

Connecticut Society of Civil Engineers

From the **President's Desk**

Dear CSCE Members,

CSCE hopes you had a wonderful summer, and that this newsletter finds you safe and healthy.

As I am sure many of you may have seen, due to recent guidance from ASCE at a national level, CSCE will not be hosting any in person events for the remainder of 2021. We are sad to not see you all in person this year, but it is important to CSCE that we do what is best to keep our members safe, and hope you all understand!

The good news is, over the past year and a half, CSCE has mastered the virtual lunch meeting, and plans to continue hosting them for the 2021 – 2022 session. Not to mention, we plan on offering NYS PDH's at the majority of them! On September 22nd, we have our first virtual lunch meeting of the year featuring a presentation on "Permeable Reactive Barrier Feasibility for Nitrogen Removal". For the October virtual meeting on the 20th, we are changing it up and having a presentation titled "Engineers, Ethics and the Law", and the Geo-Institute is hosting the Fall Geotechnical Seminar on October 27th and 29th. The November 17th meeting will be presented by the Department of Transportation on the Walk Bridge Program. We also continue to engage the local universities by having them present on their section activities at our monthly meetings.

As of now, the 2022 Multi Regional Leadership Conference still will be hosted in Hartford in January 2022. If your company would like to sponsor this conference, please reach out to Katie Klose <u>kklose@blcompanies.com</u> or visit <u>www.ctmrlc.com</u> for more information.

While we have some of our speakers ironed out for the year, CSCE is still actively looking for speakers for the 2022 meetings. If you are interested in speaking at one of our upcoming meetings, or have any

additional suggestions for events or topics, please feel free to reach out to me at <u>Brianna.maljanian@gmail.com</u>.

I am looking forward to being your President for the 2021-2022 session of CSCE and I hope to (virtually) see you all soon!

Sincerely,

Brianna Maljanian, P.E., M. ASCE

From the Editor

Welcome back to the monthly CSCE Newsletter. Starting this September, we look to continue the monthly newsletter. The format and features will largely stay the same including "Project Spotlights/Excellence in Civil Engineering". We will continue to highlight some of the outstanding civil engineers working in our state as well as interesting projects of all shapes and sizes.

For the September newsletter we will be highlighting John Dunham, P.E. of The Connecticut Department of Transportation, winner of the ASCE 2021 Roebling Award, and the Rochambeau Bridge reconstruction project in Southbury/Newtown, CT. Do you have a project you would like to have featured in the newsletter? Reach out to me at <u>tparker@hwlochner.com</u>; we would love to feature your project.

Tyler Parker, P.E., M.ASCE

Newsletter Editor

Upcoming Events

September 22 - Virtual Lunch Meeting – 12-1:30 p.m.

- Topic: Permeable Reactive Barrier Feasibility for Nitrogen Removal
- Speaker: Julianne Marrion, AECOM
- Co-Sponsors: CSCE Water Resources Committee / ASCE Student Chapter at the University of New Haven
- Registration Link: 092221 Virtual Lunch Meeting | Connecticut Society of Civil Engineers Section (asce.org)

October 1 - Deadline for ACE Award Applications Extended from July 31

October 20 - Virtual Lunch Meeting - 12-1:30 p.m.

- Topic: Engineers, Ethics and the Law
- Speaker: Frederick E. Hedberg, Partner at Robinson+Cole

• Co-Sponsors: Younger Members Group and ASCE Student Chapter at CCSU (not confirmed yet)

October 22 & 29 - Virtual Geotechnical Seminar

November 17 - Virtual Lunch Meeting - 12-1:30 p.m.

- Topic: Walk Bridge
- Speaker: Co-Sponsors: CT Chapter of the ASCE Construction Institute

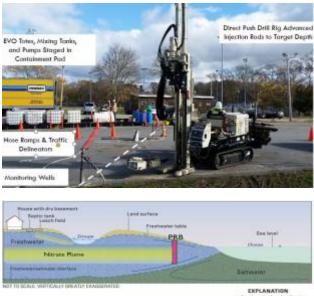
December 15 - Virtual Lunch Meeting - 12-1:30 p.m.

