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# News

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## Mentoring and Service: Bob Camillone's IS-ASCE Legacy

*By Matt Kirby, P.E.*

**A**s evidenced by the many distinguished professionals involved in ASCE, the Society tends to inspire lifelong commitment by its members. These members serve the industry, its professionals, and its next generation. This notion is epitomized by the namesake of the ASCE Transportation & Development Institute Illinois Section Chapter's (IS-ASCE T&DI) scholarships, Bob Camillone.

Robert (Bob) J. Camillone, M.ASCE, hailed from New York, living in the city and the suburb of New Rochelle throughout his childhood. Later, his father's career took his family to Lincoln, Illinois ("from big city to cornfields," as his wife, Rose, says), and Bob finished his last two years of high school at Lincoln High School. He ran track, played chess and helped build sets for the high school plays. He worked as a busboy at a local restaurant then as a bagger at Kroger's food store. However, his call-

ing was engineering, as inspired by an uncle who was an electrical engineer.

His family's move to Lincoln was fortuitous for this career, as the distinguished College of Engineering at the University of Illinois was just 60 miles away in Champaign. There Bob earned a B.S. in electrical engineering in 1965. In 1977, he earned an M.S. in civil engineering from the Illinois Institute of Technology, (continued on page 9)



**Bob Camillone at the 2008 ASCE Illinois Section  
Annual Dinner.**

## President's Notes

Dhooli Raj, P.E.



The Illinois Section has been busy for the past few months with the President Elect Spring Dinner, Legislative Day and the Great Lakes Student Conference. On April 25th the Illinois Section hosted our 11th Annual Legislative Day. Approximately 40 people traveled to Springfield to visit with their State Legislators. The ASCE Illinois Section partnered with ASCE sections from Central Illinois and St. Louis as well as APWA, ITE, and MPC for a day of advocacy.

Illinois Secretary of Transportation Randall Blenkinsop addressed the group and provided insight into sustainable infrastructure funding. Representative Tim Butler welcomed the group to Springfield and emphasized the significant role transportation plays in the Illinois economy and we had a question and answer session with Senator Bill Brady. Members then spent the afternoon visiting with their State Senators and Representatives. We would

like to thank Dave Bender, ACEC-IL, for coordinating the legislative meetings and his continued support of our industry.

The Great Lakes Student Conference was held in April at UIC with approximately 600 student participants from schools around the midwest. The UIC team, led by Andrew Boysen and Shiffy Feldman, did a fantastic job organizing and managing the 3-day event and were able to secure over \$70,000 in sponsorship from local companies to make the event a success and subsidize costs for the student attendees.

The event was comprised of the hallmark steel bridge, concrete canoe, and technical paper competitions, and also included fifteen mini competitions including wooden bridge, quiz bowl and concrete bags. The UIC student leaders wanted to provide a broad variety of events that appealed to students of all disciplines and academic levels.



ASCE members from across Illinois participating in Springfield Legislative Day on April 25, 2018

## ASCE Illinois Section News

**ILLINOIS SECTION NEWSLETTER**  
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Section - Region 3

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# Why Underground Stormwater Detention

By Michael T. Ungeran, P.E.

Since the 1990's the EPS, NPDES Phase I & II requirements have made stormwater detention systems a staple of site development. In areas where land and space come at a premium, subsurface/underground stormwater detention systems have risen in popularity. From an engineering and development standpoint, it is important to understand benefits to underground systems, what options are available, attributes of the various systems, and what to look for when examining a system.

The intent of quantitative stormwater practice is to identify the stormwater runoff of a given site and maintain or reduce the identified runoff post-development.

The aerial images<sup>1</sup> below show an example.

Prior to development, the cornfields in the left image would permit much of a rainfall event to infiltrate into the ground. Most water not infiltrating into the ground runs off the site in a sheet flow manner. The post development image on the right shows a majority of the cornfield has been replaced with hardscape (pavement and structures). The infiltration ability of the hardscape surfaces not only increase the amount of stormwater shed from the developed site, the water not infiltrating into the ground runs off the site at a greater rate.

Not facilitating a means to match or reduce the pre-developed run-

off creates a potential for flooding. Quantitative controls must be put in place. A quantitative control restricts the stormwater release rate of the post-developed site, matching or reducing the release rate of the pre-developed site. In matching the pre-developed release rate for the stormwater runoff, the increased rate of the post-developed site becomes restricted. The restriction of the flow necessitates the requirement to detain the excess water until it can be released at a controlled rate.

In the right image, stormwater detention basins can be observed at the north end of the site. The stormwater basins are engineered to hold the excess water while it releases at a controlled rate. In the post-developed image, nearly twenty-five percent of the developed site was dedicated to facilitating the stormwater detention basins.

The construction cost of a pond is commonly the least expensive option for stormwater detention, however; the construction cost of a pond does not take into account the developed value of the land. Forfeiting a sizable portion of the land to a pond comes at a cost of lost opportunity. There is a threshold where the added expense of facilitating the stormwater detention underground becomes a practicable option.

(continued on page 11)



Pre-Development



Post-Development

<sup>1</sup> Images from Google Earth

# Student to Colleague: How You Can Help Transition Students to Working Professionals

By Taylor Leahy, P.E.

