

As you may have noticed, we are testing delivering the monthly Section newsletter, rebranded as *The Arch*, via ConstantContact for a better user experience. Past newsletters will continue to be archived and available for PDF download from the Section website. Enjoy *The Arch*!





ASCE April 2023 Luncheon

Tuesday, April 11, 2023

Anchoring to Masonry

Description: The acceptance criteria for post-installed anchorage into masonry, which defines the testing protocol for products used in construction thus demonstrating their compliance with model building code, has been revised to offer a more statistical analysis of post-installed anchor design into masonry.

Presenter: Lana Fiedler, PE – Professional Engineer, Hilti Group Lana graduated from SIU in 1995 with a Bachelor of Science in Engineering, and 2001 graduated from Fontbonne with a Master of Management Degree. Lana has previously worked in various capacities including Design, Inspection and Project Management of Civil Projects before joining Hilti in 2005. Lana has worked for Hilti for 18 years and has maintained several roles within the company including Senior Field Engineer, Senior Firestop and Structural Engineer, Project Manager, Energy Division, and Regional Manager, Energy Division.

Click here to sign up!

Please register by March 7th

When: Registration starts at 11:30am, lunch is served at 11:45am. The program will begin promptly at 12:00pm. One (1) PDH available.

Where: Engineers Club of St. Louis, 4359 Lindell Blvd., St. Louis, MO 63108

Section Board of Directors 2022-2023

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Civil Design, Inc.
agraves@civildesigninc.com

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SCI Engineering, Inc.



From the President

Happy April!

I hope you're enjoying this taste of spring as much as I am. I'll be spending lots of time outside to prepare my gardens, play with my kids, and be more active! (Before the pollen bomb explodes, anyway...)

In addition to being a full-time roadway engineer and ASCE devotee, I also volunteer time to plan the St. Louis Work Zone Awareness Run in April to coincide with National Work Zone Awareness Week. This year's race is on Saturday, April 15th and is a great way to work on fitness while networking with industry colleagues and supporting a great cause – raising awareness for driving safely in work zones. Keep your eyes open for orange cones and help ensure that those road workers return safely to their families after a hard day's work!

April is already looking busy, but I am planning on visiting two of our student chapters to talk about my career and all the benefits of ASCE after graduation. On April 5th, I'll be heading to (my alma mater) Mizzou to present to their student chapter meeting

scunningham@sciengineering.com

Director of Professional & Technical Development Tony Roth Geotechnology, LLC troth@geotechnology.com

Past President
John Weiland
Wade Trim
jweiland@wadetrim.com

and talk to a few classes while I'm there. I don't get back often, so I'm looking forward to walking through those halls again! On April 19th, I'll be heading down to Missouri S&T with several other Section members to present to their student chapter and network with them. One of the great benefits of ASCE is the networking opportunities – especially for students looking for internships, jobs, and advice. It feels good to help them navigate their own career journey!

Awards season is also upon us as we put out our Call for Local Award Nominations. To give out awards, we need nominations! Do you know of a STL Section member that deserves to be recognized for their work in ASCE or the profession? Work with them to submit a nomination – our Award Committee even simplified the forms this year to make it easier! Did you work on an awesome project that was built in the last 5 years in the St. Louis area? We would love to hear about it and recognize your hard work. Awards are presented at our Annual Dinner in September and winners receive a beautiful plaque to hang in your office. Nominations are due June 1st – but don't wait until the last minute! You can download the forms and guidelines now and get started this spring.

Last, but not least, I want to thank our members for participating in the Strategic Plan Survey that went out last month. We got some great responses that will help guide us as we establish our 3–5-year plan for the Section. It will be a huge undertaking, but ultimately will help align the decisions of the next several Presidents and Boards with the membership that we serve. Thanks!

Alison Graves

2023 St. Louis Section President

Section Leadership Opportunities

We're looking for members to volunteer to kickstart some committees that took a break during COVID or are ready to transition to a new chair. Chairing or serving on a committee is a great way to get to know people, build leadership skills, and give back to our community! You can do as much as you have time for – committees are expected to plan at least one activity this year. Ideas could include seminars, roundtable discussions, site visits, happy hours, joint activities with other committees or organizations, community service, mentoring, etc. We're here to help you! Please reach out to any Board Member to get involved.



