Problem

Maccaferri Africa was approached by A.S. Civils to carry out design and submit proposal & cost estimate for a retaining wall required to support embankment over which lies a link bus route D403 in Inanda, Durban.

Solution

Maccaferri’s MacRes® System was proposed as a solution, reason being:

1. The continuity in appearance due to the required wall having to be joined and continued from an already existing concrete faced wall, a similar system had to be employed.
2. Due to the curvy alignment of the road a system flexible enough to take sharp curves was required and MacRes® system offered this flexibility by smaller sized concrete panels.

Design input:

Foundation soil & backfill:
Angle of friction = 30°
Cohesion = 0
Unit weight = 18
Loading = 12kPa

Structural fill soil:
Angle of friction = 36°
Cohesion = 0
Unit weight = 18
No water was taken into account during the analysis of the structure.
Benefits

- Quick and easy to install.
- No formwork is required due to use of precast elements for facia. Minimal skills required for installation.