

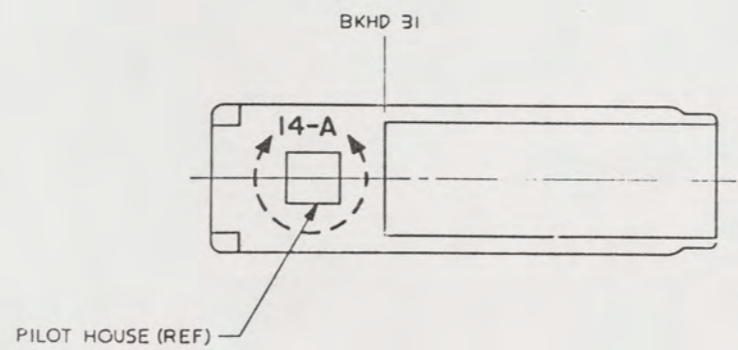
NOTES:

- ALL FABRICATION WELDING AND INSPECTION TO BE IN ACCORDANCE WITH NAVSEA 0900-LP-014-5010, WELD SIZES BASED ON USE OF AWS A5.1, CLASS E7018 ELECTRODES FOR LC STEEL TO LC STEEL.
- TEMPLATE ALL WORK FROM LCM-B AND EQUIPMENT.
- EQUIPMENT AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH USCG AND ABS REGULATIONS.
- REPAIR ALL PAINT DAMAGED BY THIS INSTALLATION AND PAINT ALL NEW STEEL IN ACCORDANCE WITH U.S. ARMY TECHNICAL BULLETIN TB43-0144.
- MATERIAL ORDERED ON THIS DRAWING IS NOT INTENDED TO BE RESTRICTIVE. SUBSTITUTION OF EQUAL QUALITY MATERIAL MAY BE MADE.
- SLIGHT DEVIATIONS FROM DIMENSIONS SHOWN ARE PERMISSIBLE TO SUIT ACTUAL CONDITIONS FOUND ABOARD THE VESSEL.
- COMPONENTS SHOWN BY SOLID, HEAVY LINES ARE NEW AND ARE TO BE INSTALLED IN ACCORDANCE WITH THIS DRAWING. PHANTOM LINES INDICATE EXISTING COMPONENTS INSTALLED BY DRAWINGS REFERENCED AS NOTED.
- ALL THREADED PIPE JOINTS SHALL BE ASSEMBLED USING ANTISEIZE TAPE M-7. PIPING SHALL BE TESTED HYDROSTATICALLY AND ALL JOINTS INSPECTED FOR TIGHTNESS IN ACCORDANCE WITH LCM-B INSTALLATION INSTRUCTIONS: 55-1905-217-1.
- PIPING SHALL BE SUITABLY SECURED BY PIPE HANGERS TO PREVENT VIBRATION AND PROTECT AGAINST DAMAGE IN ACCORDANCE WITH NAVSHIPS 804-13857B1.
- PIPING SYSTEMS SHALL BE THOROUGHLY CLEANED BY FLUSHING WITH THE MEDIUM FOR WHICH THE SYSTEM IS INTENDED.
- IDENTIFY PIPING SYSTEM IN ACCORDANCE WITH TB43-0144.
- BULKHEAD PENETRATIONS SHALL BE IN ACCORDANCE WITH NAVSEA 810-2145B01. PENETRATIONS NO LONGER USED SHALL BE CLOSED OFF WATERTIGHT.
- CONVERT EXISTING STARBOARD PUMP FROM RH TO LH BY REVERSING ROTOR. INLET PORTS AND OUTLET PORTS TO BE ROTATED TO FACE IN DIRECTION SHOWN. INLET PORTS ON INBOARD SIDE, OUTLET PORTS ON OUTBOARD SIDE.
- PIPES OR HOSES OBSCURED BY FLOOR PLATING OR ENGINE ROOM EQUIPMENT SHALL BE IDENTIFIED BY (COPPER BRASS, CRES) TAGS IN ACCORDANCE WITH MIL-STD-130. TERMINATIONS AND USE SHALL BE CLEAR.

