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**Upcoming Events**

**January**

- 10 – Geo-Institute Meeting
- 14 – January Luncheon
- 14 – EWRI Chapter meeting
- 16 – YMG Meeting
- 16 – EWRI Monthly Webinar
- 24 – Geo-Institute One-day Workshop

*Follow the Section and share with your network.*



*Update your bookmarks with our new Section website*

<http://sections.asce.org/st-louis/>



## ASCE / SAME January 2020 Luncheon

Tuesday, January 14, 2020

### History and Future Paths Forward for the Upper Mississippi River Navigation Structures

Jeff Stamper, USACE Inland Navigation Design Center Tech. Manager

The 25 Upper Mississippi River navigation structures were designed and constructed in record time in the 1930's. Major rehabilitation projects have well extended the design lives of the structures for continued service to the Nation. There are plans to modify Lock and Dam Nos. 22, 24, and 25 to construct a new 1,200-foot long lock at each of the three projects. Recent plans propose to construct in the wet making the construction less costly but have many more challenges to overcome.

**About the Presenter:** Jeff Stamper works for the Inland Navigation Design Center (INDC) in the Rock Island District as a Technical Manger. Jeff Stamper manages the design studies for Nation's navigation structures in particular the Upper Mississippi River and Illinois River locks and dams. Jeff has been with the INDC for more than five years. Jeff Stamper was a Structural Engineering Subject Matter Expert in the St. Louis District prior to his duties with the INDC.

**Register Now!**

**Time, Date, Location**

11:30am to 1:00pm, January 14, 2020, at The Engineering Center, 4359 Lindell, St. Louis 63108. Registration starts at 11:30am and lunch is served at 11:45am. The program will begin promptly at 12:00pm. One (1) PDH available.

**Cost**

\$20/person for members, \$25/person for non-members, and \$15/person for active government employees.

**Registration**

Please register and pay online using the link above.

## Officers & Directors 2019 - 2020

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## President's Message



The Saint Louis Section continues our commitment to public outreach by participating in several upcoming events at the St. Louis Science Center. In recognition of Engineers Week (EWeek) the Science Center hosts the Engineering Expo on February 22. We have traditionally participated in this event for the past several years and will again. Next, we plan to attend The Great Outdoors Expo on April 18. We will exhibit hands-on demonstrations of civil engineering concepts and our photo display of civil engineering works. These are fun and engaging events to be a part of. Please consider spending some part of either or both of those days with us and the many people, young and old, that will be

there to learn about the role of science and technology in our lives. There will be two or three more such events in later in 2020 and I will update you about those in the following months.

ASCE President-Elect Jean-Louis Briaud will visit our area on February 5 and 6. On Wednesday, February 5 he will be at Missouri University of Science and Technology. On Thursday, February 6, Dr. Briaud will join ASCE student chapter and other Section members at The Engineers Club for a noon reception and a forum to discuss topics related to ASCE and the profession. Watch for RSVP details to be sent out by mid-January.

Our three most active local institute chapters, Geo-Institute (GI), Structural Engineering Institute (SEI) and Environmental and Water Resources Institute (EWRI), continue their ongoing planning and presenting to their members numerous professional and technical development seminars and webinars. They have their own email lists to notify their members directly about upcoming meetings and other events. If you have selected to be a member of one of those institutes in your ASCE renewal, then by default you should be receiving those updates. If you have not been receiving those messages, then please contact one of the local chapter officers to help resolve the issue. You can find their contact information and other details about their activities on the Section's Resources webpage at <http://sections.asce.org/st-louis/resources>.

Reminder from my previous article: University of Missouri – Columbia (Mizzou) will host the 2020 Mid-Continent Student Conference in April, 2020 (<https://engineering.missouri.edu/academics/civil/mcsc2020/>). You can play an important part in the conference as a judge for one of the several competitive events the students will participate in. For more information about the events and volunteering to be a judge, please contact the conference planning committee at [2020MidContConf@gmail.com](mailto:2020MidContConf@gmail.com). The Saint Louis Section will also participate. We are looking for engineers and firms to partner with to help Mizzou give the more than 300 student participants a variety of networking and practice oriented exhibits. Are you available to join us in that?

I wish you all the best as we ring in the New Year of 2020.

'Til next time,  
Brent M. Vaughn, PE  
[brent.vaughn.asce@gmail.com](mailto:brent.vaughn.asce@gmail.com)

## Committee Chair Openings

*ASCE St. Louis Section is seeking dedicated members to open chair committees as briefly described below, with the opportunity that the incoming chair will “make it their own.”*

**Pre-College Outreach (formerly Career Guidance)** - The purpose of the Pre-College Outreach is to inform elementary, middle and high school students and staff about Civil Engineering. This information includes the requirements for becoming a civil engineer, and how civil engineers improve the quality of life for all citizens. The committee provides speakers and participates in Career Days, Shadowing Days, and other volunteering opportunities relating to Civil Engineering. They also maintain a database of school counselors, and keeps an inventory of materials (including brochures, pamphlets, videos) used by the Committee in their activities. The Society provides many resources and materials to be utilized by the Committee in their efforts.

**Student Involvement Chair** - The purpose is to serve as a bridge between the student chapters at SIU-Edwardsville, SIU-Carbondale, MUS&T, University of Missouri, and St. Louis University, keeping both the student chapter and the Section informed about the activities of each. The Student Involvement Chair also informs the student chapters of the Section funds available to them and assist them in requesting the funds, and assist the Past-President in soliciting scholarship nominees.

