November 2020

President’s Message ..........................2
EWRI St. Louis News ..........................3
EWRI Monthly Speaker Series ..........4
EWRI – Water, Water, Everywhere 5
Structural and Geo-Confluence ......6
Younger Members Group ...............7
Open Committee Positions .............7
Volunteer Opportunity through Community Engineering Corps (CE Corps) ...........................................7
FE Review Sessions .......................8
Employment Opportunities .............9
Submit items to the newsletter... 16

Upcoming Events

November
5... Structural and Geo-Confluence 6
EWRI – Water, Water, Everywhere 10
MSPE-EWRI Joint Luncheon 19
EWRI Monthly Speaker Series Webinar

Follow the Section and share with your network.
LinkedIn

Update your bookmarks with our new Section website
http://sections.asce.org/st-louis/

Missouri Society of Professional Engineers (MSPE) St. Louis Chapter and American Society of Civil Engineers (ASCE) St. Louis Section November Joint Luncheon Webinar Tuesday, November 10, 2020

BOOTS ON THE GROUND
A LOOK AT MSD PROJECT DELIVERY IN A GREEN AGE
Two presentations will be made centering upon how the Metropolitan St. Louis Sewer District (MSD) delivers a variety of construction projects to remain in compliance with current regulations.

Abstracts

CSO Volume Reduction Green Infrastructure Programs Overview: In 2011, MSD completed a Combined Sewer Overflow Long-Term Control Plan (CSO LTCP), which was formalized in a Consent Decree (CD) with the U.S. Environmental Protection Agency (EPA) in April, 2012. This presentation will give an overview of the four CSO Volume Reduction Green Infrastructure Programs, as well as how you can participate: Small Grants, Large Grants, MSD Direct Projects, and the Green City Coalition.

Getting it Done: Unique Bidding Alternatives in a Traditional Bidding Environment: This presentation will discuss different bidding methods MSD utilizes. This will include discussion of everything from Small Infrastructure Repair projects to large Immediate Needs, as well successes had with the Small Contractor Program.

About the Presenters

Kaleena Menke, PE is a Civil Engineer with the Metropolitan St. Louis Sewer District (MSD). She has a BS in Civil Engineering from the University of Colorado Denver. Kaleena is a licensed Professional Engineer in Illinois and Missouri. At MSD, Kaleena manages the Green Infrastructure Program within the Combined Sewer portion of the District for stormwater quantity management. Prior to her time at MSD, she worked as a civil site designer in private consulting. When she’s not working, she can be found biking through the streets of St. Louis. Although she’s from Colorado, Kaleena has lived in the area for over six years now and is proudly calling St. Louis her home.

Steve Adams graduated from the University of Missouri – Columbia with a degree in Civil Engineering in 2003. He worked in both private and public settings before joining MSD in 2009. At MSD he currently works in the Project Design group where he designs solutions and prepares construction documents for a variety of projects. These include storm and sanitary sewers, pump stations, creek bank stabilization, and green infrastructure projects.

Time and Date: 12:00pm to 1:00pm, November 10, 2020. One (1) PDH available.
Cost: Free!
Registration: Please register here by 9:00 PM on November 9, 2020. A link will be sent the morning of the event to access the webinar.
President’s Message

November is an interesting time of the year. The full effect of fall is here. The thoughts of giving thanks with loved ones. And our civic duty to express our opinion on the shape of government. This statement underlines another passion I have developed, mainly because of ASCE: political activism. I encourage you all to vote in the upcoming general election. No matter your political leanings, it is important to let our government know your opinion.

Have you heard of the Key Contact Program? I learned of it early in 2010, but didn’t really get involved until I attended the Multi-Region Training in Fort Worth, TX in 2011. A fellow Younger Member spoke to us about how his state representative knows him by name; and not because they’re neighbors. He would call and give information about engineering topics almost weekly. As he told the group, “Our government officials aren’t engineers. Let them know from you if a piece of legislation is good or bad. You are the authority.”