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8540 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	13226E9463	LCM-B, MOD-1 CONTROL CONSOLE MODIFICATIONS
2	13226E9467	LCM-B, MOD-1 MODIFICATIONS TO HYDRAULIC RESERVOIR RAMP/HYDRAULIC START
3	516-4510441	LCM-B, MOD-1 RAMP HYDRAULIC SYSTEM
4	13226E9465	LCM-B, MOD-1 BILGE PUMP HYD MOTOR PIPING SYSTEM

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	13229E2254	CONTROL CONSOLE MODIFICATION
2	13226E9467	LCM-B, MOD-1 MODIFICATIONS TO HYDRAULIC RESERVOIR RAMP/HYDRAULIC START
3	516-2534229	LCM-B, MOD-1 RAMP HYDRAULIC SYSTEM
4	13226E9465	LCM-B, MOD-1 BILGE PUMP HYD MOTOR PIPING SYSTEM

SHEETS		STATUS OF REVISIONS		DESCRIPTION	DATE	APPROVED
1	2	DATE	BY			
-	A		A	SEE ECP NO. 90HE3309 AND 90HE3310	18 JUN 88	RMS



KEY VIEW
SCALE NONE

THIS DRAWING APPLIES
TO HULL NUMBERS
8520 THROUGH 8560 AND
8580 THROUGH 8618 ONLY

YARD	ITEM	QTY	DESCRIPTION	COMPL	MATERIAL	
YARD	M-10		ANGLE, 3" X 2 1/2" X 1/4" X 3" L	ASTM A36	STL	
YARD	M-9	34749	6 COUPLING, COMPRESSION, 1 1/4" SIZE (ANVIL)	COML	STL	
YARD	M-8	80996	NO. 137	5 U-BOLT PIPE HANGER, 1 1/4" W/NUTS, CD PL (GRINNELL)	COML	STL
YARD	M-7		SIZE II	AR	ANTISEIZE TAPE (SEE NOTE B)	
YARD	M-6	87373	7410106-20-	1	HOSE ASSEMBLY, 1 1/4" MALE PIPE X 1 1/4" JIC SWIVEL	
			20-20-36		X 36" L (P H)	
YARD	M-5	24161	32CSR-32RMP-	1	HOSE ASSEMBLY, 2" X 18" L (GATES)	
			32RFJX-18"			
YARD	M-4	24161	32CSR-32RMP-	1	HOSE ASSEMBLY, 2" X 72" L (GATES)	
			32RFJX-72"			
YARD	M-3	87373	7410106-20-	1	HOSE ASSEMBLY, 1 1/4" MALE PIPE X 1 1/4" JIC SWIVEL	
			20-20-29		X 29" L (P H)	
YARD	M-2	87373	7410106-20-	1	HOSE ASSEMBLY, 1 1/4" MALE PIPE X 1 1/4" JIC SWIVEL	
			20-20-28		X 28" L (P H)	
YARD	M-1	24161	4C2AT-4RFJX-60"	1	HOSE ASSEMBLY, 1/4" JIC SWIVEL X 60" L (GATES)	
YARD	F-16	79470	C5205X4	1	CONNECTOR, MALE, 1/8" IPS X 1/4" TUBE (WEATHERHEAD)	
YARD	F-15	79470	C5205X4X4	1	CONNECTOR, MALE, 1/4" IPS X 1/4" TUBE (WEATHERHEAD)	
YARD	F-14					
YARD	F-13			1	TEE, 1 1/4" IPS, CL 3000, THREADED	
YARD	F-12	24161	16MP-16FPX	1	ADAPTER, SWIVEL, 1" IPS X 1" IPS FEMALE, (GATES)	
YARD	F-11	98660	BA1000-20-16	1	CONNECTOR, STRAIGHT, TUBE TO MALE PIPE, 1 1/4" TUBE X 1" IPS (FLODAR)	
YARD	F-10			2	ELBOW, 90°, 1" IPS, CL 3000, THREADED	
YARD	F-9			3	ELBOW, 90°, 1 1/4" IPS, CL 3000, THREADED	
YARD	F-8	98660	AC 1000-32	2	CONNECTOR, MALE, 2" IPS X 2" TUBE (FLODAR)	
YARD	F-7	98660	AC 1000-20	4	CONNECTOR, MALE, 1 1/4" IPS X 1 1/4" TUBE (FLODAR)	
YARD	F-6			4	ELBOW, 90°, 1 1/4" IPS, CL 3000, THREADED	
YARD	F-5	80996		1	UNION, CLASS 3000, WOG, THREADED, 1 1/4" IPS, (GRINNELL)	
YARD	F-4	98660	PF101-20-4	1	BUSHING, REDUCER, 1 1/4" IPS X 1/4" IPS, THREADED (FLODAR)	
YARD	F-3			4	ELBOW, 90°, 2" IPS, CL 150, THREADED	
YARD	F-2			2	TEE, 1 1/4" IPS, CL 3000, SWLDG	
YARD	F-1			16	ELBOW, 90°, 1 1/4" IPS, CL 3000, SWLDG	
YARD	P-3		TYPE S, GR A	AR	PIPE, SEAMLESS, BLACK, 1" IPS, SCHED 80	
YARD	P-2		TYPE S, GR A	AR	PIPE, SEAMLESS, BLACK, 2" IPS, SCHED 80	
YARD	P-1		TYPE S, GR A	AR	PIPE, SEAMLESS, BLACK, 1 1/4" IPS, SCHED 80	

