UNDERGROUND FIBERGLASS
SINGLE-WALL INTERCEPTOR SPECIFICATIONS

SHORT FORM SPECIFICATION

The contractor shall provide single-wall fiberglass underground interceptor, in types (single, double, or triple basin) and sizes as shown on the drawings. The interceptors shall be manufactured by Containment Solutions. Interceptors shall be tested and installed with pea gravel or crushed stone or approved alternate backfill material, according to the current installation instructions (Containment Solutions' Pub. No. INST 6001 provided with the tank).

LONG FORM SPECIFICATION

1. GENERAL

1.1. Quality Assurance

1.1.1. Acceptable Manufacturers: Containment Solutions, Inc., Conroe, TX

1.1.2. Governing Standards

1.1.2.1. UL 1316 Underwriters Laboratories, Inc., Glass Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products.

1.1.2.2. National Fire Protection Assoc. (NFPA 30) Flammable and Combustible Liquids Code and (NFPA 31) Standards for Installation of Oil Burning Equipment.

1.2. Submittals

1.2.1. Shop Drawings: Contractors shall submit _____ copies of shop drawings for each tank. Drawings shall include all critical dimensions and show locations of all fittings and accessories, i.e., manways, hold-down straps, etc.

1.2.2. Catalog Data: Contractor shall submit _____ copies of manufacturer's literature.

1.2.3. Installation Instructions: Contractors shall submit _____ copies of manufacturer's latest installation instructions.

1.2.4. Calibration Charts: Contractors shall submit copies of manufacturer's latest calibration charts.

2. PRODUCTS

2.1. Single-Wall Interceptor Tanks

2.1.1. Provide single-wall fiberglass reinforced plastic underground _____ basin interceptor tank with fittings and accessories as denoted on the drawings.

2.1.2. Loading Conditions - Tanks shall meet the following design criteria:

2.1.2.1. External hydrostatic pressure: Buried in ground with 7' of over burden over the top of the tank, the excavation fully flooded and a safety factor of 5:1 against general buckling.

2.1.2.2. Surface Loads: When installed according to manufacturer's current installation instructions, tanks shall withstand surface HS-20 axle loads (32,000 lbs/axle).

2.1.2.3. Internal Load: Primary and secondary tanks shall withstand 5 psig (35kPa), or 3 psig for 12' diameter tanks, air pressure test with 5:1 safety factor.

2.1.2.4. Tanks shall be designed to support accessory equipment such as heating coils, ladders, drop tubes, etc. when installed according to manufacturer's recommendations and limitations.

2.1.3. Product Storage Requirements

2.1.3.1. Tank must be separately vented at the influent tee, interceptor chamber and at the effluent tee.

2.1.3.2. Tank shall be capable of storing liquids with specific gravity of up to 1.1.

2.1.3.3. Tank shall be capable of storing grease and oils at temperatures not to exceed 150ºF at the tank interior face. Operating temperatures of the influent oil/water mixture shall range from 40° F to 150° F.

2.1.3.4. Tank shall be chemically inert to petroleum products.

2.1.4. Materials

2.1.4.1. The tank shall be manufactured as a matrix of premium resin, glass fibers and silane-treated silica that together result in a composite providing improved corrosion protection.

2.1.4.2. Tank inner wall shall be fabricated against a mold to produce a non-air inhibited and high gloss laminate to provide a fully cured inner surface without the need for wax coats, a low coefficient of friction and a natural resistance to the build-up of algae or other contamination on the surface. Wax and wax resin coatings cannot be used to achieve full surface cure on tank shells and endcaps.

2.1.5. Capacity and Dimensional Requirements

2.1.5.1. Nominal capacity of the tank shall be _____ gallons.

2.1.5.2. Nominal outside diameter of the tank shall be _____ feet.

2.1.5.3. Nominal overall length of the tank shall be _____ feet.

2.2. Accessories

2.2.1. Provide fiberglass anchor straps, turnbuckles and concrete deadmen as provided by tank manufacturer.

2.2.2. Manway Extensions

2.2.2.1. Provide fiberglass reinforced plastic manway extensions as shown on the drawings.

2.2.2.2. The height for the manway extensions shall be _____ feet high.

2.2.2.3. If manway extensions are shown on drawings, the Contractor is to furnish the correct diameter and length.

2.2.3. Flanged Manways

2.2.3.1. The standard manway is 22" ID.

2.2.3.2. All manways will be furnished complete with U.L. listed gaskets, bolts and covers.

2.2.3.3. Location — see standard tank drawings.

2.2.3.4. Manway risers 48" in diameter and 42" high are optional to provide access to the manway lid. A 24" x 24" galvanized street box with a cover must be provided by contractor for at-grade installation.

2.2.4. Tank Lifting Lugs

2.2.4.1. Provide lifting lug(s) on all tanks.

2.2.5. Tangential Nozzles

2.2.5.1. Shall be installed on the heads of the tank for inlet and outlet flows and shall be sized in accordance with the manufacturers designed flow rates. Connection to nozzles shall be made with flexible connectors.

2.2.6. Transfer Pipes

2.2.6.1. Shall match the diameter of the inlet and outlet nozzles.

2.2.7. Optional Fittings

2.2.7.1. All standard threaded fittings are carbon steel NPT half couplings. Reducers can be used for smaller sizes where specified and provided by the contractor.

2.2.7.2. All standard threaded fittings to the primary tank are 4" in diameter.

2.2.7.3. All optional inlet/outlet stub outs shall be FRP or PVC.

2.2.7.4. Flexible connectors must be used on all piping connections. Piping must be free to move independent of the tank.

2.2.8. Optional Oil Stop Valve

2.2.8.1. The interceptor tank shall be furnished with an Oil Stop Valve.

2.2.8.2. Oil Stop Valve will be sized the same as inlet and outlet pipe on the tank. The assembly wil be installed and shipped with the tank for sizes of 8" diameter and less. Sizes from 10" to 14" will be test fit by the tank manufacturer but shipped seperately, and installed by the Contractor at the site. The Oil Stop Valve shall be furnished with a P-trap, fiberglass platform to mount the P-trap onto, and a 4" NPT threaded coupling at the tank top that is accessible at grade to accommodate the release cable attached to the Oil Stop Valve.

3. EXECUTION

3.1. Installation of FRP Tanks

3.1.1. Contractor's personnel involved with tank system installation shall be educated by tank manufacturer.

3.1.2. Contractor shall test and install tank, and accessories, according to all current installation instructions provided with tank.

3.1.3. Contractor is to complete the installation checklist provided by the manufacturer. A copy of the installation checklist must be retained by the tank Owner and/or installation Contractor to validate any future warranty claim.

3.1.4. Tanks shall be tested and installed according to the current installation instructions provided with the tank (refer to Containment Solutions pub. no.'s INST 6001).

4. LIMITED WARRANTY

4.1. Limited Warranty

4.1.1. Warranty shall be Containment Solutions' limited warranty in effect at time of delivery.