This resonated with me. Not only does our Section participate in the annual Legislative Fly-In (held in March), but our Government & Public Relations committee participates in local “Drive-In” events each year. This past year in Missouri, Section members drove to Jefferson City to meet with the General Assembly. And for the last 5 years, Section members have driven to Springfield, IL to meet with their Illinois representation. We spend a day meeting with representatives and senators and handing out information related to infrastructure. We may cite recent polls or studies. We almost always speak of the national (and state!) infrastructure report cards. I have participated in the Illinois events, and come away with a great feeling to know I am able to advocate for a better infrastructure for my region.

Make sure you check out the Key Contact program (https://www.asce.org/keycontacts/).

Make sure you check out the Key Contact program (https://www.asce.org/keycontacts/). Register to become a Key Contact. ASCE will send out alerts regarding legislation applicable to your legislative district. In, literally, 2 clicks, you can send a letter recommending Congress act on your behalf. And if you are interested locally in either the Fly-In or the Drive-In’s, please contact Dennis Boll with our Government and Public Relations committee. Applications are now being accepted for the 2021 Legislative Fly-In! (deadline to apply is 11/23/2020; The Section has 2 spots for a “scholarship” to attend)

And if you’re REALLY interested in shaping government, run for office! I did.

- Jordan
(former Trustee, Village of New Baden, IL)

Did You Know: The ASCE Infrastructure Report Card is cited in a news publication nearly every day in America.
2020 Mid-American Environmental Engineering Conference (MAEEC): For a number of years, the EWRI Chapter has been sponsoring this annual student conference series including student awards. The EWRI Chapter was pleased to again sponsor the 25th annual MAEEC conference in 2020 that was hosted as a virtual event by Southern Illinois University Edwardsville on October 24, and attended by environmental engineering/water resources graduate students and their faculty advisors from universities in this region:

- Southern Illinois University Edwardsville
- Washington University in St. Louis
- Missouri University of Science and Technology
- University of Missouri Columbia
- Southern Illinois University Carbondale
- Saint Louis University

Dr. Alexandria Boehm, a Professor of Civil and Environmental Engineering at Stanford University and a Senior Fellow at the Woods Institute for the Environment, gave a keynote presentation entitled “SARS-CoV-2 in Wastewater Settled Solids is Associated With COVID-19 Cases in Urban Sewersheds”. In addition to student presentations, the conference offered two student-faculty interactive sessions discussing careers in academia and industry, and a panel session on young professionals’ active involvement in professional societies for leadership development and career advancement. Two student award winners for best presentations are: Anamika Chatterjee and Albern Tan, both of Washington University in St. Louis.
The St. Louis Section of EWRI is pleased to announce our monthly webinar on Thursday, November 19, 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, November 16, 2020. Please register online in advance at the following link:

https://docs.google.com/forms/d/1QnlMH3q8UdCJqcmbSO8d_pNFHeqUQoEeRJbhoBErw8/edit

Registrants will receive detailed login and dial-in information prior to the event.

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4S) IN MISSOURI
The Missouri Department of Natural Resources (MoDNR) maintains the National Pollutant Discharge Elimination System (NPDES) permit for MS4s to protect our waters from urban stormwater runoff. MS4s are unique and touch the population of the urbanized area in ways that a “normal” NPDES permit does not. This presentation will explain the MS4 regulations, the permits, and the development of individual MS4 programs.

SPEAKERS
Sarah Wright, MS4 Permitting Coordinator, MoDNR
Erin Heidolph, MS4 Program Coordinator, MoDNR

Sarah Wright is the MS4 Permitting Coordinator for MoDNR and focuses on the MS4 regulations, interpretation of the regulations, and writing all the MS4 permits for Missouri. Erin Heidolph is the counterpart of Sarah in MoDNR’s MS4 Program. Erin is the MS4 Program Coordinator for MoDNR and focuses on MS4 compliance and Stormwater Management Plan review.

Between Sarah and Erin, they bring a combined experience of 18 years in the environmental field, with seven of those years dedicated specifically to stormwater and MS4s. Sarah and Erin share a passion of protecting the environment and enjoy coming to work every day knowing they are doing their part to ensure Missouri’s outdoors stay beautiful for generations to come.

