

BIANNUAL NEWSLETTER

JANUARY
2025

K Engineering and
Land Surveying, P.C.

kcepc.com



CONTENTS

3

A LETTER FROM RAJ RAVILLA

KC's president reflects on 2024 and looks ahead.

8-9

OUR WATER SUPPLY

How New York City gets some of the best water in the world.

10

NEW PROJECTS

Read about KC's new projects from the 2nd half of 2024.

4-7

MILESTONES

KC celebrates our employees.

9

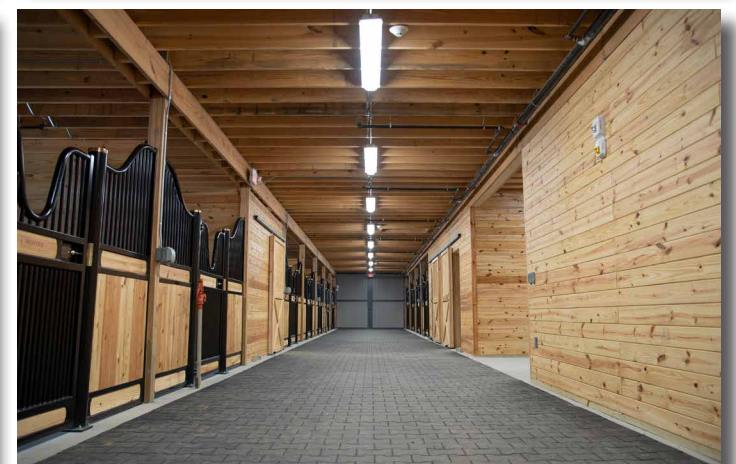
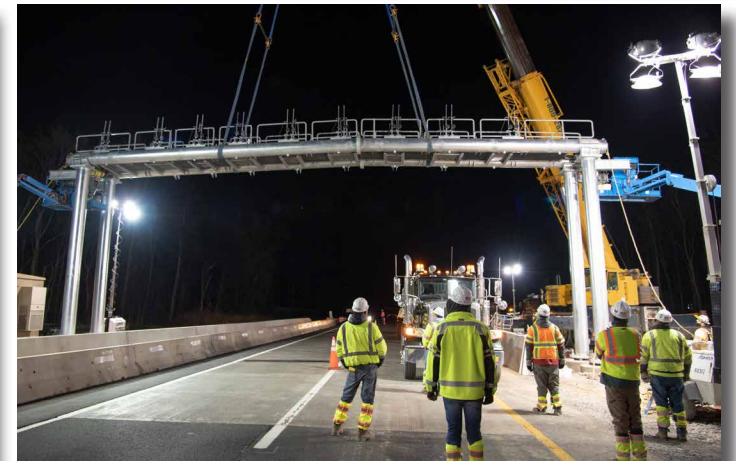
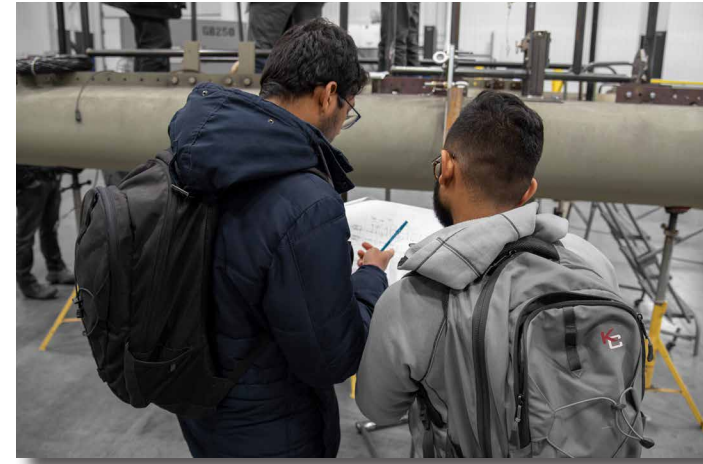
HOLIDAY PARTY

KC employees celebrated a successful year.

11

NUMBERS

Statistics about KC.





「A LETTER FROM RAJ RAVILLA」

Hello KC family and friends.

