

2024 Awards

Outstanding Civil Engineering Achievement Award Winners



LOT Air Traffic Control Tower Site Development Replacement

The Air Traffic Control Tower (ATCT) Site Development project addressed the longterm need for a control tower at Lewis University Airport (LOT) in Romeoville, Illinois. The completion of the project was the culmination of a 20-year process to enhance operational efficiency and provide additional safety to one of the busiest large corporate reliever airports in the Chicagoland area. The ATCT Site Development project not only introduced a new control tower, but also established an access road leading to it, a nearby parking lot, and all essential utilities. Prior to the ATCT's opening, LOT directed an

estimated 100,000 annual aircraft operations. With this completed upgrade, the airport is now equipped to oversee high activity levels and mix of aircraft with improved control and safety and can facilitate more than 130,000 takeoffs/landings per year.

Project participants include: Joliet Regional Port District (owner), Primera Engineers, Ltd., Wang Engineering, Inc., Burns & McDonnell Engineering Company, Inc., Aviation & Federal, NASHnal Soil Testing, American Surveying & Engineering, P.C.

Clavey Road Reconstruction

The Clavey Road Reconstruction project, completed by Ciorba Group for the City of Highland Park transformed a critical 5,400-foot urban corridor from US 41 to Green Bay Road. This \$14.9 Million comprehensive infrastructure project included full roadway reconstruction, installation of a new multiuse path, replacement of two existing structures with a single bridge over the Skokie River, complete water main and storm sewer system replacement, and modernization of traffic signals. During design and construction engineering the Ciorba team worked in coordination with the City to overcome significant challenges, including utility conflicts, environmental concerns, and the need for



extensive public engagement. Innovative engineering solutions and construction phasing were used to address the required changes to the roadway profile with maintenance of traffic plans that ensured minimal disruption while enhancing safety and accessibility for the Highland Park community and their facilities including Ravinia Park. Construction was completed in two phases due to federal funding and maintenance of traffic constraints; this project exemplifies excellence in civil engineering, balancing complex technical requirements with community needs.

Project Participants include: the City of Highland Park (Owner), Ciorba Group, Soil and Material Consultants, Huff & Huff, Surveying and Mapping (SAM), Copenhaver Construction and Lake County Grading



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Addison Creek Reservoir

The MWRDGC Addison Creek Bellwood Reservoir has 600 acrefeet of flood storage volume and is located on 21-acres of industrial land located northwest of Washington Boulevard and 25th Avenue in the Village of Bellwood. The reservoir is located east of Addison Creek on land that has an abandoned industrial building. Along the west side of Addison Creek an intake structure was constructed and consisted of a 120 linear foot weir with a crest elevation 1.4' higher than the Addison Creek 2-year flood elevation, a concrete chute, and a concrete drop structure. Once the floodwaters enter the drop structure, they will be con-

veyed eastward to the reservoir through two 87.5" steel pipes bored under Addison Creek and railroad tracks. A concrete spillway located in the reservoir dissipates the energy of incoming floodwaters. An access bridge was constructed across Addison Creek and both sides of the channel were lined with rip-rap through the project area. Prior to the excavation of the reservoir, the existing building was demolished, and the concrete foundation removed. The reservoir was constructed by excavation followed by hauling off the earth. A portion of the upper layer of earth was contaminated and was removed to a landfill. The remaining earth was clean material and was hauled to a CCDD accepting facility. A pump station was constructed to enable the dewatering of the captured floodwaters back to Addison Creek after the flood levels have receded. The MWRDGC's total construction cost for the Addison Creek Reservoir was \$81.3 million. A \$5 million grant from the Cook County Community Development Block Grant Disaster Recovery Program via U.S. Department of Housing and Urban Development helped fund the project.

Project participants include: Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) (owner), Christopher B. Burke Engineering, Infrastructure Engineering, Inc., Material Service Testing, Zroka Engineering, Raimonde Drilling, Huff & Huff, Ward Environmental Services, Cotter Consulting Services, Primera, O'Brien & Associates, Testing Service Corporation, Cushing, and, Juneau Associates.



Houbolt Road Extension/Bridge and I-80 Diverging Diamond Interchange

The Houbolt Road project is a testament to how private industry and public agencies can work together to solve regional transportation issues. The project delivers significant benefits to the City of Joliet, Will County, private industry and to the regional economy by providing a direct connection between the massive intermodal rail terminals and I-80. The

congestion and safety concerns of the local communities are addressed through a reduction in truck traffic and congestion on local routes. Private industry benefits by saving truck drivers up to 20 minutes travel time, fuel savings and better route dependability. The project is an excellent example of how innovative, unique, "out-of-the-box" approaches to both project delivery (through a public/private partnership) and project execution (using a privately led design/build/operate/maintain model) can be applied to real world situations to deliver solutions to our transportation challenges.

