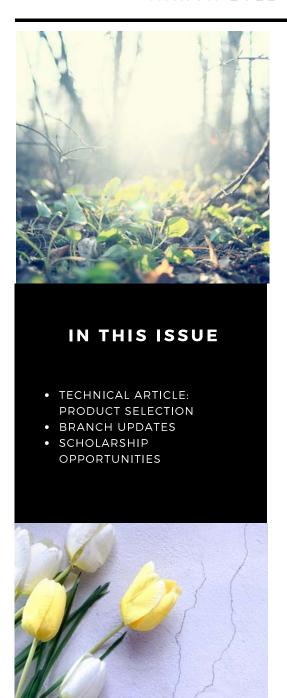
# CIVIL SOURCE

# ASCE UTAH SECTION NEWSLETTER

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# PRESIDENT'S MESSAGE

by Mark Chandler, PE, PG, CFM

Happy spring to everyone. I hope the recent winter storms have not caused too many challenges for anyone. It is great to see the precipitation we need so much. For those of us that work in the municipal services and water resources industry, this time of year is heavy with conferences. Conferences in the first four months of the year include Utah Groundwater Association, Utah City Engineers Association, Rural Water Association of Utah, Utah Water Users Conference and Water Environment Association of Utah and I am sure I have missed some others. As I have attended some of these conferences this year, it has become even more apparent how critical our involvement in the community around us is. There are so many complex challenges that face us in the future throughout the world, let alone here in Utah. The challenges that we have in the water industry is mirrored in the transportation, development, and manufacturing world. Especially as we continue to see significant growth in the State despite being the second driest State in the middle of one of the worst droughts on record. Currently, our ability to absorb some of the challenges we are facing is thanks in large part to forward thinking leaders and engineers that planned for significant water storage facilities and distribution lines. I won't get into the significant effort that is going to be required to maintain and upgrade these facilities in coming years, but instead I want to focus on the call for excellence in the Civil Engineering industry. A big part of ASCE is providing the tools to raise the bar, to elevate Civil Engineers. What we do impacts future generations. We may at times feel like what we do does not matter that much, but it matters to those who will use our facilities for the next 20, 50 or 100 years. The industry is moving along so quickly right now that we often find ourselves with a "keep your nose to the grindstone" mentality just to keep up with the needs of our projects. But each of us had insights from our various project experience that can help us look beyond the end of the next project. Our voices can lend reason and vision to the world if we are willing to take those steps. I hope that with all of the crazy challenges going on right now between Covid-19, wars, inflation, drought, etc. that we can take some time to look up from the breakneck speed to help provide our experience in planning commissions, city councils and district boards, county commissions and state legislatures. As we participate in these areas we provide experience that is generally lacking or completely mission that can help to build a better future for the coming generations. That is one of the primary objectives of ASCE, is that we elevate not just ourselves, but the world with us. Have a great month and I hope to see many of you at our annual meeting, or at the very least, on the virtual extension.

# TECHNICAL ARTICLE PRODUCT SELECTION

by Sam Odd, PE Logan City Public Works Program Manager

If you had to choose between something good that you know, and something perfect that you don't know, which would you choose? Most of us tend to stick to what we know, even if it might not fit our exact needs, simply because it is convenient and comfortable. This human tendency leaves us to ponder the question "What could have been if I hadn't gone with the "good" option and instead went with the "perfect" option?" We generally will never know the answer to that question, and often don't need to. The "good" option usually meets all our needs. Recently, in Northern Utah, a project team faced this question in selecting a pipe material. Should they choose the well-known material, or should they try a new material that claims to be the perfect solution to the project problems.

Answering the question of "What is the best product?" will return a different answer for each person asked. Products have their strengthens and weaknesses just like anything else we buy. To say that one product can be ideal for every situation is inaccurate. In evaluating what product is used for a specific application a series of questions should be considered including: "What is the corrosiveness of the native soil?" "What is the corrosiveness of the conveyed utility?" "What installation constraints or requirements are there?" "What experience do industry professionals have with this material/product?" And perhaps of growing importance; "What is the availability of the material/product?"

The answers to these questions (and many more) may change multiple times in a collection system, or multiple times on one project. Finding the right product that adequately balances all the priorities of a project can be overwhelming, but once done leads to a smooth project and a full product lifespan.

A recent project in Northern Utah faced these decisions when determining how to proceed with the material selection for a city's sewer trunkline. After consulting manufacturers and contractors, a new (to the City) material was selected. HOBAS Pipe.

HOBAS pipe originated in Switzerland from, of all places, the textile industry. The process of centrifugally casting fiberglass was developed to create the drums with which the textiles where made. The strong, perfectly round drums were quickly discovered by water engineers and by 1960 were adapted for water conveyance systems. Since then, their pipe has been used around the world for anything water or wastewater related.

HOBAS was selected due to its strength at depth (HOBAS says they can engineer their product to be buried 70+ feet deep), lightweight characteristics (saved on installation costs), and most importantly, corrosion resistance. This was a new product to everyone on the project team, but with selection of an experienced contractor it was clear this was the best product for the project.

After selecting the HOBAS pipe system, the team discovered that this product has been used on many projects through the United States, and many of those here in Utah. By allowing new materials to be considered, the project team was able to find a solution that truly met the needs of the project.