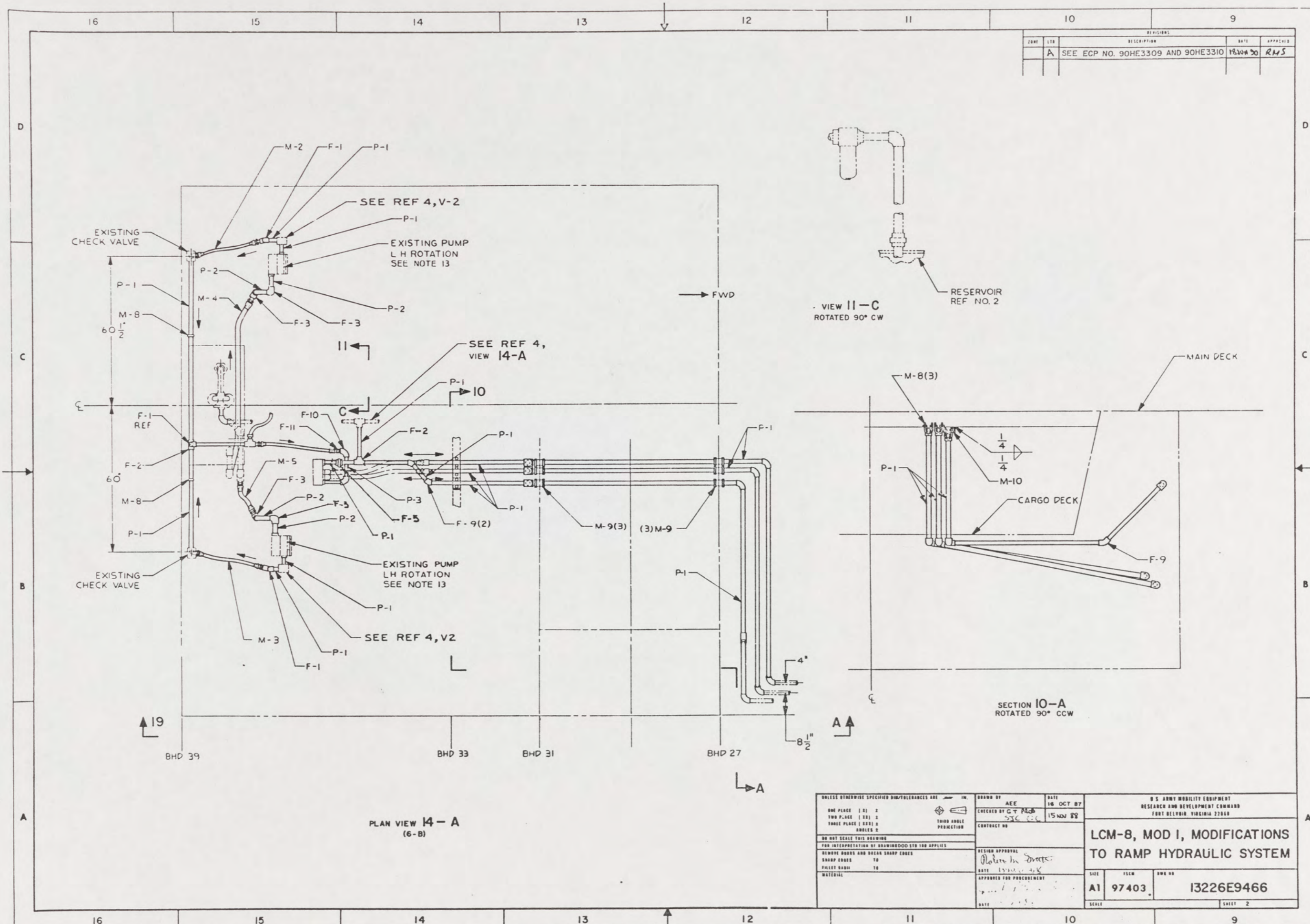
SUPPLIER		PART OR IDENTIFYING NO.		QTY REQD		NOMENCLATURE OR DESCRIPTION		SPECIFICATION		MATERIAL	
YARD	P-3		TYPE S, GR A	AR		PIPE, SEAMLESS, BLACK, 1" IPS, SCHED 80		ASTM A53		STL	
YARD	P-2		TYPE S, GR A	AR		PIPE, SEAMLESS, BLACK, 2" IPS, SCHED 80		ASTM A53		STL	
YARD	P-1		TYPE S, GR A	AR		PIPE, SEAMLESS, BLACK, 1 1/4" IPS, SCHED 80		ASTM A53		STL	