Diversity and Inclusion (D&I) Committee

Committee will coordinate, promote, and execute programs that
advocate for inclusion of all people within the civil engineering
profession without regard discriminatory practices. Historically,
the D&I Committee has participated in and supported career
outreach events organized by the National Society of Black
Engineers (NSBE) and the Society of Women Engineers (SWE).
Other past events included organizing volunteering opportunities
with Girl Scouts and Introduce a Girl To Engineering Day.

Pre-College Outreach Committee

• Committee 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. Past activities have included coordinating classroom presentations, Engineer's Week SciFest at the Science Center, and Project Lead the Way in several high schools. There are lots of members who want to help volunteer – they just need someone to coordinate with the schools!



Fundraising Committee

 Committee is to raise funds for use by the Section for the Student Scholarships and Career Guidance Activities. In past years, funds were raised by hosting a golf tournament. However, other fundraising ideas could include organizing a technical seminar, corporate sponsorship program, trivia night, exam prep programs, etc. The Society has a ton of best practices for more ideas!



The Section is also accepting nominations for the position of **Director of Administration** for a two-year term beginning October 1, 2023. This position will be vacated upon the beginning of ASCE's next Fiscal Year on October 1 as the individuals currently holding Board of Director positions will accept new positions or rotate off the Board of Directors. All positions have description available the Section's Constitution and Bylaws and Handbook.

Acceptance of the position for Director of Administration generally will involve graduating to subsequent positions on the Board of Directors, resulting in a multi-year commitment to serving on the Board of Directors.

Please submit nominations in writing via email to Nominating Committee Chair, <u>John Weiland</u>. Nominations shall include the name of the individual and a brief description of their qualifications and interest in the position.

Nominations deadline extended to April 14, 2023.

2023 Legislative Fly-In to Washington, D.C.

On March 1-3, 2023, 280
ASCE members from 47
states, the District of Columbia
and Puerto Rico, including St.
Louis Section members
Alison Graves, Jordan
Pettibone, and ASCE Society
President-Elect Marsia
Geldert-Murphey, attended
the 2023 Legislative Fly-In in
Washington, D.C. The event
started at the Hyatt Regency
Capitol Hill where we heard
from ASCE leaders.

congressmen, and our knowledgeable lobbyists. On the 2nd, members met face-toface with U.S. Senators and Representatives on the Hill, where they shared everyday



civil engineering experiences, issues briefings prepared by <u>ASCE Government Relations</u> team, and celebrated the successes of the \$1.2 trillion <u>Infrastructures Investment and Jobs Act</u> (IIJA). They capped off the day at a rooftop reception overlooking the Capitol!

To get more involved with our Drive-In and Fly-In programs, contact the St. Louis Government Relations Chair, <u>Dennis Boll</u> or State Advocacy Caption, <u>Alison Graves</u>.



Above: ASCE Missouri members Bayley Brooks (KC), Danny Hotson (KC), Sheryl Gallagher (KC), Senator Eric Schmitt, Otto Lynch (SFG), and Alison Graves.



Above: ASCE STL members Marsia Geldert-Murphey, Alison Graves, & Jordan Pettibone.



Above: ASCE Missouri members meet with Drew Dziedzic, Senator Schmitt's Legislative Director



Above: ASCE Missouri members meet with Kylie Bohman, Senator Hawley's Legislative Correspondent

Engineers Day at the St. Louis Rotary Club

On March 2nd, members of the ASCE St. Louis Section attended the St. Louis Rotary Club's Engineer's Day lunch at the Missouri Athletic Club downtown.

Members included: Jeff Hill, Tony Roth, Chris Toenjes, Jeff Fouse, Shari Cunningham, and John Weiland.



Construction Institute (C-I) Summit 2023 Recap

The ASCE St. Louis Section was pleased to have the opportunity to participate as a supporting sponsor of the 2023 ASCE Construction Institute (CI) Summit, which was held at the Hyatt Regency St. Louis at the Arch from March 1-4. The conference explored challenging issues for our infrastructure, along with innovative strategies in the engineering and construction industries through the technical program, which included sessions that focused on project delivery, temporary works, project case studies, safety, design, and recent technologies.



Above: MoDOT's **Tom Evers** and **Justin Wolf** participate in the conference keynote speech on MoDOT's I-270 Design-Build Project



A highlight of the conference included a tour of the I-270 North Design-Build Project.

