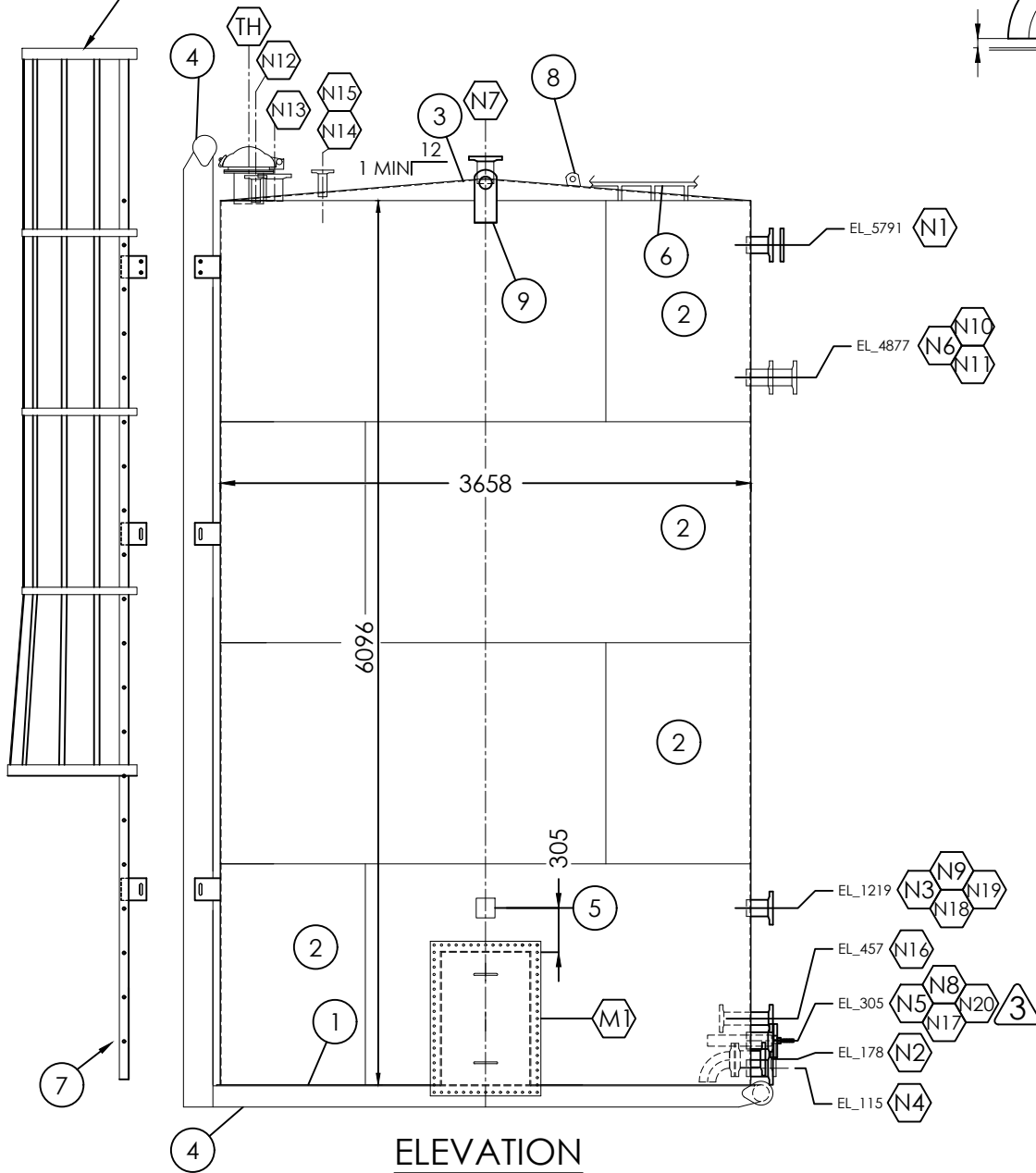
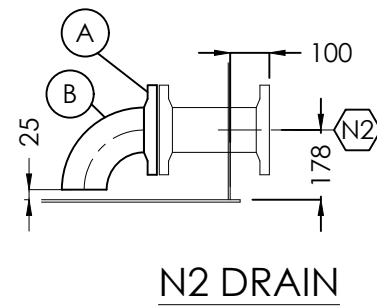


**PLEASE NOTE: SEAL WELD TOP
SIDE OF L-SKID SADDLES @ SHELL**

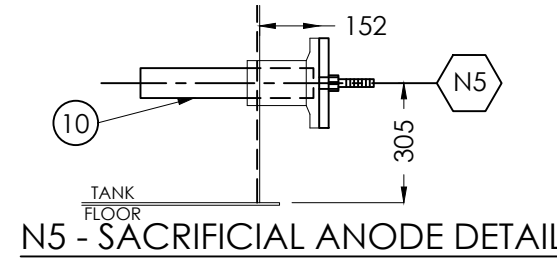
LADDER SHOWN SEPARATE FROM
TANK FOR CLARITY ONLY



