

# VAAL RIVER EASTERN SUBSYSTEM AUGMENTATION PROJECT (VRESAP)

FREE STATE – GAUTENG - MPUMALANGA

## PROJECT TYPE: PIPELINE, EARTHWORKS AND CIVIL WORKS

CLIENT:  
TRANS-CALEDON TUNNEL AUTHORITY  
(TCTA)

VALUE:  
R1.7 billion

CONSULTANTS:  
Vaal Pipeline Consultants JV (GOBA, Ninham  
Shand and PD Naidoo & Associates)

PROJECT DURATION:  
Originally an 18 Month Emergency Pipeline which  
eventually ended up as 9 year project due to  
Cathodic Protection and issues surrounding  
coatings

DATE OF PROJECT:  
November 2005

PROJECT DESCRIPTION:  
The project included for the supply and  
installation of 113km of 1.9m diameter pipes from  
the Vaal Dam to Knoppiesfontein and a further  
5.6km gravity line from Knoppiesfontein to  
Trichardsfontein varying between 1.2m and 1m  
diameter.

The pipes were spirally welded during  
manufacture and supplied in lengths of 12m, 18m  
and 19.2m which were then butt-welded on site.

Cathodic Protection was installed along the entire  
pipeline in view of soil conditions and stray  
currents along the route.

Supply and installation of various size valves.

Civil works included for the construction of  
various Valve and Scour Chambers.

