

## From sthe Editor:

It's November! We hope everyone had a great Halloween and is pacing the candy intake. The section had a great tour and happy hour last month and are looking forward to this month's meeting, a presentation about the Turnpike Exit 45, and events leading up to the 71<sup>st</sup> Annual Transportation Conference!

If you are interested in getting more involved or learning about the Maine Section of ASCE, please don't hesitate to reach out or come to a meeting!

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We hope to see you soon!

## Heather

Maine Section ASCE - Save the Date(s) November 2022						
6	7	8	9	10	11	12
13	14	15 Monthly Meeting	16	17 WTS Meeting	18	19
20	21	22	23	24 Thanksgiving	25	26
27	28	29	30	DEC 1 Transportation Conference	DEC 2	DEC 3





## **President's Message**

Greetings to all!

I hope October treated everyone well. Lots of beautiful foliage and decent weather to enjoy. I hope everyone has been able to do some pumpkin carvin'! Feel free to share photos of your Halloween costumes for fun. My son and I had some fun carving this year!





As a part of our

K-12 outreach program, Nate Powelson and I, presented to the STEM program at Biddeford Middle School. We had 80 kids in attendance. It was a great experience to be able to inspire them through discussions about what we do for a living and a showing of the DreamBig video. The kids were wearing pink for cancer awareness.

The MBTA PDH tour was a big success. Folks spent the day touring the on goings in downtown Biddeford including the new Lincoln Hotel (I highly encourage a visit). It was a pretty funny experience as a bunch of engineers briefly swarmed the hotel. We also toured parts of Portland near the end of the day. Many thanks to all the hosts who helped and hosted that experience.

Coming up on November 15th, we will have our

monthly meeting @ Harraseeket Inn in Freeport. Networking will begin at 4:30PM, followed by dinner at 5:30PM, and the presentation starting at 6PM. The presentation will be given by Mr. Ray Hanf of HNTB. Ray will be presenting on the work at Exit 45. Please register by November 11<sup>th</sup>!

Thanks, **Don LeBlanc, P.E.** Maine Section ASCE President

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Maine Section November 2022 Newsletter



At the Exit 45 South Portland (Maine Mall Road) Interchange there were multiple deficiencies that were in need correction. First, a functionally obsolete bridge serving the interchange; second, an outdated and in disrepair toll plaza; and third, poor interchange highway geometry resulting in multiple locations being defined as High Crash Locations (HCLs). The Maine Turnpike Authority (MTA) evaluated many alternatives to address these deficiencies, while maintaining traffic and providing the least environmental impacts. The resulting preferred solution was an interchange reconfiguration from the current trumpet style interchange to a diamond interchange.

As is common in southern Maine, the project area is underlain with soft soils (Presumpscot Clays) that are extremely challenging to construct on. The interchange reconfiguration required realignment of multiple ramps, creating new embankments over soils that were previously undisturbed. As a result of these embankments, a preload embankment contract utilizing prefabricated vertical drains (wick drains) and surcharge was required to mitigate stability and long-term settlement concerns. The preload contract was a multi-year, multi-stage

# Maine Section ASCE Monthly Meeting Maine Turnpike EXIT 45 Interchange Reconfiguration

Earn 1 PDH! – Register HERE

November 15<sup>th</sup>, 2022 Harraseeket Inn 162 Main St, Freeport Maine Schedule: 4:30 – 5:30 Registration/Networking 5:30 – 6:00 Dinner 6:00 – 6:45 Presentation followed by Q&A Cost: ASCE Members - \$40 Non-ASCE Members - \$45 UMaine Students/Life Members – Free

Menu Option #1 – Grilled Salmon Menu Option #2 – Vegetable Risotto Menu Option #3 – Cast Iron Chicken Breast Menu Option #4 – Beef Short Rib

embankment construction to safely construct the new embankments. Concurrent to the preload contract an additional construction contract was required to relocate a portion of Central Maine Powers (CMP) transmission lines that cross within the project area. The MTA administered this contract to allow an expedited schedule to meet the MTAs required time constraints. Finally the third construction contract finished the build out of the interchange, which included construction of two new toll plazas and their respective utility buildings, installation of two exit toll points including concrete roadways, construction of a new interchange bridge, installation of geofoam lightweight fill adjacent to the bridge abutment, installation of a new traffic signal system serving the southbound ramps, installation of concrete median barrier, stormwater treatment devices, significant tonnage of hot mix asphalt, highway lighting, highway signage, and demolition of the existing bridge and toll plaza.

The presentation will highlight the technical challenges faced during design and construction that ultimately were all overcome to deliver a highly successful project for the MTA and ultimately the state of Maine.