MoDOT is modernizing 8 miles of I-270, including replacing 7 interchanges with new innovative designs. This tour was complemented by keynote speakers including MoDOT's Assistant District Engineer, Tom Evers, P.E., Project Director for the I-270 corridor project and Justin Wolf, P.E., who shared information about local projects, and discussion of unique construction techniques.

Left: Section Past-President **John Weiland** and Construction Committee Chair **Anne Werner** served on the CI Summit local planning committee.

March Luncheon

The St. Louis Section hosted Thomas Casey, Chief Geotechnical Engineer, at SCI Engineering for our monthly Lunch N'Learn Series for March 2023. Casey gave a profound presentation over evaluating risks in geotechnical engineering, rightly titled "War Games." With over 30 in attendance, Casey took the audience through geophysical methods included in testing such as ReMi, Seismic Refraction, Electric Resistivity Testing (ERT), and Multichannel Analysis of Surface Waves (MASW).







Call for Section Award Nominations

The Section is seeking nominations for outstanding project or colleagues deserving recognition and prestigious awards at the Annual Awards Dinner in September, showcasing the civil engineering excellence in Greater St. Louis! Self-nominations are also accepted! These prestigious awards are presented at the Annual Awards Dinner in the fall and are a great way to showcase the Civil Engineering Excellence in our Section. Qualified nominations may be forwarded for consideration in the ASCE Region 7 Awards.



ASCE St. Louis will accept nominations for the following awards until June 1st, 2023.

Project of the Year Award

This award is made annually for any engineering project that falls into the general category of civil engineering. The award is given to the owner, lead design engineer and general contractor of the project. Only engineering and construction achievements within the boundaries of the St. Louis Section are eligible. The project must have been



completed and placed into operation within 5 years of the date the nomination is submitted. Basis for the Award is "an engineering project that demonstrates the greatest engineering skills and represents the greatest contribution to civil engineering progress and mankind".



Professional Recognition Award

This award recognizes the importance of professional attainment in the advancement of the science and profession of engineering and is presented annually to a Member of the St. Louis Section who has made substantial contributions to the engineering profession and the St. Louis Section.



Young Engineer Award

This award recognizes professional contributions of younger members to the Society and to the Section and is presented annually to a Member of the Section who is less than 35 years of age.



Outstanding Faculty/Practitioner Award

This award is made annually for any Faculty/Practitioner Advisor who supports student chapters and civil engineering students. The nominee must be active with ASCE student members in the St. Louis Section and a member of ASCE.

Please submit nominations to co-chairs, Ronald Luna and Nichole Witushynsky.

Guidelines and forms for nominations are available on the Section website under "Awards."

Younger Members Group (YMG)

You don't have to be a Younger Member to come to the monthly Happy Hour socials!

Join us as we descend upon St. Louis favorite brew-spots while always meeting new faces and enjoying a drink after the workday!

Right: Happy Hour at The Armory March 9th, 2023





Thu, April 6th Global Brewery @5:30pm Edwardsville, IL

RSVP via Facebook



Thu, May 11th Narwhal's Crafted @5:30pm St. Louis, MO

RSVP via Facebook

Younger Members of ASCE make up about 50% of all members in the Society (ASCE), with the YMG being open to members 35 years or younger as well as others still "young at heart." The group is a stepping-stone for young engineers and recently graduated student members to develop professional relationships and opportunities!

Contact Alicia, for any questions regarding ASCE St. Louis Younger Members Group!





@ASCESTLYMG



Younger Members Chair Alicia Padilla alicia.m.padilla4@gmail.com

Institutes & Technical Groups

Environmental & Water Resources Institute (EWRI) St. Louis Chapter







EWRI of ASCE - St. Louis Chapter

2023 Environmental & Water Resources 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 Missouri Department of Natural Resources Water Protection Programs, and to develop skills useful in the region related hydrological and hydraulic analysis with PCSWMM (by CHI)

PCSWMM license for workshop will be provided to you via email before the event, please make sure to have it <u>installed</u> on your computer for the training session.

Location: Busch Student Center (BSC 253), Saint Louis University

20 N Grand Blvd., St. Louis, MO 63103

Friday, April 14, 2023

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:

\$90 for Members (EWRI, MSPE), \$120 for Non-members, Free for Students

Online Registration

Questions?

