



Illinois Section
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ASCE Illinois Section

News

Vol. 61, No.3
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Joliet's Alternative Water Source Program Study

Written by Jerome McGovern

The City of Joliet is currently undertaking a study to find a new source of water for its publicly owned water system. Currently, the primary source of water is drawn from wells which utilize the deep aquifers. That source of water is diminishing after being drawn on for over 100 years to provide potable water at a rate greater than its sustainable yield.

The City of Joliet is currently undertaking a study to find a new source of water for its publicly owned water system. Currently, the primary source of water is drawn from wells which utilize the deep aquifers but this source is diminishing.

The City of Joliet is southwest of Chicago and is located at the intersection of Interstate Highways 80 and 55 in Will County. Several major railroads also intersect the Joliet area and this has made the region an important distribution hub for goods that are delivered to the Chicago metropolitan

area. Joliet experienced substantial population growth as areas in Kendall County were annexed into the corporate limits in the 1990's and 2000's. In 1990, the population was 86,836. The population is currently 148,409, based upon a special census conducted in 2016.

A sustainable and dependable water supply is essential to support the existing population, future growth and business development. Currently, Joliet operates a series of 21 deep wells and 5 shallow wells that pump an average of 19 million gallons per day. The primary source of water is the deep wells that tap into the Ironton Galesville aquifer located approximately 1,000 feet below the surface of the ground. An aquifer is an underground formation or layer of water-bearing, permeable rock, rock fractures or unconsolidated materials, such as sand and gravel, from which water can be extracted by using a well. The Ironton Galesville aquifer is a deep formation of sandstone that provides water to Joliet, other municipalities, and industry in the southwest region. Over time the available head of the (continued on page 6)

President's Notes

Megan McDonald, P.E.



At the risk of sounding like a broken record, I hope you and your families are staying safe and healthy as we enter our seventh month of pandemic and quarantine and continue to see protests and unrest in our cities. This is my fourth, and final, President's Notes as my time as President comes to an end this October. With all the current events it feels like it went by in record time but also barely moved.

I cannot help but feel disappointed in the events cancelled and the friendships and connections that were not made. I am disappointed we were not able to travel to Washington, D.C. to advocate for increased and sustainable funding for our Nation's infrastructure, that we were not able to drive down to Springfield to continue to say thank you for passing the capital bill while gently encouraging them to push for more, and the many other events locally and nationally that are so important to our members.

At a Society level, there are many resources that can continue to engage you with current events during our social distancing (<https://collaborate.asce.org/covid-19/virtual-events>). If you have not signed up for Key Contacts, I encourage you to take this time to register so that you can be kept abreast of upcoming votes and policies that require membership action to inform our legislators (<https://collaborate.asce.org/covid-19/virtual-events>).

At a local level, I want to take the opportunity to remind you that our board, institutes, and technical groups are still here, and they are working tirelessly to come up with new ways to provide content and connection. As we all know, pulling together a completely virtual program is difficult, especially while we are all dealing with the stress and changes the current events have created these past few months. I am thankful to our group of volunteers that continue to keep our Section running and come up with inventive ways to engage our members.

I hope we take some of the lessons we have learned over the last few months and continue to utilize them in the future. The creative solutions that have arisen from working from home, including virtual meetings with staff and clients, and offering flexibility for employees as they navigate meeting professional and household needs while dealing with no childcare or schools, or the stress of a changing world. I hope that we have grace with one another, knowing that we can continue to be productive even while at home, moving projects forward and meeting deadlines, even if some days it does not look like a traditional 9-5. Our profession can weather this storm, and we are finding that there are new ways to do business that I think can provide an increase in productivity and efficiency, but at a minimum can increase the work-life balance that we all dream of achieving.

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ASCE Illinois Section News

ILLINOIS SECTION NEWSLETTER

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**Communications Chair/
Newsletter Editor -
Katie Bell**

Katiebell529@gmail.com

Director of Advertising -

Tim Scully-Granzeier
312-933-4639

Tim.Scully-Granzeier@arcadis.com

Pres. Megan McDonald (312) 466-8249
Pres. Elect Brian Pawula (847) 922-6125
Sec. Andrew Walton (312) 520-9276
Treas. Sandra Homola (312) 616-5095

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Student Life During a Pandemic

Written by Victor Anthony Limontitla Cedillo

None of my six roommates nor I expected to leave school for spring break and then not see each other for months. I remember walking around campus and the virus feeling so distant. This was toward the end of winter quarter, so stress was high all around, but everything ran like clockwork. Classes, events, and social gatherings were still happening every day. Then the cases started to skyrocket in the

Once finals week ended, I said goodbye to my roommates under the assumption that I would see them all again in two weeks. It's been four months and counting since I last saw them in person.

