

# Hwy 90 Ranch WSC



Our water company has been in existence since the early '70's. The developers made the initial installation and in 1978 they turned it over to the community. Volunteer community help has been running it ever since. There have been improvements made such as additional storage tanks and the construction of the meeting house. Many members of the community have participated in the operation of our water supply corporation.

With a few exceptions, we still operate our water company using volunteers. We have standby assignments for plumbing and electrical help in addition to paying our billing person.

What does our water system consist of?



Six 4,000 gallon storage tanks.



A sixty horsepower submersible pump which pumps the water from the Edwards Aquifer into the storage tanks.



A chlorine system which is checked daily.

What does our water system consist of?



Mester Pump House

1-5hp + 3-2-7hp

A building that houses pressure control components including three ~~35~~ horsepower pumps. These pumps generate between 40 to 55 psi in order to create the necessary water pressure required to serve the community's needs.

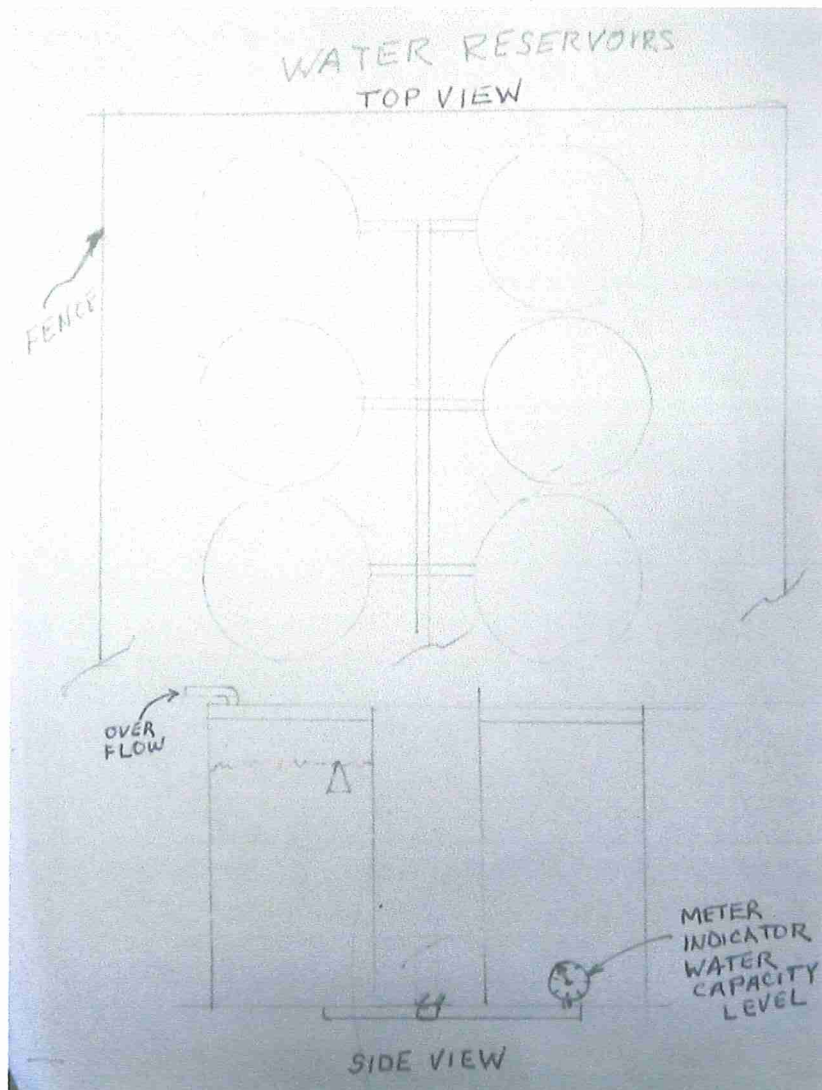


3, 4, 6  
approximately 6 miles of 4, 6, and 8 inch pipes which supply water to the homes and businesses



