

## Outstanding Civil Engineering Achievement Award Winners

### ***Ward 2 & 3 Stormwater Improvements***

Much of Wood Dale developed 50 years ago before the advent of modern stormwater management regulations. The lack of stormwater detention and adequate overland flow routes resulted in serious localized flooding during significant rainfall events. The most severe roadway flooding has occurred on Prospect Avenue where water levels can reach 43" above the roadway surface during a 100-year rainfall event. Flooding often reaches several homes and multiple parking lots in the adjacent townhome complex.

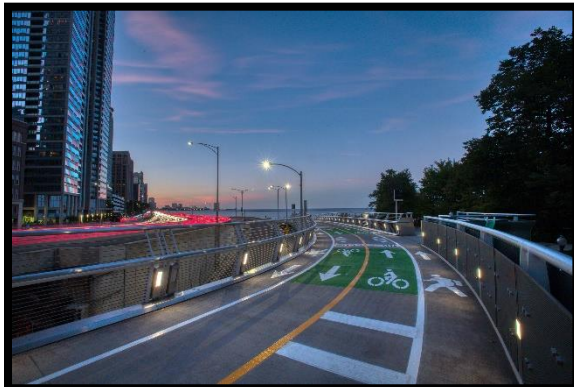
In 2016, Wood Dale developed a master stormwater plan for the area, then began a multi-year program to fund the construction of improvements. The first two phases (2018-19) consisted of expanding and reinforcing the downstream storm sewer system and streambank stabilization of the receiving waterbody, Squaw Creek. The third phase in 2020 involved the construction of an underground stormwater detention system containing 7.7 acre-feet of storage volume beneath City roadways, and the final phase (2021) is adding another 6.8 acre-feet on Westview Elementary School property. The underground detention system consists of more than 6,400 lineal feet of 10'x10' precast concrete box culverts to maximize storage within the limited footprint of the project area.



Project execution was coordinated with multiple homeowner associations, hundreds of residents, an elementary school, and utility companies. Box culverts a half-mile in length were installed along Potter Street and Prospect Avenue, along with a new stormwater lift station to dewater the system. A custom width trench box was fabricated to support the 22' deep excavation for the dual row 10'x10' box culvert detention system along Potter Street while continuously maintaining vehicular access to multiple residential parking lots. A portion of the box culverts were installed beneath a 36" high pressure natural gas transmission main and below high voltage ComEd transmission lines, posing considerable construction and coordination challenges. The system was also designed to allow for expansion of the underground detention into nearby areas along Potter Street if additional detention volume is needed in the future due to increasing rainfall severity.

The detention system will protect homes in the area from flooding during significant storms and help to ensure reliable emergency access during these events.

### ***Lakefront Trail Pedestrian Bridge***



The Chicago Lakefront Trail spans 18 miles along the shoreline of Lake Michigan and serves as a major access point to the city's tourist cornerstone, the Chicago Navy Pier. The trail contains 50 access points and is considered the busiest pedestrian path in the country. In addition to eliminating poor conditions that contributed to accidents along this section of the trail, users now have a bridge to enjoy and marvel at en route to Chicago's most notable tourist attractions.

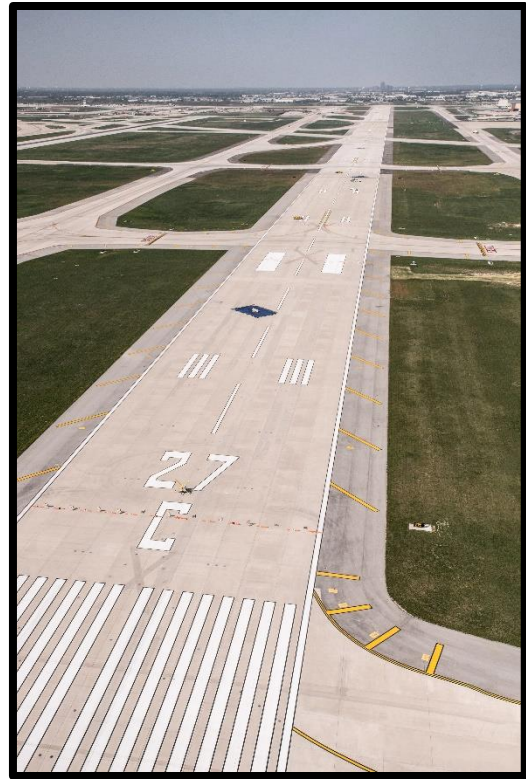
As the prime consultant, HNTB worked with the City of Chicago to develop a bridge configuration that was functional and aesthetically pleasing. This required an elevated level of coordination with the architectural and structural teams as well as the civil, geotechnical, electrical, landscaping and

wayfinding professionals. The project's completion has brought social and economic benefits to Chicago's Lakefront. At its busiest points, the trail attracts nearly 30,000 pedestrians, runners and bicycle commuters daily during the peak summer season.