2024 saw its fair share of successes for KC. Our work as Lead Designer on the New York State Department of Transportation (NYSDOT) I-81 Viaduct - Phase 1, Contract 2 project, a massive design-build project critical for Central New York infrastructure, is concluding. Additionally, we were awarded several new projects as both prime and subconsultant with a variety of agencies, including NYSDOT, New York State Thruway Authority (NYSTA), New York City Department of Parks & Recreation (NYC Parks), Port Authority of New York and New Jersey (PANYNJ), and Orange County Department of Public Works (OCDPW).

2024 also saw its fair share of challenges. Inflation and high interest rates continue to weigh upon the Architecture, Engineering, and Construction (AEC) industry. However, there is reason for optimism in 2025 in this regard; interest rates are expected to decrease, and government spending from federal, State, and local sources will continue to proliferate throughout our industry. The AEC industry is also suffering from a talent shortage. KC currently has several positions listed on the [careers page](#) on our website; please review this page and consider referring a friend or former colleague who you think may fit the bill.

“2024 saw its fair share of successes for KC.”

Regardless of the challenging environment for our industry, we should continue to improve KC processes and procedures in 2025. KC's open-door policy has served us well in the past: if anyone has any suggestions or ideas for improvement to the way we do things here at KC, I encourage you to speak to your supervisor or myself. Success is the product of our collective knowledge, experience, and ideas, and I always welcome innovative ways of thinking.

There are several exciting projects already on our radar for 2025, and I anticipate further successes in our pursuits. Additionally, I am excited that Vice President / Director of Engineering Nancy Clark, P.E., ENV SP was nominated and elected as Chair for ACEC New York. Her term starts in July; I am heartened that KC is being represented in this way. Other KC employees have also had a productive 2024, both personally and professionally, as shown in our Milestones section of the newsletter. Please join me in offering our colleagues the heartiest of congratulations.

One final note: as we all know, engineering, land surveying, and construction inspection work can ebb and flow. If you find yourself with any idle time between projects, you should use this time to improve your efficiency and effectiveness. Check in with your fellow employees to see if they need assistance with any of their projects. Train yourself in a new software or technique or research ways to become better at software or techniques you already know. Look into pursuing new certifications. Update project templates for future work. If there is a certain task that you are particularly good at, consider training your colleagues on how to more efficiently perform the task. Review past projects and analyze what went well and what went wrong: lessons learned can be incredibly valuable, not just to you, but to your coworkers as well. When we work together and support each other, KC benefits and we all benefit in turn.

I hope that you are enjoying the new year so far, and I look forward to what 2025 has in store for us.

-RAJ

「MILESTONES」

Today and every day, KC celebrates our employees.



15

VINCENT DIBELLO, P.L.S.
ASSOCIATE / ASSISTANT SURVEY MANAGER

Vinny recently celebrated 15 years with KC. In this time, he has helped to lead the survey department through some of their most important projects, including the Cashless Tolling and Kew Gardens Interchange design-build projects. He is well-versed in right-of-way (ROW) and design mapping, boundary calculations and determinations, deed plots, construction layout and calculations, analysis of field data, topographic surveying, and preparation of legal descriptions.



10

KEVIN JENKINS
SURVEY PARTY CHIEF

Kevin has been with KC for 10 years. His field experience includes boundary ROW topographic, global positioning system (GPS), and wetland surveys; stakeout calculations for houses, roads, curbing, drainage structures, sanitary structures, wells, and property stakeout using AutoCAD and land desktop programs; as well as deed, field map, and record plan research. He is currently leading survey teams for several NYSDOT transportation projects.



10

NEEL PATEL, P.E., ENV SP
ASSOCIATE / LEAD CIVIL ENGINEER

Neel joined the KC team 10 years ago. His experience in his 10 years with KC has been diverse: he has worked as Team Leader and Inspector for condition survey and bridge replacement projects; Senior Structural Engineer and Senior Civil Engineer on NYSTA and NYSDOT design-build projects, respectively; and, currently, as Deputy Design Manager on the Champlain Hudson Power Express (CHPE) project.



10

NANCY CLARK, P.E., ENV SP
VICE PRESIDENT / DIRECTOR OF ENGINEERING

Nancy marked 10 years of experience with KC in October. Nancy has 37 years of experience in the civil engineering industry in NY. In her role at KC, she leads the engineering team and oversees many of KC's most important projects. Her extra-curricular resume is impressive: Nancy chairs the Mid-Hudson Region Legislative Committee, and she is currently preparing for her year as Chair for ACEC New York, which begins in July 2025.