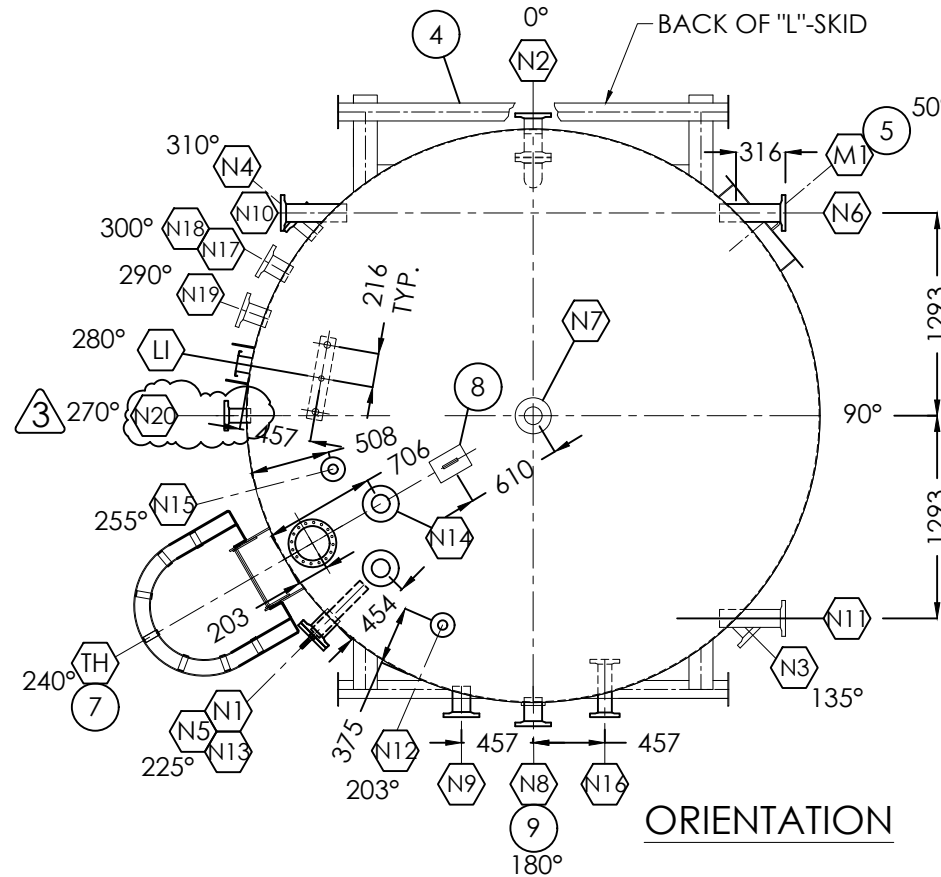
ELEVATION



N2 DRAIN

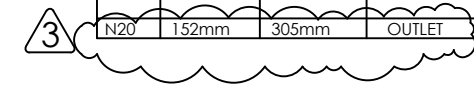


N5 - SACRIFICIAL ANODE DETAIL



ORIENTATION

NOZZLES			
MARK	PROJ.	ELEV.	NOTES
N1	152mm	5791mm	HLSD
N2	100mm	178mm	DRAIN
N3	152mm	1219mm	CLEAN OIL OUTLET
N4	152mm	115mm	OUTLET
N5	152mm	305mm	ANODE
N6	316mm	4877mm	OVERFLOW
N7	152mm	SEE DWG	VENT
N8	152mm	305mm	INLET
N9	152mm	1219mm	BACKUP LIQUID OUTLET
N10	316mm	4877mm	EQUALIZATION
N11	316mm	4877mm	OVERFLOW
N12	152mm	ROOF	BLANKET GAS
N13	152mm	ROOF	PVRV
N14	152mm	ROOF	LT
N15	152mm	ROOF	BLANKET GAS SENSOR
N16	152mm	457mm	SPARE
N17	152mm	305mm	SPARE
N18	152mm	1219mm	SPARE
N19	152mm	1219mm	SPARE
N20	152mm	305mm	OUTLET



CUSTOMER:

400 BBL L-SKIDDED STORAGE TANK

TITLE:

QUOTE #:

CUSTOMER: **3**

TITLE: **3** MODIFICATION TO ONE (1) 64 CU. M. (400 BBL)
3658 x 6096 HIGH L-SKIDDED STORAGE TANK
ELEVATION & ORIENTATION

REVISIONS			
NO.	DESCRIPTION	BY	DATE
3	REVISED AS NOTED	JS	09.13.17
2	AS BUILT	MS	11.14.13
1	ISSUED FOR FABRICATION	CP	05.28.13
0	ISSUED FOR APPROVAL	MG	05.15.13



APPROVED BY:	CHECKED BY:	DRAWN BY: JS
DATE: 09.11.17	TAG #: T-4000	DRAWING#: 17660_OR
SHEET: 1 OF 6	SCALE: NTS	SERIAL#: 17660



SHIPPING DIMENSION	
LENGTH:	6699 mm [22' - 0"]
WIDTH:	3788 mm [12' - 6"]
HEIGHT:	4026 mm [13' - 0"]
WEIGHT:	12,000 LBS
(DIMENSIONS FOR TANK LAYING DOWN)	
SHIP LOOSE ITEM	
CAGED LADDER C/W BOLT UPS	

BILL OF MATERIALS

MARK	QTY	MATL	DESCRIPTION	SERVICE
N1	1	A105	114 DIA. (4") 150# RFSO FLANGE	HLSO
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG	
	1	A105	114 DIA. (4") 150# RF BLIND FLANGE 2" NPT	BLIND
N2	2	A105	114 DIA. (4") 150# RFSO FLANGE	DRAIN
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 250 LG (SEE DWG. B-17660 OR FOR DETAILS)	
A	1	A105	114 DIA. (4") 150# RFSO FLANGE	
B	1	A234	114 DIA. (4") SCH 40 90° LRWE	
N3	1	A105	114 DIA. (4") 150# RFSO FLANGE	CLEAN OIL OUTLET
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG	
N4	1	A105	114 DIA. (4") 150# RFSO FLANGE	OUTLET
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG	
N5	1	A105	114 DIA. (4") 150# RFSO FLANGE	ANODE
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG N5 - SACRIFICIAL ANODE COMPONENTS	
10	1		76 x 559 ALUMN. ANODE MOUNTED ON 114 DIA. (4") BLIND FLG. c/w 114 DIA. FLANGE INSULATION	
N6	1	A105	114 DIA. (4") 150# RFSO FLANGE	OVERFLOW
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 405 LG	
N7	1	A105	114 DIA. (4") 150# RFSO FLANGE	VENT
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 172 LG	
N8	1	A105	114 DIA. (4") 150# RFSO FLANGE	INLET
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG	
N9	1	A105	114 DIA. (4") 150# RFSO FLANGE	BACKUP LIQUID OUTLET
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG	
N10	1	A105	114 DIA. (4") 150# RFSO FLANGE	EQUALIZATION
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 405 LG	
N11	1	A105	114 DIA. (4") 150# RFSO FLANGE	OVERFLOW
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 405 LG	
N12	1	A105	60 DIA. (2") 150# RFSO FLANGE	BLANKET GAS
	1	A106	60 DIA. (2") SCH 40 SMLS PIPE x 172 LG.	
N13	1	A105	114 DIA. (4") 150# RFSO FLANGE	PVRV
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 172 LG.	
N14	1	A105	114 DIA. (4") 150# RFSO FLANGE	LT
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 172 LG.	
N15	1	A105	60 DIA. (2") 150# RFSO FLANGE	BLANKET GAS
	1	A106	60 DIA. (2") SCH 40 SMLS PIPE x 172 LG.	SENSOR
N16	2	A105	89 DIA. (3") 150# RFSO FLANGE	SPARE
	1	A106	89 DIA. (3") SCH 40 SMLS PIPE x 338 LG.	
N17	1	A105	114 DIA. (4") 150# RFSO FLANGE	SPARE
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG.	
N18	1	A105	114 DIA. (4") 150# RFSO FLANGE	SPARE
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG.	
N19	1	A105	114 DIA. (4") 150# RFSO FLANGE	SPARE
	1	A106	114 DIA. (4") SCH 40 SMLS PIPE x 168 LG.	
N20	1	A105	89 DIA. (3") 150# RFSO FLANGE	OUTLET
	1	A106	89 DIA. (3") SCH 40 SMLS PIPE x 168 LG.	



BILL OF MATERIALS

MARK	QTY	MAT'L	DESCRIPTION	SERVICE
1	1	A36	6.4 PL. x 3710 DIA. FLAT BOTTOM	
2	4	A36	4.8 PL. x 1524 x 11492 LG. SHELLS	
3	1	A36	4.8 PL. x 3671 DIA. CONED ROOF	
4	1	A36	400 BBL L-SHAPE SKID (SEE SHT. B-17660 SK FOR DETAILS)	
5	1		NAMEPLATE & BRACKET	
6	1	A36	400 BBL SAFETY TOE RAIL (SEE SHEET B-17660 STR FOR DETAIL)	
7	1	A36	400 BBL CAGED LADDER (SEE SHT. B-17660 CL FOR DETAILS)	
8	1	A36	SAFETY TIE OFF LUG (ARGO STD SMALL LIFT LUG c/w REPAD 6.4 THK. 152 x 223LG.)	
9	1	A36	LARGE LIFT LUG	
M1	1	A36	610 x 914 (24" x 36") RECT. MANWAY (LAPPED ON FLOOR)	
	1	A36	762 x 1066 RECT. MANWAY COVER	
TH	1		219 DIA. (8") ENARDO 660 STD. SERV. THIEF HATCH SET @ 16 OZ. PRESS/0.4 OZ. VAC. 8" ARGO FAB. THIEF HATCH EXTENSION	
LI	1	A105	33 DIA. (1") 3000# FS CPLG	LEVEL INDICATOR
	2	A105	42 DIA. (1 1/4") 3000# FS CPLG	
	1		ARGO STD. SERVICE LEVEL GAUGE SYSTEM C/W LINEAR METER GAUGE BOARD AND PVC FLOAT	
	6		GAUGE BOARD BRACKETS	
	4		OUTER CABLE BRACKETS	
	2		CABLE ANCHORS	