Dr. Azadeh Bloorchian
Spring Symposium/Workshop Chair, ASCE-EWRI St. Louis Chapter
azadeh.bloorchian@stantec.com

Geo-Institute (G-I) St. Louis Chapter





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

Case Histories Seminar and Student Projects

DATE AND TIME: Wednesday, April 19, 2023

5:00 pm Registration and networking; Student poster displays

5:30 pm Buffet dinner

6:00 pm Student posters presented

6:30 pm Program begins

Case Histories:

Deep Foundation Testing in Midwest Area, by Elvis Ishimwe, PhD | GRL Engineers, Inc.
 Deep foundations are typically used to transfer large loads for heavy structures to competent soil layers when unfavorable soil and groundwater conditions or liquefiable layers are encountered. The performance of deep foundations mainly depends on their integrity and quality control. In Midwest area, High strain dynamic load tests, static load tests, cross-hole sonic logging and thermal integrity profiling that are commonly performed to evaluate the integrity and the performance of deep foundations. The importance of deep foundation testing and some test results will be discussed using case histories in this presentation.

 MacArthur Bridge West Approach Span replacement over Broadway Avenue, by Allen Smith, PE, SE | Crawford, Murphy & Tilly

A presentation on the replacement of a double track through-truss bridge in downtown St. Louis using accelerated construction. The existing bridge was a 150-foot double track, through-truss over a three-lane city street. The challenge was to remove and replace the existing bridge with minimum track outages in a confined urban area. The new design called for the foundation and substructure to be constructed before the existing bridge superstructure was removed. Helical piles were used as a cost-effective foundation solution that could be used in a low overhead situation. The project was a design build which allowed for the designer and contractor to work together to make the project successful.

Student research posters will be on display during the registration/networking period, and selected students will give brief presentations on their topics.

LOCATION: Engineers Club of St. Louis, 4359 Lindell Boulevard, St. Louis, MO 63108

COST: \$50.00 for ASCE Members; \$60.00 for Non-ASCE Members; \$25.00 for Full Time Students. Registration includes a buffet dinner. Vegetarian meals are available upon request. Attendees will receive up to 2.5 PDH credits.

REGISTRATION: https://rb.gy/faemi2

Advance registration is required for all attendees and payment need to be completed online. ASCE is charged for all reserved meals. Registration deadline is Tuesday, April 11, 2023. No Walk-Ins or payment at door will be accepted. Cancellations must be requested before Tuesday, April 11, and are subject to a 15 percent cancellation fee. Substitutions may be made by email to Xiaomin You at Xiaomin. You@wsp.com.

A limited number of sponsorship opportunities are available for this event. If interested, please contact Zachary at ZFallert@Geosyntec.com.

Structural Engineering Institute (SEI) St. Louis Chapter



Join ASCE St. Louis SEI monthly on Thursday, April 13th at noon. All are welcome to attend! Call-in information: 605-475-5350 (code: 5056289)

For more information, contact <u>Lowell Seaton</u>.

Help us raise awareness for safe driving as the construction season kicks off with National Work Zone Awareness Week (April 17-21)! We're hosting a 5K Run and 1 Mile Fun Run/Walk for all ages! Everyone gets a short sleeve moisture wicking t-shirt. Get out and spread the message to: Work Safe. Drive Safe. Save Lives.



Sign up here!



ACI SIUE Snell Lecture

2ND ANNUAL SIUE ACI STUDENT CHAPTER

"THE ACI SNELL LECTURE"

WEDNESDAY, 12 APRIL 2023 AT NOON (CDT)

This event is being held at SIU-Edwardsville and virtually via Zoom.

The National Veterans Memorial and Museum (NVMM) Columbus, Ohio

Presented by Mike Schneider ACI Fellow and Past President

The National Veterans Memorial and Museum (NVMM) will be a place where the stories of veterans and their families will be told together. The NVMM is not service specific and will represent all branches of the armed forces. NVMM will be the one place where history and current events will combine in one unique structure on the banks of the Scioto River in Columbus, Ohio.

This presentation will cover the planning and construction of the concrete frame for this unique structure. Featured challenges of the project include: Architectural off the Form Concrete, building a concrete frame with no dimensions and building a complex concrete structure with curved walls and sloping voids.

