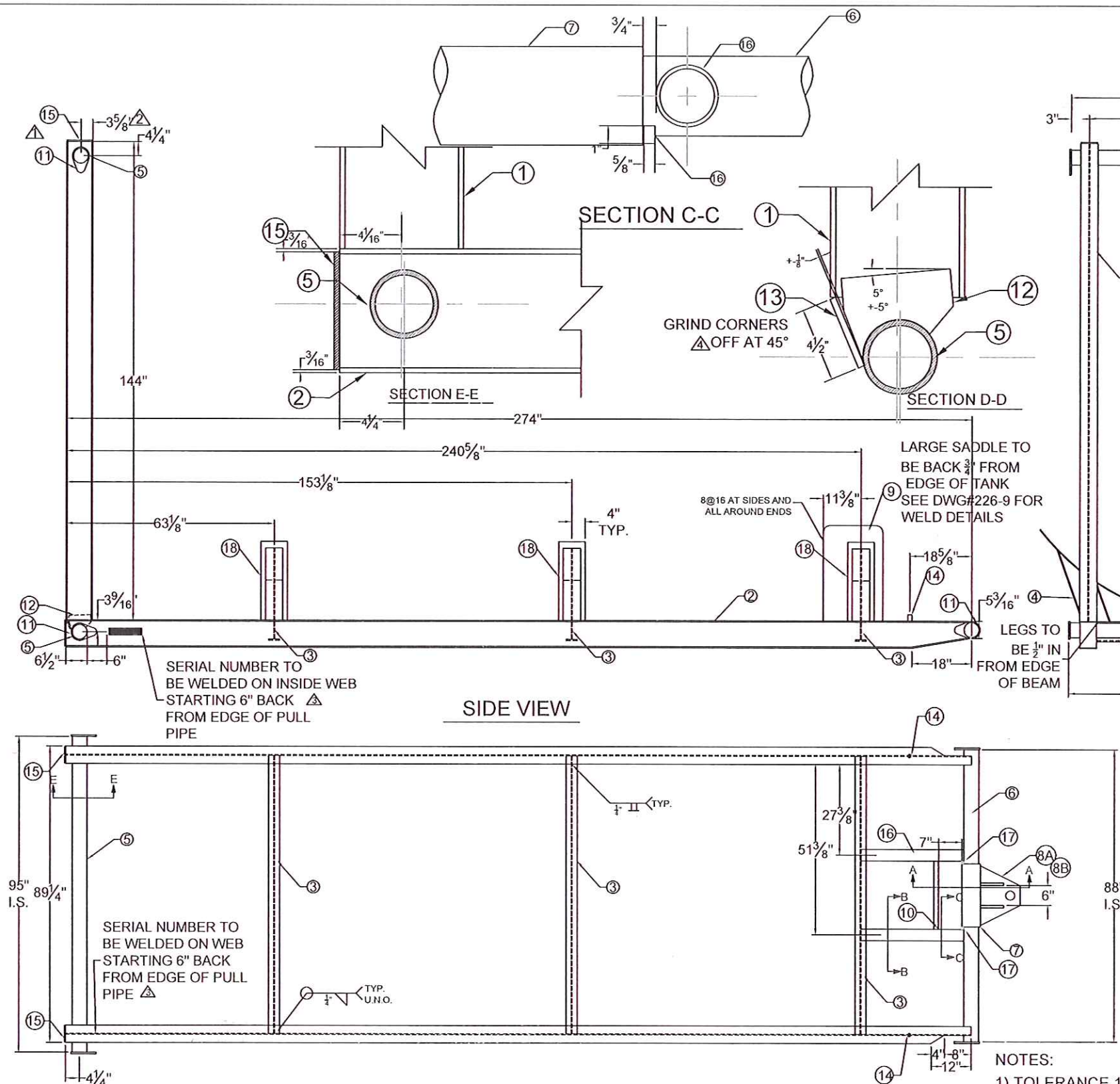




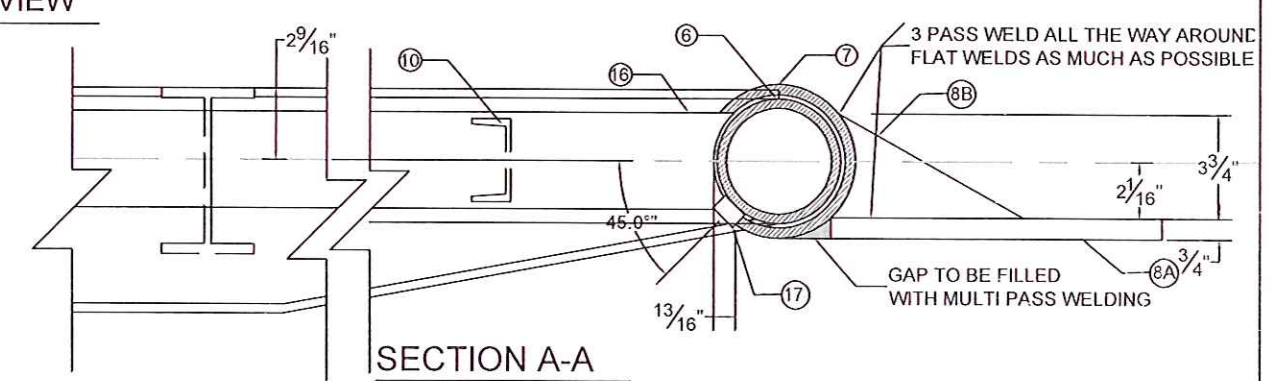
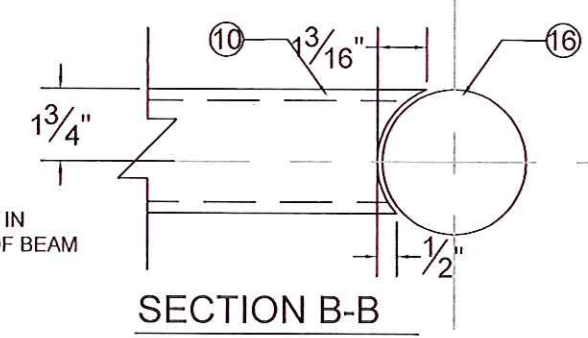
Tank Drawings

For





ITEM	SERVICE	QTY	DESCRIPTION	LENGTH
01	BACK SKID	3	W8@18 BEAM	144"
02	BOTTOM SKID	2	W8@18 BEAM	274"
03	CROSS BEAM	3	S6@12.5 BEAM	83 1/8"
04	LEGS	6	W8@18 BEAM	APPROX. 23 1/2"
05	BACK SKID PIPE	2	4" SCH 80 PIPE	95"
06	FRONT PULL PIPE	1	4" SCH 80 PIPE	88"
07	PIVOT PIPE	1	5" SCH 80 PIPE	19"
08A	PIVOT TONGUE	1	1/4" PLATE	DWG#134-6
08B	PIVOT TONGUE GUSSETS	2		DWG#134-6
09	LARGE SADDLE	1	1/4" PLATE x 18"	130"
10	PIVOT TONGUE REST	1	3" STD CHANNEL	22 5/8"
11	4" TEAR DROPS	6	1/2" PLATE	DWG#121
12	BACK SKID CONNECTOR PLATE	1	1/2" PLATE	DWG#134-6
13	BACK CENTER SKID PLATE	1	3/8"x5" FLATBAR	4 1/2"
14	TIE DOWN PIN	2	1 1/4" ROUND BAR	2"
15	END CAPS FOR LONG SKIDS	5	3/8"x5" FLATBAR	7 3/4"
16	PULL PIPE SUPPORTS	2	3" SCH 40 PIPE	32"
17	PIVOT TONGUE STOPS	2	3/8" SQUARE BAR	1"
18	SMALL SADDLE	3	1/4" PLATE 8"	120"



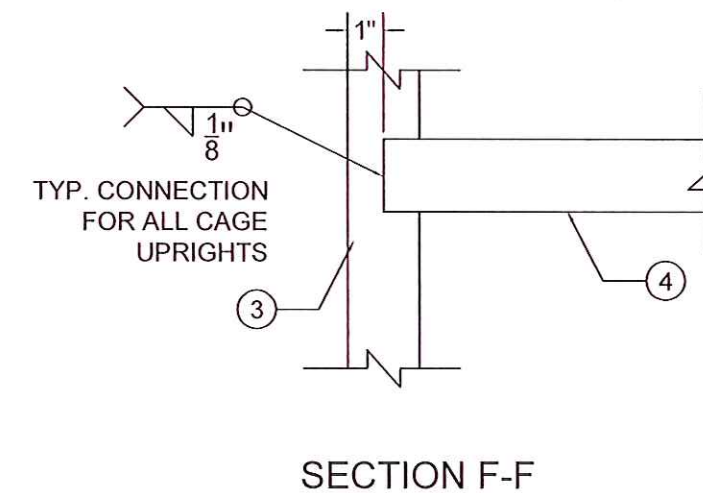
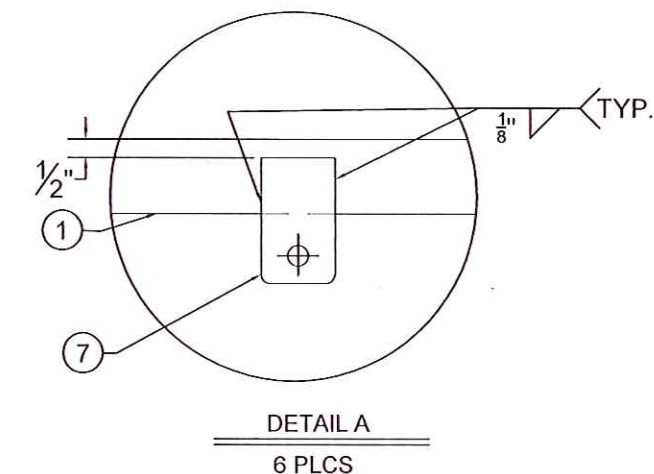
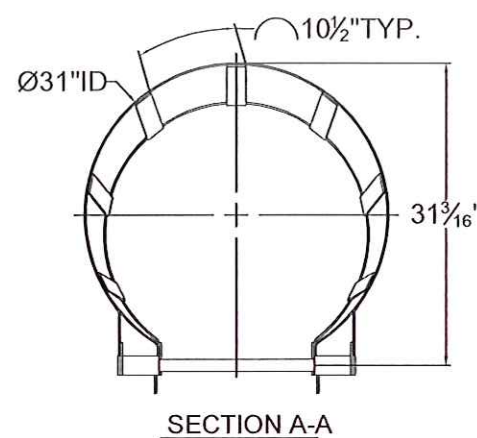
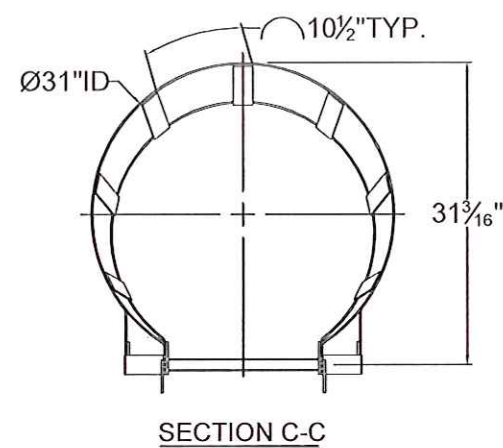
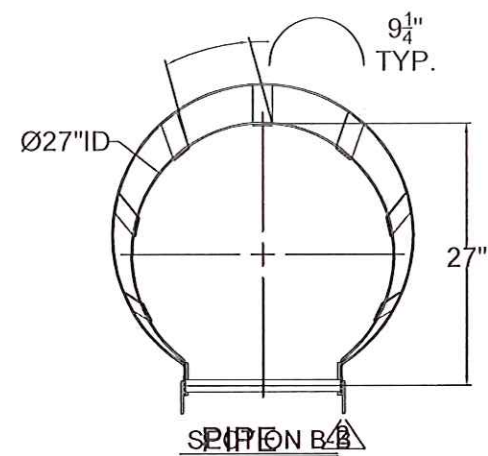
- NOTES:
- 1).TOLERANCE 1/8" +
 - 2).ANGLE, PLATE, BEAM, CHANNELS A36
 - 3).PIPE & TUBE A500 OR A53B

REV. #	DATE	DWG. BY	APPROVED BY
1	28/10/13	CST	
2	29/10/13	CST	
3	04/10/13	CST	
4	19/11/13	CST	

PROJECT: 400 BBL WATER STORAGE TANK		DATE: SEPTEMBER 26 2013
PRODUCED BY: CST		APPROVED BY:
DWG NO: 226-2A	DWG Name: RENTAL TANK SKID	

HIGHLAND PROJECTS LTD.

