

PRIVATE WATER SUPPLY DESIGN

System design for _____ located at (property address or legal description) _____

This design is for (check one) a single-family residence or a two-party private well.

Source pump:

Pump rate _____ gpm. If less than the required daily production of 400 gallons per day (gpd) for a single-family residence or 800 gpd for a two-party private supply, the booster pump and storage section must be completed.

Required pump head:

Well head

(S.W.L. + Drawdown)

System elevation

Headlosses

Residual (30 psi)

Total

Pump selected: Attach pump curve/table

Type, e.g., Goulds _____

Horsepower _____

Model No. _____

Depth of pump setting _____

Booster pump:

If the capacity of the water supply is less than the required daily production of 400 gpd for a single-family residence or 800 gpd for a two-party private supply, complete this section as well as the storage reservoir section:

Booster pump rate

Required pump head

System elevation _____

Headlosses _____

Residual (30 psi)

Total

Pump selected: Attach pump curve/table

Type, e.g., Goulds _____

Horsepower _____

Model No. _____

Storage reservoir: Must be completed if a booster pump is required.

- Single-family residence: 400 gallons unless otherwise documented. Attach manufacture's specifications
- Two-party private: 800 gallons unless otherwise documented. Attach manufacture's specifications.

Pressure tank sizing:

Selected tank size _____ gallons.

One gallon of working storage per one gpm pump capacity, e.g., a 5 gpm pump will require 5 gallons of working or usable storage which computes to a 19-gallons (total volume) pressure tank. When a booster pump is required, size the pressure tank according to the booster pump, not the well pump.

Distribution system:

Services	Pipe type	Pipe diameter	Pipe length	Peak flow	Headloss per 100 ft.	Headloss in feet
1						
2						

Completed by _____ Date _____