Graduation season is upon us once again. Every engineer has had to make the transition at one point or another from a graduating student to a new-hire professional. The journey between graduation and the first year as an engineer can be both exhilarating and challenging. A great resource for helping recent graduates continue their success during this transition to career professionals is your Illinois Section of ASCE! By being prepared for the incoming new-hire with the tips below, your company will foster a successful bridge as your new-hire now leaves the lecture hall and enters the fast-paced work force of Professional Engineering.

## Form mentor-mentee pairs

The Illinois Section of ASCE has successfully completed its inaugural mentee and mentor program and was focused on pairing students with industry professionals. There are many benefits to creating your own mentor-mentee pairing with new-hires within your own growth-oriented firm. This experience is not only invaluable to the mentee, but also to the mentor. As Anthony K Tjan explains, “its highest level, mentorship is about being “good people” and having the right “good people” around us — individuals commit-

ted to helping others become fuller versions of who they are.” By developing a mentor program within your firm, young professionals are set on a fast-paced, resource loaded path towards driving your company into the future. The program inherently develops strong leaders by growing networks and creating advisory conversations across a multitude of individuals within the firm.

## Bring your new-hire professionals to an ASCE IL Section event

Enable the buddy-system! No one enjoys walking into a room and not knowing a single person present. Ease your new-hires’ mind; invite them to an upcoming ASCE event and introduce them to your fellow members. The ASCE Illinois Section hosts a plethora of events around Chicagoland, including sponsored social events specifically designed for introductions, mingling and networking across the expanse of civil engineering disciplines.

Furthermore, there is still a tremendous amount to be said for building a network based on face to face relationships. This traditional form of networking is still an invaluable asset to building your network as a professional. Author Dr. Ivan Misner’s study of over 12,000 business people re-

ported that only 27% of respondents reported that online networking contributed to their success. The people you introduce your new-hire to and who they in time introduce to you may very well have a profound impact on the future of your firm.

## Encourage new-hire to become active with the YMG or other professional organizations

The vast majority of engineering firms in today’s industry will cover the cost of a professional society membership. This form of shared commitment exists because firms recognize the benefits of employee involvement. Some such benefits include: leadership development, networking opportunities, exclusive resources and discounts.

One way to access these benefits is by encouraging involvement with the Younger Member Group (YMG) of the IL Section. The ASCE YMG is an enthusiastic and dedicated group of likeminded young engineering professionals. The group has a very active core group of participants and always welcome new individuals with the same passion for developing the Chicagoland civil engineering profession, in addition to networking with other young (continued on page 10)



# Board Positions ASCE to Lead Civil Engineering's Future

By George A. Ghareeb, P.E., F.ASCE, Region 3 Director

ASCE's Spring Week is always an exciting time. It begins with the [Legislative Fly-In](#), this year saw 210 ASCE members in Washington, DC, to meet with their elected officials about infrastructure investment. The OPAL Gala celebrates the [best of the best](#) in our profession. And the Board meeting caps off the week.

This year Board members were treated to a tour of the nearby DC Water Blue Plains Advanced Wastewater Treatment Plant – a great way to remind us that our civil engineering innovations and successes don't happen in a vacuum; they have real, tangible effects on our communities every day.

## Highlights of the Board meeting

- The Board of Direction discussed and approved more

than 40 strategies to implement as we work toward our six goals for the Society. ([See story in ASCE News.](#))

- The Board also acted to put ASCE at the forefront of the profession's future – exploring new credential and certification options to drive the Raise the Bar initiative forward, as well as approving an exciting new Industry Leaders Council program called Future World Vision.
- The Board received an interesting presentation from Roy E. Wright, the deputy associate administrator for insurance and mitigation at the Federal Emergency Management Agency. Building and rebuilding resiliently remains one of our profession's top priorities, particularly in the wake of the extreme events worldwide last fall, so it was good to hear how ASCE and

FEMA can work in collaboration and alignment in the future.

- The ASCE Task Committee on New Revenue also reported to the Board, presenting some interesting options to consider, including potential leadership training courses, online streaming subscription options, and opportunities to monetize market intelligence.

The next Board meeting is scheduled for July 13-14 in Charleston, SC.

To share your views or provide ideas on how ASCE can better serve its members and the profession, please [email George](#).

*George A. Ghareeb, P.E., F.ASCE your Region 3 Director, is a member of the Central Illinois Section. George represented Region 3 at the March 16-17 Board meeting in Arlington, VA.*



**IIT Students at 2018 ASCE Great Lakes Student Conference. They will be representing the Chicago area at both the National ASCE Steel Bridge and Concrete Canoe events.**

# It's Time to Nominate Your Peers, Projects, and Firms for the 2018 ISASCE Awards

By Brett Sauter, P.E., S.E. and Don Oliphant, P.E., CFM, CPESC

With the summer fast approaching, it is the time of year when the ASCE Illinois Section solicits nominations for individuals, exceptional projects, and employers for their contributions to civil engineering and our Society. The Illinois Section needs your help in identifying and recognizing qualified individuals, projects, firms, and agencies. The award winners will be acknowledged during our Annual Awards Dinner taking place on October 11, 2018 at the Crystal Gardens at Navy Pier.

Founded in 1852, ASCE is the oldest engineering society in the United States, representing over 150,000 members in 177 countries. ASCE is dedicated to the advancement of civil engineering as a profession, while also protecting the natural environment. IL Section Award recipients are eligible to be nominated by the Section to become candidates for the 2018 ASCE National Awards Program.