When not at work, Sarah enjoys camping, fly fishing, sewing, and spoiling her rescue dog. Sarah is a regular volunteer with the Missouri Stream Team program and a crew member for Missouri River Relief, believing that picking up litter and trash is a fun way to spend her weekends!

In her off time, Erin enjoys canoeing on Missouri’s rivers, fishing, and horseback riding. Erin is also an avid trail runner and loves gardening to support the seasonal hummingbirds, butterflies, and honey bees. Both Sarah and Erin live in Central Missouri.

Thank you to our joint seminar sponsor, EDM Incorporated!

Please contact Len Madalon (ljm@edm-inc.com) with any questions, if you are interested in presenting, or have an idea for a topic.
2020 Environmental & Water Resources Spring Symposium/Workshop

WATER, WATER, EVERYWHERE

Join us for a full-day educational symposium/workshop for professional development to learn about water-related technical topics in our region, including the Metropolitan St. Louis Sewer District’s current program and projects, and to develop skills useful in the region related to hydraulic analysis with HEC-RAS.

Please have HEC-RAS installed on your computer for the training session.

Virtual Symposium via Webex (link to be sent to registrants)

Friday, November 6, 2020

Technical Program 8:00 AM to 4:00 PM

6 Professional Development Hours
Full-day Technical Program in the Following

Who should attend: Water resource engineers, environmental engineers, hydraulic engineers, water resource designers, MSD engineers, hydrologists, students, etc.

Cost:
$40 for Members (EWRI, MSPE), $50 for Non-members, Free for Students

Online Registration available
http://events.constantcontact.com/register/event?llr=yonzmehab&oeidk=a07ehd946945496ee16

Questions?
Dr. Azadeh Bloorchian
Spring Symposium/Workshop Chair, ASCE-EWRI St. Louis Chapter
636-343-5852 (work)
azadeh.bloorchian@stantec.com
Structural and Geo-Confluence

2020 ONLINE EVENT
November 5, 6, 12, and 13
11:00 AM to 1:00 PM CST each day

Registration is open for the fifth annual Structural and Geo-Confluence, hosted by the St. Louis Chapters of SEI and GI. This four-day ONLINE conference is open to all. Registrants will earn up to 2 PDH per day, 8 PDH total.

**Agenda:**

**Thursday, November 5:**
- **The Engineering Design of the St. Louis City SC Stadium**, Matt Breidenthal and Francesca Meola, HOK, and Stephanie Spann, David Mason + Associates
- **Lessons Learned from Litigation Caused by Expansive Clays**, Steve Wendland, Kleinfelder, Inc.

**Friday, November 6:**
- **San Francisco’s Sinking Millennium Tower**, Ron Hamburger, Simpson Gumpertz & Heger
- **Seismic Retrofit of Merchants Bridge**, Kevin Eisenbeis and Paul Tackett, Burns & McDonnell

**Thursday, November 12:**
- **Observing and Controlling Ground Behavior during Tunneling**, Ed Cording, 2020 Terzaghi Lecturer, University of Illinois
- **Intro to Blasting - Impact of Geotechnical Information and Blasting Techniques on Cost and Results**, William Scott and Jereme Caron, Maine Drilling & Blasting

**Friday, November 13:**
- **Incorporation of Thunderstorm and Tornado Loading in Wind Load Codes and Standards**, Frank Lombardo, University of Illinois
- **Underpinning Prairie: Micropiles Support Prairie Du Sac Dam**, Brian Barkauskas, Nicholson Construction Company

<table>
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<tr>
<th>Registration Class</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>Professional</td>
<td>$25 per day OR $75 for all 4 days</td>
</tr>
<tr>
<td>Full-time Students</td>
<td>$20, all 4 days</td>
</tr>
<tr>
<td>Virtual Exhibitor</td>
<td>$250, includes 1 registration for all 4 days</td>
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</tbody>
</table>

Virtual exhibitors, please contact Lyle Simonton (lsimonton@subsurfaceconstructors.com) to discuss these benefits.

