

NEWSLETTER

IN THIS ISSUE

▶ *Coming to Fruition: GOSR's Living with the Bay Program
(Part 2: East Rockaway High School)*

▶ *Bay Park Conveyance Project*



Coming to Fruition.



GOSR's Living with the Bay Program (Part 2: East Rockaway High School)

▶ East Rockaway High School (ERHS) is located along the west bank of the Mill River in Nassau

County, NY. Superstorm Sandy's heavy rains and storm surge caused severe flooding of the property and buildings. The boiler room, auditorium and gymnasium wings, faculty parking lot, and sports fields were most impacted by the storm, experiencing the worst of the damage. The crawl space under the building reportedly flooded during normal tidal cycles pre-Sandy, but during Sandy, there was sewage and fuel oil overflows in the building and sewage infiltration into the stormwater outfalls on the site.

Continued on page 2

Coming to Fruition continued

During the initial stages of the Mill River Watershed Management/Living with the Bay program, a project was identified at ERHS to improve flood resiliency, provide shoreline hardening, and introduce stormwater infiltration and treatment on the property. Ultimately the project was selected for implementation, including design and construction.

The project included the construction of a new elevated steel structure/platform above the flood elevation for a new replacement emergency generator and associated electrical equipment, 700 +/- linear feet of new steel sheet pile bulkhead to replace the existing deteriorated

timber bulkhead, elevation and construction of a new multi-use sports field, installation of new drainage structures and piping, a new water quality unit, a new bio-retention basin, and a new faculty parking lot for the facility.

Hayduk Engineering worked with the team at Tetra Tech, responsible for construction inspection services for the duration of the project. Hayduk Engineering provided routine inspection of the construction work, as well as the New York State Department of Environmental Conservation (NYSDEC) Stormwater Pollution Prevention Plan (SWPPP) compliance monitoring during construction. The project was completed in 2021. ■



Hayduk Engineering welcomes...

Kenneth J. Jacques, P.E. to the team as Director of Construction Administration Services.

Mr. Jacques has over 40 years of experience as a Resident Engineer on construction inspection projects for various clients in the New York Metropolitan area, including New York State Department of Transportation, New York State Thruway Authority, and others. Mr. Jacques' experience includes primarily highway and bridge related projects, including reconstruction, rehabilitation, and new construction projects. Mr. Jacques will be leading the Construction Administration Division of Hayduk Engineering, helping to develop and grow this discipline service for the firm.



Holiday Festivities

► The holidays are a busy time of year at Hayduk Engineering. Our staff works around the clock to manage project workloads, deadlines, and schedules to close out the year strong and to get ready bringing in the next year with our clients. We recognize that our continued success is directly attributable to the hard work and dedication of our staff, and we like to show our appreciation in part with our annual Holiday Party and other company events and compensation programs.

We held our annual Holiday Party in conjunction with the Long Island Builder's Institute at Villa Lombardi's once again with their casino night and raffle auction. Congratulations to all the raffle prize winners!

► Thank you to all the Hayduk Engineering staff members who pitched in to make our holiday season charity drives a success. This year we launched two events, a Thanksgiving food drive and a Holiday toy drive.

Our food drive supported the Suffolk County United Veterans - Association for Mental Health and Wellness' Veteran's Place in Yaphank, NY. The Vet's Place provides a food pantry and temporary housing for our Country's veterans in need.

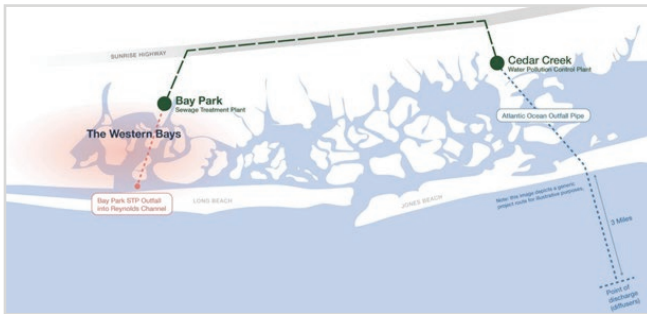
Our toy drive supported the "Helping Makes U Happy - Adopt a Family" program for a Long Island family in need. This year we "adopted" a family with 3 girls and 2 boys, ages 5, 6, 10, 12, and 14.



*Hayduk Engineering has been honored as one of **LIBN Best Places to Work 2021**, our second year in a row!*

**LONG ISLAND
BUSINESSNEWS**
**Best Places
to Work**

BAY PARK CONVEYANCE PROJECT



► The South Shore Water Reclamation Facility (also known as the Bay Park Wastewater Treatment Plant) is located in East Rockway, NY and services Sewer Districts 1 and 2, representing a population of about 530,000 residents in Nassau County, NY. The facility was originally designed and constructed in the late 1940s to treat 27 million gallons per day (mgd) of wastewater but was later expanded and now has a capacity of 70 mgd, average daily flow.

The facility features an activated sludge process that provides secondary treatment, meaning that it is not currently capable of providing biological nutrient removal. “Nutrients”, such as Nitrogen and Phosphorous, are present in wastewater and can be harmful to both humans and the environment in high enough concentrations.