U.S., and finals were made remotely on the university's authority. Once finals week ended, I said goodbye to my roommates under the assumption that I would see them all again in two weeks. It's been four months and counting since I last saw them in person.

Northwestern University notified all students that spring quarter was to be done remotely. I went home for spring break and stayed there to start the new quarter. Home for me is in Minneapolis, Minnesota. It was an odd transition for me because I never associated home with schoolwork. I would wake up every morning for my first class: a commute of about three steps to



the desk in my room where I would previously only play video games. The commute was not bad, but the noise getting there was annoying to say the least. I live next to an airport and could hear the roaring of the airplane engines since 6 AM. I also live next to a highway and could hear all the cars racing toward downtown in the mornings.

The classes themselves were not too different. The only exceptions were the occasional technological difficulties. Every time a plane would take off and pass over my house, my internet would become unstable, and I would be kicked out of the Zoom call. The key advantage to online classes is my ability to look things up quickly, like words or concepts, to further understand what a professor is talking about. Moreover, there was

Everyone in my family is an essential worker. I couldn't help but worry about their safety and health every hour of every day.

no need to take notes because professors would share their

presentations with the class. However, I am a student who comprehends material better with notes, so I took notes anyway.

It's important to note that the pandemic continued to evolve, and my state went into lockdown because of it. Learning toward the end of the quarter became a secondary objective for me. Everyone in my family is an essential worker. I couldn't help but worry about their safety and health every hour of every day. My family in particular would work longer hours every day and be exposed to strangers and people who had contracted the virus, so we all took precautions at home. We checked in daily to see if anyone had any symptoms. We had a few scares but never contracted the virus. Nevertheless, our extended family was affected, and we sought ways to help them as much as possible, but grief had started to become all too familiar during these times. This is something I think faculty and staff in every institution should carefully consider, especially when returning to classes this fall: keep in mind the physical and mental health of students and other colleagues.

Looking ahead to the fall quarter of 2020, I have to say that I am worried for students everywhere in the country. While I want to attend classes in person, I do not want this pandemic to keep spreading, so I personally will be doing all of my classes online despite the hybrid in-person/online option. Even with (continued on page 9)

Illinois Tollway Mile Long Bridge Project Update

Written by Justin Pattison, P.E. and Patrick Laux, P.E., S.E.

For this newsletter article, members of the IS-ASCE Structural Engineering Institute (SEI) interviewed the Illinois Tollway's Mile Long Bridge project team to gain insight into this critical piece of infrastructure on the Central Tri-State Tollway corridor.

Project Background

The Mile Long Bridge is located along the busiest corridor on the Illinois Tollway system. The proposed Mile Long Bridge consists of separate northbound and southbound structures. Both dual structures will carry five lanes and a flex lane of the Tri-State Tollway (I-294) over the Canadian National (CN) Railroad, the Illinois and Michigan (I&M) Canal, the Chicago Sanitary and Ship (CSS) Canal, the Metropolitan Water Reclamation District (MWRD), the Des Plaines River, the Forest Preserves of Cook County, the Burlington Northern Santa Fe (BNSF) Willow Springs Intermodal Yard, Santa Fe Drive, and the 75th Street interchange in the Village of Willow Springs. The existing dual structures are comprised of sixteen units made up of 54 spans with a total approximate length of 4,940 feet and currently carry four travel lanes in each direction. The Mile Long Bridge was originally built in 1957 with two lanes in each direction. The dual bridges were widened in 1969 toward the median centerline to add a third lane in each direction and were widened

again in 1993 to the outside to add a fourth lane in each direction. The proposed bridge will consist of 27 spans arranged in seven units.

The proposed Mile Long Bridge consists of separate northbound and southbound structures which will each carry five lanes and a flex lane of the Tri-State Tollway (I-294) over the Canadian National (CN) Railroad, the Illinois and Michigan (I&M) Canal, the Chicago Sanitary and Ship (CSS) Canal, the Metropolitan Water Reclamation District (MWRD), the Des Plaines River, the Forest Preserves of Cook County, the Burlington Northern Santa Fe (BNSF) Willow Springs Intermodal Yard, Santa Fe Drive, and the 75th Street interchange in the Village of Willow Springs.

