SHARE:

Join Our Email List

Volume 12 | January 2021 View as Webpage





VTASCE Monthly News and Updates

Good afternoon members of the Vermont Section of ASCE and happy New Year! Due to the COVID-19 pandemic, all in-person events will be suspended until further notice. However, there will be exciting virtual events in the coming months so stay tuned! We will be advertising ASCE events as well as events from other professional organizations.

Do you have a friend or colleague who has been on the fence about joining ASCE, but has yet to? Now is the perfect time. Several great benefits of becoming a member include:

- 10 FREE PDH's
- Great networking opportunities
- Up to date information about government relations with the engineering field
- And much more

Toys for Tots Update:

Due to your collective efforts and the assistance and strong sense of community from local establishments, we filled more than SIX donation boxes that were delivered Saturday (12/19) to be distributed to children in need in Vermont.

Huge shout out to Stantec for filling a whole box at their office, McGillicuddy's for nearly filling FOUR boxes at their three Chittenden County locations (not to mention that the owner matched all donations and dropped off a truckload himself), and The Stone Corral for also nearly filling a whole box.

Thank you all!



Visit our Website Join Now Contact Us

President's Message

Message to all ASCE Vermont Members! Are you working on an interesting project that you would like to present to the ASCE community?

We are reaching out to our members for future lunch and learn webinar topics. This is a great opportunity for you and your company to showcase the fun or interesting projects you've been working on in the state of Vermont. Topics must be technical in nature so that PDH's can be awarded for attendance.

If you have an idea for a topic, please reach out to me, Tyler Barnard at tylerb@engineeringventures.com



Email Tyler

Project Spotlight

BTV TAXIWAY 'G'

On December 12, 2020, the Burlington International Airport (BTV) opened a 9,000 ft long Taxiway that parallels the entire length of BTV's runway. BTV worked with Stantec Consulting Services to design Taxiway Golf. It has been in design, planning and construction for over 10 years and completed in four phases of construction. The project includes layout, grading, pavement design, line striping, signage, utilities, lighting, drainage, stormwater treatment, blast deflectors, retaining walls, detailed phasing, erosion/sediment control and aircraft navigation aid equipment relocations.

A taxiway is used for an airplane to safely maneuver the airfield to access the runway for takeoff or access the gates at the terminal after landing. Having a parallel taxiway provides more flexibility for pilots and an increase in efficiency for flights arriving and departing from Vermont's largest commercial airport.

A few of the major components of the project are discussed briefly below:

- Construction Phasing Working on an active airfield requires very detailed phasing to ensure construction does not impact airport operations so flights can continue safely without major interruptions. Stantec worked with the FAA, BTV, Air Traffic Control and airlines to come up with a detailed plan that is known as a Construction Safety and Phasing Plan (CSPP). This plan dictates the areas where a contractor can work, access locations, duration, required safety measures and aircraft detours. While there were four major phases of construction on this project, there was as many as 40 discrete phases that were carefully designed.
- Stormwater Treatment With the vast amount of pavement associated with this project, stormwater runoff had to be considered to the full extent of the State's treatment requirements including designing a system that will detain the 100-year design storm. This project uses an innovative underground infiltration solution known as StormTrap. Stantec designed two systems. The larger of the two systems is the length of a football field and sized to infiltrate 1.1 Million Gallons of Stormwater runoff. The smaller system is 75' by 48' and sized to infiltrate the entire 100-year storm event.



• Taxiway Layout and Design—The geometry for the parallel taxiway, seven perpendicular taxiways and the crosswind runway intersection had to be carefully considered for the design aircraft at BTV. The design group considered the future use of larger aircraft at BTV including those within design group IV such as a Boeing 757, Boeing 767 or Airbus A-300. After designing per FAA standards, turning movement models were generated for the design aircraft to ensure the proposed project could be safely navigated by pilots.

Upcoming ASCE Events

Burlington Bike Path Project January Virtual Webinar

There will be a webinar this <u>Thursday</u>, <u>January 14th</u>, <u>from 12pm to 1pm</u> on the Burlington Bike Path project featuring Kurt Muller and Evan Detrick of VHB. The focus of the virtual webinar will be on the



environmental piece and contaminated soil management. Register using the button below to earn a free PDH!

Unfortunately, the virtual webinar on the North Hero - Grand Isle Drawbridge project will no longer be occurring.

Register here

Other Upcoming Events

VSPE Virtual Banquet - Engineer of the Year and Young Engineer of the Year



The date for this year's Vermont Society of Professional Engineer's (VSPE) virtual banquet will be <u>Thursday</u>, <u>February 25th from 4-6pm</u>. Engineer of the Year (EOY) and Young Engineer of the Year (YEOY) will be announced at the event along with a Keynote Presentation from representatives of the Generator Marketplace in Burlington, VT. Stay tuned for registration and information on other events!



Norwich University Laboratory Renovation

During e-week 2021, Norwich University Construction Engineering will be opening a new \$1.5 million laboratory renovation. This improvement was entirely constructed under COVID-19 Vermont state protocols. This renovation was made possible through a generous gift by Dr. Donald M. Wallace, a 53-year professor of Norwich engineering. Improvements are specifically focused to allow increased student experiential learning and hands on testing of soils and construction materials. Additionally, an outdoor concrete pouring facility was constructed, allowing competitive head to head student concrete mixing, testing and pouring. We are looking forward to our ribbon cutting during e-week 2021!

Clean Water Lecture: In Action! Stormwater 3-Acre General Permit

This past Thursday, January 7th, the State of Vermont provided an online lecture as a part of their Clean Water Lecture Series to explain the new Stormwater 3-Acre General Permit and work with the community to answer their questions and concerns. If you would like to see a recording of this lecture or sign up for the Clean Water Newsletter, please visit the links below!

YouTube channel

Clean Water Newsletter

University of Vermont Advanced Engineering Courses Online

The University of Vermont is now offering several advanced engineering courses in-person and online. If the class times don't work with your schedule, class recordings will be available for later viewing allowing you to still take the courses. You may find these courses of interest:



- CE 395 COVID19 Wastewater Epidemiology (in-person or remote)
- CE 243 Transportation Demand Modeling (in-person only)
- CE 295 Engineering Project Management (in-person only)
- ENGR 112 Building Information Modeling (remote)
- ENGR 114 Advanced 3D Drafting (remote)
- ENGR 195 Advanced 3D Civil Engineering Drafting (remote)

Search for classes here

Job Postings

There are no job postings currently.

If you're interested in posting a career opportunity here please fill out this form or reach out our treasurer Matt Estabrooks. These newsletters go out to over 350 of our Vermont ASCE members made up of practicing civil engineers.

10 Free PDH's for ASCE Members

Login to enroll in your free on-demand webinars and earn PDHs for each one you successfully complete. Choose up to 10 webinars from the 90 on-demand webinars. Each one is a 1-hour webinar worth 1 PDH. That's 10 free PDHs from our comprehensive continuing education library – just for being a member!



Click here for more information!

Thanks to our 2020 sponsors















Click the logo to visit the company website

If you're interested in being a sponsor its not too late, please fill out this form or reach out our treasurer Matt Estabrooks