## HOW TO NOMINATE?

Nomination forms and additional information on award requirements can be found on our website [www.isasce.org/scholarships-awards](http://www.isasce.org/scholarships-awards). For nominations of individuals, a complete application consists of a nomination form, a

letter of support, resume, and letters of recommendation. Project nomination packets must consist of the nomination form and letter, a narrative, and pictures highlighting the unique attributes of the project or construction aspects. A statement of support from the owner or client is also needed for project nomination packets. A time lapse video submission of the project is optional.

Nominations for all 2018 awards are due by **August 3, 2018**. Please submit the original nomination(s) to Brett Sauter at 5507 N. Cumberland Avenue, Chicago, Illinois 60656 and a pdf of the nomination packet electronically to [bsauter@ciorba.com](mailto:bsauter@ciorba.com). Feel free to call Mr. Sauter (773.355.2936) with any questions or comments.

## WHAT ARE THE CATEGORIES?

ISASCE has ten (10) awards available for individuals, firms, and projects. Below is a brief description of each available award; additional information and details can be found on ISASCE's website.

### Outstanding Civil Engineering Achievement Award

The Outstanding Civil Engineering Achievement Award recognizes outstanding projects that

contribute to civil engineering progress and to society. The project must have been completed by the end of 2017 to be eligible. Four project size categories are available – Projects having a Cost of \$10M or less, Projects with a cost over \$10M but less than \$25M, Projects with a cost of \$25M but less than \$100M, and Projects with a cost of \$100M or more. **Projects may be nominated for the National OCEA Award.**

### Sustainability in Civil Engineering Achievement Award

The Sustainable Project of the Year award recognizes creativity in the form of innovative sustainability. Projects may be any that demonstrate innovation in sustainability and that were constructed by the end of 2017 and demonstrate adherence to the principles of economic, social, and environmental sustainability.

### Civil Engineer of the Year

The Civil Engineer of the Year award recognizes an outstanding professional engineer, who has made contributions to society through extraordinary professional conduct in a specific instance or having an established reputation for professional service.

(continued on page 13)

# 2018 Illinois Infrastructure Report Card

By Darren Olson, P.E., CFM, D.WRE

Infrastructure is the backbone of our daily lives and communities. While we don't always acknowledge it, the condition of our infrastructure has a very real impact on every person and business. We all depend on roads and bridges to get us where we are going, water infrastructure that delivers clean water to our taps, and a system of inland waterways, ports, rail, roads and transit to move goods and people that fuels our economy.

Illinois has a unique competitive economic advantage being at the crossroads of the country's rail, air, roadway and waterway systems. Historically, large investments were made in our infrastructure to capitalize on these advantages, which created and promoted growth and advantages for Illinois' economy and citizens. In recent years however, there has been a trend of underinvestment that threatens our competitive advantage and the health, safety and welfare of our citizens. In 2010, a panel of Professional Civil Engineers and American Society of Civil Engineers (ASCE) members throughout the State graded our infrastructure as a D+. In 2014, that grade increased slightly to a C- due to investments from the Illinois Jobs Now program, Illinois Tollway and City of Chicago. However, over the last four years, our State's infrastructure has been on a starvation diet, plagued by years of budget impasses, unpaid bills, pension crises, and a lack of focus from our elected officials on the very infrastructure that built this great State.

This past year, an expert team of more than 30 civil engineers was assembled to evaluate and study the major components of our in-



frastructure. In 2018, the grade has remained as a C-. The conclusion is not a surprise but more an alarm that over the course of the last four years, our investment and prioritization of infrastructure has faltered, and the systems' condition are starting to decline because of it. Those responsible for the day-to-day design and maintenance of our infrastructure systems are struggling to effectively maintain the foundation of our modern society with inadequate funding in the face of increased usage, aging systems, and rapidly changing lifestyles and economies. As a result, many of our infrastructure systems are

struggling to stay in adequate condition. As these systems continue to surpass their intended lifespans, Illinois residents and policymakers must decide if we collectively value the personal and economic advantages that come from a robust infrastructure network, and if we do, to make it a priority moving forward.

If Illinois is ready to improve our infrastructure, we offer the following suggestions to start raising the grade.

## PRIORITIZE INFRASTRUCTURE

Illinois must make infrastructure a priority again. After the last four years of pension crises, unpaid bills and budget stalemates, infrastructure has fallen off the radar of our policymakers - and our citizens are paying the price.

## SUSTAINABLE FUNDING

Our leaders must consistently pass balanced budgets and develop new revenue sources that provide adequate long-term sustainable funding for infrastructure. Existing programs such as CREATE for passenger and freight rail, Public-Private Partnerships for roadways and bridges, and TFIA for transit must be fully utilized and leveraged.

## PASS A CAPITAL PLAN

The State needs to pass a Capital Plan to ensure we have a roadmap (continued on page 15)

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# Illinois Institute of Technology ASCE Student Chapter Hosts Robin Kemper, 2017-2018 ASCE President Elect

By John G. Green

On Thursday, April 12th, the American Society of Civil Engineers (ASCE) Student Chapter at the Illinois Institute of Technology hosted Robin Kemper, the ASCE 2017-2018 President-Elect of the Society (National). The student chapter provided a luncheon and the officers provided a presentation that detailed the engineering extra-curricular activities the students have held in the past year, as well as upcoming activities, such as the ASCE Great Lakes Student Conference, which was held in April, 2018 at UIC. The IIT

students spoke about their efforts designing and building a concrete canoe for the race, and their plans for the steel bridge competition.