Units 1 and 2 are long span steel plate girder superstructures and units 3 through 7 consist of prestressed concrete girders. The total proposed bridge length is approximately 4,849 feet with a maximum

steel span length of 410 feet and a maximum prestressed concrete span of 188 feet.

There were significant challenges in both the Master Plan (Phase I) and detail design (Phase II) portions of the project. Perhaps the most challenging aspect was to determine the optimal bridge type to meet all the design goals established by the Tollway and the design team.

SEI-IL: How did the project originate and where does it currently stand?

Project Team: *The existing bridges are near the end of their useful service life, and increasing traffic demands necessitated additional traffic capacity. The proposed northbound bridge is under construction and is expected to be substantially completed at the end of 2020. The proposed southbound bridge construction is planned to start in Q4 of 2020.*

SEI-IL: From a structural engineering perspective, what has been the most challenging part of design?

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ASCE's Proposed Sustainable Infrastructure Standard

Written by Karen C. Kabbes, PE, D. WRE, ENV SP, F. ASCE and Lt. Col. Brad C. McCoy, PhD, PE, ENV SP, M. ASCE

What does a \$2 Trillion infrastructure funding gap have to do with ASCE's Sustainable Infrastructure Standard? In a world where social needs are placing unprecedented claims on public funds, a unique intra-society pairing has prepared a new tool to help our communities address growing and evolving infrastructure needs: a Sustainable Infrastructure Standard.

Composed of professionals from the construction industry, products industry, consulting, government, and academia, the Sustainable Infrastructure Standard Task Committee charged with developing the standard includes strategic level input from leaders of the ASCE Industry Leaders Council (ILC) and the Committee on Sustainability

With such a diverse group of contributors, the proposed Sustainable Infrastructure Standard has the potential to significantly change our industry.

(COS). With such a diverse group of contributors, the proposed Sustainable Infrastructure Standard has the potential to significantly change our industry. A Sustainable Infrastructure Standard has been a long-term goal of ASCE and is now being operationalized through

the COS. The creation of the new standard began with initiatives proposed by leaders of the ILC, which includes the heads of some of the industry's largest consulting firms who are committed to rethinking what's possible in our industry. Approximately five years ago, the ILC proposed a shared goal to reduce infrastructure life cycle costs by 50% by 2025 and foster the optimization of infrastructure development. To get there, they realized that we needed to rethink how we plan, design, build and fund infrastructure. To achieve that goal, the ILC recognized that we need to improve the delivery of infrastructure investments through innovation, performance-based standards, life cycle cost analyses, and overall increased sustainability to significantly reduce the life cycle costs of new and refurbished infrastructure.

Primed to be the first American National Standards Institute (ANSI) Sustainable Infrastructure Standard, it will also be one of ASCE's first performance-based standards. As a performance-based standard, it is focused on meeting expected outcomes, in contrast to ASCE's typical prescriptive-based standards that focus on meeting the means to arrive at presumed outcomes. With the ability to focus on the desired outcome, as compared to limited to a list of specific means or design criteria, the infrastructure industry will be free to innovate across professions and

communities, creating a culture of continuous innovation and improved outcomes.

Yet some say the biggest initial game changer of the proposed standard is the life cycle cost analysis requirement. No longer will users be able to limit their analysis to initial investment costs. The entire life cycle including planning, design, construction, operations, maintenance and repair, and eventual retirement need to be considered. Additionally, the standard includes minimum life cycle durations for key infrastructure systems that must be used in conducting the life cycle cost analyses.

Primed to be the first American National Standards Institute (ANSI) Sustainable Infrastructure Standard, it will also be one of ASCE's first performance-based standards.

Following the Institute for Sustainable Infrastructure's Envision rating system framework, the proposed standard has eight chapters. This framework will certainly be familiar to those who have used the Envision rating system in the past. The chapters of the standard include Leadership, Quality of Life, Resource Allocation, Natural (continued on page 12).

Joliet's Alternative Water Source Program Study

(continued from page 1)

