# Cairo Metro Line 4 - Phase 1

### Client

Orascom Construction

### Scope of Work

Schematic Design Review Detailed Design

#### Location

Egypt

## **Types of Activities**

Architectural Civil Landscape

Roads Structural

The project comprises the construction of depot and workshop area for Phase 1 of Greater Cairo Metro Line 4, with a total length of 18.8 km. The line runs from Hadayek Al-Ashgar station to El-Malek El-Saleh station and consists of a total of 16 stations, where traction power is provided through the 3rd rail system (750 VDC). The depot has an approximate area of 317,515 m2 and is located 1.2 km east of Hadayek Al-Ashgar station with double access tracks. It is planned to have stabling and train inspection capacity for a fleet of 23 eight-car trains (Phase 1) and overhaul capacity for rolling stock (92 eight-car trains) of the whole line at the year 2050.

The project also includes the construction of 5 types of separate generator buildings in each station, High

Voltage Station HVS (220 kV) with a total BUA of 8,650 m2, and Operation Control Center (OCC) with a total BUA of 9,500 m2.

The HVS encompasses transformers for converting high voltage (220 kV) to medium voltage (20 kV) and controlling the facilities of medium voltage transmission to the line.

The OCC building is located approximately 500 m south of El-Nasr Station, where it is inteded to accommodate Operation Control Center, SCADA facilities, and Power Control Point. Additionally, the space and facilities of the OCC building are to be designed for phases 1 and 2.