**Communications Co-Chair** - The Committee's primary goal is to communicate to all local members news of past, present, and future activities and programs for the purpose of stimulating greater interest and participation in section affairs. The Co-Chair is expected to work closely with the president and chairmen of other committees to obtain information of vital interest to the membership. Correct and timely information should be obtained from the program committee regarding forthcoming meetings. Valuable news will also be found in the Section Leader, a regular publication issued from ASCE headquarters. An informal but regular system of contacts or reporters is an essential ingredient to the collection of interesting news.

## Membership Benefit Question

As a result of our note in the December newsletter, we had a question about the free PDHs offered by ASCE with respect to Ethics, as one member needed 2 PDHs in Ethics. Unfortunately, there are no free webinars available that cover this. There was one titled “The Ethics of Leadership”, but it has been found to have some technical issues so isn’t available at this time. The list of free webinars can be found at the following link:

<https://sa360.asce.org/ASCEWebApp/Benefits/Membership/Freeondemandwebinars.aspx>

There are several other Ethics webinars available on the ASCE website but those are more to be hosted in a group setting and have a cost associated with them. Please consider one of these that your company or organization may host in a group setting.

<http://mylearning.asce.org/diweb/catalog?dp=0&c=79&t=2125&q=ethics&f1=1>

Please contact Lyle Simonton at [lsimonton@subsurfaceconstructors.com](mailto:lsimonton@subsurfaceconstructors.com) with any other questions regarding your membership benefits.

## ASCE Missouri Legislative Drive-In Announcement



Announcement –  
ASCE Government Relations Committee  
December 2019

9<sup>th</sup> Annual Capitol Day in Jefferson City  
Promoting Infrastructure Development  
Tuesday, February 11, 2020  
9:00 AM to 3:30 PM  
at MSPE's Office and State Capitol Building

ASCE members will join the Missouri Society of Professional Engineers (MSPE), the American Council of Engineering Companies (ACEC), and the Missourians for Transportation Investment to advocate for issues at the 2020 Capitol Day. Attendants will spend the day learning current issues and meeting with state legislators. Don't miss out on the opportunity to help educate lawmakers on issues of importance to Licensed Professional Engineers! Registration is free! Please register by **January 31** by clicking here: <https://mspe.org/event-3653969>

A legislative overview will start the day at the MSPE office (200 E. McCarty Street, Suite 200) led by contract lobbyist Mark Rhoads and Executive Director Travis Lowe, followed by meetings with your state senator and representative at the capitol. Please contact your state senator and representative and schedule meetings between 1:00 - 3:00 pm on that day. Contact Dennis Boll at 314-568-3125 or [dboll@geotechnology.com](mailto:dboll@geotechnology.com) for more information.

### ASCE President-Elect to Visit St. Louis

ASCE President-Elect Jean-Louis Briaud will visit our area on February 5 and 6. On Wednesday, February 5 he will be at Missouri University of Science and Technology. On Thursday, February 6, Dr. Briaud will join ASCE student chapter and other Section members at The Engineers Club for a noon reception and a forum to discuss topics related to ASCE and the profession. Watch for RSVP details to be sent out by mid-January.

## Younger Member Group Update



**Community Service Projects** – The YMG is looking to replace a community service project in the spring, if you know of or hear of any in the St. Louis or metro-east areas please pass the information along to us at [ascestlymg@gmail.com](mailto:ascestlymg@gmail.com).

**Younger Member Highlight** – We are stating a new recognition feature for our younger members, if you would like a chance to be recognized, please fill out [this survey](#). A Younger Member, potentially two, will be chosen each month and featured on our Facebook page and in the newsletter on our YM update.

**Mark your calendars for the first meeting of the fall!**

### **January YMG Meeting: SLU**

Thursday, January 16, 2020

Urban Chestnut Midtown

3229 Washington Avenue, 63103

6 pm to 8 pm

<http://urbanchestnut.com/home/>

The FY20 updated schedule can be found on the next page!

Like us on Facebook for more frequent updates and potential pop-up activities!



# YMG 2019 – 2020 Calendar

\*Subject to change throughout the year

## **October YMG Meeting:**

Thursday, October 3, 2019

Schlaflly Bottleworks

7260 Southwest Ave, 63143

6 pm to 8 pm

[www.schlaflly.com](http://www.schlaflly.com)

## **November YMG Meeting:**

Thursday, November 14, 2019

McGurk's

1200 Russell Blvd, 63104

6 pm to 8 pm

<http://www.mcgurks.com/>

## **December YMG Meeting:**

Thursday, December 12, 2019

International Tap House

16 S. Euclid Ave, 63108

6 pm to 8 pm

<https://www.internationaltaphouse.com/>

## **January YMG Meeting: SLU**

Thursday, January 16, 2020

Urban Chestnut Midtown

3229 Washington Avenue, 63103

6 pm to 8 pm

<http://urbanchestnut.com/home/>

## **February YMG Meeting: SIUE**

Thursday, February 13, 2020

Recess Brewing

307 N Main St, Edwardsville IL 62025

6 pm to 8 pm

[www.recessbrewing.com](http://www.recessbrewing.com)

## **March YMG Meeting:**

Thursday, March 12, 2020

1860's Hardshell Café

1860 S. 9<sup>th</sup> St. 63104

6 pm to 8 pm

[www.1860saloon.com](http://www.1860saloon.com)

## **April YMG Meeting:**

Thursday, April 9, 2020

SqWire's Restaurant & Annex

1415 S. 18<sup>th</sup> St., 63104

6 pm to 8 pm

[www.sqwires.com](http://www.sqwires.com)

## **May YMG Meeting:**

Thursday, May 14, 2020

Hair of the Dog

1212 Washington Ave, 63103

6 pm to 8 pm

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▶ [www.structurescongress.org](http://www.structurescongress.org)

Learn more at [www.structurescongress.org](http://www.structurescongress.org).