5

**KAMAL REGMI, P.E.
GEOTECH PROJECT ENGINEER**

Kamal has been with KC for five years and is working on the I-81 Viaduct – Phase 1, Contract 2 design-build project as a Geotechnical Engineer, for which he prepares the geotechnical work plan, develops soil profiles, designs foundations for structures, and inspects and oversees soil boring and drilling operations for soil investigations.



5

**DEVIN MCKENNA, P.E.
SR. CIVIL ENGINEER**

Devin joined KC five years ago with experience providing design and drafting services for drainage, water supply, site design, and roadway and bridge infrastructure contracts. Devin recently earned his P.E. license in NY, and is currently working on the CHPE project developing design changes for cable alignments and access roads.



5

**YOGENDRA GAUCHAN, P.E.
SR. ASSOCIATE / PROJECT MANAGER**

In the five years that Yogendra has been with KC, he has provided expert structural engineering services for several bridge reconstruction projects in NJ and NY. His current workload includes retaining wall inspections for NYSDOT in the City, several bridge replacement and rehabilitation projects, and a highway resurfacing project.



NEW

**SAHANA SHANKAR
CIVIL ENGINEER I**

Sahana has three years of civil engineering experience working on infrastructure projects. She previously worked for the New York City Department of Design and Construction (NYCDDC) where she worked under the Deputy Director for Design Infrastructure in Public Buildings preparing contract documents, plans, and specifications.



NEW

**RICARDO ORTIZ
INSPECTOR**

Ricardo became a member of the KC team in October. His experience includes project management, inspection, safety compliance, civil engineering, QA, document management, proposal development and writing, inventory management, systems administration, drawing and report preparation, and budgeting.



NEW

**SABATO DALIA
SR. GEOTECHNICAL ENGINEER**

Sabato joined KC's geotechnical engineering group in October. He has performed geotechnical and structural design for various bridges in the New York metropolitan and Tri-State areas, including the Henry Hudson, Gordie Howe International, and Raritan River bridges. He has also performed inspection for soil borings, rock corings, and piles.



5

**RAM KASTURI, P.E.
PRINCIPAL / LEAD GEOTECH ENGINEER**

Ram recently celebrated five years with KC. As the head of KC's geotechnical engineering group, he performs a broad spectrum of geotechnical engineering tasks, including design and analysis, field investigation, construction engineering, and project management for large-scale projects, including highways, bridges, culverts, and buildings.



NEW

**RAFSAN CHOWDHURY
PROJECT ACCOUNTANT**

Rafsan, who joined KC in August, is responsible for processing client invoices and monitoring accounts receivable and payable. Additionally, his role involves processing timesheets and expense reports as well as implementing and maintaining internal financial controls according to KC company procedures.



NEW

**SRIMATHI ALAGUMAYILSAAMY
STRUCTURAL ENGINEER I**

Srimathi joined KC in August with four years of experience designing, planning, and scheduling engineering projects. A former Deputy Project Manager at an engineering company, she led six pre-fabrication and erection projects, developed quality assurance (QA) and quality control (QC) plans, and analyzed project impacts.

NO PHOTO
NEW

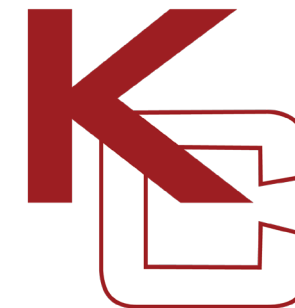
**LEN'NIESHA JAMES
COMMUNITY CONSTRUCTION LIAISON**

Len'Niesha became a KC employee in October. She has six years of experience providing community liaison services for a wide variety of NYCDDC capital projects, including water main, storm sewer, sanitary sewer, pedestrian ramp, and other various infrastructure projects in New York City and the surrounding areas.

NO PHOTO
NEW

**MUSHFIQUR REHMAN
INSPECTOR**

Mushfiqur joined the KC team in October. He has 13 years of experience providing detailed inspection services for a wide variety of projects, including sanitary, storm sewer, and water main reconstruction, as well as sidewalk and curb installation projects. He has worked with several City agencies, including the NYCDDC.



