

# Guidelines for Installing Septic Tanks and Leach Drains

In the Shire of Kalamunda

## Submitting an Application

1. Construction of the apparatus must be in accordance with the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974* and any **Conditions of Approval** imposed by the Shire's Health Services. No person may alter or modify any approved plan, or installation, without the prior approval of Shire's Health Services.
2. Approval will not be given for the installation of an on-site waste water treatment system (other than an approved grey water treatment system) where sewer connection is available.
3. The application must include:
  - Details of the type of disposal system you intend to install. A conventional system consists of two concrete septic tanks and two concrete leach drains;
  - Two copies of a site plan drawn to an appropriate scale such as 1:100 or 1:200;
  - The location of all buildings, boundaries, trafficable areas, walls, paved areas and any other structures;
  - Location of bores, drainage easements, subsoil drains, waterways and any other water body;
  - The finished floor levels, site contours, contour levels and preferred location of the proposed system (please refer to the sample plan overleaf) along with associated pipework.
4. All material, pipes, bends, junctions, fittings, and fixtures shall be sound and free from defects, of a trade finish and installed in accordance with *Water Services Licensing (Plumbers Licensing and Plumbing Standards) Regulations 2000*. In addition an approved mosquito-proof cowl is required to all educt vents.



5. There must be a minimum 1.2m clearance between the base of the leach drain and the highest known groundwater level and leach drains must be located:
  - In parallel with the land contours.
  - 1.8m from all buildings, foundations, boundaries, trafficable areas, walls, paved areas and any other structures.
  - 6m from any sub-soil drain, drainage easement, soakwells etc.
  - 30m from any well, bore, waterway or water body.
  - There must be a minimum separation distance of 3.6m between leach drains.
6. Septic tanks or aerobic treatment units (please see Guidelines on submitting ATU applications for additional information specific to ATU's) may not be constructed closer than 1.2m to any buildings, foundations, boundaries, trafficable areas, paved areas, and any other structures.
7. All storm water shall be diverted to prevent entry to the waste water treatment system and effluent disposal area and no structure may be erected over any waste water treatment system.
8. The top (lid) of septic tanks and leach drains shall be no more than 300mm below the finished ground level. For gravity systems applicants must ensure there is sufficient fall without the need to exceed the maximum depth.

Leach drain sizes shall be in accordance with the following table:

Number of bedrooms	SOIL CLASSIFICATION			
	Sand		Loams or gravels	
	Minimum infiltrative area (m <sup>2</sup> )	Leach or evaporation drain (number x length)	Minimum infiltrative area (m <sup>2</sup> )	Leach or evaporation drain (number x length)
2 or less	18.8	2 x 6m	28.2	2 x 9m
3	25.4	2 x 8m	38.1	2 x 12m
*4 or more	27.6	2 x 9m	41.5	2 x 13m

\* Where there are 6 or more bedrooms on one Lot the above table may not apply. Please contact the Shire's Health Services for clarification.

9. Leach drains in heavy soils are required to be installed with a heavy soil detail incorporating the addition of 1.5m of clean coarse sand fill surrounding the leach drains as shown in the attached diagram.