CUSTOMER:

400 BBL L-SKIDDED STORAGE TANK

TITLE:

QUOTE #:

DESIGN NOTES

- TANK TO BE BUILT AND TESTED TO API-12F SPEC. MODIFIED (NON-LABELED)
- TANK TO BE AIR/SOAP LEAK TESTED TO 1.5 PSI.
- ROOF/SHELL JOINTS NOT TO BE BACKWELDED
- REFER TO ORIENTATION DRAWING FOR PROPER LOCATION OF ALL NOZZLES, COUPLINGS, ETC.
- ALL DIMENSIONS ARE IN mm.
- ENSURE THAT GAUGE BOARD OR ANY OTHER LOOSE ITEMS ARE SECURE PRIOR TO TRANSPORT TO PREVENT DAMAGE TO EXTERNAL OR INTERNAL FINISHES.**
- STUDS/NUTS/GASKETS - ANSI FTGS: B7 / 2H / 316SS FLEX**
- GASKETS AND FASTENERS - MANWAY & TH: GRADE 5 / NEOPRENE**

THIRD PARTY INSPECTION

THIRD PARTY INSPECTION NOT REQUIRED.

INTERNAL & EXTERNAL FINISH

- INTERNAL FINISH (FLOOR & 914mm (3') UP SHELL ONLY
BLAST: SS-SPC-SP5 WHITE METAL BLAST
PRIMER: 10.0 - 16.0 MILS DFT DEVOE 253 EPOXY
INTERNAL PIPING DOES NOT REQUIRE EPOXY COATING AND IS TO BE INSTALLED AFTER INTERNAL COATING OF TANK IS COMPLETED AND HOLIDAY TESTED
- EXTERNAL FINISH
BLAST: SS-SPC-SP6 COMMERCIAL BLAST
PRIMER: 1.5 - 2.0 MILS DFT CLOVERDALE TOWER OR RUSTEX 71024 (GREY).
PAINT: 1.5 - 2.0 MILS DFT CLOVERDALE ENAMEL **TO MATCH QC-315 TAN**
*****NOTE: 2 COATS OF PAINT REQUIRED, FOR TANK SHELL, TANK ROOF, TANK SKID AND LADDER.**
- BOTTOM FINISH
BLAST: SS-SPC-SP6 COMMERCIAL BLAST
PRIMER: 1.5 - 2.0 MILS OF CLOVERDALE TOWER OF RUSTEX #71024 (GREY).

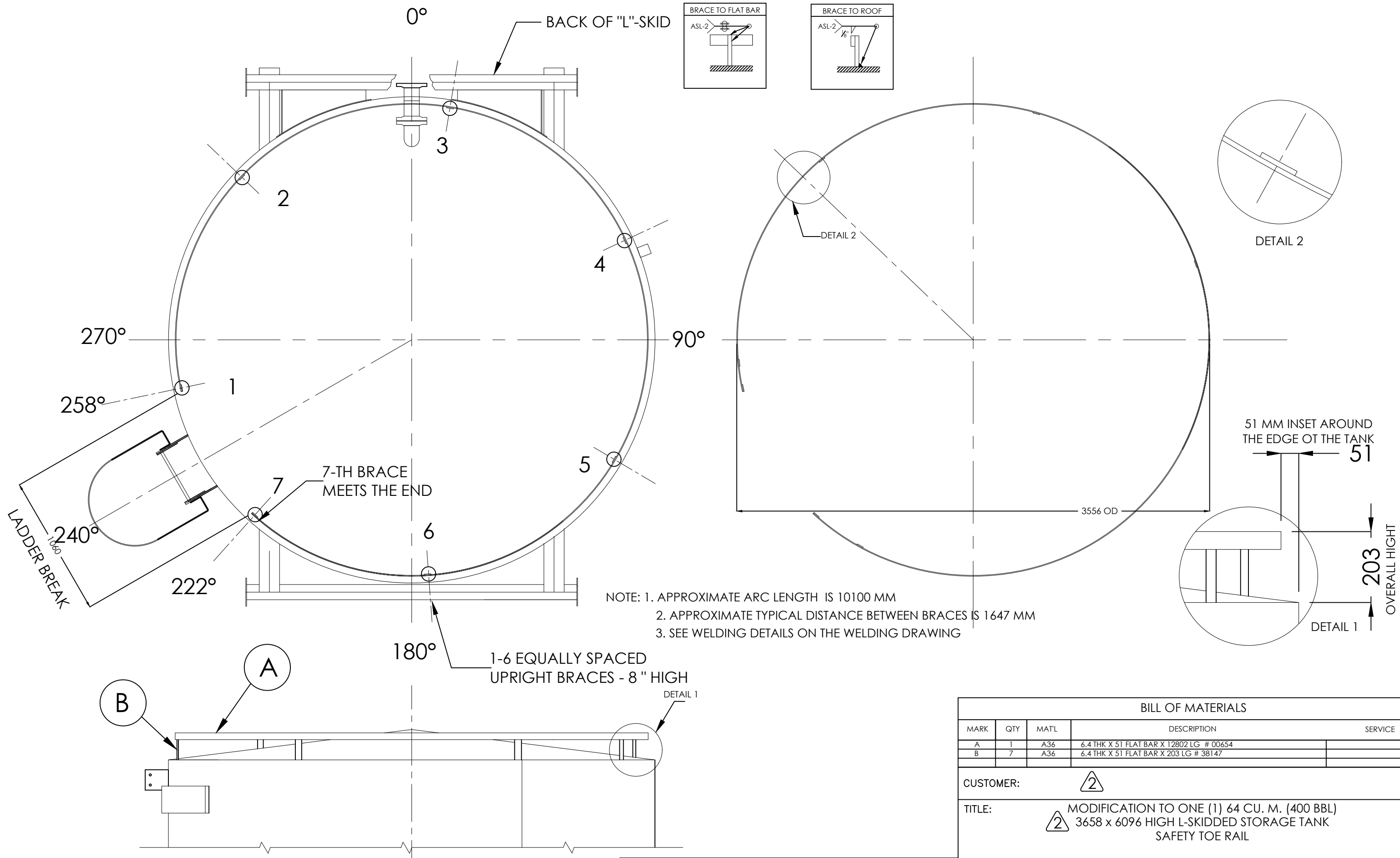
REVISIONS

NO.	DESCRIPTION	BY	DATE
3	REVISED AS NOTED	JS	09.13.17
2	AS BUILT	MS	11.14.13
1	ISSUED FOR FABRICATION	CP	05.28.13
0	ISSUED FOR APPROVAL	MG	05.15.13

CUSTOMER:

TITLE: MODIFICATION TO ONE (1) 64 CU. M. (400 BBL) 3658 x 6096 HIGH L-SKIDDED STORAGE TANK
BILL OF MATERIALS

	APPROVED BY:	CHECKED BY:	DRAWN BY: JS
	DATE: 09.11.17	TAG #: T-4000	DRAWING#: 17660_BOM
SHEET: 2 OF 6	SCALE: NTS	SERIAL#: 17660	REV.



