



Pont de Radès - La Goulette

Civil engineering works

2004 - 2009



TUNISIA

Client

TAISEI CORPORATION

Owner

Ministère de l'équipement
Tunisien

Lead Designer

Consortium of Japanese
and tunisian consultants:
Nippon Koei, PCI, Scet &
Studi

Highlights

Main bridge in concrete
with three-spans (70m,
120m, 70m) and dual
carriage way

Deep foundations (piles
80 m deep)



The Project

TERRASOL with its branch TERRASOL TUNISIA has been the geotechnical consultant for the Japanese company TAISEI CORPORATION during the construction of the Rades - La Goulette bridge.

This bridge includes a main cable-stayed bridge, as well as access viaducts with their access embankments.

KEY FEATURES

- Definition, follow-up and analysis of soil testing during execution
- Geotechnical studies on behalf of the contractore
- Follow-up of works: consolidation of embankments, execution and control of piles.

Our Services

Its outstanding character lies specially in the geotechnical context, with compressible muds of a hundred meters thick.

- The two main piers of the viaduct are founded on 9 piles (diameter 2000 mm), which were originally planned to 100 m depth; due to the difficulties to drill such piles and after two full-scale load tests, the depth of these piles could be reduced to 80 m.
- The multiple piers of the access viaducts are founded on precast piles (reinforced concrete) 25 m deep, driven down to a thin sand layer.
- Access embankments, whose heights reach 8 m with pre-loading, could be built without any instability; vertical drains installed in the first more compressible layer have enabled to achieve consolidation in 3 to 4 months approximately, with settlements reaching 1.50 m!

Adequate soil testing, complemented by design studies accounting for the specific soil behaviour encountered on site, allowed anticipating this unusual behavior in a satisfying way, which could be confirmed by on-site monitoring.

terrasol

Immeuble central seine
42 - 52 quai de la rapée
75583 Paris cedex 12 France
Tél +33 1 82 51 52 00
Fax +33 1 82 51 52 99
info@terrasol.com