PROFESSIONAL MILESTONES

Congratulations to the following KC employees on their *professional achievements*:

CERTIFICATIONS

Professional Engineer

Algasimu Jallow (NY), Brian Masur (NY), Daniel Torres (NY), Devin McKenna (NY), Eugenio Macri (NY), Kamal Regmi (NY), Shrujal Barvaliya (IL), Yogendra Gauchan (NJ)

Envision Sustainability Professional

Julian Llorente

ISO 9001:2015 Lead Auditor

Adel Nasr

ACI Concrete Field Testing Technician - Grade I

Eugenio Macri, Nelson Murray, Ricardo Ortiz

DDC Water Main

Essam Gawish, Mushfiqur Rehman

MNR Safety and Class C Electrical Training

Jose Ramirez

OSHA 10-Hour

Mahmoud Tarawneh

OSHA 30-Hour

Nelson Murray

Certified Public Accountant

Brian Falkena

PROMOTIONS

Sr. Associate / Project Manager

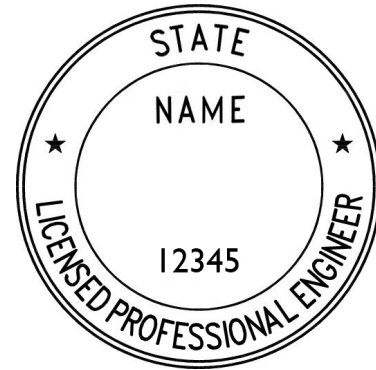
Yogendra Gauchan

Project Engineer

Eshana Kolli, Kamal Regmi, Manavendra Mulye

Sr. Project Accountant

Brian Falkena



Meet your ACEC New York Chair-Elect.



In 2024, KC Vice President / Director of Engineering Nancy Clark, P.E., ENV SP accepted ACEC New York's nomination and election for the Chair-Elect position at the State Level. This is a 3-year commitment to serve on the ACEC New York Executive Committee. She previously served on the ACEC New York State Board from 2018 through 2022, with the first two years as a State Board Director from the Mid-Hudson Region, and then two years on the Executive Committee serving as Secretary. She has served on the Mid-Hudson Region Board since January 2018.

In 2024-2025, as Chair-Elect, Nancy is visiting each of the 8 ACEC New York Regions as she prepares for her role as Chair. The Chair-Elect serves as Chair of the Membership Committee. In her regional visits, she has been presenting a primer on ACEC New York with a focus on Membership and what ACEC does. So far, she has visited the Western Region in Buffalo, the Southern Tier Region in Binghamton, the Rochester Region, the Metropolitan Region in NYC, and, most recently, the Long Island Region in Garden City. In early 2025, she will meet with the Mid-Hudson Region, the Eastern Region in Albany, and the Central Region in Syracuse. Nancy says, "I see many of the members at New York State events, but it is great to meet with them in their own regions."

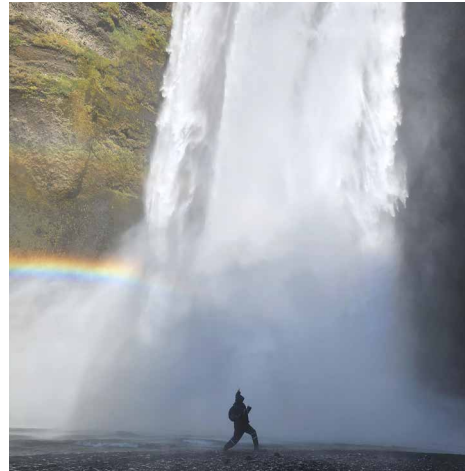
In 2025-2026, Nancy will serve as the elected Chair, the chief volunteer officer for the organization, and will act as a spokesperson for the organization. She will chair many State level meetings in the position, which starts July 1, 2025.

In 2026-2027, she will serve as the National Director, who is the immediate past Chair, and will represent ACEC New York as a national board member on the ACEC Board.

Nancy says, "In each of my presentations, I think of Kathy Dewkett, my first boss out of college. Kathy hired me in 1988 at a small firm where we worked together for 18 months. Her boss had taught her the importance of the ACEC New York predecessor organization, which was called the Consulting Engineers Council of New York State. In 2009, Kathy hired me again with another firm. Kathy was the first woman to serve as Chair of the organization that has become ACEC New York. I will be the third. Soon after I was nominated, I called Kathy to share my news. She said, 'It's a much different organization than when I served. You're going to work a lot harder than I did.' So far, I continue to enjoy serving ACEC New York. It is a lot of work, but it's very much worthwhile."