## Geo-Institute News

Next Geo-Institute committee meeting is January 10, 7:30 AM at Terracon, 11600 Lilburn Park Road, St. Louis, MO 63146. All GI members are invited to participate. Those who are unable to attend in person can join by phone. Please contact [jschaeffer@millennia.pro](mailto:jschaeffer@millennia.pro) for more details.

Geo-Institute is hosting a one-day workshop and seminar, presented by Dr. Bengt H. Fellenius, on the topic of Basic Design of Piled Foundations". More details can be found on the next page.



**GEO-  
INSTITUTE**  
St. Louis Chapter



St. Louis Chapter of the Geo-Institute of ASCE Presents

### **Basic Design of Piled Foundations: One-day Workshop and Seminar by Bengt H. Fellenius**

**DATE:** Friday, January 24, 2020

**LOCATION:** Engineer's Club of St. Louis, 4359 Lindell Boulevard, St. Louis, MO

8:00 am	Registration and networking
8:30 am	Program begins
12:00 pm	Buffet lunch
5:00 pm	Program ends

This one-day event addresses the practice of the design of piled foundations. What data one must pull together and what processes of analysis and calculations necessary for a design of a specific project are presented. Negative skin friction and associated drag force and downdrag are emphasized along with settlement analysis. Various methods and aspects of determining pile capacity are presented and discussed, but the emphasis is on deformation and settlement. Indeed, the seminar makes it clear that design of deep foundations involves a good deal more than finding some value of capacity.

Specifics of where to install instrumentation, perform a test, and analyze the test data are addressed. How to consider and compare straight-shaft piles to piles with changing cross section, e.g., expanded base piles, open-vs. closed-toe pipe piles, is also addressed. Brief comments are given on some Code and Standards requirements for Limit States Design, LSD, (Ultimate Limit States, ULS, and Serviceability Limit States, SLS, by Canadian terminology, and Load and Resistance Factor Design, LRFD, by US terminology). The lectures are illustrated with case history examples throughout. Much emphasis is placed on the design and performance of pile groups and piled raft foundations in regard to load response and settlement, the so-called unified piled design.

**COST:** \$275.00 for ASCE Members; \$300.00 for Non-ASCE Members. Registration includes a buffet lunch. Vegetarian meals are available by contacting [Jake Schaeffer](mailto:jschaeffer@millennia.pro) ([jschaeffer@millennia.pro](mailto:jschaeffer@millennia.pro)), before January 17.

Attendees will receive up to 7.5 PDH credits.

**Please register at <https://conta.cc/2EqXb5F> (case sensitive) by January 17**

*Advance registration is required for all attendees. Refunds must be requested before January 17, 2020. Any refund will be subject to a 15 percent cancellation fee. Registration may be transferred to another person by advanced email notice to Jake Schaeffer.*

A limited number of **sponsorship opportunities** are available for this event. If interested, please contact Jake Schaeffer.



## EWRI St. Louis News



**Election of Chapter Officer:** EWRI St. Louis Chapter will hold election for the position of Secretary/Treasurer at the next business meeting. The position will be effective from the election date to September 30, 2021. The role and responsibilities are posted in Chapter's Bylaws at <http://sections.asce.org/st-louis/node/18>. If you would like to nominate yourself or another member of our Chapter, please email to our Chapter secretary Meg Zuercher, [Meg.Zuercher@jacobs.com](mailto:Meg.Zuercher@jacobs.com), no later than January 10, 2020. EWRI Chapter's next meeting is scheduled for **10am January 14, 2020** Tuesday at the Engineering Center of St. Louis (the Engineers' Club) 4359 Lindell Blvd. St. Louis, MO 63108. Look forward to seeing you there.

**2020 EWRI St. Louis Spring Symposium/Workshop:** Your inputs are important for planning of our annual spring symposium/workshop. Please complete the survey at [www.surveymonkey.com/r/72LSQMW](http://www.surveymonkey.com/r/72LSQMW). For questions, please contact the symposium chair Dr. Azadeh Akhavan Bloorchian at [azadeh.bloorchian@stantec.com](mailto:azadeh.bloorchian@stantec.com).

**Getting Involved with EWRI St. Louis Chapter:** You are invited to get involved with various activities of our Chapter such as organizing our webinar series and annual symposium/workshop and to offer your ideas how our Chapter can better serve our members and professional community. Please contact our Chapter chair Dr. Zhou at [jzhou@siue.edu](mailto:jzhou@siue.edu) for information and conversation.

To learn more about our Chapter's activities, please visit our LinkedIn page [https://www.linkedin.com/company/environmental-and-water-resources-institute-st-louis-chapter?trk=similar-pages\\_result-card\\_full-click](https://www.linkedin.com/company/environmental-and-water-resources-institute-st-louis-chapter?trk=similar-pages_result-card_full-click)



## EWRI St. Louis Monthly Speaker Series Event

The St. Louis Section of EWRI is pleased to announce our monthly webinar **on Thursday, January 16, 2020 at 11:30 am-12:30 pm Central Time.**

This presentation will be broadcast live over a webinar. Registration is free to ASCE members. **Advance registration is required by Noon, Monday, January 13, 2020.** Please register online in advance at the following link:

<https://docs.google.com/forms/d/e/1FAIpQLSett23vrZ79L3B3VtnV5nxypqgVBOXiwBalpaOJF2ZFROB4ng/viewform>

Registrants will receive detailed login and dial-in information or directions for in-person attendance prior to the event.

