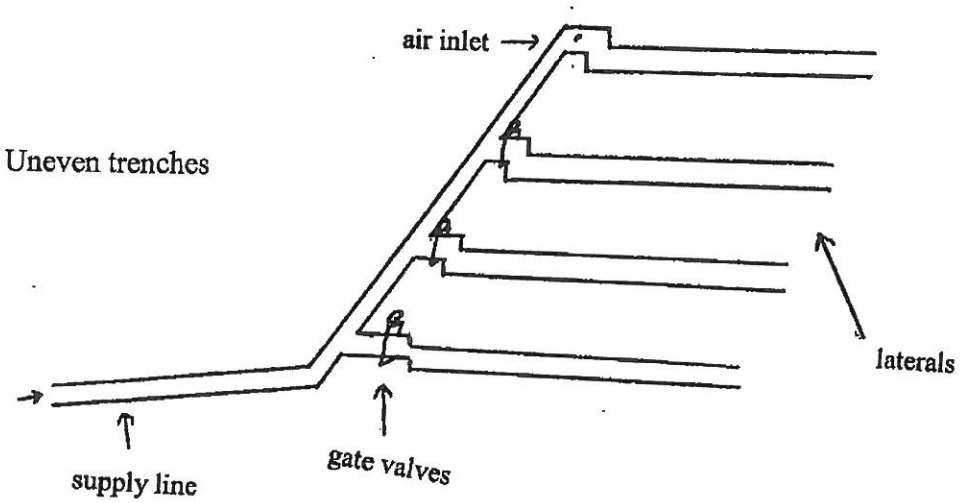
Pressurized uneven trenches

With pressurized trenches on a slope, uniform distribution can be more difficult. A desktop design approach to uniform distribution has many variables in the field that can not always be relied upon.

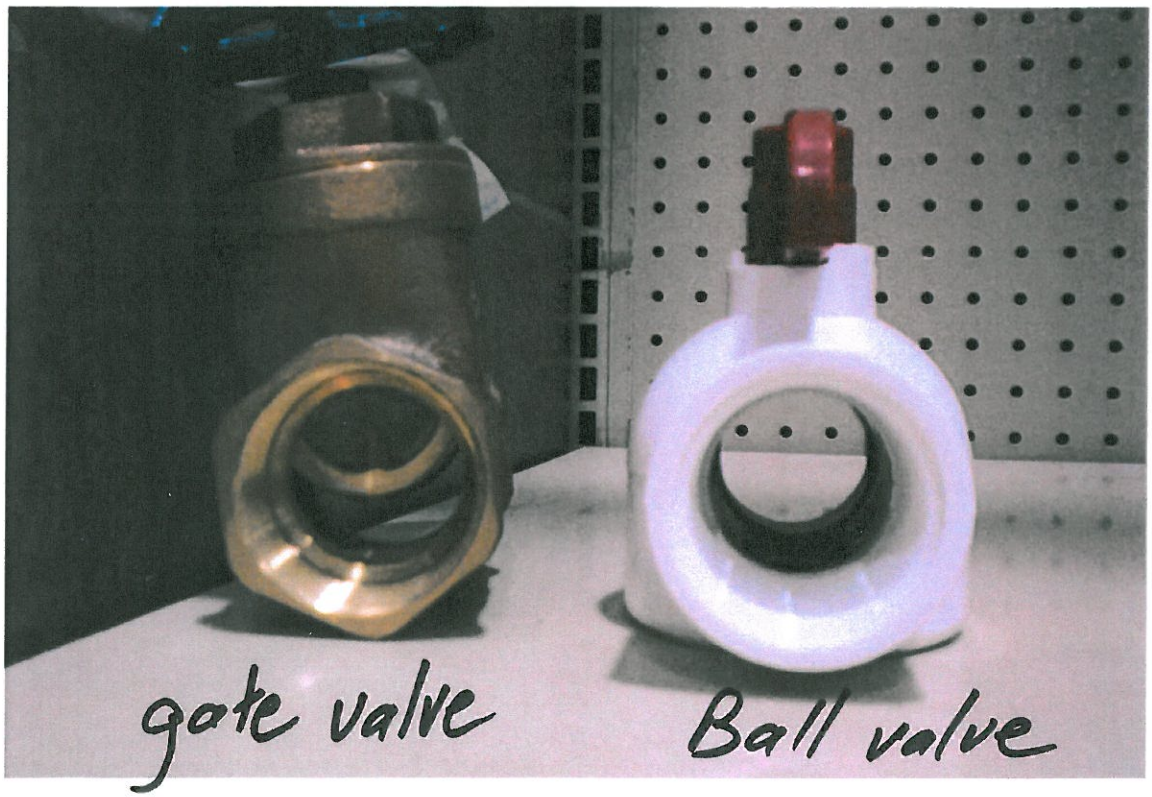
A dependable way to create uniform distribution is to use a Gate valve (not a Ball valve) at the beginning of each lateral (except the top one) to dial in equal pressure to each lateral by measuring the squirt heights. This method does incur extra costs for gate valves and landscape boxes, but maintains the simplicity of the same perforation size and spacing.
In addition, for the life of the system you are now able to maintain equal squirt heights by adjusting as necessary.

To prevent all the effluent from draining to the lowest trench after the pump shuts "Top Feed" all the laterals similar to the method used to top feed a bed manifold as shown below.
Note: check valves can not be relied upon when used in the horizontal position.

Using these two methods will ensure that uniform distribution is maintained and any one trench is not overloaded.




manifold
supply line


gate valve
Ball valve