



Bay Park Water Pollution Conveyance Project

Co-Sponsors: ASME-LI; ISA-LI

Date: Wednesday, October 19, 2022

Time: 5:30PM - 6:00 PM Sign-In; 6:00PM Presentation

Location: New York Institute of Technology; Anna Rubin Hall, Room 316

Northern Boulevard, P.O. Box 8000, Old Westbury, NY 11568-8000

Map - https://www.nyit.edu/files/long_island/Locations_LI_CampusMap.pdf.

Cost: Attendance is free of charge for all attendees; 1.0 PDH will cost \$35 (Please indicate). Bring a check made payable to.....ISA-Long Island.

Registration is REQUIRED: Please register by contacting Mark Klein at mrkpe1@optonline.net no later than October 15, 2022. Please provide name, daytime phone number, and company and society affiliation; and if requesting the PDH Certificate. A Parking Pass will be issued to all who pre-register.

Program Description: The Project will reduce nitrogen pollution in the Western Bays by conveying treated water from the South Shore Water Reclamation Facility* to the Cedar Creek WPCP ocean outfall.

The project overview will describe the unique means and methods being used on this project some of those highlights are: Cutter Soil Mixing as a means of SOE- This technique has proven extremely water tight. It has resulted in great cost savings and improved quality vs many of the traditions methods of SOE, Long micro-tunnel drives- Micro-tunnel drives over 2,000' are fairly new to the industry at this diameter, Discrete pipe slip-lining- While this is not novel to this project, an aqueduct installed in 1906 being lined across 7.3 miles directly below a major state highway is one of the more challenging applications (Lessons learned will be discussed), Wet tapping- The existing effluent conduit at Cedar Creek is approximately 50 years old. The means and methods used to assess the condition of that pipe and the risk of wet tapping it are also fairly unique at this diameter, WWTP processes- The interaction of two pump stations in immediate proximity is hydraulically interesting and physical models were built to verify design assumptions. How they interact together (the third pump station 10 miles away) and controls will be discussed.

Presenter: Kancheepuram. N. Gunalan (Guna) graduated with a bachelor's degree in Civil Engineering and master's degree in Soil Mechanics and Foundation Engineering from the oldest engineering school in India namely College of Engineering, Guindy in Chennai, India. Guna developed one of the earliest Performance Specifications for the then largest transportation project, I-15 Reconstruction Project in Salt Lake County that was delivered through design build delivery method ahead of the 2002 winter games. He has delivered many successful multi-billion-dollar programs and projects around the country. He has been active in various professional societies such as the American Society of Civil Engineers having served as its 2020 President and the World Federation of Engineering Organizations (WFEO) wherein he is currently serving as its Chair of the UN Relations Committee. He served as the chair of ASCE's 2014 Global Engineering Conference in Panama City, Panama, in celebration of the 100th anniversary of the Panama Canal.