**Please register at** [https://conta.cc/2GBOIP](https://conta.cc/2GBOIP) **(case sensitive)**

Individual registration is required for this online event, for ASCE’s PDH verification records. No group registrations.

Login information for this online event will be provided to registrants the day before each session, using the email address entered during registration.

Registration may be transferred to another person by advanced email notice to Stephanie Spann (sspann@davidmason.com) and Greg Hempen (hempen69@sbcglobal.com).

Refunds must be requested before Wednesday, November 4, 2020. All refunds will be subject to a 15 percent cancellation fee.
Younger Members Group
With the year just getting started and the Covid-19 pandemic, we don’t have much to report this month, but here are a few quick updates. We are so excited for a new year and ready to dig in!

Virtual Meetings – As we navigate staying social while being socially distant, the YMG is looking for opportunities to keep in touch and stay up to date with each other. Be on the lookout for our monthly email update which will include a survey to help us assess the interest in virtual meetings. The link to the survey can also be found here: https://forms.gle/ySwjfgDcg6WFr24H9
All responses are appreciated!
Volunteer Opportunities – We’re looking for ways to safely stay connected with our community. Please complete the linked survey to help us better understand your interest in future service opportunities: https://forms.gle/ZctmPYiwMPmRjKmp7

Contact Michelle Bresnahan, YMG Chair, at MBresnahan@lochgroup.com if you would like to be added to the email list or if you have any questions or comments regarding the YMG Update.

Open Committee Positions
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.

Volunteer Opportunity through Community Engineering Corps (CE Corps)
CECorps is a program that was started in 2014 by an alliance between ASCE, the American Water Works Association (AWWA) and Engineers Without Borders USA (EWB-USA). CECorps advances local infrastructure solutions by providing pro-bono engineering services in partnership with communities that need it most. Members of these three organizations can volunteer their time and expertise to assist communities that do not have the resources to access engineering services in a traditional manner. Visit https://www.asce.org/community_engineering_corps/ for more information.

There is a CECorps project team in Hartford, IL that is in need of a Responsible Engineer in Charge (Civil PE licensed in Illinois). The project team is currently made up of EWB-USA members. The team has done one site visit and is holding virtual team meetings.

The project involves utility planning and permitting for the construction of a new church building in Hartford, IL. The Church will be utilizing a pre-fabricated steel structure for the new church. The placement of the church will be on a plot of formerly farmed land, which does not currently have water or sanitation services from the street to the building site. Current permitting or planning for these utilities has not yet been done. On the nearest access road to the site for the new build, there are municipal water and sewer services, but no outreach has yet been conducted to those municipalities. A project team will be conducting any necessary design as well as assisting with permitting for construction. In addition, the team may examine potential alternatives due to the fact that tie-in to the sewer system would necessitate digging up a town-owned roadway and thus be potentially cost prohibitive. The church is a nonprofit church group located within the town of Hartford, IL., and has been a part of the community for over 90 years.

Learn what the Responsible Engineer in Charge Role [PM1] entails. If interested in volunteering, email Melissa Prelewicz, ASCE’s CECorps staff liaison, at mprelewicz@asce.org.
# FE Review Sessions