BILL OF MATERIALS				
MARK	QTY	MATL	DESCRIPTION	SERVICE
A	1	A36	6.4 THK X 51 FLAT BAR X 12802 LG # 00654	
B	7	A36	6.4 THK X 51 FLAT BAR X 203 LG # 38147	

CUSTOMER:

TITLE: MODIFICATION TO ONE (1) 64 CU. M. (400 BBL) 3658 x 6096 HIGH L-SKIDDED STORAGE TANK SAFETY TOE RAIL

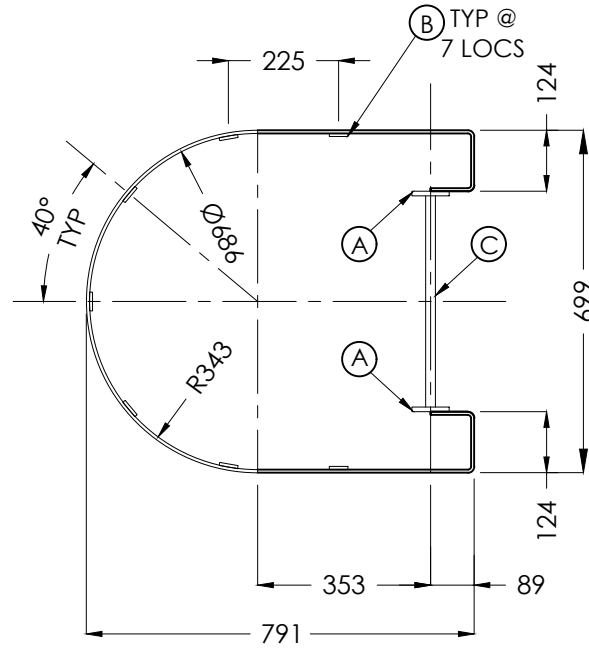
REVISIONS			
NO.	DESCRIPTION	BY	DATE
2	REVISED AS NOTED	JS	09.13.17
1	AS BUILT	MS	11.14.13
0	ISSUED FOR FABRICATION	CP	06.03.13

	APPROVED BY:	CHECKED BY:	DRAWN BY:	REV.
	DATE: 09.11.17	TAG #: T-4000	DRAWING#: 17660_STR	
	SHEET: 3 OF 6	SCALE: NTS	SERIAL#: 17660	

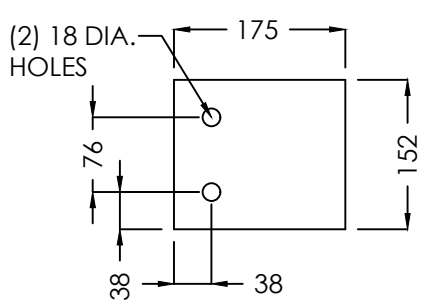
CUSTOMER:

TITLE: 400 BBL SAFETY TOE RAIL

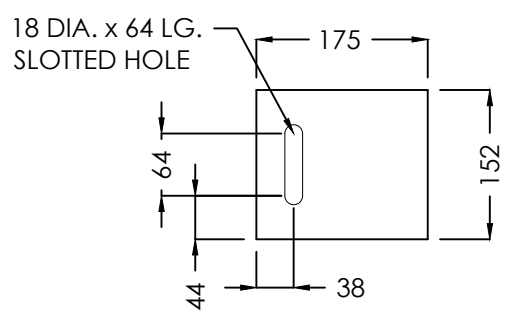
QUOTE #:



ITEM (C) 3 REQ'D
ITEM (G) 1 REQ'D

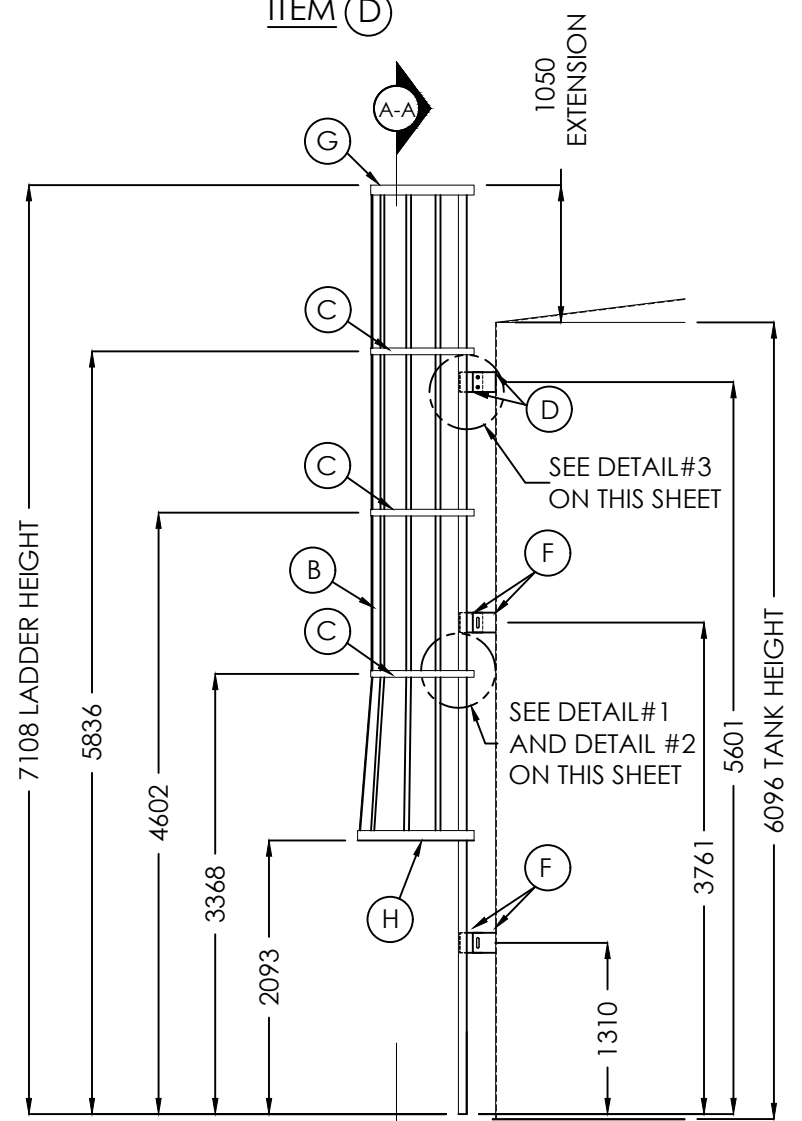


ITEM (D)

