

# Bukhara and Samarkand Sewerage Project

## Client

Corporate Solutions Consulting LTD

## Scope of Work

Data collection  
Supervising topographic surveys  
Geotechnical investigations, and CCTV inspection  
GIS mapping  
Hydraulic modeling by Sewer CAD V8  
Review of detailed designs prepared by local consultant  
Preparation of bidding documents  
Construction supervision  
Training and start-up assistance

## Location

Uzbekistan

## Types of Activities

Civil works  
Mechanical

Dating back to the 1960s, both Bukhara and Samarkand sewerage systems were old and suffering from frequent breakdowns. To tackle this issue, the Government of Uzbekistan together with the World Bank embarked on implementing an important project to rehabilitate and improve the overall wastewater services in Bukhara and Samarkand, two important cities in Uzbekistan. The project development objectives were to mitigate the environmental impact from wastewater pollution and to improve the efficiency and sustainability of wastewater management in Bukhara and Samarkand.

As a member of a consortium led by Corporate Solutions Ltd. of the United Kingdom, ECG provided engineering design and construction supervision services to rehabilitate and improve the wastewater systems in both cities.

In Samarkand, the improvement measures focused on rehabilitating 277 km of sewer networks, a total of six (6)

wastewater pumping stations, and two (2) wastewater treatment plants (Main WWTP of capacity 139,000 m<sup>3</sup>/day and Farhad WWTP which is completely out of operation); while in Bukhara, the rehabilitation measures tackled 220 km of sewer system, sixteen (16) wastewater pumping stations, and one (1) wastewater treatment plant (100,000 m<sup>3</sup> /day). The project also involved the extension of sewer networks to high priority areas in both cities.

The wastewater treatment plants in both Bukhara and Samarkand receive new blowers and modern efficient diff user systems for the aeration tanks; and new return sludge pumps were installed at Bukhara WWTP. New screens (at both cities' WWTPs) and grit chambers (at Bukhara Main WWTP) were installed to better protect all subsequent treatment stages and prevent further damages of existing installations and the new aeration system. Finally, the third WWTP in Samarkand will be completely rehabilitated.

