



EDUCATE • TRAIN • RESEARCH • PUBLISH



TRENCHLESS NORTH AMERICA



The Official Magazine of the North American Society for Trenchless Technology



NASTT 2026 NO-DIG SHOW RECAP

Energy - Innovation - Collaboration!

Palm Springs CA March 29 – April 2, 2026

Download Digital Edition:



SUMMER 2026
Volume 16 • Issue 3

nastt.org

TRUSTED AT **EVERY DEPTH**



LUNCH **AND LEARN**

Trenchless Training, On Your Schedule

Akkerman offers in-person or virtual Lunch & Learn sessions tailored to your team. Gain insight into trenchless methods, equipment, and best practices—delivered in a format that works for you.

For more information,
contact sholden@akkerman.com

- Sliplining
- Guided Boring Systems
- Microtunneling
- Pipe Jacking
- Tunneling
- Earth Pressure Balance

58256 266th Street
Brownsdale, MN 55918



(800) 533-0386
Akkerman.com

— AMERICAN MADE SINCE 1973 —

**SUMMER 2026 – VOLUME 16, ISSUE No. 3**

19

**NASTT 2026 NO-DIG SHOW:
ENERGY AND INNOVATION IN PALM SPRINGS!**

Temperatures and spirits were soaring as the world's premiere trenchless technology conference and trade show returned to Palm Springs for the first time since 2018, celebrating the rapidly growing awareness of the many benefits of trenchless applications. Held March 29 - April 2 at the Palm Springs Convention Center, the NASTT 2026 No-Dig Show showcased numerous environmentally friendly trenchless solutions and cost-saving opportunities that municipalities and utilities can implement to help their communities.

**FEATURES****8 Q&A: Cindy Preuss P.E., CDM Smith**

Awarded the 2026 NASTT Chair Award for Distinguished Service at the NASTT No-Dig Show in Palm Springs CA, Cindy Preuss, P.E. has devoted years of outstanding volunteer service to NASTT with deep involvement in the national organization and the Western (WESTT) Regional Chapter. Currently the Global Water Conveyance Practice Leader for the Water Services Group at CDM Smith, Cindy shares her well-informed insights on the current and future state of trenchless technology in North America.

10 Morty's Trenchless Academy: Horizontal Hammer Boring (HHB) Explained

Horizontal Hammer Boring (HHB), sometimes referred to as "DTH Hammer Boring", is a trenchless construction method for new installations specifically intended for hard ground consisting of solid bedrock, cobbles, boulders, rock pinnacles, and other challenging geology. The method is an adaptation of vertical pipe piling installations, and is quickly becoming the go-to solution for hard rock boring from 5-1/2-inch to 48-inch diameter installations up to 330 feet, and more.

32 NASTT 2026 Abbott Innovative Product Award Winners

The Abbott Innovative Product & Services Award celebrates companies with a state-of-the-art product or service making a significant impact in advancing the trenchless industry. The award is named for the late Joseph L. Abbott, Jr., an active NASTT member since its founding in 1990 and a champion of innovation. The two Award winners, Footage Tools and Thompson Pipe Group are profiled.

50 Sewer Force Main Installation in Valdez, Alaska

This paper was one of the best attended out of all the presentations at the 2026 NASTT No-Dig Show in Palm Springs. This paper is a case study of the design and construction of approximately 18,000 linear feet (LF) of 20-inch HDPE SDR 11 sewer force main installed primarily by HDD in Valdez, Alaska, which traversed numerous environmental sensitive wetlands, highways and rights-of-way.

**DEPARTMENTS**

- 4 Executive Director's Message
- 6 Welcome from NASTT Chair
- 14 NASTT No-Dig North Calgary 2026 Preview
- 30 NASTT/NUCA Contractors' Forum
- 36 NASTT Rising Stars – Youth Meeting the Future
- 40 NASTT 2027 No-Dig Show
- 42 NASTT No-Dig Show 2026 Municipal Scholarships
- 46 Eye on Industry
- 54 Events Calendar
- 55 Index of Advertisers

NASTT OFFICERS

Chair
Greg Tippet, P.Eng. – Program Delivery Lead,
Western Canada Water Group, Stantec Consulting Ltd.

Vice Chair
Andrea Long – Principal Engineer, Aurora Water

Treasurer
Eric Schuler – Business Development - Project Director, Navitas

Secretary
Tucker Toelke – Director of Alternative Delivery, Michels Preconstruction Services, Inc.

Officer-at-Large
Brian Avon – Associate Vice President, Carollo Engineers

Immediate Past Chair & International Representative
Matthew Wallin, P.E. – Partner & Senior Project Manager,
Bennett Trenchless Engineers LLP

2026 BOARD OF DIRECTORS

Kevin Bainbridge, A.Sc.T. – Vice President, Robinson Consultants Inc.

Jeff Boschert, P.E., BCPLW, F.ASCE – President, National Clay Pipe Institute

Andrew Costa – Vice President, Sales & Strategy, Azuria Water Solutions

Todd Kilduff, P.E. – President/Principal Engineer,
Kilduff Underground Engineering Inc.

John Kraft IV Ph.D. – Research Scientist, Adjunct Professor,
Trenchless Technology Center (TTC)

George Mallakis – Regional Manager, TT Technologies Inc.

Stephanie Nix-Thomas, P.E. — President, Claude H. Nix Construction Co.

Joe Royer, Ph.D., Director of Innovation & Technology,
Critical Infrastructure, Henkel Corporation

Chris Schuler – Vice-President, Operations, Underground Solutions

Andrew (Drew) Sparks — Director of Engineering, Laney Directional Drilling

Glen Wheeler, Chief Tunnel Engineer, James W. Fowler Co.

Jim Williams, P.E., PMP — Senior Consultant, Brierley Associates

NASTT STAFF

Executive Director
Kim Hanson PE - khanson@nastt.org

Vice President of Operations and Conferences
Jessie Clevenger – jclevenger@nastt.org

Conference Services Director
Michelle Hill – mhill@nastt.org

Marketing & Brand Manager
Jenna O. Hale – jhale@nastt.org

Membership Outreach & Database Manager
Carolyn Hook – chook@nastt.org

Education Manager
Kari Webb – kwebb@nastt.org

Regional Chapter Manager
Victoria Cox – vcox@nastt.org

Conference Program Manager
Amy Shipp – ashipp@nastt.org



662 Dudley Avenue
Winnipeg, MB R3M 1R8

EDITORIAL:

Andrew Pattison
204.275.6946
marcomap@shaw.ca

ADVERTISING SALES:

Bert Eastman
204.997.6371
bert@atobpublishing.com

Wayne Jury
204.803.1300
waynej@atobpublishing.com

harper media
your social media strategy & web marketing partner

700 - 200 Main Street
Winnipeg, MB R3C 1A8

DIRECTOR:

Aaron Harper
204.318.1121 xt. 101
aharper@harpermedia.ca

LAYOUT & DESIGN:

Joel Gunter
204.318.1121 xt. 108
joel@harpermedia.ca

© Copyright 2026 A to B Publishing Inc. All rights reserved. Contents of this publication may be reproduced or transmitted with written permission from the Publisher. Views expressed in this publication are not necessarily those of NASTT or of A to B Publishing Inc. • Printed 07/26 in Canada

Canada Post Publications Mail Agreement #43839013

Return undeliverable Canadian addresses to: marcomap@shaw.ca





WELCOME TO THE SUMMER 2026 EDITION OF TRENCHLESS NORTH AMERICA

The Energy Was Hard to Miss

Dear NASTT Members and Trenchless Advocates:

The NASTT 2026 No-Dig Show was a strong show. From the first session to the final hour on the show floor in Palm Springs, the energy was hard to miss, and a good reminder of something I carry into every part of this role: this industry is driven by its people, and that is what makes it so strong.

For me personally, the 2026 No-Dig Show was a milestone. It was my first No-Dig Show as Executive Director, and I could not have asked for a better introduction to what this event means to our community. The conversations were meaningful, the sessions were substantive, and the connections made throughout the week are exactly what NASTT exists to support. I am grateful to every member, volunteer, exhibitor, sponsor, and speaker who made it what it was.

A highlight of the week was our awards celebration – always one of my favorite moments at No-Dig, and this year did not disappoint. We inducted a new member into the NASTT Hall of Fame, the highest honor our community can bestow, and recognized the recipients of the Distinguished Chair Award, the NASTT Volunteer Award, and more. To every honoree: your contributions to this industry and to this organization are seen and deeply appreciated. It was a privilege to celebrate you in Palm Springs.

Looking ahead, we are excited to welcome the trenchless community to the 2026 No-Dig North in Calgary this fall. No-Dig North continues to be an important gathering for the Canadian trenchless community and beyond, and we expect another strong program of education and connection.

And then, Raleigh! Bringing the 2027 No-Dig Show to my home city is something I have genuinely been looking forward to. The trenchless work happening in this region is impressive, and I am excited to showcase it on a national stage. No-Dig has always been a place where you can learn something practical and connect with people who matter to your work, and we are committed to making Raleigh a show that reflects everything this community expects.

Thank you for being part of this. I look forward to seeing many of you in Calgary this fall, and in Raleigh next spring.

Kim Hanson

**Kim Hanson PE, Executive Director
North American Society for Trenchless Technology (NASTT)
khanson@nastt.org**

*“This industry is
driven by its people.”*

*“I look forward to
seeing many of you in
Calgary this fall.”*

*“Thank you for being
part of this.”*

True to the Task.

When pressure mounts, we hold firm. Every obstacle is met with calculated force. We anticipate, adapt, and advance... our resolve unshaken.



Claude H.

NIX CONSTRUCTION

After 50 years of innovative solutions, we've learned that even the toughest projects can be conquered.

Your Solution Starts Here. Let's Dig In.

VISIT CHNIX.COM CALL 801-479-9000



“Gratitude and pride for what our association continues to accomplish together.”

“Together, we are building a stronger future for trenchless technology.”

CAPTURING THE ENERGY, INNOVATION, AND COLLABORATION!

Dear NASTT Members, Volunteers and Trenchless Advocates,

As I reflect on the tremendous success of the NASTT 2026 No-Dig Show in Palm Springs, I am filled with gratitude and pride for what our association continues to accomplish together. This summer issue of **Trenchless North America** serves as a celebration of that achievement, capturing the energy, innovation, and collaboration that made this year's conference one of the most memorable in NASTT history.

Palm Springs welcomed over 2,000 trenchless professionals from across North America and beyond for a week of education, networking, and industry advancement. From the moment attendees arrived, the excitement was unmistakable. Technical sessions were packed with valuable insights and real-world applications, the exhibit hall buzzed with conversations and new technology demonstrations, and our networking events provided countless opportunities to strengthen existing relationships and build new ones.

What makes the No-Dig Show truly special is the people who come together to make it happen. I would like to extend my sincere thanks to our volunteers, committee members, speakers, exhibitors, sponsors, attendees and staff. The dedication of our volunteers, in particular, continues to be the foundation of NASTT's success. Their willingness to share expertise, contribute time, and support our mission ensures that we remain the leading organization advancing trenchless technology education and innovation.

This issue highlights many of the moments that made Palm Springs exceptional, from outstanding technical presentations and industry recognition to the connections formed between colleagues and future collaborators. Whether you attended in person or are experiencing the event through these pages, I hope the stories and photographs remind you of the strength and passion that exist throughout our trenchless community.

While we celebrate the accomplishments from this past spring, we are already looking ahead to an exciting fall season. One event that should be on everyone's calendar is the 2026 No-Dig North conference, taking place November 2-4 in Calgary, Alberta. No-Dig North continues to grow as Canada's premier trenchless technology event, bringing together municipal leaders, engineers, contractors, manufacturers, and consultants to explore the latest advancements shaping our industry. Calgary's vibrant energy and strong infrastructure community provide an ideal setting for education, networking, and collaboration. I encourage all members to make plans now to join us for what promises to be another outstanding conference.

Our Regional Chapters also have a busy and exciting schedule ahead. Across North America, chapters continue to deliver high-quality educational programs, networking opportunities, and local events that connect trenchless professionals within their regions. These gatherings are an essential part of NASTT's mission, providing members with opportunities to engage throughout the year while addressing the unique challenges and opportunities facing their local markets.

As we move through the second half of 2026, I am continually inspired by the commitment and enthusiasm of our members and volunteers. The trenchless industry continues to evolve, and NASTT remains at the forefront by fostering education, sharing knowledge, and building connections that advance our profession. Thank you for your ongoing support of our association and our mission.

I hope you enjoy this issue of **Trenchless North America**, and I look forward to seeing many of you in Calgary this fall and at Regional Chapter events throughout the season. Together, we are building a stronger future for trenchless technology.

Sincerely,

Greg Tippet

**Greg Tippet P. Eng., Board Chair
North American Society for Trenchless Technology (NASTT)**

Is reline a viable option for your project? Find out today using the online **Contech Reline Tool**.



Reline Done Right™

With over 75 years of reline experience, Contech Engineered Solutions partners with owners, designers, and installers to develop permanent, fully structural solutions based on time-proven design methods. We know what works and what doesn't, and we don't play games with the hydraulics, structural design, or long term performance. Knowing pipe assessment, structural design & hydraulic analysis is what we do. The result is the right solution for your project needs – done right, on time and under budget.