• Sponsor: CT Valley Chapter of the ASCE Geo-Institute

09-22-2021 Virtual Lunch Meeting

Topic: Permeable Reactive Barrier Feasibility for Nitrogen Removal

Meeting Co-Sponsors: CSCE Water Resources Committee and the ASCE Student Chapter at the University of New Haven





The Town of Orleans, Massachusetts is one of several Cape Cod communities that must reduce groundwater nitrate loading. Permeable reactive barriers (PRBs) are a non-traditional wastewater treatment technology with the potential to reduce nitrate by treating groundwater biologically upgradient of sensitive surface waters. A demonstration PRB was installed by injecting an emulsified vegetable oil (EVO) substrate along a transect line that cuts across a plume of nitrate. The EVO volume used was based on the mass flux of nitrate, site specific groundwater chemistry, and establishing a PRB with persistence of at minimum five to seven years.

The demonstration project was implemented in November 2016 and modified in June 2018. Data collected over a five year period indicate that the PRB is reducing groundwater nitrogen

concentrations. Information gained through the demonstration is currently being utilized in full-scale design and to predict nitrogen removal efficiency for cost effectively achieving water quality goals. The team compared life cycle cost estimates for PRBs to that of traditional sewering in key are as identified and is currently conducting additional geological investigations to inform full-scale PRB design.

Attendees will have the opportunity to earn 1 New York State Professional Development Hour (NYS PDH) at this event.

Speaker(s)

Julianne Marrion, P.E. - Ms. Marrion is a Project Engineer at AECOM with nine years of experience working on a variety of water, wastewater, chemical and environmental engineering projects. Her experience includes municipal drinking water, municipal and industrial wastewater, remediation, air emissions quantification and control, stormwater, and more. She has been working on the PRB demonstration project in Orleans since late 2015. She is a registered professional engineer and has a B.S. in Chemical Engineering from Worcester Polytechnic Institute.

Important Times

12:00 - 1:30 p.m. - This meeting will be virtual. A link will be sent to registrants prior to the meeting.

Registration

View the Presentation - No NYS PDH: Free

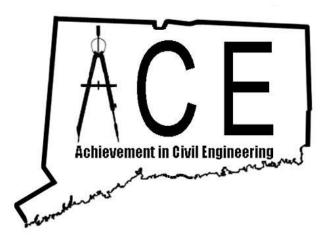
CSCE Members who want to earn 1 NYS PDH: \$20

Non CSCE Members who want to earn 1 NYS PDH: \$30

14th Annual Achievement in Civil Engineering (ACE) Awards

CSCE would like to honor the design and construction achievements of Connecticut Civil Engineers through it's achievement in Civil Engineering (ACE) Awards. As such, CSCE invites engineering firms to nominate projects that were planned, designed, or constructed substantially between January 1, 2020 and December 31, 2020 in Connecticut. The Awards will commend projects in which significant engineering expertise or innovation was exhibited by Connecticut Engineers and especially CSCE members.

- Deadline for Application Moved to October 1, 2021
- Applications available at <u>www.csce.org</u>.



ASCE Multi-Region Leadership Conference (MRLC) 2022

The American Society of Civil Engineers' (ASCE) Connecticut Section Younger Member Group (YMG) is proud to announce that the 2022 ASCE Multi-Region Leadership Conference (MRLC) will be held in Hartford, Connecticut at the Hartford Marriott Downtown/Connecticut Convention Center on January 27-29. We are excited to host the MRLC in Connecticut for the first time in 2022. While the conference won't take place for another 5 months, we are already planning great things for Hartford! We're looking for commitments from local firms and organizations to sponsor the conference. To show our appreciation, contributing organizations will be acknowledged as described for the associated levels listed below. Please note there is limited availability for the Platinum and Gold Level Sponsorships.

