Reference

# Extension of Metro B – Hopitaux Lyon Sud – GC01






## SHORT DESCRIPTION

In order to serve the city center of Oullins, the university-hospital hub of Lyon Sud, to create a multimodal exchange center and globally to intensify the development of the "valley of hospitals", SYTRAL has decided to extend the line B subway about 2.5 km at the south of Lyon. Two new stations will be created, Oullins Center and Saint-Genis-Laval Hospitals South. This work was entrusted to the joint venture IMPLENIA France (Agent) - DEMATHIEU BARD - IMPLENIA Switzerland. This award marks the successful development of Implenia France in the country by engaging in large-scale projects, with major public clients located in the region.

## THE PROJECT

The particularity of this project lies in the geology expected during drilling, which should be composed of particularly permeable alluvium that led to the choice of a Variable Density TBM, the most complex use of which is not subject to many feedback. This technical difficulty is combined with the strong requirements to control settlements, the non-compliance of which is subject to significant penalties.

Pre-injections will be done before the diaphragm walls of the 2 shafts on the market, the PAHLS attack shaft and the well of the Oullins OCE station. This preliminary foundation work is done on its own.

Finally, the environment, hyper urban and near the Lyon Sud Hospital, intensifies the difficulty of this project which must be the foundation of a long-lasting Lyon presence of Implenia France.

## CHALLENGES

After taking up the commercial challenge, the major challenge here is a technical challenge. It will be necessary to control

settlements during drilling at the Variable Density TBM at the peak of what is currently being done in a complex geology.

This challenge will mark Implenia France's know-how in the management of complex high value-added technical projects.

## FURTHER INFORMATION

**Scope of works**
Study and execution of works

**Performed services**
Tunneling works / Civil works / D-walls / Injections

**Construction methods**
Variable density Tunneling

## FACTS

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|---|---|
| **Location** | LYON , France |
| **Status** | Under construction |
| **Construction volume (value of our services)** | 138 M EUR |
| **Start of construction** | December 2017 |
| **Completion** | December 2020 |
| **Project management** | Client: SYTRAL; Engineer: Groupement SYSTRA – EGIS – Atelier Schall named MELYES; Consortium: Consortium IMPLENIA France (Mandataire) – DEMATHIEU BARD – IMPLENIA Suisse; |
| **ARGE** | ✓ |
| **Overall length** | 2400 m |

## SERVICES

- Tunnelling
- Transport tunnels
- Special Foundations
- Infrastructure