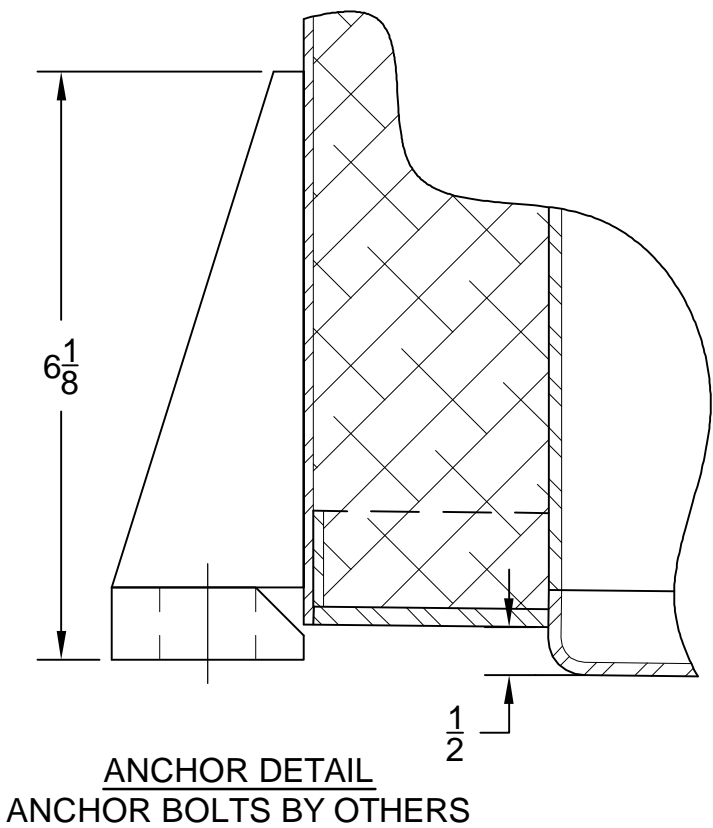
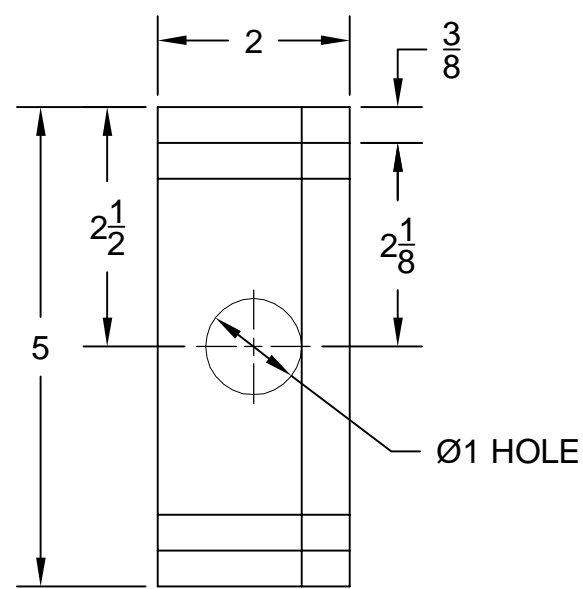
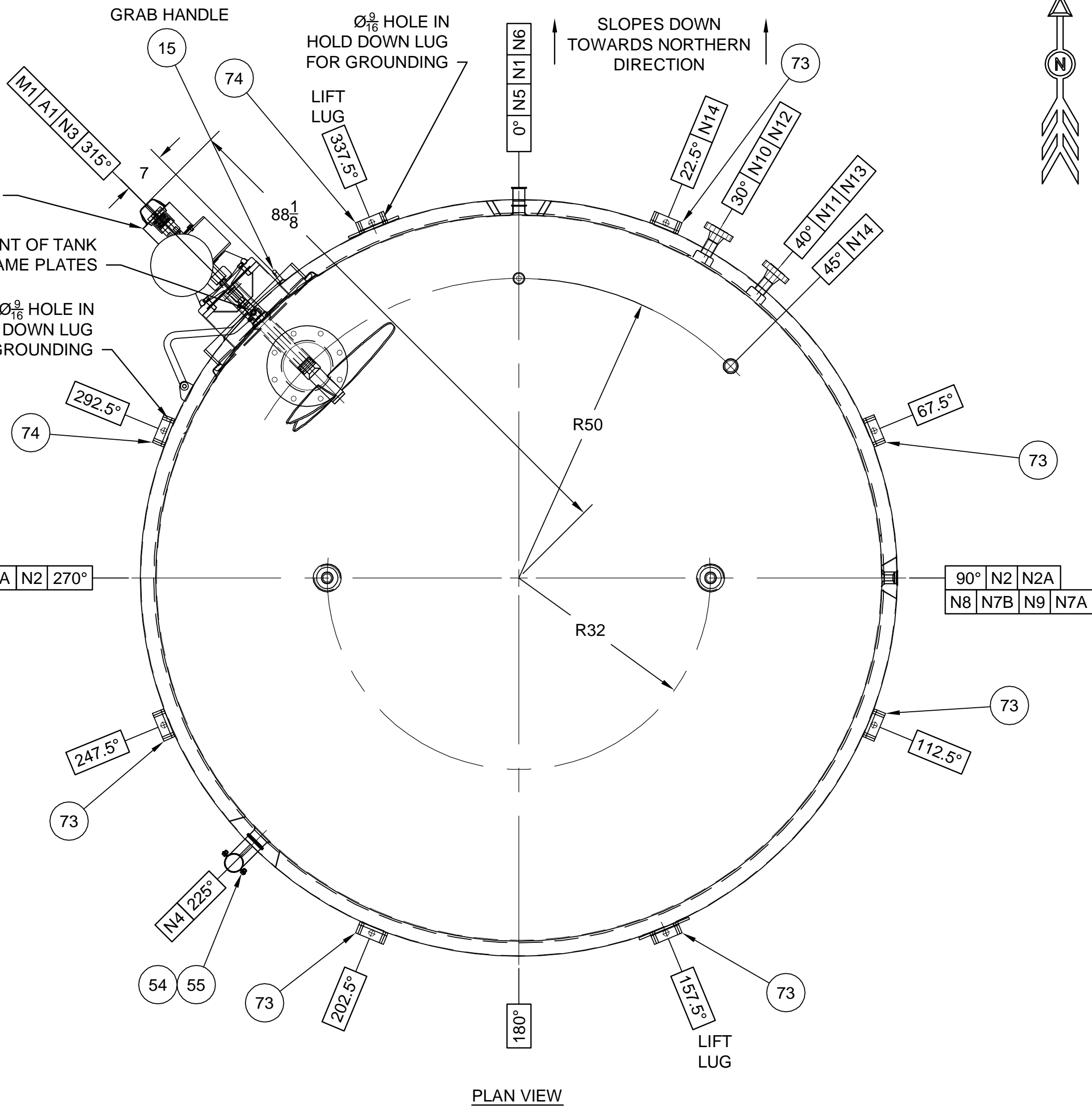
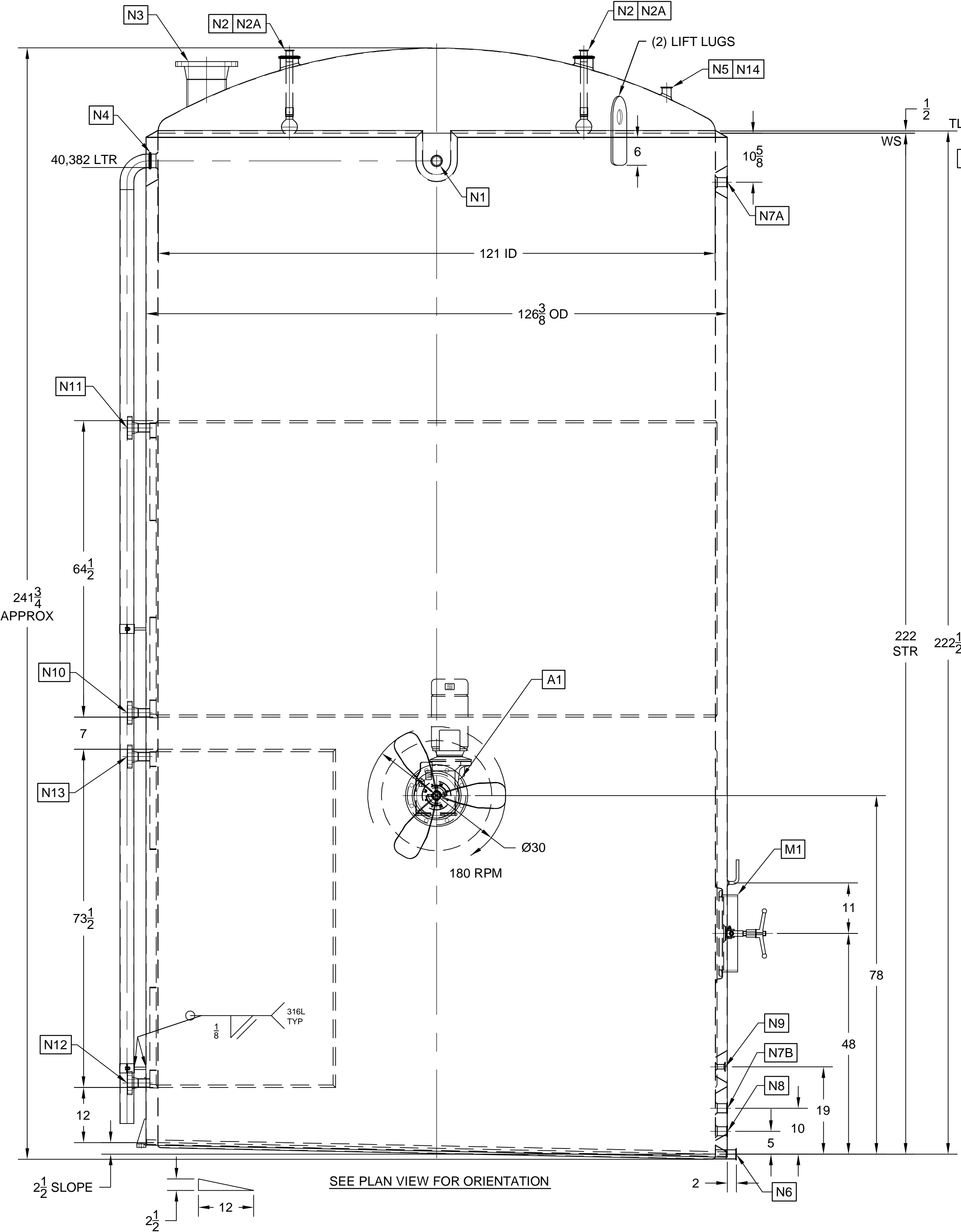