- Storm Sewers
- Sanitary Sewers
- Culverts & Structures
- And More





with

Cindy Preuss

Awarded the 2026 NASTT Chair Award for Distinguished Service at the NASTT No-Dig Show in Palm Springs CA, Cindy Preuss, P.E. has devoted years of outstanding volunteer service to NASTT with deep involvement in the national organization and with her regional Western (WESTT) Regional Chapter. A enthusiastic and passionate advocate for trenchless technology, Cindy has served for years on the No-Dig Show Technical Program Committee, served a full term on the NASTT Board of Directors, and was a long-standing member of the WESTT Regional Chapter Board of Directors. Recently she has worked as Chair of the Abbot Innovative Product & Services Award Committee, broadening the scope of this prestigious award to identify new ways to bring even more groundbreaking innovations to the forefront of the trenchless community.



**CDM
Smith**

Currently the Global Water Conveyance Practice Leader for the Water Services Group at CDM Smith, Cindy shares her well-informed insights on the current and future state of trenchless technology in North America.

What first inspired you to become interested in the construction & engineering field, particularly underground construction?

It was a fairly organic path. I initially envisioned becoming an environmental engineer focused on water quality, inspired in part by nearly a year of travel in developing countries after high school. During college, however, I realized that water chemistry did not capture my interest in the way I had expected. As a result, I shifted toward civil engineering, where my focus turned to infrastructure design – whether roadways, pipelines, tanks, wells, or buildings.

Outline your experience of first being introduced to trenchless technology methods and applications.

My first introduction to trenchless technology came when I was assigned to a major pipeline design project involving more than 4.5 miles of dual sewer force main in an urban area, where project conditions made trenchless construction essential. Through that work, I was introduced to horizontal directional drilling in a narrow roadway, through a campground, down a steep slope, and beneath a tidal channel. The design also incorporated an auger bore and jack installation beneath one railroad crossing, sliplining at another, and the use of an abandoned pipeline beneath a high-traffic roadway to slipline one of the two force mains and minimize the impacts of open-cut construction.

How did you first get involved with NASTT? What are some of the goals and initiatives you would like to see NASTT pursue?

I first became involved with NASTT when my supervisor at my first job encouraged me to attend No-Dig in 2004, given the

"I believe NASTT has done an exceptional job advancing the industry."

major multi-application trenchless design project I was leading at the time. That conference broadened my perspective and deepened my interest in the trenchless industry. My enthusiasm did not go unnoticed by then-NASTT board member Piero Salvo, who encouraged me to join the program committee. With my employer's support, I did – and I have remained involved ever since.

In terms of goals and initiatives, I believe NASTT has done an exceptional job advancing the industry over the years. Its two national conferences – No-Dig and No-Dig North for our Canadian colleagues – offer outstanding access and exposure for professionals at all levels. The program committee is strong and highly engaged, volunteer participation is robust, and the breadth of industry publications and educational courses is impressive. Building on that foundation, I would like to see NASTT continue expanding opportunities for engagement, education, and collaboration across all sectors of the industry.

What are your thoughts on the current state of the trenchless industry? What areas do you see evolving in STEM education and post-secondary academics?

Through my service on the WESTT board of directors, I have seen firsthand the establishment and growth of two new student chapters in the region. The feedback from students

"Feedback from students has been both inspiring and encouraging."

has been both inspiring and encouraging, as their exposure to trenchless technology has grown from little or no awareness of pipeline construction and rehabilitation methods to a genuine eagerness to learn more about both. In post-secondary academics, the breadth of research and development projects led by universities is creating meaningful opportunities for graduate students to explore, evaluate, and advance trenchless technologies.

Is the trenchless industry generally doing a good job of attracting young professionals? What do you think can be done to better engage students and young professionals in the trenchless industry?

Yes, I do believe the trenchless industry is making meaningful progress in attracting young professionals. In particular, NASTT and its regional chapters have been highly effective in engaging student chapters through partial and full sponsorships to attend the national No-Dig conference and regional events. Those opportunities give undergraduate and graduate students valuable exposure to the trenchless industry that they often would not receive through academic programs alone. Many go on to pursue advanced study with a trenchless focus, and many also secure positions in the industry through the professional networks they build through NASTT.

To better engage young professionals, I would encourage targeted outreach to NASTT's corporate members, challenging each to sponsor at least one emerging professional to attend a national conference each year. In return, that attendee could be asked to contribute a brief reflection on key takeaways from the event for publication in Trenchless Today or as part of an online feature, with recognition given to the sponsoring company. This would not only elevate the visibility of both the young professional and the employer, but also help strengthen the pipeline of talent across the industry.

Biggest challenges facing the trenchless industry today? Has acceptance and understanding of trenchless technology improved?

While acceptance and understanding of trenchless technology have improved over time, one of the industry's biggest challenges today is keeping pace with rapidly evolving

"Groundbreaking advancements continually reinforce the intelligence, commitment, and energy that define this industry."

technologies through equally strong standards and guidelines. That responsibility belongs to all of us, and it is essential to promoting consistency, governance, confidence, and reduced risk in the application of trenchless methods to public infrastructure projects. Strengthening that framework will not only support continued growth in trenchless applications, but also help expand acceptance, reinforce confidence in long-term performance, increase demand, and ultimately lower costs for owners and customers.

What do you personally enjoy most about working in the trenchless technology field?

What I enjoy most is the innovation. Whether it is a new technology or an advancement of an existing one, in rehabilitation or new construction, across small- or large-diameter applications, gravity or pressure systems, the trenchless industry is constantly evolving. Seeing groundbreaking advancements - and the collective drive among industry professionals to keep pushing the envelope - continually reinforce the intelligence, commitment, and energy that define this industry. Ultimately, what makes that innovation so meaningful is its practical impact: reducing the cost and disruption associated with improving critical pipeline infrastructure.



"Over the years, I've seen Cindy step up time and time again with enthusiasm and energy that inspires others to get involved. We have a lot of great members who serve NASTT, but Cindy's contributions to the No-Dig Show, technical programs,

the Abbott Award for Innovation, the WESTT Regional Chapter and more will truly leave a legacy."

– Greg Tippett, P.Eng., Chair, 2026 Board of Directors

Horizontal Hammer Boring - What it is and Where it's Going:

GEONEX™ creates resurgence of DTH Hammer Boring with specifically manufactured equipment

By: Richard Revolinsky, North American Operations Manager, GEONEX INC.



In 2019, GEONEX™ received the NASTT Abbott Innovative Product Award at the NASTT No-Dig Show for their Horizontal DTH Hammer Boring Method (HHB) and the equipment specifically manufactured to accommodate this method. However that's not where this story begins or ends. Since 2013 GEONEX™ has been manufacturing specific machines and tooling to deploy this conventional vertical installation method horizontally, and today has more than 100 machines onsite worldwide. HHB is becoming the go-to solution for hard rock boring from 5-1/2-inch to 48-inch diameter installations up to 330 feet (100 meters) for traditional crossings as well as installation of HDD surface casings.

What is HHB?

Horizontal Hammer Boring (HHB), sometimes referred to as "DTH Hammer Boring", is a trenchless construction method for new installations specifically intended for hard ground consisting of solid bedrock, cobbles, boulders, rock pinnacles, and more (Figure 1). The method is an adaptation of vertical pipe piling installations in which a pneumatically powered Down-The-Hole (DTH) Hammer is placed within the first piece of pipe, meaning the hammer is down-the-hole. The principles of operation remain the same of DTH Boring whether in the vertical or horizontal position, however when utilized horizontally, specific changes and considerations must be made to achieve ultimate success.

While boring with DTH tooling is not a new approach, the standardization of equipment specifically designed with the intent to operate DTH tooling through professional manufacturing has driven the recent resurgence and interest resulting in the development of a new standard and methodology classification.

HHB Down-The-Hole Tooling and Functionality

Figure 2 shows the major components of the down-hole tooling utilized with the HHB Method. From left to right you'll see hollow-stem auger. The auger convey compressed air from



Figure 2. Cut-away view of the down-hole components of the HHB method



Figure 1. A 24 inch piece of casing is placed over cobbles excavated during preparation of the launch pit (left) The same casing placed over the spoils pile generated by the HHB method during installation (right)

"The method is an adaptation of vertical pipe piling installations."

compressors through the GEONEX™ horizontal drilling rig and control station to the pneumatic hammer. Following the auger is the pneumatic hammer which provides the necessary percussive force. To the right of the hammer, is the two-part breaking assembly. The breaking assembly utilizes a central "pilot" bit which is secured to the hammer and a "ring" bit which is mounted to the pilot bit to provide cutting of the full diameter with minimal overcut. These 2 components, the pilot bit and ring bit, act as one during the installation, rotating and oscillating to fragment the ground.



Figure 3. Assembled first section showing ring bit, starter casing and pilot bit

Shown in Figure 3 is a complete assembled lead section of the tooling. The green ring is the ring bit and grey component is the pilot bit. Note the face is substantially closed. Several small holes in the face allow for release of compressed air. Between the ring bit and pilot bit there are several openings to allow fragmented particles to enter the casing for removal of material as the installation progresses. With each cycling of the hammer compressed air accelerates the breaking assembly forward. On rebound, compressed air is released through the face to convey cuttings from in front of the breaking assembly into the casing where the material is then carried back to the launch pit by rotating auger.

The first section of casing is the "starter casing". This unit has an internal steel collar on which enables advancement of the installation. When material is flushed from the face by compressed air, the breaking assembly can travel further upon

"Since 2022 more than 60 recorded installations have been performed."

subsequent cycling of the hammer. Prior to striking the ground, shoulders of the pilot bit act on the steel collar and momentum of the pilot bit pulls the casing along the bore path. This approach reduces the need for a jacking frame or a back-stop to push off of in order to advance the casing. Minimal pressure is added via hydraulic motors to maintain firing of the hammer. The casing is not jacked into place, it is pulled by the hammer action.

Upon completion of the installation, the ring is removed, while the auger, hammer and pilot bit are pulled back to the launch location.

HHB Drilling Systems

Proper deployment of DTH hammers and tooling requires designated drilling systems which provide the appropriate forward pressure, rotation and precision control while maintaining the ability to absorb the rebound forces of the hammer. While DTH hammers have been used with varying degrees of success in conjunction with traditional auger boring units, these units

ATLAS
TRENCHLESS, LLC

HORIZONTAL
DIRECTIONAL
DRILLING, AUGER
BORING, GUIDED
AUGER BORING, PIPE
RAMMING,
TUNNELING

CONTACT
US

320-685-7578
Drilling@Atlas-
Trenchless.com

www.Atlas-Trenchless.com

Atlas Trenchless specializes in trenchless construction methods, excelling in complex and environmentally sensitive terrains.

YOUR PREFERRED SPECIALTY CONTRACTOR

Capabilities

- Install pipe with diameters up to 48" and distances over 7,500 LF through soil and rock
- Spread capabilities from 40,000 up to 750,000 lbs of pullback
- Custom fabrication for HDD tooling as necessary

Morty's Trenchless Academy

inherently lack in certain features to maximize the benefits of DTH Hammer use.

GEONEX™ drilling systems are both umbilical and hydraulic, and consist of an in-pit drill machine and on-grade hydraulic power pack. Hydraulic lines connect the two units and air hosing connects compressors to the power pack. This approach provides several job-site advantages as well as eliminating exhaust fumes in the excavation. Additionally, the units have the ability to work in very wet conditions, often deployed below the groundwater table. With exception to difficulties welding additional casing pipes that may have flowing groundwater, the systems operate well despite high water content along the bore path. Other than hammer lubrication, typical operation uses no other lubricants. Water is often induced into the compressed air stream as a means of dust mitigation.

GEONEX™ Power Packs are equipped with a touch screen PLC, wireless remote control, digital gauges and powered by a tier-4 diesel engine. Redundant manual gauges and control levers are also standard to ensure production. The wireless remote control allows the technician to operate the equipment with real-time display readings and adjustment of hydraulic pressures and air flow. The technician can operate within the launch pit, on grade, or even at the receiving pit as the bore reaches completion (Figure 4).



Figure 4. The Drill machine shown in the launch pit. Rotation is provided by hydraulic pressures and compressed air fed through the rotary unit to the auger to operate the hammer. The technician holds the remote with live display to monitor and adjust all drilling parameters

As shown in Figure 5, the GEONEX™ equipment is placed in the median of a busy highway for an installation parallel with traffic flow. One lane is closed to accommodate heavy equipment and contractor vehicles. The aerial image shows the compressor to the top left of the launch pit, the Power Pack to the top right, and the drill rig in the excavation.



Figure 5. Aerial view of HHB System deployed in a highway median

Since arrival of the first GEONEX™ unit in North America in 2018, the HHB method has experienced steady growth. Fueled by the need to undertake increasingly challenging installations through cobbles and boulders and supported by greater availability of equipment the method has seen more than a 50 percent growth in contractor and equipment availability since 2022.

