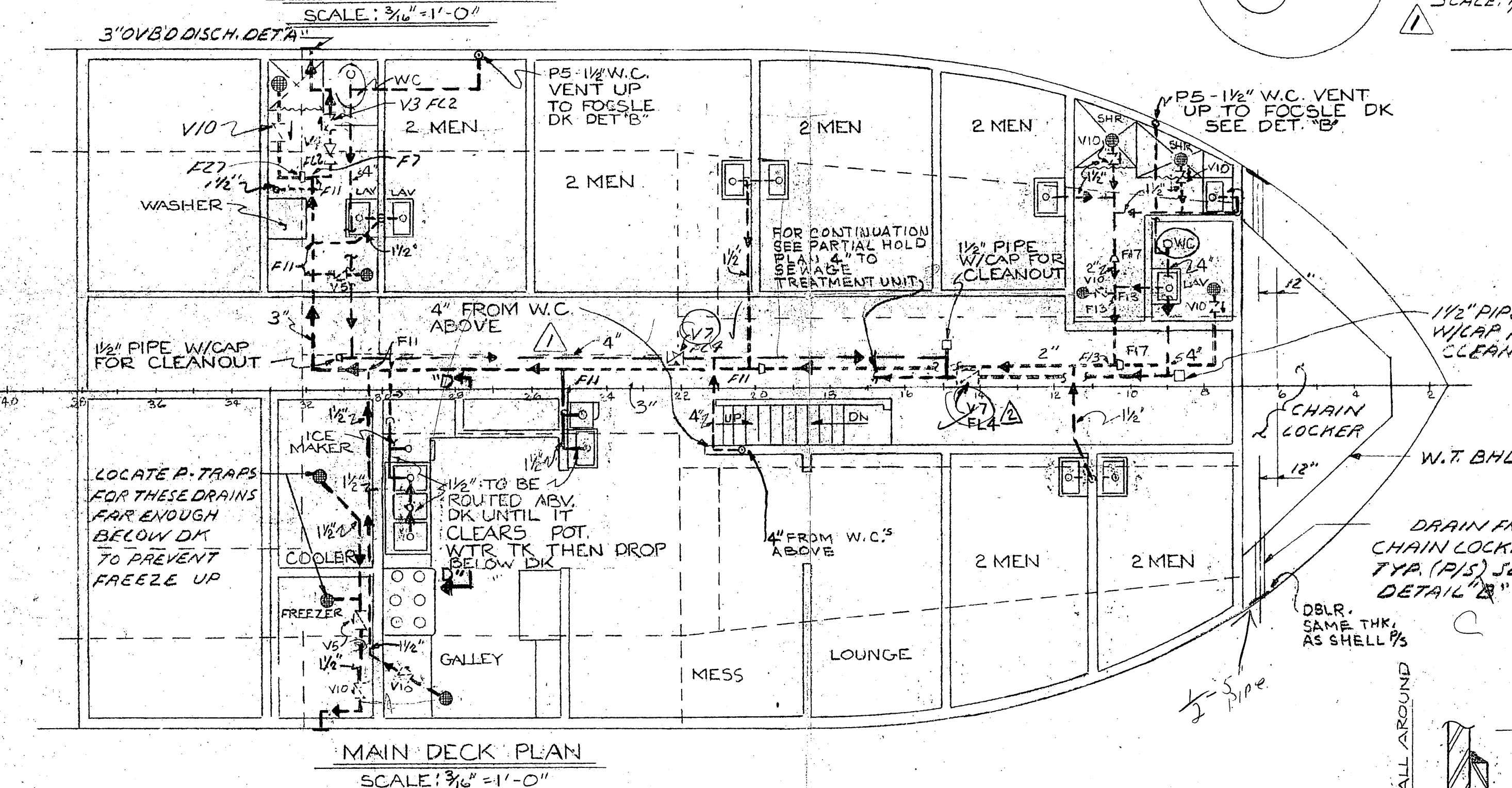
REV. NO.	DESCRIPTION	BY	DATE	APPRV.
1	REVISED DRAWING PER DALE GREERDES MARKED UP PRINT.	J. D. G.	9/28/81	P.C.B.
2	ADDED PC NO. 1, 7, FL 4 TO CHECK VALVE IN MN. DK. PLAN. CHG. W.C. VENT 2" TO 1 1/2" IN SECT. "C-C" CHG. DET. "B" TO DET. "C" CHG. QTY. FOR PC NO. 5 FL 4, & F28 PER DALE GREERDES MARKED UP PRINT	P.C.B.	10/16/81	A.L.S.



GENERAL NOTES:
 1. ALL PIPE & FITTINGS TO BE SCH. 80
 2. ALL DRAINS TO BE SLOPED 1/8" PER FT.
 3. PIPING IS TO BE THOROUGHLY CLEANED AFTER INSTALLATION & BEFORE FUNCTION TESTING.
 4. ALL PIPE SUBJECT TO MECHANICAL INJURY OR UNDUE VIBRATION SHALL BE ADEQUATELY PROTECTED AND/OR SUPPORTED.
 5. HYDRO TEST ALL DRAIN LINES OVER GALLEY MESS TO INSURE AGAINST LEAK PRIOR TO PUTTING SYSTEMS IN SERVICE.



