

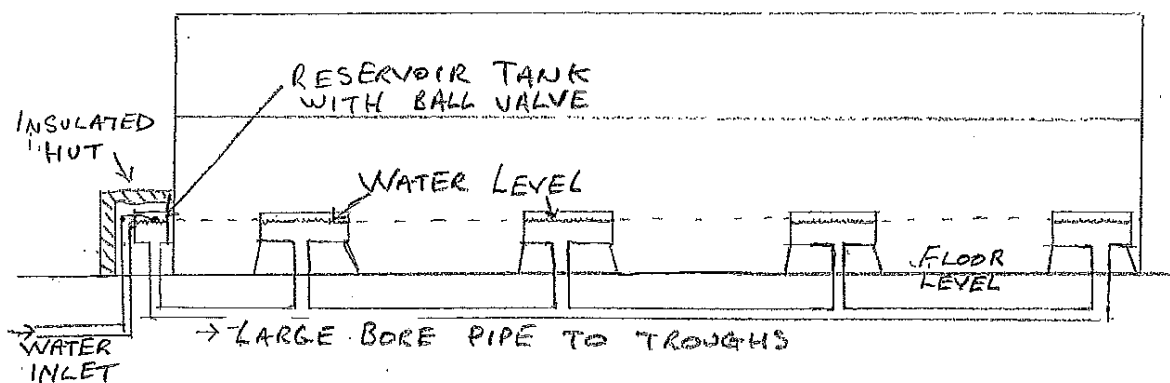
## Frost Free Water Troughs

An alternative to the traditional valve and ballcock arrangement to reduce the chances of the valve freezing up.

This approach can be taken a stage further by removing all the trough valves completely and controlling the water level from a central tank. This tank is not accessed by stock, and can therefore be fully insulated with inlet and outlets coming directly from underground.

The system is ideally suited to a new build and is not so straightforward to install as a retrospective fit.

The principle of the system is that all troughs are at the same level as the reservoir tank with freeflow filling in to the bottom of the trough. The water level in the reservoir tank dictates the water level in each trough.



There are some other advantages in that there are no valves or ballcocks accessible to stock; the flow rate into the troughs can be high, therefore small troughs will service a relatively large number of cows; easier to clean with no restrictions in the trough; ideally suited to tip-over troughs.

When considering this system, careful consideration must be given to trough levels as they must all be at the same level, and are not individually adjustable.

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