**Ray Hanf** is a Senior Project Manager with HNTB Corporation, having been with the firm for the past 15 years. A Maine native and University of Maine grad, Ray has focused much of his career on transportation projects here in the state. Ray's project have been a mix large complex projects (similar to the MTA's Exit 45 or the MaineDOT's Route 3 Highway Reconstruction) to small culvert replacement or paving contracts, and everything in between. Ray is currently serving as Project Manager for the MTA Gorham Connector project. In addition to his project portfolio, Ray has been active member of ACEC currently serving on the Highway Subcommittee, aimed at assisting the MaineDOT Highway Program with initiatives that improve the design consistency within the program, such as the ADA Training or the upcoming Lessons Learned/Best Practices Training.

Please register online or email by November 11th, contact Nate Strout - Email: Nate.Strout@swcole.com

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Maine Section November 2022 Newsletter



# 71<sup>st</sup> MAINE TRANSPORTATION CONFERENCE | DECEMBER 1, 2022 WHERE CHALLENGES MEET OPPORTUNITY

*Maine's unique transportation needs* 

Presented by



Please join us as we gather with regional and national leaders in the transportation field for the 71st Maine Transportation Conference, Thursday, December 1, 2022.

The Maine Transportation Conference will feature a full day of technical and policy track discussions examining a range of topics from federal infrastructure

funding trends and workforce challenges to the advances in electrification and climate technologies. There also will be plenty of opportunities to network, along with the popular Student Paper and Bridge Breaking competitions.

**REGISTER HERE!** 





Come watch your Maine Mariners take on the visiting Adirondack Thunder and catch up with your fellow Maine Section ASCE members! It's also the annual Teddy Bear Toss game so bring a stuffed animal to toss on the ice and donate to charity!

# 04 December 3:00 PM Start

At the Cross Insurance Arena 1 Civic Center Square, Portland, ME 04101

# Please RSVP by November 9th

E-mail Benjamin Smith at benjamin.smith@tylin.com





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### In Memoriam

The Maine Section of ASCE sends our thoughts and support to CPM Constructors and their families. To honor the lives of CPM Constructors founder and CEO Eldon Morrison and President Paul Koziell we will be making donations to the AGC Education Foundation and MBTA Educational Foundation. We are thankful for their time spent being active in our professional organizations and growing this industry in Maine. *Photos and obituaries taken from the Press Herald* 



https://www.pressherald.com/2022/10/16/obituaryeldon-morrison/



https://www.pressherald.com/2022/10/16/obituarypaul-koziell/

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Looking for Employment?



Salary range is \$64,000 to \$88,000 and is based upon experience. The City of Auburn has an excellent fringe benefit package

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## We're Hiring, Project Engineer Wanted!

Be a part of the team working to maintain the infrastructure of the city and to support, protect, and enrich the lives of the citizens we serve. This is a job with a lot of great rewards. It offers outstanding health benefits for both you and your family at low costs; retirement with an opportunity for a pension plan or 401 and up to 3 weeks paid time off in the first year.

Requirements include a bachelor's degree in civil engineering, an Engineer-in-training certificate and 2 years of experience or an equivalent combination of education and/or experience. Computer literacy with Microsoft products, CAD/GIS software and a valid Class C Maine driver's license are necessary. Interested applicants should send a cover letter, resume, salary requirements and list of 3 references to Christine Mumau, Human Resources Department, 60 Court Street, Auburn, ME 04210, Tel. 207-333-6601 ext 1414, e-mail address

<u>cmumau@auburnmaine.gov</u>



## Join the Main-Land Family!!



Main-Land is a fun loving, close knit, consulting firm that has a small company feel but has the horsepower to tackle large scale private and public sector site civil engineering and development, land planning, water and wastewater utilities, road and infrastructure projects, and a whole lot more. We promote work/life balance and lots of fun while working hard. Main-Land is a Maine Best Places to Work award winner and company culture is no accident!

Main-Land is hiring for the following positions for our Falmouth and Livermore Falls office locations:

- Staff Engineer
- Project Engineer
- Senior Engineer

Please go to www.main-landdci.com/join-our-family/ or email Angela at angela@main-landdci.com for more information and to apply today!

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(207) 897-6752 69 Main St, PO Box Q Livermore Falls

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### Advertise with Maine ASCE

Would you like to advertise in the Informant? Take a look at our rates below, and contact the editor at Informant.ASCEMaine@gmail.com with any questions.

#### **Business Cards**

Do you run your own consulting firm, or have a business that the Maine engineering community should know about? Advertise with a business card! Business card listings run for 1 year, including 9 issues of the Informant and full time on the website. Cost: \$150.00 Discounts Available: Purchase a 1-year Business Card ad and receive a \$25 discount on a Job advertisement!

### **Job Listings**

Advertise for new employees at any level – students, EITs, and PEs will all see your ad. Job advertisements are posted in one issue of the Informant, and will run on the website for one month.

Cost: Quarter Page (3.75"x5") - \$35 Half Page (7.5"x5") - \$75 for 1 month - \$500 for 1 year (9 issues) Full Page (7.5"x10") - \$150 for 1 month -\$1000 for 1 year (9 issues)