### **Road Salt Retention and Transport in Soils and Subsequent Release of Base Cations and Trace Elements to Porewaters**

Road deicing salts are widely used to improve winter travel safety. However, their application causes the release of Na, Cl, and other contaminants into the environment. While Na may temporarily be stored in soil porewaters or adsorbed on soil particles, it can gradually be released over time. Teresa will review discuss her studies and results on evaluating road salt retention and transport by collecting roadside samples weekly over one year, immediately after deicing applications. Concurrently, water samples from a nearby karst spring-fed stream were collected with soil waters. Waters were analyzed for Na, Cl, other major ions (Ca, Mg, K, Si), toxic trace elements, and stable isotopes. Understanding road salt and associated contaminant transport through multiple reservoirs will allow us to better assess their harmful impacts.

**Speaker: Teresa Baraza Piazuelo, MS** is a PhD student and Graduate Assistant in the Department of Earth and Atmospheric Sciences at Saint Louis University, where she has chosen Environmental Geosciences as her doctorate's concentration. Teresa is Soils and Soils Processes Division Student Representative for the University's Graduate Students Association.

Winner of the 2018 Wilson Memorial Scholarship from Karst Waters Institute, Teresa received her MS from Saint Louis University, where her thesis was on the effects of road deicing salts on the release and transport of toxic metals from roadside soils to a karst groundwater system.

Thank you to our joint seminar sponsor, **EDM Incorporated!**

Please contact **Len Madalon** ([ljm@edm-inc.com](mailto:ljm@edm-inc.com)) with any questions, if you are interested in presenting, or have an idea for a topic.

## Sustainability Committee Seminar



### ASCE St. Louis Sustainability Committee Seminar SIUE GREEN ROOF ENVIRONMENTAL EVALUATION NETWORK

**Speakers:**

Susan Morgan, Ph.D., P.E., Bill Retzlaff, Ph.D., Serdar Celik, Ph.D.

**Date and Time:**

Thursday, February 27, 2020, 4:00 PM – 5:00 PM

**Seminar Information:**

Location: Havana Room, 4240 Duncan Ave, St. Louis, MO 63110  
Free drink will be provided at the venue by Venture Café St. Louis

Attendees will earn 1 free PDH, Event is FREE

RSVP at <https://rb.gy/cuhhk>

Parking information: <https://vencafstl.org/contact/>

**Short Description:**

This presentation will introduce SIUE's Green Roof Environmental Evaluation Network (G.R.E.E.N.) and provide an overview of SIUE's research/training activities along with presenting select results of research on stormwater and thermal effects of green infrastructure.

*If you have any questions or you are interested in presenting at the committee seminars, please contact the committee chair, Siavash Zamiran, at [szamiran@meacorporation.com](mailto:szamiran@meacorporation.com)*

**SPEAKERS:**

Dr. Susan Morgan, P.E., Professor in Civil Engineering and Associate Dean of the Graduate School at Southern Illinois University Edwardsville



Dr. Bill Retzlaff, Distinguished Research Professor in Biological Sciences and Associate Dean of the College of Arts and Sciences at Southern Illinois University Edwardsville



Dr. Serdar Celik, Professor in the Department of Mechanical Engineering at Southern Illinois University Edwardsville



ST. LOUIS CHAPTER  
MISSOURI SOCIETY OF  
PROFESSIONAL ENGINEERS



**Missouri Society of Professional Engineers (MSPE)  
and Missouri Water Environment Association (MWEA)  
January Joint Luncheon  
Thursday, January 16, 2020**

### **NPDES Permitting 101.... and Beyond**

**Abstract:** NPDES Permits are like opinions...everyone has one. This session will focus on providing the audience with a basic, but deep understanding of municipal wastewater permitting. It will show some of the nuances in permitting and what to be aware of as you file your permit application and review your final NPDES Permit. The two presenters, a former Missouri State regulator and an engineer from a leading design/build firm will guide the audience through the intricacies of the State's rule and regulations that can make the permit process challenging for the utility operators and managers to understand. The presenters will illustrate how and why analytical sample results from past years impact current permit effluent limits. Finally, this session will show the attendees the "numbers" behind the "trade-craft" of NPDES Permit development.

**Lacey Hirschvogel** is the Environmental and Public Policy Manager with Missouri Public Utility Alliance. She leads the Missouri Public Water Council, a branch of MPUA that focuses on training, education, and planning assistance for municipal water and wastewater utilities. Lacey advocates for MPUA's members on legislative and regulatory issues. Lacey joined MPUA after working for the Department of Natural Resources' Water Protection Program as an environmental scientist where she wrote municipal National Pollutant Discharge Elimination System (NPDES) wastewater permits and developed state policy and regulations. She graduated with a Bachelor of Science degree in Chemistry from the University of Florida and a Master of Public Affairs degree at the University of Missouri.