Project participants include: City of Joliet (Owner), Illinois DOT Region One, CeterPoint Properties, United Bridge Partners, TranSystems, Burns & McDonnell, Civiltech Engineering, Inc., CEMCOM, Ltd., Claasen White & Associates PC, Geotechnology, LLC, Huff & Huff, Inc., Interra, Inc., O'Brien & Associates, Patrick Engineering, Inc., Strand Associates, Inc., Testing Service Corp., D Construction, Granite Construction, Kraemer North America, Elmund & Nelson, Co., Michels Construction, Inc., PT Ferro Construction, Co.



2024 Awards

Sustainability in Civil Engineering Achievement Award



The Illinois Tollway LED Lighting Program

The Illinois Tollway LED Lighting Program is setting the industry standard for tolling and transportation agencies, cutting its annual energy costs in half with the use of sustainable technologies.

The decade-long effort replaces traditional high-pressure sodium (HPS) lighting with light-emitting diode (LED) lighting. Through its \$20 million LED Lighting Program, the Illinois Tollway has so far converted approximately 20,000 of its

22,000 roadway light fixtures to LED bulbs, reducing energy costs by an estimated \$700,000 a year.

The results are driving energy efficiency, reducing maintenance needs and enhancing visibility for the nearly 1.6 million daily drivers on the five roadways that make up the 294-mile Illinois Tollway system in 12 counties throughout Northern Illinois.

As part of its 16-year, \$15 billion capital program, *Move Illinois: The Illinois Tollway Driving the Future*, the Illinois Tollway is demonstrating its commitment to establishing the "cleanest and greenest" program by not only installing LED lighting on new construction projects, but also providing for simultaneous retrofitting of existing light fixtures

Project participants include: Illinois Tollway (Owner), WSP USA, Meade Inc., Aldridge Electric Inc., John Burns Construction Co., Demarc Electric and Communications LLC, Utility Dynamics Corp.

Citizen Engineer of the Year Katherine "Kat" Au, P.E.

Katherine (Kat) Au has been involved with ASCE's Construction Institute the past few years and will be the Chair for the upcoming 2025-2026 term. In addition to being involved with ASCE, she founded the Illinois Asian American Civil Engineers (IAACE) and is on the advisory board for the Illinois Professional Engineers. With IAACE and the PE board, she strives to help the Asian/immigrant community by providing resources, guidance and finding pathways for licensure for those with foreign degrees.

Kat has always wanted to help the younger engineers. She has been volunteering as a judge for the Future City Competition for the past decade. Now that she has a platform with IAACE, she used it to help college students and younger engineers by providing webinars, tours, a mentorship program as well as starting a student chapter at UIC.

Besides helping the Asian community, Kat will be speaking at UIUC to a class

of seniors in September to share with them the importance of licensure. By sharing her experience and knowledge, she hopes to encourage the younger generation to pursue licensure which will expand their opportunities.

As the upcoming Chair for ASCE CI- IL Section, she aims to get the team more involved with student outreach, offer training workshops and bringing more younger engineers on board.





2024 Awards

Civil Engineer of the Year Darren Olson, P.E., D.WRE, CFM, CPESC, CPSWQ



Darren is a Vice President and the Water Resources Department Head at Christopher B. Burke Engineering, Ltd (CBBEL)where he started his professional career over 26 years ago. Over that span of time, Darren has been fortunate to have had the opportunity to work with many great engineers on complex water resources projects. These include creek restoration and urban flooding mitigation projects that have been constructed throughout the Chicagoland area and are improving the health, safety and welfare of the public. He also leads CBBEL's stormwater design and permitting for electric utility clients and serves as the stormwater consultant for many communities throughout the Chicagoland area. In his current role as Water Resources Department Head, Darren leads a staff of 20 engineers on a wide range of awardwinning water resources projects that include stormwater master planning, urban flood control design, regulatory compliance, and environ-

mental design and permitting for electric grid improvements.

Darren graduated from the University of Illinois with a Bachelor and Master's in Civil Engineering where his introduction to water resources occurred at an internship with the U.S. Geological Survey. He also received a Master's of Business Administration from Northwestern's Kellogg Graduate School of Management. He began his involvement in the Illinois Section of the American Society of Civil Engineers (ASCE) shortly after starting at CBBEL and has served many roles with ASCE including Illinois Section President, Region Governor and most recently the Chair of the ASCE National Committee on America's Infrastructure – which will be publishing the Report Card on America's Infrastructure in March 2025. Darren lives with his family in Roscoe Village and in his spare time he enjoys running the Chicago Marathon and coaching tennis at Lane Tech High School where his children attend.

Young Civil Engineer of the Year David Wilkinson, P.E.

