



Dakar Regional Express Railway (TER)

Geotechnical analysis / Foundations of civil engineering structures

2017 –On-going



SENEGAL - Dakar

Client

EIFFAGE

Owner

Senegal government -
APIX agency

Highlights

- 55 km in total
- 36 km widening of existing infrastructure
- 19 km new line



The Project

The construction of the Dakar regional express railway line is part of the Senegal economic development plan. Its two main functions are to provide services for the Dakar suburbs, replacing the existing "Petit Train de Banlieue" (PTB), and a connection with Blaise Diagne International Airport (AIBD).

The Dakar TER project is divided into two phases. Phase 1 covers the development and widening of the existing infrastructure between Dakar and Diamniadio stations (36 km), and phase 2 covers the construction of a new line between Diamniadio station and the AIBD airport (19 km).

Key features

- Geotechnical synthesis for civil engineering structures
- A hundred structures: road bridges, railway bridges and footbridges

Our Services

EIFFAGE entrusted the SETEC group with the project studies and with technical assistance during the works phase. Within the SETEC project teams, TERRASOL is responsible for the geotechnical analysis of the foundations of the structures along the whole of the alignment. Around a hundred structures are concerned: road bridges, railway bridges and footbridges.

The geology varies greatly along the alignment. In general, the project can be divided into three distinct geological sectors:

- Sector 1: 21 km at the Dakar end, comprising dune sands between 15 and 40 m thick;
- Sector 2: around 20 km in the middle part, with marly and marly-limestone layers, overlain by a clayey layer;
- Sector 3: the last 14 km at the airport end, with sandstones, clays and laterite deposits.

One of the major challenges of the project is its schedule, as the opening of the line is planned for 14 January 2019.