**Jeff Barnard, P.E.** is the Global Practice Leader at Burns & McDonnell's St. Louis regional office. He has a strong background in capital improvements planning for wastewater systems, including wastewater needs forecasting; inflow & infiltration studies; system hydraulic modeling; wet weather storage facilities; sewer system evaluation surveys; corrosion evaluation and control; system rehabilitation; and NPDES permitting. Mr. Barnard has specific experience in the design of pump stations, gravity sewers, and treatment plant processes.

#### **Time, Date, Location**

11:30am to 1:00pm, January 16, 2020, at the Engineering Center, 4359 Lindell, St. Louis 63018. Registration starts at 11:30am and lunch is served at 11:45am. The program will begin promptly at 12:00pm. One (1) PDH is available.

**Cost:** \$20/person

**Registration :** <https://mspe.org/event-3635091>

Please register and pay online using the link above for reservations by 5:00pm, Thursday, January 9th, 2020.

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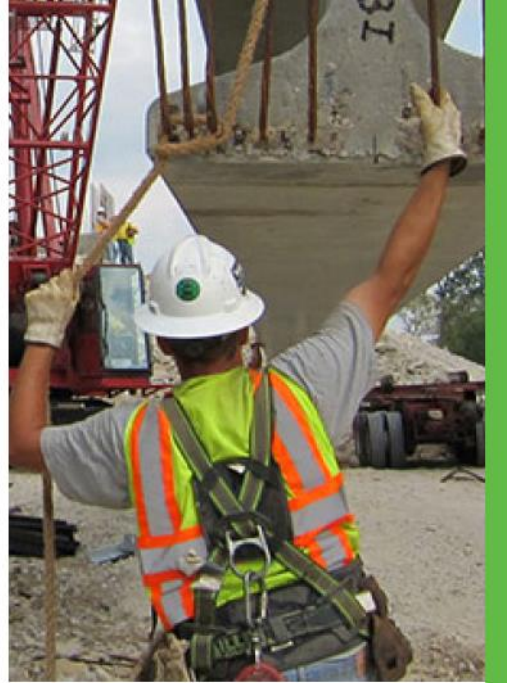
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## Erosion and Stormwater Control Seminar

# 2020 Erosion, Sediment and Storm Water Control Seminar

Friday, February 28, 2020

LeClaire Room at Lewis and Clark Community College

N.O. Nelson Campus, 600 Troy Road, Edwardsville, IL 62025

### Agenda

- 9:00 am - 9:15 **Welcome and brief review of NPDES program** - Wayne Caughman, IL-EPA
- 9:15 - 9:45 **Installation and Maintenance of the 5 Most Common BMPs on Storm Water Permits**  
Speaker: Rick Gundlach, Project Scientist, SCI Engineering
- 9:45 - 10:15 **A Case Study of the Ameren Illinois, Jarvis Substation in Madison County**  
Speaker: Kevin Adkins, Environmental Scientist, Ameren Services, Permitting and Natural Resources Group
- 10:15 - 10:30 **Break**
- 10:30 - 11:00 **Water Management During Brown Field Site Development, Case Studies to include the Wood River Power Plant**  
Speaker: Adam Peetz, Vice President of Remediation and Site Development Aton Environmental Services
- 11:00 - 11:30 **Tough Native Plants for Storm Water BMPs, Selection and Maintenance**  
Speaker: Felicia Ammann, Field Scientist, SCI Engineering
- 11:30 - 12:00 **Questions and Discussion**
- 12:00 pm **Adjourn**

Cost is **FREE**, but RSVPs need to be received by 5:00 pm, Friday, February 21, 2020.

This seminar is worth 3 PDH's for Professional Engineers and 3 PDU's for CPESC's and CESSWI's. Please make your reservations online at

[https://siue.co1.qualtrics.com/jfe/form/SV\\_6FillmQi3J0sCVL](https://siue.co1.qualtrics.com/jfe/form/SV_6FillmQi3J0sCVL)

If you are unable to register online, please contact Brent Vaughn at [bvaughn@siue.edu](mailto:bvaughn@siue.edu).

This seminar is sponsored by -



Madison County Soil and  
Water Conservation District



SCI ENGINEERING, INC.



Madison County Planning  
and Development Office



SOUTHERN ILLINOIS UNIVERSITY  
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## Professional Engineer Refresher Course

These review courses are geared toward helping participants pass the Professional Engineer (P.E.) license exam. Spring classes will be held in the fields of:

- Civil- Water Resources, Geotechnical; Transportation, Construction, Structural;
- Mechanical-Mechanical Systems/Materials, Hydraulics & Fluids, Energy & Power Systems, HVAC/Refrigeration; and
- Electrical-Power

Course fee includes a three-ring binder, lecture notes, certificate of completion, and CEU's.

It is recommended that participants purchase their discipline's desk reference manual prior to the first class. Desk reference manuals can be obtained by going to the following website: <http://ppi2pass.com>

**Deadline for Registration:  
January 23, 2020**

### ***How to Enroll – 4 Ways to Register:***

1. **Online** – To register online, go to [www.stchas.edu/learnforlife](http://www.stchas.edu/learnforlife)

2. **By Mail** – Complete the registration form, attach your check or money order, and mail to:  
SCC, Division of C&CD  
4601 Mid Rivers Mall Dr., HUM 103  
Cottleville, MO 63376-2865

3. **In Person** – Walk into 103 HUM with completed registration form and payment. Registration hours:

- 8 a.m. – 5:30 p.m. Mon-Thurs.
- 8:30 a.m. – 4:00 p.m. Fridays
- After-hours drop box in HUM hallway

4. **By Phone** – Call 636-922-8233 during the hours listed above. Telephone registration: VISA, Discover, and MasterCard only accepted as payment. Registration Fee:

- \$550 for MSPE & SAME members
- \$600 for ASCE, ASME, ASHRAE & IEEE members
- \$650 for non-members

Course content inquiries should be directed to

**Lisa Cheng, P.E.**

(314) 425-8355 or

[lisa.cheng@hdrinc.com](mailto:lisa.cheng@hdrinc.com)

For more details, please see the [Brochure here](#).