David Wilkinson, PE, is a Principal at SWE Solutions. Born and raised in the United Kingdom, he came to Chicago in 2008 on a full-ride soccer scholarship to study at Illinois Tech. He graduated in 2012 with a Bachelor's in Civil Engineering, and minors in both Architecture and Engineering Graphics.

David began his professional career as a designer before transitioning into survey and data processing. He rounded off his engineering skillset by working in Construction Management on several major IDOT & Tollway projects. He has spent the last 5 years developing RTK Drone workflows and has become an industry leader in this space.

In June of 2021 David co-founded SWE Solutions with the goal of creating an innovative, forward thinking engineering firm that would attract young people and inspire them to pursue careers in Civil Engineering.





2024 Awards

Government Civil Engineer of the Year Jennifer "Sis" Killen, P.E., PTOE

Jennifer "Sis" Killen serves as the Superintendent for the Department of Transportation and Highways for Cook County, Illinois, the second most populous county in the nation. She brings more than two decades of experience to her role and was a key orchestrator in the transformation of the Department from a roads centric environment to a culture with a broader range of transportation investments and economic outcomes.

She co-led the completion of the department's long range transportation plan, establishing policy priorities to guide holistic infrastructure investment to address local and regional policy and project needs through strategic partnerships. Her work over the last decade has positioned Cook County Government as a regional transportation leader. As Superintendent and a licensed Professional Engineer, Ms. Killen is responsible for all aspects of multimodal transportation facility planning, design, construction and maintenance. As the executive of the Department, she is committed to empowering and developing staff and creating an environment where creativity and innovative partnerships thrive.



Killen received a Bachelor of Science degree in Civil Engineering from the University of Illinois at Urbana-Champaign. Ms. Killen began her career in private consulting and has spent the second half of her career as a public agency executive.

Young Government Civil Engineer of the Year Yazan M. Alshawabkeh, PH.D., P.E., SEI

Dr. Yazan Alshawabkeh is a civil/structural engineer, earned his PhD degree from the University of Illinois at Chicago in 2023. Possessing a Civil Professional Engineering License in the state of Illinois as well as the Structural Engineering Intern license. Dr. Alshawabkeh is also certified as a home inspector and a national bridge inspection team leader. Currently, Dr. Alshawabkeh serves as a Resident Engineer at the Illinois Department of Transportation, overseeing critical capital improvement programs and transportation projects in the northern cook area. With over five years of experience, his expertise spans structural engineering, bridge analysis, personnel management, university teaching, construction problem-solving, and bridge inspection and maintenance. Dr. Alshawabkeh's research is at the forefront of engineering development, particularly in laboratory experimental testing, structural



mechanics, and finite element analysis. His significant contributions to the field include several published works, such as his Ph.D. dissertation on the "Buckling Behavior of Steel H-piles Supporting Integral Abutment Bridges (IABs): Numerical and Analytical Investigation." His portfolio also features numerous technical reports and papers that he has authored or co-authored. In addition to his technical work, Dr. Alshawabkeh serves as a co-chair of the Illinois Center for Transportation's Technical Review Panel on state and federally funded research projects. In this role, he is responsible for planning, supervising, and evaluating each phase of these projects, further demonstrating his commitment to advancing the field through rigorous research and practical application.



2024 Awards

Construction Engineering Person of the Year Patrick Kielty, P.E.



Patrick (Pat) was in the construction industry for nearly 50 years, the last 20 of which were spent as Senior Construction Engineer at Christopher B. Burke Engineering, Ltd. (CBBEL). Working in this industry for all those years, Pat has experienced and worked on every type of highway and heavy project there is including bridges, roads, tunnels, sewers, and water mains.

One of Pat's most notable projects was his involvement in the creation of Chicago's historic lakefront Museum Campus and the associated relocation of Lake Shore Drive. He was also selected as Resident Engineer for the construction of McFetridge Drive, the roadway between the Field Museum and Soldier Field. When power was accidentally cut to Solider Field and the nearby museums, Pat was the calmest person involved, never getting rattled, just doing what needed to be done.

Over the course of his career, Pat helped mentor dozens of young construction engineers, who have gone on to become leaders in the field, including superintendents, department heads and IDOT Bureau Chiefs. Pat also took a hand in working with CBBEL's annual summer interns, taking them out into the field to get them hands-on experience.

Outside of work, Pat was a life member of the American Society of Civil Engineers and Irish Engineers and Contractors of Chicago. In Pat's spare time, he was a member of Stonehenge Golf Club in Barrington, IL.

Public Involvement Award IL Section Younger Member Group



Thank you to the Illinois Section for recognizing the public involvement efforts of the Younger Member Group. The YMG strives to provide a variety of events for early-career and younger engineers, and to reach out to the community of Chicago-area college students to support and encourage their growth in civil engineering. YMG is proud to partner with a multitude of non-profit and educational institutions focused on advancing engineering and STEM, and our members are grateful to volunteer their time to assist at the many opportunities throughout the year.