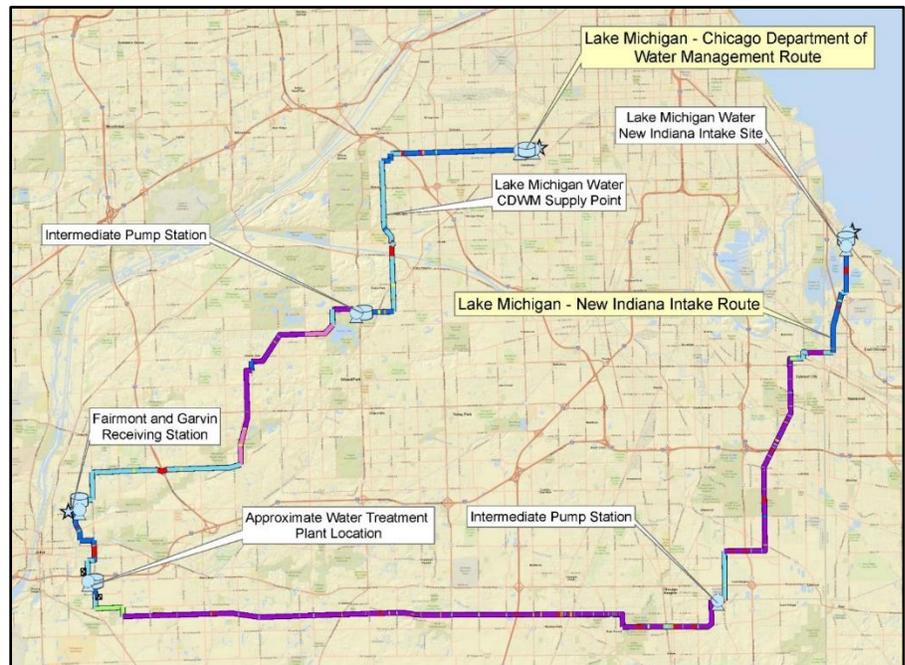
water has decreased as the aquifer is drawn down to provide water to municipalities and industries. Joliet has known since the 1960's that the aquifer had a limited life. Studies by the Illinois State Water Survey (ISWS) have tracked the declining production of the Ironton Galesville aquifer in Will and Kendall Counties. At the current rate of use, the ISWS believes that by 2030 Joliet will have insufficient water supply to meet its maximum day demands. In 2018, the city undertook a study to consider other sources for its water supply.

Phase I of the study initially considered 14 water source alternatives. During Phase II, the list was narrowed to five water source alternatives for a more detailed examination and preliminary cost estimates to implement. The five alternatives studied were: the Kankakee River, the Illinois River, Lake Michigan through the existing DuPage Water Commission system, Lake Michigan through the existing Chicago Department of Water Management (DWM) system and, finally, Lake Michigan with a new intake on the Indiana side of Lake Michigan. In January of 2020, the Joliet City Council selected the options of Lake Michigan water through the existing Chicago DWM system and Lake Michigan water with a new intake on the Indiana side of Lake Michigan for further study.

While the Illinois River would provide a sufficient quantity of water for Joliet's current and future needs, a back-up well system would still need to be relied upon. Low flow conditions on the

Kankakee River limit its ability to be a regional solution and would not provide sufficient water during drought conditions. The variable quality of raw river water makes the water more difficult to treat and would require maintaining an ex-

the need for the construction of a new intake structure and treatment of the raw water. A connection would be made at the Southwest Pumping Station located at 84th and Kedvale in the City of Chicago. This pump station is fed by



Disclaimer: The location of facilities associated with these alternatives are approximate for the purpose of conceptually estimating costs. Siting of proposed facilities will be evaluated during preliminary design following water source alternative selective. Graphic courtesy of the City of Joliet.

isting well system as a back-up source of water during a river water upset or drought conditions. DuPage Water Commission asked that they not be considered as an alternative water source supplier. Therefore, the evaluation of that option was removed from the Phase II Study.

The Lake Michigan - Chicago DWM alternative would be less expensive initially and eliminate

two rock tunnels that supply water from the Eugene Sawyer Water Purification Plant. A connection to the existing supply tunnel and separate pump stations would be constructed in addition to a transmission pipeline to the existing Joliet distribution system. The Lake Michigan – new Indiana intake alternative requires the construction of the water intake crib off the shore, a raw water pipeline from (continued on page 7)

Joliet's Alternative Water Source Program Study

(continued from page 6)

Indiana to Joliet and a water treatment plant to treat the raw water before it is connected to the existing distribution system. This option would also require extensive permitting and right-of-way acquisition through northwestern Indiana and south Cook County. While this option is more expensive initially, Joliet would have greater control of its water source and supply system and total costs would be less over a 50-year time frame. One of the issues under discussion at the planning stage is whether the

One of the issues under discussion is whether the project should be upsized to provide water to adjacent communities that are also dependent upon the Ironton Galesville aquifer for their source of water. These surrounding communities have similar water supply issues and are also considering alternative sources of water.

project should be upsized to provide water to adjacent communities that are also dependent upon the Ironton Galesville aquifer for their source of water. These surrounding communities have similar water supply issues and are also considering alternative sources of water. The final study considers two options; a 30 MGD option which would be sufficient for Joliet only and a 60 MGD option which would provide water for

Joliet plus other municipalities in the region.