PC NO.	QTY	SIZE	DESCRIPTION	MAT'L	REMARKS
P1	130'	4"	PIPE SCH 80 SMLS	BLK STL	ASTM A 53 GR. B
P2	50'	3"			
P3	40'	2 1/2"			
P4	70'	2"			
P5	140'	1 1/2"			
F1	12	4"	90° ELBOW SCH 80 LR BW		ASTM A 234
F2	6	3"			
F3	2	2 1/2"			
F4	2	2"			
F5	54	1 1/2"			
F6	4	4" x 4"	TEE SCH 80 B.W.		
F7	1	3" x 3"			
F8	1	2 1/2" x 2"			
F10	2	3" x 2"			
F11	7	3" x 3"			
F12	1	2 1/2" x 2"			
F13	12	3" x 2"			
F14	13	1 1/2"	90° ELBOW SCH 80 SR BW		
F15	13	1 1/2"	180° RETURN BEND SR BW		
F16	13	1 1/2"	DK DRAIN B.W.	CAST STL	MEMARCO TYPE 205 BW FLG NO. 15A OR EQ
V1	2	4"	CHECK VALVE 150# FLG'D	IBBM	CRANE #147X OR EQ ASTM A216
V2	2	4"	GATE VALVE 125# FLG'D	IBBM	CRANE #461 OR EQ ASTM A216
V3	1	3"	CHECK VALVE 150# FLG'D	CAST STL	CRANE #147X OR EQ ASTM A216
V4	1	3"	GATE VALVE 150# FLG'D	IBBM	CRANE #47XU OR EQ ASTM A216
V5	6	1 1/2"	CHECK VALVE SCR'D 125#	BRZ	CRANE 41 OR EQ ASTM A216
FL	4	4"	FLANGE 150# R.F. S.O.	FORGED STL	GRINNELL OR EQ ASTM A105
FL2	4	3"			
FL3	2	2 1/2"			
FL4	10	4"	FLANGE 150# F.F. S.O.		
FL5	4	3"			
V6	1	2 1/2"	CHECK VALVE 150# FLG'D	CAST STL	CRANE #147X ASTM A216
V7	3	4"	CHECK VALVE 125# FLG'D	IBBM	CRANE #383 ASTM A126
V8	2	3"	GATE VALVE 125# FLG'D	IBBM	CRANE #461 OR EQ ASTM A126
F17	6	2" x 1 1/2"	RED. CONC. B.W.	BLK STL	ASTM A 234
F18	1	2 1/2" x 2"			
F19	1	3" x 2"			
F20	1	2 1/2" x 1 1/2"			
F21	2	1 1/2"	180° RETURN BEND LR BW		
F22	3	1 1/2"	45° ELBOW		
F23	1	1 1/2"			
F24	1	4" x 3"	RED TEE SCH 80 B.W.		
F25	4	1 1/2"	PIPE CAP SCR'D	BRZ	GRINNELL OR EQ ASTM B 62
FL6	1	3"	BLIND FLANGE 150# R.F.	FORGED STL	GRINNELL OR EQ ASTM A105 GR II
F26	12	1 1/2"	TEE SCH 80 B.W.	BLK STL	ASTM A 234 GR B
V10	7	1 1/2"	CHECK VALVE 200# FLG'D	BRZ	CRANE #38 OR EQ ASTM B 61
FL6	14	1 1/2"	FLANGE F.F. 150#	FORGED STL	GRINNELL OR EQ ASTM A105
F27	1	3" x 1 1/2"	RED. CONC. B.W.	BLK STL	ASTM A 234 GRINNELL OR EQ.
F28	2	4"	LATERAL SCH 80 BW	BLK STL	ASTM A-106 GRADE B GRINNELL OR EQ. GRINNELL OR EQ. ASTM A-105 GRADE II
V9	1	3/4"	ANTI SYPHONIC VENT VALVE	PVC	MEMARCO (HAYWARD MARINE PRODUCTS) OR EQ.
F31	1	3/4"	180° RETURN BEND OPEN WATER SCR'D	M.I. BLK.	ASTM 197 ANSI B16.3
F32	1	1 1/2"	TEE SCH 80 B.W.	BLK STL	ASTM A 234
P6	4	3/4"	PIPE SCH. 80 SMLS	BLK STL	ASTM A 53 GR. B



MISSISSIPPI MARINE HULL #90

DESIGN ASSOCIATES, INC.
 NAVAL ARCHITECTS MARINE ENGINEERS
 NEW ORLEANS, LA.

TIDEWATER MARINE SERVICE

140' x 36' x 10'
 SEISMIC VESSEL

SANITARY DRAINS

Drawn: P.V. Date: 24 July, 81 Checked: P.C.B.
 Traced: Date: Checked:
 Aprvd: Date: Scale: NOTED
 Sheet 1 of 1 Drawing No. C-2062-46 Revision Mark