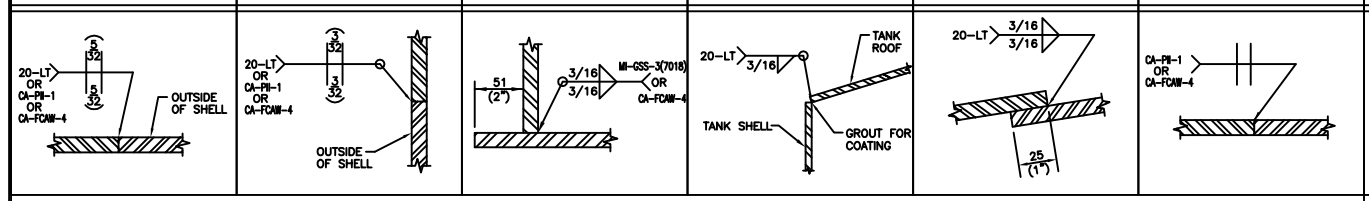
FOREMOST STANDARD TANK WELD DETAILS (N.T.S.)



CUSTOMER SPECIFICATIONS

DESIGN CODE: API–12F (MODIFIED)
SERIAL NO: 032010–1
DESIGN PRESSURE: 3.45 Kpag(8 oz.) PRESS. / 0.4 oz. VAC.
DESIGN TEMPERATURE: –37°C(–35°F) TO 93°C(200°F)
OPERATING TEMPERATURE:
SERVICE: WATER STORAGE
OPERATING LEVEL:
CORROSION ALLOWANCE: NONE
OTHER:

FINISHING

INTERNAL: SANDBLAST TANK SHELL, FLOOR & ROOF TO SSPC–SP6 AND APPLY 12–14mills DFT DEVOE 253 UTILIZING A TWO–PART SYSTEM.

NOZZLE PIPE THROUGH THE SHELL & ROOF INTERNAL & EXTERNAL FLANGE FACES WILL BE COATED AS PER STANDARD PRACTICE. FLANGE FACES ONLY 1 COAT OF PRODUCT.

EXTERNAL: NONE

TESTING: AIR TEST TO 12oz. DIESEL TEST FLOOR TO SHELL JOINT FIRST PASS. MAG PARTICLE COMPLETED INNER FLOOR TO SHELL FILLET WELD FOR TOE CRACKS. SPOT X–RAY SHELL SEAMS. VACUUM BOX TEST FLOOR SEAM.

INSULATION: APPLY 38(1 1/2") SPRAY URETHANE FOAM INSULATION C/W ONE COAT BLACK ELASTOMERIC SEALER.

LADDER: APPLY BLACK ELASTOMERIC SEALER.

NOZZLE SCHEDULE

MK	NO	SIZE	SCH	RATE	TYPE	PROJECTION INT.	PROJECTION EXT.	REPAD YES	REPAD NO	DESCRIPTION
N1	1	114 / 4"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"		✓	INLET
N2	1	114 / 4"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"		✓	OUTLET
N3	1	114 / 4"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"	✓		SPARE C/W BLIND
N4	1	89 / 3"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"	✓		TRUCK OUT
N5	1	89 / 3"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"	✓		LEVEL GAUGE
N6	1	273 / 10"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"		✓	VENT C/W MUSHROOM CAP
N7	1	114 / 4"	STD	CLASS 150	RFWN	25 / 1"	203 / 8"		✓	SPARE C/W BLIND (LT)
N8	1	114 / 4"	STD	CLASS 150	RFWN	13 / 1/2"	152 / 6"	✓		LEVEL SWITCH C/W 3" S.S. HUB BLIND
N9	1	114 / 4"	STD	CLASS 150	RFWN	13 / 1/2"	152 / 6"	✓		LEVEL SWITCH C/W 2" S.S. HUB BLIND AND MK#19
C1	1	38 / 1 1/2"	–	3000#	FULL CPLG	HALF	HALF		✓	LEVEL INDICATOR C/W GAUGEBOARD
C2 a,b	2	32 / 1 1/4"	–	3000#	FULL CPLG	HALF	HALF		✓	GAUGEBOARD FLOAT GUIDEWIRES
TH	1	219 / 8"	STD	–	FAB'D	76 / 1 1/16"	152 / 6"		✓	THIEF HATCH NOZZLE C/W ENVIROO 660 SET AT 8oz. PRESS/0.4oz. VAC.
M1	1	610 x 1219 / 2'–0" x 4'–0"	–	API	FAB'D	25 / 1"	102 / 4"		✓	SHELL MANWAY C/W SPLIT COVER

