

Guidelines for Installing Aerobic Treatment Units

in the Shire of Kalamunda

Submitting an Application to Construct an ATU

An ATU is a waste water treatment system designed to treat waste water to a quality that permits its reuse as irrigation for plants.

ATUs frequently offer greater flexibility than conventional on-site waste water disposal systems such as septic tanks and leach drains. They also can be used on environmentally sensitive properties, and in some instances, permit the development of land unsuited to other forms of on site waste water disposal.



The ATU must be an approved system and must be installed by a person approved by the Department of Health. A list of approved systems, installers and service persons can be obtained via the Shires website or the Department of Health's website.

Types of ATU and Irrigation Systems

While ATU models come in different shapes and sizes, they are very much similar in operation. The Department of Health brochure called "Aerobic Treatment Units" describes the basic principles of their operation and may be obtained from Council's Health Services.



The appropriate type and configuration of the irrigation system for your property may be limited by the site conditions. The different types of irrigation include spray irrigation, Aquasafe drains (available only with the Aquarius ATU) as well as sub-strata and sub surface irrigation. Sub-strata and sub surface irrigation configurations are illustrated toward the end of this leaflet.

Positioning the ATU and Irrigation

The ATU must be located 1.2 metres from any building, boundary, structure or trafficable area, and 6 metres from wells, bores, drainage easements or any water course.



With regard to the irrigation area, the following setback distances apply:

Item	Spray irrigation	Sub-strata irrigation	Sub-surface irrigation	Aquarius Aqua safe Drains
Open Fenced Boundaries	1.8 metres	0.5 metres	0.5 metres	1.8 metres
Closed Fenced Boundaries - a minimum of 1.2m high	<i>As determined by local government</i>	0.5 metres	0.5 metres	1.8 metres
Buildings	1.8 metres	0.5 metres	0.5 metres	1.8 metres
Sub-soil/ Open drains	6.0 metres	3.0 metres	3.0 metres	6.0 metres
Swimming Pools	6.0 metres	2.0 metres	2.0 metres	1.8 metres
Bores/Wells/Creeks	30.0 metres	30.0 metres	30.0 metres	30.0 metres
ATUs	1.8 metres	0.5 metres	0.5 metres	1.8 metres
Paths, driveways, carports and other structures	1.8 metres	0.5 metres	0.5 metres	1.8 metres

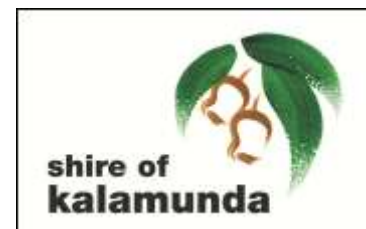
Submitting an Application to Construct

For your ATU Application to be assessed, it must:

1. specify the ATU model, capacity and type of irrigation;
2. include two copies of a site plan drawn to an appropriate scale such as 1:100 or 1:200
3. be accompanied by a signed maintenance agreement with an Authorised Person appropriate to that ATU model (information on the companies approved to install ATUs within WA, as well as the relevant maintenance companies can be obtained from Council's Health Services).

In particular, the site plans must indicate:

- the location of the ATU, all drains, details of the irrigation area and pipe-work;
- the distance of the ATU and irrigation from all buildings, boundaries, bores, waterways and drainage easements (including subsoil and cut off drains);
- the distance to all trafficable areas (such as the driveway);
- spot levels or contours are also required.



Permit to Use an Apparatus

Following installation, your ATU is required to be inspected to ensure compliance with the Code of Practice for the Design, Manufacture and Operation of ATUs Serving Single Dwellings and with any particular conditions of approval imposed by the Shire of Kalamunda or the Executive Director, Public Health.

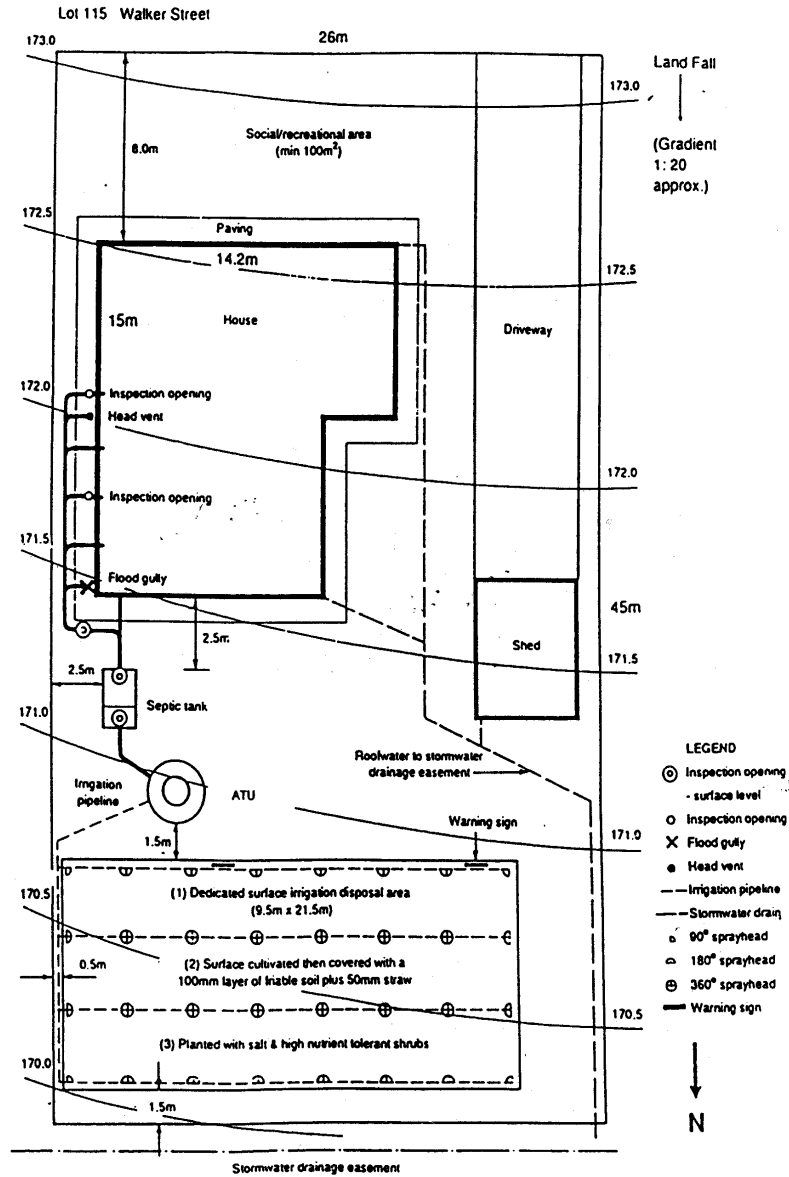
Following the inspection, the ATU installer is required to submit to the Shire's Health Service, certification that the ATU has been installed in accordance with the approved specifications for that ATU model. On receipt of this certificate, the Shire Environmental Health Officer who inspected the ATU and irrigation area issues the permit.