## VIRTUAL FALL 2020 FUNDAMENTALS OF ENGINEERING (FE) REVIEW SESSIONS AT SIUE*

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Instructor</th>
<th>Time</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed. 10/07/20</td>
<td>Math/Statistics</td>
<td>Dr. Chew</td>
<td>10 – 11:30 AM</td>
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<tr>
<td>Mon. 10/12/20</td>
<td>Surveying/Construction</td>
<td>Prof. Sherrill</td>
<td>12 – 1:30 PM</td>
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<tr>
<td>Thurs. 10/15/20</td>
<td>Structural Analysis</td>
<td>Dr. Cross</td>
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<td>Tues. 10/20/20</td>
<td>Dynamics</td>
<td>Dr. Shavezipur</td>
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<tr>
<td>Thurs. 10/22/20</td>
<td>Statics</td>
<td>Dr. Fries</td>
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<td>completed</td>
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<tr>
<td>Tues. 10/27/20</td>
<td>Engineering Economics</td>
<td>Dr. Eneyo</td>
<td>4:30 – 5:50 PM</td>
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<tr>
<td>Thurs. 10/29/20</td>
<td>Fluid Mechanics</td>
<td>Dr. Denn</td>
<td>4:30 – 5:50 PM</td>
<td>completed</td>
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<tr>
<td>Mon. 11/02/20</td>
<td>Geotechnical Engineering</td>
<td>Dr. O souli</td>
<td>12 – 1:30 PM</td>
<td>Zoom</td>
</tr>
<tr>
<td>Wed. 11/04/20</td>
<td>Transportation Engineering</td>
<td>Dr. Qi</td>
<td>4:30 – 5:50 PM</td>
<td>Zoom</td>
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<tr>
<td>Thurs. 11/05/20</td>
<td>Environmental Engineering</td>
<td>Dr. Zhou</td>
<td>4:30 – 5:50 PM</td>
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<td>Tues. 11/10/20</td>
<td>Engineering Materials</td>
<td>Dr. Huang</td>
<td>4:30 – 5:50 PM</td>
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<td>Thurs. 11/12/20</td>
<td>Mechanics of Solids</td>
<td>Dr. Panahshahi</td>
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<td>Zoom</td>
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<tr>
<td>Tues. 11/17/20</td>
<td>Structural Design: Concrete</td>
<td>Dr. Panahshahi</td>
<td>4:30 – 5:50 PM</td>
<td>Zoom</td>
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<tr>
<td>Thurs. 11/19/20</td>
<td>Hydraulic/Hydrologic Systems</td>
<td>Dr. Benjankar</td>
<td>4:30 – 5:50 PM</td>
<td>Zoom</td>
</tr>
</tbody>
</table>

* ALL REVIEW SESSIONS ARE TAUGHT BY SIUE FACULTY MEMBERS.

THE SESSIONS ARE FREE FOR SIUE ENGINEERING STUDENTS WHERE EMAILS WITH THE ZOOM LINKS FOR THE SESSIONS WILL BE EMAILED TO THEM. NO REGISTRATION IS NEEDED.

FOR NON-SIUE STUDENTS AND PRACTICING ENGINEERS, EACH SESSION WILL COST $10 PAYABLE TO SIUE CHI EPSILON. TO REGISTER AND OBTAIN THE ZOOM MEETING INFORMATION FOR THE SESSION(S) YOU ARE INTERESTED IN ATTENDING PLEASE CONTACT MS. ASHLEY SPAIN, CHI EPSILON PRESIDENT AT ASPAIN@SIUE.EDU, AT LEAST 24 HOURS IN ADVANCE. AN INVOICE WILL BE SENT TO YOU ONCE THE SESSIONS ARE COMPLETE.

FOR MORE INFORMATION PLEASE CONTACT PROF. PANAHSHAHI AT NPANAHS@SIUE.EDU

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*SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE*
Employment Opportunities

Horner & Shifrin, Inc. is currently looking for candidates to fill the positions of:

**Project Engineer (Transportation)**
5+ years experience, proficient in Microstation & AutoCAD, Northwest Arkansas

**Project Manager (Water/Wastewater)**
5+ years experience in water & wastewater design, Poplar Bluff, MO

**Project Manager (Civil/Site)**
10+ years experience using Civil 3D CAD Modeling, O’Fallon, MO

**Complete Streets Planner**
ACIP certification preferred, BS in Urban Planning, St. Louis

**Sr. Level Plumbing Designer or Engineer**
10+ years exp., strong ability to work in AutoCAD and Revit, St. Louis

**Design Engineer (Transportation)**
Full time, 2 years experience, EIT certificate Chicago/St. Louis

**Project Manager (Transportation)**
10+ years experience, knowledge of GEOPAK SS4 or Civil 3D, Poplar Bluff, MO

**Sr. Environmental Scientist**
Experience working on NEPA projects St. Louis

**Engineer (Structural Bridge)**
Previous bridge design experience, OSHA 10 preferred, Chicago/St. Louis

**Project Engineer (Structural Bridge)**
5+ years exp., proficient in Microstation and/or AutoCAD, Northwest Arkansas

Please visit our website at [www.hornershifrin.com/careers/](http://www.hornershifrin.com/careers/)
Job Title: Professional Land Surveyor
Location: St Louis, MO