IMPORTANT

1 TO PREVENT FOAMING, WHIPPING, OR OTHER PRODUCT DAMAGE, A VARIABLE FREQUENCY DRIVE (INVERTER) SHOULD BE INSTALLED ON THIS AGITATOR MOTOR TO ADJUST THE ROTOR SPEED FOR LOW OR INTERMEDIATE OPERATING LEVELS. THIS VARIABLE FREQUENCY DRIVE IS ALSO TO BE SET TO SOFT START AND STOP THE MOTOR. CORRECT AMP DRAW AND OTHER SETTINGS MUST BE CORRECTLY PROGRAMMED IN THE VFD. DCI WILL NOT WARRANTY DAMAGE CAUSED BY INCORRECT VFD PROGRAMMING.

2 IF A VARIABLE FREQUENCY DRIVE IS NOT INSTALLED, A SOFT START SYSTEM MUST BE INSTALLED TO PROTECT MOTOR, GEARS AND AGITATOR COMPONENTS.

NORD HELICAL BEVEL GEAR MOTOR
30 DIA PROP, 180 RPM
DOUBLE NITRILE SEALS,M4 MOUNT POSITION
USDA H-1 LUBE
7½ HP,1.15 SF,F INSULATION,NEMA B MOTOR
3/60/575 VOLT, TEFC
USDA SS GRAY PAINT
MANUAL CLEAN DESIGN
MEETS CL II,DIV 2,GRP.G INVERTOR DUTY
(XP AND INVERTOR RATING NOT LISTED ON TAG)
4:1 TURNDOWN MAX



dcj
This drawing has been reviewed by DCI engineering.
ENG. _____

IMPORTANT NOTICE
PLEASE REVIEW THIS FINAL ASSEMBLY DRAWING. IF YOU HAVE ANY QUESTIONS OR CONCERNS, CONTACT DCI, INC. AS SOON AS POSSIBLE. EQUIPMENT FABRICATION IS PROCEEDING IN ACCORDANCE WITH THIS DRAWING. BE ADVISED THAT ANY CHANGES MADE DURING FABRICATION WILL BE SUBJECT TO REVIEW AND POSSIBLE PRICE AND/OR SHIPMENT REVISIONS.

- NOTES:
- DCI, INC. SHALL NOT BE RESPONSIBLE FOR THE CORROSION RESISTANCE OF EQUIPMENT OR ANY RESULTING DAMAGES. IT IS THE PURCHASER'S RESPONSIBILITY TO SPECIFY THE CORRECT MATERIAL OF CONSTRUCTION SPECIFICATION FOR THE INTENDED APPLICATION(S). CONSULTATION WITH QUALIFIED PERSONNEL IN MATERIAL SELECTIONS IS HIGHLY RECOMMENDED.
 - WHERE "COMPLETE SEAL WELDS" VS. THE USE OF "EXPANSION ISOLATION SEALS" ON THE OUTER SHEATHING ARE USED, CRACKING WILL BE EXCLUDED FROM THE WARRANTY DUE TO THE EXPECTED THERMAL EXPANSION STRESSES OF THE EQUIPMENT UNDER NORMAL OPERATING CONDITIONS.
 - ALL TOLERANCES ARE IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, 2007 EDITION, 2008 ADDENDA AND DCI STANDARD VESSEL TOLERANCES DRAWING 020000.
 - ALL ASME WELDING TO BE DONE BY ASME QUALIFIED WELDERS.
 - ALL ASME WELDING PROCEDURES ARE IN ACCORDANCE WITH ASME CODE UW-28.
 - ASME CODE JURISDICTION ENDS AT THE FIRST SEALING SURFACE EXCLUDING MANWAY.
 - VESSEL AND/OR HEAT TRANSFER SURFACE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, 2007 EDITION, 2008 ADDENDA.
 - VESSEL AND/OR HEAT TRANSFER SURFACE TO BE HYDROSTATICALLY OR PNEUMATICALLY TESTED PER UG-88. CHECK FOR DEFECTS, REPAIR AND RETEST IF NECESSARY.
 - SUITABLE PRESSURE AND/OR VACUUM RELIEF DEVICES MUST BE INSTALLED BY CUSTOMER FOR OPERATION OF VESSEL AND/OR HEAT TRANSFER SURFACE.
 - ALL FLANGES WILL HAVE BOLT HOLES STRADDLE THE 0°-180° & 90°-270° CENTERLINES, UNLESS SPECIFIED OTHERWISE.
 - NOZZLES AND/OR OPENINGS IN VESSELS, SHALL NOT BE LOCATED IN OR WITHIN .5" OF WELD SEAMS IN HEADS AND/OR SHELLS WITHOUT PRIOR ENGINEERING APPROVAL. IF NOZZLE OR OPENING IS IN OR WITHIN 0.5" OF WELD SEAM, AN ADDITIONAL ENGINEERING CALCULATION AND/OR X-RAY MAY BE REQUIRED TO MEET UW-14 REQUIREMENTS.
 - ALL REINFORCEMENT PADS MUST BE PROVIDED WITH (1) 1/8 DIA. WEEP HOLE LOCATED AT THE LOWEST POINT WHEN THE VESSEL IS IN ITS NORMAL OPERATING POSITION.
 - ALL CUSTOMER SUPPLIED PARTS MUST HAVE PROPER IDENTIFICATION, APPLICABLE CODE/STD INFORMATION (EXAMPLE: PARTIAL DATA), AND MILL TEST REPORTS BEFORE BEING WELDED TO VESSEL.
 - PRODUCTION TO PROVIDE PROTECTION FOR ALL NOZZLES AND FITTINGS PRIOR TO SHIPMENT. VESSEL MUST BE ADEQUATELY VENTED.
 - FINAL BORE OF 25MM INSGOLD FITTINGS ID TO .985"-.988" AFTER WELDING. (WHEN APPLICABLE)
 - NOZZLE END I.D. SURFACES HAVE A MINIMUM 1/16 RADII.
 - DCI SURFACE FINISH DEFINITIONS:
AI = AS IS WELD OR MATERIAL.
CC = COLOR CLEANED WELD.
BB = BEAD BLASTED WELD OR MATERIAL.
HRAP = HOT ROLLED PLATE MATERIAL.
2B = COLD ROLLED BRIGHT MILL MATERIAL.
2D = COLD ROLLED DULL MILL MATERIAL.
NUMERIC VALUE = RA.
NUMERIC VALUE + "E" = RA AFTER FINAL ELECTRO-POLISH.
WELD FINISH SAME AS BASE MATERIAL UNLESS NOTED OTHERWISE. E.X. 32/70 (BASE/WELD).
 - DCI TO PERFORM THE FOLLOWING TESTS AND PROCEDURES:
X-7033-7 - HYDROSTATIC PRESSURE TEST
X-7038-4 - BASIC SURFACE FINISH TEST
X-7065-3 - BPE DRAINAGE TEST PROCEDURE
 - MATERIAL CERTS REQUIRED FOR THE FOLLOWING:
☒ PRESSURE VESSEL COMPONENTS
☒ REMOVABLE ACCESSORIES/WETTED PARTS*
☐ AGITATOR SEALS*
ADDITIONAL COSTS APPLY
 - CRN FOR DIMPLE JACKET TO BE DETERMINED.
 - TANK MAY BE LIFTED WITH HOLD-DOWN LUGS.
 - CUSTOMER TO INSTALL ON SLOPED PAD.
 - OVERFLOW LINE TO BE 6" FROM OUTLET CENTER.

dcj INC
ST' CLOUD, MINNESOTA
VESSEL MAWP 0 PSI AT 150°F
MAEWP 0 PSI AT 150°F
MDMT -20°F AT 0/0 PSI
VESSEL VOLUME 10,568 GAL(40,000 LTR)
MFRS SERIAL NO JS4783
YEAR BUILT _____