105 customer meters

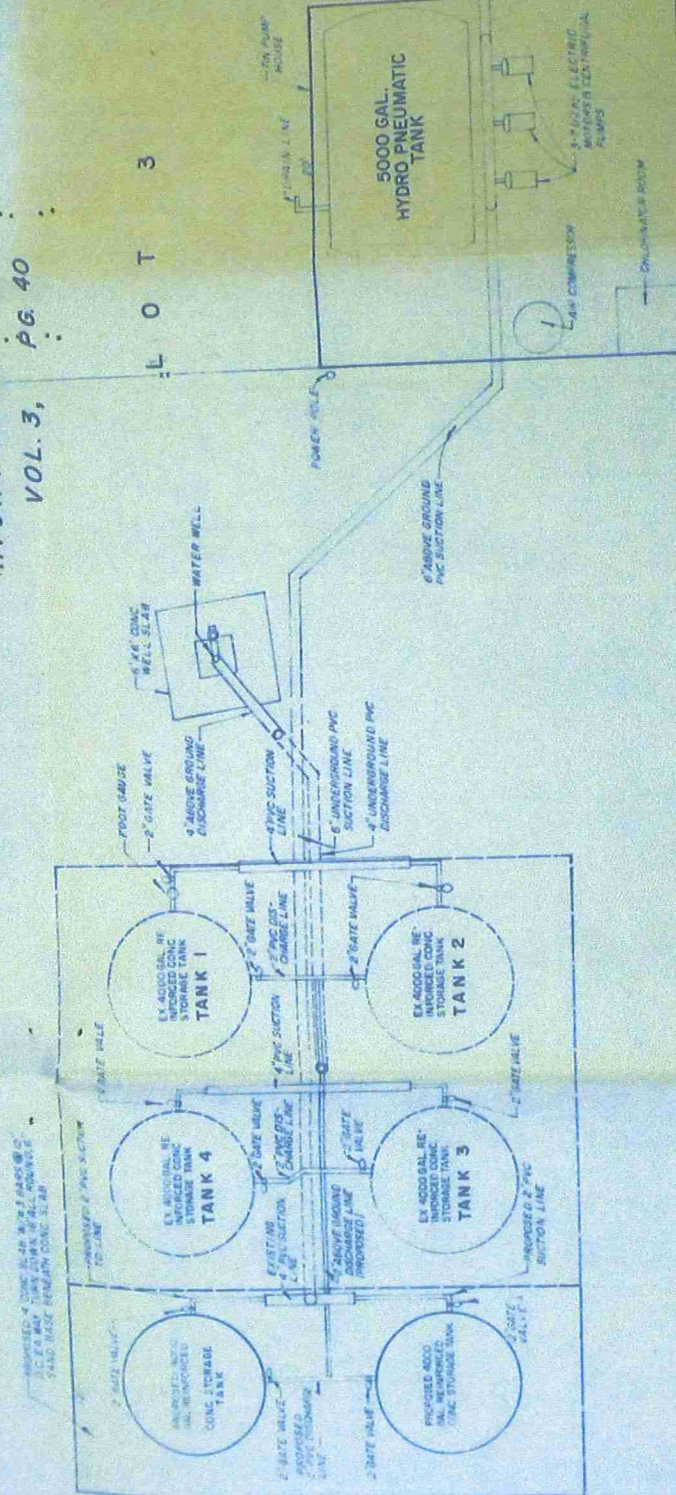
## Water Tanks



Each tank will hold 4,000 gallons of water. These six tanks combined with the 2,000 gallon pressure tank results in a total equipment capacity of 26,000 gallons of water. Should the pumps fail, the tanks have been designed to sustain a gravity feed of water to the community. This is accomplished through the water pressure which naturally results from the weight of the water in the tanks exiting into smaller pipes.