ITEM	SERVICE	QTY	MATERIAL	DESCRIPTION	LG.
01	LADDER SIDE RAIL	2	1/2"x2" FLATBAR		232"
02	LADDER RUNGS	20	1 1/2" 11 GA SAFETY STEEL		16"
03	LADDER HOOP BOTTOM	1	3/8"x2" FLATBAR	ROLLED 31" OD	84"
04	CAGE UPRIGHTS	5	1/2"x2" FLATBAR		192"
05	LADDER BRACKET #1	3	1/2"x2" FLATBAR	SEE DETAIL	4 1/2"
06	LADDER BRACKET #2	5	1/2"x2" FLATBAR	SEE DETAIL	9"
07	LADDER BRACKET #3	18	1/2"x2" FLATBAR		3 3/8"
08	LADDER HOOP TOP	1	3/8"x2" FLATBAR	ROLLED 31" OD	84"
09	LADDER SIDE RAIL EXT.	2	1/2"x2" FLATBAR		44 3/8"
10	LADDER HOOP CENTER	3	3/8"x2" FLATBAR	ROLLED 27" OD	74"



NOTES:
1. SEE SHT 2 OF 2 FOR DETAIL ITEMS 3, 5, 6, 7, 9, 10, & 11
2. SEE SHT 2 OF 2 FOR SECTION E-E
3. ITEM 5 & 6 TO BE WELDED TO REPADS LOCATED ON TANK WITH 3/16" FILLET ALL AROUND TYP.

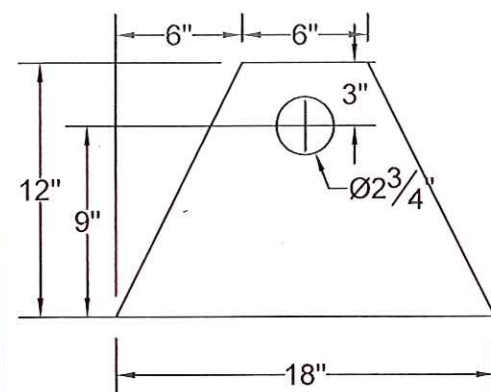
1). TOLERANCE 1/8" +/-
2). ANGLE, PLATE, BEAM, CHANNELS A36

REV. #	DATE	DWG. BY	APPROVED BY
1	11/01/13	CST	
2	11/05/13	CST	

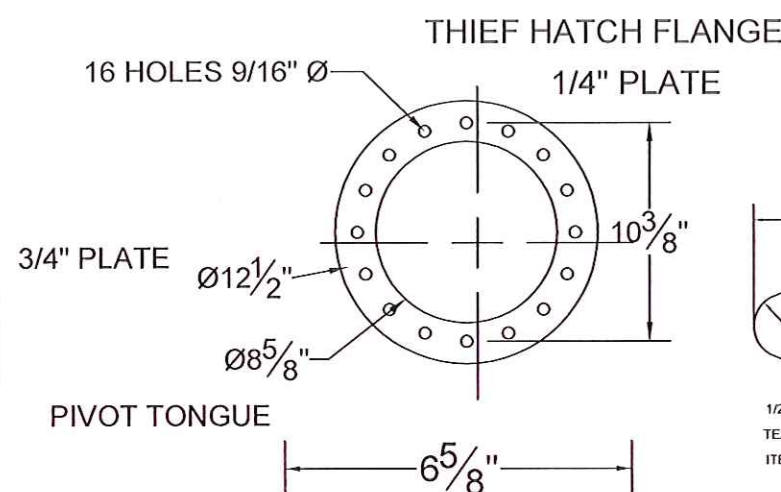
HIGHLAND PROJECTS LTD.

PROJECT:	400 BBL WATER STORAGE TANK	DATE:	NOVEMBER 5, 2013
PRODUCED BY:	CST	APPROVED BY:	
DWG NO.:	226-6	DWG Name:	LADDER
SHT:	1 OF 2		

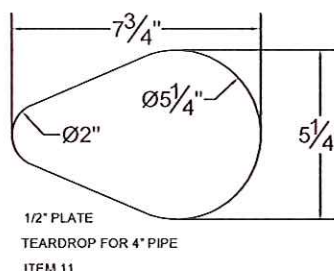
- 1).TOLERANCE 1/8" +/-
- 2).ANGLE, PLATE, BEAM, CHANNELS A36