### **Academic Employee: Research Engineer Position No. 00075187**

The Center for Intelligent Infrastructure at Missouri University of Science and Technology (formerly University of Missouri-Rolla) seeks to expand its research capabilities in autonomous inspection and maintenance of civil infrastructure (e.g., bridges and tunnels) by inviting applications for a research engineer position, commencing around October 15, 2019. The annual salary for this position with full benefits is around \$60,000, depending on candidates' background and experience.

The successful candidate will be expected to demonstrate ability to work in laboratory and field environments and willingness to do heavy lifting and long distance travel. Candidates must have an earned undergraduate degree in civil engineering from an ABET/EAC accredited program or equivalent, and at least 1 year of practical experience in bridge inspection and maintenance, particularly with the state department of transportation. Superior communication and interpersonal skills, leadership capabilities, the ability to engage in collaborative and interdisciplinary research projects, and the ability to motivate and inspire undergraduate and graduate students are also required attributes. Licensure as a professional engineer in civil engineering is required or must be attained in the State of Missouri within 1 year of appointment. Knowledge about any bridge management software such as PONTIS is strongly encouraged. Familiarity to nondestructive evaluation and test of bridges is a plus.

The Center for Intelligent Infrastructure has recently been established at Missouri University of Science and Technology in recognition of nation's growing interests in infrastructure research using advanced technologies such as robots, remote sensing, nondestructive evaluation, structural health monitoring, data analytics, and asset management. The Center currently has expertise in civil engineering, computer science, economics, electrical engineering, engineering management and systems engineering, power engineering, and multi-hazards engineering (earthquake, tornado, flood, etc.). Its current research programs are focused on the preservation, safety, resilience, and sustainability of transportation infrastructure systems. The Center is envisioned to extend its autonomous inspection and maintenance capabilities from bridges to other infrastructures such as dams, building, levees, offshore platforms, pipelines, power plants, roads, transmission towers, and tunnels. The successful candidate will have the opportunity to interact with interdisciplinary research teams across campus, including the Tier I University Transportation Center (see <http://inspire-utc.mst.edu/>), Mid-America Transportation Center (see <https://matc.unl.edu/>), the National Center for Transportation Infrastructure Durability and Life-Extension, the Center for Infrastructure Engineering Studies (see <http://cies.mst.edu/>), the Wei-Wen Yu Center for Cold Formed Steel Structures (see <http://cfssonline.org/>), the Intelligent Systems Center (see <http://isc.mst.edu/>), and the Materials Research Center (see <http://mrc.mst.edu/>).

Review of applications will begin on September 15, 2019 and will continue until the position is filled. Interested candidates should electronically submit an application consisting of a cover letter, a current curriculum vitae, a statement of research interests and goals, and complete contact information for three references to the Missouri University of Science and Technology's Human Resource Office using the following link <https://hr.mst.edu/careers/>. All submitted application materials must have the position reference number 00075187 in order to be processed. Acceptable electronic formats that can be used for email attachments include PDF and Word; hardcopy application materials will not be accepted.

Missouri University of Science and Technology participates in E-Verify. For more information on E-Verify, please contact DHS at 1-888-464-4218. The final candidate is required to provide official transcript(s) for any college degree(s) listed in application materials submitted. Copies of transcript(s) must be provided prior to the start of employment. In addition, the final candidate may be required to verify other credentials listed in application materials. Failure to provide official transcript(s) or other required verification may result in the withdrawal of the job offer. Females, minorities, and persons with disabilities are encouraged to apply. Missouri University of Science and Technology is an affirmative action / equal opportunity employer and is responsive to the needs of dual-career couples.





Horner & Shifrin is seeking a full-time Engineer to work in our Transportation division in our St. Louis or Poplar Bluff, MO office. This position requires **4+** years of experience. This position is assigned specific tasks on project teams; and is expected to resolve engineering problems and tasks with assistance, as needed, from more experienced staff.

**POSITION RESPONSIBILITIES/DUTIES:**

- Candidate will work under licensed engineer
- Responsible for the development of engineering plans, specifications and estimates (PS&E)
- Work as part of a team to complete general transportation engineering services for municipal, county and state agencies
- Provide good and effective written/verbal communication skills

**POSITION REQUIREMENTS:**

- Must have an Engineer Intern certification; Professional Engineer license is preferred
- Must have a valid driver's license
- Must be able to pass a background check
- Proficient in the use of Microsoft Office software (Outlook, Excel, Word, Project)
- Proficient in the use of MicroStation and GEOPAK SS4 or AutoCAD Civil 3D

**EDUCATIONAL REQUIREMENTS:**

BS in Civil Engineering

**SALARY RANGE:**

Salary will be commensurate with experience.

Horner & Shifrin, Inc. is a Federal Contractor, Equal Opportunity Employer M/F/Disability/Veteran. We are a 100% Employed Owned firm, offer a generous benefits package, and named a 2017, 2018 & 2019 Top Workplace by the St. Louis Post-Dispatch.