HIGHWAY 90 RANCH LTD.  
VOL. 3, PG. 40

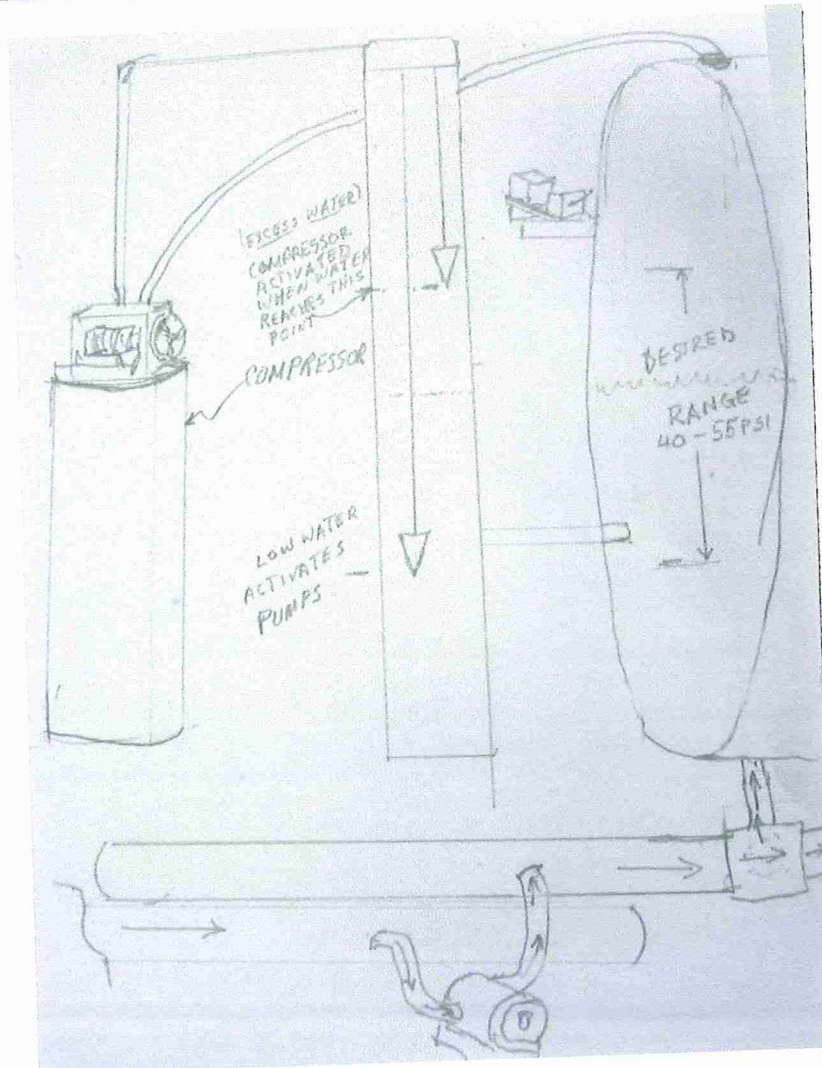
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## Pumps



Three ~~35~~ HP water pumps supplement the pressure needed to sustain the 40 to 55 PSI which is required to optimally deliver the water to each customer.



## Procedure for When There's No Water



Step 1: Does the meter show there is no water in the tank? (i.e. the indicator is on zero)  
If so go to the Pump location

