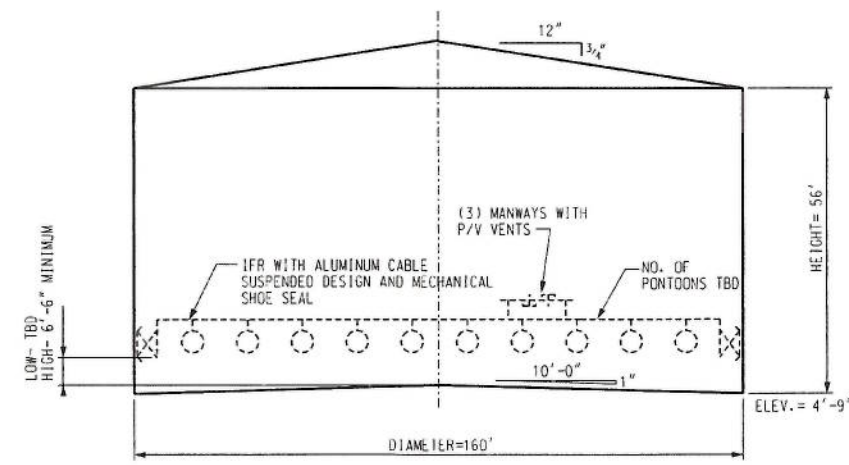


NOTE:
NOZZLES AND OTHER ITEMS ARE
SHOWN DOUBLE IN SCALE FOR
CLARITY ONLY.

ORIENTATION PLAN
NO SCALE



ELEVATION
NO SCALE

TANK NO. & LOCATION
TANK CAPACITY (BBL'S)
TANK SERVICE (PRODUCT)
TRUE VAPOR PRESSURE AT 120° F OPERATING TEMP.
TANK SHELL DESIGN SPEC. GRAVITY
TANK DESIGN TEMP.
DESIGN METAL TEMP.
MAXIMUM PUMPING RATE IN
MAXIMUM PUMPING RATE OUT
TANK FLOATING ROOF DESIGN S.G.

200-17
200,000
GASOLINE
ATMOS
120° F
40° F
8000 BPH
11,700 BPH
0.7

REFERENCE DRAWINGS:

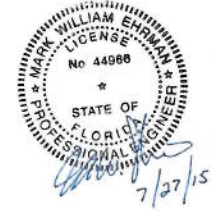
STANDARD DWG	PROJECT DWG	DRAWING TITLE
GSTD-0101-01-E	130-00302-02-T	TYPICAL TANK GROUND METHOD
GSTD-0103-01-C	130-00302-07-T	STANDARD PREFERRED 36" MANWAY
GSTD-0103-04-C	130-00302-08-T	MANWAY SEAL DEFLECTOR PLATE
GSTD-0111-01-C	130-00302-09-T	STANDARD STORAGE TANK ROOF
		GUARDRAILS STANDARD
		8" & 16" SECTIONS
GSTD-0117-01-P	130-00302-10-T	STANDARD SHELL NOZZLE DETAIL
GSTD-0120-01-T	130-00302-11-T	FALL HAZARD ABATEMENT FOR TOP OF
		VERTICAL STORAGE TANKS
GSTD-0134-01-T	130-00302-12-T	STANDARD BOTTOM INSTALLATION
GSTD-0135-01-T	130-00302-13-T	STANDARD COLUMN BEARING PLATE
LSTD-0117-21-T	130-00302-03-T	TANK GAUGE
LSTD-0117-24-T	130-00302-03-T	TEMPERATURE PROBE
LSTD-0117-25-T	130-00302-04-T	HIGH LEVEL ALARM
LSTD-0122-01-C	130-00302-05-T	STANDARD STORAGE TANK RINGWALL
		FOUNDATION
LSTD-0135-01-T	130-00302-06-T	STANDARD ROOF MANWAY LADDER
LSTD-0136-01-C	130-00302-14-T	STANDARD ROOF HATCH WITH HANDLE
LSTD-0153-01-D	130-00302-15-T	LOADING RACK SUCTION LINE TROUGH
LSTD-0154-01-T	130-00302-16-T	RECEIPT LINE DIFFUSER
LSTD-0155-01-T	130-00302-17-T	WATER DRAW-OFF
LSTD-0156-01-T	130-00302-18-T	LOW SUCTION LINE
LSTD-0157-01-T	130-00302-19-T	SAMPLE VALVE
LSTD-0158-01-T	130-00302-20-T	PIPE SUPPORT FOR INTERNAL PIPE
LSTD-0161-01-P	130-00302-21-T	TANK ROOF NOZZLE
LSTD-0162-01-T	130-00302-22-T	PIPING CONFIGURATION
LSTD-0168-01-T	130-00302-23-T	JET NOZZLE
LSTD-0173-01-T	130-00302-24-T	STANDARD WINDING STAIRWAY (1 OF 2)
LSTD-0173-02-T	130-00302-25-T	STANDARD WINDING STAIRWAY (2 OF 2)
LSTD-0175-01-T	130-00302-26-T	STANDARD TIE OFF ANCHOR
LSTD-0178-01-T	130-00302-27-T	API 653 NAMEPLATE WITH BRACKET
LSTD-0182-01-T	130-00302-28-T	ALUMINUM PONTOON FLOATING ROOF

