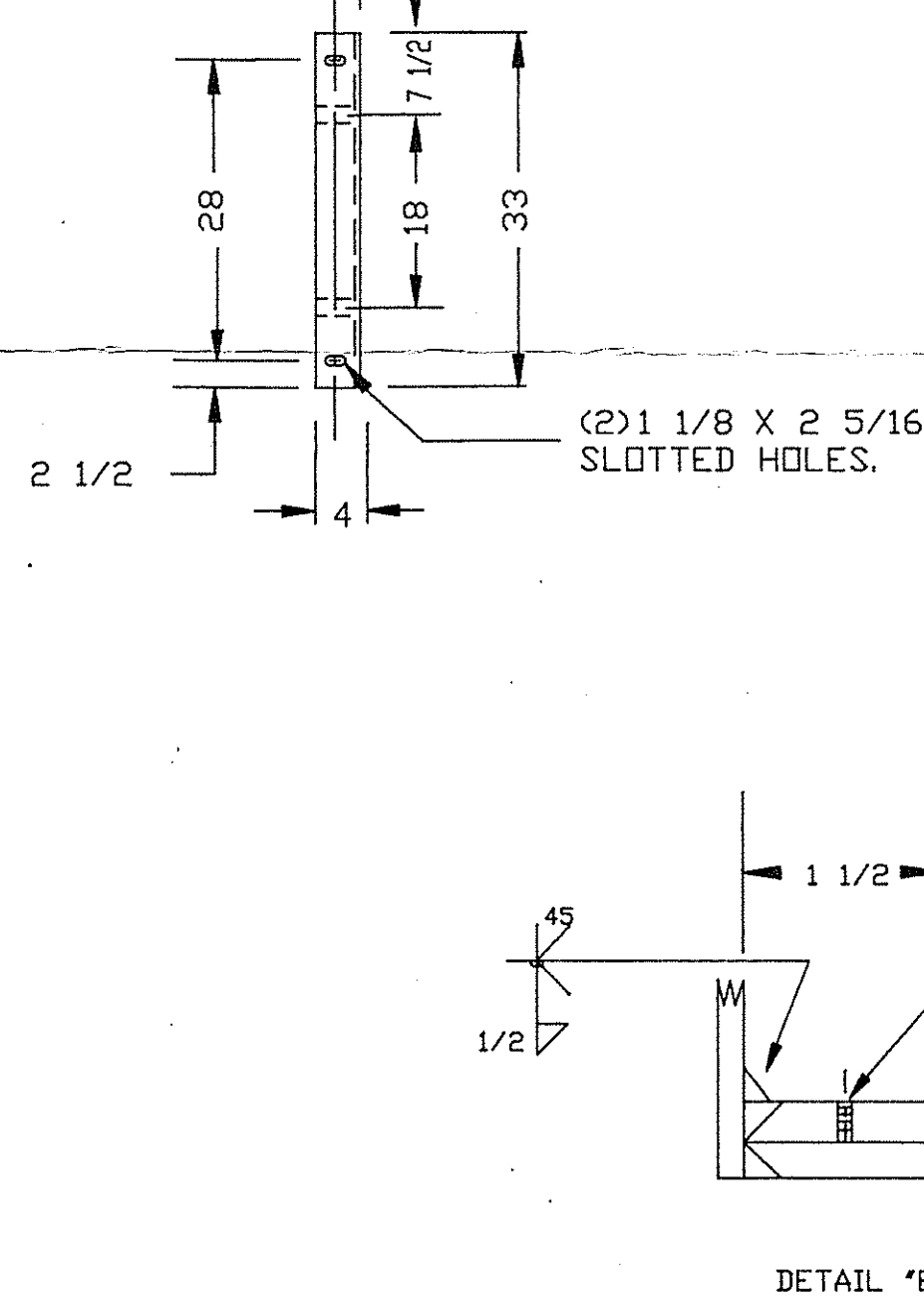
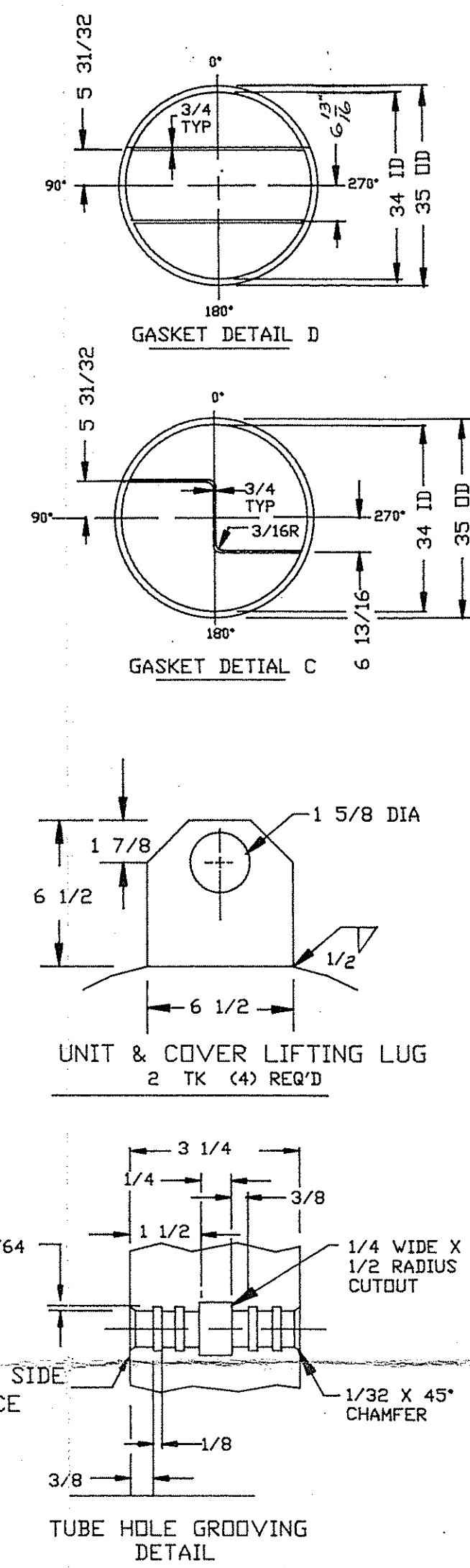