M1	SIDE	16 X 20 MANWAY	TANK ACCESS	1			12	
N14	TOP	2 TRI-CLAMP	SPARE	1				
N13	SIDE	1-1/2 150# RFWN FLANGE	LOWER DIMPLE JACKET OUTLET	1				
N12	SIDE	1-1/2 150# RFWN FLANGE	LOWER DIMPLE JACKET INLET	1				
N11	SIDE	1-1/2 150# RFWN FLANGE	UPPER DIMPLE JACKET OUTLET	1				
N10	SIDE	1-1/2 150# RFWN FLANGE	UPPER DIMPLE JACKET INLET	1				
N9	SIDE	1 TRI-CLAMP	THERMOWELL	1				THERMOMETER BY OTHERS
N8	SIDE	2 TRI-CLAMP	LEVEL TRANSMITTER	1				TRANSMITTER BY OTHERS
N7B	SIDE	2 TRI-CLAMP	LEVEL SWITCH	1				SWITCH BY OTHERS
N7A	SIDE	2 TRI-CLAMP	LEVEL SWITCH	1				SWITCH BY OTHERS
N6	SIDE	2 TRI-CLAMP	OUTLET	1				CUSTOMER SUPPLIED OUTLET VALVE
N5	TOP	1 TRI-CLAMP	PROCESS WATER INLET	1				
N4	SIDE	3 TRI-CLAMP	OVERFLOW	1	67		68	OVERFLOW LINE (52)
N3	TOP	8 150# RFWN FLANGE	VENT	1				VENT ASSEMBLY BY OTHERS
N2A	TOP	1-1/2 TRI-CLAMP	CIP CONNECTION	2				
N2	TOP	4 TRI-CLAMP	CIP MOUNT	2	69		70	MTG TUBE (27), BALL (28), PIN (29)
N1	SIDE	2 TRI-CLAMP	PROCESS INLET	1				
A1	SIDE	12-1/2 OD FLANGE	AGITATOR	1				
MK.	LOC.	DESCRIPTION	SERVICE	QTY.	CLAMP	CAP	GSKT	DESCRIPTION / (ITEM NO.)
NOZZLE SCHEDULE					ITEM NO.			
					NOZZLE ACCESSORIES			

ITEM	MATERIAL DESCRIPTION	MATERIAL SPEC.	INTERIOR RA FINISH	EXTERIOR RA FINISH
SHELL	SHEET 10 GA	SA240.316/316L	25	N/A
TOP HEAD	SHEET 12 GA	SA240.316/316L	25	32
BTM HEAD	SHEET 10 GA	SA240.316/316L	25	N/A
SHELL HEAT TRANS	SHEET 16 GA	SA240.304	N/A	N/A
HEAD HEAT TRANS	N/A	N/A	N/A	N/A
SHELL SHEATHING	SHEET 12 GA	SA240.316/316L	N/A	32
TOP HD SHEATHING	N/A	N/A	N/A	N/A
BTM BREAST RING	SHEET 7 GA	SA240.316/316L	N/A	32
BREAST RING	SHEET 10 GA	SA240.316/316L	N/A	32
LEGS	N/A	N/A	N/A	N/A
FITTING GASKETS	FDA APPROVED	SILICONE	N/A	N/A
MANWAY GASKET	FDA APPROVED	NEOPRENE	N/A	N/A
ALL OTHER PRODUCT CONTACT SURFACES	N/A	316/316L	25	25

CIP DATA:	(2) 3-1/2 DCI SPRAY BALLS, 11,100 KG/HR
CIP FLOW RATE:	49 G.P.M. AT 20 P.S.I. (EACH BALL)
INSULATION	
SHELL:	2" CF8C & 2" X 24" WD EPS (2) PLACES
BTM HEAD:	2" CHLORIDE-FREE CERAMIC FIBER
TOP HEAD:	N/A
SURFACES COVERED WITH INSULATION TO RECEIVE A 5 MIL. COATING OF THURMALOX - ALL: <input checked="" type="checkbox"/> HEAT TRANSFER: <input type="checkbox"/> NONE: <input type="checkbox"/>	
PAINT, EXT:	N/A

HEAD DIMENSIONAL INFORMATION	
TOP INNER HD:	121 ID, 121 DR, 3 KR, .5 SF
BTM INNER HD:	121 ID, .25 KR, .5 SF, .25/FT SLOPE
TOP OUTER HD:	N/A
BTM OUTER HD:	N/A

HEAT TRANSFER SURFACE INFORMATION	
DIMPLE JACKET ON THIS JOB IS DESIGNED FOR	
<input checked="" type="checkbox"/> NON-THERMAL SHOCK LOADING	<input type="checkbox"/> THERMAL SHOCK LOADING
<input checked="" type="checkbox"/> MODERATE	<input type="checkbox"/> EXTREME
ONE BOX MUST BE CHECKED REFERENCE DCI DOCUMENT #X-7141	
SHELL:	<input checked="" type="checkbox"/> DIMPLED, PLUG WELD <input type="checkbox"/> HALF PIPE <input type="checkbox"/> N/A
	<input type="checkbox"/> DIMPLED, LASER WELD <input type="checkbox"/> CONVENTIONAL
HEAD:	<input type="checkbox"/> DIMPLED, PLUG WELD <input type="checkbox"/> HALF PIPE <input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> DIMPLED, LASER WELD <input type="checkbox"/> CONVENTIONAL
AREA	SHELL: (1) 172 SF LWR ZONE, (1) 169 SF UPPER ZONE
DIMPLE PATTERN TYPE:	2-1/4 X 2-1/4, TYPE AF
HEATING MEDIUM:	UNKNOWN
COOLING MEDIUM:	CHILLED WATER 13.076 KG/HR EACH 8 PSIG PRESSURE DROP

NON-DESTRUCTIVE EXAMINATION	
RADIOGRAPHY: <input type="checkbox"/> VESSEL <input type="checkbox"/> HEAT TRANSFER PER: <input type="checkbox"/> UHA-33 <input type="checkbox"/> UNF-57	
TOP HEAD	TOP HEAD
TO SHELL	TO SHELL
LONG SEAM	LONG SEAM
HEAD	HEAD
TO SHELL	TO SHELL
N/A	N/A
N/A	N/A
N/A	N/A
PT (DYE PEN): <input type="checkbox"/> VESSEL <input type="checkbox"/> HEAT TRANSFER PER: <input type="checkbox"/> UHA-34 <input type="checkbox"/> UNF-58	
SPOT X-RAY T-SEAM(S) 12" IN ALL DIRECTIONS: <input type="checkbox"/> YES <input type="checkbox"/> NO	
OTHER:	