PERSONAL MILESTONES

KC employees had an eventful year!



Sr. Project Accountant **Brian Falkena, CPA** earned his CPA license and went on his first-ever international trip to Iceland.



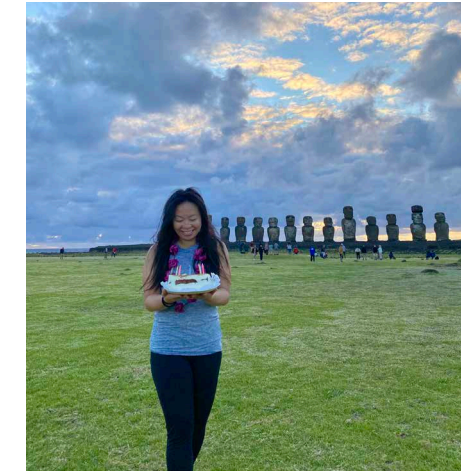
Civil Engineer **Brian Masur, P.E.** got married in July and passed the P.E. Exam in November.



Associate / Project Engineer **Clara Edwins, P.E., ENV SP** received confirmation from the judge that her legal name change was accepted.



Survey Party Chief **Kevin Jenkins** built a new garage foundation with the assistance of several KC staff: "Thank you Benson, Mark, Chris, and Bobby for helping me. I appreciate you sacrificing your Saturdays and providing your much-needed help with this project. I also want to thank John Bolger for design assistance."



Sr. Civil Engineer **Melinda Kwok** took a leave of absence in 2024 to solo travel around Asia and Latin America. She visited several of her bucket list destinations, including Indonesia, Bhutan, India, Vietnam, Pakistan, Colombia, and Guatemala, and celebrated her birthday on Easter Island in Chile.



Sr. Structural Engineer **Manavendra Mulye, P.E.** got married and was selected into the Class of 2025 for the ACE Mentor Leadership Program.



Associate / Project Engineer **Chakradhar Vallabh, P.E., ENV SP** summited Mt. Whitney, the highest mountain in the contiguous US, this past July.



Sr. Engineer **Daniel Torres, P.E.** proposed to his partner in September, and they are planning to wed this Summer.



Sr. Associate / Project Manager **Kelli Capka, P.E., P.T.O.E., ENV SP** welcomed baby Robert to her family in April.

Congratulations to **all!**



OUR WATER SUPPLY: A NEW YORK STORY

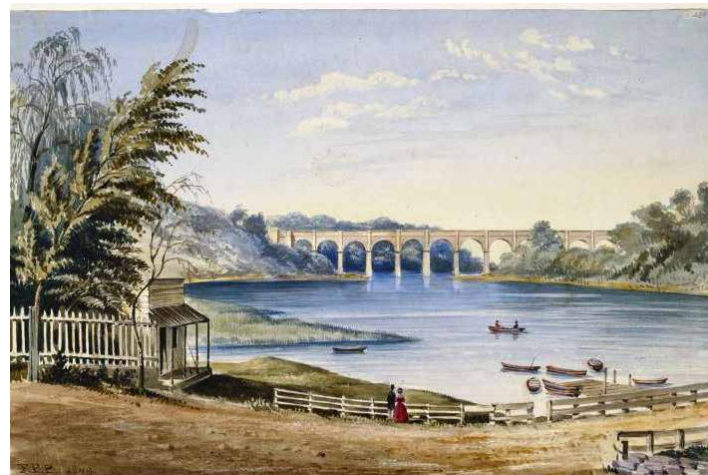


The New York City water supply system is one of the largest and most efficient water supply systems in the world.

The system supplies over 1.2 billion gallons of water every day to the residents of New York City as well as the residents of Westchester, Putnam, Orange, and Ulster counties. The water comes from 19 reservoirs and 3 lakes located across the Hudson Valley and Catskills regions, which are delineated into three distinct systems: the Catskill Water Supply System, the Delaware Water Supply System, and the Croton Water Supply System. You may hear some insist that the water tastes different depending on which water supply system it comes from. This is, in fact, true: the geology of each of these areas are distinct and can lead to differences in taste. Thanks to the geography of the State of New York, a significant majority of the water does not need to be pumped through the system: gravity does most of the work. Additionally, the watersheds that provide water to the system are protected, resulting in cleaner water at the source and less need for expensive filtration systems.