In order of procurement, the 11 contractors who own and operate 19 GEONEX HHB systems in North America are ; EBI Drilling (MN), Bortech Company (NY), New-Tech Construction (NE), The Crossing Group (BC), Minger Construction (MN), Northeast Remsco Construction (NJ), Claude H. Nix Construction (UT), Kmetz Inc (NJ), Big Sky Limited (ID), Moffat Pipe (NC) and BT Construction (CO). While based in their respective home states, the need for HHB installations often results in many of the above contractors traveling across a multitude of state lines.

North American Expansion

Since arrival of the first GEONEX™ unit in North America in 2018, the HHB method has experienced steady growth. Fueled by the need to undertake increasingly challenging installations through cobbles and boulders and supported by greater availability of equipment the method has seen more than 50 percent growth in contractor and equipment availability since 2022. Currently 11 Contractors in North America own and operate 19 Geonex™ HHB systems, many of whom purchased more than one complete system proving the increased reliance and demand for the method as a viable alternative to traditional boring methods.

While those may not seem like high quantities for traditional methods, consider the North American Micro-Tunneling Association consists of only 21 member corporations since its establishment in 2012.

Since 2022, more than 60 recorded installations have been performed using the HHB method in more than 21 states and 4 Canadian Territories, 14 of which have been completed in 2026. Several of these installations can be found referenced in the NASTT Knowledge Hub as well as regional publications for the various chapters highlighting the increased demand and successful challenging installations.



Richard Revolinsky is the North American Operations Manager for Geonex Inc. He has served the trenchless industry for the past 15 years in several roles and differing stake-holder positions. He enjoys the innovation and creative problem solving of the Trenchless industry and the teamwork it embodies.

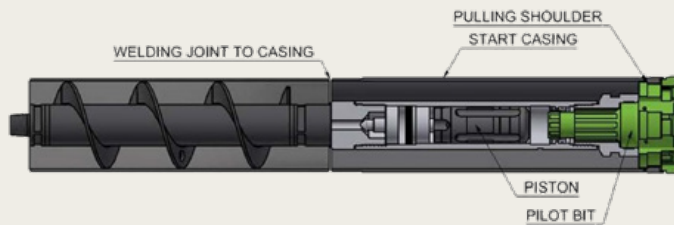
Tooling Isn't Cutting It? Try HHB and Break Through!!!

**GEO
NEX**

Single Pass Method To Install Casing In The Toughest Geology On Earth

Deployed successfully as an alternate to auger boring, pipe ramming, and micro-tunneling the Horizontal Hammer Boring Systems by GEONEX™ offer an effective way to install upwards of 300 feet of surface casing for HDD projects or casing for traditional horizontal boring alignments.

Horizontal Hammer Boring (HHB) is a method of trenchless construction which utilizes a pneumatic hammer placed in the first piece of casing being installed into the bore path. The hammer pulverizes rock, excavates material, and advances the casing down hole to achieve casing installation through solid rock, cobbles, boulders, and mixed conditions efficiently, reliably, and fast.



Compressed air is supplied to the pneumatic hammer through hollow stem auger. The hammer piston accelerates a full faced cutting head forward to pulverize the rock. Each cycle of the hammer releases compressed air through ports in the cutting head. The air conveys the now fragmented material into the casing. Rear facing ports further move the material back to rotating auger which deposits the cuttings back to the launch shaft.



As material is conveyed from the face and into the casing, the full face of the cutting head can move further along the bore path. When the hammer fires, shoulders on the cutting assembly impact a steel band inside the lead pipe, pulling the casing along the bore path. Because the casing is advanced by the hammer action down hole, there is no need to push or jack the rear of the casing, eliminating the need for a reaction block behind the drill machine.



Eliminating floor mounted tracks and poured concrete reaction block also means less prep time for the launch shaft. Additional controls and features facilitate connecting and dis-assembling the threaded hollow-stem auger and submersible wiring components on the drill machine means the equipment can keep running even if the shaft fills with water.

With average installation rates of 7 to 20 feet per hour across the full diameter range, through high strength rock, cobbles, boulders and mixed conditions, all with the same cutting head, it's no wonder more contractors are deciding to go GEONEX™.



UNDERGROUND INFRASTRUCTURE SUSTAINABILITY:

**No-Dig North, Calgary TELUS Convention Centre
November 2 - 4, 2026**

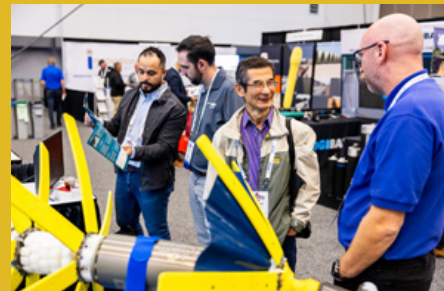
*Explore the Future of Trenchless Innovation at the
NASTT 2026 No-Dig North*

We can't wait to bring the trenchless community together again in 2026 in Calgary, Alberta, a vibrant city where innovation meets western hospitality, surrounded by the stunning Canadian Rockies! As Canada's leading trenchless technology event, No-Dig North attracts top industry professionals in engineering, construction, manufacturing, and municipal planning to exchange ideas and discover cutting-edge trenchless technologies that support sustainable, cost-effective infrastructure development.

No-Dig North is the largest trenchless technology conference in Canada where municipalities, contractors, consulting engineers, public utilities, industrial facilities, and damage prevention professionals attend to learn new techniques that will save money and improve infrastructure. This show offers five topic tracks over the course of two days with peer-reviewed, non-commercial presentations, including case studies detailing environmentally friendly trenchless solutions and cost-saving opportunities. Additionally, an exhibition hall and networking events are offered throughout the week for opportunities to exchange ideas with colleagues. NASTT's suite of Good Practices Courses is offered on the first day of the conference as well.



Networking and close personal access to industry expertise is a central feature of the annual No-Dig North show



Delegates have easy access to industry experts and trenchless technology exhibits featuring innovative new technologies

**For information and registration link please visit:
<https://nastt.org/no-dig-north/>**

No-Dig North 2026 Preliminary Schedule



The NASTT No-Dig North conference helps you stay in touch and informed! Grow your network of business connections and stay on top of the latest trenchless developments during the show. (Times and Events are subject to change)

Monday, November 2, 2026

Attendee & Exhibitor Registration

7:00 am – 6:00 pm – Exhibit Hall Prefunction

NASTT's Introduction to New Installations Good Practices Course

8:00 am – 12:00 pm – Room 202

NASTT's HDD Good Practices Course

8:00 am – 5:00 pm – Room 205

NASTT's CIPP Good Practices Course

8:00 am – 5:00 pm – Room 206

Chapter Chair Meeting

12:00 PM – 1:00 PM – Ideation 1

NASTT's Introduction to Rehabilitation Good Practices Course

1:00 pm – 5:00 pm – Room 202

Student Kick-Off

4:30 pm – 5:30 pm – Room 209

Exhibit Hall Open & White Hat Welcome Reception

5:30 pm – 7:30 pm – Exhibit Hall

Tuesday, November 3, 2026

Attendee & Exhibitor Registration

7:00 am – 6:00 pm – Exhibit Hall Prefunction

Opening Breakfast & Keynote

8:00 am – 9:45 am – Exhibit Hall

Technical Paper Session (Track 1)

10:00 am – 11:55 am – Room 202

Technical Paper Session (Track 2)

10:00 am – 11:55 am – Room 203

Technical Paper Session (Track 3)

10:00 am – 11:55 am – Room 205

Technical Paper Session (Track 4)

10:00 am – 11:55 am – Room 206

Technical Paper Session (Track 5)

10:00 am – 11:55 am – Room 209

Exhibit Hall Open

12:00 pm – 5:00 pm – Exhibit Hall

Lunch Concessions

12:00 pm – 3:00 pm – Exhibit Hall Prefunction

Technical Paper Session (Track 1)

2:30 pm – 3:55 pm – Room 202

Technical Paper Session (Track 2)

2:30 pm – 3:55 pm – Room 203

Technical Paper Session (Track 3)

2:30 pm – 3:55 pm – Room 205

Technical Paper Session (Track 4)

2:30 pm – 3:55 pm – Room 206

Technical Paper Session (Track 5)

2:30 pm – 3:55 pm – Room 209

Exhibit Hall Open & Social Hours

3:00 pm – 5:00 pm – Exhibit Hall

Trenchless Roundup Networking Event (ticketed event)

6:00 pm – 9:00 pm – The Guild (offsite)

Wednesday, November 4, 2026

Attendee & Exhibitor Registration

7:30 am – 2:00 pm – Exhibit Hall Prefunction

Morning Wake Up Station

7:30 AM – 8:30 AM – Glen Prefunction Foyer

Technical Paper Session (Track 1)

8:30 am – 10:55 am – Room 202

Technical Paper Session (Track 2)

8:30 am – 10:55 am – Room 203

Technical Paper Session (Track 3)

8:30 am – 10:55 am – Room 205

Technical Paper Session (Track 4)

8:30 am – 10:55 am – Room 206

Technical Paper Session (Track 5)

8:30 am – 10:55 am – Room 209

Exhibit Hall Open & Lunch Concessions

11:00 am – 2:30 pm – Exhibit Hall

Technical Paper Session (Track 1)

2:30 pm – 3:55 pm – Room 202

Technical Paper Session (Track 2)

2:30 pm – 3:55 pm – Room 203

Technical Paper Session (Track 3)

2:30 pm – 3:55 pm – Room 205

Technical Paper Session (Track 4)

2:30 pm – 3:55 pm – Room 206

Technical Paper Session (Track 5)

2:30 pm – 3:55 pm – Room 209

BC Chapter Meeting

4:30 pm – 5:30 pm – Ideation 1

GLSLA Chapter Meeting

4:30 pm – 5:30 pm – Ideation 2

Northwest Chapter Meeting

4:30 pm – 5:30 pm – Ideation 3



Meet Us in Calgary

November 2 - 4 / Calgary TELUS Convention Centre

No-Dig North is the premier annual conference focused on trenchless technology in Canada. Attendees include engineers, contractors, manufacturers, and municipal representatives who seek to learn about and discuss sustainable, cost-effective solutions for infrastructure needs. The 2026 No-Dig North conference is coming to Calgary AB at the Calgary TELUS Convention Centre, November 2-4, 2026

Learn more at:
nastt.org/no-dig-north



No-Dig North is owned by the North American Society for Trenchless Technology (NASTT), a not-for-profit educational and technical society established in 1990 to promote trenchless technology for the public benefit. For more information about NASTT, visit our website at nastt.org.

BRANDT HYDROVACS



“To just push a button to get your hydraulics and your blower going—that’s a pretty big deal for us.”

Jason Taylor 📍 Basin Environmental

YOU SAID IT.

Brandt Hydrovacs are born from boots-on-the-ground insight.



More Productive

Built to make short work of your utility projects with best-in-class boom reach and one-button operation.

More Uptime

Efficient pump control, instant troubleshooting, and less wiring reduce downtime to keep you digging deep.

More Support

More parts, faster service, and a 24/7/365 call center ensure you get the support you need when you need it.



Explore the full lineup at
brandt.ca/hydrovacs

Brandt



Meet Your Career Goals

Stay ahead of the curve.

- NASTT Good Practices Courses
- *Trenchless North America* & E-news
- Regional chapter magazines
- NASTT technical papers

Make valuable connections.

- NASTT Member Directory
- Speaking & training opportunities
- Conferences, training and events
- Exhibit, sponsorship and advertising opportunities

Share your knowledge.

- Leadership positions
- Student scholarships
- Authorship opportunities
- Trenchless Job Board

Gain new skills and experiences.

- Volunteer projects & committees
- Award programs
- Pipe Bursting Center of Excellence

Find new ideas and solutions.

- NASTT No-Dig Show | No-Dig North
- Regional chapter events
- NASTT Scholarship Fund Auction
- Municipal Scholarship Program



nastt.org/membership

membership@nastt.org

888-388-2554

**NASTT membership
equips and empowers you
to thrive in your career.**

**BECOME AN EXPERT. SAVE MONEY. BOOST YOUR VISIBILITY.
STAY AHEAD OF THE CURVE. FIND SOLUTIONS. GAIN NEW SKILLS AND EXPERIENCES.
GROW YOUR NETWORK. ADVANCE YOUR CAREER.**



NASTT 2026 No-Dig Show Another Successful Trenchless Showcase in Palm Springs!

Networking Filled with Energy, Innovation & Collaboration!

A late spring heatwave had temperatures and spirits soaring as the world's premiere trenchless technology conference and trade show returned to the great Sonoran Desert for the first time since 2018. Renowned for its natural beauty and colorful desert scenery, Palm Springs was once again a vibrant accommodating host for the NASTT 2026 No-Dig Show which celebrated the rapidly growing awareness of the economic social and environmental benefits of trenchless technology.

With a near record attendance of over 2100 professionals, including NASTT Student Chapter members and Municipal Scholarship recipients, the NASTT 2026 No-Dig Show offered abundant proof that trenchless technology offers the widest range of solutions with applications for the most challenging underground infrastructure projects. Attendees embraced this unique once-a-year opportunity to connect with the Contractors, Manufacturers, Engineers, Educators, and Utility Owners working in North America's trenchless industry, enjoying a fast-paced week of fun, networking events and a wealth of practical information on trenchless construction and engineering techniques.