MATERIAL LIST

MATERIAL REQUIREMENTS

M (MTR'S): MTR's REQUIRED AND MATERIAL IDENTIFIED AS PER Q.C. MANUAL
I (IMPACT TESTING): NONE
C (CHEMISTRY): NONE

MK	QTY	PART NO.	DESCRIPTION	REF. DWG.	MATERIAL	WT	MAT REQ
1	1	2954	FLOOR PLATE 1/4" THK. x 15'–7 1/2" DIA.	–	G40.21–38W	1958	M
2	3	2939	PLATE 3/16" THK. x 8'–0" x 47'–11 1/2" LG.	–	G40.21–38W	8817	M
3	2	2426	ROOF PLATE (HALF) 3/16" THK. x 15'–5 13/16" FLAT DIA.	–	G40.21–38W	1431	M
4							
5	1 SET	–	NOZZLE DETAILS	T–032010–D102	–	402	
6	4	1494	TANK HAULING PADS	–	–	136	
7	2	–	LIFTING LUG 1/2" THK.	T–032010–A104	SA–516–70N	30	
8	1	4276	TAILING LUG C/W REPAD (LIGHT ASS'Y)	–	–	27	
9	1	2888	LADDER 27'–0 LG. C/W 20'–0" CAGE	–	–	316	
10	1	2896	NAMEPLATE BRACKET	–	–	5	
11	1	–	NAMEPLATE	T–032010–A105	S.S.	1	
12	1	1221 1492	SHELL MANWAY 2' x 4' C/W SPLIT COVER PLATE	–	–	202	