The efficiency and efficacy of this system is something that many take for granted, and its success is due to historical and ongoing feats of engineering and forward planning. For the first 200 years of New York City's history, water was sourced from within the City. The City was surrounded by brackish water, so the

primary source of water in New York City's early history was a 48-acre pond, named Collect Pond, that was located between what is now Lafayette Street, Leonard Street, Centre Street, and White Street in downtown Manhattan. By the 18th century, Collect Pond and other water supply sources had become exceedingly polluted, leading to rampant disease among City residents. Water was transported on a daily basis from Brooklyn to Manhattan via horse-drawn carriage, but this was incredibly inefficient. The consensus was that New York City's water was unsafe to drink, and to make matters worse, fires had become commonplace in NYC by the late 18th century, including one that destroyed almost half of the City. From 1800 to 1830, New York City's population more than tripled in size,

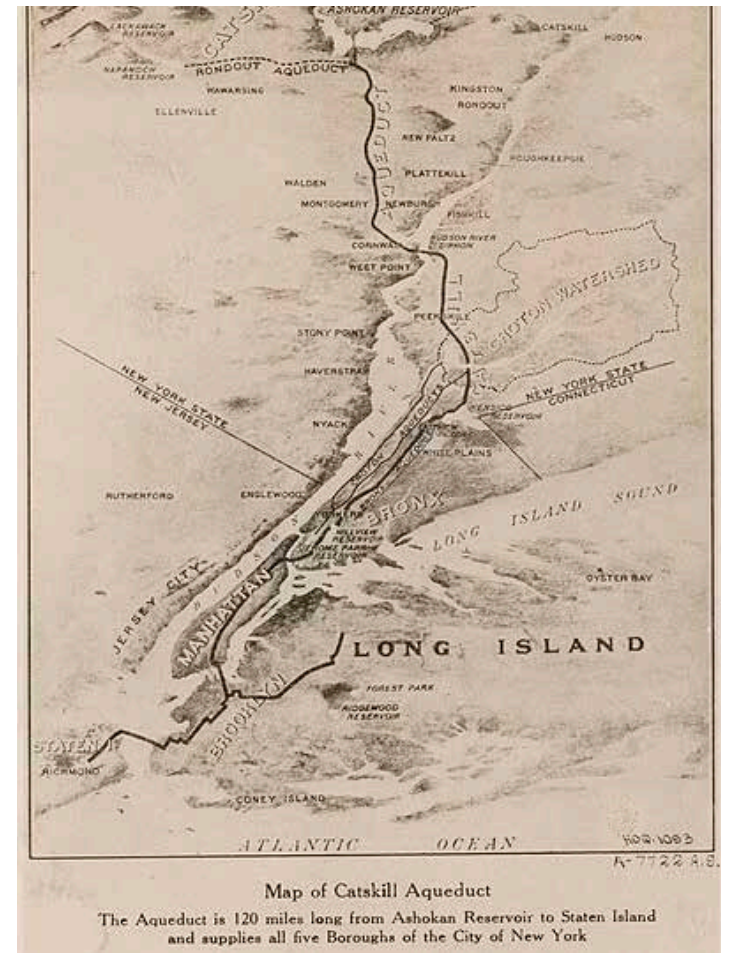


Part of the Old Croton Aqueduct after its completion (Public Domain)

and the City had an extremely high mortality rate that hovered around 2.6%. There was an urgent need for reliable and clean sources of fresh water.

In the early 19th century, New York City developed a plan to draw water from the Croton River 41 miles north. The Old Croton Aqueduct, built between 1837 and 1842, was built to transport fresh water to the City and was an engineering marvel. Made of iron piping with a brick enclosure, it dropped 13 inches per mile, allowing gravity to do the work of bringing 35 million gallons of water per day into the Receiving Reservoir in Uptown Manhattan, which could hold 180 million gallons of water. From there, the water flowed to the Croton Reservoir in Midtown Manhattan, where it was distributed to the rest of the City. The citizens of the City were enamored with this engineering marvel: this new water supply system rapidly improved the quality of life for City residents. In addition to being a landmark in public health, the system was an aesthetic marvel as well: the Croton Reservoir offered panoramic views of the City, and Edgar Allen Poe was said to walk along the top of the Reservoir for inspiration.