Each year, the MRLC attracts over 500 engineering professionals, students, and educators from 24 eastern states, 5 eastern Canadian Provinces, and Puerto Rico. The focus of this conference is to mold engineers into leaders of their industry. This conference provides leadership training, professional development, and networking opportunities in addition to technical sessions. Speakers and panelists are typically society, community, industry, or local political leaders providing unique perspectives on leadership and the future of the civil engineering profession.

Please consider supporting this conference at one of the following suggested sponsorship levels.

To confirm your sponsorship level, please visit our website: www.ctmrlc.com

Please email any questions to csceymg@gmail.com



YOUNGER MEMBER GROUP

Platinum Level (Limited Availability)

\$5,000

Sponsor one of the three nighttime events: Thursday Social, Friday Social, or Saturday Awards Dinner (Sponsor Social Selection based on order of sponsorship)

Company logo on all attendee gift bags

Gold Level (Limited Availability)

\$2,500

Logo on all conference lanyards

Free one page advertisement in CSCE Newsletter

Listed as a sponsor on networking event signage

All Silver Level benefits

\$1,250

Opportunity to provide company promo items for attendee gift bags

Silver Level

One free open position listing in CSCE

Newsletter

Personalized "Thank You" post on social media/ website platforms

All Bronze Level benefits

Bronze Level \$500

Listed as a sponsor on conference breakout room posters, slideshows, and mobile

Project Spotlight



ROCHAMBEAU BRIDGE RECONSTRUCTION PROJECT

Owner: Connecticut Department of Transportation

Designer: WSP USA

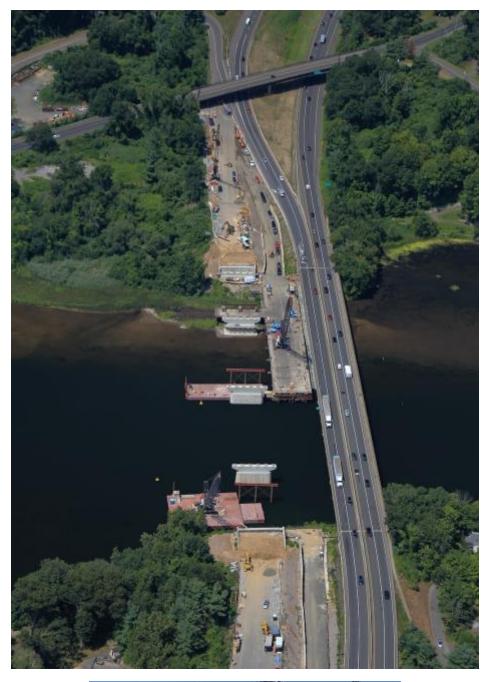
Contractor: The Middlesex Corporation

CE&I: H.W. Lochner

The Connecticut Department of Transportation began construction activities for the rehabilitation of the Rochambeau Bridge in June 2020 and is scheduled to be completed by December 23, 2023. The crossing was dedicated in 1954 to the French General Rochambeau by the Connecticut sons of the American Revolution. At the location of the bridge, Le Comte De Rochambeau crossed the Housatonic river leading the French army enroute to Victory at Yorktown, the last major land battle of the American revolution.