Civil Design, Inc. is a Certified Woman Business Enterprise, civil engineering firm of 70+ team members committed to building stronger communities in the markets we serve. Areas of focus include site development, surveying, transportation, water resources, structures and infrastructure and analytics. Civil Design Inc. is in its 24th year of business and has offices in St. Louis, MO, Effingham, IL and Louisville, KY.

Culture: CDI has a strong family-oriented culture with the drive to build stronger co-worker, client, and local communities. Guided by the values of continuous learning and growth, mutual trust and respect, ownership, and responsiveness – CDI offers a spirited team atmosphere driving quality engineering and strong client relationships.

Job Description: Responsible for making precise measurements to determine boundaries and providing topographic data utilizing survey equipment and data collection software.

Essential Job Functions
- Coordinate, direct, and lead team members in the completion of Boundary and Topographical Surveys, Route Surveys, ALTA/NSPS Land Title Surveys, Utility Surveys and Constructional layout for private and government projects.
- Create and execute project work plans
- Manage multiple projects and delegate project tasks to team members.
- Managing day-to-day operational aspects of projects and scope.
- Perform reviews and quality assurance to insure adherence to project standards and methodologies.
- Experience with Trimble Robotic, GNSS and Conventional equipment, LiDAR Scanning equipment.
- Adhere to safety policies, procedures, and requirements of CDI.
- Primarily Office work, if needed some travel.

Knowledge, Skills and Abilities
- Comprehensive understanding of the principles and practices of land surveying.
- Advanced knowledge of mathematics through trigonometry and geometry and its application to field surveying.
- Proficient with Microsoft Office, MicroStation and other relevant software.
- Skilled in the use of surveying instruments including Trimble Robotic and GNSS equipment.
- Thorough knowledge and understanding of processing collected data through the completion of projects.
- Ability to work effectively in a team environment and possess strong interpersonal skills.
- Strong organizational and time management skills.
- Excellent verbal and written communication skills.
- Must be physically able to work outdoors and on construction sites under all weather conditions.
- Commitment to a safe working environment following safety policies, guidelines, and procedures.
- Ability to troubleshoot and problem solve.
- Familiarity with and knowledge of geographic area.

Desired Knowledge, Skills and Abilities
- Understanding of MicroStation, AutoCAD, Trimble Access, Leica Cyclone, Trimble, and Leica Instrumentation is a plus.

Education, Training and Experience Requirements:
- License: Missouri Professional Land Surveyor (PLS) Required. Additional state licenses a plus.
- Minimum of 3 years’ experience as PLS.
- Prior experience with MicroStation, MoDOT Standards, AutoCAD, and Records Research.
- Must possess a valid driver’s license and have a good driving record.

**Working Conditions**

Work is generally performed in the office but will include some outside work at various job sites. May be exposed to all kinds of weather conditions including extreme temperatures, rain, snow, high winds, humidity, and dusty conditions. Physical activity is required including walking, standing, carrying equipment, stooping, kneeling, and bending. May be exposed to exhaust fumes, dust particles, insects, wildlife, plants, poison ivy, and other environmental elements. Must be able to lift/carry 30lbs in field conditions. Up to 10% of work performed outside.

**Core Competencies**

- Building Trust – Interacting with others in a way that gives them confidence in one’s intentions and those of the organization.
- Collaboration - Working effectively and cooperatively with others; establishing and maintaining good working relationships.
- Contributing to Team Success - Actively participating as a member of a team to move the team toward the completion of goals.
- Engagement Readiness - Demonstrating a willingness to commit to one’s work and to invest one’s time, talent, and best efforts in accomplishing organizational goals.