Throughout the 19th century, New York City continued to grow in population at a rapid clip, necessitating further expansion of the water supply system. In response, the City opened the New Croton Aqueduct in 1890. Still in use today, it runs parallel to the Old



A bird's eye view of the Catskill Aqueduct (Public Domain)

Croton Aqueduct and supplies 300 million gallons of water per day to the City; yet, the need for even more water was apparent.

The City established the Board of Water Supply in the early 20th century, which developed



HOLIDAY PARTY 2024

At the end of 2024, KC employees from near and far gathered to celebrate the year.

KC administration organized a party at the end of the year for KC employees to eat, be merry, and reflect upon the success of the previous year. This year, employees from all KC offices met at C.V. Rich Mansion in White Plains to celebrate together.

The holiday party is one way that KC shows employees that they are appreciated, and gives employees the chance to reflect upon the events of the previous year. Employees celebrated the achievements of the company as well as their own personal milestones of the past year as they do every year. It is always important to take stock of your achievements and experiences from the past year, and what better way to do so than with your KC colleagues? φ

plans for the Catskill Aqueduct. Construction on the new Catskill Aqueduct system, which included the new aqueduct, 3 dams, and 67 shafts, began in 1907 and was completed in 1924. Today, around 40% of New York City's water comes from the Catskill Aqueduct.

The Delaware Aqueduct was built between 1939 and 1945. It is the world's longest tunnel. This aqueduct supplies 500 million gallons of water per day to New York City, around half of the City's water usage. With the completion of this aqueduct, the City finally had ample water for its needs. The Old Croton Aqueduct, which was showing its age, was taken offline.

These engineering marvels continue to reap dividends today. The complete New York City water supply system has a capacity of 550 billion gallons and their combined watershed covers 1 million acres. 97% of the water supply system works using only gravity. Three major tunnels within New York City distribute water throughout the City with the assistance of around 7,000 miles of water mains. With a system of this size and complexity, regular maintenance and improvements are necessities.

KC is proud to have contributed to the ongoing success of the New York City water supply system. For two decades, KC has assisted the New York City Department of Environmental Protection (NYCDEP) Office of Engineering Audits (OEA) in auditing some of

the City's biggest projects pertaining to water supply. KC also has design and inspection experience in treatment, storage, and distribution systems for several municipalities, over 50 major residential developments, and numerous industrial plants, shopping centers, and hotels.

KC employees include skilled water, wastewater, civil, structural, and environmental engineers with experience in all aspects of water collection, supply, and treatment, including water treatment plants, wells, drainage plans, stormwater management, water mains, and catch basins. Additionally, KC is experienced in providing all engineering, surveying, and inspection tasks required to support large-scale water supply projects from concept to completion. φ



KC provided auditing services for the Croton Water Treatment Plant upgrades.



NEW PROJECTS

KC's **new worklog** demands meticulous attention to detail, and our **capable staff** are always ready to rise to the occasion.

NEW AWARD: Contract B007-124M: Rotational Project Assignment of Landscape Architecture Design Services for Bensonhurst Park Improvements, New York City Department of Parks and Recreation (NYC Parks): The scope of work for this project involves design for the reconstruction of Bensonhurst Park in Brooklyn, including construction of the handball and basketball courts, asphalt multi-purpose play area, skate park, and surrounding paths and sidewalks. KC will be performing survey services as a subconsultant.

NEW AWARD: Contract B294-124M: Rotational Project Assignment of Landscape Architecture Design Services for Jackie Robinson Playground Reconstruction, NYC Parks: The scope of work for this project involves design for the reconstruction of Jackie Robinson Playground in Brooklyn. This project will include reconstructing the playground with new play equipment that meets or exceeds the current accessibility standards and provides strengthening and challenging opportunities for children of all ages and abilities. KC will be performing survey and civil design services as a subconsultant.