President-Elect Kemper praised the IIT ASCE Student Chapter for its strong program of activities, and she spoke about the importance of encouraging students to pursue degrees and careers in Civil Engineering. She also informed the gathering that in support of that goal, ASCE's feature film, DREAM BIG, which presents a visually stunning and intel-

lectually compelling case for the study and practice of the discipline, will be available on Netflix starting on July 1st of this year.

For more information regarding the upcoming activities of the IIT ASCE Student Chapter, please visit their website: <http://mypages.iit.edu/~asce/>





# 2018-2019 ASCE IL Section Leadership Ballot Announcement

I am pleased to announce our nominees for ASCE Illinois Section Board for the next calendar year. Per our By-laws, the recommendations of the nominating committee are being filed in this Newsletter, a minimum of three months prior to our Annual Awards Dinner on October 11, 2018. During this time, please review the ballot and file additional nomination(s) directly to the Secretary of the Illinois Section no later than August 1, 2018. The additional nomination(s) must include a petition signed by not less than 15 Active (dues paying) Members of the IL Section. If there are no petitions filed for additional nominations by August 1st, the ASCE Board

will vote on the ballot named below. If there are petitions, the ASCE Board will include validated nominees in discussions and voting. The nominees will be ratified by the ASCE IL Section Board at the August 6, 2018 meeting and an email will be sent to the membership for a 30-day review period prior to the Annual Awards Dinner. If you have any questions regarding this process, please contact me at [draj@collinengr.com](mailto:draj@collinengr.com).

## **IL Section Ballot (2018-2019)**

**President** - John G. Green, Ph.D., P.E.

**Past President** - Dhooli Raj, P.E.

**President-Elect** - Megan A. McDonald, P.E., LEED AP

**Treasurer** - Brian Pawula, P.E., PMP

**Secretary** - Andrew D. Walton, P.E.

**Directors to 2019** - Thomas Borges, P.E., Sandra Homola, P.E., Brian Olson, P.E.

**Directors to 2020** - Monica Crinion, P.E., Matthew Kirby, P.E., Kris Salvatera, P.E.

**Institute Chairs** - To be determined by Institutes; not subject to IL Section Bylaws.

## Mentoring and Service: Bob Camillone's IS-ASCE Legacy

(continued from page 1)

with an emphasis on Automated Systems and Transportation and writing his thesis on the Design of an Urban Rapid Transit Vehicle. He also earned his MBA from Lewis University in 1996. Throughout his career, he was employed as an engineer for Cutler-Hammer Inc., the Electromotive Division of GM, Pullman Technology Inc., and was a consultant to LTV Steel, the Veterans Affairs Administration, and the US Steel Corporation.

From college on Bob was involved in professional societies, as he wanted to do his part in

promoting the engineering profession and mentor others. In addition to ASCE, Bob was a member of the Western Society of Engineers, a life member of the Institute of Electrical and Electronics Engineers (IEEE), and a University of Illinois Ambassador, assisting incoming and graduating students. Bob was very passionate about his membership in ASCE, which he joined in 1979. Throughout his membership, Bob showed a dedication to the Society, and became a Life Member in 2008. Throughout his membership, he led the Section in various roles, serving as hospitality chair,

and serving on the communications committee, awards committee, and assisting with various other functions. He was an active member of the Transportation Committee, T&DI's predecessor.

According to Rose Camillone, his wife, Bob's "goals were service, mentoring and hospitality to - family, friends, church, community and his profession. Since we had no children, working with young people, mentoring and supporting them had been a big part of our life." Embodying these goals, while on the Transportation (continued on page 10)

## Mentoring and Service: Bob Camillone's IS-ASCE Legacy

(continued from page 9)

Committee, Bob was involved in the selection of the Committee's scholarships. He and Rose often discussed the impressive characteristics of the scholarship applicants.



Rose Camillone with Scholarship winner Kurt Ordillas at the 2018 IS-ASCE Scholarship Dinner

When Bob passed away in November 2010, Rose was inspired by Bob's legacy to ASCE and

immediately endowed the Bob Camillone Memorial Scholarships, with only the simple request that his name be included somewhere on the application. Rose continues to fund the two two-thousand dollar scholarships "because it is (her) way of mentoring and supporting young people going into civil engineering," just as Bob had done before.

Bob was an inspiration to many engineers, including friend of the family David Boddy, whom he mentored from childhood. At Bob's funeral, David gave the eulogy, including this paragraph which embodies Bob's life as a mentor:

*One year Uncle Bob gave me a plaque as a gift which has an excerpt from Herbert Hoover about the engineering personality and mindset. This line has stayed with me since I first read it, as I know it summed up Uncle Bob's mentoring life. "The engineer himself looks back at the unending stream of good-*

*ness which flows from his success with satisfaction that few professions may know. And the verdict of his fellow professionals is all the accolades he wants." While none of us are the mentoring professionals Uncle Bob was, we all sit here today as a verdict of his success. And that was all the accolade Uncle Bob ever wanted.*

Bob Camillone's legacy to the engineering community is clearly one of mentoring and service. Above all, ASCE seeks to inspire these same virtues, and Bob's story is one that should inspire all of us as members.