To register go to ACI Missouri Events or https://bit.ly/ACI_Snell2023



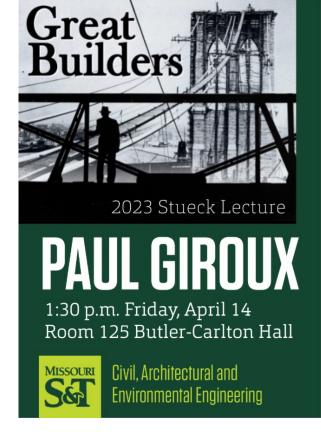
Once registered, you will be provided with an event reminder and the zoom link three days prior to the event.

For questions contact Dr. Anne Werner, awerner@siue.edu





Mike Schneider is a veteran of the concrete industry. He started with Baker Concrete Construction (Monroe, Ohio) as a Project Manager in 1978, and is currently Sr. Vice President/Chief People Officer. He also serves as the company champion of Baker's Incident & Injury Free (IIF) Program and is responsible for safety within Baker on a Global basis. Mike has been a member of ACI since 1981, served as ACI President 2016-2017. In 2006, he was named an ACI Fellow and received the Rogers H. Corbetta Concrete Construction Award in 2011. He's also a member and past President of ASCC (American Society of Concrete Contractors). Mike received the Lifetime Achievement Award from the Spirit of Construction Foundation of Greater Cincinnati in 2012. Mike is involved with the Boy Scouts of America and serves on numerous boards throughout the Cincinnati community.





Veteran builder, award-winning historian, and civil engineering professor, **Paul Giroux**, Dist.M.ASCE, NAC, will share his unique perspective and the timeless lessons of the builders of the "great projects" — the Brooklyn Bridge, the Hoover Dam, the Golden Gate Bridge and the Panama Canal.

Zoom Link: umsystem.zoom.us/ j/94565268678



Missouri LTAP



Student Chapters of the Section



Joel G. Burken, Ph.D., Faculty Advisor <u>linktr.ee/ASCE_MST</u> | <u>ASCE.MST.EDU</u>





Mikayla Elkins, *President*Jalil Kianfar, Ph.D., *Faculty Advisor*

linktr.ee/SLU_ASCE | ASCE SLU Facebook





Brandon Lanning, *President*Ajay Kalra, Ph.D., *Faculty Advisor*

ASCE SIUC Facebook





Magda Carbajal, *President* Alaa Elsisi, Ph.D., *Faculty Advisor*

SIUE.CampusLabs.com/ASCE | ASCE SIUE Facebook





Sotirios Korakis, *President* Sarah Orton, Ph.D., *Faculty Advisor*

Instagram: @MizzouASCE | ASCE Mizzou Facebook







ASCE Missouri S&T Student Chapter



ASCE Missouri S&T Student Chapter has seen quite an uptick in activity and community in Rolla this past semester. We were thrilled to host a variety of Engineering Week events, including hosting students with the Missouri Gateway Green Building Council to tour the S&T Green Roof and learn of building green infrastructure for sustainable cities.

The visit was part of the <u>Green Schools Quest</u> challenge, where students must complete a project related to sustainability. Mentors are volunteers paired with participating classes to help the students identify, investigate and implement a no-to-low-cost sustainability project. Follow our activities and connect with our student activities!

Moving into the future, we are looking forward to hosting St. Louis Section President **Alison Graves** on April 19th for our chapter meeting to remain engaged in Section activities. Our

members and competition teams are getting set for the <u>2023 Mid-America Student Conference</u> hosted at Kansas State, April 14-15. Our <u>Steel Bridge</u> and <u>Concrete Canoe</u> teams are well on their way to a good showing at K-State, looking to group of over 30 students to K-State for the competitions as well as learn how to host a solid competition. ASCE Missouri S&T alongside <u>ASCE Missouri State</u> are excited to be hosting the 2024 competition!

As we look to help build the pipeline of talent needed for our profession. <u>S&T offers a range of summer camps in STEM fields</u> and with engineering themes, ranging from the Jackling Intro to Engineering Camps Robotics and Explosives, and Girls Go Green campus on sustainable engineering. Share the word and look to help get more students excited about engineering and STEM in our community.

All are also invited to the <u>2023 Stueck Distinguished Lecture</u>, live and online on April 14th at 1:30. <u>Paul Giroux</u> is our 2023 lecturer, *Presenting on Great Builders* with an added focus on the Eads Bridge for us. Paul is a Distinguished Member of ASCE and serves on its History and Heritage Committee.