NEW AWARD: Expert Professional Services for the Performance of a Condition Survey of New Jersey Marine Terminal - Port Newark and Elizabeth Buildings and Airtrain Station (Building 65) at Newark Liberty International Airport, Port Authority of New York and New Jersey (PANYNJ): The scope of work for this project includes condition surveys of various buildings at Newark Liberty International Airport to ensure that the conditions of each

building are thoroughly inspected, verified, and well documented. The purpose of these surveys will be to determine the condition of existing structures and identify any structural or non-structural deficiencies that might present potential safety hazards. Architectural and other nonstructural elements will also be inspected for deficiencies that may affect the buildings' functionality. KC, as the prime consultant, will manage the condition survey scope for this project.

NEW AWARD: Contract D214999: Term Agreement for Highway Design Support Services - New York Division, New York State Thruway Authority (NYSTA): The scope of work for this project involves various highway design services in the New York Division. The primary assignment will be for the Major Deegan Expressway to Cross Westchester Expressway pavement resurfacing project. This project includes full depth pavement repairs, two-inch milling and paving of travel lanes and shoulders, safety improvements, bridge wearing surfaces and joint repairs, rock slope scaling and fence work, highway lighting, concrete median barrier replacement, and drainage improvements and repairs. KC will provide civil design services as a subconsultant.

NEW AWARD: Contract D041226: Design Services for Inspection and Inventory of Retaining Walls, Region 11, New York State Department of Transportation (NYSDOT): The scope of work for this project includes routine or in-depth inspection of priority retaining walls owned by NYSDOT and other agencies

along various arterial highways / locations within the five boroughs of New York City. KC will complete highway design and land surveying work as a subconsultant.

NEW AWARD: Contract D041229: Construction Inspection Services for NY-25 Intersection Improvements, Region 10, NYSDOT: The scope of work for this project involves adding a left turn lane on the southbound Mount Sinai Coram Road at NY-25 intersection. The work includes shifting of the curb line on the west side of southbound Mount Sinai Coram Road, new striping, sidewalk construction, crosswalk readjusting, and rebuilding signals. As the prime consultant, KC will provide construction management and inspection services.

NEW AWARD: Contract D041235: Design Services for Mechanically Stabilized Earth (MSE) Wall Replacements, Sprain Brook Parkway Engineering Only, NYSDOT: The scope of work for this project will include the repair of two segments of existing MSE walls on the Sprain Brook Parkway at Payne Street and the eastbound Cross-Westchester Expressway ramp to southbound Sprain Brook Parkway in the Town of Greenburgh and Village of Elmsford in Westchester County. KC will provide environmental engineering and land surveying services for this project as a subconsultant.

NEW AWARD: PIN 8762.32: Lower Road (CR12) Over Tributary to Wallkill River, Orange County Department of Public Works (OCDPW): The scope of work for this project includes preliminary engineering, detailed design,

ROW incidentals and acquisition, construction support, and inspection services for a locally administered federal aid culvert replacement project in the Town of Wawayanda, NY. KC, as the prime consultant, will provide project management, civil and structural engineering, land surveying, and inspection services.

NEW SHORTLIST: Design-Build Contract VN-84B: Rehabilitation and New Construction of Brooklyn Verrazzano-Narrows Bridge (VNB) Ramps RFQ, Metropolitan Transportation Authority (MTA): This project will generally consist of deck replacement and general rehabilitation of the Verrazzano-Narrows Bridge and the relocation of exit ramps. KC, as a member of a design-build team, was shortlisted for this project as the quality management firm. Additionally, KC will be providing structural design services as subconsultant to the Lead Designer φ





PDA testing for the CSX Bridge in Syracuse for NYSDOT Design-Build Contract D900056: I-81 Viaduct - Phase 1, Contract 2. KC is the Lead Designer and Quality Manager for this mega-project.

NUMBERS

20 ***New opportunities awarded in 2024***
KC continually wins new jobs thanks to our qualifications and our leadership.

2 ***Municipalities where KC is the Municipal Engineer***
We take pride in serving our clients, especially when it benefits our local communities.

113 ***Proposals submitted in 2024***
KC's project managers, in tandem with the marketing group, produce a steady stream of new proposals, keeping KC at the forefront of the industry.

125 ***KC employees***
KC's staff is comprised of engineers from many disciplines, land surveyors, inspectors, and administrative staff.

6 ***Job openings***
KC is currently hiring for multiple positions. [Visit our website to learn more.](#)

3 ***KC offices***
The KC headquarters is located in New York, NY with regional offices in Newburgh and Albany, NY.