KAYTECH
ENGINEERED FABRICS

Special Application
Soakaway
West Riding, Durban, KwaZulu-Natal

Case Study

Project:	Subdivision, 21 Haylett Road, West Riding		
Client:	Mrs F Atkinson	**Date:**	January 2008
Consultant:	Michael J Haviland	**Product:**	**Infiltrator™ Chambers End Caps**
Contractor:	McLeod Plumbers	**Quantity:**	14 and 2 respectively

The owner of this property with a two bedroomed cottage and a three bedroomed, two bathroomed house wanted to subdivide, but both dwellings discharged their individual septic tanks into the same soak pit.

The grassed site is rectangular in shape and level, but with a general slope of one in three in a south easterly direction. The subsoil profile with depth comprises a 250 mm thick fine, silty, sandy topsoil and a 600 mm layer of moist, silty sand with sandstone fragments, underlain by highly weathered sandstone.

In accordance with the local metro's guidelines and National Building Regulations a soil percolation test was performed which established a percolation rate of 90 mm per hour. Effluent flow for the larger house was taken to be 900 ℓ per day.

Based on this information the engineer decided that the existing disposal system be retained for the two bedroomed cottage, and designed a new septic tank and a 17 m long soak pit for the three bedroomed house. The new soak pit was formed by joining fourteen **Infiltrator™ Quick4 Chambers** end-to-end. The design of the new **Quick4 Infiltrator™ Chamber** permits a 10 º swivel at each join, allowing the construction to follow the contour of the land.

Infiltrator™ Chambers also permit the installation of inspection ports, in this case three, to monitor possible contamination of the system.

Overall this successful installation of the new **Infiltrator™ Quick4 Chambers** provided numerous benefits to the engineer and owner, including ease and speed of installation, cost savings of various materials, and adaptability to local site conditions.