The final study will also consider:

- Conceptual raw and finished water transmission main routing;
- Hydraulic analysis along the route to determine pumping requirements;
- Identify overall improvements required;
- Develop updated cost estimates for the necessary improvements;
- Regulatory and Permitting considerations;
- Project Risks;
- Implementation schedule.

As part of the project, Joliet will apply to the Illinois Department of Natural Resources to obtain a Lake Michigan allocation permit since the amount of water that can be diverted by Illinois from Lake Michigan is limited to 3200 cubic feet per second. This permit is needed regardless of which option is selected.

Financing for construction is a major concern. The upfront cost for the infrastructure necessary is still under discussion. A combination of Federal and State loans and Revenue Bonds may be the source of construction funds. The preliminary cost estimates for the 60 MGD option range from \$600 million for the Lake Michigan - Chicago DWM alternative to \$1.1 billion for the Lake Michigan - new Indiana intake alternative

The cost of the project would be financed by increased water bills paid by the users of the Joliet water

system in order to retire any long term bonds or loans for the initial cost. Joliet is seeking to use the Water Infrastructure Finance and Innovation Act (WIFIA), a long-

Financing for construction is a major concern. The preliminary cost estimates range from \$600 million for the Lake Michigan - Chicago DWM alternative to \$1.1 billion for the Lake Michigan - new Indiana intake alternative.

term loan program administered by the U. S. Environmental Protection Agency that was created in 2014 which provides up to 49% of the eligible project costs. The remainder of the costs would be financed by State Revolving Fund loans and bonds. The current average monthly bill for a resident of Joliet in 2020 is \$30.75, based on an average usage of 700 cubic feet. The estimated average monthly bill, assuming construction is complete and the system is operational in 2030, would be approximately an additional \$60 to \$70 per month.

The timetable for selecting a final option is December 2020.

Thanks to Allison Swisher P. E., Director of Public Utilities, City of Joliet for her help in preparing this article. Consultants to the City of Joliet for this study are Crawford, Murphy and Tilly (CMT), Stantec, Strand Associates and Engineering Enterprises, Inc. (EEI).

(continued on page 8)

Joliet's Alternative Water Source Program Study

(continued from page 7)

More information is available at the website www.RethinkWaterJoliet.org

Information about water studies by ISWS can be found here: www.isws.illinois.edu/illinois-

water-supply-planning/northeastern-illinois

Jerome McGovern is a Senior Municipal Engineer for Baxter & Woodman

President's Notes

(continued from page 2)

While I cannot predict what the future will bring, I do hope that 2021 will be brighter. I hope that as a Section we will be able to offer in-person professional development programs, networking, and introduce our new fundraising plans for

our Diversity & Inclusion Committee. While it was not what I expected, I appreciate the opportunity to be your President while trying to manage what 2020 has thrown at us. Thank you for supporting our Section and for

supporting me. I look forward to seeing you all again, outside the lens of a laptop video camera. And in order to complete my circle of 2020, I hope everyone stays healthy and please remember to wash your hands.


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Student Life During a Pandemic

(continued from page 3)

all the precautions, all it takes is one person to have the virus and expose dozens of people. These people can be your peers or your faculty who would then expose their families and friends who can fall ill.

Social distancing can be lonely at times, but I have learned a few ways to entertain my extroverted

Together we can take care of each other and make social distancing less lonely.

side that could be helpful to share. Step outside after a long class to feel the sun or get some fresh air. For students, check in with a friend once a day virtually through social media or video chats. For faculty

or staff, check in with your students once in a while even if it is not school related. Together we can take care of each other and make social distancing less lonely.

Victor Anthony Limontitla Cedillo is the Co-President of Northwestern University's ASCE Chapter.