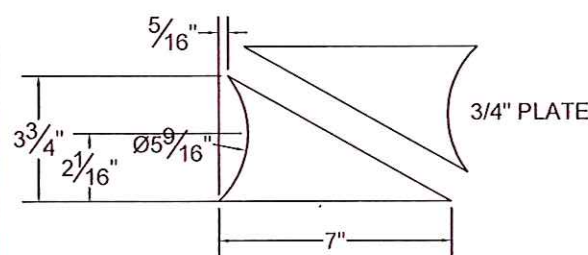
ITEM 8A



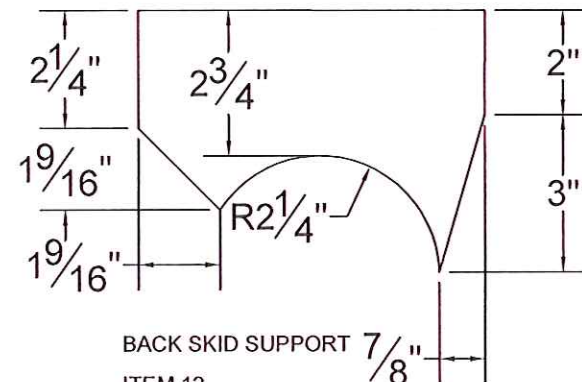
PIVOT TONGUE



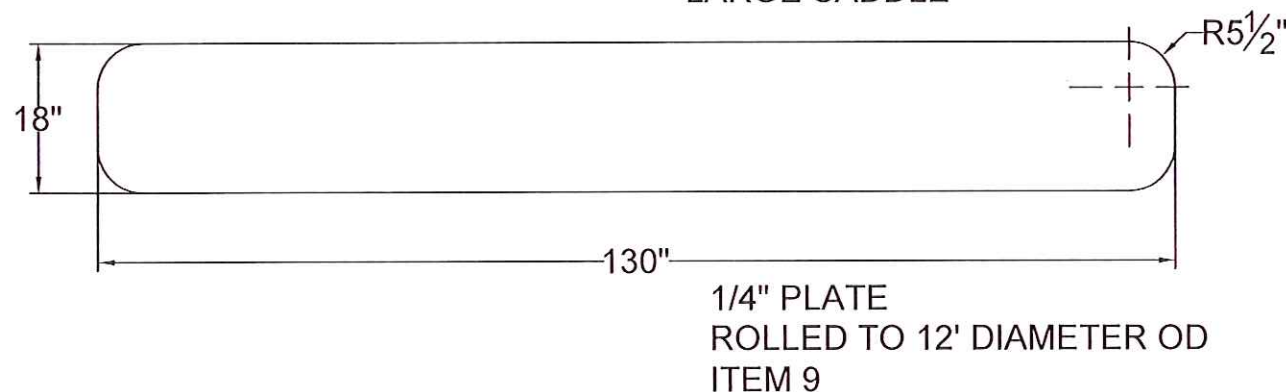
1/2" PLATE
TEARDROP FOR 4" PIPE
ITEM 11



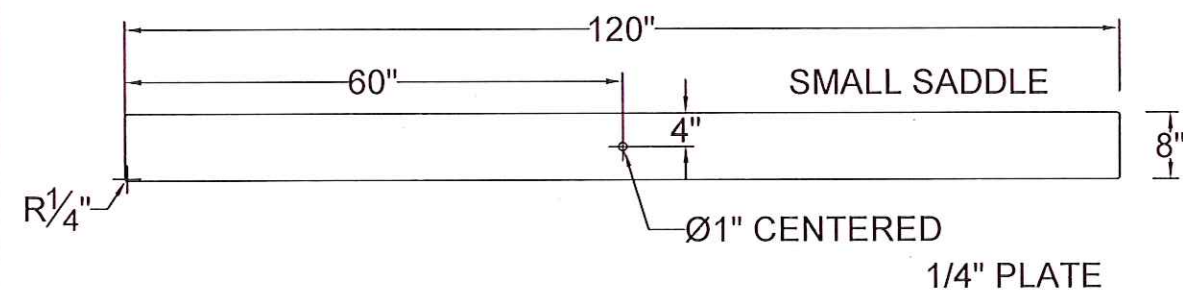
ITEM 8B
PIVOT TONGUE GUSSETS



BACK SKID SUPPORT
ITEM 12
3/8" PLATE
LARGE SADDLE

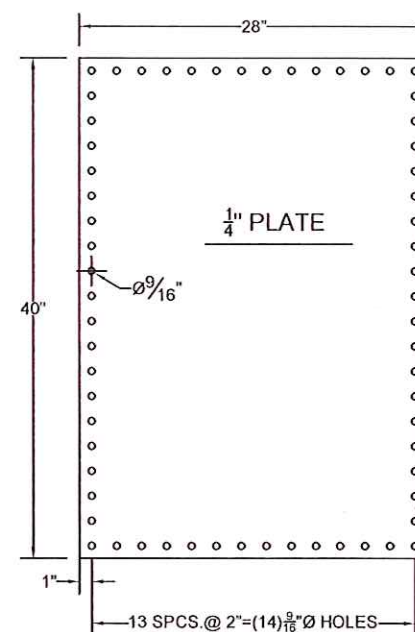


1/4" PLATE
ROLLED TO 12' DIAMETER OD
ITEM 9

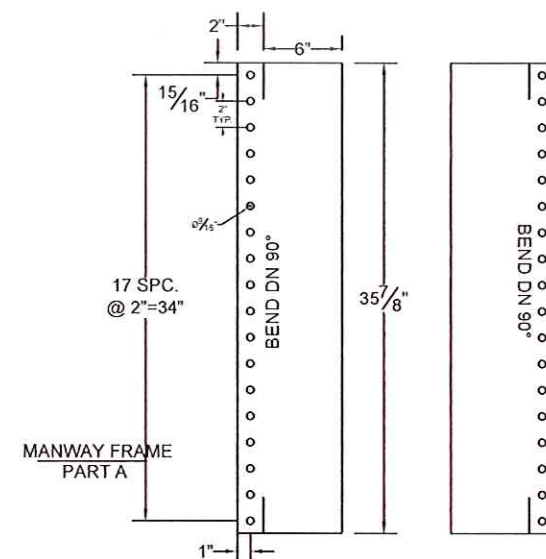


SMALL SADDLE

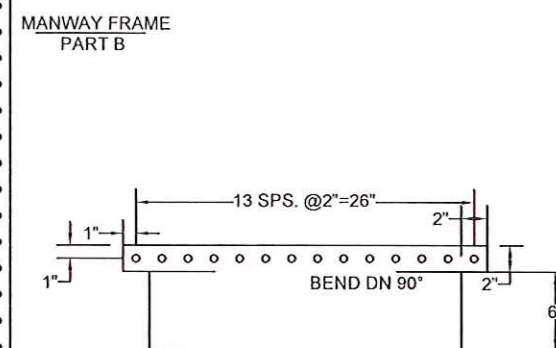
1/4" PLATE



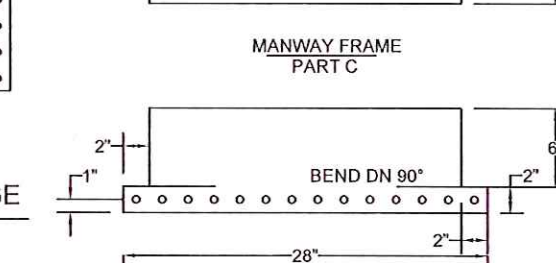
MANWAY



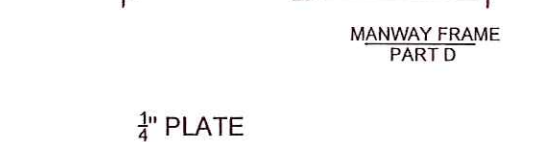
MANWAY FRAME
PART A



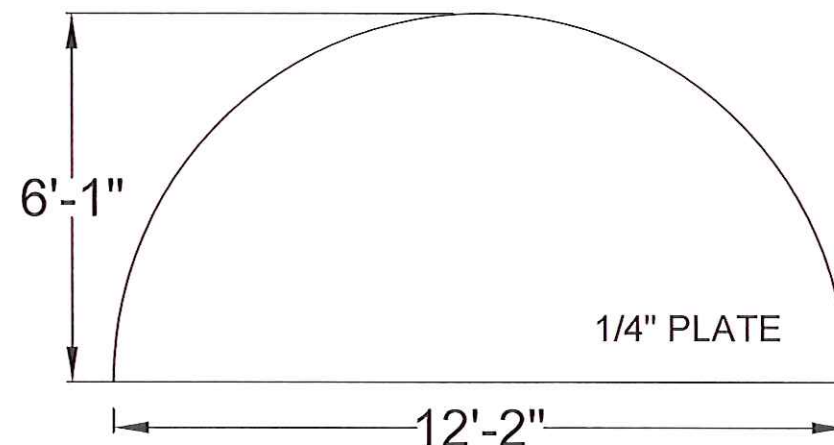
MANWAY FRAME
PART B



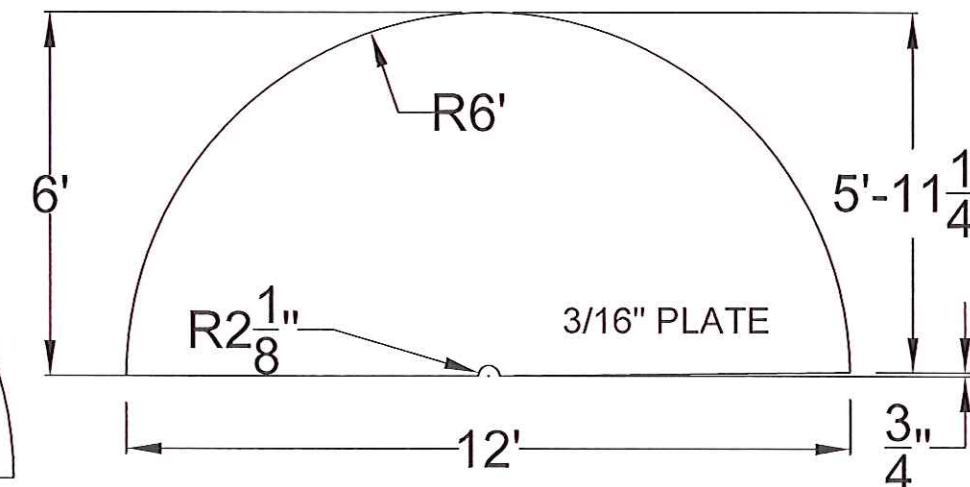
MANWAY FRAME
PART C



MANWAY FRAME
PART D



FLOOR



ROOF

- NOTES:
1).TOLERANCE 1/8" +/-
2).PLATE A36

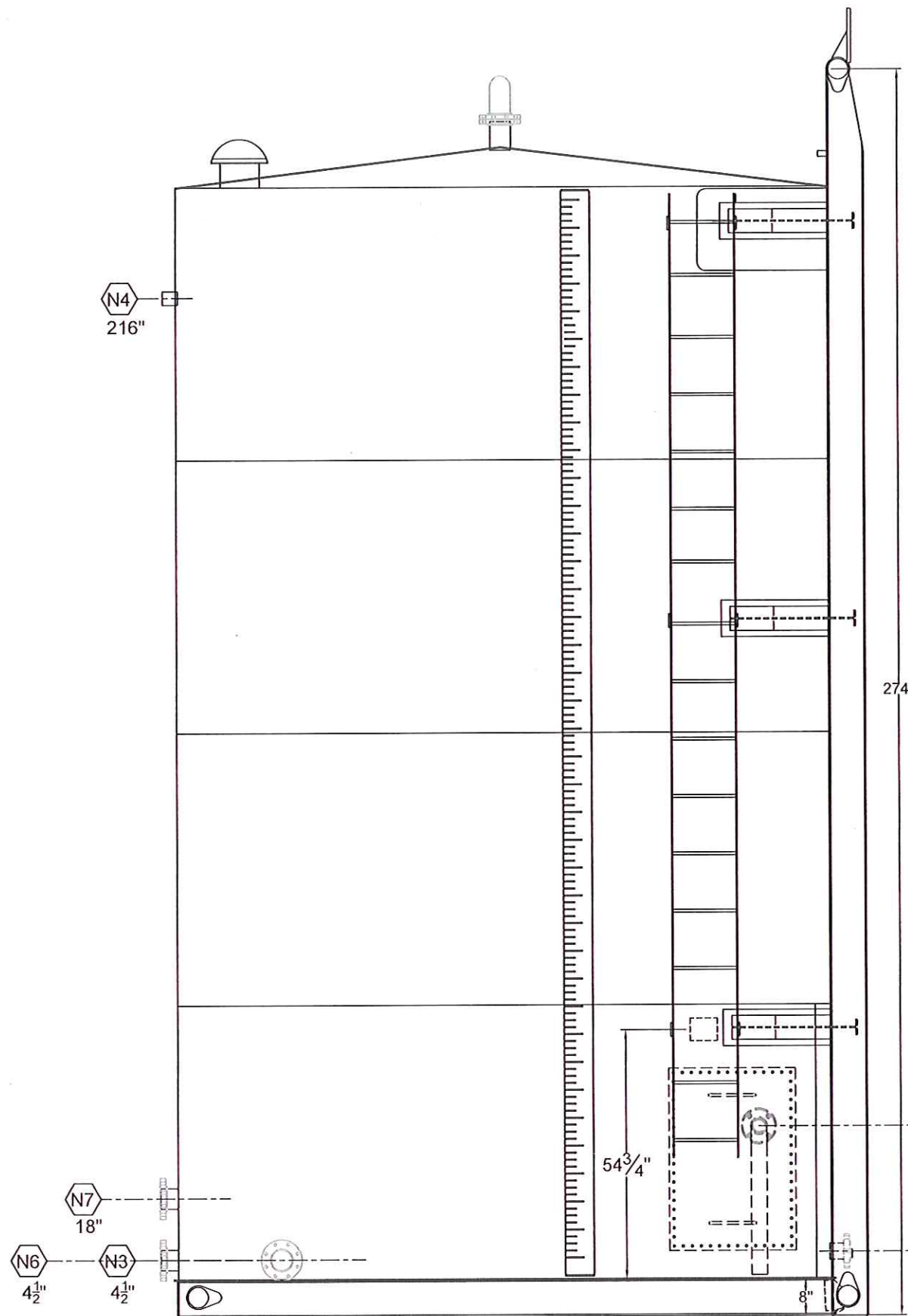
REV. #	DATE	DWG. BY	APPROVED BY

HIGHLAND PROJECTS LTD.

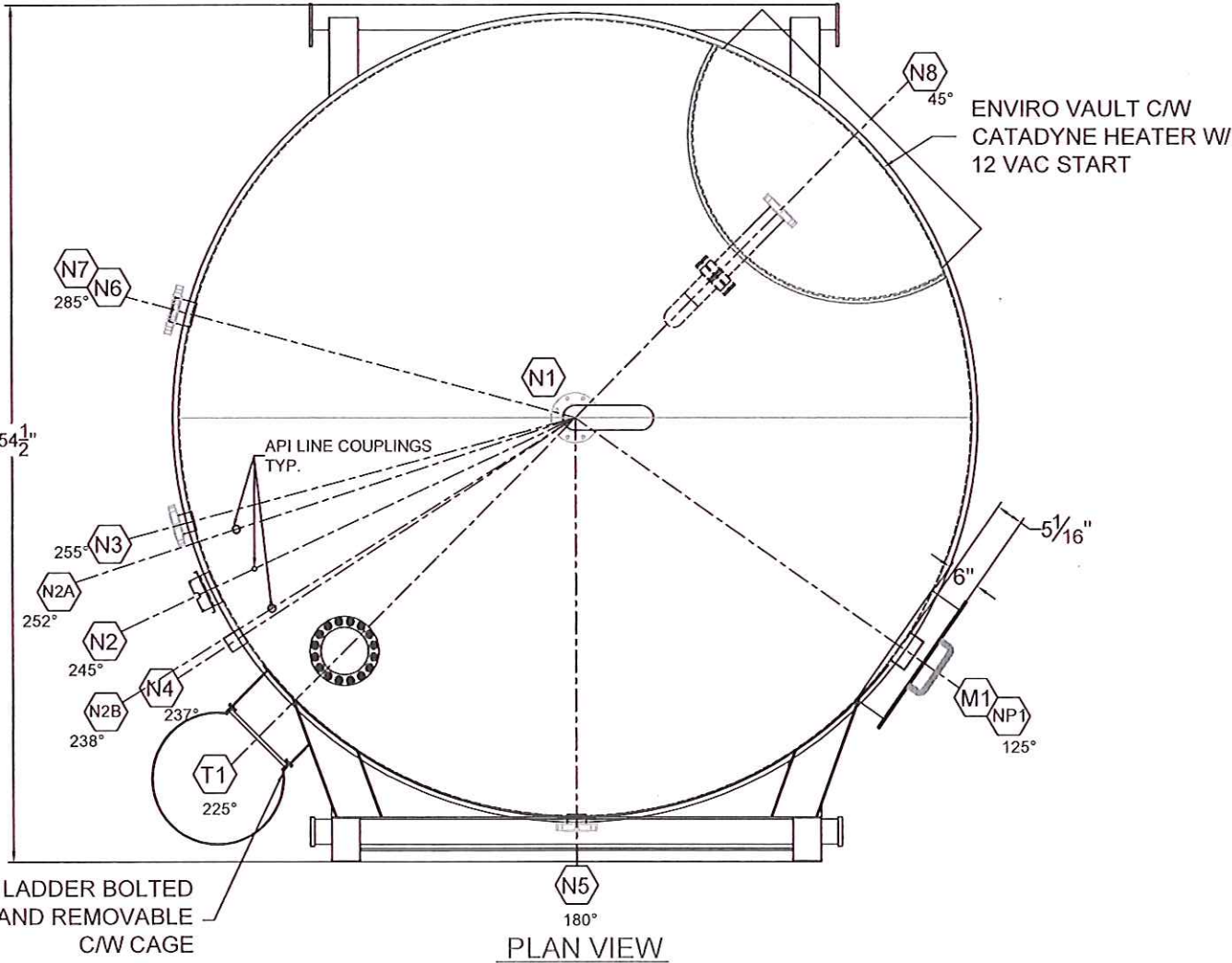
PROJECT:	400 BBL WATER STORAGE TANK	DATE:	OCTOBER 15, 2013
PRODUCED BY:	CST	APPROVED BY:	
DWG NO.:	226-7	DWG Name:	PLASMA PARTS

EXCELSIOR ENGINEERING
ORIENTATION ON RENTAL STYLE SKID
APPROX. EMPTY WEIGHT INCLUDING INSULATION 12,600LBS

ITEM	SIZE	SCH	CLASS	TYPE	SERVICE	ELEVATION FROM BOTTOM OF FLOOR	ORIENTATION	PROJ. TO FACE OF FLANGE
N1	4"	40	150	RFSO	VENT	ROOF	CENTER	6"
N2	2"	STD		COUPLING	LEVEL INDICATOR	ROOF	245°	4"
N2A	1 1/2"	STD		COUPLING	FLOAT GUIDE	ROOF	252°	4"
N2B	1 1/2"	STD		COUPLING	FLOAT GUIDE	ROOF	238°	4"
N3	4"	40	150	RFSO	INLET/OUTLET	4 1/2"	255°	4"
N4	2"		#3000	COUPLING	LSHH	216"	237°	2 1/2"
N5	3"	40	150	RFSO	DRAIN	6"	180°	2 1/2"
N6	3"	40	150	RFSO	LEVEL TRANSMITTER	4 1/2"	310°	4"
N7	4"	40	150	RFSO	OUTLET	18"	310°	4"
N8	3"	40	150	RFSO	TRUCK OUT	33 1/2"	45°	6"
M1	24"X36"	-	-	-	MANWAY	26" TO CL	125°	5"
T1	8"	-	-	-	THIEF HATCH	ROOF	225°	5"
NP1	5"x6"	-	-	-	NAME PLATE	54 3/4" CL	125°	3"



