



American **Concrete Pipe** Association

2020 - School of Rock – COVID STYLE

August 13, 2020 – September 3, 2020

- RESILIENCY/DURABILITY ■ UTILITY CONFLICT RESOLUTION ■ TRENCHLESS INSTALLATION
- SOLUTIONS FOR FAILING CULVERTS ■ UNDERGROUND DETENTION & BOX CULVERTS
- WATER QUALITY DEVICES EXPLAINED ■ ETHICS & ENGINEERS RESPONSIBILITY

The American Concrete Pipe Association (ACPA) has teamed up with the local Tennessee concrete pipe and box culvert producers to bring expert best practices for design and installation of stormwater drain, and culvert crossings. In conjunction with the local Chattanooga Branch of ASCE we are providing this online training for Engineers, Inspectors, Contractors, Installers, and Reviewers. Each webinar will contain 2 topics and will be a fun 2 hour long interactive training session with tools and applications to use for future reference.

The fee for each of the 2-hour virtual training sessions is \$20 and **ALL FUNDS COLLECTED BY THE CHATTANOOGA BRANCH OF ASCE WILL GO TOWARD THEIR SCHOLARSHIP FUND FOR 2021!** We will provide 2.0 Professional Development Hours (PDH) for each two-hour session you attend. See session information, course descriptions, and registration links below for more information.



WEBINAR SCHEDULE

Session Courses	DATE & Time / Registration Link
Resiliency/Durability & Utility Conflict	Thursday August 13 @ 10:30 AM to 12:30 PM EST https://attendee.gotowebinar.com/register/6851342134752085003
Underground Detention & Water Quality Devices Explained	Thursday August 20 @ 10:30 AM to 12:30 PM EST https://attendee.gotowebinar.com/register/2856893356856055563
Solutions for Failing Culverts & Trenchless Installations	Thursday August 27 @ 10:30 AM to 12:30 PM EST https://attendee.gotowebinar.com/register/5899588377075064843
Ethics & Engineers Responsibility	Thursday September 3 @ 10:30 AM to 12:30 PM EST https://attendee.gotowebinar.com/register/3480232886921782542



COURSE DESCRIPTIONS

- **Resiliency and Durability** - This course covers pipe resiliency, durability and aggressive factors which can affect rigid and flexible pipe systems. A properly designed and installed storm drainage pipe system will produce a resilient system that reaches its expected service life. Therefore, it is important to understand the issues that affect the service life of storm drainage. Our infrastructure depends on resilient and durable systems that reduce impacts to the maintenance budget and impacts to the road user.
- **Utility Coordination** - What was the biggest headache on your last project? Many engineering and construction project managers will say utilities. A determination will be made prior to or during utility field inspections to identify aerial and underground facilities within project limits that are a potential conflict and could require relocation versus those facilities that may not be in conflict and may possibly be allowed to remain if their location is in compliance with the current accommodation policy and clear zone requirements. Utilities certainly impact design; it is the unknown utilities that cause unwanted impacts to design and at time that are sometimes critical. Utilities impact construction as well, and unknown utilities discovered on the job site during construction can create significant impacts to the project budget and timeline.
- **Trenchless Installation - Jacking Pipe** A growing segment of pipe installation includes trenchless applications. They are less disruptive to traffic, communities, utilities, and businesses. Trenchless installation saves time, saves money, and improves roadway safety. It is important to know this competitive option. As our nation's infrastructure approaches its service life, the jacking pipe procedure is a beneficial option worth researching.
- **Solutions for Failing Culverts** Failing culverts create maintenance and budget challenges for DOTs and Public Works Agencies. Public agencies exercise both temporary and permanent strategies to address the safety and structural concerns created by failing culverts.
- **Underground Detention with RCP and Box Culverts** - This class will focus on handling stormwater via underground storage. Whether detention, infiltration, retention, storage, harvesting, and pipe/stone backfill storage combos - a review of many of the products that participate in this market will be discussed as will their capabilities and limitations. Specific and critical considerations for the specifier, regulator and inspector will be revealed and discussed. Lastly, a crucial design feature that engineers and regulators must not overlook = safe long-term maintenance of these systems.
- **Water Quality Devices Explained: Filters, Separators, Screens, and LID- Which do I need?** - This class explains the fundamental differences in the various products/technologies relating to treating SWQU's and how different systems are grouped to target specific pollutants of choice (POC). Trash, sediment, hydrocarbons, bacteria, heavy metals all can be captured, but not by all technologies! Maintenance of these units will also be emphasized.

- **Ethics** - The study of professional ethics is more than a hypothetical exercise; it is the very foundation of engineering practice. As engineers, it is our responsibility to understand it, develop it, and live it daily. This class explores the history of professional ethics; the ethical canons upheld by national engineering societies; and the narrow line that separates legal and professional responsibilities. Case studies on real events, including the Challenger disaster, the Hyatt Regency Walkway Collapse, and the Florida International University (FIU) foot bridge collapse, bring to life the unethical choices that jeopardized public safety. It is an engineer's responsibility to put the safety of the public first. Every decision engineers make must support the public's expectations that they have made ethical choices to ensure their safety.
- **Engineers Responsibility** - Many engineers and specifying agencies design culverts and storm drainage systems without understanding the differences between the rigid and flexible pipe products. In addition, many do not have possession of the appropriate installation standards that provide the details required for proper installation. This training will cover the specific requirements of each standard to provide engineers with the technical information they need to make informed engineering decisions. After completing this program, participants will be able to recognize and demonstrate the differences between rigid and flexible pipe installations referencing both ASTM C1497 and ASTM D2321. Participants will develop a practical understanding of the necessary steps to reduce risks when specifying rigid or flexible pipe.

MEET YOUR PANELIST AND PRESENTERS



Al Hogan, PE
Regional Engineer
American Concrete Pipe Association

- 36 yrs. Experience
- BS CE – Tennessee Tech University
- Columbia, TN

ahogan@concretepipe.org
 (615) 351-3017



Michael Kusch
Director of Technical Marketing
Foley Concrete Products

- 37 yrs. Experience
- BS Env Design – University of Oklahoma
- Murfreesboro, TN

mkusch@foleyproducts.com
 (615) 351-9164