### **Matt Kirby, P.E.**

Mr. Kirby is an engineer in transportation at HNTB. He currently serves as Chair of the IS-ASCE Transportation and Development Institute. Matt would like to thank Rose Camillone for her contributions to this article. This article also draws from *Keeping the Engineer's Spirit Alive in the Illinois Chapter of T&DI* by Andrew Walton, PE in the July 2015 Illinois Section Newsletter.

## Student to Colleague: How You Can Help Transition Students to Working Professionals

(continued from page 4)

professionals around them. Everyone is always welcome at sponsored events. Annual activities include: technical presentation dinner meetings, Toys for Tots Holiday Party, Bags Tournament, tours, service projects and more! For more information on upcoming events and activities, please

encourage your new-hire to subscribe to the YMG e-newsletter and follow YMG on social media (Facebook, LinkedIn).

### **Works Cited**

Tjan, Anthony K. "What the Best Mentors Do." *Coaching*, Harvard Business Review, Feb. 2017, [hbr.org/2017/02/what-the-best-mentors-do](http://hbr.org/2017/02/what-the-best-mentors-do). Accessed 9 May 2018.

(continued on page 11)

# Student to Colleague: How You Can Help Transition Students to Working Professionals

(continued from page 10)

Misner, Ivan. "Online Networks Still Lagging Behind Other Networking Efforts." *Dr. Ivan Misner: Business Networking and More*, 18 Aug. 2016, [ivanmisner.com/onlinenetworkslag/](http://ivanmisner.com/onlinenetworkslag/). Accessed 9 May 2018.

## **Taylor Leahy, P.E.**

*Ms. Leahy is a water resources engineer at CDM Smith who has delved into the world of riverine and coastal modeling. She has worked extensively with H&H models and has completed a multitude of projects aimed at locating flood-prone*

*regions while serving as the H&H group task leader. Additionally, Taylor serves ASCE IL Section as the YMG University Affairs chair and Sustainability Committee. Ms. Leahy is a member of the Union League Club of Chicago and is active within the Chicago Engineers Foundation.*

# Why Underground Stormwater Detention

(continued from page 3)

## **TYPES OF SYSTEMS**

### Underground Pipe Systems



**High Density Polyethylene (HDPE) Pipe System<sup>2</sup>**



**Corrugated Metal Pipe (CMP) System<sup>3</sup>**

Oversizing the proposed storm sewer pipes and lowering the slope can facilitate the required

<sup>2</sup> Photograph from [www.ads-pipe.com](http://www.ads-pipe.com)

<sup>3</sup> Photograph from [www.conteches.com](http://www.conteches.com)

stormwater detention. As a greater length of pipe is required to facilitate the storage, the pipe can be designed in a series of runs. The most expensive component of the pipe system is the manifold that connects the runs together. Making the runs longer will reduce the required length of the manifold and keep the cost down. If the existing soils are conducive to infiltration, the pipes can be perforated.

### Underground Chamber Systems



**HDPE Chamber System<sup>1</sup>**

Chamber systems can be less expensive than their pipe counterparts as the chamber systems can be installed manually without heavy equipment. The most expensive component of the chamber system is the manifold that connects the runs together. Mak-

ing the runs longer will reduce the required length of the manifold and keep the cost down. The open bottom of the chamber allows for infiltration of the rain water.

### Underground Concrete Vaults



**Cast in Place Concrete Vault System<sup>4</sup>**



**Precast Concrete Vault System<sup>5</sup>**  
(continued on page 12)

<sup>4</sup> Photograph from [www.djc.com/special/concrete2016/concrete2016.pdf](http://www.djc.com/special/concrete2016/concrete2016.pdf)

<sup>5</sup> Photograph from [www.stormtrap.com](http://www.stormtrap.com)

# Why Underground Stormwater Detention

(continued from page 11)

While concrete vault systems can be more expensive than their pipe and chamber counterparts, spatially, they can be the most efficient underground detention design, providing the most storage in the tightest space. Concrete vault systems can usually facilitate manual inspections where the pipe and chamber systems can be limited to video inspections.

## WHAT TO CHECK FOR

There are three critical elements that all underground detention systems have in common; design, installation and maintenance.

### Design Elements

- The quantitative elements must meet or exceed the requirements of the governing jurisdictional authority.
- Make certain a pipe or chamber system has ASTM or AASHTO standards for the product and installation.
- Make certain shop drawings for a concrete vault system has been sealed by the delegated structural engineer from the manufacturer or the engineer of record for the project.
- The standards or sealed shop drawings will ensure the structural capabilities of the system is sufficient for the intended traffic loads or other structural considerations.

- Make certain the Civil Engineer for the site has communicated with the Civil Engineer for the structure. While the site Civil may determine the quantitative elements and location of a stormwater detention vault, the structural Civil will need to prepare the structural details for the vault and ensure no conflicts between the detention system and other structural elements exist.
- Make certain the soils are suitable for the detention systems. Soils with a high ph may not be suitable for all materials. Expansive clays may prohibit underground detention systems altogether. The properties of the in-situ soils will also determine if a groundwater infiltration system can function properly.

### Installation Elements

- Make certain the bedding (material beneath the pipe, chamber or vault) meets the depth requirements established by the referenced standards or the Structural Engineer's notes and details.
- Make certain the minimum and maximum cover requirements detailed by the referenced standards or the Structural Engineer's notes and details are met to satisfy the intended design loads.
- Make certain the backfill material meets the size, shape, quality and compaction requirements stated in the referenced standards or the Structural Engineer's notes and details.