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE		IN.	
ONE PLACE ()	± .1		
TWO PLACE ()	± .01		
THREE PLACE ()	± .001		
ANGLES	± .1		

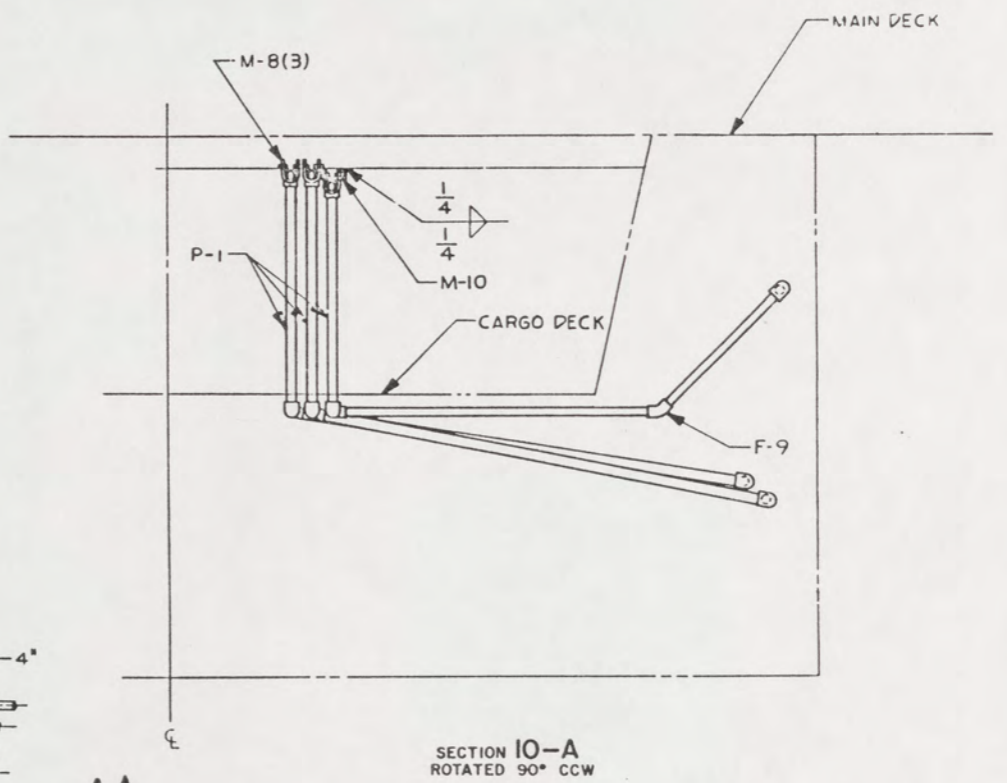
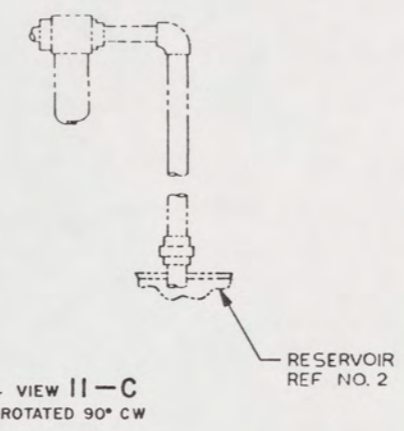
DO NOT SCALE THIS DRAWING	
FOR INTERPRETATION OF DIMENSIONS SEE 100 APPLIES	
REMOVE BURNS AND BREAK SHARP EDGES	
SHARP EDGES	10
FILLET RADIUS	10
MATERIAL	