Situations like this are not unique in our field. New products and materials are brought to the market every year with impressive claims and promised value. Often, as an industry, it is easy to stick to the tried-and-true methods that we know and like. However, by opening our processes to new ideas and sharing these ideas with industry peers, we can end up with a better outcome than we thought possible.



## **CENTRAL UTAH BRANCH UPDATE**

By: Mitchell Smith, EIT

Our previous luncheon was on Wednesday, March 2nd. Darren Burton presented on the aspects of ASCE and how to create engagement in the membership as told through his experiences and leadership history. Around 15 members attended in person, and several attended thru Microsoft Teams. Students from UVU and BYU were encouraged to attend virtually.

This month's luncheon will be Wednesday, March 24th at 12pm and will be held in person. We encourage all our members to attend. For future luncheons, if any members of the branch would like the opportunity to present one of their projects, would like to recommend a friend to present, or have a topic you'd like to have us find a speaker for, please reach out to me at mitsmith@provo.org. Thanks.

The Central Utah Branch is now advertising our Annual Scholarship to UVU and BYU students. We hope to receive many applications and to award scholarships to two or three deserving students. The applications can be found on the Utah Section Facebook or thru the following link. <a href="https://drive.google.com/file/d/l-3MeBnTeRmNQ8wP\_ayngT\_RVRbONIUd2/view?usp=sharing">https://drive.google.com/file/d/l-3MeBnTeRmNQ8wP\_ayngT\_RVRbONIUd2/view?usp=sharing</a>



## **WASATCH FRONT BRANCH UPDATE**

By Britton Tveten, PE

In March we will have Leroy Palmer the President at AmeriWest Water Services Inc come to speak to us on Well Rehabilitation and Aquifer Protection at the Westech Engineering building on March 18th. Due to weather, one of the 2 E-week activities was postponed by request of the school. If you would like to help out please reach out to atzvetcoff@HNTB.com. We are looking forward to the Student Chapter at U of U sponsoring our April luncheon.

# **NORTHERN UTAH BRANCH UPDATE**

by Weston Bellon

Kamilla Schultz did a fantastic job presenting in February on leadership and determination. On March 17. we will be meeting at the Logan Environmental Building Classroom to hear from Chad Brown on the topic of Ethics in Engineering. This is a different location from our usual meeting. The Logan Environmental Building is located in front of the transfer station at 153 1400 West, Logan. After this meeting we will be back to the Public Works building.

#### **SEI UPDATE**

By: Conrad Guymon, PE, SE

It's great to see spring happening (for a few days here and there) along with events happening on a more customary timeframe.

We have several positions that need to be filled at the Societal level. These are board level positions and a great opportunity to serve and make a difference in the engineering profession. I received the following invitation to share:

SEI Young Professional members (35 and younger) are invited to apply: These committees need to fill their Secretary position. SEI Committees provide great opportunities to gain valuable experience with expert leaders, and advance and serve the profession. Learn more about job description and commitment details and apply by March 31.

#### SEI Committee on Resilience

Vision: Promote resilient design in buildings, bridges, and other structures.

Mission: Advance structural engineering professional practice by developing programs and resources to support engineering professionals working toward enhancing resilience.

Charge: To direct, oversee, and coordinate SEI's efforts to enhance resilience for buildings, bridges, and other structures by preparing recommendations for the SEI Board of Governors and SEI Divisions, Committees, and Members.

Chair: Don Scott, P.E., F.SEI, F.ASCE

#### • SEI Committee on Performance-Based Design

Purpose: To advance the structural engineering profession toward performance-based design through development of guides, prestandards, and educational resources; advocacy; and other activities.

Chair: Don Dusenberry, P.E., F.SEI, F.ASCE

Please apply for these using this link if you are interested and willing to serve.

#### **ASCE Standards Series**

The ASCE Standards Series continues. ASCE-7 has had significant updates in the six years since the last edition was published. The latest edition of ASCE-7 will be adopted by reference in the 2021 IBC. I understand this will be adopted July 2023 in Utah based on a search of bills in the current legislative session. Attending these throughout the year will put us in a good position next year when this code is adopted in Utah.

May 12 | ASCE 7-22 Seismic
June 9 | ASCE 7-22 Wind & Tornado
July 14 | ASCE 7-22 Snow/Rain
September 8 | How & Why to Use ASCE 7-22 in Your Practice
Register Now

Electrical Transmission and Substation Structures Conference - Student Scholarships

New Scholarship for Students to Electrical Transmission and Substation Structures Conference October 2-6 in Orlando.

Learn more and <u>Apply by April 25</u>

Scholarship made possible by the SEI Futures Fund in collaboration with the ASCE Foundation <a href="https://www.etsconference.org/program/student-scholarship">https://www.etsconference.org/program/student-scholarship</a>

#### Structures Congress

We can't wait to see you in Atlanta this April! Make sure to register today so you don't miss out on everything we have to offer: The conference Wednesday April 20 through Saturday April 23, 2022.

- Earn up to 14.5 PDHs
- 3 Keynote speakers talking about COVID data, embodied carbon, and 3D printing
- <u>Special Sessions</u> curated just for engineers discussing everything from innovation to sustainable design <u>Register Today!</u>