1. ABOVEGROUND NON-FIRE RATED TANKS (UL142)
2. Acceptable manufacturers subject to compliance with the specifications:
3. Critical Fuel Systems
4. Highland Tank
5. Modern Welding
6. General
7. Provide and install a XX,000-gallon UL-142 Double-Wall Steel Aboveground Storage Tank. Tank storage volume shall be XX,000 gallons. Tank shall be x’ y” in diameter and x’ y” long.

Consult with CFS on the size of the tank that is required. These tanks should be included in the equipment schedule. These tanks are available in a number of configurations. Most popular is the double wall tank as is noted above. Other configurations can be a single wall tank with a separate rupture basin, in some cases that is called a dike tank as the rupture basin acts as a dike. Some locations can use a single wall tank where the room itself can be used as a containment area. Please consult with your local authority or State Fire Marshall.

1. The tank shall be designed for aboveground storage of flammable and combustible liquids at atmospheric pressure. Tank shall be fabricated from mild carbon steel with flat-flanged heads. Inner tank thickness: minimum ½”, head and shell. Out tank gauges: 10-gauge head and shell.
2. Each tank shall be delivered as a complete UL-listed assembly with two (2) factory supplied, welded-on saddles. Size and location of saddles shall be as required by the manufacturer. Saddles to be set level on a solid foundation.
3. Tank shall be designed for possible relocation at a future date. Concrete encased tank designs are not equal and will NOT be permitted.
4. Tank shall comply with the latest edition of National Fire Protection Association NFPA 30 Flammable and Combustible Liquids Code. The tank’s secondary containment must be tested for tightness in the factory and in the field before commissioning. Tank shall be supplied with emergency vents for the primary and the secondary containment tanks. Emergency venting by "form of construction" is not equal and will NOT be permitted.
5. Inner and Outer Tank shall be manufactured in accordance with UL-142 Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids. Entire tank shall be labeled for Underwriters Laboratories UL 142 Standard
6. Tank shall be subject to the STI’s Quality Assurance program and shall be backed by the STI 30-year limited warranty.
7. Construction
8. Tank shall be fabricated per UL-142 of mild carbon steel with shell seams of continuous lap weld construction.
9. Tank shall be of double wall construction and provide complete secondary containment of the primary storage tank’s contents by an impervious steel outer wall.
10. Lifting lugs shall be provided at balancing points to facilitate handling and installation.
11. Exterior Protective Coating:
12. Surface Preparation: Grit blast - SSPC-SP-6 White Blast.
13. Finish: White finish paint system 5-7 DFT on the shell and heads.
14. Threaded fittings with thread protectors shall be supplied as follows (all fittings must be located on tank top per UL):
15. One (1) 2" - Interstitial Monitoring.
16. One (1) 2" - Normal Vent, Primary Tank.
17. One (1) 4", 6", or 8" - Emergency Vent, Primary Tank.
18. One (1) 4", 6", or 8" - Emergency Vent, Secondary Tank.
19. One (1) 4" or 6" - Product Fill.
20. One (1) 2" or 4" - Product Pump or Supply.
21. One (1) 2” or 4” – Filtration Supply (at opposite end of Product Return
22. One (1) 4" - Product Return or Auxiliary (3,000 gal. and larger).
23. One (1) 2" or 4" - Liquid Level Gauge.
24. One (1) 4" - Stage 1 Vapor Recovery, Electronic Level Stage 1 Gauge, or Auxiliary (4,000 gal. 8’0" diameter and larger)..
25. One (1) 18" Manway (min.) with emergency vent (4,000 gallons and larger).
26. Additional fittings available upon request.
27. Optional Equipment
28. Manway(s).
29. 7 or 10 gal. Spill/Overfill Container.
30. External Ladder.
31. External Ladder Platform.
32. Walkway(s) with Handrails.
33. Stairs and Platforms with Handrails.
34. Internal Ladder(s).
35. Internal Coating with Interior Weld (500 gal. minimum).
36. Fuel Management System and Monitoring Systems.
37. Electronic Overfill Detection Sensors and Alarm Panels.
38. Execution
39. Tank shall be installed on a reinforced concrete base constructed by the owner. Installation and testing shall be in strict accordance with Steel Tank Institute Installation and Testing Instructions for UL142 Rated Aboveground Storage Tanks.