

Alternative Wastewater Treatment System- Rootzone

A new system has now been approved for Western Australia. It is an alternative to a septic tank and leach drain system, and in some cases, can be used instead of an Aerobic Treatment Unit (ATU).

The system uses natural biological processes in a reed bed system to treat wastewater to such a standard that it can also be pumped out through dripline to irrigate gardens. Constructed wetlands and reed bed filter systems have been used for water treatment in many applications worldwide for decades. They have been used for applications as diverse as household sewage treatment and stormwater remediation.

The process relies on natural photosynthesis and biological degradation to achieve good quality effluent. Wastewater passes into a primary sedimentation tank before it enters a horizontal flow reed bed and then a vertical flow bed. Excess effluent is sent to either leach drains or conventional beds or pumped to dripline irrigation.

The Rootzone reed bed treatment systems contain special media and wetland macrophytes (plants) which provide sites for bacteria and other organisms which undertake the digestion of household wastes into simpler substances. Rootzone is environmentally-friendly technology in wastewater and sludge treatment.

Water Installations has the expertise to design and implement cost effective, ecological engineering solutions that protect your investment and the environment using appropriate technology for the treatment of domestic and commercial waste water.

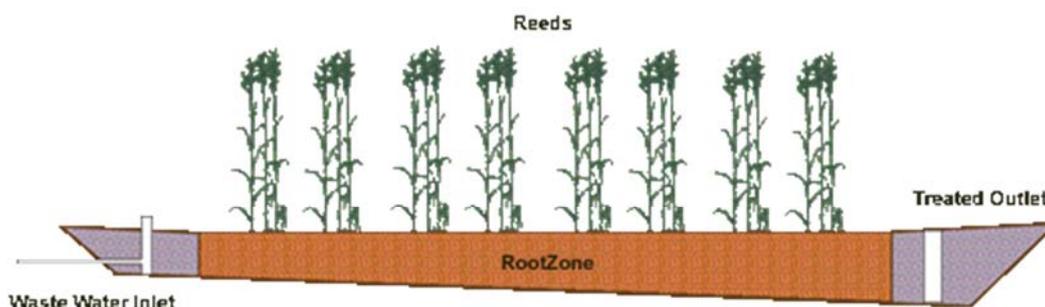
We examine every case on an individual basis to ensure that the best solution is implemented. We take a holistic approach, looking at the source of the pollution and ways to reduce the problem as well as cost effective re-use of the output.

Benefits

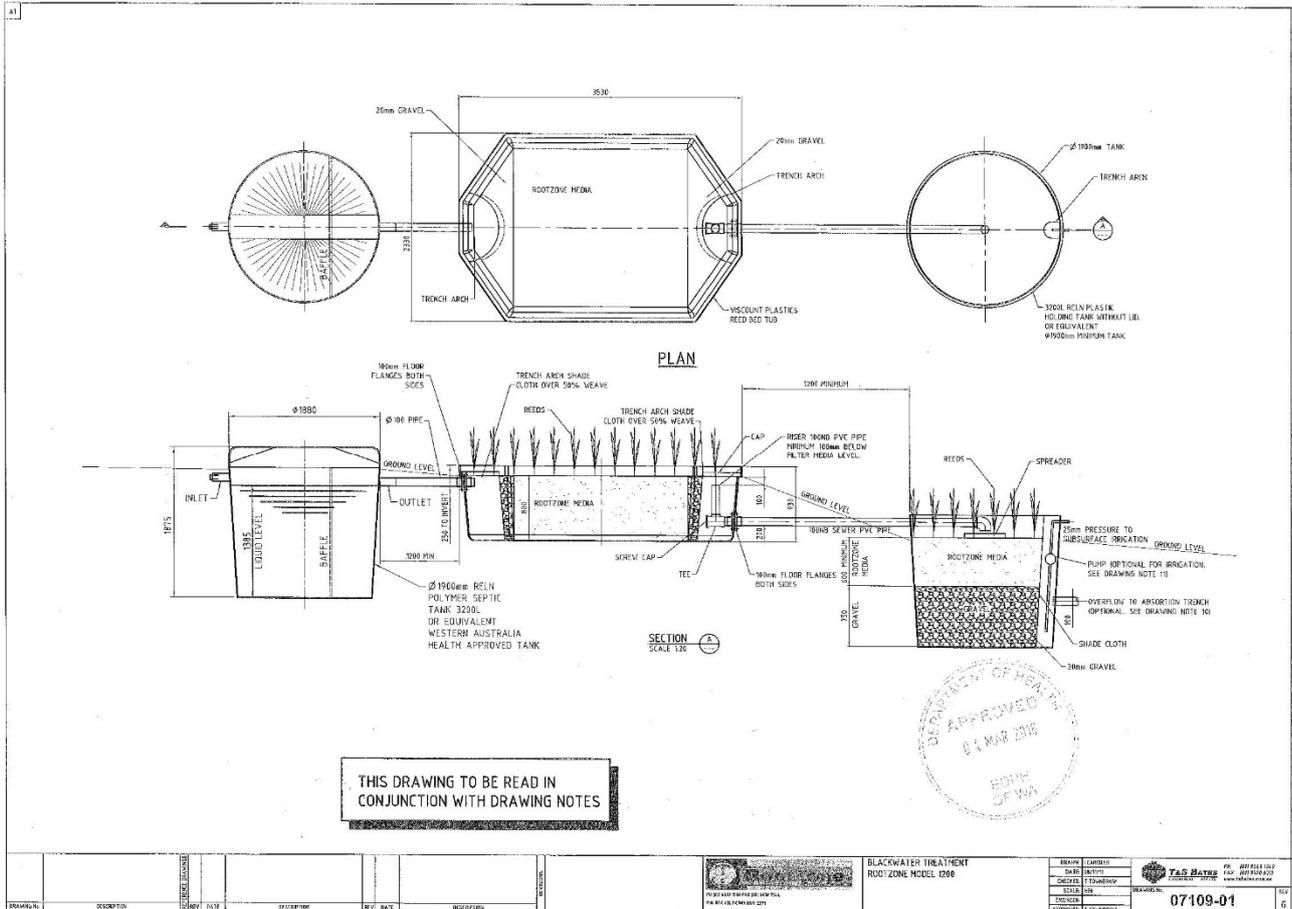
- Low Operating and maintenance costs - Servicing every six months.
- No Technical expertise needed to operate.
- Environmentally safe and friendly.
- Alternative system to septics and some ATU applications.

Rootzone filter bed systems produce no noise or smells. However, like all wastewater systems, sludge and scum slowly accumulates in the primary sedimentation chamber. This will need to be removed by a Liquid Waste Contractor every ten years or so.

With little or no electrical or mechanical parts, Rootzone systems are long lasting, wear free, self-regulating ecosystems that are simple to operate without complex controls and chemical additives. The maintenance requirement is relatively low and the system life is very long.



Rootzone Horizontal Subsurface Filter (HSF)



How to get a system installed

An application is submitted for any installation in WA. This is a form that can be obtained from your local Council, but Water Installations does have this, and most often we undertake this on your behalf, and as part of our quote.

You will also need to fill in and return a signed Service Agreement, which is lodged with Council as part of the application to install. Please contact our office for this form.

Once installed and commissioned, and inspected and passed by Council, we will provide a handover to you and go over the main aspects of system operation.

The Rootzone system requires regular servicing by an approved Service Technician. Servicing and maintenance is carried out every six months. A Report on the system, including water quality, is provided to both the local Council and the homeowner.

Please contact our office for any further information you require.