### Maintenance

- Make certain an inspection/maintenance log is kept up to date for the system.
- Make certain the outflow restrictor device has not been blocked.
- Make certain the outflow restrictor device has not been displaced or removed.
- Make certain any crack to a concrete system that exceeds 0.01 inch wide (approximate thickness of a sheet of paper) is evaluated and properly addressed<sup>6</sup>. Cracks will permit corrosive contaminants from stormwater runoff that include salts used for snow removal to negatively impact long term performance of the concrete structure.

### **Michael T. Ungeran, P.E.**

*Mr. Ungeran graduated with a Bachelor of Science in Civil Engineering degree from Purdue University in 1996. He is a licensed Professional Engineer (PE) with the states of CO, IL, IN, MI, MN & OH. He is a member of the American Society of Civil Engineers (ASCE) where he served on the state board of directors from 2004-2007. Mr. Ungeran currently works as a forensic engineer for The VERTEX Companies, Inc ([www.VERTEXeng.com](http://www.VERTEXeng.com)).*

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<sup>6</sup> AASHTO LRFD Bridge Construction Specification – Section 27.6.4



# It's Time to Nominate Your Peers, Projects, and Firms for the 2018 ISASCE Awards

(continued from page 6)

## **Young Civil Engineer of the Year**

This award will be presented to a civil engineer with either EIT or PE registration who is employed in the private sector and is under 35 years old as of February 1, 2018. This candidate will be evaluated on having gained significant professional achievement through advancement of the profession, evidence of technical competence, high character and integrity, and contribution to public service.

## **Government Civil Engineer of the Year**

This award will be presented to a distinguished registered professional civil engineer employed in public service with evidence of sustained outstanding civil engineering performance in the public sector, showing evidence of high character and professional integrity.

## **Young Government Civil Engineer of the Year**

As above, this award is presented to a civil engineer with either EIT or PE registration who is employed full-time in the public sector and is under 35 years old as of February 1, 2018. This person has shown excellent performance and demonstrated leadership potential in the public sector, evidence of high character, and professional integrity.

## **Citizen Engineer of the Year**

This award is to be presented to a member who has made volunteer efforts that better our world in such areas as local or national legislation, education at all levels, non-profit volunteer organizations, community activities, etc.

## **Public Involvement Award**

Presentation of this award will go to an IL Section member or group, which has made volunteer efforts that better our world in such areas as local/national legislation, education at all levels, non-profit volunteer organizations, and community activities.

## **Public Sector Employer Recognition Award**

This award will be presented to a public sector employer who encourages their engineers to actively participate in ASCE. Special recognition will go to those organizations who exhibit exemplary support as evidenced by: providing a model for involvement through agency-wide participation; allowing engineers time off to attend ASCE meetings/seminars/events; supporting and encouraging technical and professional growth, encouraging engineers to prepare articles for publication in ASCE professional and technical journals; and assisting in the payment of society dues.

## **Private Sector Employer Recognition Award**

This award will be presented to a private sector employer that encourages their engineers to actively participate in ASCE. Special recognition will go to those organizations who exhibit exemplary support as evidenced by: providing a model for involvement company-wide; participation in local, regional, and/or national ASCE activities; allowing engineers time off to attend ASCE meetings/seminars/events; supporting and encouraging technical and professional growth; encouraging participation of younger members; and assisting in the payment of society dues.

For additional information and more in-depth award criteria, please go to ISASCE's website – [www.isasce.org/scholarships-awards](http://www.isasce.org/scholarships-awards).

### **Brett Sauter, P.E., S.E., Ciorba Group**

*Mr. Sauter is the Structural Group Manager at Ciorba Group specializing in a variety of bridge rehabilitation and reconstruction projects. He serves as a Director of ASCE to 2018 and Awards Committee Chair.*

### **Don Oliphant, P.E., CFM, CPESC, Christopher B. Burke Engineering, Ltd.**

*Mr. Oliphant is a Civil Engineer at Christopher B. Burke Engineering, Ltd. specializing in municipal and water resources engineering. He serves as a Director of ASCE to 2018.*

## 2018 ASCE IL Section Golf Outing

**I**L Section ASCE kicked off the spring with fanfare at the Annual Section Golf Outing at the Village Links course in Glen Ellyn. On May 23<sup>rd</sup>, Chicago area engineers (and an engineer-to-be) participated and the weather was perfect. The group enjoyed the outdoors, appreciated wind shear, celebrated the wonders of proper drainage, exercised slope and distance estimation, and performed underwater inspection.

The proceeds from the event are administered by the Section's Minority Affairs Committee, which provides scholarships to area minority high school students who attend the [Introduction to Engineering Program at the University of Notre Dame](#).

ASCE would like to thank all who participated and supported this long-standing event, with particular recognition to the following sponsors.

- Arcadis
- Collins Engineers, Inc.
- Compass Surveying Ltd.
- Exp US Services, Inc.
- GSG Consultants, Inc.
- Lin Engineering, Ltd.
- Rubinos & Mesia Engineers, Inc.
- Storm Trap
- WBK Engineering, LLC
- Wyndalco Enterprises, LLC

The 2018 Golf Outing Committee was chaired by Bill Cussen with support by Lou Arrigoni, Sarah Harbaugh, John Lazzara, Brian Pawula, and Tim Scully-Granzeier.