NOTES:

- ALL DESIGN FABRICATION, AND CONSTRUCTION TO BE IN ACCORDANCE WITH API 650, LATEST EDITION.
- MINIMUM SHELL THICKNESS $\frac{1}{4}$ " (INCLUDES CORROSION ALLOWANCE)
- MINIMUM FLOOR THICKNESS $\frac{5}{16}$ " (INCLUDES CORROSION ALLOWANCE)
- WINDING STAIRWAY WILL START AT TBD AND RUN (CLOCK, COUNTERCLOCK) WISE SEE SCHEDULE NO. 13.
- AUTOMATIC GAUGE WILL NOT BE FURNISHED AND INSTALLED BY THE TANK ERECTOR. AUTOMATIC GAUGE WILL BE REQUIRED (MPC TO PROVIDE). FLOAT REQUIRED.
- ELECTRICAL POWER IS NOT AVAILABLE FOR WELDING. ERECTOR IS TO FURNISH (SAFETY DISCONNECT SWITCHES/ GENERATOR).
- ADVISE FIELD SUPERINTENDANT TO VERIFY NOZZLE LOCATIONS WITH PROJECT ENGINEERING DEPARTMENT BEFORE PROCEEDING WITH NOZZLE INSTALLATION.
- IF NOZZLE IS NOT NEEDED IN THE ABOVE SCHEDULE MARK "NOT REQUIRED".
- SF = SINGLE FLANGE, DF = DOUBLE FLANGE.
- RF = RAISED FACE, FF = FLAT FACE
- COUPLING = CPLG.
- SHELL CORROSION ALLOWANCE = 0.125 INCHES O/C (BOTTOM SHELL COURSE ONLY)
- ROOF AND SHELL VENTS SHALL HAVE COVERS AND SCREENS REMOVABLE FROM THE OUTSIDE TO ALLOW FOR SEAL INSPECTION.
- TANK IS TO BE ERECTED ON CONCRETE RINGWALL FOUNDATION BY OTHERS.
- PAINT BY OTHERS.
- AT THE COMPLETION ON THE ERECTION OF THIS TANK, THE CONTRACTOR SHALL FURNISH THE OWNER A SHELL ROLLOUT SKETCH WITH THE FOLLOWING MINIMUM ALL RADIOGRAPHIC FILE AND INFORMATION:
a.) HEAT NUMBERS FOR EACH SHELL PLATE
b.) WELDERS MARK FOR EACH HORIZONTAL AND VERTICAL WELD SEAM INDICATING WHO WELDED THE SEAM (BOTH INSIDE AND OUTSIDE PASSES)
c.) LOCATION (BY DIMENSION) AND IDENTIFICATION OF RADIOGRAPHIC FILM TAKEN.