[illegible]

③	ADDED WELD PROC. 138, 139		SH	4/2/92	7
④	ADDED NOTE 20		RR	2/2/92	7
1	REV FOR CUSTOMERS MARKED PRINT DATED 1/23/92 AND REV. EXP. JT. LOCATION		JH	2/5/92	8
REV.	DESCRIPTION		BY	DATE	CK
ENGINEERING DRAWINGS					
T.S. DRILLING TEMPLATE BT-21485					
BENDING DETAILS					
DETAILS					
CERTIFIED CORRECT FOR JOB NO.					
BY			DATE		
SHD	DATE		2-7-92	2/27/92	9
CUST.	REPRO.				
	PRINTS	4			4
ISSUED	DATE	5/9			4/1
	REVISION	0	1	④	④

CONSTRUCTION TO COMPLY WITH ASME-CODE.									
SECT. VIII 1989 ED. INCLUDING CERTIFICATE									
AND STAMP (FORM U 1)									
ADDENDA A90					TEMA CL. B				
DIVISION 1									
FOR INSTALLATION IN STATE OF NC									
SHELL SIDE		CONDITIONS				TUBE SIDE			
300		DES. PRESS. (P.S.I.G.)				600			
20/700		DES. TEMP. (°F) MIN/MAX				20/650			
475		TEST PRESS. (P.S.I.G.)				1014			
DESIGN FLUID									
THERMINOL 66					C MOTHER LIQUOR				
1/16		CURR. ALLOW. EXC. TUBES				0			
WEIGHT (LBS)		EMPTY 20842				FLOODED 27071			
GENERAL NOTES									
REQD.									
SHELL CHAN. NOT REQD.									
1	DEHYDRATE								X
2	HALOGEN TEST AT P.S.I.G.				M2892				X
3	AIR AND SOAP TEST AT 20 P.S.I.G.				REFINE. PADS FACINGS				X
4	X-RAY SPOT ☒ FULL ☐								X X
5	POST WELD HEAT TREAT								X
6	SANDBLAST C.S. AFTER FAB. PER SSPC -SP6				EXT. INT.				X X
7	PICKLE								X
8	PAINT EXTERIOR C.S. ONE SHOP COAT								X
8A	CARBOZINC 11 3 MIL DFT (MIN)								X
8A	PAINT EXTERIOR SS TWO SHOP COATS DAMPNEY THURMALOX 70 BLACK 15 MIL DFT MIN								X
REQ.									
9	TUBE END WELDING				NOTE 14				X
10	CUSTOMER'S NAME PLATE				MANUAL AUTOMATIC				X
11	NOZZLE PROTECTION BOTTLED WOODEN COVERS				M & L STD. SPECIAL				X X
12	SPARE PARTS (1) SET GASKETS								X
13	IMPACT TEST WELD ☐ BASE ☐ HEAT AFFECTED METAL ☐ METAL ZONE ☐				SHELL CHAN.				X X
14	TUBES TO BE STRENGTH WELDED TO TUBESHEET PER M&L PROCEDURE. 266932								X
15	PAINT EQUIPMENT NUMBER BY 3" HIGH LETTERS								X
16	TORQUE CONTROL ROLLER EXPAND TUBES INTO TUBESHEET STARTING 1/8 BEYOND TUBE TO TUBESHEET WELD TO WITHIN 1/8 OF THE SHELL SIDE FACE								X
17	TUBE TO TUBESHEET WELDS TO BE AIR & SOAP TESTED & 50 PSI PRIOR TO TUBE EXPANDING								X
18	LIQUID PENETRANT EXAMINE TUBE TO TUBESHEET WELDS AFTER HYDROTESTING								X
19	LIQUID PENETRANT EXAMINE CUT SURFACE OF TUBESHEETS BEFORE & AFTER WELDING								X
20	ALL WELDING TO BE IN ACCORDANCE WITH M&L PROCEDURES (SHAW) 1a, 13, 14, 82 (FCAN) 35, 130, 139, (GMW) 72A, 129 (GMW) L3, 40-1 (SAW) 94								X

CUSTOMER : CAPE INDUSTRIES					
P.O. NO. , P13268-N					
ENGINEERS :					
NO. OF UNITS REQUIRED : ONE (1)					
M & L SERIAL NO. ,					
NAT'L BD. NO. ,					
TAG. : E-6203-13R2					
INSPECTION BY CUSTOMER				REQ'D	NOT REQ'D
				☒	☐
M & L JOB NO. 268332					
MANNING & LEWIS ENGINEERING CO. 675 RHWAY AVENUE UNION N.J. 07083					
32-240 METHANOL PREHEATER					TEMA TYPE
					NEN
SCALE	MADE	CKD.	DATE	DRAWING NO.	REV.
1/17.776	JH	HVS	12/13/91	0-21484	3