**Brian Pawula, John Lazzara, Bill Cussen, and Lou Arrigoni**



**Dipak Shah, Jeffrey Druckman, Eric Borys, Jay Olson**



**Michael Filipski,  
Dave Filipski**

# 2018 Illinois Infrastructure Report Card

(continued from page 7)

for the future. The previous Illinois Jobs Now program was passed in 2009 and has run its course. While a Capital Plan does not solve the need for sustainable long-term funding, it does provide desperately needed resources for the State's infrastructure after several years of budget stalemates and reduced funding.

## CAPITALIZE ON ADVANTAGES

We must capitalize on our location at the crossroads of the nation. Our existing network of railways, roadways, inland waterways, and location next to the Great Lakes gives our State a competitive economic advantage. However, without investment in these infrastructure systems, that

advantage will be squandered.

## FORWARD THINKING

The backbone of our state's infrastructure was built 50 to 100 years ago and upgrades are necessary for modernization, resiliency and to accommodate its changing users. We need to consider emerging technologies and shifting social and economic trends as we design our future infrastructure with clear economic, social, and environmental benefits in mind.

The Report Card was created to help Illinois understand the state of our infrastructure. As civil engineers, our job is to plan, design, construct, and maintain our infrastructure networks and this document allows us the opportunity to

share that information with the public. The Report Card provides a snapshot for residents and policymakers to engage in conversation about where we are and where we want to be. We hope that this information provides the insight needed to start that conversation and ignite action.

**Darren Olson, P.E., CFM, D.WRE, Christopher B. Burke Engineering, Ltd.**

*Mr Olson is is a Region 3 Governor for ASCE, member of the ASCE Public Policy Committee, and Co-Chair of the Illinois Section Report Card Committee. He is also a Senior Water Resources Project Manager with Christopher B. Burke Engineering, Ltd.*

American Society of Civil Engineers - Illinois Section  
Committee on Sustainability  
Presents:

## 8<sup>th</sup> Annual Sustainability Conference

Date: June 8, 2018  
Location: Illinois Tollway  
2700 Ogden Avenue  
Downers Grove, IL 60515  
Hours: 8:30 AM-12:30 PM

(Check-in 7:45, breakfast will be provided) 4 PDH/CM provided

\$30 - Government Employees, Faculty and ASCE/APWA/ACEC members  
\$40 - Non ASCE/APWA/ACEC members

The world is ever-changing, and our sustainability initiatives are changing with it. This year's conference will focus on sustainability in our public way. At the conference you'll hear about the ASCE IL Section's most recent Sustainability Award recipient, the Illinois Tollway's I-90 Fox River Bridge project, as well as a panel discussion on sustainability.

**FLOODING RESILIENCY PLAN FOR BUS OPERATIONS**  
Brian Hacker, Regional Transit Authority (RTA)  
Raymond Chan, Chicago Transit Authority (CTA)

**WATERSHED PROTECTION**  
Steve McCracken, The Conservation Foundation

**SPACE TO GROW PROGRAM**  
Kristin Lo Verde, Openlands

**ILLINOIS TOLLWAY LIFE CYCLE ASSESSMENT PROCESS**  
Tom Wilson, Applied Research Associates

**PANEL DISCUSSION**  
Steve McCracken, Brian Hacker, Raymond Chan, Kristin Lo Verde and Tom Wilson

**ENVISION UPDATES**  
John Lazzara, HDR Inc.

**ILLINOIS TOLLWAY PROJECTS**  
I-90 Fox River Bridge, Rob Koss, Stanley Consultants  
ISTHA INVEST, Lindsey Oliver, GSG Consultants

**REGISTRATION**  
<https://www.123signup.com/event?id=hdjkx>  
Check [www.isasce.org](http://www.isasce.org) for further details.





**Summer 2018**

In an effort to inform Illinois Section members of the discussions at the monthly Board meetings, the Section Secretary contributes this article to the newsletter. Any questions or comments on the Board activities are welcome by contacting Megan McDonald, at [megan.mcdonald@clarkdietz.com](mailto:megan.mcdonald@clarkdietz.com)

**■ Treasurer's Report**

▲ A treasurer's report was presented at the March, April, and May meetings. All reports were approved.

**■ Highlights from Illinois Section Activities and Group Reports.**

▲ **Technical Group Scholarships - President-Elect Dinner** – The IL Section technical groups handed out eight scholarships totaling \$13,000. Congratulations to all of our scholarship winners from local universities.

▲ **ASCE Great Lakes Student Conference** – UIC hosted the 2018 ASCE Great Lakes Conference on April 19-21. Thank you to all our volunteers and for UIC for hosting such a successful conference.

▲ **Construction Committee** – The IL Section has started up the new Construction Committee. The goal of this committee is to bring designers, owners, contractors, con-

struction managers and academia together to develop relationships that provide information on different project deliveries and how they can be used locally with our funding issues. If you are interested in joining this committee please contact Zachary Pucel, [zjpucel@transystems.com](mailto:zjpucel@transystems.com).

▲ **ASCE Student Resume Book** – The ASCE IL Section Resume Book is now published and available. Please contact Sherryl Malanao for your copy, [Sherryl.Malanao@jacobs.com](mailto:Sherryl.Malanao@jacobs.com).

▲ **Environmental & Water Resources Institute** – Green Infrastructure Seminar will be coming up in November 2018 at UIC. Details to come.