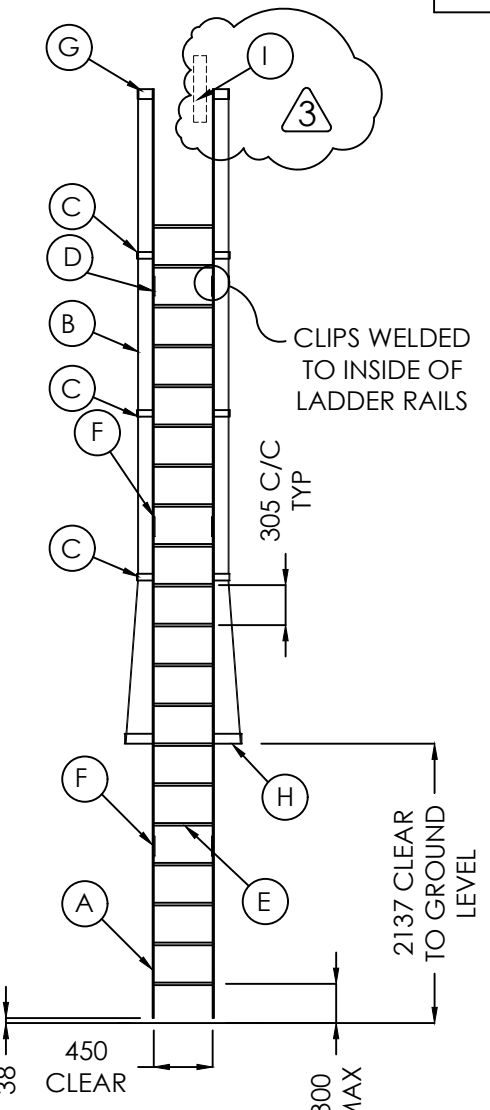


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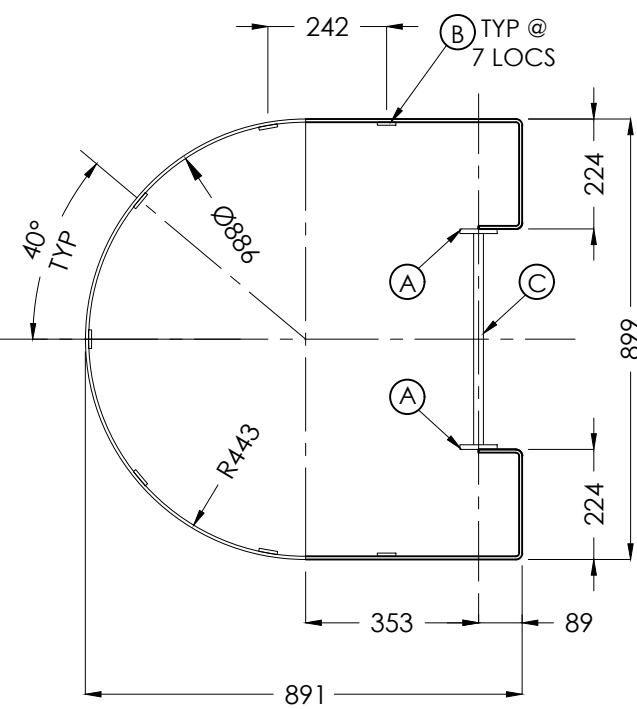
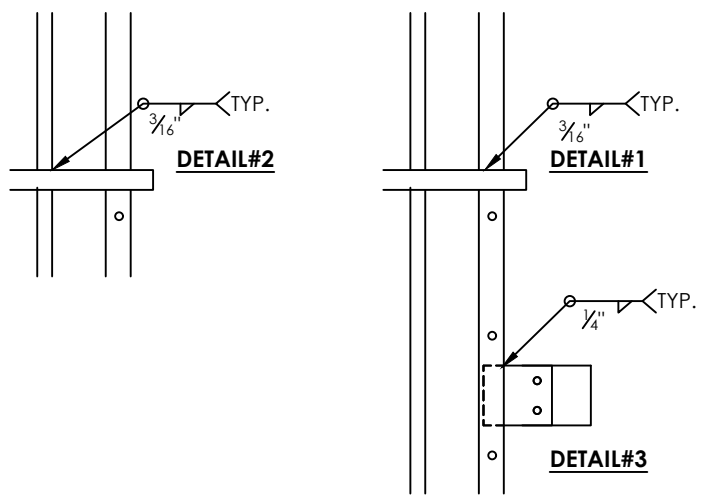
BILL OF MATERIALS				
MARK	QTY	MAT'L	DESCRIPTION	SERVICE
A	2	A36	9.5 THK x 64 FLAT BAR x 7108 LG.	
B	7	A36	6.4 THK x 38 FLAT BAR x 5020 LG.	
C	3	A36	6.4 THK x 50 FLAT BAR x 2388 LG. (FORMED AS PER DETAIL)	
D	4	A36	9.5 THK x 152 FLAT BAR x 175 LG. (SEE DETAIL THIS SHEET)	
E	20	A36	19Ø (3/4") ROUND BAR x 470 LG. (LADDER RUNGS)	
F	8	A36	9.5 THK x 152 FLAT BAR x 175 LG. (SEE DETAIL THIS SHEET)	
G	2	A36	6.4 THK x 76 FLAT BAR x 2388 LG. (FORMED AS PER DETAIL)	
H	1	A36	6.4 THK x 76 FLAT BAR x 2905 LG. (FORMED AS PER DETAIL)	
I	1	A36	DBI-LAD20 FLEXIBLE CABLE SYSTEM, 20 FT LADDER SAFETY SYSTEM	



ELEVATION



SECTION A-A



ITEM (H) 1 REQ'D

DESIGN NOTES

1. ALL DIMENSIONS ARE IN mm.

WELDING NOTES

- 1. USE OF E7024 ROD HAS **NOT** BEEN PROHIBITED.
- 2. ALL SHARP EDGES AND BURRS TO BE REMOVED.
- 3. NO FLAME CUT HOLES.

LADDER BOLTING

ALL BOLTING TO BE 16MM (5/8") GRADE 5 MINIMUM.

EXTERNAL FINISH

EXTERNAL FINISH
BLAST: SSPC-SP6 COMMERCIAL BLAST
PRIME: 1.5 - 2.0 MILS DFT CLOVERDALE TOWER OR RUSTEX 71024 (GREY).
PAINT: 1.5 - 2.0 MILS DFT CLOVERDALE ENAMEL TO MATCH
QC-315 TAN

REVISIONS			
NO.	DESCRIPTION	BY	DATE
3	ADDED LADDER SAFETY SYSTEM	JS	09.13.17
2	AS BUILT	MS	11.14.13
1	ISSUED FOR FABRICATION	CP	05.28.13
0	ISSUED FOR APPROVAL	MG	05.15.13

CUSTOMER:



TITLE:

3 MODIFICATION TO ONE (1) 64 CU. M. (400 BBL)
3658 x 6096 HIGH L-SKIDDED STORAGE TANK
CAGED LADDER DETAILS



APPROVED BY:	CHECKED BY:	DRAWN BY:	JS
DATE:	09.11.17	TAG #:	T-4000
SHEET:	4 OF 6	SCALE:	NTS
DRAWING#:	17660_CL	SERIAL#:	17660