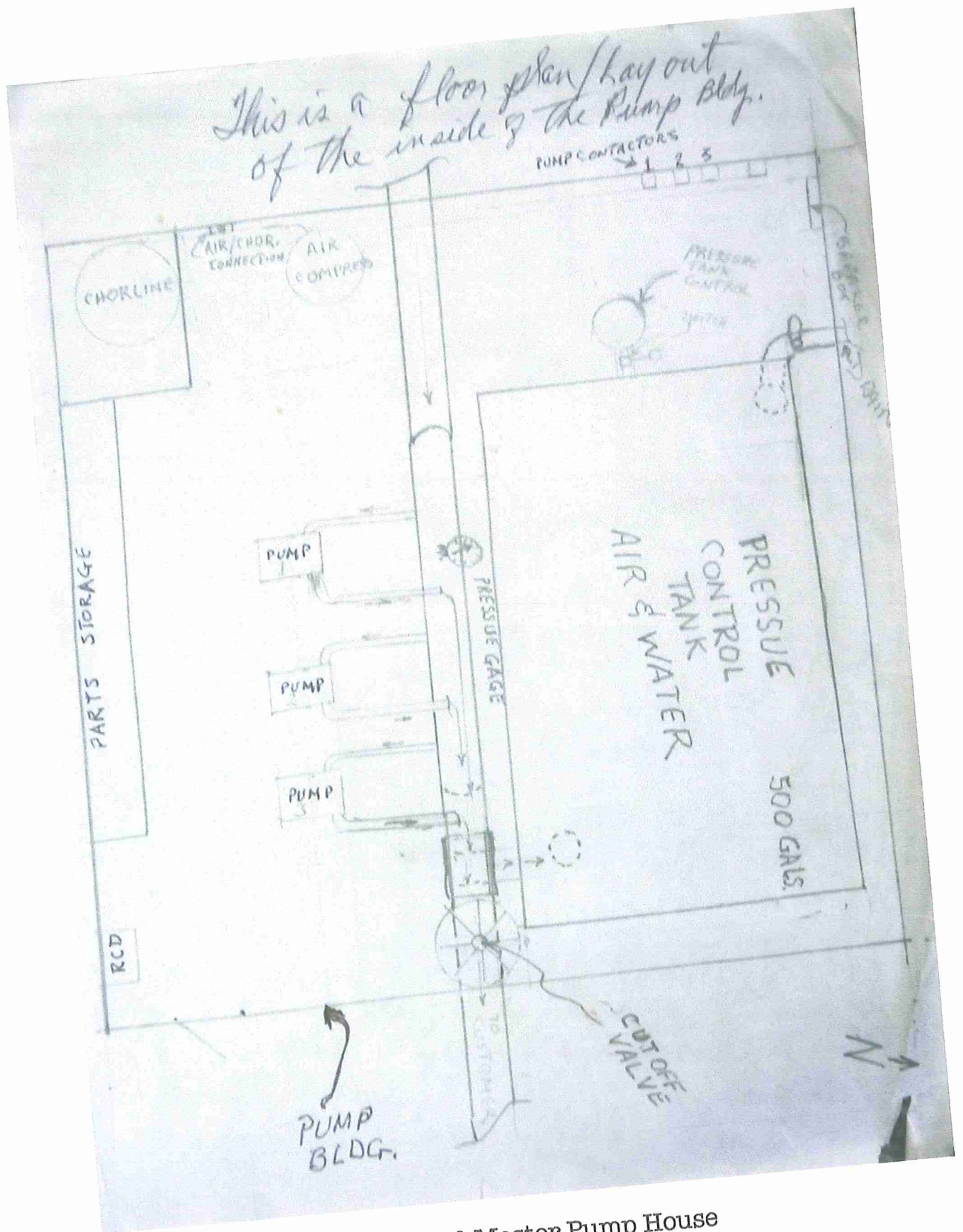


Master Meter:



Go to over ride switch and switch it to "on."  
Does the submergible pump come on? Leave the switch on until the automatic system takes over. Be sure to turn the switch off at this point.  
If the pump does not come on, then we have either a breaker problem or a short in the pump. Go inside the pump house to check the breaker.

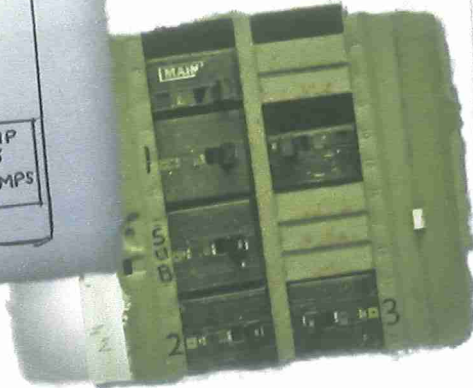
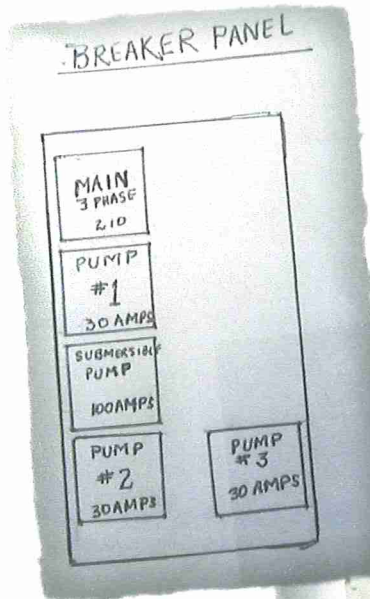
**Pump Operations**