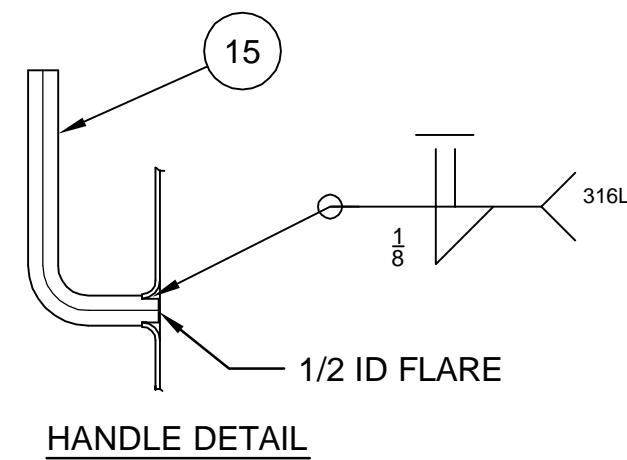
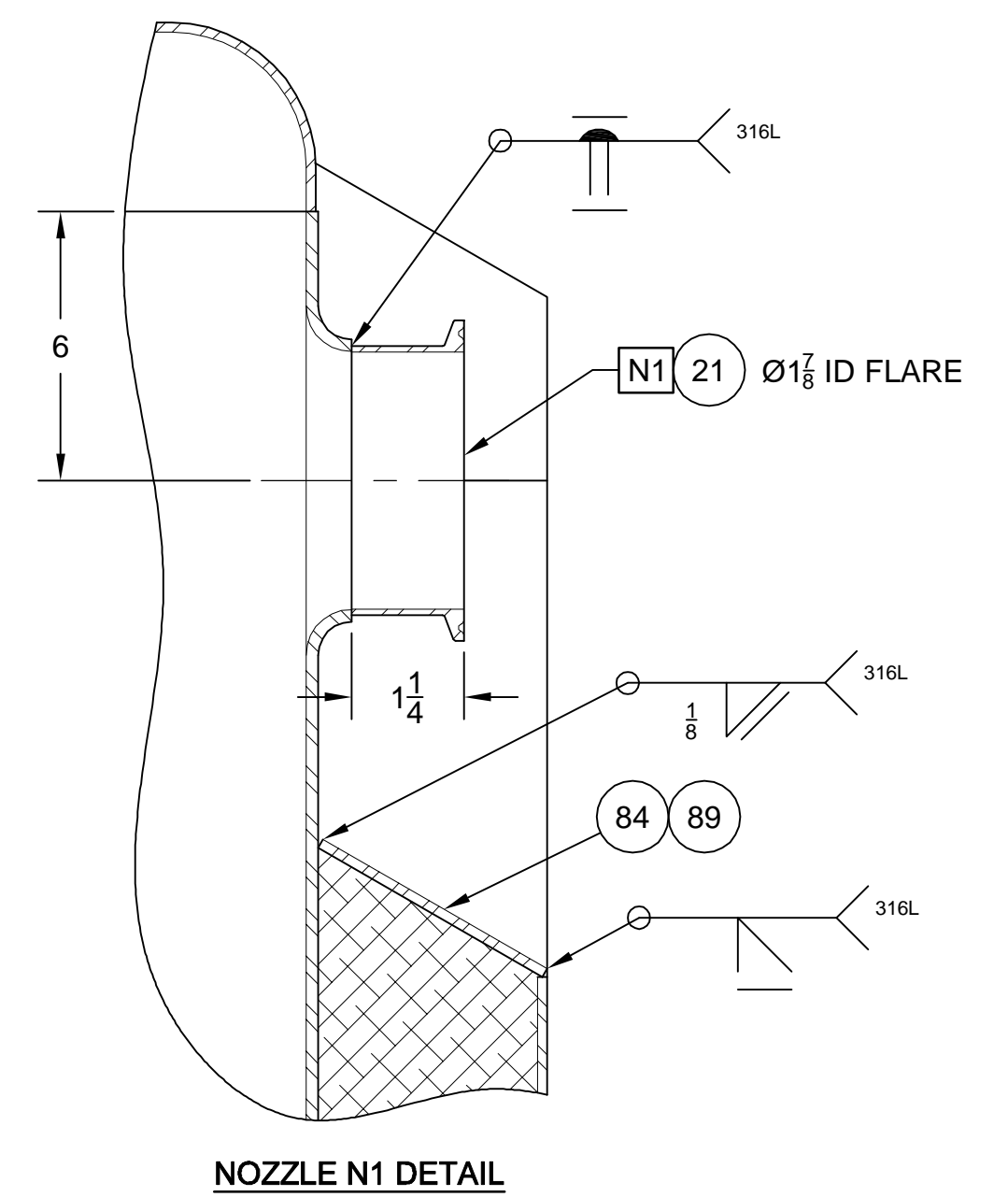
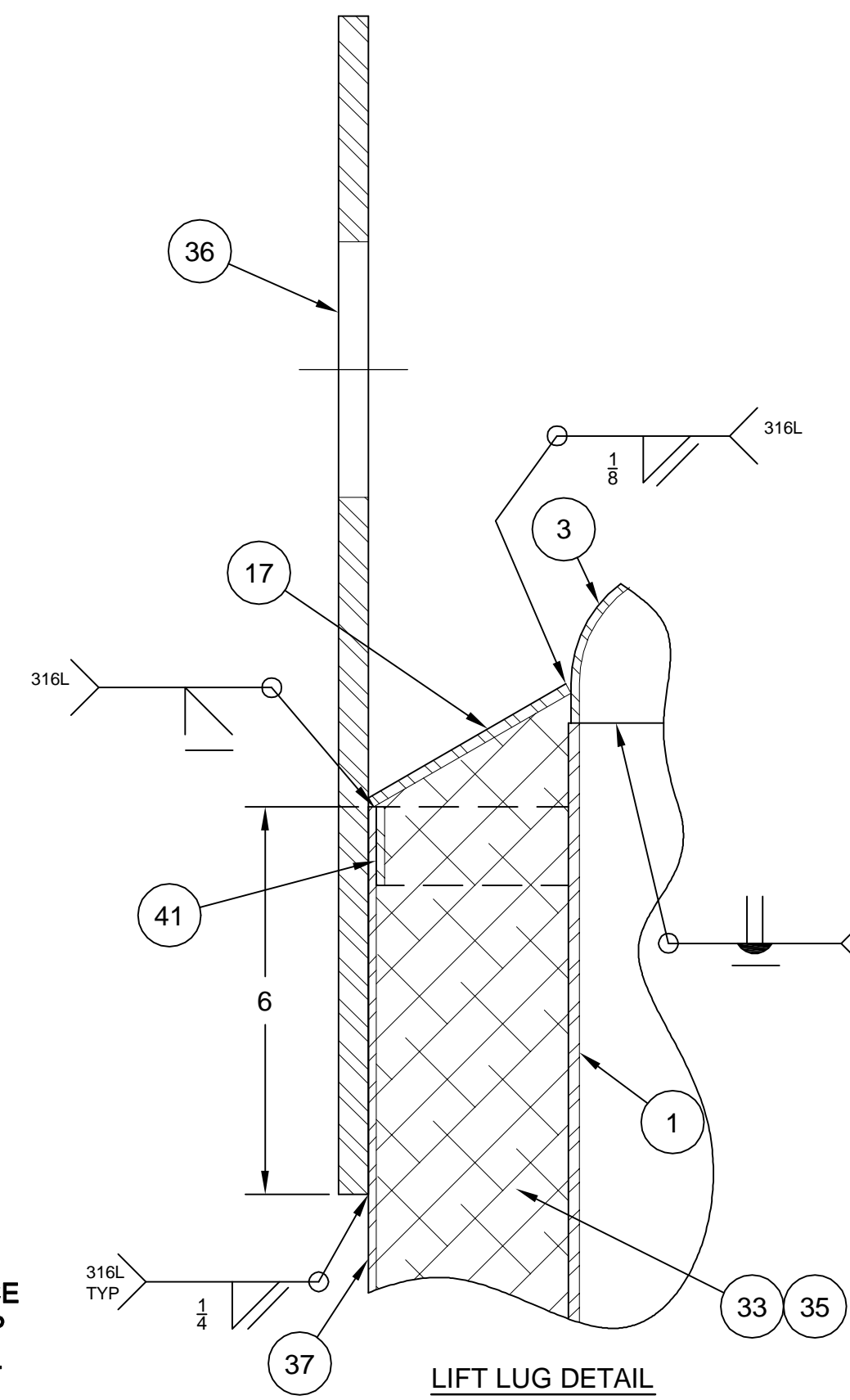
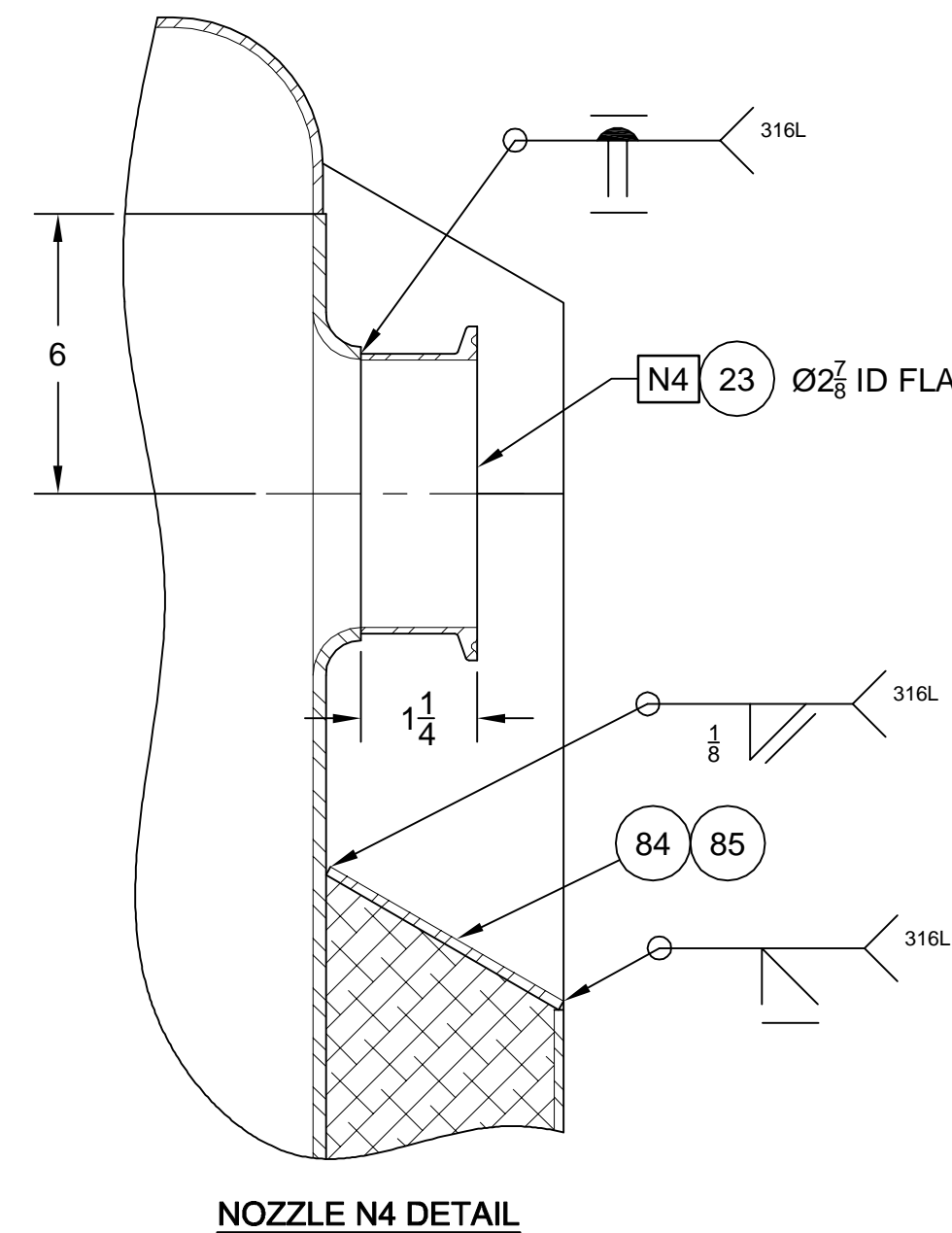
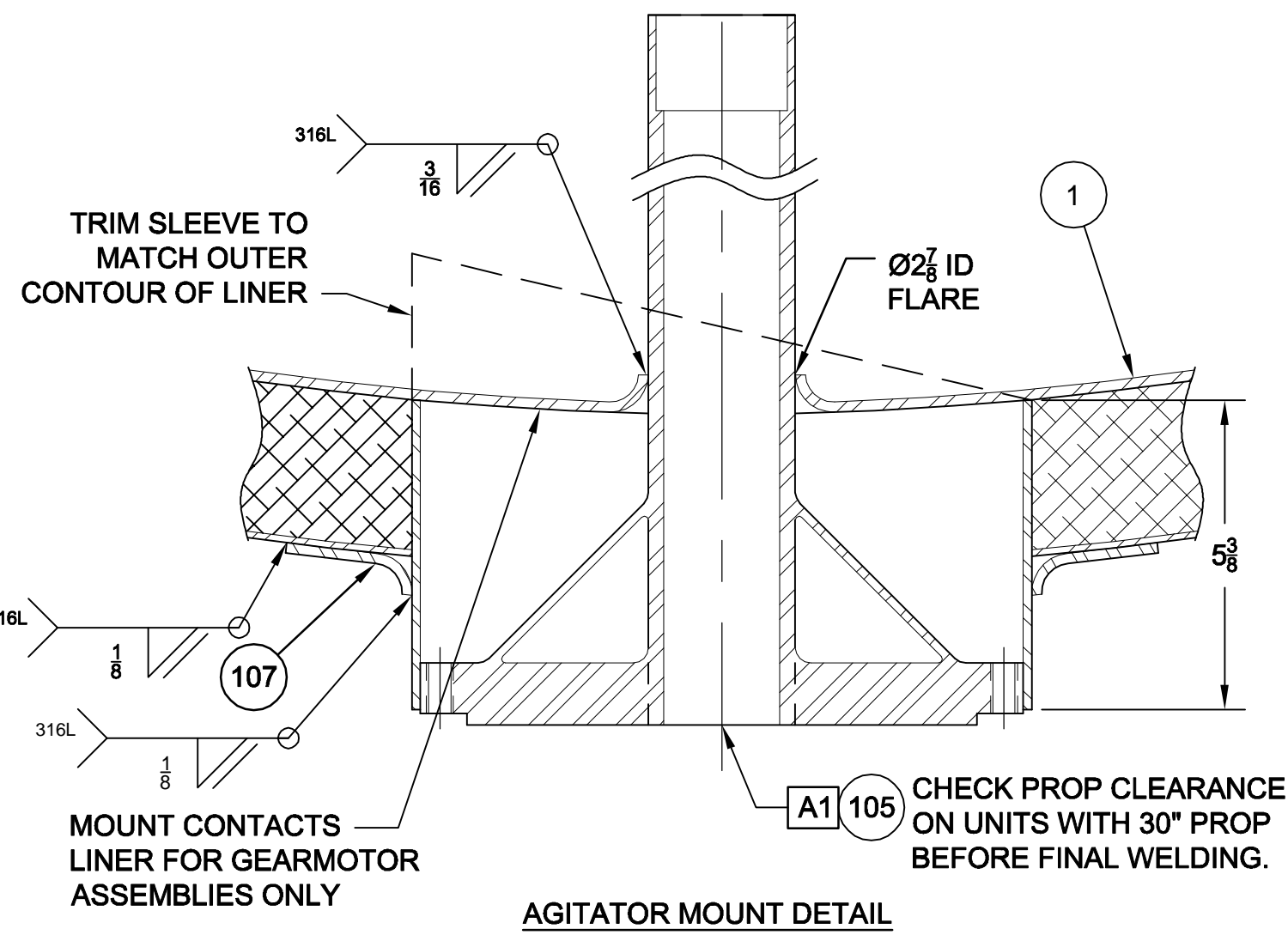
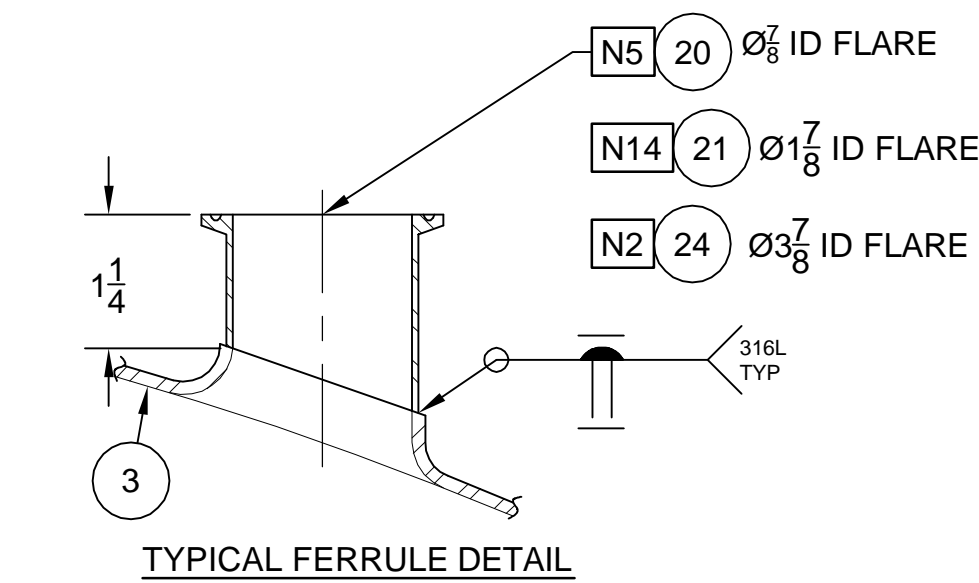