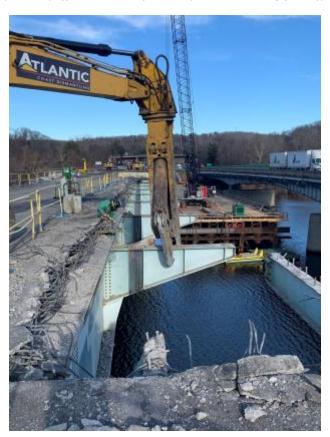
The project consists of the rehabilitation of 2 Bridges which carry I-84 over the Housatonic River in Southbury/Newtown, CT. The original Eastbound Structure was built in 1954 and the Westbound structure was built in 1977. After a condition assessment of the existing structure, it was found that the Concrete decks were deteriorating. This along with the CT DOT's plan to phase out bridges with nonredundant girder-floor beam-stringer framing, solidified the need for a complete superstructure replacement. The plan was to modify the existing substructure to accept the new girders while minimizing any increased bearing pressures on the pile supported piers. New pier caps were constructed with a width of 5' atop the existing 10' wide piers to reduce the deadload.

The project is currently in stage 2 of construction and the first major traffic shift has placed both directions of I-84 traffic on I-84 eastbound utilizing crossovers built in the median of I-84. Steel is currently being erected for the I-84 westbound bridge and is scheduled to be open by then of this construction season. Once the new I-84 westbound bridge is complete, traffic will be shifted onto the new bridge while the I-84 eastbound bridge is reconstructed, with temporary crossovers built in a similar manner, in the median of I-84. Work in the river takes place off of a pile support trestle and barges. Please visit https://www.rochambeaubridge.com/ for project updates and additional construction photos.





https://sway.office.com/StHOPjY0TtTmYyzb#content=8VdqzfwO4sjya7



Excellence in Civil Engineering

CSCE would like to congratulate **John S. Dunham**, P.E., M.ASCE, for winning the ASCE 2021 **Roebling Award**. The Roebling Award recognizes and honors an individual who has made an outstanding contribution to the advancement of construction engineering.

Dunham is a leader who is providing the profession with better ways to address the issues of project schedules, safety, cost, and quality. He has correspondingly demonstrated himself as an outstanding mentor of less experienced engineers. He was the leader/team builder who brought the I-95 New Haven Harbor Crossing Corridor Improvement Program (\$2.0 billion) to a successful conclusion. The Program included the Pearl Harbor Memorial Bridge, commonly referred to as the Q Bridge. This extradosed signature bridge was the first of its kind constructed in the United States. It features a 1,000-foot main span cable-supported structure. The bridge was the Grand Prize winner of AASHTO's 2016 America's Transportation Awards. The bridge was also a finalist for the ASCE Outstanding Civil Engineering Achievement Award in 2017.





Employment Opportunities



- TPA Design Group
- Civil Engineer

• Job Posted: July 22, 2021

TPA Design Group is a multi-disciplinary consulting firm with over 75 years of experience in providing site planning, engineering, and landscape architecture services to clients throughout Connecticut and New England.

We are seeking a Connecticut-licensed PE with at least five (5) years of practical experience including hydrology, storm drainage and sanitary sewer design, utility layout, site and roadway layout, grading and erosion control. Candidates with EIT status and seeking PE certification may also be considered.

The ideal candidate will demonstrate competency with basic professional skills including ability to communicate verbally and in writing with colleagues, allied disciplines, clients, and the public. Proficiency with AutoCAD Civil 3D and Hydrologic/Hydraulic modeling software is required. Candidates should have prior experience and good working knowledge of local, state, and federal permit processes including presentations before municipal and/or regulatory review boards.

Salaries and benefits are open and will be negotiated based upon applicant's experience. This position is for full-time employment and includes health, dental, and other benefits.

TPA Design Group is an Equal Opportunity Employer. Please send a cover letter and resume in confidence to: TPA Design Group, 85 Willow Street, New Haven, CT 06511. For more information, please contact David Sacco, P.E. – **dsacco@tpadesigngroup.com**



- GNCB
- Sr. Geotech Engineer
- Job Posted: July 22, 2021

GNCB seeks Sr. Geotech Engineer to serve as Project Manager. Responsibilities: Manage projects including all aspects of field & lab investigations, project design, & construction administration; prepare budgets, proposals, reports & contracts; build and maintain Client Relationships. Minimum Quals: B.S. or M.S. in Civil Engineering with geotech concentration; P.E. in Connecticut; 8 to 12 years' experience showing proficiency in job responsibilities & knowledge of local subsurface conditions.