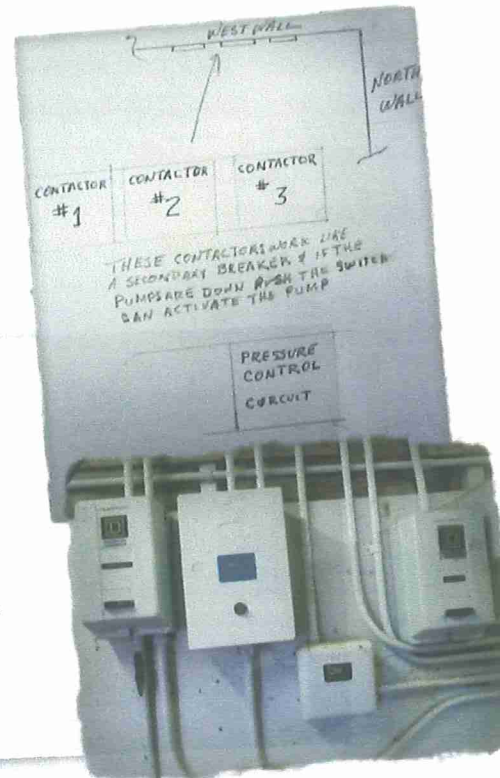
Layout of Mester Pump House

Pump Operations

## Procedure for When There's No Water



Are the breakers ok? i.e. are they all on? If not, then turn on. If they are all already on, then there is a problem with the pump and we must call a repair man.



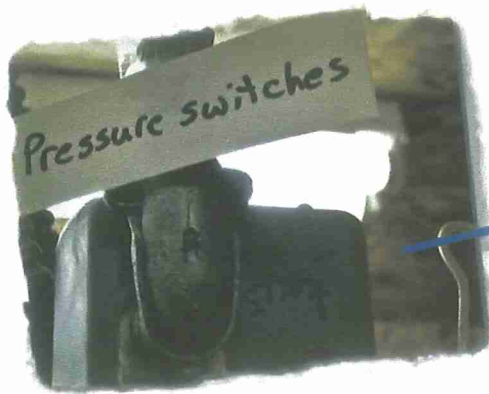
Check if pressure tank is empty. Allow time for tanks outside to fill up.



Check whatever pump is going to start. Make sure water valves incoming and outgoing are in the "open" position.



## Procedure for When There's No Water



Manually push pressure switch to "on." Hold until pressure gauge gets to 30 psi then release and

the automatic pressure system will take over.