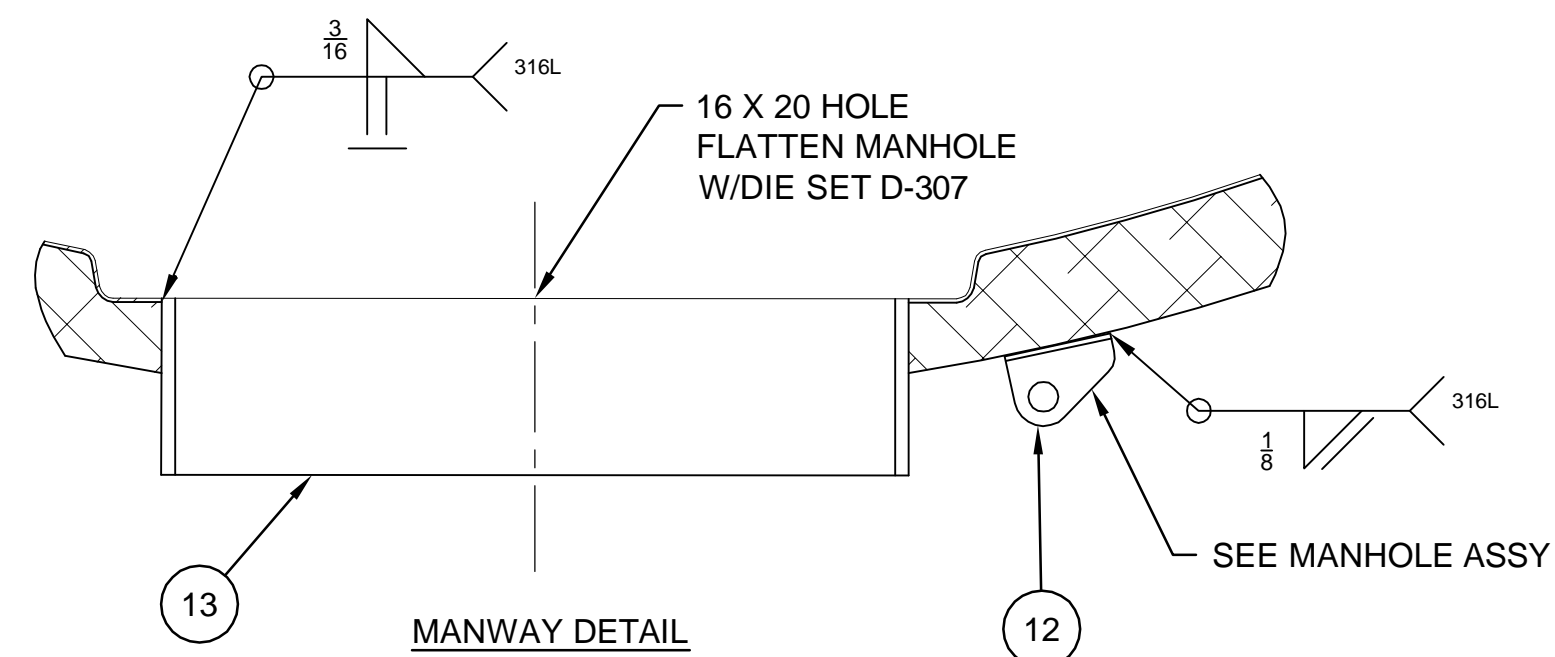
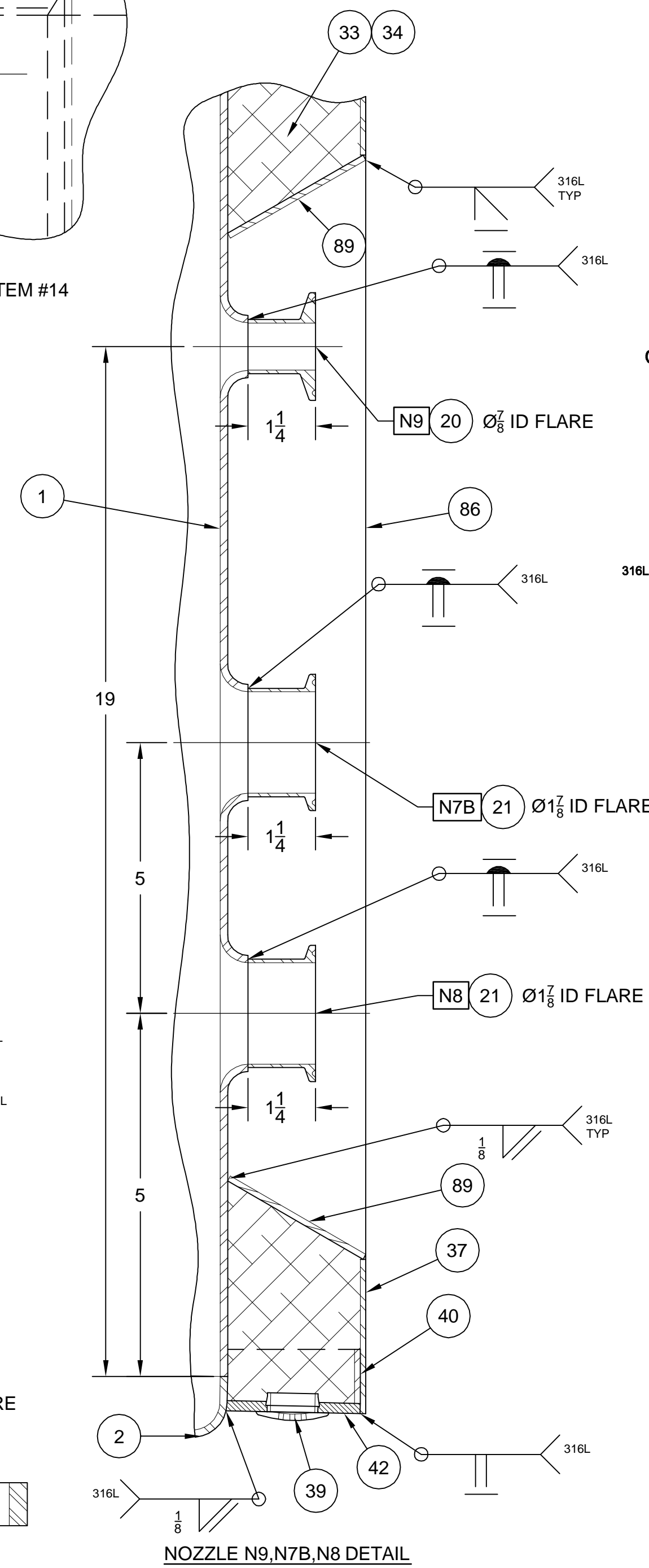
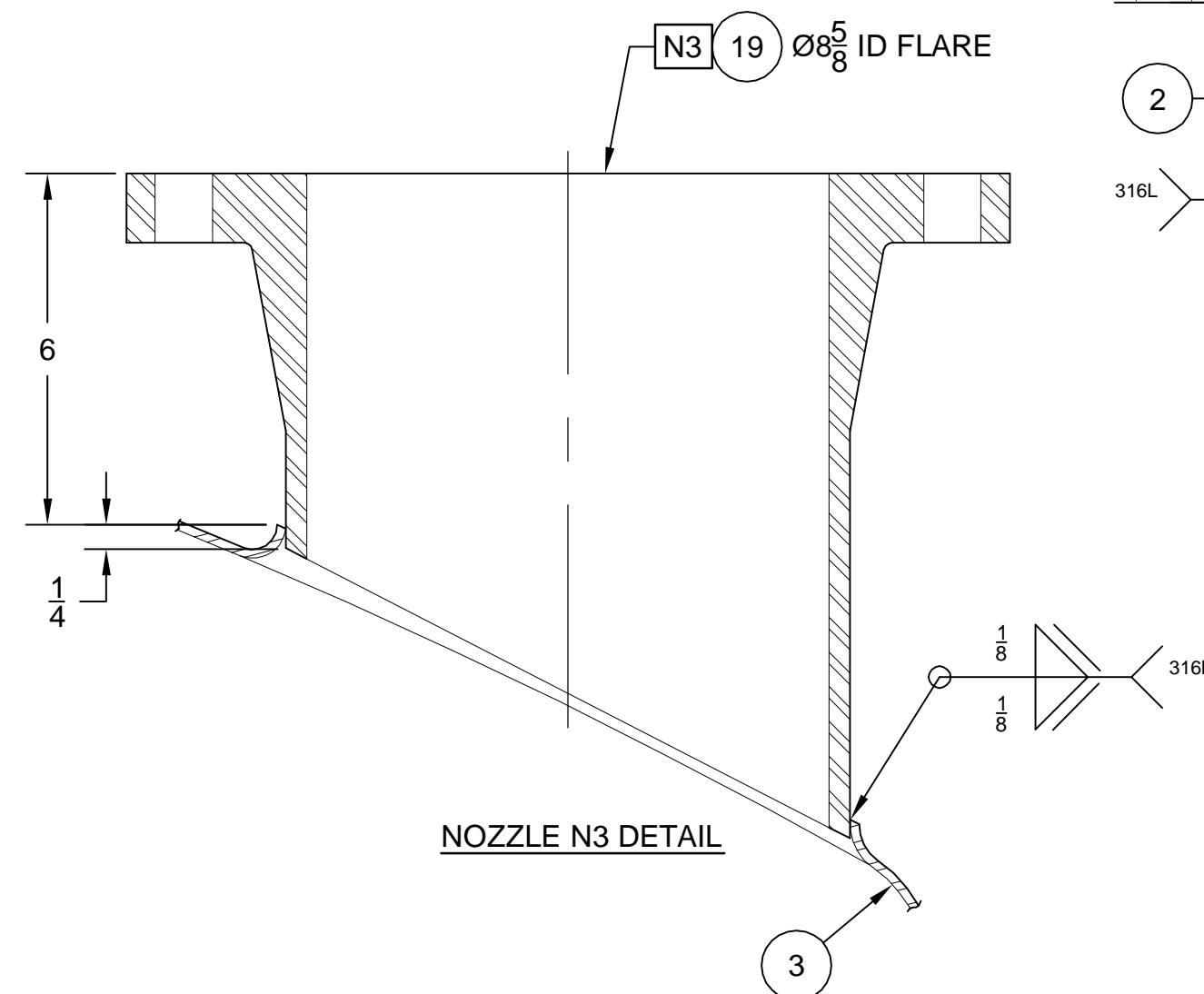
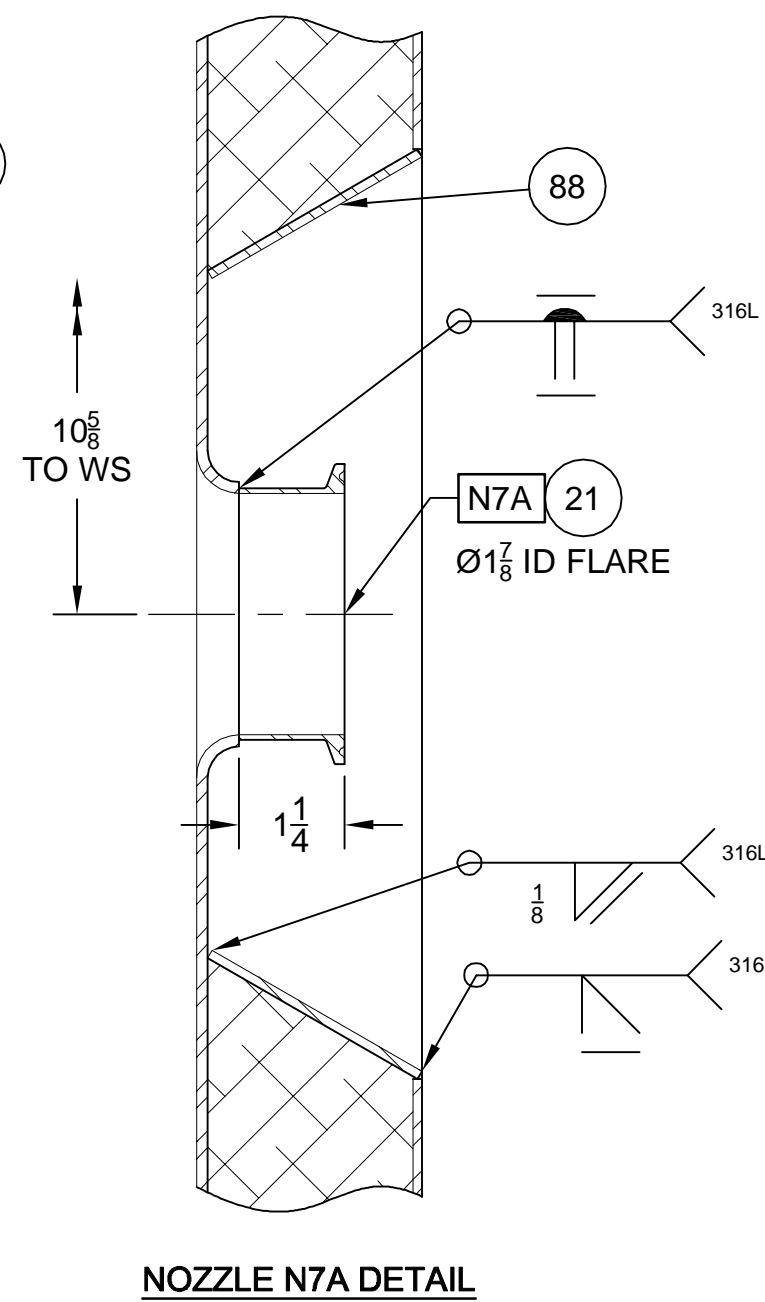
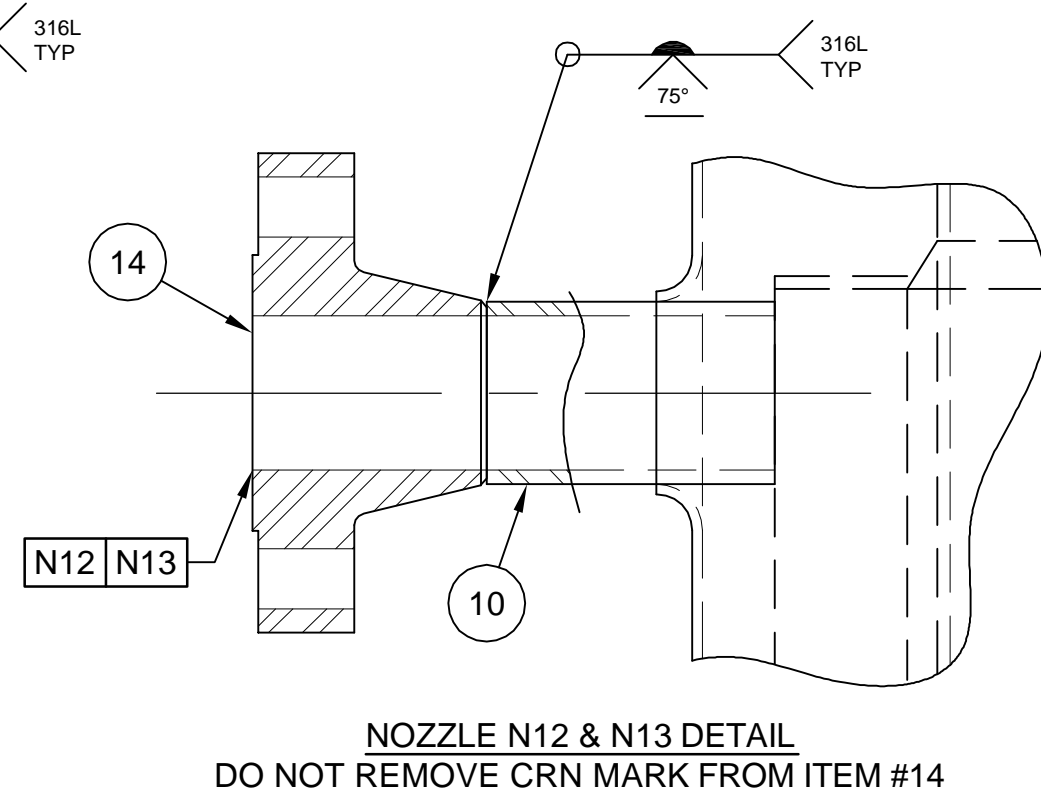
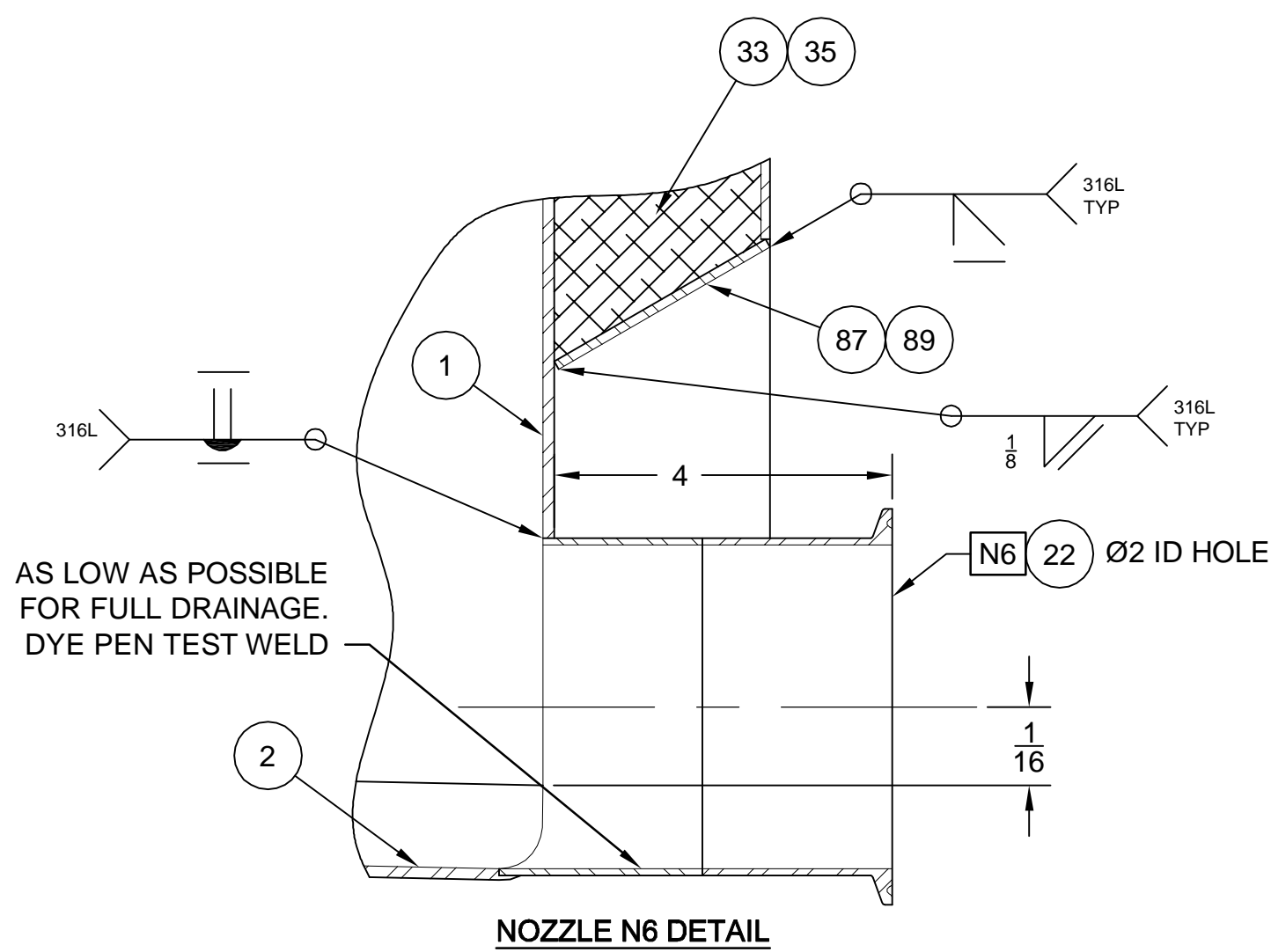