13	4	2533	TANK ROOF SAFETY HARNESS LUG	–	–	1	
14	1	–	LEVEL INDICATOR ASSEMBLY C/W METRIC BOARD, FLOAT, GUIDE WIRES, FLOOR CLIPS, CABLE TIGHTENERS & MISC. HARDWARE	T–032010–B107	–	107	
15	1	–	ENVIRO–VAULT WALL/ROOF DETAILS (5'–0" x 5'–0" HIGH VAULT)	T–032010–A103	–	550	
16	1	–	ENVIRO–VAULT DOOR ASS'Y	T–032010–C106	–	99	
17	1	–	CATADYNE HEATER 12"x24" 12V, 12000 BTU C/W WIRING PACKAGE INSTALLED IN ENVIRO–VAULT	–	–	21	
18	1	9800	BASE SKID 750 BBL TANK	–	–	2076	
19	1	11931	SOR LEVEL SWITCH C/W EXTENSION ARM (SHIP LOOSE)	–	–	3	
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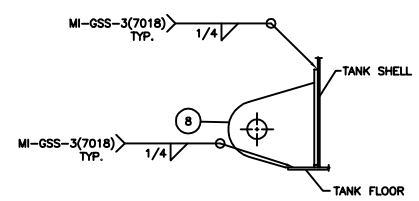
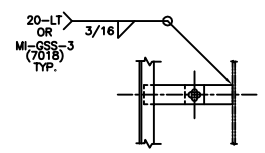
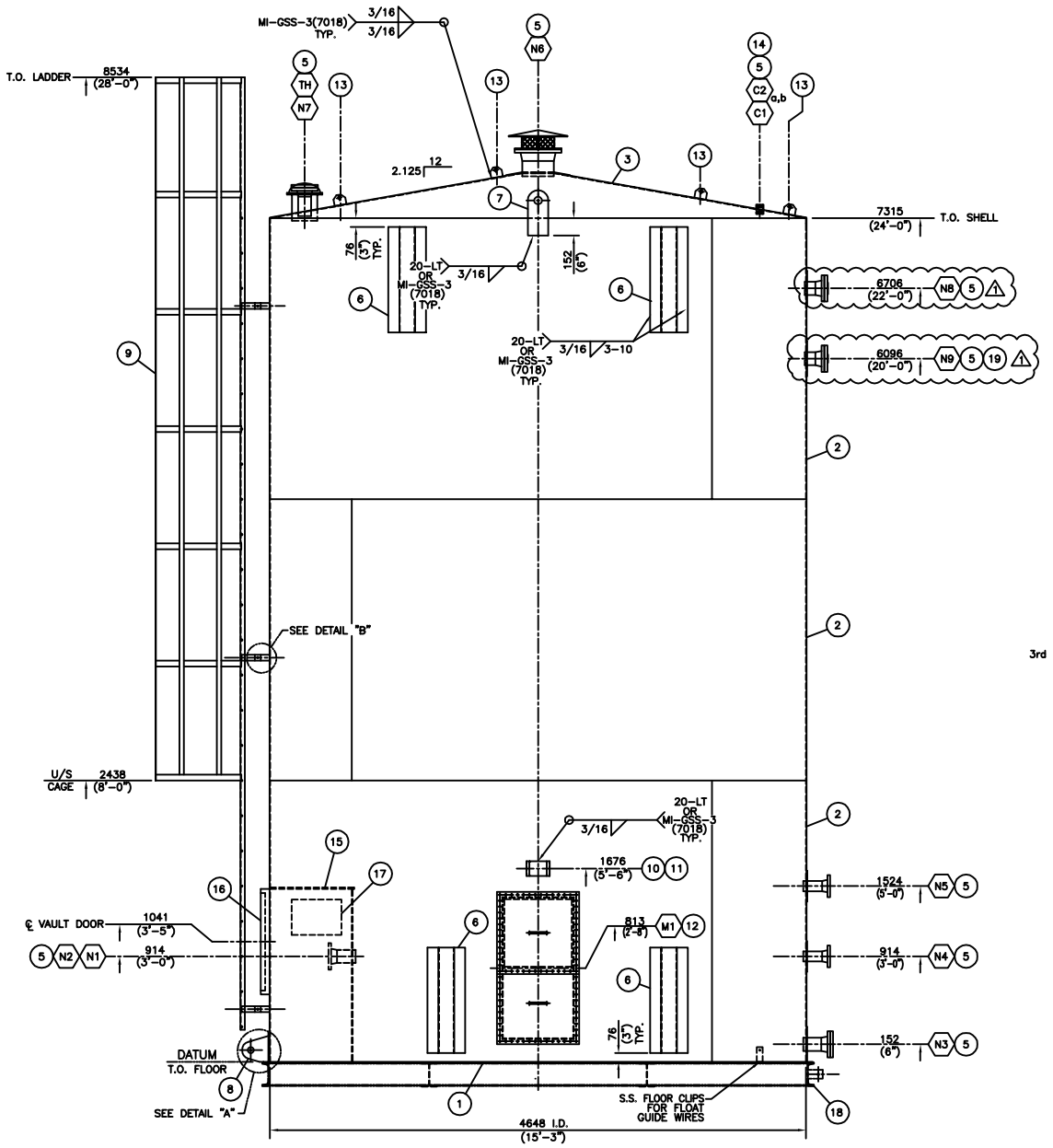
39							
40					INSULATION	1500	
					SUBTOTAL	17682	
					x 1.06		
					TOTAL (lbs.)	18743	