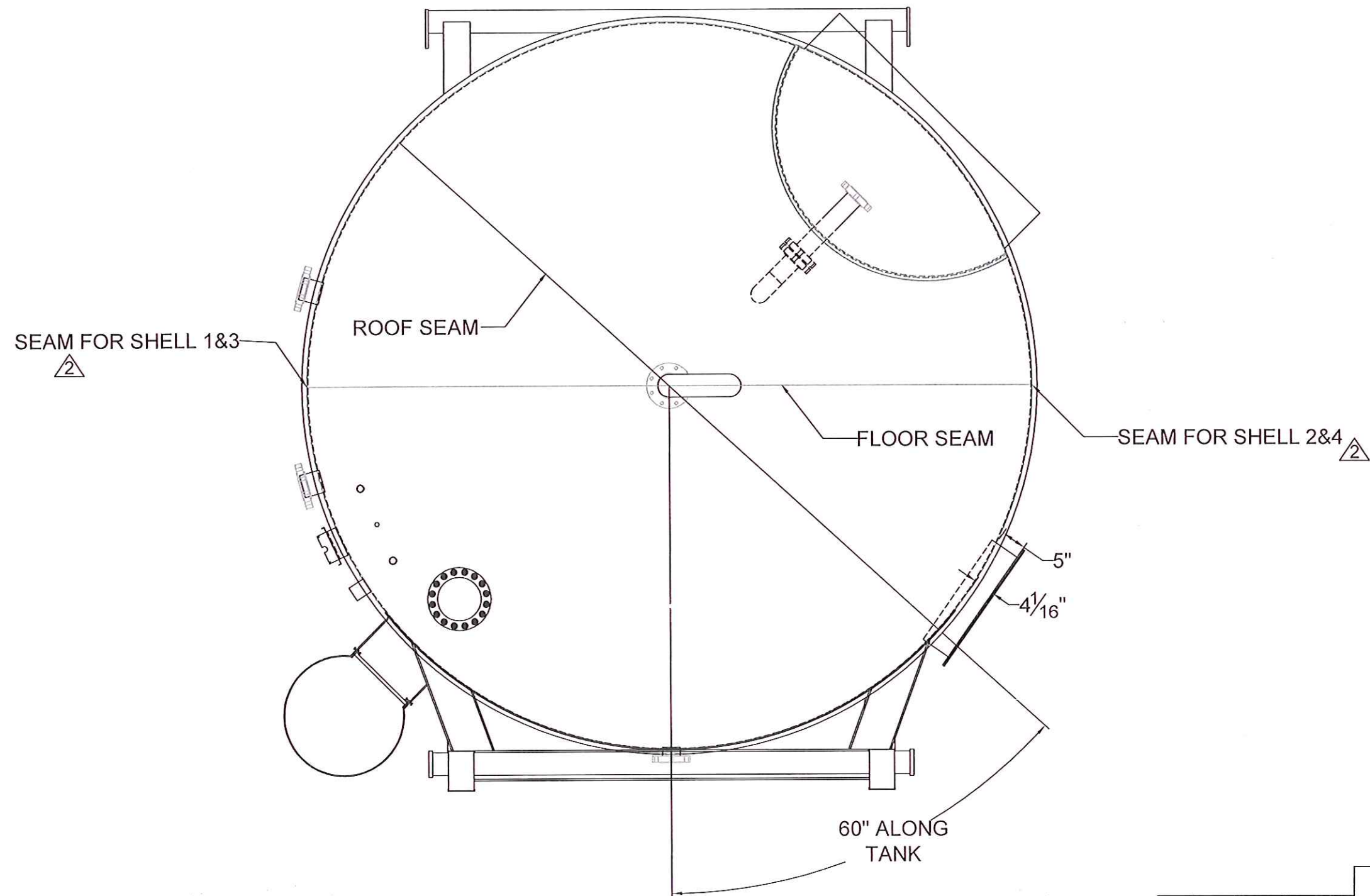
ELEVATION VIEW



PLAN VIEW

REV. #	DATE	DWG. BY	APPROVED BY
1	22/10/13	CST	
2	29/10/13	CST	
3	30/10/13	CST	
4	01/11/13	CST	

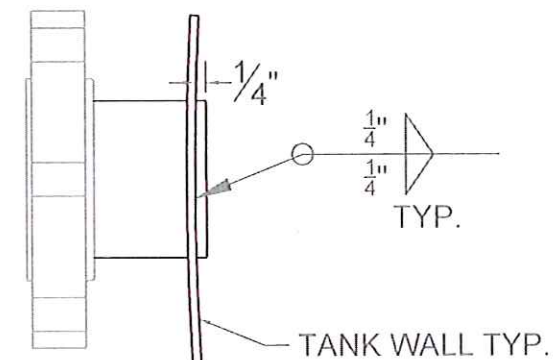
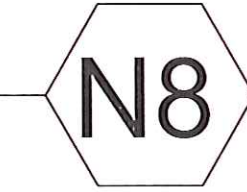
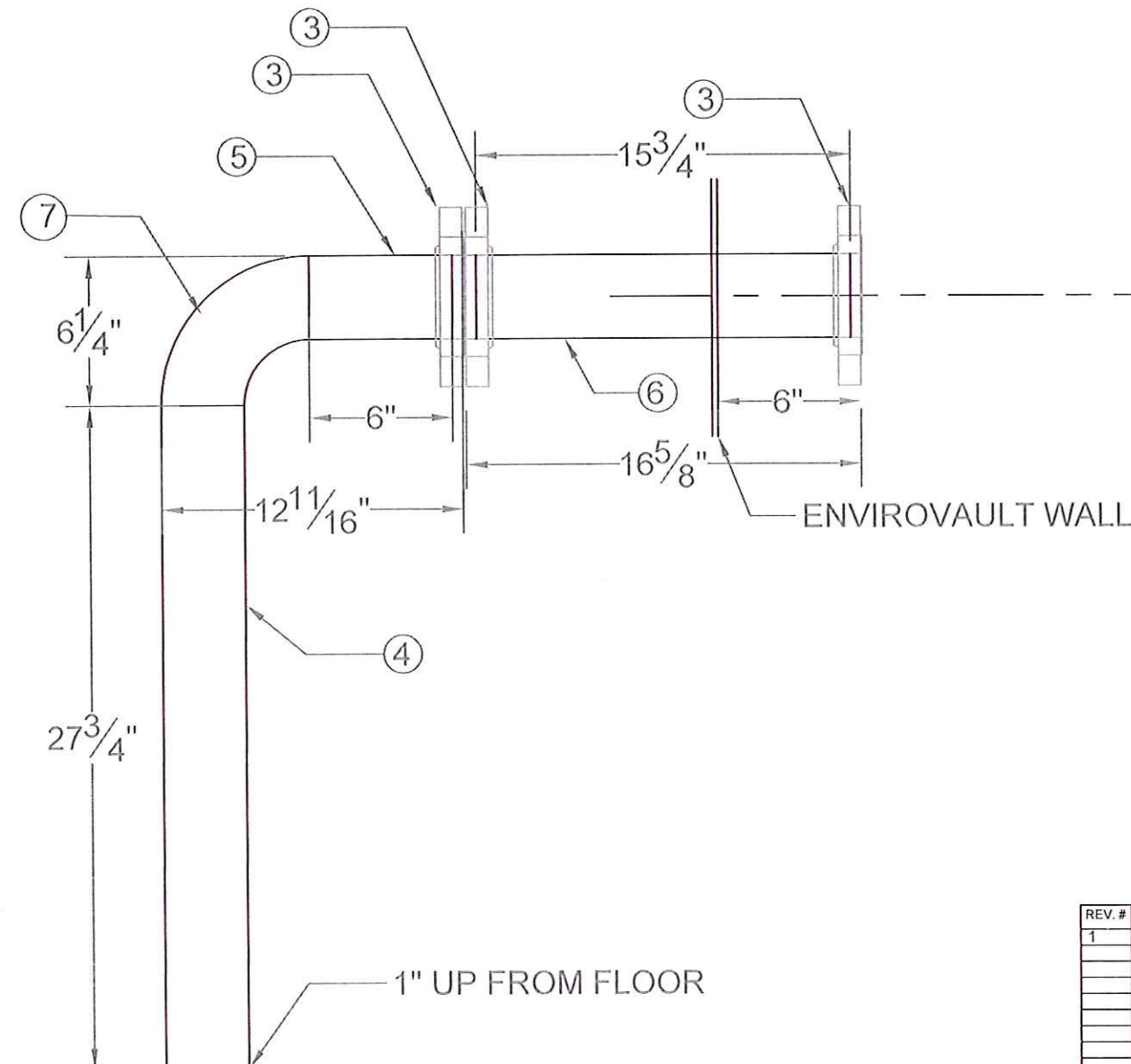
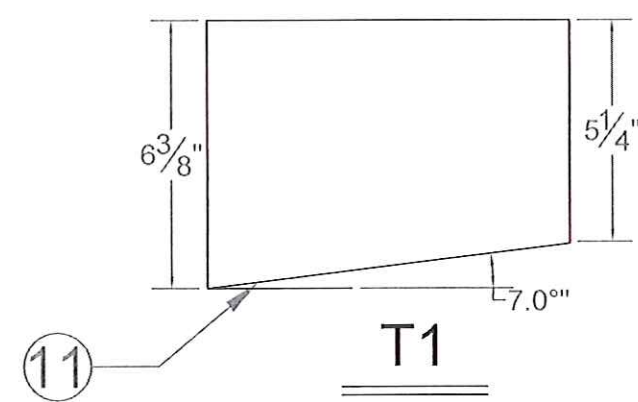
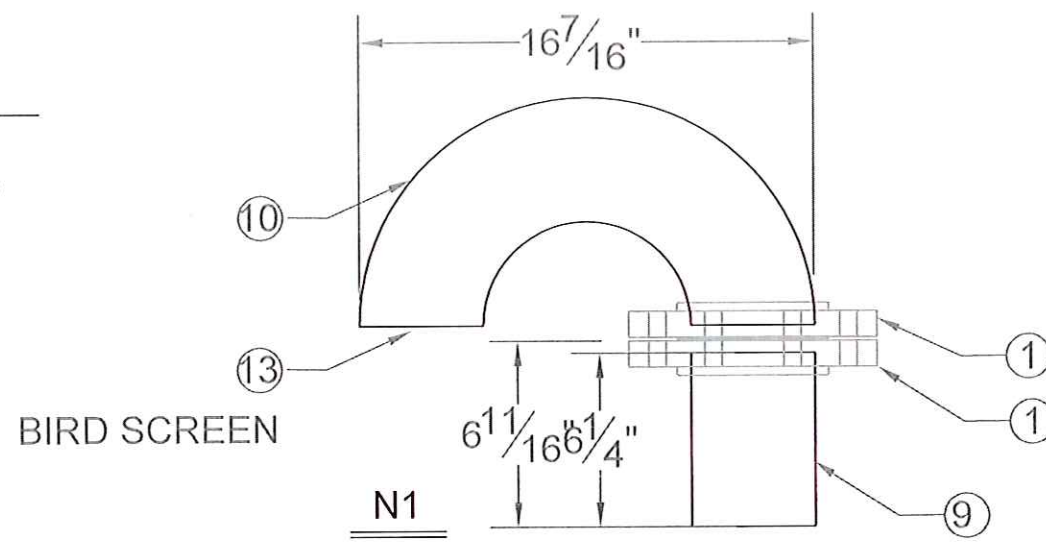
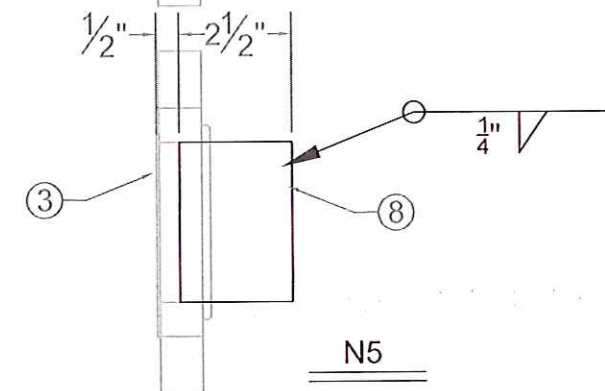
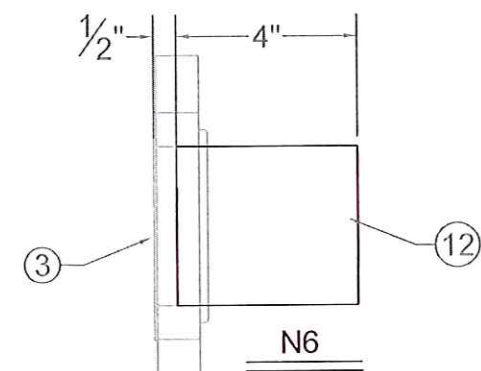
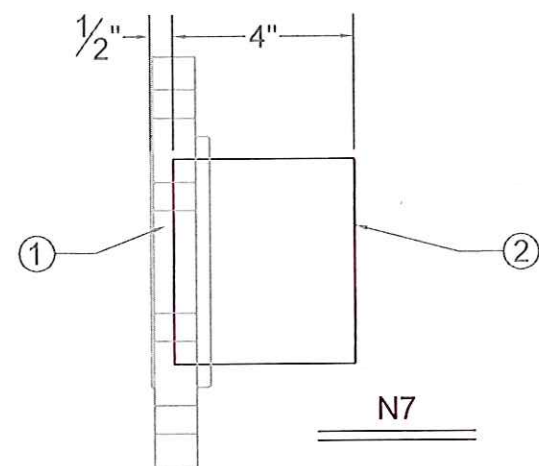
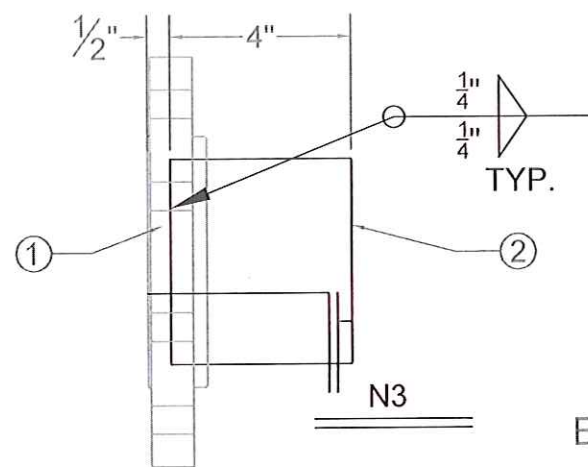
HIGHLAND PROJECTS LTD.			
PROJECT:		DATE:	
400 BBL WATER STORAGE TANK		SEPTEMBER 26, 2013	
PRODUCED BY:		APPROVED BY:	
CST			
DWG NO:		DWG Name:	
820-226-8		OVERVIEW COMPLETE WITH RENTAL STYLE SKID	



NOTES:
1).TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY
1	10/29/13	CST	
2	11/11/13	CST	