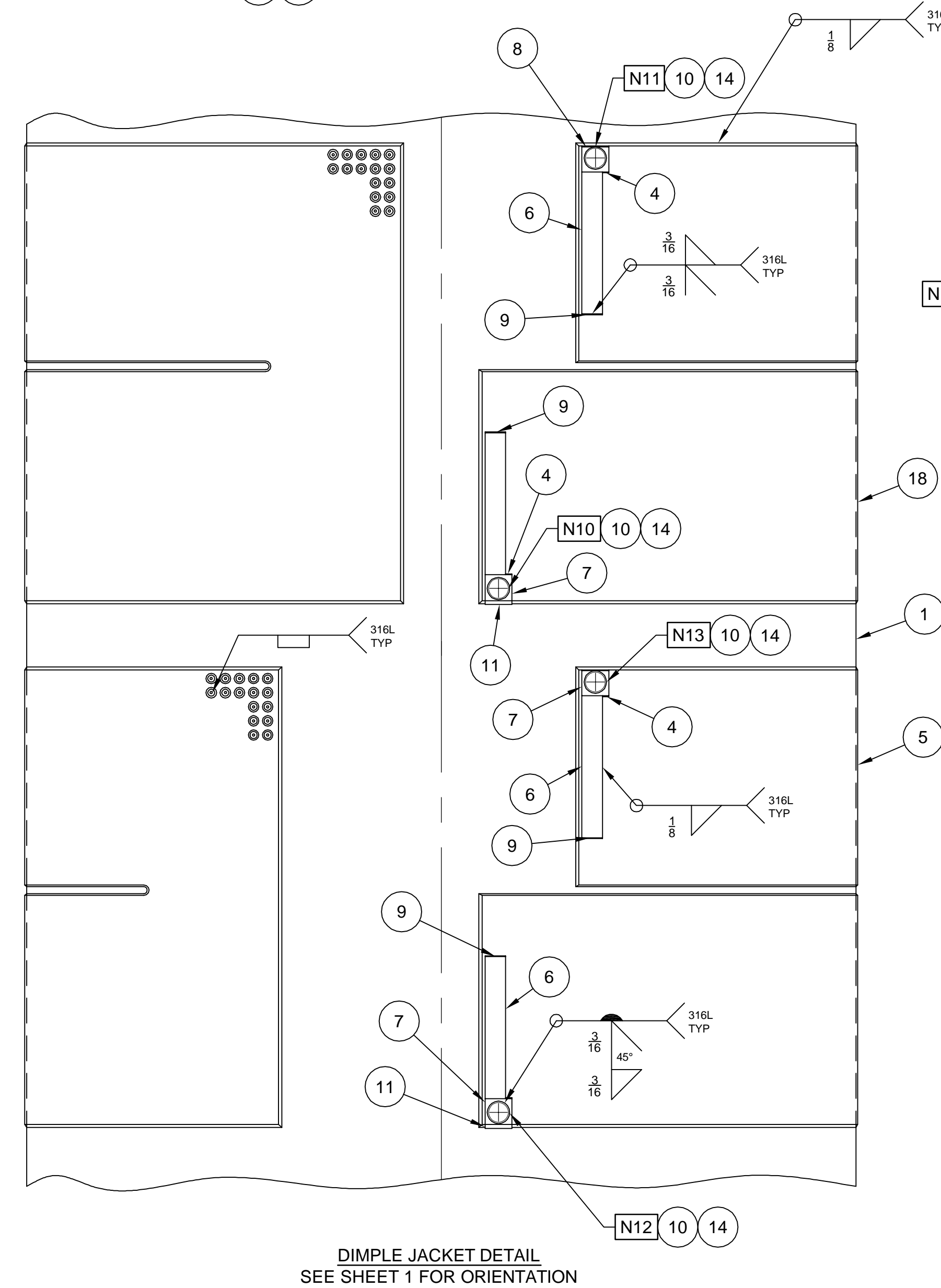
U	NB
W	CERTIFIED BY dcj INC ST CLOUD, MINNESOTA
JACKET MAWP 150 PSI AT 150 °F	
MAEWP 15 PSI AT 150 °F	
MDMT -20 °F AT 150 / -15 PSI	
JACKET VOLUME 38.9 GAL (142.2 LTR)	
MFRS SERIAL NO JS4783	
YEAR BUILT	