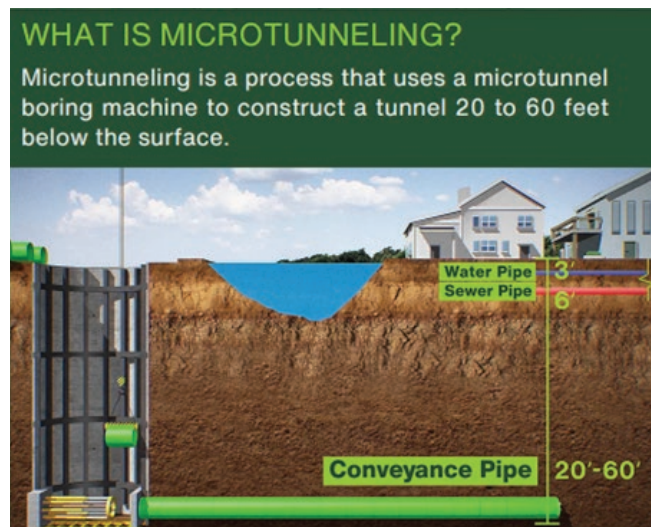
The Bay Park outfall currently discharges into the Western Bays. The discharge from the Bay Park outfall pipe eventually flows through Reynolds Channel and ultimately into the Atlantic Ocean. The exchange of water between the Atlantic Ocean and the Western Bays is heavily limited by the hydraulic capacity of Reynolds Channel. The nitrogen-rich discharge from the Bay Park facility has been identified as one of the major contributors to the degradation of Western Bays, which has caused a reduction in coastal resiliency and loss of coastline. In addition, the water quality in Western Bays has declined, resulting in harmful algal blooms which cause fishkills, loss of habitat, and a decline in the shellfishing industry which was once vital on Long Island.

The Bay Park Conveyance Project, an initiative resulting from the partnership of Nassau County Department of Public Works and the New York State Department of Environmental Conservation, seeks to improve the Western Bays by redirecting the treated wastewater from Bay Park, 8 miles east to the Cedar Creek outfall which discharges 3 miles off the coast into the Atlantic Ocean. This \$500 million project includes a new effluent

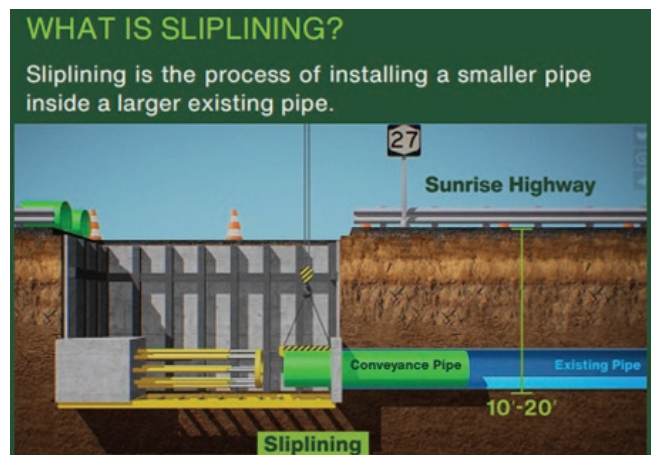
Continued on page 5

pumping station at Bay Park and a new force main to an existing abandoned water aqueduct under Sunrise Highway, followed by another new force main connecting from the aqueduct to the existing Cedar Creek outfall. The total length of the new connection from Bay Park to Cedar Creek is approximately 1 miles.

The proposed force mains are being constructed using microtunneling technology, which utilizes a tunnel boring machine (TBM) to drill a tunnel for the new pipelines. The depth of the new force main sections varies from 20-60' below grade.



In addition, the abandoned water aqueduct under NYS Route 27 Sunrise Highway will be rehabilitated and sliplined to allow for the flow connection.



Hayduk Engineering is working as a subconsultant to AECOM, the Program Manager for the project. Jeffrey P. Hayduk, NICET IV Chief Construction Inspector, is an integral part of the AECOM Team responsible for the Quality Assurance and Quality Control on this project. He is overseeing the work of Western Bays Constructors and the independent Construction Inspection team on a daily basis and is also participating in managing the project with AECOM for the full duration to construction closeout. ■



► **WE'RE HIRING!**

Hayduk Engineering is seeking to fill a limited number of key management-level and senior engineer positions in our Transportation and Wastewater Engineering Divisions. Please contact Stephen A. Hayduk, P.E. at sah@haydukengineering.com for more information.

► **NEW HIRES**



Kenneth J. Jacques, P.E.
Director of Construction
Administration Services

► **ANNOUNCEMENTS**

Stephen A. Hayduk, P.E. has been honored as LIBN 40 Under 40 award recipient, obtained his New York State Professional Engineer license, and has been admitted as a Member/Principal of Hayduk Engineering, LLC.

—

Daniel J. Stahl, P.E., received his New York State Professional Engineer License.

► **STAFF PROMOTIONS**

Daniel J. Stahl, P.E. has been promoted to Project Engineer II.

—

Nicholas R. Diers, I.E., has been promoted to Staff Engineer II.

—

Patricia Hayduk has been promoted to Office Manager.

► **RECENT CONTRACT DESIGNATIONS**

PRIME

Town of Smithtown, Callahan's Beach Access Reconstruction and Bluff Stabilization – Civil engineering services.

PRIME

Strathmore on the Green, Sewage Treatment Plant EOR and Preliminary Treatment System Upgrades – Engineer of record services, wastewater engineering services.

PRIME

Beechwood Organization, Country Pointe at Elwood Sewage Treatment Plant, Water, and Sewer Design – Wastewater engineering services.

PRIME

Suprina Solutions, East Northport Property Redevelopment – Site/civil engineering services.

SUB

Nassau County DPW Priority Pavement Resurfacing Task Order 33 Phases 7 and 8 – Highway engineering services and cost estimating.

SUB

NYSDOT Wooley Ave. & Bradley Ave. Bridges Rehabilitation – Construction inspection services.