Design of Three Troughs and Three Pump Stations for Cairo Street, RA/200

Client

United Gulf Construction Company (UGCC)

Scope of Work

Detailed Design Design Review

Location

Kuwait

Types of Activities

Electrical Roads Design Structural Plumping and Sewage

The RA/200 project involves upgrades for Cairo Street (Road No. 35), and includes the following components:

- 7 kilometers of at-grade roadways,
- 2.3 km of depressed roadways in three reinforced concrete troughs along the Cairo Street,
- 5 vehicular bridges over the troughs,
- 1 elevated vehicular bridge (U-turn flyover) with 180 meters of roadways on ramps, (reinforced earth ramps),
- 7 pedestrian bridges,
- 5 utility bridges,
- relocation and diversion of existing services and utilities, road and footpath surfacing, road lighting, road signs, road markings, traffic signaling, surface water drainage and associated works, in addition to other works related to associated local roads and junctions.

ECG scope of work comprise:

Design

- Design of 3 troughs base slabs and tension piles distribution,
- Full design for three pump stations: PS1 & PS3 with rate 2050 m³/ hour (570 l/s) and PS2 3070 m³/hour (835 l/s) to discharge storm water.
- Box culvert design

Design Validation - 3rd Party Checker

- Dewatering,
- Shoring,
- Metal gantries for traffic signs,
- Retaining walls.