**Outstanding Civil Engineering Achievement Award Winners, cont.*****Chicago O'Hare International Airport  
Runway 9C-27C***

The \$8.5 billion O'Hare Modernization Program was initiated by the City of Chicago and the Chicago Department of Aviation in 2001 to create an efficient and reliable system of runways to help reduce delays, increase capacity and support current needs of O'Hare International Airport (ORD) while providing future growth opportunities. As ORD's second-longest runway and first new runway since 2015, it helps balance flight activity between the north and south airfields and associated effects on neighboring communities.

Construction required careful sequencing to decommission Runways 14L-32R and 14R-32L while also relocating and replacing several airport facilities. The project was successfully coordinated in a way that assured 100% airport operations were maintained at all times during construction. Runway 9C-27C opened on November 5, 2020 with a flight to Seattle. The completion of Runway 9C-27C generated more than 2,500 jobs and created an opportunity for many small and diverse-owned businesses.

**Sustainability in Civil Engineering Achievement Award*****Aurora (M-8) Maintenance Facility***

The Illinois Tollway's new, 95,000-square-foot maintenance facility in Aurora was built to meet LEED certification standards for sustainable design and construction. Located on a 19-acre site along the Reagan Memorial Tollway (I-88) adjacent to the Aurora Toll Plaza, the \$40.5 million facility operates 24/7 to serve roadway needs of the eastern segment of I-88 from Aurora to the Tri-State Tollway (I-294). To achieve LEED status, the Illinois Tollway's newly reconstructed maintenance facilities include refueling equipment for low-emitting and fuel-efficient vehicles, white thermoplastic polyolefin roofing and low-reflectivity concrete pavement, LED electronically programed

exterior lighting and interior occupancy lighting and geofoam installation. The buildings incorporate photovoltaic panels to feed power back into the grid and electric vehicle charging stations. Skylights and punched openings in pre-cast wall panels use translucent, insulating glass and polycarbonate panels for natural lighting. In-floor hydronic radiant heat and overhead natural gas radiant heat, along with installation of low-flow fixtures, further reduce energy and water costs. The Aurora maintenance facility includes the Tollway's first on-site brine-making equipment to assist with snow and ice control and a storm water management system to improve the quality of storm water discharge from the site, which is half a mile from the Fox River.



## Construction Engineering Person of the Year Hossein Ataei, PhD., P.E., P.Eng., F.ASCE



Hossein Ataei, P.E., P.ENG., F.ASCE is a civil engineering faculty member and Director of the Construction Engineering and Management Program at the University of Illinois, Chicago. He is a registered P.E. in the US (States of Nevada, Texas, and Wyoming) and in Canada (Provinces of British Columbia, Ontario and Quebec). Dr. Ataei's industry experience varies from project management and business administration to the design and risk advisory consulting services on large-scale heavy civil engineering projects, and mainly in the mining, energy, and power sectors.

Dr. Ataei is an ASCE Fellow. He serves on the national ASCE committees of Claims Avoidance and Resolution (CAR), Committee on Practices to Reduce Failures, and the Forensic Engineering Education. He is also an ABET Program Evaluator for the accreditation of the civil and construction engineering higher education programs in the US and internationally. His academic and professional interests are in construction engineering and management, claims and dispute resolution, forensic engineering, and

innovative project management practices for complex and interconnected civil engineering systems. Dr. Ataei is the author of many books and papers, the most recent of which is the "COVID-19 Pandemic Impacts on Construction Projects", published by the American Society of Civil Engineers (ASCE) in 2021, in a collaboration with the colleagues from the Claims Avoidance and Resolution Committee. Dr. Ataei has a PhD in Civil Engineering from University of Southern California in Los Angeles, California, and holds three Masters degrees in Civil Engineering; Construction Management; and in Business Administration.

## Government Civil Engineer of the Year Sarah Hunn, P.E., CFM

Sarah Hunn received her Bachelor of Science in Civil Engineering from Michigan Technological University in 2002. She began her career at the Illinois Department of Transportation and has worked for DuPage County for the past 16 years, currently serving as Director of the Stormwater Management Department. In this role, Sarah leads nearly 40 staff members, oversees the operation of 17 flood control facilities and manages flood control and water quality projects countywide.

During her time at DuPage County, Sarah has overseen the construction and/or modification of eight of the County's 17 flood control facilities and managed nearly \$50 million in grant funds for capital projects, including the Armstrong Park Reservoirs, Churchill Woods Dam Removal, Urban Stream Research Center, the Brewster Creek Headwaters Flood Control Project and several flood control and restoration projects along the West Branch DuPage River. These projects and initiatives in which Sarah has been involved have received 16 awards – on local, state and national levels – for outstanding achievement.



Sarah is an active member of the Illinois Chapter of ASCE and the Illinois Association of Floodplain Managers, serving as the awards chair for the past five years. She's also a leader in science, technology, engineering and mathematics (STEM) education throughout DuPage County, presenting to numerous school groups in both office and field settings. Earlier in her career, Sarah was also awarded Young Government Engineer of the Year by ASCE, Illinois Section.

Outside of work, Sarah is actively involved with Engineers Without Borders, currently assisting with fundraising for the project team's international travel, in which she has also participated. She is also an advocate for local humane societies, devoting time and effort to place at risk animals in homes, in addition to housing multiple shelter animals herself. Sarah is also a triathlete, golfer and avid snowboarder.

