

## INKONGWENI RIVER BANK PROTECTION MARGATE, SOUTH COAST, KZN, SOUTH AFRICA

### Vertical Walls with Concrete Facing Panels

#### Problem

The residents of Santana Flats, a multi-storey development on the Margate beachfront that lies adjacent to the Inkongweni River on the KwaZulu-Natal South Coast, were concerned that the deterioration of the riverbank would cause instability to their buildings foundation.

Evidence suggested that the erosion was caused by the strong flow of the water in the river.

#### Solution

The solution entailed the construction of a 2m high gabion structure resting on a 300mm thick Reno mattress, spanning a total length of 160m. The mattress extended in front of the structure for a further 2,5m thus forming an apron to protect the superstructure from scour. In addition, a mattress revetment with a width of 2m was constructed on the slope behind the superstructure to protect the embankment during high flows.

The structure was constructed with PVC coated mesh and this will considerably increase the design life and durability of the structure.

**Client:** MARGATE TLC

**Designer / Consultant:** KANTEY & TEMPLAR

**Contractor:** MARGATE ASPHALT

**Products used (Qty.)**

- Gabion unknown

**Date of construction:** 07/2000 - 08/2000



During construction



Immediately after construction



After construction