



EnTrans
CONSULTING

Environmental & Transportation Solutions

Water and Wastewater

Services: We provide comprehensive consultancy services, including site investigation and conceptual, preliminary, and detailed design for water and wastewater systems. Our scope covers water desalination (reverse osmosis systems), water supply networks, sewer networks, and wastewater treatment plants, as well as the siting of system components. Our services also include the design of irrigation water systems.

Area of Experience

- Domestic water supply networks, including assessment of water hammer effects and appropriate mitigation measures
- Gravity sewer networks
- Domestic water pump stations and force main pipelines
- Sewage pump stations and force main pipelines, including water hammer analysis and mitigation
- Water purification plants and reverse osmosis (RO) systems
- Wastewater treatment plants and appropriate disposal options

Sample Projects

- Design of stormwater and sewer networks for New Alamein Industrial Park (area: 3 million sqm), IDF, Egypt
- Design and construction supervision of sewage and water networks, including pump stations, for Abou Ghatess Railway Central Depot, General Nile Company for Road Construction, Egypt
- Design of water and sewage networks, including pump stations, for New Heliopolis City, Egypt
- Design of water and sewage networks for the 15th of May Waste Treatment Facilities (area: 150,000 sqm), ECWM, Egypt
- Design and construction supervision of sewage and water networks and a wastewater treatment unit for the MSW Treatment and Recycling Facility (area: 210,000 sqm), ECWM Waste Treatment and Recycling Complex, 10th of Ramadan City, Egypt

Design Activities

- Preparation of baseline data (water consumption, drainage, and landscape irrigation requirements)
- Sitting of pump stations and wastewater treatment plants
- Environmental impact assessment for system components and surrounding areas
- Development and evaluation of design alternatives
- Preparation of full design packages, including conceptual, preliminary, detailed, shop drawings, and as-built drawings
- Value engineering to select the most technically and economically feasible alternatives
- Preparation of tender documents for equipment and network works
- Construction supervision
- Maintenance support and system troubleshooting

