DOKOLWANE DAM COMMUNITY DEVELOPMENT
MPONWANE, KZN, SOUTH AFRICA

Mass Gravity Retaining Walls

Problem

The boreholes in the mountainous areas surrounding the Pongola Poort dam yielded little or no water. This meant that women and children would have to walk distances to collect water from streams which often dried up during the winter months.

Most young children did not attend school, as their main task was to collect water for their family's needs which hindered their development.

Solution

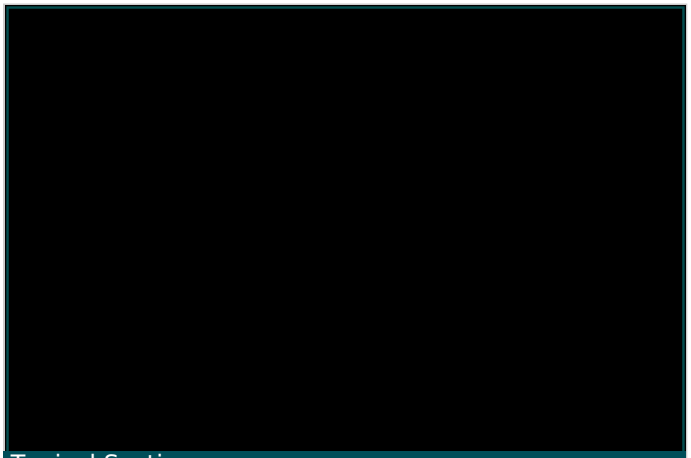
The Dokolwane community, together with CSIR, constructed a dam in the Mponwane region.

The dam, constructed with gabions, had a 6m base width, 4m crest height, and 22m crest length. The northern flank was placed behind a rock outcrop and the southern flank dug into the hillside. A concrete cut-off wall was built upstream of the wall and the upstream face was covered with a “flexible” ferro-cement facing to reduce seepage under and throughout the structure.

Client: DOKOLWANE COMMUNITY
Designer / Consultant: CSIR
Contractor: DOKOLWANE COMMUNITY
Products used (Qty.)
- Gabion unknown

Date of construction: 11/1997 - 01/1998


During construction


Typical Section

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