HIGHLAND PROJECTS LTD.	
PROJECT:	400 BBL WATER STORAGE TANK
DATE:	OCTOBER 25, 2013
PRODUCED BY:	CST
APPROVED BY:	
DWG NO:	820-226-10
DWG Name:	SHELL SEAM DETAIL



TOP VIEW TYP.
INSTALLATION

ITEM	MATERIAL	QTY	LENGTH
01	4" RFSO #150	4	
02	4" SCH 40 A106B SEAMLESS	2	4"
03	3" RFSO #150	5	
04	3" SCH 40 A106B SEAMLESS	1	27 3/4"
05	3" SCH 40 A106B SEAMLESS	1	6"
06	3" SCH 40 A106B SEAMLESS	1	15 3/4"
07	3" SCH 40 90° LR ELBOW	1	
08	3" SCH 40 A106B SEAMLESS	1	2 1/2"
09	4" SCH 40 A106B SEAMLESS	1	6 1/4"
10	4" SCH 40 180° LR ELBOW	1	
11	8" SCH 40 PIPE	1	6 3/8" LONG SIDE
12	3" SCH 40 A106B SEAMLESS	1	4"
13	9F EXPANDED METAL	1	4 1/4" Ø

ALL FLANGES TO BE
2-HOLED WHERE APPLICABLE

NOTES:
1).TOLERANCE 1/8" +-

REV. #	DATE	DWG. BY	APPROVED BY
1	10/30/13	CST	

HIGHLAND PROJECTS LTD.			
PROJECT:		DATE:	
400 BBL WATER STORAGE TANK		OCTOBER 25, 2013	
PRODUCED BY:		APPROVED BY:	
CST			
DWG NO.:		DWG Name:	
820-226-11		FITTING DETAILS	

ITEM	SIZE	SCH	CLASS	TYPE	SERVICE	ELEVATION FROM BOTTOM OF FLOOR	ORIENTATION	PROJ TO FACE OF FLANGE
N1	4"	40	150	RFSO	VENT	ROOF	CENTER	6"
N2	1"	STD		COUPLING	LEVEL INDICATOR	ROOF	245°	
N2A	1"	STD		COUPLING	FLOAT GUIDE	ROOF	252°	
N2B	1"	STD		COUPLING	FLOAT GUIDE	ROOF	238°	
N3	4"	40	150	RFSO	INLET/OUTLET	4"	300°	4"
N4	2"		#3000	COUPLING	LSH#1	216"	237°	2"
N5	3"	40	150	RFSO	DRAIN	6"	180°	2"
N6	3"	40	150	RFSO	LEVEL TRANSMITTER	4"	310°	4"
N7	4"	40	150	RFSO	OUTLET	18"	310°	4"
N8	3"	40	150	RFSO	TRUCK OUT	33"	45°	6"
M1	24"x36"	-	-	-	MANWAY	26" TO CL	125°	5"
T1	8"	-	-	-	THIEF HATCH	ROOF	225°	5"
NP1	5"x5"	-	-	-	NAME PLATE	54" CL	125°	3"

ALL PIPING INFORMATION
ON DWG #226-11

33¹/₄" UP FROM TOP OF FLOOR
TO CENTER OF FLANGE.

ENVIRO VAULT TO BE INSTALLED
IN TANK. DETAIL FOR INSTALLATION
AND FITTING AND HEATER
BRACKET PLACEMENT
ON DWG#226-14

SEE DRAWING
#226-11

DETAIL A
NAME PLATE BRACKET

SAME DISTANCE
FROM CENTER
TO EDGE OF TANK

1¹/₂" API LINE COUPLING CUT TO
THE ROOF ANGLE C/W ³/₁₆" BEVEL
HOLE IN ROOF TO BE ³/₄" Ø OD
AND COUPLING
CENTERED AND WELDED
OVER HOLE

³/₄" API LINE COUPLING CUT TO
THE ROOF ANGLE C/W ¹/₈" BEVEL
HOLE IN ROOF TO BE ³/₄" Ø OD
AND COUPLING
CENTERED AND WELDED
OVER HOLE

1¹/₂" API LINE COUPLING CUT TO
THE ROOF ANGLE C/W ³/₁₆" BEVEL
HOLE IN ROOF TO BE ³/₄" Ø OD
AND COUPLING
CENTERED AND WELDED OVER HOLE

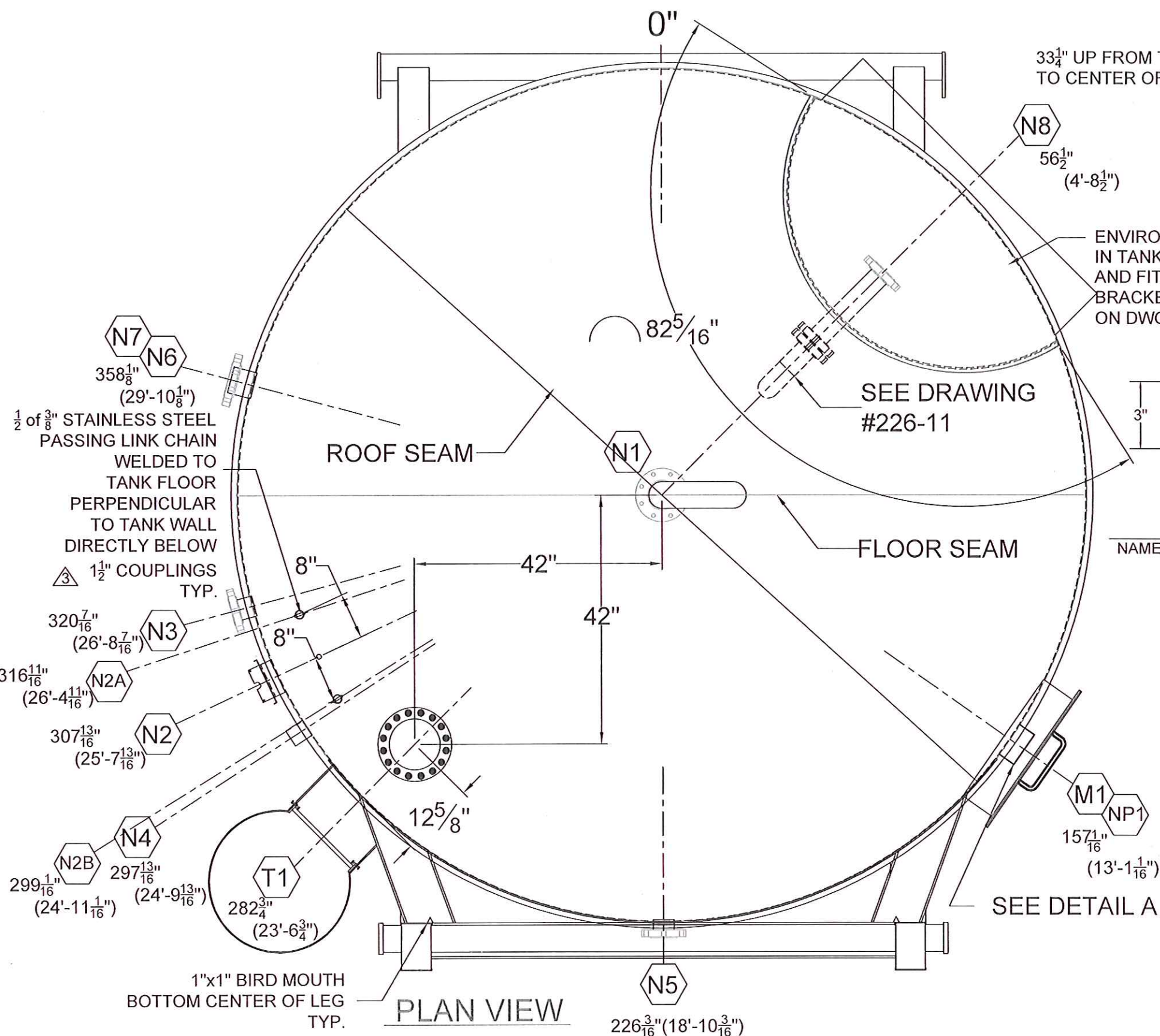
NOTES:
1).TOLERANCE 1/8" +-

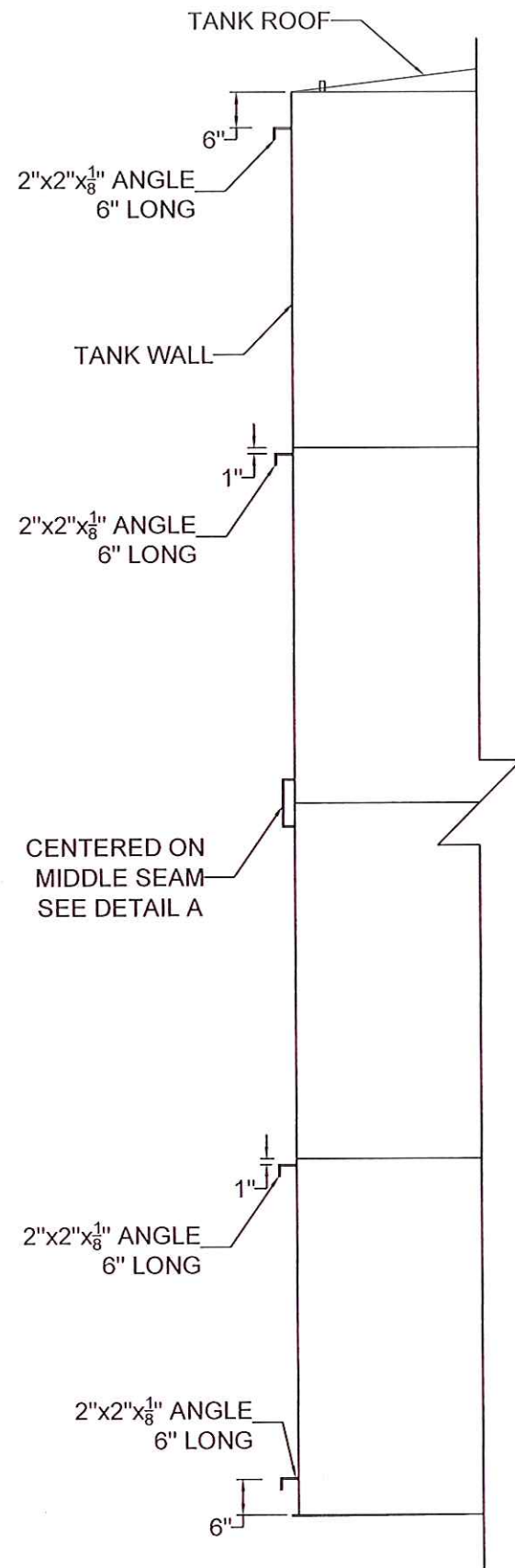
COUPLING DETAIL

HIGHLAND PROJECTS LTD.

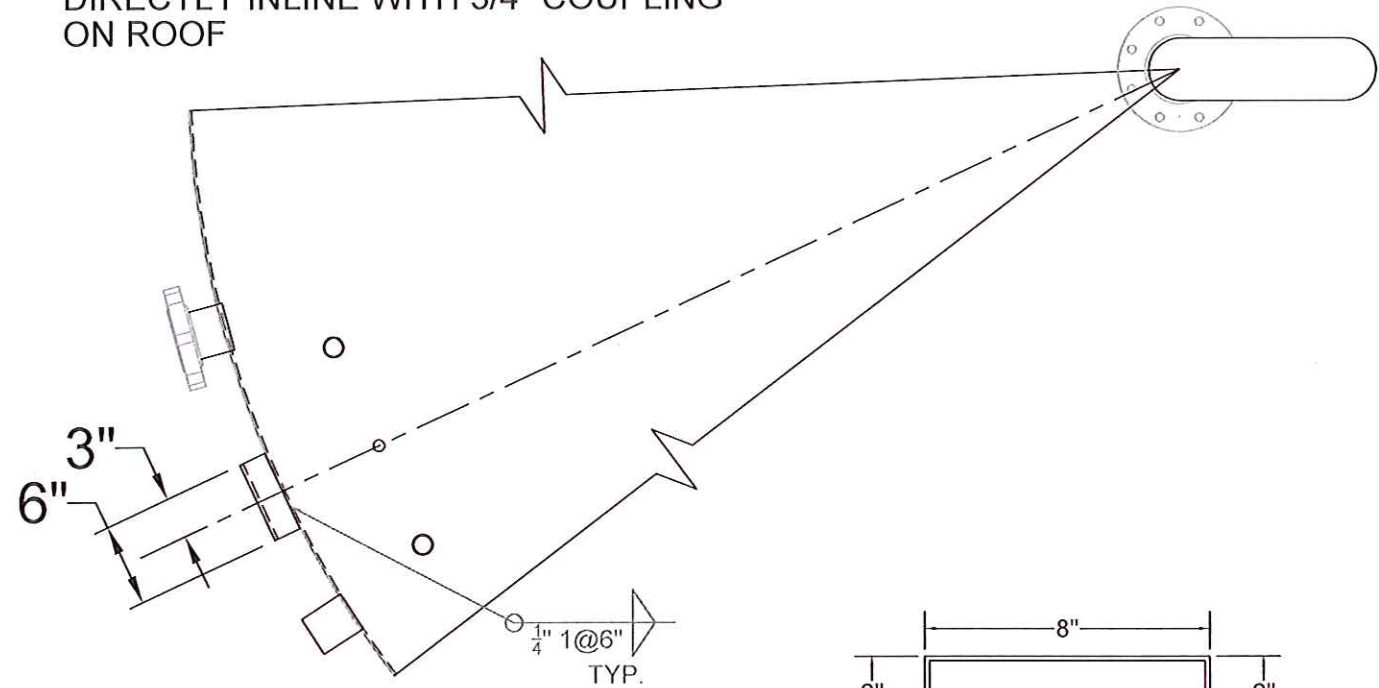
REV. #	DATE	DWG. BY	APPROVED BY
1	30/10/13	CST	
2	04/11/13	CST	
3	18/11/13	CST	