Illinois Tollway Mile Long Bridge Project Update

(continued from page 4)

Project Team: *There were significant challenges in both the Master Plan (Phase I) and detail design (Phase II) portions of the project. Perhaps the most challenging aspect was to determine the optimal bridge type to meet all the design goals established by the Tollway and the design team. The proposed Mile Long Bridge has achieved the following design goals:*

- *Provides a bridge geometric layout (offset alignment) and structure type that minimizes impacts to stakeholders below the bridge as well as Tollway traffic during construction*
- *Enhances Maintenance of Traffic (MOT) safety during construction and minimizes MOT durations.*
- *Provides enhanced ground access for the bridge construction and future bridge inspection while considering impacts to stakeholders' operations below.*



- *Provides an economical design capitalizing on economies of scale to minimize bridge*

construction costs and enhance bid competitiveness.
(continued on page 10)

Illinois Tollway Mile Long Bridge Project Update

(continued from page 9)

- *Minimizes number of spans and joints to enhance bridge durability and long term maintenance while also reducing future inspection needs. The proposed number of spans were cut in half with respect to the original structures.*
- *Provides a framing configuration to allow staged deck replacement and a future bridge widening.*
- *Utilize stainless steel reinforcement in the deck, parapets, and in the pier caps under deck joints to enhance durability and to drive life cycle costs lower.*
- *Standardize the use of low profile disc bearings on all 622 bearings used on the project, taking advantage of the economy of scale to mitigate initial construction cost, to enhance*



SEI-IL: What measures were taken to improve economy of design?

Project Team:

- *Standardize the PPC beam design to one prestressed beam shape which is a customization of the California wide flange while using only two beam depths (90" and 72") throughout the 470 beams used for the project.*
- *Maximize the number of spans with the same span length for ease of PPC beam fabrication*

durability and to drive life cycle costs lower.

- *Increase span length over CSS canal to 410' in order to locate piers out of the waterway to avoid navigable vessel collision and minimize the construction and schedule risk associated with in-water construction.*
- *Use weathering steel plate girders for the south 5 spans to meet the long span strength requirements for crossing the CN/IC RR tracks, crucial*

utility lines, and significant waterways, minimizing future bridge repainting needs for the entire Mile Long Bridge.

- *Use record-breaking 188' long span PPC beams to cross the existing and future rail tracks over the BNSF main yard.*
- *Standardize the pier type, utilizing a multi-column pier on a drilled shafts minimizing disturbances to adjacent railroad tracks and sensitive utilities. Providing a uniform substructure system provides consistent construction methods which minimizes costs and schedule.*

SEI-IL: Has construction efforts encountered any unique challenges? If so, how did the team overcome them?

Project Team: *Construction considerations were very much a part of the initial concept development. The design was conceptualized starting with how the bridge was to be constructed and the team worked backward toward defining the alignment, span configurations and structure type. Key challenges included:*

- *High voltage ComEd overhead transmission lines were located directly above each end of the existing bridge with low limited overhead clearance. The power lines were raised prior to construction of the proposed bridge to facilitate beam erection.*

(continued on page 11)

Illinois Tollway Mile Long Bridge Project Update

(continued from page 10)

- A high pressure jet fuel pipe line that serves O'Hare airport is located within the project site. The pipe line is being re-located to avoid conflict with the new construction while utilizing vibration monitoring to enhance safety.
- Communication and collaboration with all stakeholders (railroads, villages, utilities, MWRD, IDOT, Coast Guard, etc.) started early within the planning phase and has proved to be crucial to limit issues during construction.

SEI-IL: Has the COVID-19 pandemic impacted construction? How has the team interaction changed as a result of COVID-19 concerns (e.g. virtual meetings)?

schedule. The design team quickly transitioned to virtual meetings using technology to continue to collaborate. Constant communication and coordination was required to meet all project submittals and keep the project on schedule.

SEI-IL: What advice would you offer project managers or design engineers when preparing for such a large project?

Project Team: *In order to achieve the success of a large project like the Mile Long Bridge, it is critical for the design team to identify the geometric and site constraints early on, understand the owner's priorities, define design criteria, and keep close communication and*

In order to achieve the success of a large project like the Mile Long Bridge, it is critical for the design team to identify the geometric and site constraints early on, understand the owner's priorities, define design criteria, and keep close communication and collaboration with the owner, owner's reps, and impacted stakeholders during bridge planning and design development.

stakeholders during bridge planning and design development.

SEI-IL: What part of the project has been the most rewarding and/or makes you most proud?