This permit must be issued prior to the house being occupied. The Permit to Use confirms an Environmental Health Officer has inspected the system. It is recommended that the property owner obtain a copy of all plans and approval conditions relevant to the ATU for their records.

Further information can be obtained from the Shire of Kalamunda Health Service on 9257 9999.

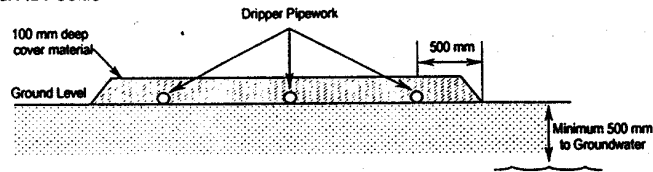


Sample Site Plan for an ATU Application:

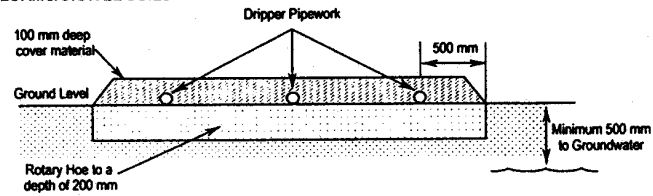


Configuration of Sub-Strata Drinker Irrigation

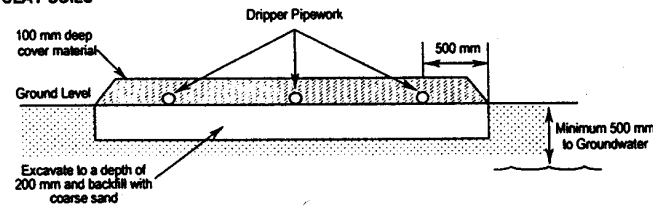
1. SANDY SOILS



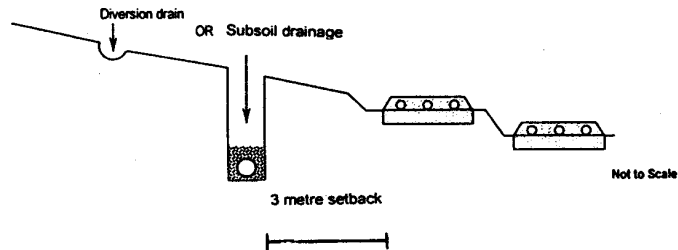
2. LOAMS/GRAVEL SOILS



3. CLAY SOILS

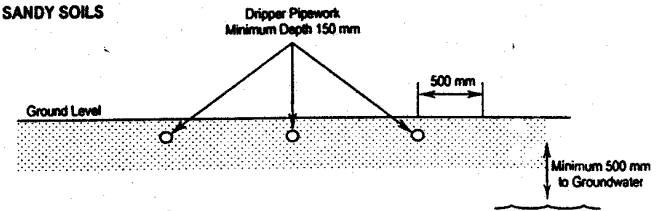


SLOPING SITE - Greater than 1 in 20

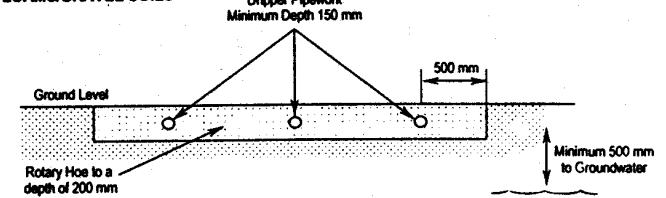


Configuration of Sub-Surface Drinker Irrigation

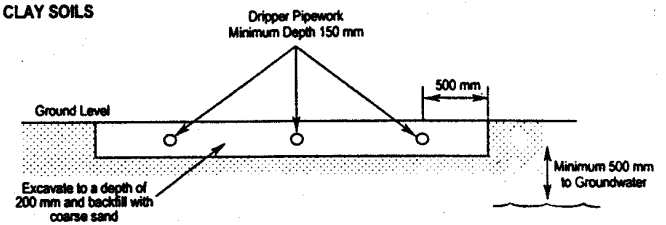
1. SANDY SOILS



2. LOAMS/GRAVEL SOILS



3. CLAY SOILS



SLOPING SITE - Greater than 1 in 20