PROJECT:	400 BBL WATER STORAGE TANK	DATE:	OCTOBER 26, 2013
PRODUCED BY	CST	APPROVED BY	
DWG NO.	820-226-12	DWG Name:	ORIENTATION





NOTE: BRACKET'S TO LINE UP
DIRECTLY INLINE WITH 3/4" COUPLING
ON ROOF



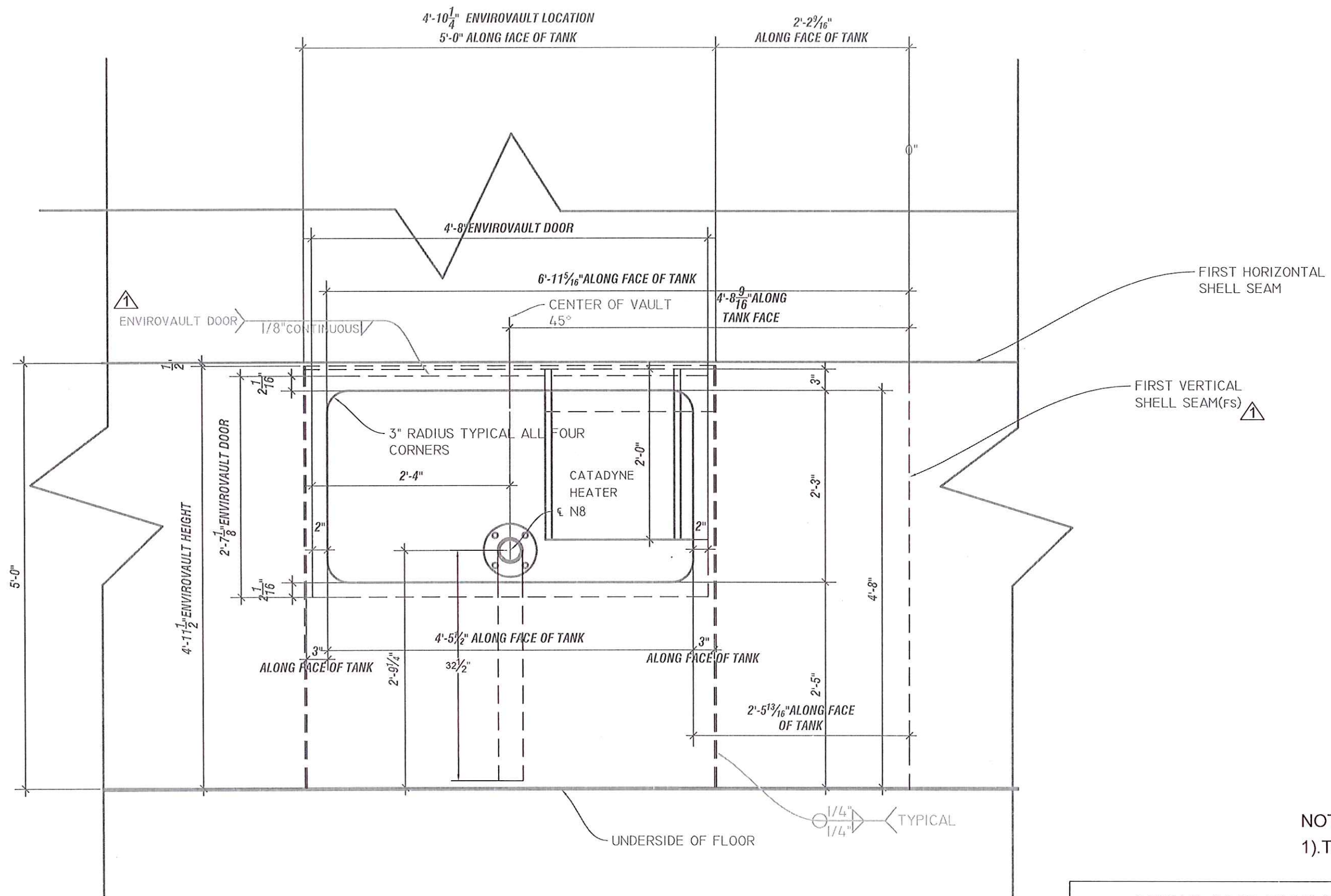
TOP VIEW

NOTES:
1). TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY

HIGHLAND PROJECTS LTD.

PROJECT:	400 BBL WATER STORAGE TANK	DATE:	OCTOBER 30, 2013
PRODUCED BY	CST	APPROVED BY	
DWG NO	820-226-13	DWG Name:	GAUGE BOARD TABS



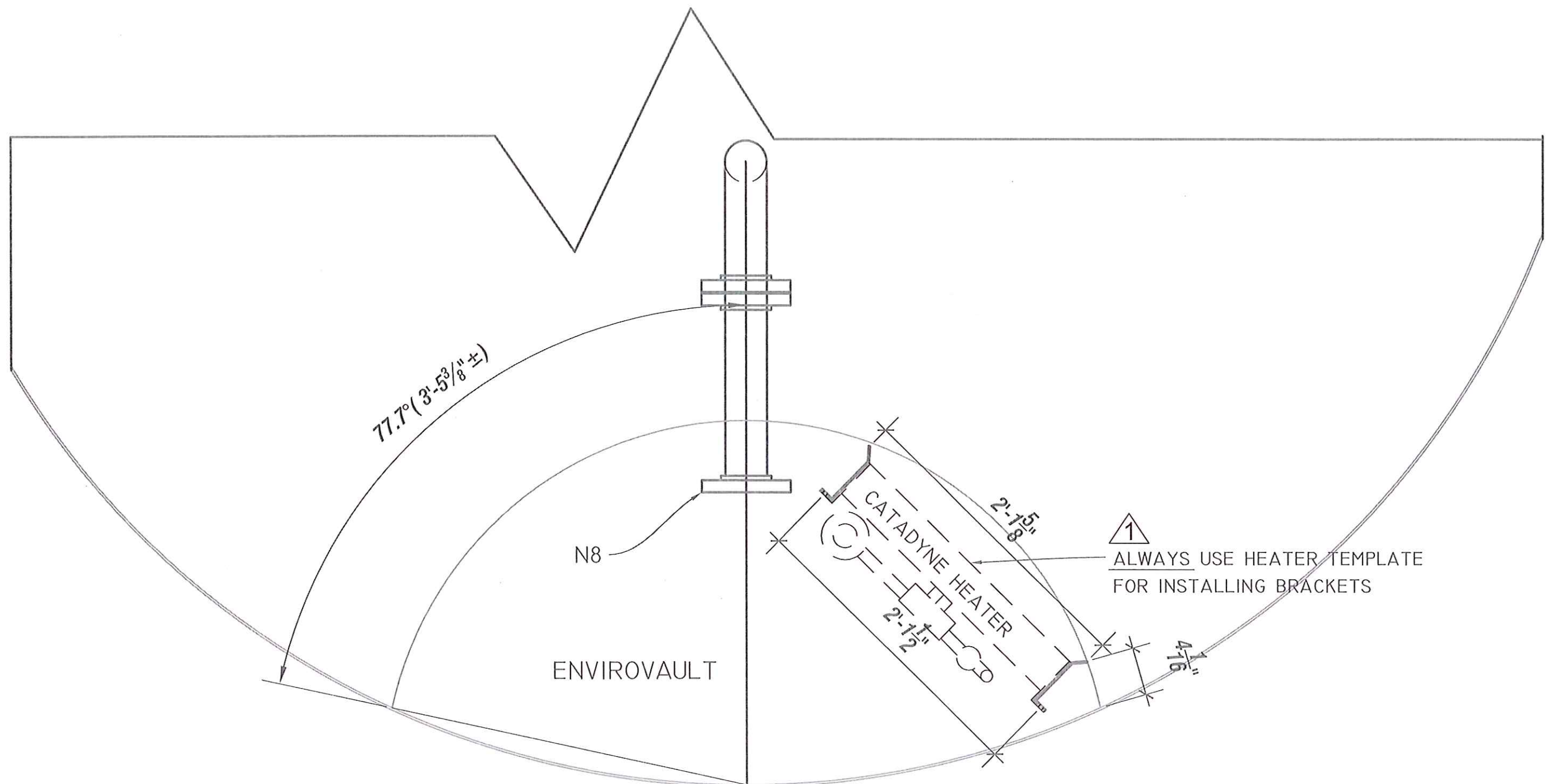
NOTES:
1). TOLERANCE 1/8" +/-

ENVIROVAULT & DOOR OPENING LOCATION

REV. #	DATE	DWG BY	APPROVED BY
1	11/15/13	CST	

HIGHLAND PROJECTS LTD.

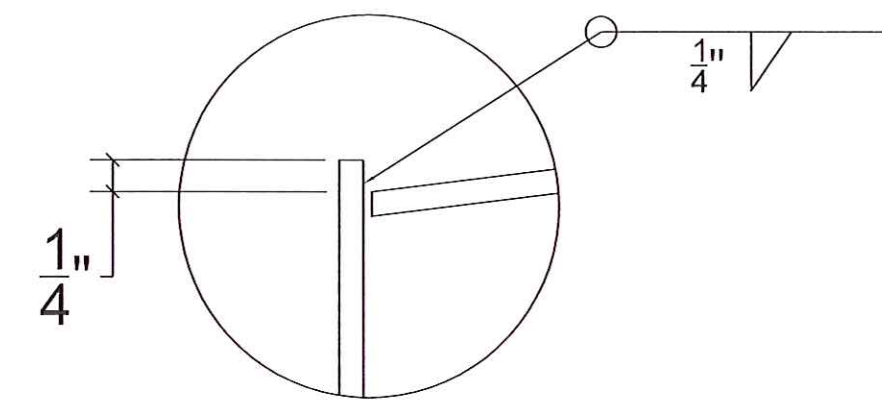
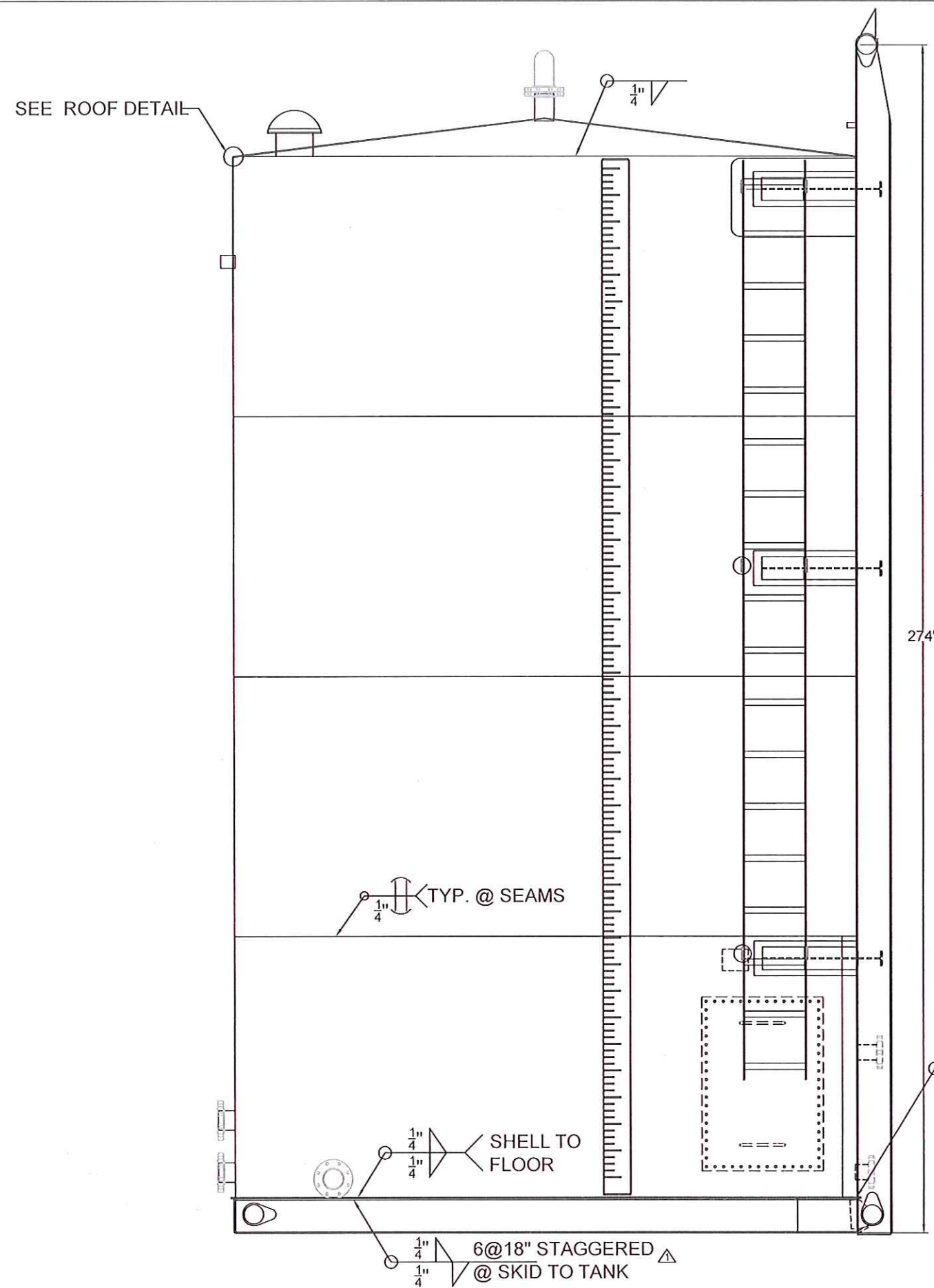
PROJECT	400 BBL WATER STORAGE TANK	DATE	NOVEMBER 4, 2013
PRODUCED BY	GDS	APPROVED BY	
DWG NO.	820-226-14	DWG Name	ENVIROVAULT INSTALLATION



