



Mr. Roman's 30 years of experience includes: Project Manager for Tetra Tech in US and International operations; senior technical officer at the North American Development Bank, Director of Utilities for the City of Laredo, Texas, and project engineer at the National Desalinization Agency in Mexico City.

As a project manager for Tetra Tech, Mr., Roman has provided QA/QC to the design team in water and wastewater treatment projects, developed planning studies and designed wastewater treatment plants and pump stations. His experience includes managing an \$80 million water supply and wastewater project in India.

As senior technical officer at NADBank, Mr. Roman managed a project portfolio with a cumulative value of approximately \$400 million in the U.S. and Mexico. The projects in the portfolio ranged from \$1 to \$100 million and included wastewater treatment plants ranging from 1 to 27 MGD; water plants from 5 to 27 MGD; and water distribution, wastewater collection, and recycled water conveyance and pumping systems.

As Utilities Director for the City of Laredo, Mr. Roman was in charge of managing the development of the water and wastewater infrastructure. The position lead the preparation of operational budgets and recommendations for the Capital Improvements Program, analyzing the water and wastewater system, developing conceptual solutions, initial scopes, and preparing planning-level cost estimates.

Mr. Roman is a licensed Professional Engineer and a certified water and wastewater operator in the state of Texas and was the President of the Texas Water Utilities Association (TWUA) in 1998.

RELATED EXPERIENCE

Wastewater

WWTP Activated Sludge and Sewer Lines, Amritsar, India, 2008-2009 - Managed the planning and design for 271 km of sewer lines and three activated sludge wastewater treatment plants ranging in capacity from 60 to 120 MLD. Pipelines ranged in size from 1.4 to 2.4 meters in diameter. The comprehensive project included the preparation of a water supply alternative plan and an Asset Management Plan.

Lincoln-Juarez Wastewater Treatment Plant, La Joya ISD, 2009 - Designed a 35,000 gpd wastewater treatment plant for the high school and bus depot. The plant was designed in transportable modules so the District can relocate it in future years.

Wastewater facility plan for the Espantosa Subdivision, Dimmit County, Texas, 2009 - Analysis of water and wastewater needs for a rural community with deficient systems. Study resulted in preparation of capital improvements plan to bring the water system to compliance with TCEQ regulations.

Lift Station Pump Replacement, Laguna Madre Water Supply District, 2008 - Designed the replacement of pumps and installation of an odor control system at the District's main lift station.

Project Role:
Project Manager

Education:
B.S., Chemical Engineering,
Instituto Politecnico Nacional,
1977

M.B.A., Business
Administration, Texas A & M
International University, 1985

M.S, Environmental
Engineering, Texas A & M
University – Kingsville, 1994

Master's Certificate – Project
Management, George
Washington University, 2004

Registrations/Certification:
Professional Engineer,
Texas, 1997, No. 82817

Texas Commission on
Environmental Quality Class "A"
Water and Class "A"
Wastewater Operator
Certifications

Professional Affiliations:
American Water Works
Association

Texas Water Utilities
Association

Water Environment Federation

Office:
San Antonio, Texas

Years of Experience:
30

Years with Tetra Tech:
2

Wastewater Facility Plan, City of Del Rio, Texas, 2009 - Provided QA/QC support to design engineers. Study resulted in recommendation for the elimination of lift stations and replacement of deteriorated infrastructure.

Water

Hydraulic Model and Leak Detection Study, City of Del Rio, Texas, 2009-2010 - Analyzed the water system and made recommendations to define pressure zones, optimize energy consumption, increase fire fighting capabilities, and replace undersized or deteriorated infrastructure.

Levee Construction, International Boundary and Water Commission, Mercedes, Texas, 2009-2010. Project Manager for Construction Management of 104 levee-miles of Rio Grande flood control levees. Work is ongoing.

Water System Modeling, Agua Special Utility District, Peñitas, Texas, 2009 - Development of a water system hydraulic model using Water CAD software. The project sought to find recommendations for operational and capital improvements, including verifying the adequacy of the existing Capital Improvements Program.

Somerset Booster Station, Bexar Metropolitan Water District, 2008-2009 - Analysis of system characteristics and pump duty point selection. The system demands create conditions which cause pump duty point to move widely on the performance curve. Pump selection required that the critical conditions be addressed.

WTP Disinfection Analysis, Eagle Pass, Texas, 2008 - Analysis of enhanced primary clarification facilities and disinfection strategy for reduction of disinfection by-products. Work resulted in recommendation to modify chlorination method and design of chloramination facilities.

Water Conservation Plan, City of Del Rio, Texas. Prepared a water conservation plan for the City, helping them identify opportunities to reduce the per-capita consumption.

Water Conservation Plan, City of Weslaco, 2008 - Developed a water conservation and drought response plan in compliance with TCEQ rules Chapter 288.

PREVIOUS EXPERIENCE

Wastewater

Wastewater Treatment Plant and Lift Station, Moore, Texas, 2009 - Designed a 70,000 gpd wastewater treatment plant and associated lift station. The plant is a plug flow, single roll aeration, activated sludge process with aerobic digestors.

WWTP Activated Sludge, Nogales, Arizona, 2008 - Conversion of a 14 MGD aerated lagoon wastewater treatment plant to nitrification-denitrification. Project scoping and development, with subsequent oversight of the design-build activities. Project cost: \$70 million.

Sewer Line Replacement, Bisbee, Arizona, 2008 - Oversight of design and construction for replacement of substandard wastewater collection lines and construction of a 0.8 MGD SBR wastewater treatment plant. Project cost: \$32 million.

Wastewater Collectors Rehabilitation, Nuevo Laredo, Tamaulipas, Mexico, 2008 - The project involved the rehabilitation of over 30 kilometers of wastewater collectors which were collapsed due to corrosion, plus construction of two new interceptors and a 400 lps wastewater treatment plant. Mr. Roman participated in the initial scoping and design activities, and in construction administration and oversight. Project cost: \$50 million.

Design and Construction of Three (3) Wastewater Treatment Plants, Reynosa, Tamaulipas, Mexico, 2008 - Plants ranged in capacity from 400 to 1,200 lps. Reviewed initial scope and detailed design and budgets. Project cost: \$24 million

WWTP Design & Construction Oversight, Tecate, B.C., Mexico, 2008 - Oversight of design and construction for the expansion of a 180 lps, trickling filter wastewater treatment plant. Oversight of project requirements



development, design, and construction of 12 kilometers of sewer lines in unserved areas. The project eliminated the uncontrolled raw sewage discharges on the streets and creeks. Project cost: \$8 million.

Wastewater Collector Design & Construction Oversight, Tijuana, B.C., Mexico. Oversight of design and construction for the rehabilitation of 180 kilometers of collapsed wastewater collectors, by the pipe bursting method. Project cost: \$66 million

Water

Water Treatment Plant, Matamoros, Tamaulipas, Mexico, 2008 - Design and construction of a 1,200 lps water treatment plant with ballasted flocculation and rapid sand filtration. Oversight of design and construction activities. Project cost: \$12 million.