▲ **Transportation & Development Institute** – A tour of the Circle Interchange will be on July 20 in conjunction with the Construction Committee. If interested, please contact Matthew Kirby, [mkirby@hntb.com](mailto:mkirby@hntb.com).

▲ **Structural Engineering Institute** – A SEI lunch meeting will be held on June 21<sup>st</sup> at Milhouse Engineering and Construction to view the On-Demand ASCE Webinar titled "Underpinning and Strengthening of Foundations". See Activities for more information.

▲ **Urban Planning & Development Group** – The UP&D group is back up and running. If you're interested in joining, please contact Bill Cussen for details, [wcussen@gsg-consultants.com](mailto:wcussen@gsg-consultants.com).

▲ **Region 3 Assembly** – The Region 3 Assembly will be held in Chicago this year on August 17-18.

▲ **Legislative Day** – Thank you to all those who volunteered their time to join us on the Legislative Day on April 25 in Springfield.

The Illinois Section Board Meetings are held every first Monday of every month with the exception of holidays. The next board meeting is scheduled for June 4, 2018 at 5:30pm at the Clark Dietz office located at 118 S. Clinton Street, Suite 700, Chicago, IL. Please note the meeting location. Future meetings will be held on July 2, August 6, and September 10. Beginning in August, the location of the Board Meetings will be moved from Clark Dietz. If you are interested in attending those meetings, please contact Dhooli Raj for the location.

*By Megan McDonald  
ASCE Secretary 2017-2018  
[megan.mcdonald@clarkdietz.com](mailto:megan.mcdonald@clarkdietz.com)*



## Illinois Section

## Activities

### ASCE IL Section Committee on Sustainability 8<sup>th</sup> Annual Sustainability Conference

Date: Friday, June 8  
Time: 7:45am Check-in & Continental Breakfast  
8:30am – 12:30pm  
Place: Illinois Tollway  
2700 Ogden Ave.  
Downers Grove, IL 60515  
Cost: \$30-Government Employees, Faculty and ASCE/APWA/ACEC Members  
\$40-Non-ASCE/APWA/ACEC Members  
PDH: 4.0 PDHs  
RSVP: Sign up through [123signup](#) by June 6, 2018  
[Conference Flyer](#)

### ASCE IL Section EWRI Board Meeting

Date: Tuesday, June 12  
Time: 4:30pm  
Place: Murray Brothers/  
Caddyshack  
9546 Balmoral Ave.  
Rosemont, IL 60018

### ASCE IL Section SEI June Lunch Meeting – Underpinning and Strengthening of Foundations – On Demand ASCE Webinar

Date: Thursday, June 21  
Time: 11:30am – 1:00pm  
Place: Milhouse Engineering & Construction, Inc.  
60 E. Van Buren St.  
Suite 1501  
Chicago, IL  
PDH: 1.5 PDHs will be awarded at the completion of the test. Instructions will be provided at the completion of webinar.

RSVP: [Register Here](#) by June 19<sup>th</sup> or contact Stephen Long, [asce.il.struct@gmail.com](mailto:asce.il.struct@gmail.com) with questions.  
[Meeting Flyer](#)

### ASCE IL Section UP&DG June Meeting

Date: Thursday, June 21  
Time: 5:30pm  
Place: Chandlers  
401 N. Roselle Rd.  
Schaumburg, IL  
Cost: None  
RSVP: Bill Cussen: [wcussen@gsg-consultants.com](mailto:wcussen@gsg-consultants.com); 630-529-8000

### ASCE IL Section T&DI Board Meeting

Date: Wednesday, July 11  
Time: 5:30pm  
Place: HNTB  
1 S. Wacker Drive,  
Suite 900  
Chicago, IL 60606  
RSVP: [mkirby@hntb.com](mailto:mkirby@hntb.com)

### ASCE IL Section T&DI's July Tour – Circle Interchange Tour – SAVE THE DATE

Date: Friday, July 20  
Time: 2:00pm - 3:00pm (Tour)  
3:30 pm (Happy Hour)  
Place: Tour – Meet at lobby of 222 S. Riverside Plz, Chicago  
Happy Hour – TBD (West Loop)

### ASCE IL Section Annual Awards Dinner – SAVE THE DATE

Place: The Crystal Gardens on Navy Pier  
[2018 Annual Dinner Save the Date Flyer](#)

### ASCE IL Section EWRI Green Infrastructure Seminar

Date: Wednesday, November 7  
Place: University of Illinois – Chicago (UIC)  
More details coming soon!

### APWA City Branch Illinois Legislators' Panel (Including ISASCE Report Card Summary)

Date: Tuesday, June 26  
Time: 11:30am - 1:30pm  
Place: Petterino's  
50 W. Randolph  
Chicago, IL 60601  
Cost: \$20 – Public Sector & Students  
\$45 – Members of APWA, ISPE, AIA, SEAOL, ITE, WTS, ASCE  
\$55 – Non-Members  
\$100 – Luncheon Sponsor (includes 1 lunch ticket & sponsor recognition)  
\$300 – Premium Table Sponsor (includes 2 lunch tickets & sponsor recognition)  
\*Any late or onsite registrations will be charged an increased ticket price of \$100 per attendee (Checks Only)  
[REGISTER HERE](#)

For all Section, Group and Committee events, check out the Section website at:

[www.isasce.org/calendar/](http://www.isasce.org/calendar/)