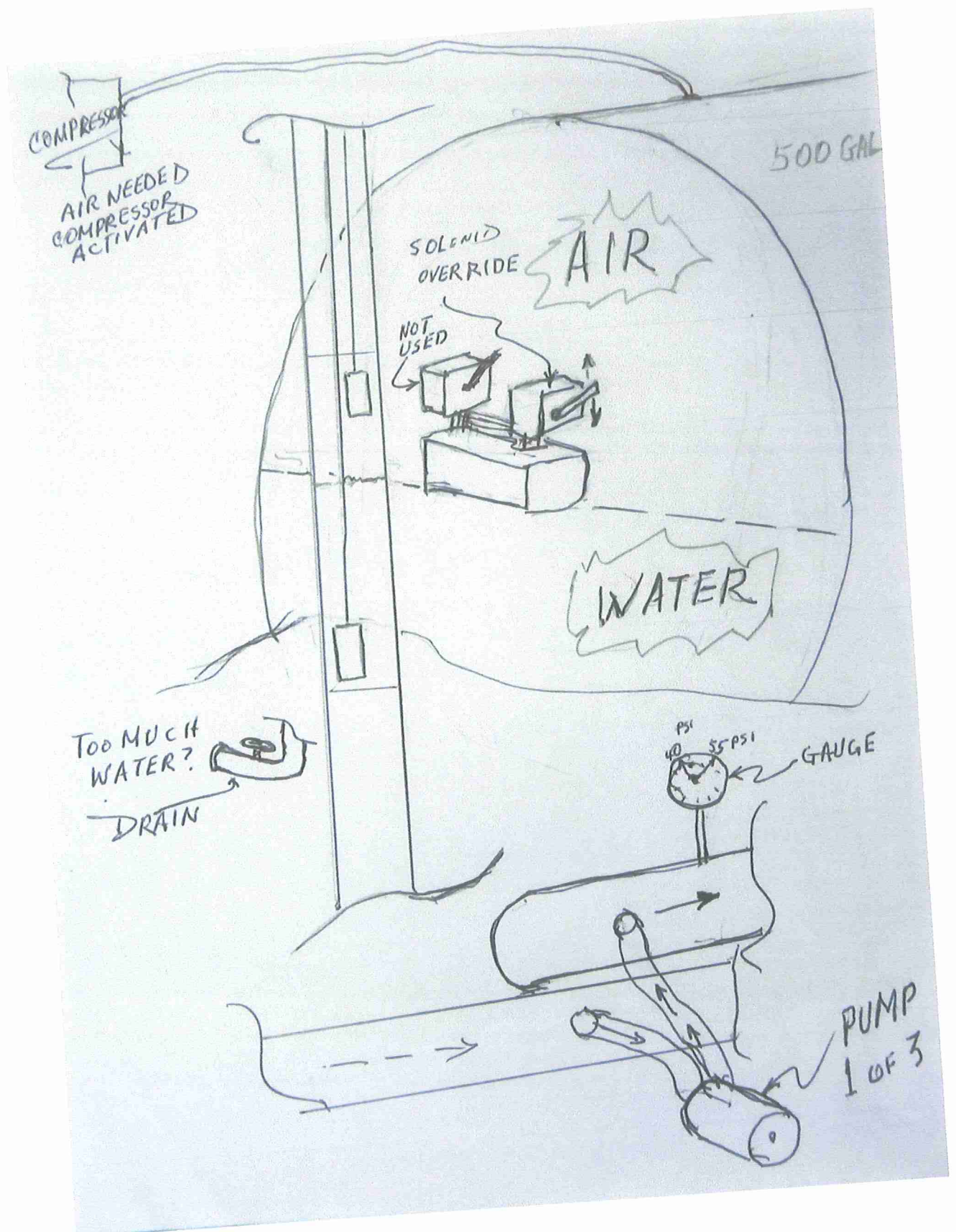


In order for the system to operate properly, the pressure gauge should read from 40-55 psi. Pump or pumps will start when pressure is below 40 and stop at about 50-55psi.



Caution: when the automatic system starts to work on its own, the over ride switch on the well pump outside needs to be turned "off."

**Pump Operations**



## Procedure for When There's No Water



If the water tanks are not filling up because there is a main line break or the customers are using the water faster than the pumps can handle, close the valves across the street from the pump house.

Valve 1



As the tanks begin to fill up and the water pressure reaches 40 psi, one of the water line cutoff valves should be opened to provide limited water to customers. When the system pressure improves, the second valve can be opened.