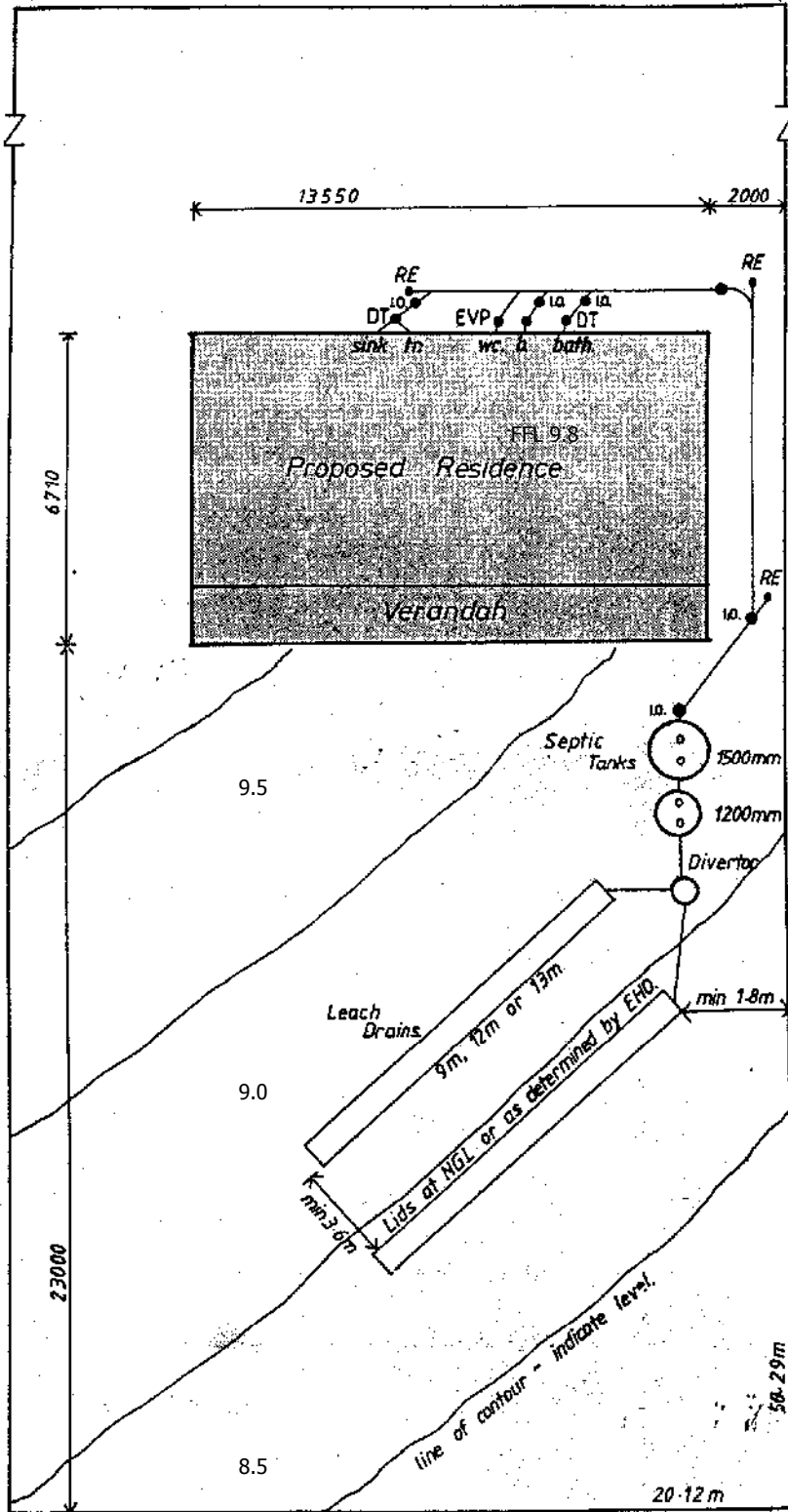


10. Large volumes of disinfectants or other chemicals into the waste water treatment system may kill the bacteria required for treatment and adversely affect the system operation. Detergents in small quantities should not affect the efficiency of the waste water treatment system.
11. A waste water treatment system must not be used until it has been inspected and a "Permit to Use Apparatus" issued by an Environmental Health Officer.

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



# Sample Plan

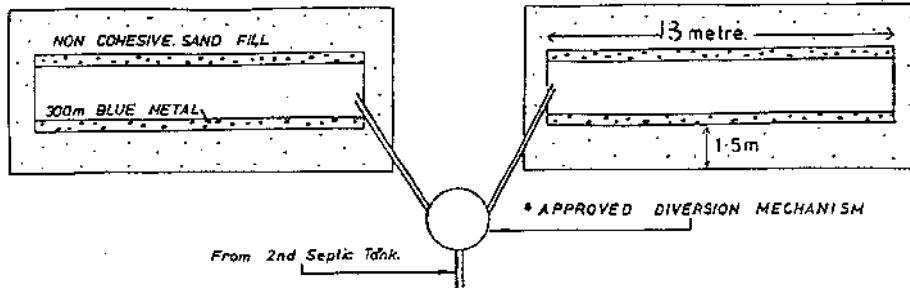


8.0

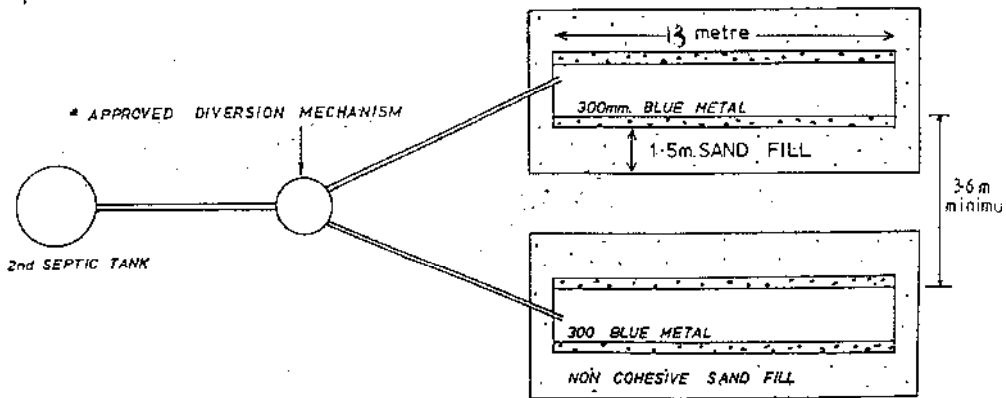


shire of  
kalamunda

1. PLAN FOR HEAVY SOILS - END TO END.

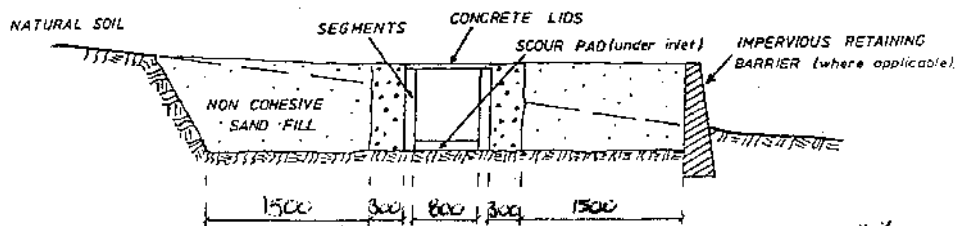


2. PLAN FOR HEAVY SOILS - PARALLEL.



3. CROSS SECTION IN HEAVY SOILS

(FOR OTHER SOILS EXCLUDE SAND FILL AS APPROVED BY HEALTH SURVEYOR).



4. \* FOR EXAMPLES OF APPROVED DIVERSION MECHANISM PLEASE CONTACT COUNCILS HEALTH DEPARTMENT.



shire of  
kalamunda