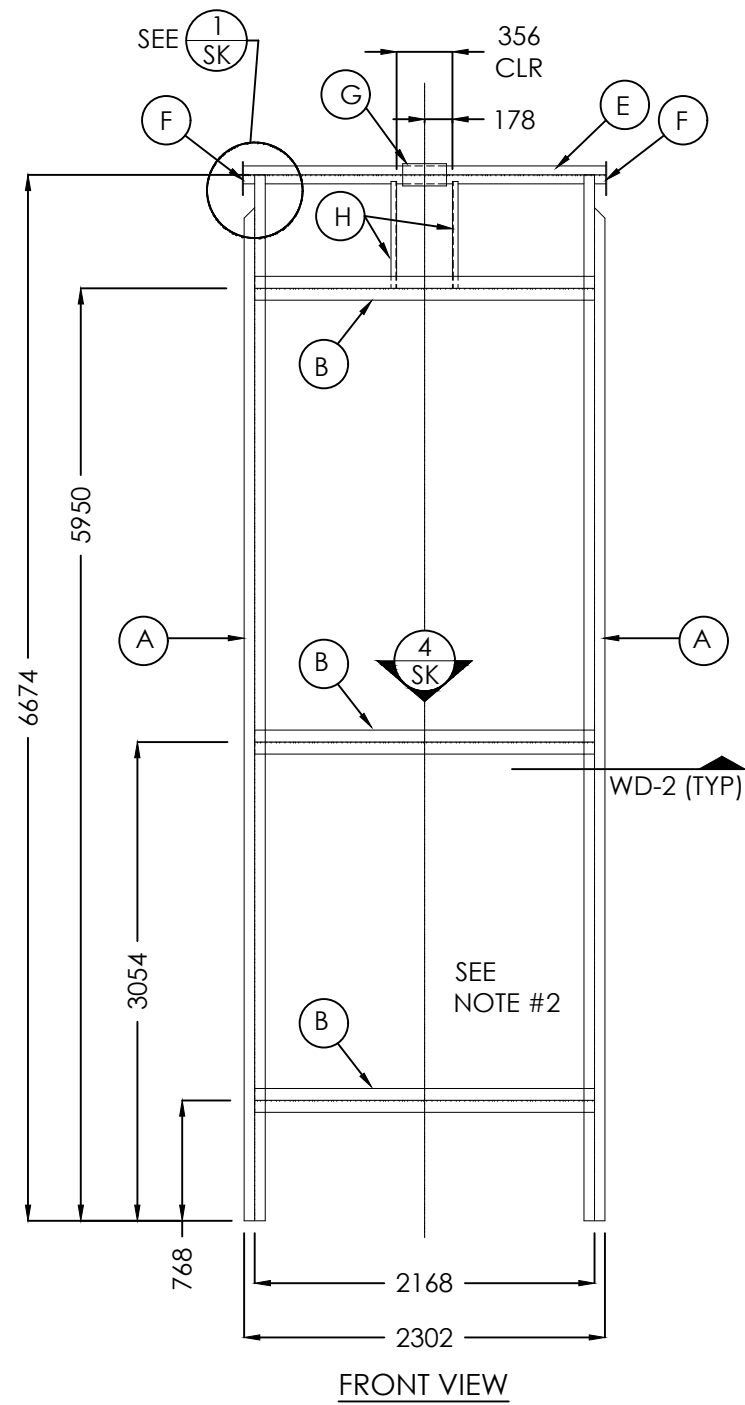


CUSTOMER:

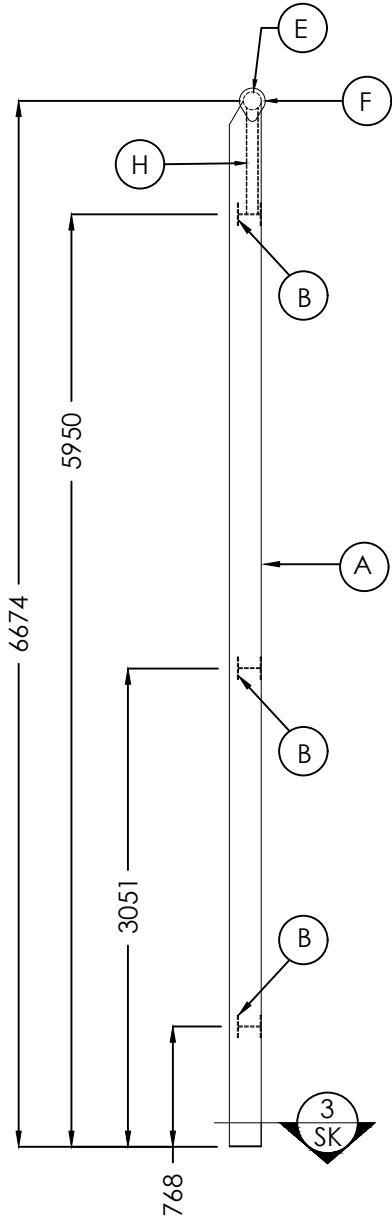
CAGED LADDER DETAILS

TITLE:

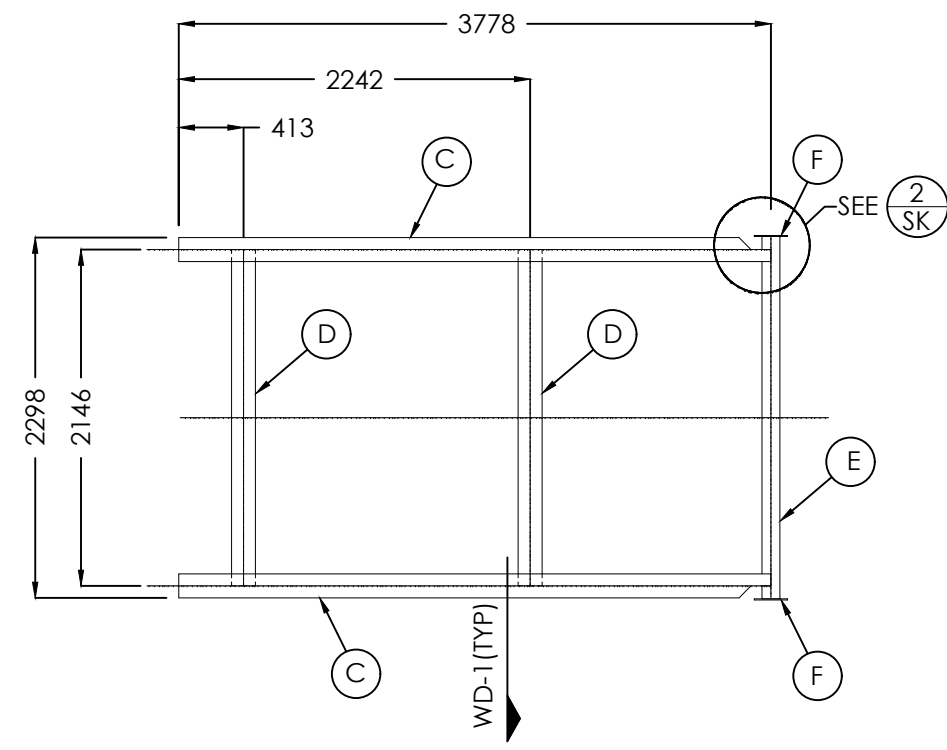
QUOTE #:



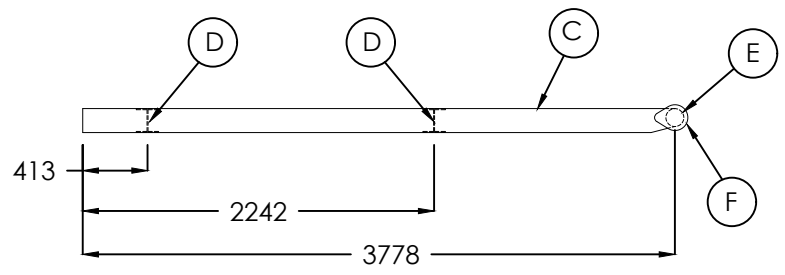
FRONT VIEW



SIDE VIEW

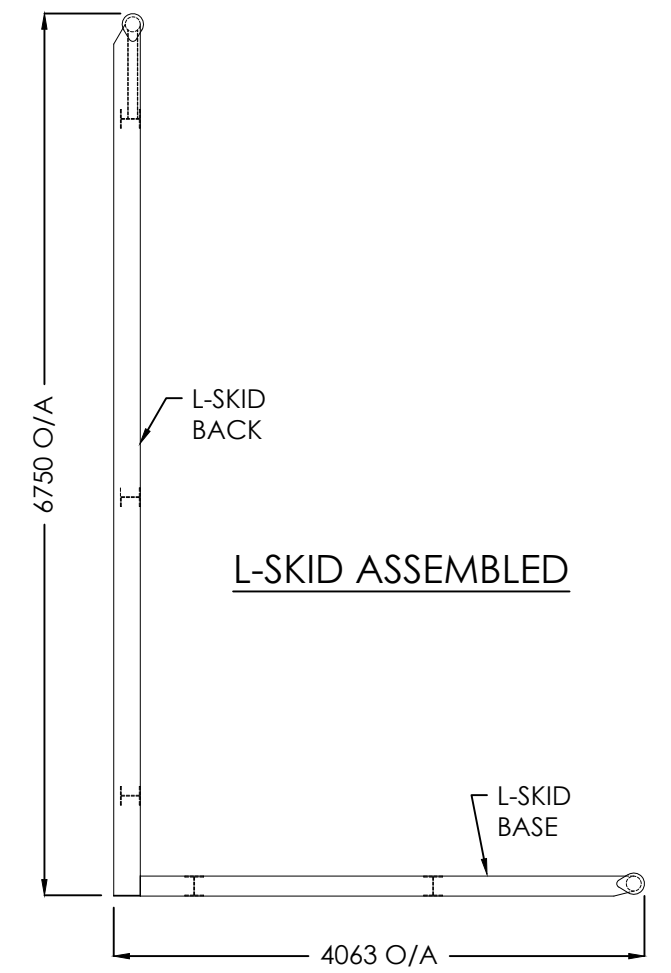


TOPVIEW



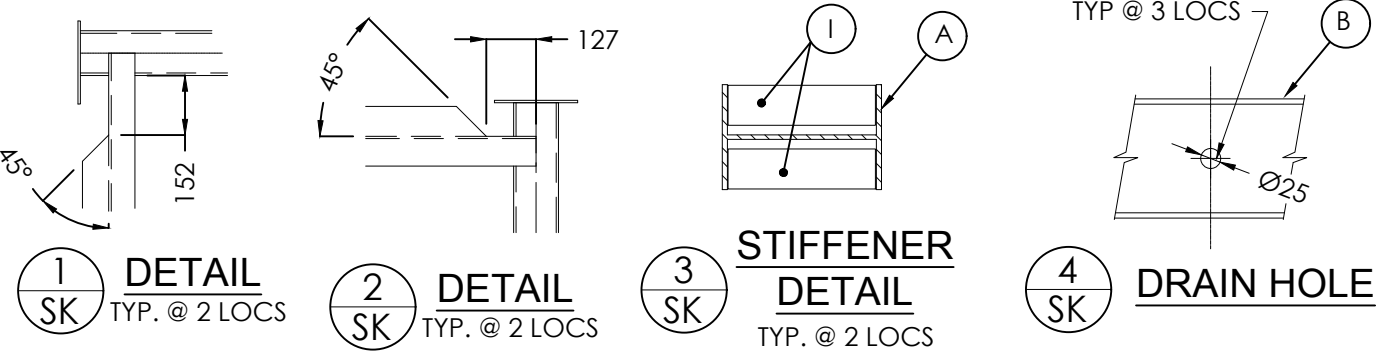
SIDE VIEW

400 BBL L-SKID BASE



L-SKID ASSEMBLED

400 BBL L-SKID BACK



1 SK TYP. @ 2 LOCS
2 SK TYP. @ 2 LOCS
3 SK TYP. @ 2 LOCS
4 SK TYP. @ 3 LOCS

WD-1 (UNLIKE BEAM DEPTH)	WD-2 (LIKE BEAM DEPTH)

WELD NOTES

- SEE ARGO SALES INTERNAL DRAWINGS "ASL-SKID-FAB" SKID WELDING SPECS FOR FURTHER WELDING AND COPING DETAILS
- ALL WELDING TO BE DONE TO LATEST REVISION OF CWB WPDS
- CWB SHOP SUPERVISORS SPECIFY WELDING PROCESS

BILL OF MATERIALS				
MARK	QTY	MAT'L	DESCRIPTION	SERVICE
A	2	50W / A992	W200x27 (W8x18) WIDE FLANGE x 6674 LG	BACK SKID - RUNNERS
B	3	50W / A992	W150x22 (W6X15) WIDE FLANGE x 2142 LG	BACK SKID - CROSS PCS
C	2	50W / A992	W150x22 (W6X15) WIDE FLANGE x 3778 LG	BASE SKID - RUNNERS
D	2	50W / A992	W150x22 (W6X15) WIDE FLANGE x 2140 LG	BASE SKID - CROSS PCS
E	2	A53B	114 DIA. (4") SCH STD ERW PIPE X 2312 LG	ROLL ENDS
F	4	A36/44W	6.4 THK LARGE TEARDROPS	TEAR DROPS
G	1	A53B	140 DIA. (5") SCH. 40 ERW PIPE x 279 LG	SWIVEL SLEEVE
H	2	A36/44W	C75X6 (C3X4.1) CHANNEL X 678 LG (SHOP TO CONFIRM)	SWIVEL STOPS
I	4	A36/44W	6.4 THK X 51 FLAT BAR X 188 LG	STIFFENERS

SKID FINISH

BLAST: SSPC-SP6 COMMERCIAL BLAST
 PRIME: 1.5 - 2.0 MILS DFT CLOVERDALE TOWER OR RUSTEX 71024 (GREY).
 PAINT: 1.5 - 2.0 MILS DFT CLOVERDALE ENAMEL **TO MATCH QC-315 TAN**

DESIGN NOTES

- ALL DIMENSIONS ARE IN mm.
- APPROXIMATE WEIGHTS:
 BASE SKID = 331 KG (720#)
 BACK SKID = 612 KG (1350#)
- TORCH CUT DRAIN HOLES IN ITEM 'B' (SEE DETAIL THIS SHEET)

REVISIONS			
NO.	DESCRIPTION	BY	DATE
3	REVISED AS NOTED	JS	09.13.17
2	AS BUILT	MS	11.14.13
1	ISSUED FOR FABRICATION	CP	05.28.13
0	ISSUED FOR APPROVAL	MG	05.15.13

CUSTOMER: 3

TITLE: 3 MODIFICATION TO ONE (1) 64 CU. M. (400 BBL) 3658 x 6096 HIGH L-SKIDDED STORAGE TANK SKID DETAILS

APPROVED BY:	CHECKED BY:	DRAWN BY: JS
DATE: 09.11.17	TAG #: T-4000	DRAWING#: 17660_SK
SHEET: 5 OF 6	SCALE: NTS	SERIAL#: 17660

