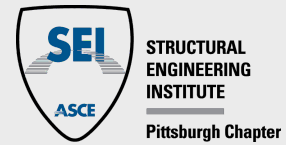


SEI-PGH NEWS



A monthly newsletter brought to you by the Structural Engineering Institute - Pittsburgh Chapter

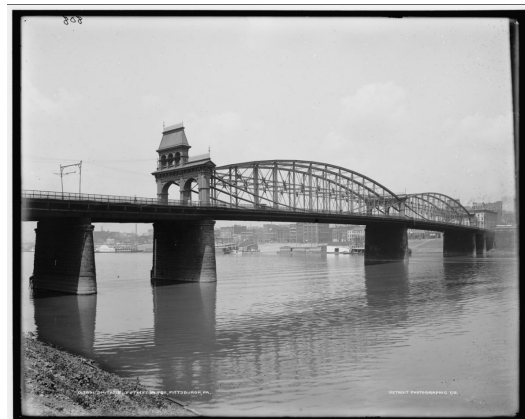
VOL. 1, ISSUE 3

NOVEMBER 8, 2021

In this issue, we test your Pittsburgh bridge history knowledge, and give you some trivia to impress your out-of-town guests during the holidays. The calendar of upcoming events is heating up as the weather cools down, with some in-person conferences scheduled for early 2022. Finally, we introduce a way to learn from the mistakes of other engineers.

The First "Smithfield Street" Bridge

Construction of the current Smithfield Street bridge started in 1881, but this steel lenticular truss landmark is the third bridge to occupy this spot. When was the first bridge built, and what type of bridge was it? (See below for the answer.)



Local/Online Educational Opportunities:

Various Dates

≤12 PDH

[AISC - Fundamentals of Welding and Bolting Night](#)

[School Course](#)

7-8:30 PM, Virtual, \$155-\$900

Tue 11/9

1.0 PDH

[ACI - Changes in One- and Two-Way Shear](#)

1-2 PM, Virtual, \$0-\$39

Tue 11/9 1.5 PDH	<u>NCSEA - The Engineer's Role in Improving Housing Resilience</u> 1-2:30 PM, Virtual, \$250-\$300
Wed 11/10 1.0 PDH	<u>STI - Unordinary Tubular Connections</u> 12-1 PM, Virtual, \$95
Wed 11/10 1.5 PDH	<u>AISC - Challenges for Designers of Crane-Supporting Steel Structures</u> 1:30-3 PM, Virtual, \$55-\$100
Wed 11/10 & Fri 11/12 4.0 PDH	<u>ASCE - Structural-Condition Assessment of Existing Timber Structures</u> 11:30 AM-1:30 PM, Virtual, \$295-\$395
Thu 11/11 1.5 PDH	<u>NCSEA - The Design Approach for Unrestrained and Restrained Earth Retention System</u> 1-2:30 PM, Virtual, \$100-\$200
Tue 11/16 1.5 PDH	<u>NCSEA - Retaining Wall Basics</u> 1-2:30 PM, Virtual, \$250-\$300
Thu 11/18 1.5 PDH	<u>NCSEA - The Design Approach for Deep Soil Mix (DSM) and Soil Nail Walls</u> 1-2:30 PM, Virtual, \$100-\$200
Tue 11/30 1.5 PDH	<u>ASCE - Seismic Screening of Buildings Using ASCE 41-17</u> 11:30-1 PM, Virtual, \$99-\$159
Thu 12/2 PDH TBD	<u>AISC - Case Studies in Resilience and Repair of Major Steel Bridges</u> Time TBD, Virtual, Cost TBD
Tue 12/7 1.0 PDH	<u>ACI - Joints in Slabs-on-Ground - Avoiding Floors That Live in Infamy</u> 1-2 PM, Virtual, \$0-\$39
Tue 12/7 1.5 PDH	<u>NCSEA - MSE Retaining Walls and Global Stability</u> 1-2:30 PM, Virtual, \$250-\$300

Wed 12/8-Fri 12/10

≤18 PDH

[2021 Virtual Accelerated Bridge Construction Conference](#)

9 AM-3 PM, Virtual, \$95-\$145

Thu 12/9

PDH TBD

[AISC - Direct Analysis Method Application and Examples](#)

Time TBD, Virtual, Cost TBD

Out-of-Town Educational Opportunities:

Mon 2/14-Thu 2/17

≤27.5 PDH

[2022 NCSEA Structural Engineering Summit](#)

New York, NY, \$895-\$1295

Wed 3/23-Fri 3/25

PDH TBD

[2022 NASCC: The Steel Conference](#)

Denver, CO, Cost TBD

Sun 3/27-Thu 3/31

PDH TBD

[2022 ACI Concrete Convention](#)

Orlando, FL, Cost TBD

Wed 4/20-Sat 4/23

PDH TBD

[2022 SEI/ASCE Structures Congress](#)

Atlanta, GA, \$305-\$1195



Bridge Quiz Answer

The first bridge at the location of the present day [Smithfield Street Bridge](#) was a covered wooden bridge built in 1818. In the span of about 15 minutes, the 1845 [Great Fire of Pittsburgh](#) destroyed it.

Lessons Learned from Failures

CROSS (Collaborative Reporting for Safer Structures) helps us all to learn from previous failures and near failures to make future structures safer. You can [sign up](#) for email updates from the US branch, predictably named CROSS-US. Note that there is a recently released [video](#) lecture about the 2018 Florida bridge collapse from CROSS-UK (counterparts on the other side of the pond) that is worth a watch.

Don't Fail to Find New SEI Members

For each new ASCE professional member that you refer that ends up joining, you get a **\$50 Amazon.com gift card***. If you are the top domestic recruiter, you would also get a **\$500 grand prize gift card***. So, go out and find those new ASCE members and be sure to tell them to pick SEI as their free Institute selection!

<https://info.asce.org/mgam>, or go to [ASCE.org](https://www.asce.org), select “Get Involved” under “Career & Growth” and scroll down to “Participate in Member-get-a-Member”

* There are some rules, of course. More than I want to retype here, so see the website for more details.

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** No calculators or slide rules were hurt in the making of this newsletter **