DRAWN BY		DATE	
AEE		18 OCT 87	
CHECKED BY		DATE	
G.T. PUGH		15 NOV 88	
THIRD ANGLE PROJECTION			
CONTRACT NO.			
DESIGN APPROVAL			
John M. Dyer			
DATE		18 NOV 88	
APPROVED FOR PROCUREMENT			
DATE			

U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060			
LCM-8, MOD 1, MODIFICATIONS TO RAMP HYDRAULIC SYSTEM			
SIZE	15CM	DRG NO.	13226E9466
SCALE	NONE	SHEET	1 OF 3



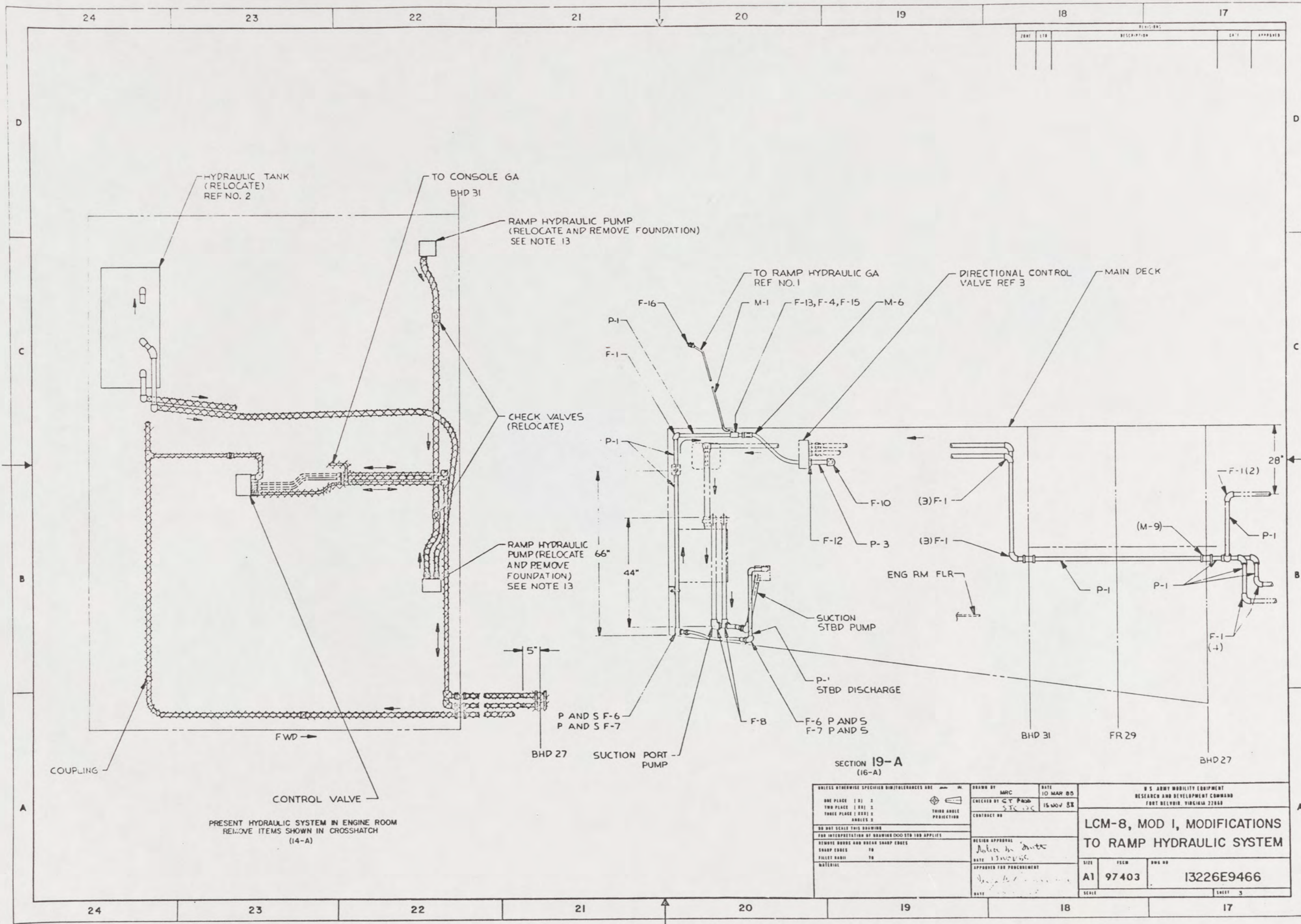
REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED
A	18 JUN 50	SEE ECP NO. 90HE3309 AND 90HE3310	RMS



PLAN VIEW 14-A
(6-B)

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: ONE PLACE (.1) ± TWO PLACE (.01) ± THREE PLACE (.001) ± ANGLES ±		DESIGNED BY AEE	DATE 16 OCT 47	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DIMENSIONS SEE THE APPLIES		CHECKED BY G.T. PACE	DATE 15 NOV 48	