If you are interested, you must apply through our website at [www.hornershifrin.com/careers](http://www.hornershifrin.com/careers). Visits and phone calls will not be accepted.

Learn more about us at [www.hornershifrin.com](http://www.hornershifrin.com).



**Prairie Engineers, P.C. is seeking a Structural Engineer to join their team.**

Prairie Engineers is a full services engineering, geospatial, and environmental science firm with a goal of delivering sustainable infrastructure solutions and maintaining our natural and built environment. We are a woman-owned firm with offices in Columbia, Hillsboro, Peoria, and Springfield, Illinois and Hazelwood, Missouri. The firm provides services to federal, state, and local governments, utilities, industries, and private businesses. Prairie Engineers is a growing company, looking to add a Structural Engineer to their team to assist primarily in the office with project planning, structural engineering design, and construction document development. This position will be a full time position with benefits and a competitive salary based on qualifications. This position is available to be filled in any of our office locations.

**Essential Job Functions:**

- Planning, design, and construction administration of transportation and building projects
- Ability to work both independently and as a team leader
- Focus on project delivery and customer service with attention to detail and deadlines

**Minimum Qualifications:**

- A minimum of five years' relevant design experience
- Current licensure as an Illinois Structural Engineer
- Good verbal and written communications skills
- Ability to work both independently and as part of a team
- Project a professional, positive attitude with a strong work ethic

**Preferred Knowledge, Skills, Abilities, and Experience:**

- Eight or more years of design experience
- Past project management experience
- Familiarity with Illinois DOT and CDB design standards, procedures, and requirements

We are an equal opportunity employer that recognizes the value of a diverse workforce. All qualified individuals will receive consideration for employment without regard to race, color, religion, creed, gender, national origin, age, handicap, marital status, veteran's status, sexual orientation, or any other legally protected status.

Preference will be given to applicants who reside in a HUBZone as defined by the US Small Business Administration. For a map of certified HUBZone areas, please refer to the following website:  
<https://maps.certify.sba.gov/hubzone/map/>

For additional information regarding our company and benefits offered our employees, please visit our website at [www.prairieengineers.com](http://www.prairieengineers.com).



For more than a century, HNTB has helped deliver infrastructure solutions that best meet the unique needs of our clients. With client relationships spanning decades, we understand infrastructure life cycles and have the perspective to solve technical challenges with clarity and imagination. We are far more than a design firm. We see and help address far-reaching issues of financing, legislation, design, construction, community outreach and ongoing operations. As employee-owners committed to the highest levels of performance, we enable clients to achieve their goals and inspiring visions.

Just like we are committed to delivering for our clients, HNTB is also committed to delivering for you by offering benefits to protect the health of you and your family, help you balance family and career, and build your savings for retirement. Learn more at <https://www.myhntbtotalsrewards.com>.

## Senior Bridge Project Engineer

<http://www.hntb.com/careers>

*Job ID: 1018-19763*

### Overview

The time is right to join HNTB Corporation! We are seeking a Senior Bridge Project Engineer to lead projects from our St. Louis, Missouri office.

### Job Summary

Provides coordination of project execution and control, in a given discipline area, to achieve continuity of purpose within scope, budget, and time schedules from initial start-up through project closeout. Also accountable for handling specific design aspects on projects appropriate to discipline field. Coordinates efforts of assigned design team to ensure completeness and accuracy of design effort. Serves as technical liaison with client on project efforts. Responsible for gross revenue of \$1-\$2M.

### Essential Responsibility

- Responsible for the delivery of project discipline scope elements within budget and schedule.
- Oversees completeness and accuracy of project team's work. Supervises and guides team to overall project objectives.
- Provides senior-level technical expertise to client on project aspects within the discipline.
- Assists with project management duties.
- Performs other duties as assigned.

### Basic Qualification

- Bachelor's degree in Engineering
- 10 years relevant experience

### Preferred Qualification/Skills

- Master's degree in Engineering
- PE/AICP

### General Work Conditions

Combination Office and Field Environment: Most work is performed in an office environment in which there is only minimal exposure to potentially unpleasant working conditions. Incumbent must have the ability to stand and sit frequently and reach horizontally as well as vertically for overhead use. Work may infrequently be performed at client's job site, construction trailer, and in the field. Work may sometimes require working in inclement weather, working in a construction site, being exposed to heavy construction equipment and doing extensive walking. Adherence to applicable safety protocol is required.

HNTB Corporation is an Affirmative Action and Equal Opportunity Employer, Minority/Female/Disabled/Veteran.

The HNTB Companies are an equal opportunity employer and does not discriminate on the basis of race, color, religion, creed, sex, national origin, age, disability, pregnancy status, sexual orientation, gender identity, veteran status, marital status, genetic information, citizenship status, or other status protected by law. In compliance with the Immigration Reform and Control Act of 1986, we will hire only U.S. citizens and aliens lawfully authorized to work in the United States (if the position is or will be one which is subject to U.S. law). We will provide reasonable accommodation for qualified individual with a disability where appropriate.



Oates Associates is a team focused on enhancing our community from the inside outward. That begins internally with a talented staff. If you are interested in a position with Oates Associates, please complete the [employment application](#) and send it along with your resume. Upload your information to our website at [www.oatesassociates.com/contact](http://www.oatesassociates.com/contact), email us at [oai@oatesassociates.com](mailto:oai@oatesassociates.com) or print and send to:

Oates Associates, Inc.  
100 Lanter Court, Suite 1  
Collinsville, IL 62234

The firm is an equal opportunity employer that offers competitive salaries, an excellent benefit package, great working environment in new office space, flex-time, opportunity for quick advancement and ownership potential. We seek to develop a more diversified workforce and encourage women and minority candidates to apply for this position.