Along with seven tracks of peer-reviewed, presentations, over 200 informative trade exhibits and multiple networking opportunities, a new event highlighted was the inaugural NASTT Golf Tournament held Sunday March 29 at the Cimmaron Golf Course, with proceeds from the event supporting the NASTT Education Fund. Another new feature this year was the Contractors' Roundtable Forum, cohosted by the National Utility Contractors Association (NUCA), which provided a dedicated place for contractors to share insights, challenges, and solutions. Other networking highlights bookending the No-Dig Show were the stunning Party in the Palms kickoff Sunday evening and joyous Trenchless Classic Celebration and Awards Tuesday evening.

The NASTT 2026 No-Dig Show in Palm Springs demonstrated beyond question that trenchless technology offers both innovative rehabilitation and technically advanced replacement options for communities and utilities looking for cost effective, non-disruptive and greener infrastructure solutions. It displayed the resilience, resourcefulness and innovative foundations of the trenchless industry, and the people who pursue it with a passion.

As preparations begin for the NASTT 2027 No-Dig Show next year in Raleigh NC, March 21 –25, the trenchless technology industry remains at the forefront as a key environmental steward offering an impressive toolbox of methods and ideas which help preserve our natural resources, reducing both GHG emissions and community impacts from construction. NASTT works purposefully towards expanding its role as the premier resource for knowledge, networking, education, and training in trenchless technology all across North America.

“No-Dig has always been a place where you can learn something practical and connect with people who matter to your work.”

– Kim Hanson P.E., NASTT Executive Director

Sunday Golf Tournament



MARCH 29-APRIL 2 | PALM SPRINGS, CA

NO-DIG SHOW

2026



The NASTT Golf Tournament held Sunday at the Cimmaron Golf Course in Palm Springs was a lively and laid back good time. 120 players enjoyed a fun morning of networking and festivities with all proceeds going to support the NASTT Education Fund



*Winning foursome of the NASTT Golf Tournament
(from l - r) Brad Caister, Ken Auty,
Patrick Moskwa, Terry Martins*

Sunday Party in the Palms

There was no better way to celebrate the start of the 2026 No-Dig Show in Palm Spring than joining together in a spectacular setting for welcome drinks and appetizers at the Party in the Palms Sunday evening! Attendees started the conference off with excitement as they looked forward to the days ahead greeting friends and welcoming new faces. This event also welcomed the recipients of the NASTT Municipal & Public Utility Scholarship and Student Chapter Members. A good time was had by all!



Monday General Session & Awards Ceremony



MARCH 29-APRIL 2 | PALM SPRINGS, CA



NO-DIG SHOW

2026



Full Conference delegates attended the General Session and Awards Ceremony Monday morning to visit with colleagues and get set for the week! During this session awards were presented, and volunteers were recognized for their trenchless achievements.



Keynote speaker Bill Hanway, Executive Vice President and Global Sports Leader at AECOM, addressed delegates with an engaging discussion on the venue design and planning underway for the Los Angeles 2028 Olympics and Paralympic Games



Departing Board Members received a plaque of appreciation for their years of dedication and service (from l-r): Carl Pitzer, Thompson Pipe Group, Chris Knott, BT Construction Inc., Dan Buonadonna P.E., Jacobs, Kim Hanson P.E., NASTT Executive Director (formerly of Hazen and Sawyer), Greg Tippet P.Eng, Stantec



Maureen Carlin Ph.D., of Garver (left) received a plaque of appreciation for her hard work and dedicated service as the NASTT 2026 No-Dig Show Planning Committee Chair



Glen Wheeler, of J.W. Fowler (left) was recognized as the 2026 Ralston Young Trenchless Achievement Award recipient



Chris Knott, Director of Business Development and Estimating at BT Construction Inc. (left) received the 2026 NASTT Volunteer Award chosen by the NASTT Staff



Six deserving recipients of the 2026 NASTT Michael E. Argent Memorial Scholarships (from left to right): Shima Zare, University of Texas at Arlington/CUIRE, Juan Alexander Rea Avila, Rutgers University, Seyed Mahmoudreza Yadollahi, Clemson University, Niloy Paul, Louisiana Tech University/Trenchless Technology Center, Paria Hamidzadeh, University of Texas at Arlington/CUIRE, Frank Adindu, Oregon State University



"Trenchless Technology" magazine 2026 Person of the Year, Jason Lueke, PhD., P.Eng of Associated Engineering (center), was recognized by Sharon Bueno (left) and Mike Kezdi (right), Benjamin Media/"Trenchless Technology" magazine



"Trenchless Technology" Magazine 2025 Project of the Year for New Installation was awarded to the project: "Champlain Hudson Power Express: Terrestrial Project Trenchless Crossings"



"Trenchless Technology" Magazine 2025 Project of the Year for Rehabilitation was awarded to the project: "The North Outfall Sewer (NOS) Unit 10 Rehabilitation Project in Los Angeles"

Monday Ribbon Cutting & Exhibit Hall



MARCH 29-APRIL 2 | PALM SPRINGS, CA



NO-DIG SHOW

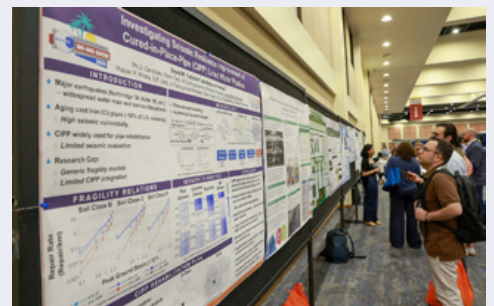
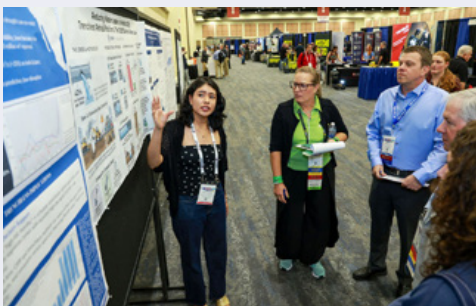
2026



The 2026 NASTT No-Dig Show Premium Sponsors were honored during the ribbon cutting ceremony



The annual ceremonial ribbon cutting opened the exhibit hall and welcomed sponsors, exhibitors, attendees and guests to the NASTT 2026 No-Dig Show! (left to right): Andrea Long P.E. PMP, NASTT Vice Chair (City of Aurora CO); Drew Sparks, NASTT Board Member (Laney Directional Drilling); Maureen Carlin Ph.D., NASTT 2026 No-Dig Show Planning Committee Chair, (Garver); Kim Hanson P.E., NASTT Executive Director; Greg Tippet P. Eng., NASTT Board Chair, (Stantec)



Each year members of the NASTT Student Chapters are invited to present their findings via a poster presentation during the Trenchless Research Competition



Networking and education are always top of mind during the NASTT No-Dig Show. The exhibit hall is buzzing with the latest innovations in the trenchless industry with product and equipment demonstrations and lively technical discussions. Exhibitors offer raffles, food and beverages give-aways and more in their booths for attendees to explore and enjoy



Drill with Confidence

Precision gyro technology delivers guidance you can trust.

Part of the complete line of ParaTrack™ HDD Guidance tools.



THE GUIDANCE SPECIALISTS
vectormagnetics.com/gyro

Monday Underground Mixer



MARCH 29-APRIL 2 | PALM SPRINGS, CA



NO-DIG SHOW

2026



The team from Vermeer awarded a \$5,000 cash prize with raffle proceeds benefitting the NASTT Educational Fund



All attendees were invited to celebrate the end of the first full day of the conference with a networking cocktail hour

Technical Sessions



MARCH 29-APRIL 2 | PALM SPRINGS, CA



NO-DIG SHOW
2026



A central aspect of the NASTT No-Dig Show is the unparalleled technical schedule featuring seven tracks packed into an informational three-day agenda. Over 200 sessions on all aspects of trenchless technology were presented and also included panel forums with industry experts such as the NUCA Contractors' Forum Registrants earn Continuing Education Units to support their professional development with their attendance to the technical sessions



HDPE
MUNICIPAL
ADVISORY
BOARD



PPI
Plastics Pipe Institute
MUNICIPAL & INDUSTRIAL

Your Video Library Resource

HDPE Installation Reports from the Field

Find out more:



© 2024 Plastics Pipe Institute, Inc.

Tuesday Evening Trenchless Classic



Long time NASTT member and former Chair of the Board of Directors, Derek Potvin P.Eng., was inducted into the 2026 NASTT Hall of Fame, honoring a lengthy career of trenchless technology leadership



Former NASTT Executive Director Mike Willmets congratulated the 2026 NASTT Hall of Fame recipient Derek Potvin P.Eng.



Cindy Preuss, CDM Smith (left) was awarded the NASTT 2026 Chair Award for Distinguished Service, in honor of her years of dedicated volunteer leadership from NASTT Board Chair, Greg Tippet P. Eng., Stantec (right)



Closing out the 2026 No-Dig Show in style, the festive Trenchless Classic evening also celebrated the NASTT 2026 Hall of Fame and NASTT Chair Award recipients

ENGINEERED SOLUTIONS FOR YOUR BYPASS PUMPING NEEDS

HIGH FLOWS
LONG RUNS
CHALLENGING
LOCATIONS
DEWATERING
ACCESS PITS



Liquid Ingenuity®



rainforrent.com/bypass
800 742 7246

NASTT-NUCA Annual Trenchless Contractors Forum

Trenchless Contractors Share Insights, Challenges & Solutions at NASTT 2026 No-Dig Show in Palm Springs



Presented in partnership with the National Utility Contractors Association (NUCA), the annual Contractors Forum connects underground utility contractors with the trenchless technology leadership. Providing a focal point for utility contractors to exchange ideas on industry infrastructure issues, the objectives of the Forum are:

- Strengthening collaboration between contractors, engineers, and owners
- Highlight the value of early contractor involvement
- Share real-world experiences—both successes and challenges
- Provide practical takeaways for improving trenchless project delivery

Moderated by Jason Holden, Akkerman Inc., other panelists included: Luke Minger, Minger Construction; Jason Young, Young Construction; Jon Nix, CH Nix Construction; and Brian Sherrell, All State Boring. Attendance at this productive exchange of ideas between contractors, engineers and owners continues to grow.

CARBON FIBRE TECHNOLOGIES

EXTEND Asset Life REDUCE Risk of Failure

Infrastructure Repair & Rehabilitation

Carbon Fiber and Epoxy Internal & External Wrap System engineered for structural strengthening & rehabilitation.

NSF APPROVED
for water & SWAT TESTED
for wastewater.

www.tccarbonfibre.com

Robinson Consultants

Over 45 years of Engineering Expertise

**Municipal
Transportation
Water Resources
Asset Management
Trenchless Technology
Land Development**

www.rcii.com
Offices located in Ottawa,
Hamilton, and Kingston



“Each new person who attends brings a fresh perspective to the industry. I hope to continue the collaboration between NASTT and NUCA to find ways to bring more contractors to No-Dig, and continue the growth in Contractor attendance next year.”

- Chris Knott, Director of Business Development and Estimating, BT Construction



WHEN THE FLUID
STAYS CLEAN
THE JOB STAYS MOVING



ASTEC | KEMTRON HDD™

Learn More at kemtronhdd.com



Prowler 400™
Go Anywhere



600MX Pro™
Maximum Solids Control



**MULTI-PASS
CLEANING**
Removes more sand and silt while maximizing fluid recovery.



**LARGEST SCREEN
SURFACE AREA**
Exceptional solids control performance in its class.



**OPERATOR-FOCUSED
DESIGN**
Smart, intuitive features simplify operation and maintenance.



**FLEXIBLE MOBILITY
OPTIONS**
Trailer-mounted or track driven to match the needs of any job.

Innovation in Action: Meet NASTT's 2026 Abbott Award Honorees

Two honorees share the inspiration, challenges, and industry impact behind their award-winning technologies



The North American Society for Trenchless Technology (NASTT) recognized two outstanding innovations with the 2026 Abbott Award for Innovation. The Abbott Innovative Product Award, awarded annually, celebrates state-of-the-art products or services making a significant impact in advancing the trenchless industry. The award is named for the late Joseph L. Abbott, Jr., an active NASTT member since its founding in 1990 and a champion of innovation.

Entries are evaluated by a panel of judges based on their ability to:

- Introduce groundbreaking advancements for the industry or specific segments;
- Demonstrate new possibilities, solve existing challenges, and push beyond traditional design or application boundaries; and
- Reflect comprehensive redesign or significant technical refinement.

Presented during the 2026 NASTT No-Dig Show in Palm Springs, the Abbott Award recognizes innovations that help shape the future of trenchless technology. This year's honorees are Footage Tools' C2400 Squeeze Boss and Thompson Pipe Group's Weldable Curve Joint (WCJ) both winners demonstrating how engineering ingenuity continues to expand what is possible in trenchless construction and pipeline infrastructure.

Congratulations to the winners.

"Engineering ingenuity continues to expand what is possible in trenchless construction and pipeline infrastructure."

Product overview videos from the winners and all 2026 award entrants are available on the NASTT YouTube Channel and in the NASTT Trenchless Knowledge Hub.

Do you have an innovation that's advancing the trenchless industry? NASTT encourages companies to showcase products, services, and solutions that are transforming how underground infrastructure challenges are addressed. Start planning now for the 2027 Abbott Award for Innovation.



Product overview presentations of the winner and finalists are available in the NASTT Trenchless Knowledge Hub. Click the Knowledge Hub button at www.nastt.org.

**APPLY NOW for the 2027 NASTT
Abbott Award for Innovation**

Visit www.nastt.org/awards
Contact membership@nastt.org
for more information or to join NASTT

NASTT Selects 2026 Innovative Product Award Winners



(from left to right) Kim Hanson P.E., NASTT Executive Director, Matt Stone, President & CEO, Ben Ferguson, Sales Manager, Mike James, ISCO Industries, VP of Business Development & Sales

NASTT Abbott Award -
Innovation Product

FOOTAGE
TOOLS

Footage Tools | www.footagetools.com

Submitted by Jim LaChapelle, Marketing Manager

"The Abbott Award is validation of our 40-year history of pushing the boundaries of innovation for specialty infrastructure tooling."

– Matt Stone, Footage Tools President & CEO

FOOTAGE TOOLS - C2400 Squeeze Boss

The C2400 Squeeze Boss delivers unrivaled force and durability for large-diameter HDPE squeeze-off applications. The C2400 is designed for 18 to 24-inch HDPE pipe (SDRs from 7 to 21) and can deliver 791 tons of force for precision pipeline control. It can endure the most demanding field conditions, ensuring superior performance in HDPE pipeline operations. Engineered for superior handling, the C2400 is crafted from precision-machined, aircraft-grade aluminum with chrome-plated steel side shafts for durability and strength. Its enhanced lock-in/swing-out bottom bar design allows for quick and hassle-free installation, while lock-down bolts maintain secure squeeze integrity even after hydraulic disconnection.

For Matthew Stone, CEO of Footage Tools, receiving the Abbott Award for Innovation is validation of the company's four decades of commitment to advancing specialty infrastructure tooling.

"Receiving the 2026 NASTT Abbott Award for Innovation is special for our team," said Stone. "It is validation of our 40-year history of pushing the boundaries of innovation for specialty infrastructure tooling. We've been committed to building best-in-class large-diameter squeeze-off tools, and the creation of the C2400 Squeeze Boss is just the latest example of that commitment."

The inspiration for the C2400 stemmed from a long-standing industry need. According to Stone, the market lacked a purpose-built tool capable of safely and effectively squeezing off heavy-wall HDPE pipe. After collaborating with industry stakeholders, Footage Tools developed the first squeeze-off tool capable of handling heavy-wall HDPE pipe up to 24 inches in diameter while delivering an unprecedented 791 tons of hydraulic force. Stone noted that the innovation is already benefiting critical infrastructure sectors by enabling pipeline isolation during maintenance, construction, and emergency repairs where other options may not be available. Looking ahead, he believes wider adoption will help reduce operational costs and environmental impacts associated with large excavations while providing a proven solution for industrial and energy systems throughout North America.

Stone also emphasized the value of NASTT's role within the trenchless industry. "NASTT has provided immense value as a cornerstone of the trenchless industry, connecting us with a broad network of dealers, contractors, operators, engineers, and other infrastructure professionals who are committed to advancing the industry through innovation, collaboration, and the exchange of technical expertise."

NASTT Selects 2026 Innovative Product Award Winners



(from left to right) Carl Pitzer, Director, Trenchless Markets, Sanaz Ghalambor, Ph.D. Strategic Products Technical Resource Engineer, Kim Hanson P.E., NASTT Executive Director

NASTT Abbott Award - Innovation Product



Thompson Pipe Group

www.thompsonpipegroup.com

Submitted by Carl Pitzer, Director, Trenchless Markets

"The innovation is not a new pipe material; it is a new joint capability that expands what is possible with concrete pressure pipe in modern trenchless construction."

– Sanaz Ghalambor, Ph.D., MBA, Thompson Pipe Group Technical Resource Engineer – Strategic Products

THOMPSON PIPE GROUP - Weldable Curve Joint (WCJ)

The Weldable Curve Joint (WCJ) is a next-generation joint system that redefines how concrete pressure pipes can be used in trenchless construction. The WCJ overcomes the limitations of traditional C300 joints by introducing a fully restrained, weldable joint that enables single-pass microtunneling, true multi-curve alignments, and longer drive lengths for pressure applications. By increasing pipe-to-pipe bearing area and providing continuous structural connectivity throughout the pipeline, the WCJ supports higher allowable jacking loads, enhanced resistance to external groundwater pressure, and improved constructability. The innovation expands the application space of concrete pressure pipe and enables trenchless solutions that were previously impractical using conventional joint systems.

For Thompson Pipe Group, the Abbott Award recognizes years of engineering, manufacturing, and field experience dedicated to solving complex infrastructure challenges. "The award is particularly meaningful because it comes from industry peers who understand the technical and construction challenges associated with trenchless projects," said Sanaz Ghalambor, Ph.D., MBA, Technical Resource Engineer – Strategic Products. "It reinforces our commitment to developing practical innovations that improve constructability, expand design possibilities, and provide long-term value to owners."

Carl Pitzer, PE, Director of Trenchless Markets, added that the recognition reflects the collaborative effort required to advance

the trenchless industry. "Receiving the Abbott Award for Innovation is a tremendous honor because it recognizes not only a successful project or product, but also the collaborative effort required to advance the trenchless industry. For Thompson Pipe Group, the award validates years of engineering, manufacturing, and field experience dedicated to solving complex infrastructure challenges."

The Weldable Curve Joint was inspired by a challenge the trenchless industry has faced for decades. While microtunneling technology has continued to advance, joint systems for rigid pressure pipe had not evolved at the same pace. Traditional AWWA C300 joints performed well in conventional installations but often limited allowable jacking loads, achievable drive lengths, curvature, and the ability to construct complex alignments using a true single-pass approach.

Rather than developing a new pipe material, Thompson Pipe Group focused on transforming the joint itself. By redesigning the joint geometry and load path, the company created a system that increases load transfer capacity, provides full restraint and weldability, and enables controlled curvature during installation. The result is a solution that allows engineers to follow more optimal alignments, reduce construction complexity and risk, and improve the efficiency of infrastructure investment. "Ultimately, the innovation is not a new pipe material," said Ghalambor. "It is a new joint capability that expands what is possible with concrete pressure pipe in modern trenchless construction."

HDPE PE4710 PIPE

The Best Choice For Water Systems

	TOP 10 Features and Benefits	HDPE	D. Iron
1	Applications: Potable Water (Lead Free), Raw Water, Reclaimed Water, and Wastewater <i>References: AWWA C901, C906, C151, & NSF 61 + Health Effects of HDPE Pipes and Fittings for Potable Water Applications, NSF 2024</i>	✓	✓
2	Open Cut Construction: Design and install per AWWA Standards and Manuals eliminating thrust blocks <i>Ref: AWWA M55, M41 + MAB-3, MAB-6</i>	✓	✓
3	Trenchless Construction: Material of choice for HDD, Pipe Bursting, Sliplining, and Compression Fit <i>Ref: ASTM F585, F1962, F3508 + MAB-5, MAB-7, MAB-11</i>	✓	X
4	Fully Restrained Joint-Free System: Minimize need for fittings to facilitate horizontal and vertical deflections <i>Ref: AWWA M55, M41</i>	✓	X
5	Longevity & Corrosion: Pipes, Fittings, and Joints have the least potential for corrosion or tuberculation <i>References: Durability and Reliability of Large Diameter HDPE Pipe for Water Main Applications, EPA/WRF/WERF 2025 + Critical Need for Corrosion Management in the Water Treatment Sector, NACE 2019 + PPIPAC.com + Long-Term Aging of Polyethylene Pipes, UKWIR 2020</i>	✓	X
6	Flow Capacity: New pipes have similar flow capacity per AWWA Standards and Manuals <i>References: AWWA M55, M41 and PPIPAC.com</i>	✓	✓
7	Water & Energy Conservation: Fused Joints have zero allowable water leakage and zero infiltration <i>References: AWWA M55, M41 + ASTM F2620, F3190, F3565 and MAB-1, MAB-2, MAB-8</i>	✓	X
8	Cost Effective: Has the lowest initial cost, lowest life cycle cost, and lowest restoration cost for trenchless installations <i>References: Life Cycle Analysis of Water Networks, CSIRO 2008 + Annual Drinking Water Quality Report for 2014, Kittery Water District, 5/31/15</i>	✓	X
9	Resilient: Ability to resist water hammer and ground movements due to droughts, freeze/thaw, earthquakes and hurricanes with the ability for flow control and squeeze off <i>References: Recent Earthquakes: Implications for U.S. Water Utilities, WRF 2012 + Polyethylene Pipeline Performance Against Earthquake, Kubota 2018 and MAB-9, MAB-10</i>	✓	X
10	Permeation/BTEX: Pipes and elastomeric joints need to be properly engineered for contaminated conditions <i>References: AWWA C901/C906 and C111/C151, Sec. 4</i>	X	X



Additional information including MAB-3 Model Spec Guide
can be found at www.plasticpipe.org/mabpubs



Rising in the Trenchless Industry

NASTT Recognizes Four Emerging Professionals as 2026 Trenchless Rising Stars

NASTT is pleased to recognize four outstanding early-career professionals as Trenchless Rising Stars. Members and employers were invited to identify young professionals whose work already reflects exceptional growth in their contributions to the trenchless industry and increasing levels of leadership, responsibility, and professional impact.

Trenchless Rising Stars are young professionals whose record reflects ongoing and exceptional growth in their contributions to the profession and increasing levels of leadership, responsibility and sphere of impact. These early career professionals have a track record that reflects a strong career trajectory and the potential to reach the highest levels of achievement in the profession.

This year's honorees represent a range of roles across research, design, construction, and engineering consulting. Through their work, they are helping advance trenchless practices, strengthen collaboration across the industry, and support the development of resilient underground infrastructure.

Although early in their careers, each of these professionals has already demonstrated the initiative, technical ability, and commitment that signal a strong trajectory within the trenchless field.

What is a Trenchless Rising Star?

Trenchless Rising Stars are early-career professionals with fewer than five years of industry experience who are already demonstrating strong technical ability, leadership potential, and a commitment to advancing trenchless technologies.





Simon Baeza-Faundez

**Geotechnical and
Tunneling Engineer
Stantec Consulting
Services, Inc.**

Nominated by Steve Fradkin and Daniel McManus, Stantec Consulting Services, Inc.

A Geotechnical and Tunneling Engineer at Stantec Consulting Services, Inc., Simon Baeza-Faundez contributes to the design and construction support of underground infrastructure projects across North America. His work includes trenchless installations for water, wastewater, and stormwater conveyance systems, as well as underground energy facilities.

Simon's experience in trenchless technology spans microtunneling, auger boring, pipe jacking, and horizontal directional drilling (HDD) beneath highways, railroads, waterways, and densely developed urban areas. He has contributed to feasibility studies, preliminary and detailed designs, and construction-phase engineering support, including preparation of technical memoranda, risk registers, and geotechnical design reports.

Beyond trenchless applications, Simon has developed a strong foundation in geotechnical engineering through work involving subsurface investigations, foundation design, slope stability, trench stability, and ground settlement analyses. His work frequently involves advanced numerical modeling and specialized geotechnical software to evaluate complex underground conditions and inform design decisions.

Simon earned his Master of Science in Geotechnical Engineering from the Colorado School of Mines, graduating with a perfect 4.0 GPA. His graduate research focused on deterministic and probabilistic slope stability analysis to evaluate tunnel locations in landslide-prone terrain, combining advanced modeling techniques with practical engineering applications.

Known for his initiative, sound engineering judgment, and collaborative approach to project work, Simon has quickly become a trusted contributor on complex trenchless design teams. Through technical expertise, continued professional development, and growing industry involvement, he is emerging as a promising young professional in the trenchless industry.

**Performance
You Can
Count On.**

**Peace of
Mind You'll
Appreciate.**



**You want piece of mind when
spec'ing a rehab product.
With OBIC, you can rest easy.**

We offer a wide range of lining solutions engineered to restore structural integrity for wastewater and storm systems that ensure durability and reliability for the long term. Call us to learn how we can help on your next project.

Watch an OBIC
Case Study



obicproducts.com | 866-636-4854

Rising Stars Recognition Program



Nominated by Ian Moore, Queen's University

A Municipal Engineering Specialist at AECOM, Zahra Joneidi focuses on advancing trenchless rehabilitation technologies and improving the understanding of liner performance in buried pipe infrastructure. Her work builds on extensive doctoral research at Queen's University, where she investigated the mechanical behavior of polymer liners crossing joints in reinforced concrete pipes.