REMOVE SQUARE AND BREAK SHARP EDGES SHARP EDGES TO FILLET RADIUS TO		CONTRACT NO.	DESIGN APPROVAL <i>Robert H. Smith</i>	LCM-8, MOD I, MODIFICATIONS TO RAMP HYDRAULIC SYSTEM
MATERIAL		APPROVED FOR PROCUREMENT <i>[Signature]</i>	DATE 1/2/50	
			SCALE	SHEET 2

65



REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPROVED

SECTION 19-A
(16-A)

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: ALL PLACES 1/32 ± TWO PLACES 1/64 ± THREE PLACES 1/8 ± ANGLES 2°	DRAWN BY: MRC CHECKED BY: C.T. P... CONTRACT NO.: DATE: 10 MAR 65 15 NOV 65	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
DO NOT SCALE THIS DRAWING FOR INTERPRETATION BY DRAWING DOG ETD 188 APPLIES REMOVE BURRS AND BREAK SHARP EDGES SHARP EDGES TO FILLET EDGES TO MATERIAL	TESTING APPROVAL: DATE: 13 MAR 65 APPROVED FOR PROCUREMENT: DATE:	LCM-8, MOD 1, MODIFICATIONS TO RAMP HYDRAULIC SYSTEM
SIZE: A1 PFCM: 97403 DWG NO: 13226E9466 SHEET: 3		

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