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**Job Title:** Experienced Structural Project Engineer  
**Location:** Civil Design Inc. (Louisville KY, Effingham IL or St. Louis, MO) Remote candidates will be considered

**Civil Design Inc.:** A certified Woman Business Enterprise, Civil Design, Inc. is a civil engineering firm of 70+ team members committed to building stronger communities in the markets we serve. Areas of focus include site development, surveying, transportation, water resources, structures and infrastructure and analytics. Civil Design Inc. is in its 24th year of business and has offices in St. Louis, MO, Effingham, IL and Louisville, KY.

**Culture:** CDI has a strong family-oriented culture with the drive to build stronger co-worker, client and local communities. Guided by the values of continuous learning and growth, mutual trust and respect, ownership and responsiveness – CDI offers a spirited team atmosphere driving quality engineering and strong client relationships.

**Benefits:**  
Competitive Benefit Package including flexible working environment, health, dental and vision Insurance, 401(k) match, PTO and extended sick bank leave.

**Job Duties**

- In this role, the Structural Engineer will be an integral part of our Structures/Bridge Group designing various bridge types, as well as support our transportation and site development Groups with their design needs.
- Manage structural engineering projects by creating scope and budgets, directing the design and coordinating work with other staff and design team members.
- Strong knowledge of building materials (Steel, Concrete, Masonry, Wood), construction methods, structural inspections, construction document preparation.
- Analyze and design transportation related structures including: bridges, culverts, retaining walls, and sign structure foundations.
• Be a key point of contact with clients, contractors, and local officials.
• Eagerness to work on a wide variety of project types.
• Assist in the preparation of engineering project proposals.
• Work collaboratively with the CDI Group Leader, Project Engineers and other team members to develop effective solutions.
• Ensures compliance with CDI’s safety procedures.

Required Skills

• Bachelor’s degree in Civil or Structural Engineering
• Illinois, Indiana, Kentucky or Missouri PE required
• Bridge design experience
• Proficiency with MicroStation
• Department of Transportation structures experience (bridges and walls) (MoDOT, IDOT or KYTC).
• Highly proficient with structural analysis and design software
• Ability to work effectively in a team environment and possess strong interpersonal and communication skills

Desired Skills:

• Master’s Degree in Civil Engineering or Structural Engineering.

Please apply at CDI’s career page – www.civildesigninc.com - >Contacts -> Careers

Job Title: Senior Water Resources Engineer | Project Manager
Location: Civil Design Inc., St. Louis, MO  63110

A certified Woman Business Enterprise, Civil Design, Inc. is a civil engineering firm of 80+ team members committed to building stronger communities in the markets we serve. Areas of focus include site development, surveying, transportation, water resources, infrastructure & analytics, and structures. Civil Design Inc. is getting ready to celebrate its 25th year in business and has offices in St. Louis, MO, Louisville, KY and Effingham, IL.

Culture
CDI has a strong family-oriented culture with the drive to build stronger co-worker, client and local communities. Guided by the values of continuous learning and growth, first time quality, mutual trust and respect, ownership and responsiveness – CDI offers a spirited team atmosphere driving quality engineering and strong client relationships.

Core Competencies
In addition to the needed technical skills to perform this job successfully, an individual should also demonstrate the following competencies: Strong Communication, Collaboration, Positive Attitude, Adaptability and Analytical Thinking.

Responsibilities
• Design and management of treatment, wastewater collection, and water system conveyance facilities.
• Prepare grant applications, facility plans and coordinate with private and public stakeholders to secure project funding specifically for small and medium sized systems
• Ability to assist on water resources and resiliency aspects of multi-disciplinary projects for integrated water resources planning and watershed master planning
• Design improvements to wastewater treatment facilities to meet environmental regulations. These include wastewater lagoons, package plants, biological and mechanical treatment processes

Please apply at CDI’s career page – www.civildesigninc.com - >Contacts -> Careers
• Mentor and develop engineering team members, specifically in environmental and wastewater engineering.
• Managing water, wastewater, and reclaimed water supply through planning, modeling and permitting
• Be a key point of contact with clients, contractors, and local government officials
• Work collaboratively with CDI managers, and other Project Engineers to develop effective solutions