• Hardesty & Hanover

- Civil Engineers
- Job Posted: June 22, 2021

Hardesty & Hanover is currently seeking engineers to join our expanding civil engineering design group in New England. Our New Haven office seeks experienced Civil Engineers with expertise in roadway, drainage, traffic, and highway safety design. Applicants should be able to perform design tasks, lead small groups, communicate effectively, and collaborate to meet objectives. Our firm offers a close -knit employee-based culture and opportunities for professional growth and leadership. Please visit <u>https://www.hardestyhanover.com/current-openings/</u>for further details.

Conlon Engineering, LLC



- Conlon Engineering, LLC
- Structural Engineer
- Job Posted: June 21, 2021

Conlon Engineering, a growing structural design firm in Brookfield, CT is seeking a structural engineer with 0-3 years of experience doing design work and calculations. We are looking for a smart, hardworking engineer who wants to be part of a profitable firm that is set up for sustainable growth. Visit our website at <u>conlonengineering.com</u> and email resumes to **office@conlonengineering.com**



- Down To Earth Consulting, LLC
- Geotechnical Senior Project Engineer
- Job Posted: June 21, 2021

Down To Earth Consulting is seeking a Senior Project Engineer to join our geotechnical group in Naugatuck, CT. The successful candidate should have a BS degree from an ABET accredited civil engineering program, 5 to 10 years of experience, and be a licensed PE. Down To Earth Consulting is an Affirmative Action/Equal Opportunity Employer. To learn more about this opportunity, please submit your resume to **ray@downtoearthconsulting.com**.



Civil • Environmental • Land Surveying

- Pereira Engineering
- Civil Engineer, Land Surveyors & Survey Technicians
- Job Posted: June 21, 2021

Pereira Engineering is an established Civil/Environmental/Land Surveying firm located in Shelton, CT. PE is seeking a Civil Engineer as well as Land Surveyors and Survey Technicians (at all levels of experience) to expand our Survey Department.

PE offers a very competitive salary and benefits. Please email resume to: joe.pereira@pereiraeng.com



- Siefert Associates, LLC
- Assistant Engineer (EIT)
- Job Posted: September 11, 2020

Siefert Associates, LLC is seeking an Assistant Engineer (EIT). Position participates in all phases of the design process, including assessing performance of engineering systems, and determining innovative solutions to challenging construction problems.

Project sites are in CT, NY & NJ. Self-motivated, proficiency in MathCAD/AutoCAD preferred; previous construction experience is helpful. B.S./B.E. in Civil Engineering. EIT certified or in pursuit. 0-2 yrs experience.



- Siefert Associates, LLC
- Assistant Geotechnical Engineer
- Job Posted: September 11, 2020

Siefert Associates, LLC is seeking an Asst. Geotechnical Engineer. Prepare calcs, drawings, engineering reports, inspect asbuilt conditions, monitor subsurface exploration, soil testing. Projects include SOE for heavy construction, design & installation of waterfront structures, utility protection, foundations,

analyses for slope stability & equipment surcharge, methods of soil improvement. EIT certified or in pursuit. 0-2 yrs experience. MS preferred.



- Siefert Associates, LLC
- Structural Project Engineer
- Job Posted: September 11, 2020

Siefert Associates, LLC is seeking a Structural Project Engineer with 5-10 yrs experience in Construction Engineering. Will prepare calcs, design drawings, perform site visits, review lower level engineers' work, manage jobs, communicate with clients, attend client events. Project types include design of temporary support structures, construction loading on structures, engineered lift plans, demolition/erection plans, rigging design and crane layout plans.