QUOTE #: 3

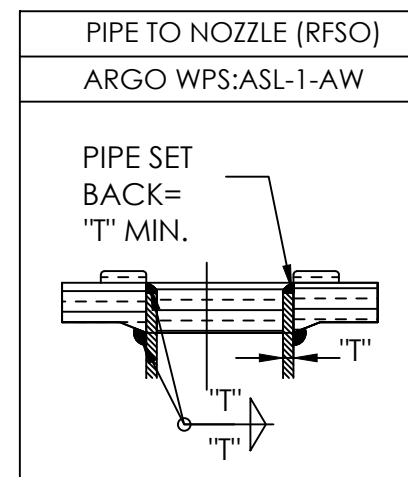
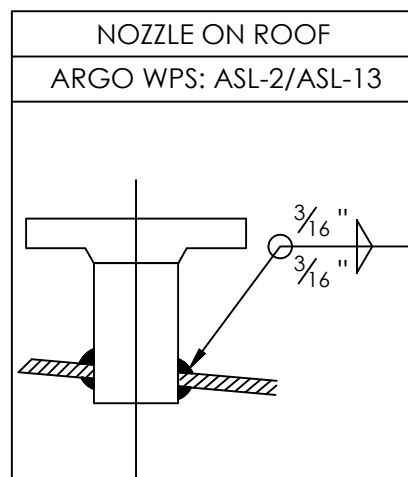
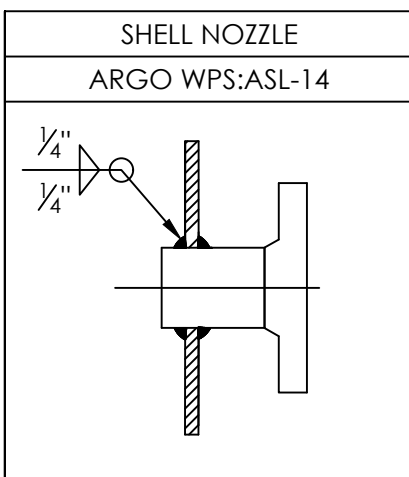
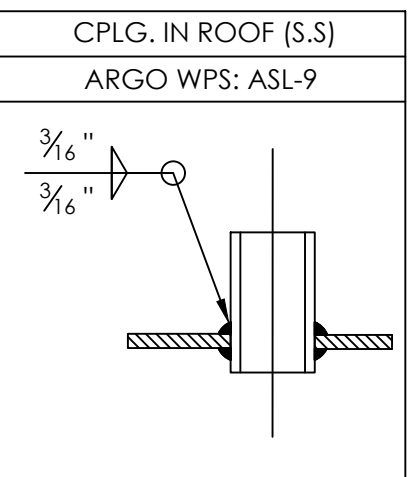
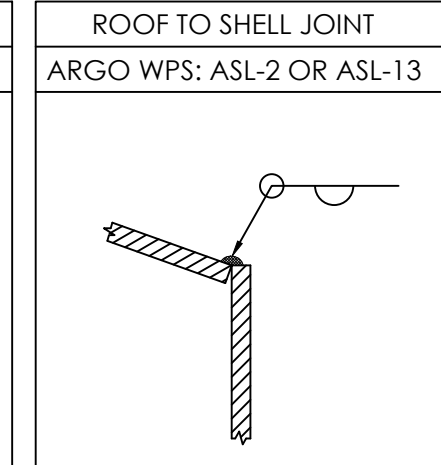
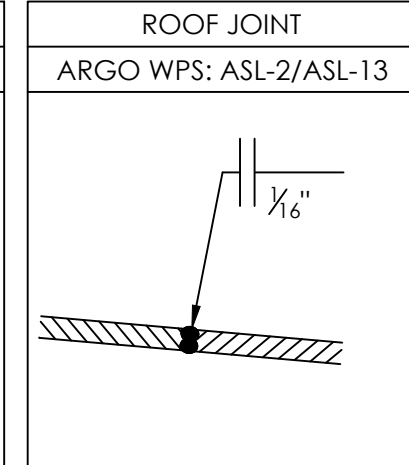
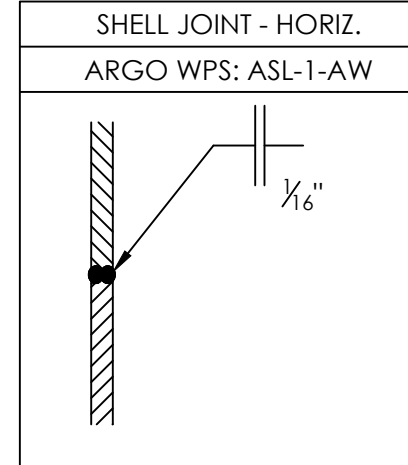
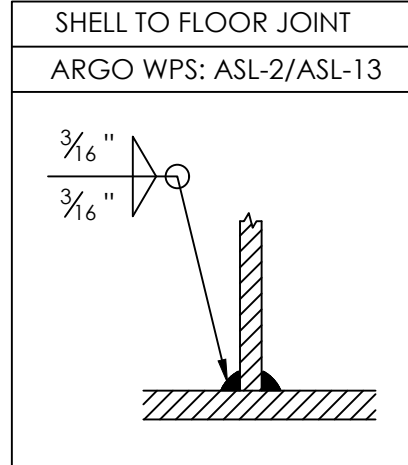
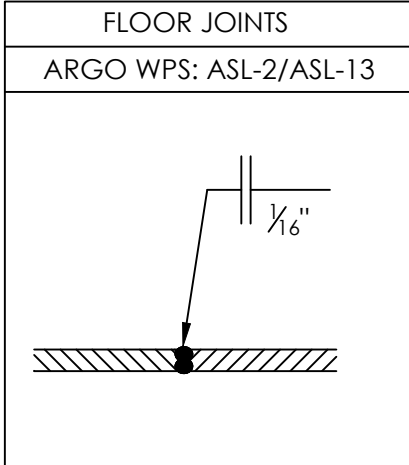
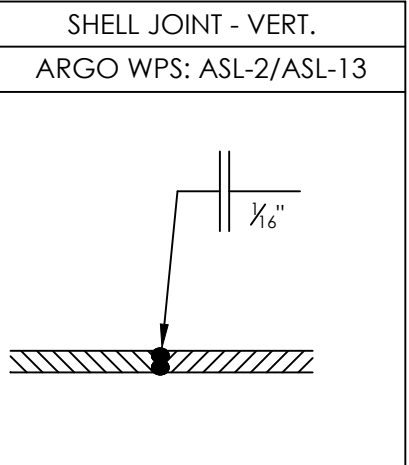
CUSTOMER:

400 BBL SW L-SKID

TITLE:

QUOTE #:





DESIGN NOTES			
1. USE OF E7024 ROD HAS NOT BEEN PROHIBITED.			
REVISIONS			
NO.	DESCRIPTION	BY	DATE
3	REVISED AS NOTED	JS	09.13.17
2	AS BUILT	MS	11.14.13
1	ISSUED FOR FABRICATION	CP	05.28.13
0	ISSUED FOR APPROVAL	MG	05.15.13

CUSTOMER:			
TITLE:		MODIFICATION TO ONE (1) 64 CU. M. (400 BBL) 3658 x 6096 HIGH L-SKIDDED STORAGE TANK WELD DETAILS	
APPROVED BY:	CHECKED BY:	DRAWN BY: JS	
DATE: 09.11.17	TAG #: T-4000	DRAWING#: B-17660_WD	
SHEET: 6 OF 6	SCALE: NTS	SERIAL#: 17660	REV.

CUSTOMER:

TITLE: WELD DETAILS

TITLE:

QUOTE #: