

## CASE STUDY

Drainage | Subsoil Drainage | Meyersdal Eco Estate, Alberton

Nov 2012

Client Private

Contractor Coenbuild / Drain Corp Plumbing

Consultant DANT Engineering

Product **Flo-Drain**<sup>®</sup> | 1 200m  
**Geopipe**<sup>®</sup> | 1 200m

Rep Winnie van der Merwe

### Problem

Consultants realised that an effective drainage system was required behind a newly constructed retaining wall surrounding one of the properties on one of the largest and most exclusive eco estates in Gauteng. The extremely poor condition of the clay soil was noted.

### Solution

A 3 m high **Flo-Drain**<sup>®</sup> system was recommended as the best possible solution to effectively lower the water table thereby protecting the house foundations. In conjunction with the **Flo-Drain**<sup>®</sup> system, **M110R Geopipe**<sup>®</sup> – which has a 70% opening allowing for a significant increase in the infiltration rate of water – was suggested. This high infiltration capacity allows for a smaller diameter **Geopipe**<sup>®</sup> to be used.

To ensure that the dispersive clay on site did not clog or blind the **bidim**<sup>®</sup> in the **Flo-Drain**<sup>®</sup>, thereby causing a reduction of permeability, 100 mm of washed river sand was shuttered behind the **bidim**<sup>®</sup> to act as a primary filter, thereby adding filtration diameter to the system and providing greater head draw down. The **bidim**<sup>®</sup> itself would then act as a secondary filter.



*The 3 m high retaining wall that required a drainage system*



*The Flo-Drain<sup>®</sup> system in position*

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### **Benefits**

This system will not only assist with waterproofing the exclusive property, but will provide a highly effective drainage function for many years to come.

The advantages to using the cost effective **Flo-Drain**<sup>®</sup> system compared to a conventional aggregate drain: it is lightweight and flexible, easy to install, supplied pre-assembled, and comes with quality assurance.