



## SAMPLE ENGINEERING SPECIFICATIONS PITLESS BOOSTER STATION

Completely assembled Pitless Booster Station for submersible pump including well cap, lift out bail, hold down hooks, lift out pipe, spool with or without check valves, specified inlet and outlet connections and reservoir tank.

**SUBMITTALS:** All bidders shall submit as part of their bid:

1. The Manufacturer and Model of the pitless booster station to be installed.
2. Detailed specifications with drawings of the Booster system furnished by the manufacturer.
3. Detailed specifications on the submersible pump and submersible wire to be used in conjunction with the Booster Station.
4. System to be assembled and pressure tested without submersible pump prior to shipping.

**SUBMERSIBLE PUMP:** Manufacturer \_\_\_\_\_ Model No. \_\_\_\_\_.

The submersible pump will be designed for \_\_\_\_\_ GPM @ \_\_\_\_\_ TDH (includes \_\_\_\_\_ # incoming pressure), with a \_\_\_\_\_ HP \_\_\_\_\_ Volt \_\_\_\_\_ phase motor. \_\_\_\_\_ ft. of No. \_\_\_\_\_ submersible wire will be furnished with the system. The unit should be factory assembled, and tested, before shipping to the site.

**SUBMERSIBLE BOOSTER STATION:** The Submersible Booster Station shall be equal to Baker Manufacturing Company, Monitor Division, Model \_\_\_\_\_.

**WELL CAP:** The Watertight Cap shall be secured to the pitless casing with a compression gasket. The top of the cap can be removed without affecting the sealed conduit or wiring. Construction of the cap will be of heavy duty gray cast iron and painted with a green enamel finish. The well cap will be watertight to 46 feet of head. All wall thickness, including upper casing and reservoir to conform to steel well casing per the recommended standards for water works, Great Lakes Upper Mississippi River Board of State Public Health and Environmental Managers, Health Education Services, Albany, NY.

**UPPER CASING:** The Upper Casing is factory assembled to the discharge body, and the lift out and hold down mechanism are factory assembled to the spool. The upper casing must provide a water tight connection from the discharge body to the well cap. The inlet and discharge center line to be \_\_\_\_\_ feet below grade, and the booster station upper casing to extend \_\_\_\_\_ feet above grade.

**SPOOL:** The spool shall be \_\_\_\_\_ inches per ANSI B 1.20.1 with male drop pipe connection and shall be constructed of heavy duty gray cast iron, ductile iron, or steel with a lead free galvanized plating on the wetted surface of over .010 inches thick. The spool will have o-ring grooves machined into the spool, retaining the o-rings when setting or pulling the system. Spool to include cable seals to seal specified wires up to the specified inlet pressure.

**DISCHARGE BODY:** The Discharge Body shall be constructed of lead-free galvanized ductile iron or lead-free galvanized steel. O-ring seat to be designed to prevent crevice and galvanic corrosion, dissimilar metals should be avoided. Discharge outlet port to be \_\_\_\_\_ inches, \_\_\_\_\_ type. (flanged, threaded, welded or transition)

**RESERVOIR TANK:** The Reservoir Tank is to be constructed of heavy duty steel, coated with a rust protective coating of non-toxic black paint. The I.D. of the tank to be \_\_\_\_\_ inches. Suction inlet to be \_\_\_\_\_ inches, type. (flanged, threaded, welded or transition) Tank length to accommodate \_\_\_\_\_ ft. long pump and motor.