NOTES:
1). TOLERANCE 1/8" ±

REV. #	DATE	DWG. BY	APPROVED BY
1	18/11/13	18/11/13	

HIGHLAND PROJECTS LTD.	
PROJECT: 400 BBL WATER STORAGE TANK	DATE: OCTOBER 30, 2013
PRODUCED BY: CST	APPROVED BY:
DWG NO: 820-226-14A	DWG Name: ENVIROVAULT INSTALLATION TOP VIEW

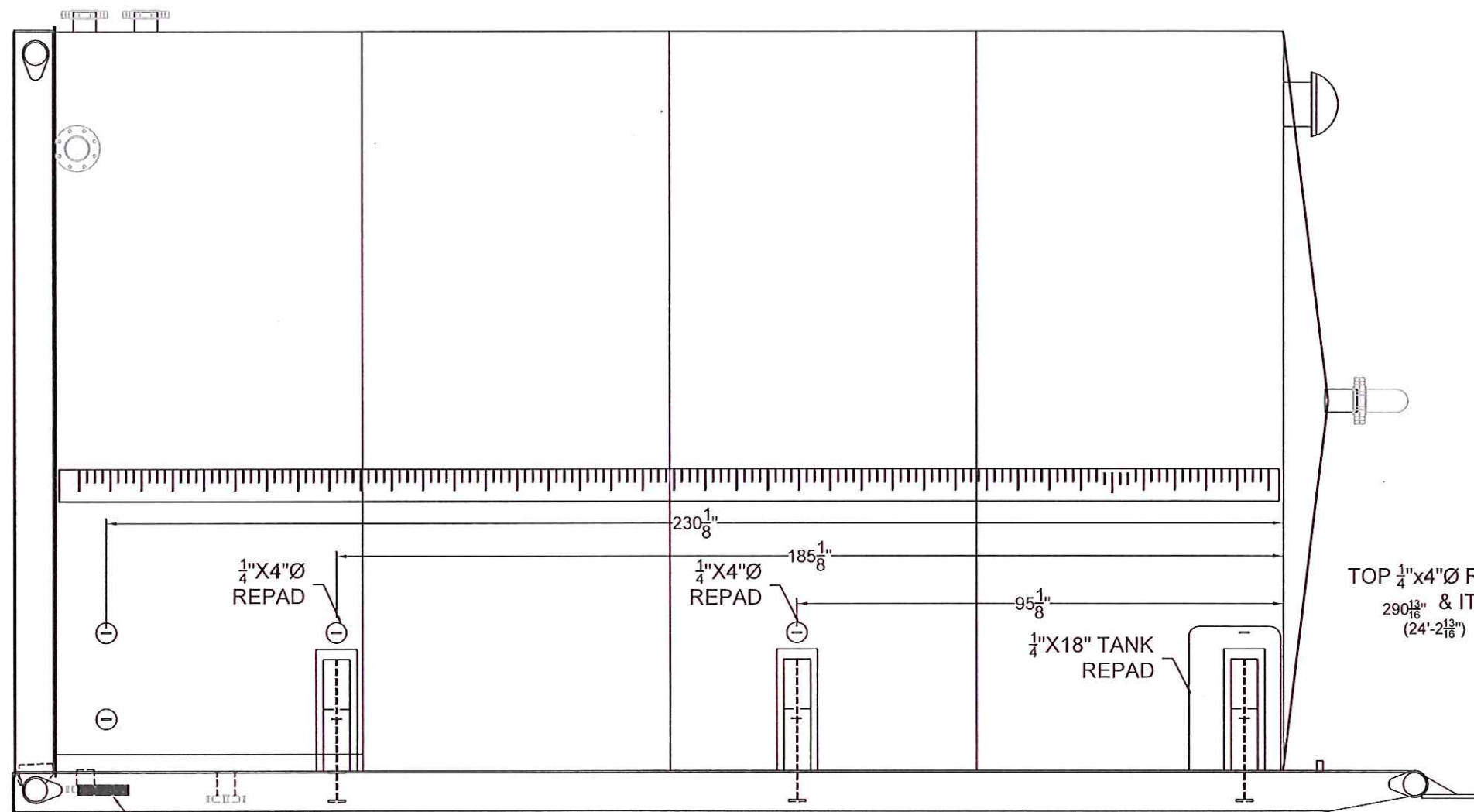


ROOF DETAIL

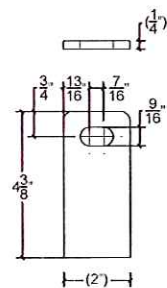
NOTES:
1).TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY
1	11/04/13	CST	

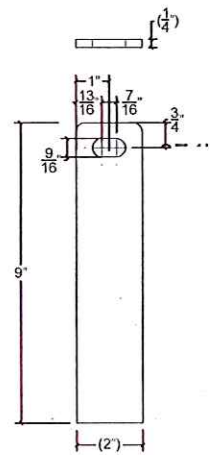
HIGHLAND PROJECTS LTD.	
PROJECT: 400 BBL WATER STORAGE TANK	DATE: OCTOBER 30, 2013
PRODUCED BY: CST	APPROVED BY:
DWG NO: 820-226-15	DWG Name: TANK WELD DETAIL



SERIAL NUMBER TO
BE WELDED ON **INSIDE** WEB
CENTERED STARTING 6" BACK
FROM EDGE OF PULL
PIPE

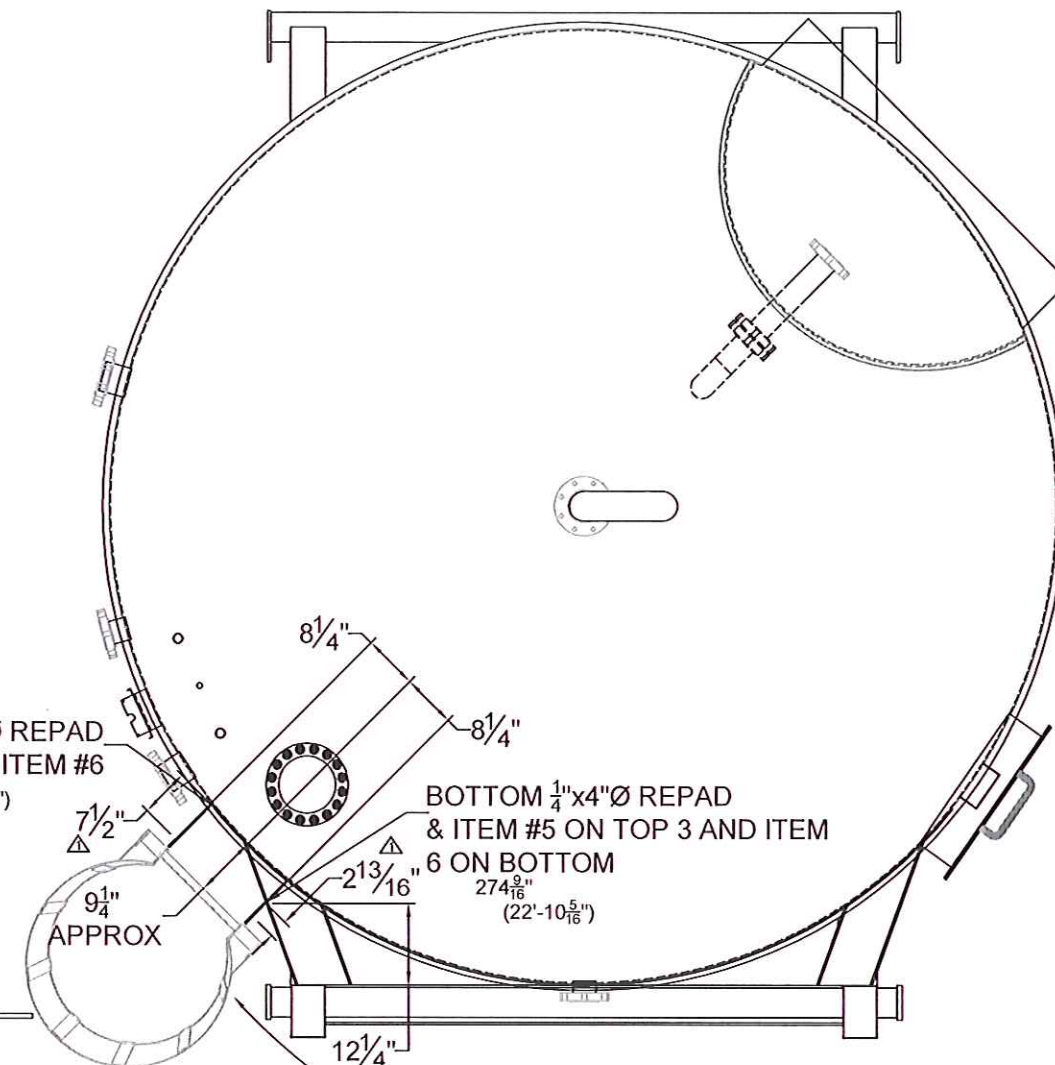


DETAIL ITEM 5



DETAIL ITEM 6

TOP 1"X4"Ø REPAD
290 $\frac{13}{16}$ " & ITEM #6
(24'-2 $\frac{13}{16}$ ")



ROTATE FRONT LARGE SADDLE 1"
TOWARDS LADDER SIDE

PLAN VIEW

NOTES:
1).TOLERANCE 1/8" +-

REV. #	DATE	DWG. BY	APPROVED BY
1	11/06/13	11/06/13	
2	07/11/13	CST	
3	08/11/13	CST	

HIGHLAND PROJECTS LTD.