Zahra's research involved large-scale experimental testing to study the bending response of glass-fiber-reinforced Cured-in-Place Pipe (CIPP) and polyurea Spray-In-Place Pipe (SIPP) liners subjected to joint rotation caused by vehicular loading. This work addresses a critical gap in existing design standards and provides some of the first full-scale experimental evidence explaining how these liners respond to joint movement and strain concentrations where they span pipe joints.

Her academic work has been closely connected to industry practice. During a 1.5-year internship with Robinson Consultants Inc., Zahra contributed to trenchless rehabilitation projects for municipalities across Canada and identified an important knowledge gap in the performance of SIPP liners. Drawing on both field experience and laboratory research, she proposed and conducted the first experimental investigation to measure strains in SIPP liners crossing pipe joints – work that earned her the 2024 NASTT GLSLA Student Scholarship.

Zahra has also demonstrated leadership in advancing industry practices, including improving QA/QC processes for CIPP liners by advocating for standardized testing report formats within industry laboratories.

An active member of the trenchless community, Zahra has served as Vice President of the NASTT Student Chapter at Queen's University and volunteered at No-Dig North conferences. Through research, industry collaboration, and professional engagement, she is emerging as a promising young professional in the trenchless industry.



A Geotechnical Engineer-In-Training at CCI Inc. and a Master of Science student in geotechnical engineering at the University of Alberta, Madelyn Smith focuses her work on advancing horizontal directional drilling (HDD) design and risk management for pipeline installations—an area that often presents significant uncertainty in trenchless construction.

Through her graduate research, Madelyn is developing a quantitative risk management framework for HDD projects. By integrating probability-based assessment methods from geotechnical and civil engineering disciplines, her work aims to improve decision-making and enhance the safety and reliability of trenchless installations.

Madelyn's academic research is informed by her professional experience at CCI Inc., where she has supervised field investigations across Canada and the United States and contributed to HDD design projects. Her responsibilities have included geotechnical reporting, risk assessments, slope stability analysis, settlement evaluation, and hydrotechnical scour analysis, providing valuable insight into the practical challenges of trenchless construction.

Beyond her technical work, Madelyn contributes to company culture and safety initiatives. At CCI, she has served on both the Health, Safety and Environment Committee and the Social Committee, supporting activities that reinforce safety awareness and strengthen collaboration among colleagues.

Madelyn is also actively engaged with the trenchless community through NASTT and currently serves as Vice President of the University of Alberta Student Chapter. Through technical innovation, leadership, and industry engagement, she is emerging as a promising young professional in the trenchless industry.



Nominated by Kendra Lamer, Michels

An Engineer-in-Training (EIT) in the Pipe Services division at Michels Canada, Mitchell Spence works on trenchless construction and rehabilitation projects across the Vancouver, British Columbia region. A graduate of the University of British Columbia with a degree in civil engineering, Mitchell developed an early interest in infrastructure that has translated into a strong start in the trenchless industry.

During his time at UBC, Mitchell demonstrated strong leadership and technical ability through his involvement with the university's Concrete Toboggan Design Team. Rising from team member to co-captain, he helped lead more than 50 students in designing and building a 350-pound concrete toboggan with a concrete sliding surface, steel roll cage, and mechanical steering and braking systems. Under his leadership, the team earned the "Most Improved Team" award and placed second in concrete mix design with an innovative carbon-neutral concrete mixture.

Mitchell Spence
EIT – Pipe Services
Michels Canada

Early experience with Michels Canada began through co-op positions focused on microtunneling construction and preconstruction services. During these internships, Mitchell contributed to projects across Canada utilizing tunneling, microtunneling, horizontal directional drilling (HDD), Direct Pipe®, and auger boring. After graduating, he transitioned into a full-time role and now focuses primarily on trenchless rehabilitation technologies including cured-in-place pipe (CIPP) and sprayed-in-place pipe (SIPP).

In his current role, Mitchell manages QA/QC document control, coordinates permitting efforts, supervises field work, and supports proposal development. He also developed a new system for technical document preparation and recordkeeping within the trenchless division, improving efficiency and accountability across projects.

Through technical curiosity, initiative, and a collaborative approach to project delivery, Mitchell has already earned significant responsibility early in his career and is emerging as a promising young professional in the trenchless industry.

Civil Construction
Engineering & Design
Energy
Renewables
Foundations
Marine
Water & Wastewater
Transportation
Mission Critical

**Above.
Beyond.
Below.**

MICHEL'S®

Michels.us

WE DO THAT ... & MORE

EOE/AA/M/F/D/V



MARCH 21-25 | RALEIGH, NC

NO-DIG SHOW

2027



Save the Date!

NASTT 2027 No-Dig Show
heads to Raleigh, NC,
March 21–25!

Get ready for a week of
cutting-edge trenchless
technology, industry
connections, and can't-
miss experiences.

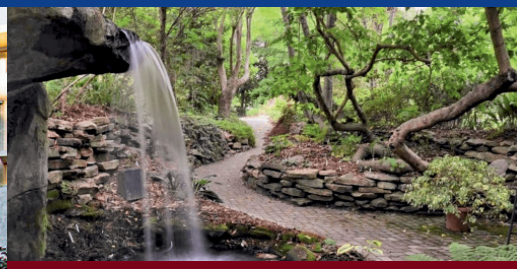
visit nastt.org



See you next year in

2027

Raleigh, NC





 www.jennmarcivil.com

 info.civil@jennmar.com

 (502) 473-1010

DEMANDING CONDITIONS

DEMAND JENNMAR

Explore our enriched product range and enhanced services under the Jennmar Specialty and Civil divisions. Join us on this journey as we redefine possibilities in the tunneling and civil engineering landscape, offering a wide range of products used in supporting, building, and rebuilding our infrastructure from above and below ground.

Our strength lies in our ability to offer our customers solutions in every phase of their projects. We manufacture Arch Systems, Lattice Girders, Liner Plates, and Lagging Systems, including designed Channel Lagging, V-Deck Lagging System, our Impact Resistant Lagging®. Plus, a full offering of bolts and resins.

Whether mining, tunneling, developing underground space, or rehabbing and re-supporting transportation, water, wastewater, or infrastructure tunnels, our team of experienced engineers and technicians is with you every step of the way—from initial consultation to qualified instruction, full design, stamped engineering submittals, and ongoing technical support to make your project a success!



GLOBAL HEADQUARTERS
258 Kappa Dr., Pittsburgh, PA 15238
(412) 963-9071

559 Wardell Industrial Park Rd.
Cedar Bluff, VA 24609
(276) 964-7001

147 Champion St.
Cedar Bluff, VA 24609
(276) 964-7413

1032 E. Chestnut St.
Louisville, KY 40204
(502) 473-1010

For more information on Jennmar's portfolio of diverse and complementary brands visit us at www.jennmar.com.

NASTT 2026 No-Dig Show Scholarships Provided to Municipal & Public Utilities



Municipal and public utility scholarships covered registration and accommodations costs for over 175 delegates attending the 2026 No-Dig Show, March 29 - April 2 in Palm Springs, California

In 2013, NASTT established the No-Dig Show Municipal & Public Utility Scholarship Award Program to provide education and training for employees of North American municipalities, government agencies and utility owners who have limited or no training funds due to economic challenges. At least 100 applicants are awarded the scholarship annually, with a total of over 2,000 scholarships since the inception of the program.

Who Do You Want to Meet at No-Dig 2026?

Doing business with municipal agencies and public utilities is crucial to the trenchless industry. NASTT's Municipal & Public Utility Scholarship brings hundreds of decision-maker agency representatives in-person to the No-Dig Show. Nearly 2,000 delegates have been onsite looking for solutions to their infrastructure challenges that you can provide.

CONNECT WITH THEM AT NO-DIG!

Join us at the Raleigh Convention Center, March 21 - 25, 2027. Apply or refer a colleague to the Scholarship by November 9, 2026.

Visit <https://nastt.org/no-dig-show/municipal-scholarships/>

"The show provided many opportunities to network with contractors, consultants, and decision makers within municipalities and utilities across the United States and Canada."

— Joseph Barnes, Johnson County Wastewater

"I found the sessions interesting and gained a lot of useful information to bring back to my community. I had such a narrow view of Trenchless Technology before the show, and now see it in a clearer fashion and in a larger light. The exhibits were interesting and I found many products or ideas that directly related to what I deal with on a day to day basis."

— Matt Overeem, Village of Wilmette

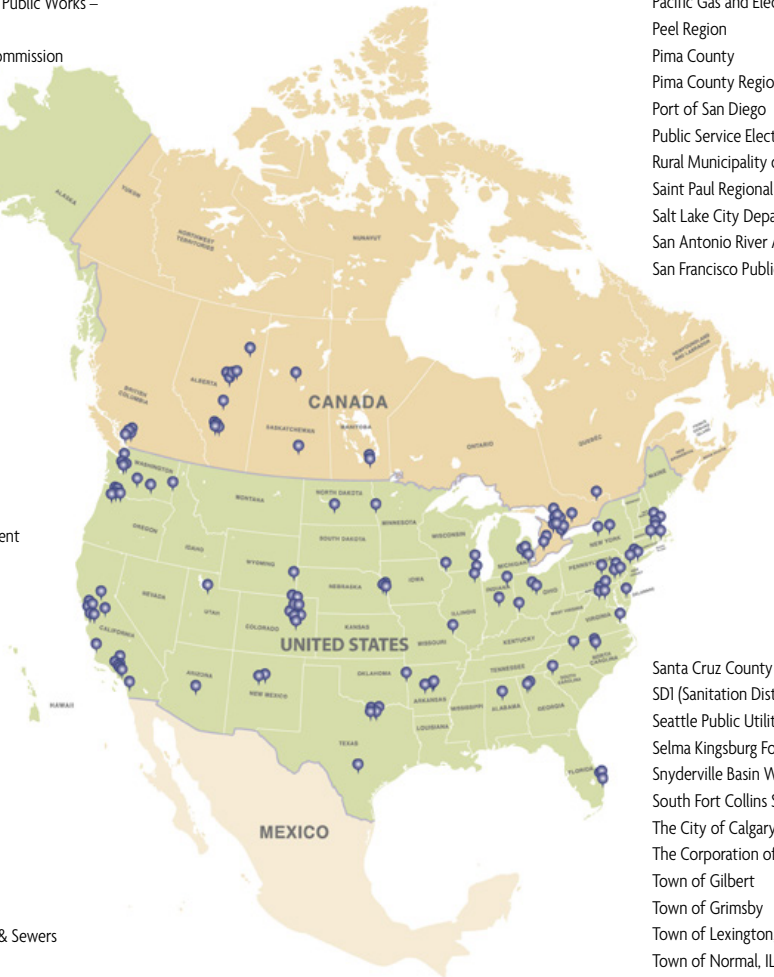


The Following Agencies Were Offered a Scholarship to Attend the 2026 No-Dig Show:

Albuquerque Bernalillo County Water Utility Authority
 ARROW Utilities
 Aurora Water
 Baltimore City DPW
 Bureau Of Reclamation
 Center for Underground Information Research and Education
 Central Contra Costa Sanitary District
 Cincinnati MSD
 Citizens Energy Group
 City and County of Honolulu
 Department of Environmental Services
 Collection System Maintenance
 City and County of San Francisco – Department of Public Works –
 Bureau of Engineering
 City and County of San Francisco Public Utilities Commission
 City of Anaheim
 City of Aurora
 City of Baltimore
 City of Bend
 City of Chandler
 City of Columbus
 City of Columbus – Columbus Water & Power
 City of Dallas
 City of Dallas, Dallas Water Utilities
 City of Dollard-des-Ormeaux
 City of Durham
 City of Eugene
 City of Fontana
 City of Fort Lauderdale
 City of Fruitland, Idaho
 City of Glendale, Arizona
 City of Glendale, California
 City of Greeley, Colorado Water & Sewer Department
 City of Haltom City
 City of Horace
 City of Kannapolis
 City of Ketchikan Public Works Department
 City of Lancaster
 City of Los Angeles
 City of Los Angeles – Bureau of Engineering,
 Department of Public Works
 City of Los Angeles, Bureau of Engineering
 City of Lynnwood- Public Works
 City of Medicine Hat
 City of Memphis
 City of Minneapolis
 City of Minneapolis Public Works
 City of Minneapolis Public Works – Surface Water & Sewers
 City of New Bedford, Massachusetts
 City of Omaha
 City of Omaha Public Works
 City of Ottawa
 City of Redmond
 City of Renton
 City of Rochester Hills
 City of Saginaw
 City of San Jose
 City of Simi Valley

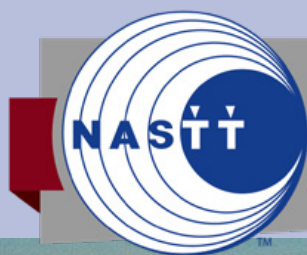
City of Ukiah
 City of Vancouver
 City of Vancouver WA – Public Works
 City of Vancouver, WA
 Clackamas County – Water Environment Services
 Clean Water Services
 Colorado River Municipal Water District
 County of Santa Cruz
 DC WATER
 Denver Water
 Eastern Municipal Water District
 EPCOR Utilities