Required Skills:
• Bachelor's Degree in Civil/Environmental Engineering from a four-year college or university; PE required
• 7+ years’ Experience
• Professional Engineer, licensed in Missouri with design experience with a focus on water resources
• Knowledge with preparation and review of Engineering Plans and Specifications to ensure that all aspects of project implementation are clearly conveyed
• Experience with hydrologic, hydraulic, and groundwater software
• Experienced in working with both governmental, and private clients in Missouri, Kentucky, and Illinois

Desired Skills
• Proficiency in XPSWMM, WaterGEMS, SewerGEMS and WaterCAD
• Proficiency with AutoCAD Civil 3D
• Experience with HECRAS, HECHMS, PondPak, HY-8
• Experience with GeoPAK Drainage
Are you a **Passionate, Highly-Motivated Geotechnical Engineer?**

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Do you want flexibility in your job?  
Do you want the ability to be innovative?  
Do you want great benefits?  
Do you have these qualifications?

- BS/MS degree in Geotechnical Engineering
- Passed FE Exam and eligible for PE exam (or already obtained PE)
- Excellent written and verbal communication skills

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**NOW HIRING IN MISSOURI, ILLINOIS, COLORADO AND TEXAS**
City of Ladue

Stormwater Engineering Manager
The City of Ladue is seeking a part-time engineer (20 – 25 hours per week) in our Stormwater Division of the Public Works Department. The Stormwater Engineering Manager serves as the City’s coordinator of the Stormwater Management program which includes oversight of the multi-million-dollar Stormwater Implementation Plan. This position requires a minimum of 5-years of experience, and a licensed Professional Engineer is desired. To read the full job description, please click on the following link: [https://www.cityofladue-mo.gov/mm/files/Stormwater%20Eng%20Mgr%20job%20description%202010-9-20.pdf](https://www.cityofladue-mo.gov/mm/files/Stormwater%20Eng%20Mgr%20job%20description%202010-9-20.pdf)
Please send resumes to publicworks@cityofladue-mo.gov

Mechanical Engineering Instructor Needed for Missouri Society of Professional Engineers (MSPE) PE Refresher Course

MSPE has been giving PE refresher courses to help engineers prepare for the PE licensee exam for the past more than 20 years. MSPE currently has an opening for Mechanical Engineering instructors.

Eligible candidate is required to be a Missouri registered professional engineer (P.E.) in Mechanical Engineering with at least 5 years of related working experience. The instructor will give review courses to help participants pass the professional engineer (P.E.) license exam, and the covered disciplines includes HVAC and Refrigeration, Thermal and Fluid Systems, Machine Design and Materials. Two categories of instructors are needed:

1. The instructor is required to be proficient in all three areas and familiar with the P.E. exam and can adjust the class content flexibly based on the student registration and their desired testing disciplines.

2. The instructor is required to be proficient in one of the three areas and familiar with the P.E. exam and will either work with the other instructors for the mechanical classes (2-3 sessions per instructor) or work alone on the specialized area (7 sessions) based on the student registration and their desired testing disciplines.

The classes are scheduled from January to March and includes 7 separate sessions that are held from 8 am to noon on Saturdays at St. Charles Community College (Address: 4601 Mid Rivers Mall Dr. Cottleville, MO). For details regarding the class and payment, please contact Lisa Cheng at lisa.cheng@hdrinc.com or call at 919-749-5998.

Note: Class might be temporarily switched to be online due to the ongoing Covid situation.
Submit items to the newsletter...

Please try to get all announcements for placement in the newsletter to the Newsletter Editor by the 20th of the month prior to publication. Items may be sent via e-mail to Brent Vaughn (ASCE newsletter editor) at brent.vaughn.asce@gmail.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 will probably 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). 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 or via feedback directly from our website.

For more information and updates see our Web Page: [http://sections.asce.org/st-louis/](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.

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