VESSEL TEST PRESSURE:	N/A
JACKET TEST PRESSURE:	195 PSIG
PRODUCT DATA: WATER/MEAL SLURRY 18% SOLID	
VISCOSITY: 350 CPS	SPECIFIC GRAVITY: 1.15
EST. EMPTY WEIGHT: 8,655 LBS	
EST. OPERATING WEIGHT: 109,965 LBS	(DESIGN)
EST. FULL FLOODED WEIGHT: N/A	
SEISMIC ZONE:	I

E		
D		
C		
B	ADDED DETAILS AND BILL OF MATERIALS FOR PRODUCTION.	VAD 2/10/10
A	REVISED PER RETURNED APPROVAL DRAWING, SUBMITTED CONFIRMATION PRINT.	VAD 2/9/10
REV	REVISION DESCRIPTION	REV BY/DATE


TITLE 40,000 LTR CONCENTRATE SILO, TK-72001		QTY. REQD: 1
DCI ORDER NO.: CS27312		
This drawing is the property of DCI, Inc. and is transmitted in confidence. The reproduction, use, or disclosure, in whole or part, of the design contained herein is prohibited without the written consent of DCI, Inc. This drawing is not officially released if it does not contain an ENG electronic signature.		
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED		
SCALE: 1/16	DO NOT SCALE DRAWING	
PRODUCTION VAD	APPROVAL CCH	PROJ. ENG. GSM
DATE 2/10/10	DATE 01/19/10	PROJ. MAN. SAH
PREFIX	DRAWING NO.	REV
SHEET 1 OF 2	014-01	JS4783 B

