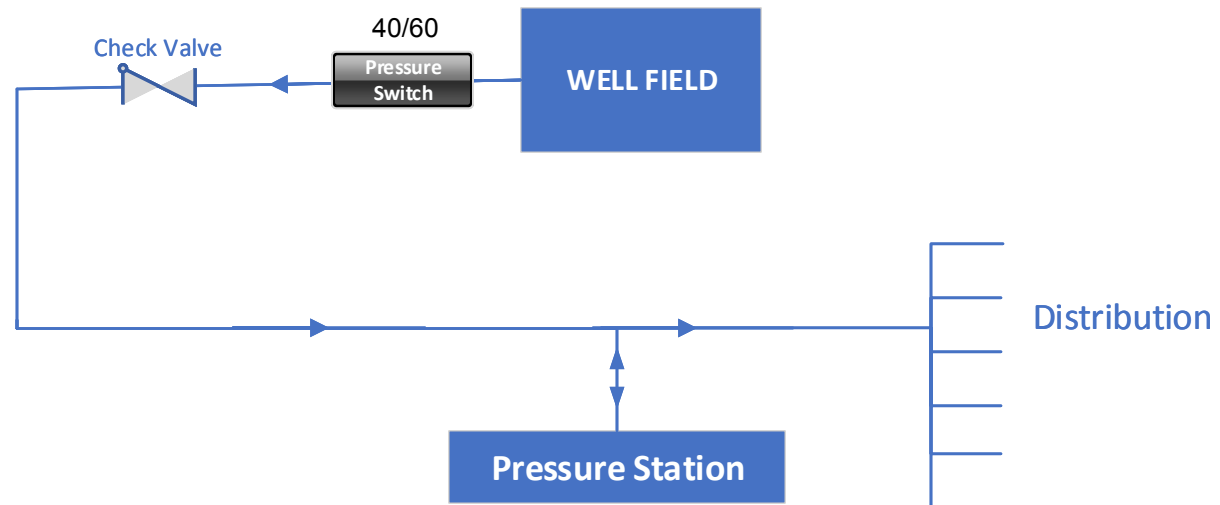


# THE ARROYOS PRESERVE

## Water Supply Plan

Phase-1 — 9-Tanks Pressure  
February 22, 2021



Pressure Station consists of as many as 9, 119 gal pressure tanks (AMTROL WX-350), providing  $\approx 400$  gals before asking for water from the well. Water supply & distribution mains might be as small as 4-inch with 1-inch takeoffs.

# THE ARROYOS PRESERVE

## Water Supply Plan

Phase-2 —TWO 9-Tank Pressure Stations  
February 22, 2021

### How It Works

Expanding the Water Supply to incorporate TWO Pressure Stations using Remote Operated By-pass Valves gives areas farther away from the well better service (pressure and volume), while allowing a more affordable-sized water main (because of less friction loss).

In practical use, each isolated Pressure Station distribution system (P.Stn) would be topped off when any one of them needed water from the well, e.g., P.Stn #1 may be sitting at 35 psi when P.Stn #2 falls to the “cut-in” pressure of 30 psi, asking for water from the well. As P.Stn #2 gets recharged, P.Stn #1 also will get brought up to its 50 psi pressure.

While the Remote Operated By-pass Valves are not required to operate in the system, they would provide for a larger amount of on-demand water to charge the 4” main in the event of fire-flow needs (VALTORX 4” Electric Actuated Butterfly Valve, Lug, NBR, 24-240V)

In the event of emergency need, each P.Stn can be opened remotely into the main and provide instant access to ≈400 gals from each P.Stn, enough to fill the tanks of two fire engines (≈2.5 minutes each at 30 psi to fill).