**Citizen Engineer of the Year**  
**Soliman Khudeira, Ph.D., S.E., P.E.**

Dr. Soliman Khudeira, S.E., P.E. is a Section Chief of Major Projects with the Chicago DOT. He is Adjunct Professor with Illinois Institute of Technology (IIT), where he teaches Design of Transportation Facilities, Research Problems, Special Projects, and FE and PE Review courses. He is the Chief Editor of the Practice Periodical on Structural Design and Construction, an ASCE Journal. He is past President (2020-2021) of the Structural Engineers Association of Illinois.

He volunteers his time with various professional organizations including teaching math classes for the ACT exam and engineering graphics for the WYSE competition. He promotes STEM education and careers in engineering through various presentations. He chairs the AAAEA-IL essay/poster contest and chairs the scholarship award committee. He is the Chair of the NAAEA education committee. He participates in judging the IIT bridge design competition.



He has over 35 years of experience in the private and government sectors, which include various disciplines of civil engineering including civil design, structural analysis & design, surveying, and construction management. He received his BS, MS, and PhD in Civil Engineering-Structures from the Illinois Institute of Technology (IIT), Chicago.

**Young Civil Engineer of the Year**  
**Irsilia Colletti, P.E., S.E.**



Irsilia Colletti is a difference-maker. Throughout her nine years in engineering, she has progressed from a smart, technically-sound professional with the ability to come up with solid solutions into a true leader in her firm and in the structural engineering field. She is passionate about discovering solutions for her clients that provide lasting, tangible improvements for end users. But she also strives to make an impact on her profession and those she works with, helping to push structural engineering forward.

Irsilia has provided a variety of services to clients not only in Chicago and Illinois, but across the Midwest. Through this experience, Irsilia has grown from a smart but raw engineer into a highly valuable member of project teams, providing key leadership and expertise that leads to top results from both design and project delivery standpoints.

Irsilia shines as a person and engineer for many reasons, but they all relate to her eagerness and excitement. She is eager and excited to be involved in engineering outside of the office. She has a seemingly limitless desire to continue learning and growing. And above all, she cares about sharing and helping others grow while also developing her own engineering expertise and skills. In her young career, Irsilia has already had a tremendous, positive impact on HNTB, her clients and their communities and the structural engineering profession.

**Civil Engineer of the Year**  
**Peter G. Wallers, P.E., CFM**



Peter G. Wallers, P.E., CFM – Pete is Board Chairman of Engineering Enterprises, Inc., a consulting engineering firm with offices in Sugar Grove and Rockford, Illinois. He holds a Bachelor of Science in Civil Engineering from Marquette University. Pete has over 40 years of consulting experience and has worked with numerous communities on the planning, design, and implementation of Water Works System Improvements. He is a registered professional engineer and certified floodplain manager. Pete serves as a Technical Advisor to the Metro West Council of Government (MWCOG) on Water Supply Planning, served as a delegate on the Regional Water Supply Planning Group representing Municipalities and Municipal Water Suppliers, and is currently the Chairman of the Technical Advisory Committee for the Northwest Water Planning Alliance (NWPA). Pete also serves on the Aurora Area Interfaith Food Pantry Advisory Board and the Montgomery Economic Development Corporation Board. He also is an appointed public member on the Judicial Public Safety Strategic Planning and Technology Commission for Kane County and a member of the Montgomery Rotary Club. He is a founding member and President of the Montgomery Foundation and was elected to serve his second term on the Oswego Library District Board of Trustees

**Young Government Civil Engineer of the Year**  
**Fawad Aqueel, P.E., PTOE**

Fawad Aqueel, PE, PTOE is the Bureau Chief of Design at the Illinois Department of Transportation Region 1. Fawad earned his civil engineering undergraduate degree from the University of Illinois at Urbana-Champaign and completed graduate studies from Illinois Institute of Technology. In his 13 years with the Department Fawad has held numerous permanent positions such as traffic engineer, phase 2 design engineer, phase 1 geometrics engineer, local agency federal aid program engineer, and phase 2 plan preparation section chief in addition to temporarily filling in for other vacant positions within the Department. In his current role as Bureau Chief of Design, Fawad and his team are responsible for ensuring contract plans prepared by IDOT staff and consulting firms are delivered on time and with minimal errors for the Department's Fiscal Year 2022-2027 Proposed Highway Improvement Program.



**Private Sector Employer Recognition Award**



***Gannett Fleming***

Gannett Fleming is a privately-held AEC infrastructure firm of over 2,500 employees that has pioneered solutions for transportation, earth sciences, facilities, geospatial, power, and water projects for more than a century with a presence in Illinois for over 30 years. Our employees possess vision, skill, and integrity to produce and maintain world-class infrastructure systems. We are grateful to our clients for entrusting us to deliver the excellence they and their customers deserve. Gannett Fleming fully supports our employees and the time they share with their great colleagues advancing our industry through ASCE IL Section. Thank you ASCE IL Section for this great honor and distinction.