

# City Gate New Cairo

## Client

Barwa Real Estate Company

## Scope of Work

Traffic impact study  
Survey works  
Soil investigation  
Sketch design  
Preliminary development  
Detailed design

## Location

New Cairo, Egypt

## Types of Activities

### Roads

- Horizontal alignment
- Vertical alignment
- Structural design of pavement
- Singing, marking & road safety

## Storm Drainage

- Rainfalls calculations
- Catchment area analysis
- Storm pipelines network
- Crossing culverts, catch basins and manholes
- Protection of existing facilities and networks

## Irrigation

- Irrigation water demand calculations
- Irrigation network routing
- Irrigation system components

## Landscape

- Analysis and investigation to existing Landscape
- Landscape design for the new areas
- Plantation selection.

## Street Lighting

- Electrical substation
- Roads electrical calculations
- Single line diagram
- Cables network routing

The development is a unique community that is being created as a focus for national economic regeneration. Its introduction will be a 'true' living style for which all aspects of business life will be catered. The highest international standards has been used in its design and development.

The 20,000 m internal road network and 400,000m pavement area are designed according to the

specification of the American Association of State Highway and Transportation Officials (AASHTO) and the Egyptian Code of Practice for Roads and Highways.

The internal road network connects to the outer adjacent roads through 13 main access points & 2 secondary access points (ingress\ egress) distributed overall the project area providing sufficient traffic transition for





the residents and visitors from any direction, and safe evacuation for the vehicles with minimum rescue time in emergency cases.

The access points to the project area are designed to provide no conflicts\ delays for outer traffic volumes due to using wide entrances and pocket lanes with sufficient storage length which can serve the expected peak traffic volumes.

The internal road network is designed to accommodate the site with design speed of 40, 50, and 60 km/h. The roads intersections design concept is simple, at grade intersection providing sufficient sight distances, turning radii and safe maneuvering. Villas areas entrances are provided with bridges to ensure privacy and maintain elite entrances.