The S&T Engineering online graduate programs also received national acclaim, <u>being ranked</u> #9 in US News for the 2022 rankings in the US! <u>View our full listing of opportunities</u> or visit Missouri Online for all online education opportunities. More offerings are planned for the coming semesters, both with classroom options in and online available globally!

Brynnleigh Weaver, Chapter President, <u>bawmt9@mst.edu</u>
Joel G. Burken, Chapter Advisor and Department Chair, burken@mst.edu



Members of the S&T Concrete Canoe Team - the Miners are ready for competition!#MinerPride

ASCE SIUE Student Chapter



ASCE SIUE Student Chapter is an active chapter with a speaker presentation every other Thursday. The student chapter participated in outreach events and offer members networking with each area of professionals. The speaker's presentation covers all specialized areas and disciplines of civil engineering.

On March 16th, Ryan Hann, PE, and Ashley Belcher from <u>POWER Engineers</u> presented "An Introduction to Transmission Line Engineering." During Engineers Week, ASCE SIUE participated in <u>SciFest Engineering Expo 2023</u> at the Saint Louis Science Center on February 25th with a tabletop activity. Guests enjoyed learning about civil engineering concepts from our

student members and faculty advisor!

Upcoming Speakers

March 16th – Hasan Abuhzaima, a structural engineer from <u>Burns & McDonnell</u> will present "How does Engineering go after Engineering School?"

April 13th – Allen Smith, PE, SE, a bridge engineer from <u>Crawford, Murphy & Tilly (CMT)</u> will present "Bridge Project in Downtown St. Louis and the constructability challenges a Structural Engineer faced."

Upcoming Events

April 7th – ASCE SIUE will tour the facilities at Vee-Jay Cement Contracting Company!

Magda Carbajal, Chapter President, mcarbaj@siue.edu Alaa Elsisi, Chapter Advisor, aelsisi@siue.edu

Employment Opportunities

ASSISTANT PROFESSOR - CIVIL ENGINEERING (ENVIRONMENTAL ENGINEERING)

OPEN RANK, PROFESSOR OF TRANSPORTATION ENGINEERING
- TAYLOR GEOSPATIAL INSTITUTE

SAINT LOUIS UNIVERSITY Posted March 30, 2023



CAMPUS ENGINEER

WASHINGTON UNIVERSITY IN ST. LOUIS Posted March 30, 2023



TRANSPORTATION ENGINEER

PROFESSIONAL LAND SURVEYOR

SENIOR-LEVEL PLUMBING ENGINEER

HORNER & SHIFRIN Posted March 30, 2023



REGIONAL AREA ENGINEER (KANSAS CITY)

MT. CARMEL STABILIZATION GROUP, INC. *Posted March 30, 2023*



CIVIL ENGINEER (WATER RESOURCES)

RDG PLANNING & DESIGN Posted March 30, 2023



TRAFFIC OPERATIONS ENGINEER (SIKESTON, WILLOW SPRINGS)

MISSOURI DEPARTMENT OF TRANSPORTATION Posted March 30, 2023



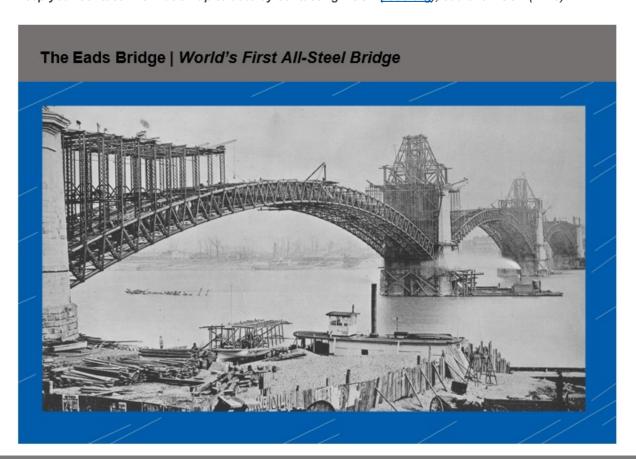


ASCE St. Louis Section

c/o Engineers' Club of St. Louis 4359 Lindell Blvd., St. Louis, MO63108 Affix Stamp Here

Email Section news and events to <u>BrenanP@theEngenuity.com</u>. See the <u>Arch Newsletter Guidelines here</u>.

Keep your contact information up to date by contacting ASCE (asce.org), 800-548-ASCE (2723)











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