Project Team: *The new Mile Long Bridge includes a number of significant accomplishments:*

- *Delivering the largest Tollway construction projects on schedule in spite of the pandemic.*
- *Delivering a crucial project that will benefit so many Tollway users for the next century.*
- *Implementing the longest steel bridge span crossing a waterway within Tollway system.*
- *Implementing the longest PPC beams to date in Midwest Region.*

(continued on page 12)



Project Team: *Both construction and design have continued through the pandemic with no delay in*

collaboration with the owner, owner's reps, and impacted

Illinois Tollway Mile Long Bridge Project Update

(continued from page 11)

Project Team Member Bio

- *Mohamad Faraj, PE served as The Illinois Tollway Project manager*
- *Rick Cholewa PE, SE, served as Project manager for the Joint Venture Team of Lochner, HDR, and Quigg. He is a Vice President and Office Manager for HW Lochner's Chicago Office.*
- *Lance Peterman PE, SE, served as the Project*

Engineer. He is an Associate Vice President and Structures Section Manager with HDR in Chicago

- *Robert Hong PE, SE, served as Lead Structural Engineer. He is the Structural Department Head and a Vice President for HW Lochner's Chicago Office.*
- *Michael Quirin PE, SE, is a Senior Structural Engineer and Project Manager with HDR in Chicago specializing*

in complex bridge design and constructability

Photos: Courtesy of FH Paschen

Justin Pattison, P.E. is a Structural Engineer at Transystems and currently serves as the Chair of the IS-ASCE SEI.

Patrick Laux, P.E., S.E. is a Structural Engineer at WSP and currently serves as the Treasurer of the IS-ASCE SEI.

ASCE's Proposed Sustainable Infrastructure Standard

(continued from page 5)

World, Climate (GHG Emissions), Resiliency, Life Cycle Cost Analysis, and an introductory chapter. The proposed standard is relatively short and includes fewer than 30 total performance outcomes. Expected to be published by ASCE for public comment late this fall or early winter, you will have a

With the ability to focus on the desired outcome, as compared to limited to a list of specific means or design criteria, the infrastructure industry will be free to innovate across professions and communities, creating a culture of continuous innovation and improved outcomes.

chance to review and comment on the proposed standard.

Involving task committee members from all over the country, several IL Section members have assisted in the standard creation. Besides Karen Kabbes' involvement on the standard's steering group, Darren Olson from CBBEL assisted on the Natural World Chapter. Additionally, John Fraunhoffer, former ASCE Director from Region 3, is secretary of the standard task committee. The task committee is chaired by Jim Rispoli, the former chair of the ILC and a member of the National Academies of Sciences, Engineering and Medicine's Board on Infrastructure and the Constructed Environment, and chair of their Federal Facilities Council, and vice-chaired by Brad McCoy, a lieutenant colonel in the U.S. Army Corps of Engineers and Asst. Professor of Civil Engineering at the U.S. Military Academy.

Karen C Kabbes, PE, D. WRE, ENV SP, F. ASCE, is President of KEI, and a member of the IL Section Sustainability Committee and ASCE's Sustainable Infrastructure Standard Task Committee Steering Group.

Lt. Col. Brad C. McCoy, PhD, PE, ENV SP, M. ASCE is Deputy Director of the Center for Innovation and Engineering at the United States Military Academy and Vice-Chair of ASCE's Sustainable Infrastructure Standard Task Committee

To inform Illinois Section members of the discussions at monthly Board meetings, the Section Secretary contributes this article to the newsletter. Any questions or comments on the Board activities are welcome by contacting Andrew Walton at awalton@orionengineersllc.com.

■ *Treasurer's Report*

▲ A treasurer's report was presented at the June and August 2020 meetings (*both meetings were held via teleconference only due to COVID-19 response*). All reports were approved.

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

▲ **2020 Annual Awards Dinner** – The 2020 ASCE IL Section Annual Awards has been re-envisioned this year due to the ongoing COVID-19 pandemic. Please stay tuned for more information.

▲ **ASCE National Convention** – The 2020 ASCE Convention will be held this year as a virtual event from Wednesday 10/28/2020 thru Saturday 10/31/2020. The ASCE Convention provides an opportunity to network with civil engineers from all over the world, hear from dynamic speakers, visit virtual exhibitors, and get the insights you need to stay ahead in the civil engineering profession. For more information about the ASCE National Convention, please refer to the following webpage: <https://www.asceconvention.org/>

▲ **Construction Institute (CI)** – The Construction Institute (CI) will be hosting a virtual presentation in October on a topic related to building construction and in November for underwater bridge inspection/imaging and special inspection access. For more information or if interested in joining this institute, please contact CI Chair Zach Pucel at zjpucel@transystems.com.

▲ **Environmental & Water Resources Institute (EWRI)** – EWRI events have been suspended due to the ongoing COVID-19 pandemic. Please contact EWRI Chair Jeana Gowin with any questions or for information about EWRI activities at jgowin@cbbel.com.

