

# Madinaty Infrastructure

## Client

Arab Company for Projects and Urban Development S.A.E.

## Scope of Work

Master plan  
Schematic design  
Design development  
Detailed design  
Tender documents  
Construction supervision

A city of international standards, Madinaty stretches over 33.6 million square meters at the northeast of New Cairo, with a total of 120,000 residential units accommodating 950,000 residents. The city, which acts as a modern extension of New Cairo, features a range of residential buildings, including villas and apartment buildings, together with an open-air mall extending over 159 feddans, as well as golf retreats, educational institutions, healthcare facilities, hotels, sports and social clubs, and entertainment destinations.

## Location

New Cairo, Egypt

## Types of Activities

Architectural  
Communications and security systems  
Electrical  
HVAC  
Infrastructure  
Mechanical  
Roads  
Structural

Madinaty is also set to be home to a number of unique services scattered along the outskirts to cater to the needs of neighboring residential communities. These services include water sports facilities, shopping centers, and educational institutions.

From engineering design up to construction supervision, ECG's consulting services covered 95% of the city's development activities. With a construction cost of USD 270 million, the city's infrastructure included the following networks:





- **Water Network:** 7.041 km of ductile iron pipelines (300 mm to 900 mm in diameter) and 120.8 km of uPVC pipelines (90 mm to 225 mm in diameter), with all associated chambers and structures, in addition to 700 house connections of a total length of 160.081 km.
- **Irrigation Network:** 9.8 km of ductile iron pipelines (300 mm to 600 mm in diameter) and 134 km of uPVC pipelines (40 mm to 315 mm in diameter).
- **Sewage Network:** 89.136 km of ductile iron pipelines (200 mm to 600 mm in diameter), with all associated structures, as well as 73 km of house connections.
- **Stormwater Network:** 90 km of ductile iron pipelines (160 mm to 700 mm in diameter).
- **Road Network:** 100 km-long network of road widths ranging from 9 m to 22.8 m, along with parking facilities stretching over a total area of 510,000 m<sup>2</sup>.
- **Low-Voltage Network:** 1,202 main distribution boards; 4,462 distribution boxes; and aluminum-armored cables with a total length exceeding 618 km.
- **Medium-Voltage Network:** 8 medium-voltage distributors, 305 transformer kiosks, 317 earth pits, and aluminum-armored cables with a total length of about 171 km.
- **Telephone Network:** 2,187 telecom handholes and telecom wiring conduits with a total length exceeding 389 km.
- **Street Lighting:** 5,624 light poles (5, 8, and 12 meters high), along with their associated lighting switches and aluminum-armored cables (about 225 km long).