NOZZLE SCHEDULE (SEE NOTE 10)

MARK NO.	REQUIRED	SIZE & SERIES	ORIENTATION	PROJECTION	CENTERLINE ELEVATION	SERVICE
1	1	12" CL. 150 RF, SF	TO BE DETERMINED	9"	1' - 1 $\frac{1}{2}$ "	SPARE
2	1	24" DIA. API STANDARD	TO BE DETERMINED	N/A	ROOF	MANWAY W/HANDRAIL
3	1	10" CL. 150 RF, DF	TO BE DETERMINED	9"	1' - 4 $\frac{3}{4}$ "	JET MIXER
4	1	12" CL. 150 RF, DF	TO BE DETERMINED	9"	1' - 4 $\frac{3}{4}$ "	RECEIPT
5	3	4" CL. 150, RF, SF	TO BE DETERMINED	7"	9"	WATER DRAW W/ INTERNAL SUMP
6	1	6" (MIN) CL. 150 RF, HILLSIDE W/NO. 7	TO BE DETERMINED	8"	1' - 4 $\frac{3}{4}$ "	LOW SUCTION
7	1	16" CL. 150 RF, DF	TO BE DETERMINED	10"	1' - 4 $\frac{3}{4}$ "	SUCTION
8	6 TOTAL	GROUNDING LUGS	TO BE DETERMINED	N/A	CHIME	GROUND ELECTRICAL
9	4	4" SPECIAL	TO BE DETERMINED	FLUSH	TO BE DETERMINED	FOAM INJECTION
10	3	36" API STANDARD	TO BE DETERMINED	14"	3' - 0 $\frac{3}{8}$ "	MANWAY/DAVIT & SEAL OVER RIDE
11	1	30" WIDE	TO BE DETERMINED	N/A	TO BE DETERMINED	BOTTOM OF STAIRWAY
12	SEE NOTE 19	$\frac{1}{2}$ " CL. 3000	TO BE DETERMINED	N/A	SEE NOTE NO. 19	SAMPLE DRAW
13	1	14" CL. 150, SF, RF	TO BE DETERMINED	9"	ROOF	ENRAF
14	1	30" WIDE	TO BE DETERMINED	N/A	ROOF	TOP OF STAIRWAY
15	1	4" CL. 150 SF	TO BE DETERMINED	9"	ROOF	MAGNETRA/ 4" HI-LEVEL ALARM
16	1	36" x 36" ACCESS HATCH	TO BE DETERMINED	N/A	ROOF	ACCESS HATCH/ MANWAY W/HANDLES & LADDER/GAUGE POLE COMBO
17	1	6" CL. 150 SF	TO BE DETERMINED	9"	ROOF	TEMPERATURE PROBE
18	1	AS REQUIRED	TO BE DETERMINED	N/A	ROOF	CENTER VENT
19	3	4" CL.	TO BE DETERMINED	6"	ROOF	PAINTERS HITCH- TIE-OFF POINT



DATE	5/13/20	DATE	5/13/20	DATE	5/13/20	DATE	5/13/20
BY	WSE	BY	WSE	BY	WSE	BY	WSE
REVISIONS	1	REVISIONS	2	REVISIONS	3	REVISIONS	4
NO	1	NO	2	NO	3	NO	4
DATE	5/13/20	DATE	5/13/20	DATE	5/13/20	DATE	5/13/20
BY	WSE	BY	WSE	BY	WSE	BY	WSE
REVISIONS	1	REVISIONS	2	REVISIONS	3	REVISIONS	4
NO	1	NO	2	NO	3	NO	4
DATE	5/13/20	DATE	5/13/20	DATE	5/13/20	DATE	5/13/20
BY	WSE	BY	WSE	BY	WSE	BY	WSE

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MARATHON

STANDARD INTERNAL
FLOATING ROOF
STORAGE TANK

FT LAUDERDALE SPANGLER
TANK 200-17

SCALE: 1/4" = 1' (11X17) 1/8" = 1' (22X34)

DATE: 7-7-2020

DRAFTER: W.S. WALLENFELSZ

DESIGNER: JAMES G. MOORE

UNIT-DWG-SHT-TYPE
130-00302-01-T