REF: SHRINK BAR AND ANGLE 30 31



IMPORTANT NOTICE

PLEASE REVIEW THIS FINAL ASSEMBLY DRAWING. IF YOU HAVE ANY QUESTIONS OR CONCERNS, CONTACT DCI, INC. AS SOON AS POSSIBLE. EQUIPMENT FABRICATION IS PROCEEDING IN ACCORDANCE WITH THIS DRAWING. BE ADVISED THAT ANY CHANGES MADE DURING FABRICATION WILL BE SUBJECT TO REVIEW AND POSSIBLE PRICE AND/OR SHIPMENT REVISIONS.

 This drawing complies with Sect.
VIII, Div.1 of the ASME Code

ENG. Signature Below Certified Drawing. Q.C. and A.I. Signatures Not Required for Certification

ENG. _____

Q.C. _____

A.I. Acceptance _____

TITLE		40,000 LTR CONCENTRATE SILO, TK-72001			
DCI ORDER NO.:		CS27312		QTY. REQD.: 1	
<p>This drawing is the property of DCI, Inc. and is transmitted in confidence. The reproduction, use, or disclosure, in whole or part, of the design contained herein is prohibited without the written consent of DCI, Inc.</p> <p>This drawing is not officially released if it does not contain an ENG electronic signature.</p>					
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED					
		SCALE: N/A		DO NOT SCALE DRAWING	
		PRODUCTION VAD		APPROVAL CCH	
		DATE 2/10/01		DATE 1/20/01	
		REV. MAN. SAH		REV. MAN. SAH	
SHEET CL. CLOUD, M		PREFIX		DRAWING NO.	
ST. 2 OF 2		014-01		JS4783	
				REV B	

Technical drawing of a LWR DJ LAYOUT. The drawing shows a circular component with various numbered callouts (1-37) and a rectangular component with callouts (5-8). The drawing includes a title block with the DCI logo and fields for drawing title, date, and revision.

DCI This drawing
VIII, Div.
ENG. Signature Below Centres Drawing, Q.C. and
Q.C.
A.I. Acceptance
Mr. Chait and West Des

LWR DJ LAYOUT

The diagram illustrates the layout of a 100m x 50m pool, divided into three lanes. The top section, labeled "LINER LAYOUT", shows the arrangement of the pool's edges. The bottom section, labeled "UPPER DJ LAYOUT", shows the arrangement of the pool's ends. The pool is divided into three lanes by two vertical lines. The left lane is 33.33m wide, the middle lane is 33.33m wide, and the right lane is 33.33m wide. The pool is 50m long. The diagram includes numbered callouts 9, 10, 11, and 12, which correspond to the numbered callouts in the text description. Callout 9 points to the bottom-left corner of the pool. Callout 10 points to the bottom-right corner of the pool. Callout 11 points to the bottom-right corner of the pool. Callout 12 points to the top-right corner of the pool.

[illegible]

TRAVELER, CHECK LIST						SHEET 1 OF 1	
DRAWN VAD		DATE 2/10/10		AS BUILT SKETCH		REV.	B
CHECKED		DATE		SERIAL NO.- JS4783			
Q.C. DWG REVIEW				N.B. NO.-			
A.I. DWG REVIEW				FINAL ASSY- JS4783			
<div></div>							
ITEM NO.	NO. REQD	MATL SPEC	DESCRIPTION	HEAT NO.	P.O. NO.	SUPPLIER	Q.C.
1	11	SA240,316/316L	SHEET 10 GA (LINER)				
2	2	SA240,316/316L	SHEET 10 GA (LINER)				
3	1	SA240,316/316L	SHEET 10 GA (LINER)				
4	1	SA240,316/316L	SHEET 10 GA (LINER)				
5	1	SA240,304	SHEET 16 GA (LWR DJ)				
6	1	SA240,304	SHEET 16 GA (LWR DJ)				
7	1	SA240,304	SHEET 16 GA (LWR DJ)				
8	1	SA240,304	SHEET 16 GA (LWR DJ)				
9	2	SA240,304	SHEET 16 GA (UPPER DJ)				
10	2	SA240,304	SHEET 16 GA (UPPER DJ)				
11	1	SA240,304	SHEET 16 GA (UPPER DJ)				
12	1	SA240,304	SHEET 16 GA (UPPER DJ)				
13	3	SA240,316/316L	SHEET 12 GA (TOP HD)				
14	2	SA240,316/316L	SHEET 10 GA (BTM HD)				
15	1	SA240,316/316L	SHEET 10 GA (BTM HD)				
16	4	SA240,316/316L	SHEET 10 GA (2 HDR)				
17	4	SA240,316/316L	SHEET 10 GA (3 HDR)				
18	2	SA240,316/316L	SHEET 10 GA (3 FULL DRN END CAP)				
19	2	SA240,316/316L	SHEET 10 GA (3 END CAP)				
20	4	SA240,316/316L	SHEET 10 GA (2 END CAP)				
21	4	SA240,316/316L	SHEET 10 GA (2 END CAP)				
22	4	SA182F,316/316L	FLANGE 1-1/2 RFWN 150# (PURCH)				
23	4	SA312,TP316/316L	PIPE 1-1/2 SCH 40				
24	1	SA240,316/316L	PLATE 3/8 (MW FRAME)				
25	1	SA240,316/316L	SHEET 10 GA (MW COVER)				
26	1	SA182F,316/316L	FLANGE 8 FFWN 150# (PURCH)				
27	1	SA312,TP316/316L	PIPE 8 SCH 40				
28	1	SA249,316/316L	TUBE 2 .065 W				
29	6	316/316L	FER'L,TC,2".BPE (PURCH)				
30	2	316/316L	FER'L,TC,1".BPE (PURCH)				
31	1	316/316L	FER'L,TC,3".BPE (PURCH)				
32	2	316/316L	FER'L,TC,4".BPE (PURCH)				
33	1	SA312,TP316/316L	PIPE 2 SCH 80 (SLEEVE AGIT)				
34	1	SA479,304/304L	ROUND 15/16 (AGIT SHAFT)				
35	1	SA479,UNS S21800	ROUND 2 (AGIT SHAFT)				
36	1	SA479,316/316L	ROUND 2-1/2 (HUB ASSY)				
37	3	SA240,316/316L	PLATE 1/4 (PROPS)				
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
INSPECTION STEPS DCI JOB No.						Q.C.DATE	A.I.DATE
1.) Inspect Welded Seams of shell,heads,dimple jacket							
2.) Top Head Min. Thickness:_____ in. (Calculated)							
3.) Shell Min. Thickness:_____ in. (Calculated)							
4.) Bottom Head Min. Thickness:_____ in. (Calculated)							
5.) Bottom Head fit up & tack,weld prep							
6.) Bottom Head welding appearance Nozzles & girth seam							
7.) Top Head fit up & tack,weld prep							
8.) Top Head welding appearance Nozzles & girth seam							
9.) Nozzles, attachments, Manway weld prep & layout							
10.) Shell Nozzles, attachments, Manway welding appearance							
11.)* Dimple Jacket Weld Macro-Section Results Satisfactory							
12.) Non Destructive Examination (if required)							
13.)* Internal Visual inspection							
14.) Preliminary Pressure Test							
15.)* Final Pressure Test							
16.)* Final visual & Dimensional inspection							
17.)* Stamping							
18.)* Calculation & Mill Test Report Review							
19.)* Sign Data Report							
20.) Non-Conformance (if applicable)							
* Indicates inspection points required by Authorized Inspector.							
Form No. X6088-2							