PROJECT: 400 BBL WATER STORAGE TANK

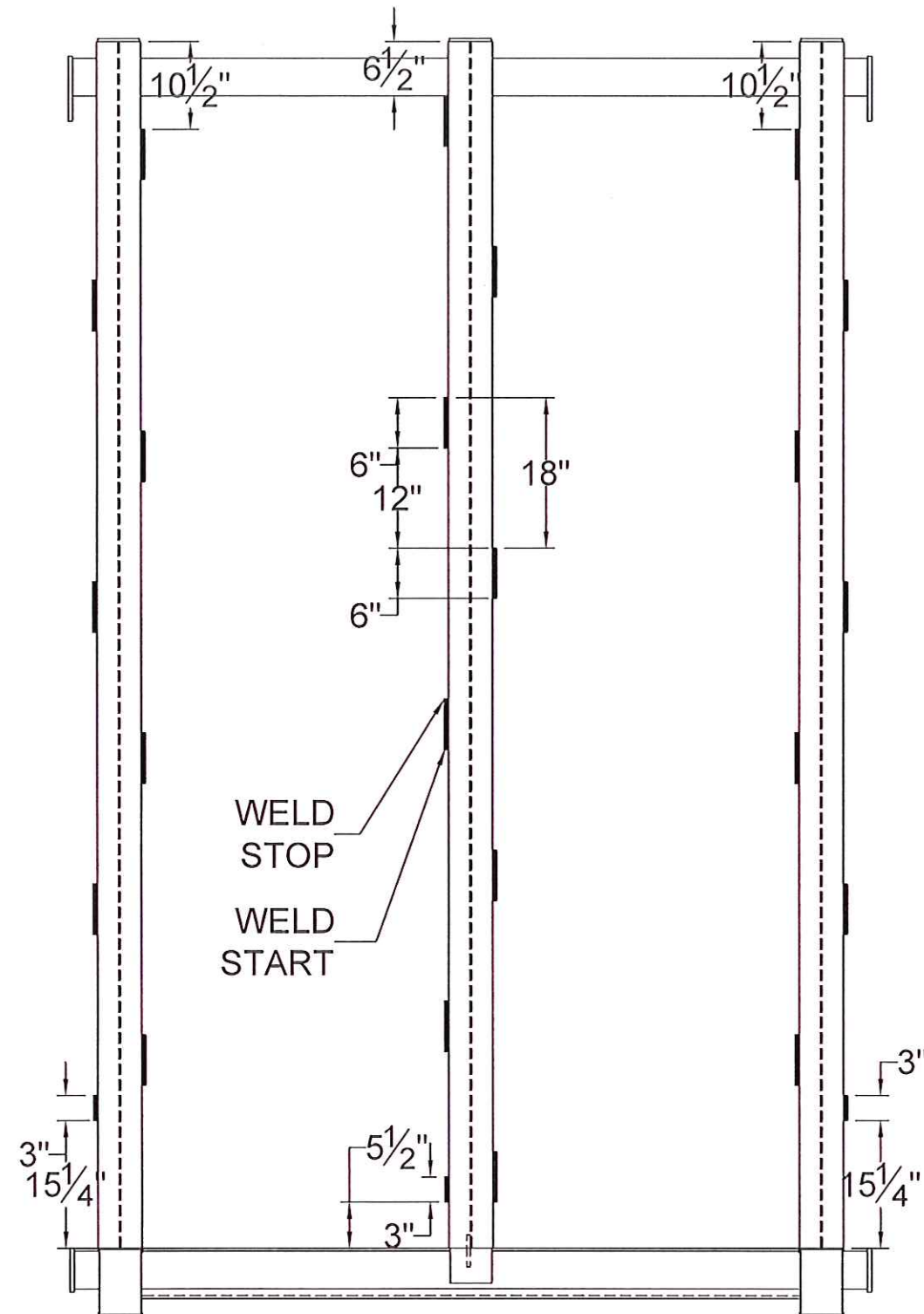
DATE: NOVEMBER 2, 2013

PRODUCED BY: CST

APPROVED BY:

DWG NO: 820-226-16

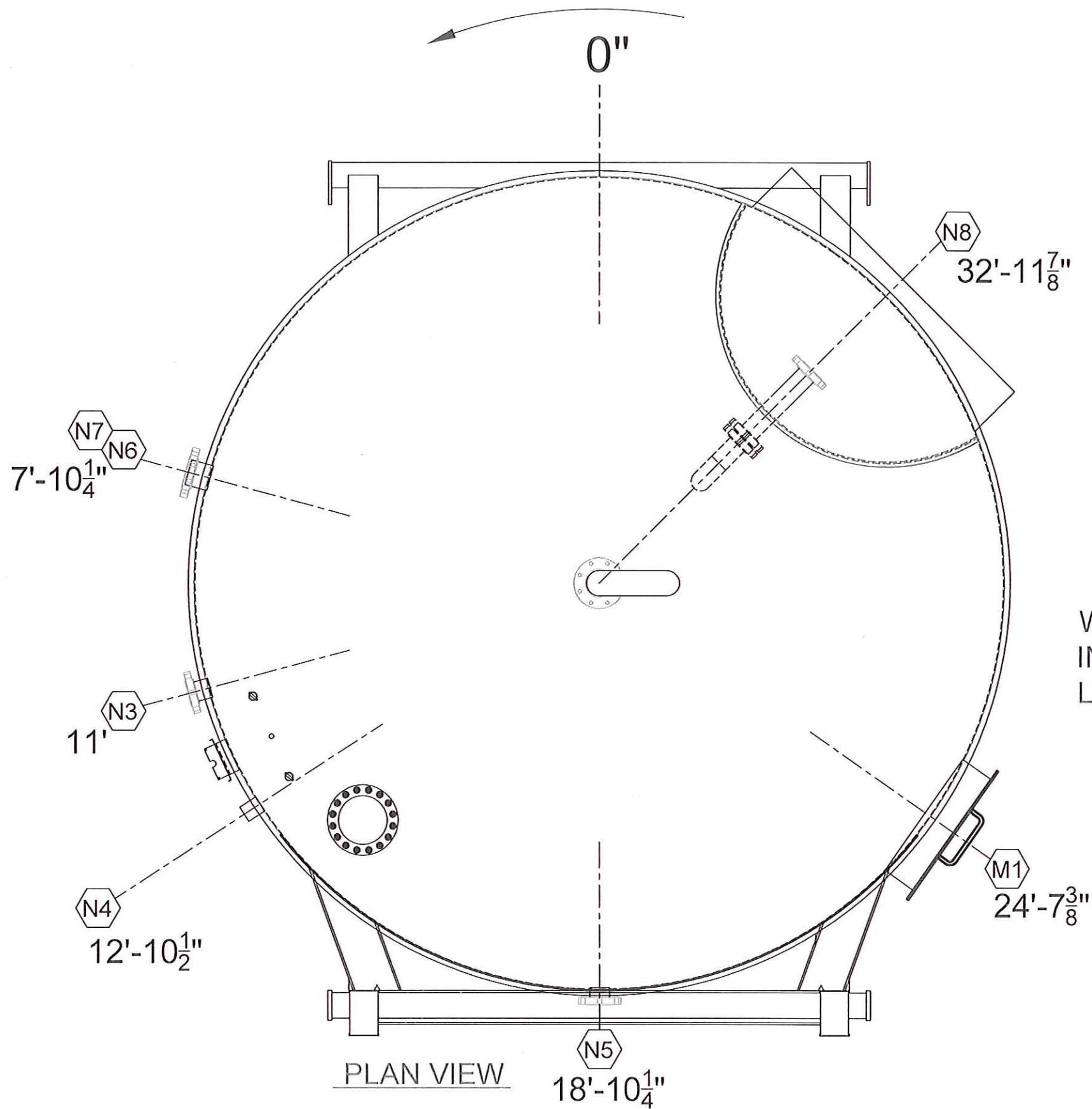
DWG Name: LADDER REPAD DETAIL



NOTES:
1).TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY

HIGHLAND PROJECTS LTD.			
PROJECT: 400 BBL WATER STORAGE TANK			DATE: NOVEMBER 4, 2013
PRODUCED BY: CST		APPROVED BY:	
DWG NO. 820-226-17	DWG Name: BACK SKID WELD DETAIL		



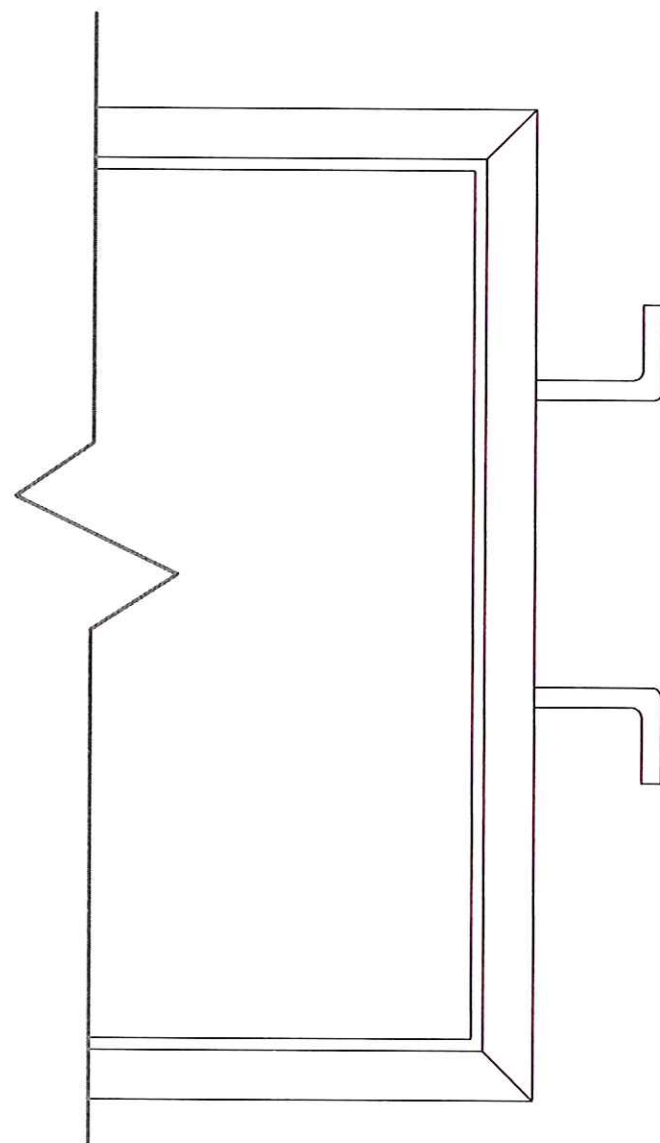
ITEM	SIZE	ELEVATION FROM BOTTOM OF FLOOR	ORIENTATION	COMPLETED
N3	4" RFSO	4 $\frac{1}{2}$ "	11'	
N4	2" #3000 COUPLING	216"	12'-10 $\frac{1}{2}$ "	
N5	3" RFSO #150	6"	18'-10 $\frac{1}{4}$ "	
N6	3" RFSO #150	4 $\frac{1}{2}$ "	7'-10 $\frac{1}{4}$ "	
N7	4" RFSO #150	18"	7'-10 $\frac{1}{4}$ "	
N8	3" RFSO #150	33 $\frac{1}{2}$ "	32'-11 $\frac{7}{8}$ "	
M1	24"X36" MANWAY	26" TO CL	24'-7 $\frac{3}{8}$ "	

WHEN STANDING
IN FRONT OF TANK
LAYOUT IS ON THE LEFT SIDE

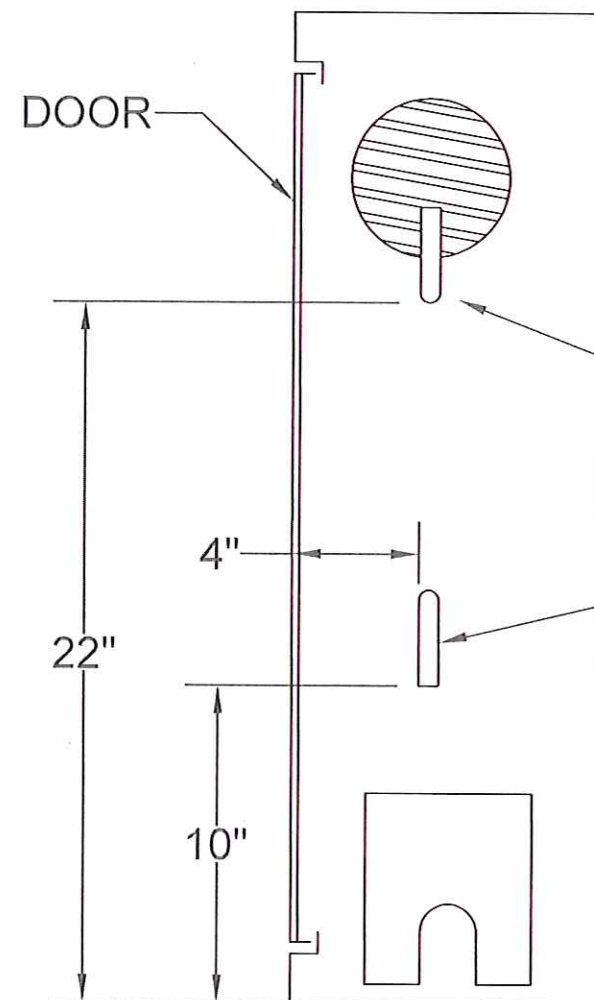
NOTES:
1).TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY

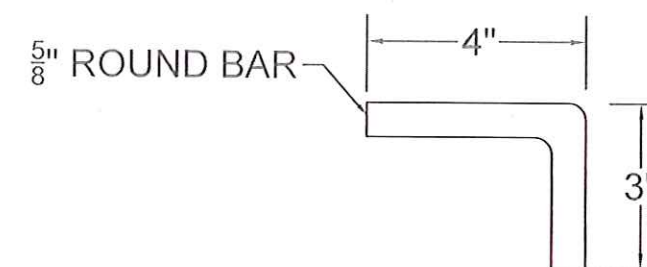
HIGHLAND PROJECTS LTD.			
PROJECT: 400 BBL WATER STORAGE TANK			DATE: NOVEMBER 13, 2013
PRODUCED BY: CST		APPROVED BY:	
DWG NO: 820-226-18	DWG Name: SUB ARC LAYOUT		



ENVIROVAULT DOOR
FRONT VIEW



ENVIROVAULT DOOR
RIGHT SIDE VIEW



DETAIL A



5/8" ROUND BAR
SEE DETAIL A

NOTES:
1).TOLERANCE 1/8" +/-

REV. #	DATE	DWG. BY	APPROVED BY

HIGHLAND PROJECTS LTD.			
PROJECT: 400 BBL WATER STORAGE TANK			DATE: NOVEMBER 13, 2013
PRODUCED BY: CST		APPROVED BY:	
DWG NO: 820-226-19	DWG Name: CABLE WRAP DETAIL		