- Siefert Associates, LLC
- Senior Project Engineer
- Job Posted: September 11, 2020

Siefert Associates, LLC is seeking a Structural Engineer for a highly responsible Senior Project Engineer Position. Senior Project Engineer will serve in a lead technical role on bridge design projects & perform complex structural analysis & design for all structural aspects of highway & rail bridge projects. Responsible for the Project Management of large-scale multifaceted engineering projects, often on advanced deadlines, and will be responsible for the primary Supervision of mid-level engineers. Design Build Experience. 10+ year experiences, MS preferred.



Special Offer on ASCE Webinars for Connecticut Section Members

Did you know that as a Connecticut Section member you get a discount on ASCE National Webinars? Plus some of the registration fee comes back to help fund other Section activities!

Memberships

ASCE and CSCE Membership

ASCE members come from all disciplines of civil engineering, from all types of environments, and from all over the world. With benefits geared to meet the high standards of professionalism, ASCE strives to cater to each member's needs.

Membership in CSCE is granted to ASCE members upon receipt of Connecticut Section dues. Connecticut Section dues are \$30 per year. Please include your section dues with your national membership renewal. We can accept mid-year memberships. Please contact our <u>Membership Committee Chair</u> for more information about CSCE and ASCE. To join the Connecticut section of ASCE, please go to the ASCE website (<u>www.asce.org</u>) and click on Join at the top of the page.

Why join CSCE? Please click <u>here</u> for our PowerPoint Presentation from a Professional Issues Seminar on Tuesday, April 8, 2008 about the Advantages to Joining Professional Associations

Transferring Section Membership

Have you recently moved to Connecticut, or are you about to? If you are a current ASCE and local Section member you can transfer your Section membership to CSCE. Once you move to Connecticut, you may go online to <u>www.asce.org/myprofile and</u> log in change your address information. This will initiate the transfer from your old Section to the Connecticut Section. If you encounter any trouble w hile online, you can also contact the ASCE Records Department via email at <u>memrec@asce.org</u> or (703) 295-6300 to provide you new address information and the transfer can be handled that way as well.

If you are moving out of Connecticut, you can follow the same procedure to transfer from CSCE to you new local Section. We are sorry to see you go, but hope that you continue to be active in ASCE and your new local Section. For information about the local Section for where you are moving, you can visit the ASCE website @: http://www.asce.org/Regions-Sections-Branches/

Advancing your Membership Grade

Do you need to advance your membership grade? Are you a recent graduate? Did you get your P.E. license? ASCE and CSCE encourage you to advance your membership grade as your professional career progresses. Information and instructions are available on the <u>ASCE website</u>

Unemployed?

ASCE National has a program to waive dues of unemployed members. For more information,

Write to:

ASCE Attn: Member Services Dept. 1801 Alexander Bell Drive Reston, VA 20191-4382

Or Call : Toll free: 1-800-548-ASCE Direct: 703-295-6169 Fax: 703-295-6335

About **CSCE**

The CSCE is the result of a merger of two organizations that occurred 30 years ago. The Connecticut Society of Civil Engineers was founded in 1884, while the Connecticut Section of the American Society of Civil Engineers was founded in 1919. In 1958, the Section had 523 members. In 1955 (the nearest comparable year for reliable numbers), the Society had 1,033 members. The two organizations met separately until they merged in 1981, by mutual vote of membership, to become the Connecticut Society of Civil Engineers Section of American Society of Civil Engineers or CSCE.

Civil Engineers design and build our increasingly complex infrastructure; work with government officials, citizens and businesses to promote better infrastructure maintenance and renewal; and build commerce in Connecticut and throughout the World. We serve diverse industries including government, consulting, construction, academics and manufacturing and we work in a variety of disciplines including governmental, structures, transportation, and water resources.

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Contact Us

The 2020-2021 CSCE Executive Board thanks you for taking the time to read this newsletter. Should you have any questions, comments, or concerns - feel free to contact <u>one of our members</u>.