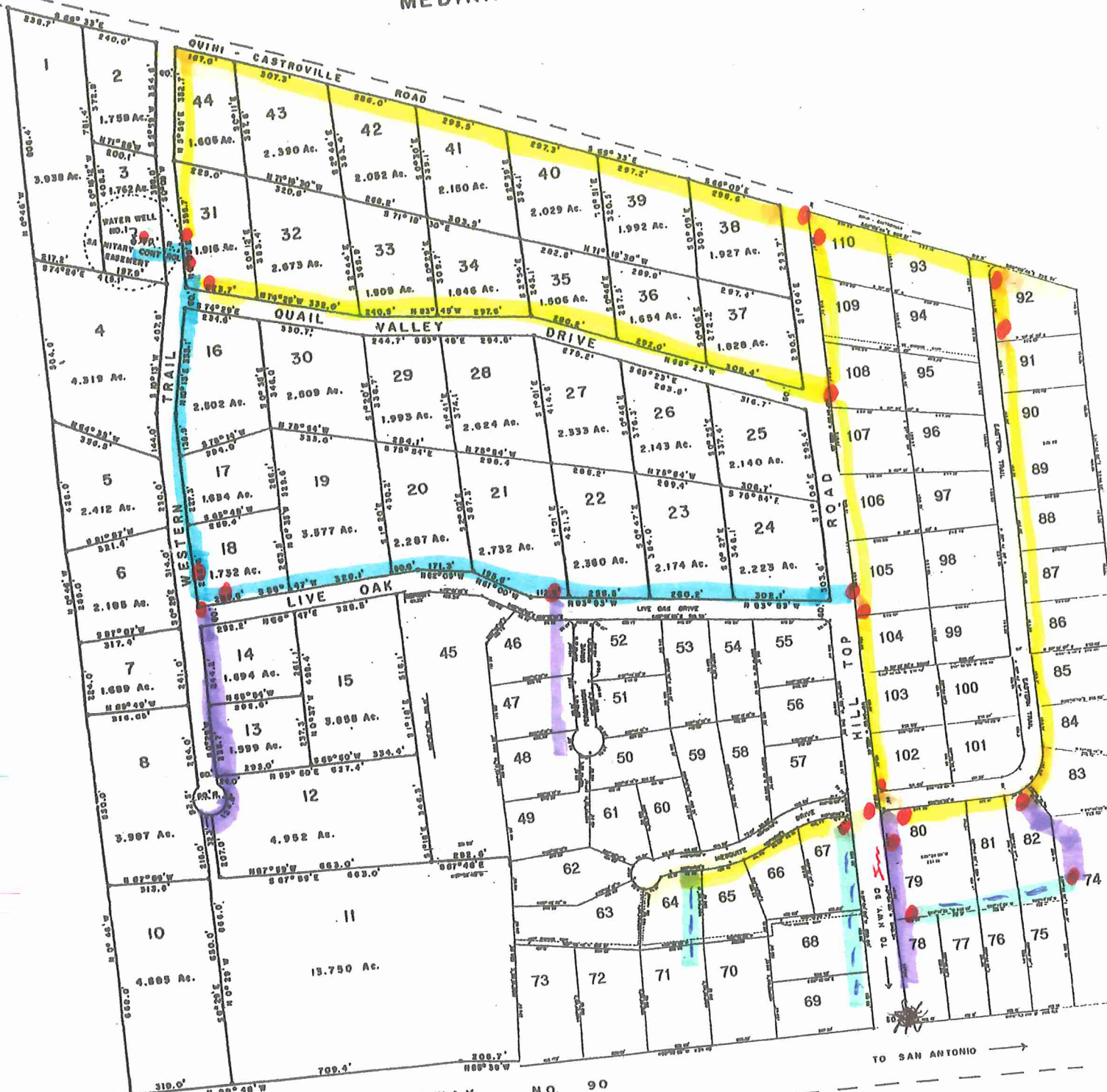
Valve 2

# HWY. 90 RANCH, LTD.

SUR. NO. 178 NEP. FLORES, A-1887.

MEDINA COUNTY, TEXAS.

● water main valves  
6" water main  
4" " "  
3" " "  
2" " "



EASEMENTS  
GRANTED HERETO

THE STATE OF TEXAS:  
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