Maryland Department of Transportation,
 State Highway Administration
 Metro Water Recovery
 Miami Dade County Department of Transportation and Public Works
 Milwaukee Metropolitan Sewerage District
 Municipality of Princeton
 National Grid
 Norwich Public Utilities
 Oakland County Water Resources Commissioner's Office
 Onondaga County Department of Water Environment Protection
 Orange County Sanitation District
 Oregon Department of Transportation
 Pacific Gas and Electric (PG&E)
 Peel Region
 Pima County
 Pima County Regional Wastewater Reclamation
 Port of San Diego
 Public Service Electric and Gas (PSE&G)
 Rural Municipality of East St Paul
 Saint Paul Regional Water Services (SPRWS)
 Salt Lake City Department of Public Utilities
 San Antonio River Authority
 San Francisco Public Utilities Commission



Santa Cruz County
 SDI (Sanitation District #1) of Northern Kentucky
 Seattle Public Utilities
 Selma Kingsburg Fowler – County Sanitation District
 Snyderville Basin Water Reclamation District
 South Fort Collins Sanitation District
 The City of Calgary
 The Corporation of the City of Markham
 Town of Gilbert
 Town of Grimsby
 Town of Lexington, MA
 Town of Normal, IL
 Town of Sylvan Lake
 Township of Langley
 Trabuco Canyon Water District
 Trinity River Authority of Texas
 Upper Montgomery Joint Authority
 Vallecitos Water District
 Washington Suburban Sanitary Commission (WSSC)
 WSSC Water
 Xcel Energy

EPCOR Water Canada
 EPCOR Water Services Inc.
 Fort Collins-Loveland Water District
 Greater Augusta Utility District
 Green Bay Metropolitan Sewerage District
 Gwinnett County Department of Water Resources
 Hillsborough County BOCC
 Hillsborough County Government, Public Works Department



MARCH 21-25 | RALEIGH, NC

NO-DIG SHOW

2027



NASTT Municipal & Public Utility Scholarship

The NASTT No-Dig Show Municipal & Public Utility Scholarship awards employees of North American municipalities, government agencies and utility owners who have limited or no training funds with a Full Conference and Exhibition conference registration to NASTT No-Dig Show. Hotel accommodations for three nights at the host hotel are provided for selected applicants. Recipients have full access to all exhibits and technical paper sessions.

Join us in Raleigh!
Applications due November 9, 2026
nastt.org/no-dig-show

Connect • Learn Achieve • Influence

**Join to be part of
an elite community of
trenchless professionals!**



Career Advancement Doors Opened!

“Because of NASTT, I have a pretty stacked tool belt that helps me bring innovative approaches to infrastructure concerns. My experiences with trenchless technologies gives me a ‘leg-up’ over others.”

~ Eric Schuler, PE, Onondaga County Department Water Environment Protection



Education Second to None

“NASTT is far and away the leading educator and networking pool in the trenchless industry. If your company plays a part in the trenchless industry, you will benefit from NASTT membership much more than you realize.”

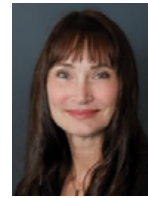
~ Joe Lane, Azuria Water Solutions



Tops at Staying on Top of the Industry

“I first joined NASTT to stay current on technological developments, best practices and market trends. Participating in NASTT committees and events and accessing its expert mentors and professionals is essential to the success of almost any project.”

~ Marya Jetten, AECOM



Amazing Network

“NASTT has been the most significant vehicle relative to the industry-specific connections I’ve made and cultivated throughout my career.”

~ Cindy Preuss, PE, CDM Smith



Membership Helps Me Strut My Stuff

“I would not be doing what I love to do without the presence and impact of NASTT. I wanted the industry to know about a record HDD project and NASTT gave me the access and opportunity to tell to the industry.”

~ Jim Murphy, UniversalPegasus International



nastt.org/membership

membership@nastt.org
888-388-2554

**NASTT membership
equips and empowers you
to thrive in your career.**

Join as an individual or get group savings as an organization with a corporate or government/education/utility membership.



Denso Expands Pipeline Protection Capabilities with New Composite Pipe Repair Systems

Denso, Inc., a leader in corrosion prevention, has expanded its pipeline protection portfolio with the introduction of its new Composite Pipe Repair Systems. The new product line includes Protal 2800CF and Protal 3200CF, two engineered carbon fiber repair systems designed to restore and reinforce damaged or weakened pipelines and piping while providing long-term corrosion protection.

As pipeline operators continue to address aging infrastructure, corrosion, wall loss, and mechanical damage, composite repair systems offer a practical solution for extending service life without welding or full pipe replacement. Denso's systems combine the high strength of carbon fiber reinforcement with advanced Protal coating technology to create durable, load-bearing repairs and corrosion protection that work with existing on-site pipe structures.

As part of the repair process, Protal 3210 Structural Filler is used to fill external defects, restore the pipe surface profile, and provide a smooth transition to ensure even load distribution, allowing internal pressure to transfer from the weakened pipe wall directly to the high-strength outer wrap without point-loading. It helps create the proper foundation for the carbon fiber reinforcement system to perform as intended.

Protal 2800CF is a high-performance, prepackaged composite repair system designed for reinforcing damaged pipelines while providing dependable corrosion protection. The system utilizes Protal 7300, making it well suited for pipeline integrity programs requiring reliable repair performance, consistent installation, and long-term protection.

Protal 3200CF is Denso's advanced high-strength wet-layup composite repair system for applications requiring the ultimate level of repair and protection. Utilizing Protal 7200 high-build corrosion protection coating, Protal 3200CF provides enhanced high-strength pipeline repair and long-term corrosion protection in demanding service applications.



Denso's Composite Pipe Repair Systems are advanced, non-metallic solutions engineered to restore and reinforce the structural integrity of pipelines affected by corrosion, wall loss, or mechanical damage—without the need for welding or shutdowns

Together, Protal 2800CF and Protal 3200CF expand Denso's ability to support pipeline owners, engineers, and maintenance professionals with solutions that address both structural reinforcement and corrosion control.

About Denso

Denso Inc. is a leading manufacturer of corrosion prevention products and systems for the energy industries. With operations in the North America, Denso provides proven solutions designed to protect critical assets in demanding service environments. Denso, Inc. provides their customers with technical expertise, field-proven products, and long-term corrosion prevention systems. For more information, **visit www.densona.com**



SoSafe Equipment Donates Power Lifter™ to North Dakota Rural Water Association to Advance Utility Worker Safety

Donation will support hands-on training for water and wastewater professionals across North Dakota

SoSafe Equipment has donated one of its Power Lifter™ Manhole Protection Systems to the North Dakota Rural Water Association (NDRWA), reinforcing a shared commitment to improving safety for the utility professionals who maintain critical underground infrastructure every day.

The donated unit is already being incorporated into NDRWA training sessions, allowing operators, public works crews, and utility professionals to gain hands-on experience with equipment designed to reduce the physical demands and injury risks associated with removing and replacing heavy manhole covers.

"Training is one of the most effective ways to improve safety," said Steve Statema, President of SoSafe Equipment. "By placing the Power Lifter directly into the hands of utility professionals during their training, we're helping demonstrate safer work practices that crews can take back to their own communities."

Manhole covers routinely weigh well over 100 pounds, and repeated manual lifting places workers at risk of back, shoulder, hand, and foot injuries. The Power Lifter™ is designed to minimize these risks while allowing crews to complete inspections and maintenance more efficiently.

For the North Dakota Rural Water Association, the donation provides a valuable training resource that can be used throughout the year as the organization delivers educational programs to water and wastewater professionals across the state.

"Our goal has always been simple," Statema added. "If we can help prevent even one serious injury while making crews more productive, we've accomplished something meaningful."

As communities across the country continue investing in infrastructure and workforce development, SoSafe Equipment remains committed to supporting the organizations that train and equip the people protecting our nation's water systems.



About SoSafe Equipment

SoSafe Equipment is dedicated to protecting the people who maintain our nation's critical infrastructure. By developing practical, field-tested safety solutions that reduce the risk of injury while increasing efficiency, SoSafe helps utilities, municipalities, and contractors create safer worksites and stronger safety cultures. Learn more at www.sosafeequipment.com



Vortex Companies Introduces the SAVA Series of UV Curing Technology

Product line features the all-new Lumeniq compact unit and the full-size 12 kW curing system

Vortex Companies (Vortex), a global leader in trenchless infrastructure rehabilitation solutions, today announced the introduction of the SAVA Series, UV Curing equipment line. Designed to deliver optimum UV curing performance in both full-size and compact frames, the SAVA Series offers CIPP Lining contractors a range of solutions to address UV curing needs based on the application, environment, and project location.

The flagship 12 kW system delivers proven UV curing performance and built for traditional jobsite conditions. The all-new Lumeniq (pronounced Lumen + IQ) was designed on a compact frame and delivers mainline curing power, utilizing smart UV lighting technology and is backed by Vortex IQ and expertise. This smaller, more portable, system allows contractors to perform UV curing in areas with limited access, where larger units cannot efficiently operate.

“Over the past several years, we have made a substantial investment in UV curing technology. Bringing manufacturing in-house allows us to elevate quality control, performance standards, and service responsiveness,” said Mike Vellano, CEO of Vortex Companies. “It was the right time to take this next step to not only ensure we are addressing contractors’ needs for multiple UV curing options, but to also deliver the most dependable and advanced equipment to the market.”

The Lumeniq was developed under the leadership of Alexander Spies, head of UV Technologies at Vortex Companies, formerly of Germany-based ETECAS UV Technology. Drawing on decades of hands-on design and manufacturing experience, Spies helped shape the Lumeniq platform to address longstanding contractor challenges.

“Lumeniq represents the culmination of years of engineering experience and industry insight,” said Spies. “Contractors have needed a compact, intelligent UV solution capable of reaching restricted access areas without compromising performance. We are proud to introduce this technology to directly address those needs and provide customers with a smarter, more versatile curing system.”



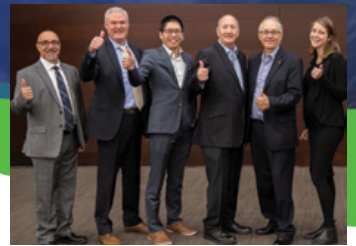
With its intelligent controls, smart light technology, practical design, the SAVA Series of UV curing systems expands Vortex’s ability to serve municipal, industrial, and specialty rehabilitation markets with precision-engineered solutions.

About Vortex Companies

Vortex Companies is a global leader in trenchless water and sewer infrastructure solutions, offering advanced technologies and turnkey services for municipal, industrial, and commercial systems. With 45 locations worldwide, Vortex specializes in the rehabilitation of manholes, pipes, and structures; the manufacture of specialty mortars, polymeric coatings, resins, and CIPP liners; and the development and distribution of sewer robotics, UV technologies, and high-speed drain cleaning tools.

Bring more to your career.
Save time and money.

Empower the world of trenchless technology.



Be part of the premier network of trenchless professionals.

NASTT members have worked through challenges, celebrated success and are ready to share their know-how at events, volunteer activities and online.

Be a solution provider.

Whether you're just starting out or are in the C-suite, NASTT's exclusive education and training supports your certification goals, grows your skillset and brings answers to your project, job site, team meeting and KPIs.

Be on the front lines of trenchless issues and products.

NASTT brings you emerging trends, innovative technologies, and who's who in the profession so you can keep up to date on the information you need to stay on the cutting edge of the industry.

Be the best with support from the best.

With members at every stage of their career, NASTT gives you access to a wide spectrum of members to give or receive support, advice and mentorship wherever you are in your career journey.



nastt.org/membership

membership@nastt.org
888-388-2554

**NASTT membership
equips and empowers you
to thrive in your career.**

Join as an individual or get group savings as an organization with a corporate or government/education/utility membership.



North American Society for Trenchless Technology (NASTT)
2026 No-Dig Show
Palm Springs, California
March 29-April 2, 2026

MM-T2-03

Sewer Force Main Installation in Valdez, Alaska (Design, Construction, Lessons Learned)

Russ Porter, PE, Steph Engineering LLC, Anchorage, Alaska

1.0 ABSTRACT

This paper presents a case study of the design and construction of approximately 18,000 linear feet (LF) of 20-inch HDPE SDR 11 sewer force main installed primarily by horizontal directional drilling (HDD) in Valdez, Alaska. The project traversed environmentally sensitive wetlands (Duck Flats) and multiple anadromous streams, with crossings of Alaska Department of Transportation and Public Facilities (AKDOT&PF) highways and rights-of-way completed without open excavation. The original design was a combination of HDD and open cut; however, the contractor proposed and executed a value-engineering revision to complete nearly the entire alignment by HDD, reducing surface impacts while introducing complete nearly the entire alignment by HDD, reducing surface impacts while introducing geotechnical and constructability risks due to longer, deeper bores. The paper summarizes drivers, design assumptions, geotechnical exploration, construction equipment, schedule and cost outcomes, problems encountered—including inadvertent returns, variable coarse granular soils with cobbles and glacial erratics, and equipment downtime, and concludes with lessons learned relevant to HDD planning in Arctic maritime environments.