### **Civil Engineer - Entry Level to 5+ Years**

The ideal candidate will also possess the following attributes:

- Bachelors in Civil Engineering
- EIT certificate or recently received PE license
- 0 – 5+ years civil engineering experience
- Work with both governmental and private clients in Missouri and Illinois is a plus
- Working knowledge of AutoCAD Civil 3D – proficiency is a plus
- Strong technical skills – presentation skills are a plus

Typical responsibilities will include:

- Drawing topographic surveys
- Laying out sites and developing grading plans in AutoCAD
- Coordinating utility service connections and relocations
- Developing of bid and construction documents
- Developing construction cost estimates
- Observing construction operations at work sites and performing material tests

# SPECIAL INSPECTIONS & DESIGN

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**POSITION:** Structural Engineer

**DESCRIPTION**

Special Inspections & Design is a leading provider of specialized engineering services in the structural, civil, industrial, and welding fields in Missouri, Illinois, and California. Our professionals are technical experts in structural engineering design, special inspections, and nondestructive testing.

We are seeking an experienced Structural Engineer (5 – 10 years) for an opportunity to work on a wide variety of projects. The position will be based out of our Collinsville, IL office. You will be responsible for analysis and design of structural systems and components using structural steel, concrete, masonry, wood, and light gage steel. Your duties will include preparation of construction drawings and specifications, visual structural inspections, report preparation, and construction review.

**QUALIFICATIONS**

Qualified candidates must have:

- BS in Civil Engineering (MS is a plus).
- PE license (SE is a plus).
- Minimum 5 years experience (5 – 10 years is ideal).
- Working knowledge of structural engineering software (RISA is ideal).
- Working knowledge of IBC and other national standard codes.
- AutoCAD proficiency.
- Good written and oral communication skills.

**TO APPLY**

Please send resume and any questions to Ashlee Peno at [ashleepeno@SIDengineers.com](mailto:ashleepeno@SIDengineers.com)

For more information about our company please visit [www.SIDengineers.com](http://www.SIDengineers.com)



Metropolitan  
St. Louis  
Sewer District

### **PRINCIPAL ENGINEER – DESIGN/PROJECT DESIGN**

The Metropolitan St. Louis Sewer District (MSD) is a Missouri State special purpose political subdivision that is responsible for the St. Louis area's storm water and sewer collection and treatment. MSD ranks in the nation's top wastewater utilities, and anticipates spending approximately \$4.7 billion on capital investment and asset sustainability over a multi-decade period.

MSD seeks an engineer to function as a team lead in the Design division of the Engineering Department. This position reports to a Program Manager and works with other engineers in the design/review of plans involving complex sanitary and storm water drainage problems; design of storm and sanitary sewer lines, lift stations and green infrastructure; evaluation and preparation of technical reports concerning complex construction and engineering problems and solutions. This position may also meet with government officials, consultants, contractors and the general public.

Qualified candidates must have a Bachelor's Degree from a recognized college or university with major course work in Civil Engineering (preferred); a Professional Engineer License and 6 years of progressively responsible engineering design experience. Experience in sewer and green infrastructure design preferred.

Excellent compensation/benefits program including defined contribution retirement plan, convenient location with free parking. For more information and to apply on line go to <https://www.stlmsd.com/careers>

## To submit items to the newsletter...

Please try to get all announcements for placement in the newsletter to the Newsletter Editor by the 20<sup>th</sup> of the month prior to publication. Items may be sent via e-mail to Xiaomin (Sophie) You (ASCE newsletter editor) at [xiaomin.you@wsp.com](mailto:xiaomin.you@wsp.com). **MS Word files are the preferred file type.** PDF files are also acceptable but may not look as sharp when inserted into the newsletter and hyperlinks might not carry through to the final version. For multiple page announcements, please consider providing a single-page flyer, concisely worded, with links provided to ancillary pages such as registration forms or other attachments. Also, please clearly include in the email subject line a concise title for the announcement and desired month(s) of publication.

Most news items will be available on the Section's Web Page, which can be reached via the link on ASCE National Website ([www.asce.org](http://www.asce.org)). Click on "Geographical and International Units" to link to the Section or go directly to our page at: <http://sections.asce.org/st-louis/>. The Section's Website Editor is Jeff Smith e-mail: [JESmith@HNTB.com](mailto:JESmith@HNTB.com) or via feedback directly from our website.

For more information and updates see our Web Page: <http://sections.asce.org/st-louis/>

This newsletter will be sent to all Section members via e-mail. Delivery of the newsletter hardcopy by First Class mail will be made upon request. Members have the responsibility to keep their contact information in the ASCE national database up to date. Please note that the St. Louis Section is only provided with members' PRIMARY information on file at the Society level. To ensure that we can contact you, please edit your PRIMARY information to contain the information where you would like the section to contact you and how you would like your information to appear in our annual roster.

**Please be sure to keep your PRIMARY contact information up-to-date by contacting ASCE at <http://www.asce.org>, or call 800-548-ASCE (2723).**



ASCE – St. Louis Section  
c/o The Engineering Center  
4359 Lindell Blvd. St. Louis, MO 63108