▲ **Geo-Institute (GI)** – All GI events are currently turning to virtual events due to the COVID-19 pandemic. Please contact GI Chair James (Jim) Hambleton with any questions or for information about GI activities at asceilgeotech@gmail.com.

▲ **Structural Engineering Institute (SEI)** – The SEI will be hosting an upcoming webinar on the investigation findings for the Florida International University (FIU) bridge collapse on March 15, 2018. Please contact SEI Chair Justin Pattison with any questions or for information about SEI activities at jmpattison@transystems.com.

▲ **Transportation & Development Institute (T&DI)** – The T&DI hosted a virtual presentation via Webex in which IDOT Area Supervisor Roman Meropolski,

PE, provided an overview of the ongoing construction activities at the Circle Interchange. Please contact T&DI Chair Robert Brzezoni with any questions or for more information at

robert.brzezoni@mbakerintl.com.

▲ **Urban Planning & Development Group (UP&D)** – All UP&D events have been suspended due to the ongoing COVID-19 pandemic. Please contact UP&D Amar Farooqi with any questions or for more information at afarooqi@gsg-consultants.com.

▲ **ASCE Younger Member Group (YMG)** – Most YMG events have been cancelled or postponed due to the COVID-19 response; however, the ASCE YMG participated in lunch webinars on 'Construction Manager/General Contractor (CM/GC) Contracting in Transportation Infrastructure Programs' and 'Climate Resilience for Critical Infrastructure' during the summer months in addition to virtual networking happy hour events. For more information about YMG activities or if interested in joining this group, please contact YMG Chair Anirudha Vasudevan at anirudha.vasudevan@aecom.com or YMG Vice-Chair Ben Ostermann at Benjamin.Ostermann@jacobs.com.

▲ **'Envision' Sustainability Virtual Instructor-Led Training** – Stay tuned for more information regarding the IS-ASCE Sustainability Committee and EWRI one-day 'Envision' virtual instructor- (continued on page 14)

Secretary Report

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led training that was postponed from Spring 2020. The event will include one-day instructor-led training and the ENV SP examination. Please contact IS-ASCE Sustainability Committee Chair Kirsten Mawhinney with any questions or for more information at kirsten.mawhinney@aecom.com.

The Illinois Section Board Meetings are held the first Monday of the month, except for holidays. The next board meeting is scheduled for September 14, 2020 and will be held via teleconference only due to the ongoing COVID-19 pandemic. If you are interested in attending these meetings,

please contact President Megan McDonald at megan.mcdonald@clarkdietz.com.

By Andrew Walton, PE
ASCE IL Section Secretary 2018-2020
awalton@orionengineersllc.com

Illinois Section

Activities

ASCE IL Section T&DI Board Meeting

Date: Wednesday, September 9
Time: 5:30 – 6:30pm
Due to COVID-19 situation, this meeting will be online via conference call.

Board meetings are open to all members, if you plan to attend, please inform T&DI Chair Robert Brzezona, at Robert.Brzezona@mbakerintl.com

ASCE IL Section Geo-Institute Virtual September Meeting and Survey – Energy Geostuctures and Geosystems: Theory and Application

Date: Tuesday, September 8
Time: 12:00pm – 1:30pm
Cost: Free
Registration is required. The registration link is included in the meeting flyer and copied below:

<https://northwestern.zoom.us/j/9tcmprzgvH9K620u4Ag-gjqtBKguHQZl>
Contact: asceilgeotech@gmail.com

[Dinner Flyer](#)

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Illinois Section ASCE Advertising Services

Would your firm like to promote a major milestone, anniversary, accomplishment, or new hire? Do you have job openings or are you looking for new opportunities?

The Illinois Section, comprising over 2,600 civil engineers, offers ads in this newsletter and on the website, <https://www.isasce.org/contact/mediaads/>, at great rates. Our quarterly newsletter is distributed electronically to our members (which includes over 500 engineering students), who look to

the newsletter to learn about upcoming activities and opportunities, to read technical and non-technical articles, and to hear about their colleagues. The newsletter is a great forum to reach a select audience and recognize successes. While the newsletter is issued quarterly, the website ads and job opportunities can be posted within 1-2 days of notification and are flexible regarding content and duration. We encourage you to take advantage of these services to celebrate your firm, support the Section, and reach other engineers.

The following form ([IS-ASCE Advertising Order Form 2020.1.8](#)) provides further detail on advertising with the Illinois Section.

Please send questions, comments, or Forms for advertisements and employment openings to the Advertising Director.

Tim Scully-Granzeier, P.E.
tim.scully-granzeier@arcadis.com