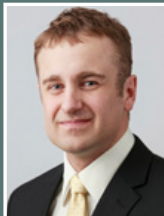
2.0 INTRODUCTION

Valdez, Alaska (population 4,000) lies at the terminus of the Trans Alaska Pipeline along Prince William Sound. The maritime climate produces heavy snowfall (on the order of hundreds of inches per year), and the project corridor includes extensive wetlands and fish-bearing (anadromous) streams. The owner sought to replace an aging asbestos cement (AC) sewer force main while minimizing environmental disturbance and maintaining service continuity.

Project Drivers

- Replace aging AC force main in environmentally sensitive corridor.
- Avoid excavation within AKDOT&PF highways and bike paths; complete AKDOT&PF crossings utilizing trenchless means of construction.

AUTHOR



Russ Porter, PE

Steph Engineering LLC, Anchorage, Alaska

SEWER FORCE MAIN INSTALLATION IN VALDEZ, ALASKA (DESIGN, CONSTRUCTION, LESSONS LEARNED)

1.0 ABSTRACT

This paper presents a case study of the design and construction of approximately 18,000 linear feet (LF) of 20-inch HDPE SDR 11 sewer force main installed primarily by horizontal directional drilling (HDD) in Valdez, Alaska. The project traversed environmentally sensitive wetlands (Duck Flats) and multiple anadromous streams, with crossings of Alaska Department of Transportation and Public Facilities (AKDOT&PF) highways and rights-of-way completed without open excavation. The original design was a combination of HDD and open cut; however, the contractor proposed and executed a value-engineering revision to complete nearly the entire alignment by HDD, reducing surface impacts while introducing geotechnical and constructability risks due to longer, deeper bores. The paper summarizes drivers, design assumptions,

This paper was one of the best attended out of all the presentations at the 2026 NASTT No-Dig Show in Palm Springs, CA. NASTT No-Dig Papers are available for download, free to members, at www.nastt.org

geotechnical exploration, construction equipment, schedule and cost outcomes, problems encountered—including inadvertent returns, variable coarse granular soils with cobbles and glacial erratics, and equipment downtime, and concludes with lessons learned relevant to HDD planning in Arctic maritime environments.

2026 Technical Paper – New Installations

2.0 INTRODUCTION

Valdez, Alaska (population 4,000) lies at the terminus of the Trans Alaska Pipeline along Prince William Sound. The maritime climate produces heavy snowfall (on the order of hundreds of inches per year), and the project corridor includes extensive wetlands and fish-bearing (anadromous) streams. The owner sought to replace an aging asbestos cement (AC) sewer force main while minimizing environmental disturbance and maintaining service continuity.

Project Drivers

- Replace aging AC force main in environmentally sensitive corridor.
- Avoid excavation within AKDOT&PF highways and bike paths; complete AKDOT&PF crossings utilizing trenchless means of construction.
- Minimize impacts to wetlands and anadromous streams; avoid in-channel creek work where feasible.

3.0 ORIGINAL PROJECT SCOPE

The pipe condition assessment of LOIS included a visual/tactile inspection of the exterior of 14,280 linear feet (LF) of submerged pipe along with associated

tethers, anchors, and fittings. In addition to the tactile inspection, Multi-Beam sonar scanning was completed for 13,740 LF of submerged pipe. The interior of 20,770 LF of pipe was inspected utilizing conventional CCTV crawler equipment and multi-sensor platforms.

The original design was to install approximately 18,000 LF of 20-inch HDPE to replace the existing 20-inch AC main, with half installed by open-cut and the other half via HDD. The alignment across the wetland was segmented into 1,500–2,000-foot drills launched from temporary pads constructed in the wetlands. Creek crossings were designed to be shorter (600-to 1,000-foot) HDD bores. The pipe between the HDD drill segments would be installed by open-cut. The existing force main was to remain in service during construction; therefore, rehabilitation methods were not considered as it was necessary for bypass during construction.

"The contractor proposed and executed a value-engineering revision to complete nearly the entire alignment by HDD."

3.1 HDD Design Work

Preconstruction engineering included inadvertent return (IR) risk assessment for all planned drills, typical drill depths were designed to be approximately 35–40 feet below ground surface (bgs), and minimum clearances beneath creeks of 25 feet. A pullback analysis indicated that ballasting with water would be required for product pipe pullbacks exceeding 1,000 feet in length. Product pipe selection was 20-inch HDPE, SDR 11.

3.2 Geotechnical Exploration

The geotechnical program for the original scope comprised boreholes to 45 to 50 feet below ground surface and geophysics work along the Duck Flats to map possible bedrock. Subsurface conditions at planned HDD depths were characterized by fine-grained sands and silts ranging to medium dense/dense. Geophysics work suggested no bedrock within 45 to 50 feet of the ground surface.



Project corridor had extensive wetlands and fish-bearing streams



Nearly the entire alignment was completed by HDD, reducing surface impacts

North American Society for Trenchless Technology (NASTT)

2026 No-Dig Show

"Allocate risk explicitly when contractor-led redesign modifies geotechnical assumptions."

Sewer Force Main Installation in Valdez, Alaska (Design, Construction, Lessons Learned)

by Engineering LLC, Anchorage, Alaska

4.0 CONTRACTOR DRIVEN REVISED PROJECT SCOPE

Through value engineering, the contractor proposed installing essentially the entire 18,000-foot force main by HDD, reducing anticipated open cut to roughly 1,000 feet total for the project. Based on the value engineering the drills were redesigned for longer lengths typically 2,000–2,500 feet, with deeper profiles to mitigate IR risk. The contractor elected to do no additional site-specific geotechnical exploration for the redesigned drills; consequently, gaps in subsurface knowledge remained and risk of adverse ground conditions shifted to the contractor per contract provisions.

4.1 Construction Summary

HDD construction proceeded in two seasons. In 2024, eight drills of varying

lengths were completed; two additional drills were completed in the spring 2025 to complete the project. Total project cost was approximately \$28 million, with drilling costs being approximately \$7 million. Substantial completion was reached in September 2025 for the project.

4.2 Equipment and Means/Methods

Two large HDD rigs were used:

- American Augers DD-625 (nominal 625-kips thrust, ~80,000 ft-lb rotary torque) during the 2024 season,
- American Augers DD-240T (approximately 240-kips thrust, ~43,900 ft-lb torque) during 2025.

The 2024 campaign experienced significant equipment-related downtime as the contractor commissioned the larger rig; performance improved markedly in



Ballasting with water was required for pullbacks exceeding 1,000 feet



Drills were redesigned for longer lengths with deeper profiles to mitigate IR risk



IRs were largely associated with variable ground and reaming performance



2026 Technical Paper – New Installations

2025 with the DD-240T and less equipment downtime.

4.3 Construction Challenges Encountered

- Equipment downtime for the project was approximately 40–45 percent of on-site time; one pipe pullback failed due to mid-pull breakdown of equipment.
- Highly variable soils were encountered in areas where the contractor elected to not acquire additional geotechnical information. The soil was mostly granular in nature with cobbles and gravel and limited fines, causing circulation challenges and IRs along the project alignment.
- Geophysical predictions did not fully capture localized bedrock outcrops or glacial erratics in the Duck Flats, resulting in change orders and profile adjustments to work around the bedrock and glacial erratics in the alignment.
- IRs were largely associated with variable ground and reaming performance; creek crossings and wetland areas performed as designed without IR incidents.

shortening drill lengths where feasible to reduce risk.

- Geotechnical conditions varies greatly in these coastal areas. Additional geotechnical information may be required depending on site conditions.

6.0 ACKNOWLEDGEMENTS

The author acknowledges the project owner, contractor, and field staff who contributed to construction and data collection efforts.



Creek crossings and wetland areas performed as designed without IR incidents

"Based on the value engineering the drills were redesigned for longer lengths."

5.0 LESSONS LEARNED AND RECOMMENDATIONS

- Allocate risk explicitly when contractor-led redesign modifies geotechnical assumptions; maintain strong contract language.
- Provide full-time inspection and require functional flow meters and downhole pressure gauges for monitoring purposes.
- Specify detailed drilling fluid/mud engineering submittals and QA/QC to ensure drilling mud is performing as expected.
- Perform robust geotechnical exploration suitable for long, deep HDDs in heterogeneous glacial/fluviol deposits; consider



Valuable lessons were learned related to HDD planning in Arctic maritime environments

Since its inception in 1991, the NASTT No-Dig Show has been the premier North American conference and trade show for the trenchless technology industry. Thousands of professionals from around the globe attend to learn new methods and systems that will save money and improve infrastructure. This conference provides attendees an opportunity to learn trenchless methods, network with peers and gain knowledge from vendors during exhibit hall hours.

The NASTT No-Dig Show is the ideal event for municipalities, contractors and engineers.

Upcoming Conferences, Courses & Events

September 22 – 23

GLSLA Trenchless Insights: Aging Infrastructure
Vaughn, Ontario, Canada

October 6

Midwest Chapter Trenchless Technology
Conference
Detroit, Michigan, USA

October 7

Southeast 2026 Trenchless Conference
Clemson, South Carolina, USA

October 15

Pacific Northwest 2026 Trenchless
Symposium
Seattle, Washington, USA

October 20 – 21

20th Annual Western No-Dig Conference
Albuquerque, New Mexico, USA

October 27 – 28

Mid-Atlantic Chapter Trenchless
Technology Conference
Annapolis, Maryland, USA

November 2 – 4, 2026

NASTT 2026 No-Dig North
Calgary, Alberta, Canada

November 9 – 10

10th Annual Northeast Trenchless Conference
Saratoga Springs, New York, USA

March 21 – March 25, 2027

NASTT 2027 No-Dig Show
Raleigh, North Carolina, USA

March 26 – March 30, 2028

NASTT 2028 No-Dig Show
Reno, Nevada, USA



November 2 – 4, 2026

TELUS Convention Centre
Calgary, Alberta



March 21 – March 25, 2027

Raleigh Convention Center
Raleigh, North Carolina



March 26 – March 30, 2028

Reno-Sparks Convention Center
Reno, Nevada

SPONSORSHIPS:

There are a variety of
sponsorship opportunities
for every price range:

- General Session Table Sponsorships
- Mobile App Sponsorships
- Premium Conference Sponsorships
- And more!

For more information and the latest course offerings, visit nastt.org/training/events.

To sponsor or exhibit at
any of these events,
please contact NASTT:

888-388-2554

Index to Advertisers

Akkerman, Inc.....	www.akkerman.com.....	Inside Front Cover
Astec Industries.....	www.kemtronhdd.com.....	31
Atlas Trenchless LLC.....	www.atlas-trenchless.com	11
Brandt Industries USA Ltd.....	www.brandt.ca.....	17
Claude H. Nix Construction.....	www.chnix.com	5
Contech Engineered Solutions, LLC	www.conteches.com.....	7
JENNMAR Civil.....	www.jennmarcivil.com	41
Michels	www.michels.us	39
OBIC LLC	www.obicproducts.com.....	37
Plastics Pipe Institute, Inc.....	www.plasticpipe.com/MABpubs.....	27, 35
Rain For Rent	www.rainforrent.com	29
Robinson Consultants Inc.....	www.rcii.com.....	30
Sunbelt Rentals	www.sunbeltrentals.com.....	Outside Back Cover
TCI Carbon Fibre Technologies.....	www.tccarbonfibre.com.....	30
Vector Magnetics.....	www.vectormagnetics.com.....	25

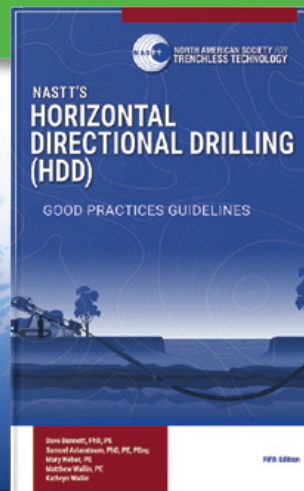
NEW! Fifth Edition HDD GOOD PRACTICES Now Available!

The Fifth Edition of the HDD Good Practices guidelines combines practical guidance available from engineers, contractors, manufacturers, vendors, and trade associations into a comprehensive resource for the successful execution of HDD crossings.

Access the e-book online from any device.



**NORTH AMERICAN SOCIETY FOR
TRENCHLESS TECHNOLOGY**



Visit the NASTT
**TRENCHLESS
KNOWLEDGE HUB**
to order your copy!

knowledgehub.nastt.org

KEEP YOUR PROJECTS FLOWING



PUMP SOLUTIONS FOR EVERY FLUID APPLICATION

When your project demands reliable fluid handling, Sunbelt Rentals provides comprehensive pumping equipment rentals, expert support, and 24/7 service for construction, industrial, and emergency applications. From dewatering to bypass pumping, our solutions ensure efficient fluid handling and maintain project integrity, keeping you on track and within budget.

**EXPLORE OUR PUMP RENTAL SOLUTIONS AND
SYSTEM DESIGN SERVICES AT [SUNBELTRENTALS.COM](https://www.sunbeltrentals.com)**



SCAN HERE TO
LEARN MORE