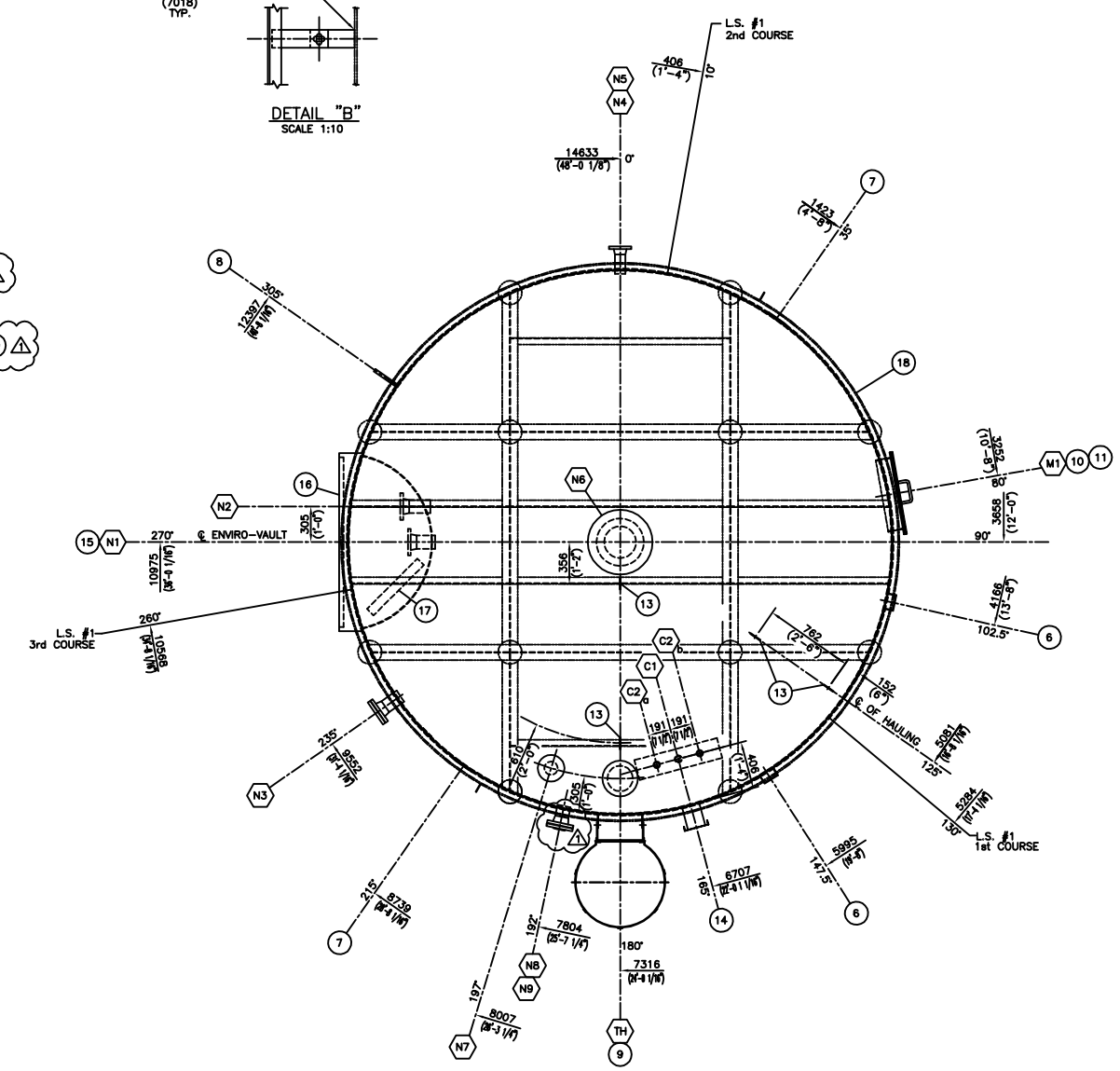
DETAIL "A"
SCALE: 1:10



DETAIL "B"
SCALE 1:10



ELEVATION



ORIENTATION

NOTES:

1. ALL DIMENSIONS ARE IN S.I. AND IMPERIAL UNITS. DIMENSIONS IN BRACKETS ARE IMPERIAL HARD CONVERSIONS FOR SHOP REFERENCE ONLY.
2. ALL NOZZLE PROJECTIONS ARE GIVEN ALONG THE NOZZLE ℄ EXCEPT FOR THE 25(1") INTERNAL PROJECTION WHICH IS AT THE SHORT SIDE.
3. ALL FLANGE RATINGS TO BE ASME B16.5 – 2009.
4. FLANGE AND BOLT HOLES TO STRADDLE PRINCIPAL ℄'s OF TANK.
5. TANK FABRICATOR IS NOT RESPONSIBLE FOR ENVIRO–VAULT DESIGN, BUT ARE RESPONSIBLE FOR ITS INTEGRATION INTO THE TANK. THE ENTIRE TANK, INCLUDING THE ENVIRO–VAULT, IS TO MEET THE DESIGN PRESSURE/VACUUM CONDITIONS SPECIFIED ABOVE.
6. INSPECTION LEVEL 3.
7. INSIDE EDGES OF NOZZLE NECKS, INSPECTION OPENINGS & MANWAYS SHALL BE ROUNDED TO A RADIUS OF 3(1/8") MIN. OR ONE HALF THE WALL THICKNESS IF THE PIPE WALL IS LESS THAN 6(1/4").

NO.	DATE (d/m/y)	REVISIONS	BY	APPD
1	06/12/13	C3 & C4 REPLACED WITH N8 & N9	RWG	
0	27/11/13	ISSUED FOR CONSTRUCTION. MOVED N5 & N6, ADDED N7, ROTATED GAUGEBOARD, HAULING PADS AND LUGS	RWG	JK
A	19/11/13	ISSUED FOR CUSTOMER APPROVAL	RWG	JK

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FOREMOST

CLIENT
HUSKY ENERGY
C/O EXCELSIOR ENGINEERING LTD.
P.O.# 8400737884

DWG TITLE
750 BBL WATER STORAGE TANK – COATED
GENERAL ARRANGEMENT

NO. REQ'D	VOLUME	SIZE	WO NO.	LEG NO.
1	120 CUBIC METERS (750 bbl)	4648mm I.D. x 7315mm HIGH (15'–3" I.D. x 24'–0" HIGH)	032010	

SCALE	DWN BY	DWG NO.	SHEET NO.	REV. NO.
1:30	R. GRAY	T–032010–D101	1 of 1	1

DATE (d/m/y)	CHKD	APPD
19/11/13		

FLW