



NASTT's *Trenchless Today*

Educate - Train - Research - Publish



Fall 2014 | Volume 4 | Issue No. 3

Membership Has Its Benefits

Check out NASTT's 2014 Directory of Individual,
Corporate and Municipal Listings Inside

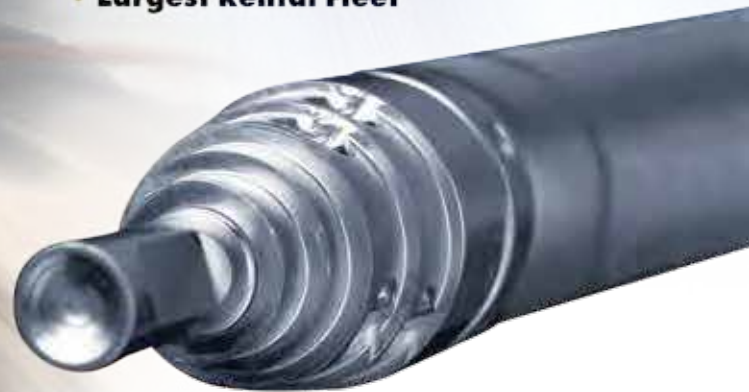


STILL THE ONE

For the Most Profitable Bores

Boring accuracy is the difference between making money and making trouble! For over 50 years, Grundomat® piercing tools from TT Technologies have been hitting their horizontal boring targets time after time. Do it right the first time with Grundomat!

- **Most Accurate Bores**
- **Longest Service Life**
- **Lowest Cost of Maintenance**
- **Most Models to Choose From**
- **Largest Rental Fleet**



TT Technologies

Call 1-800-533-2078 www.tttechnologies.com

Pipe Bursting • Pipe Ramming • Horizontal Boring • Directional Drilling • HDD Assist



FALL 2014 EDITION

FEATURES

- 10 **Q&A**
For this month's Q&A, *NASTT's Trenchless Today* sat down with Dr. Kim Staheli, incoming NASTT chair to chat about her career in the trenchless industry and her continuous leadership roles with NASTT over the years.
- 12 **In the Trenches** By Andrew Farr
Frank Firsching, Dave Krywiak and Jason Lueke are three valuable members of NASTT whose hard work has not only helped to shape the association, but also the trenchless industry as a whole. Check out this month's *In the Trenches* to find out how their career paths have led them to the forefront of many of NASTT's initiatives.
- 16 **NASTT's 2014 Membership Directory**
This year marks the fourth time we've published NASTT's Membership Directory in the fall issue of *NASTT's Trenchless Today*. The Directory can serve as a useful tool for locating names and contact information for contractors, manufacturers, professional service providers and municipal representatives who are NASTT members. Check out our full listing of individual, corporate and government members.

DEPARTMENTS

- 34 Eye on the Industry
- 36 Chapter News
- 38 Regional Chapter Info
- 40 Student Chapter Info
- 42 Technical Paper
- 46 Calendar/Advertisers Index

COLUMNS

- 4 Executive Director's Message
- 6 Chair Message
- 8 Education Update



**EXECUTIVE
DIRECTOR
MESSAGE**



Michael Willmets
NASTT Executive Director

THE NASTT STAFF AND NEW INITIATIVES

In 2014, NASTT began implementing some of the new initiatives identified in our recent Strategic Planning Program. We recognize that our members are our most important asset, and with that in mind, we are aggressively planning for the future of the society.

The Strategic Plan findings showed that our members not only approved of the services and benefits we've been offering but, they also wanted to expand and develop NASTT even further. It is exciting to know that our membership and the trenchless industry as a whole look to NASTT as the premier organization for trenchless education and training. The past year has seen our society grow by leaps and bounds including the record-

breaking NASTT's 2014 No-Dig Show in Orlando. We should also mention our Good Practices training program that is wildly successful for both live training events and the continuing complementary webinar series.

With this in mind, it made sense for our staff to grow in order to continue to meet the needs of the membership. Michelle Hill and I would like to formally welcome Jenna Hale and Molly Margosian to the NASTT staff.

Jenna Hale joined the NASTT staff in June of 2013 as our first-ever Marketing Coordinator. Jenna came to NASTT with nearly a decade of trenchless industry marketing and trade show experience and has used her skills to expand our online trenchless job board and social media presence. She also heads up the newly launched NASTT blog, *Talking Trenchless*, and our bi-weekly e-newsletter which is full of timely Society information and industry news. All of these outlets serve to communicate with not only NASTT members, but the industry at large. Anything trenchless technology always makes for a great news story and we want to get the word out in as many ways as possible!

Our newest addition, Molly Margosian, recently joined the staff on July 1 in our newly created position of Membership Coordinator. Molly comes to NASTT with a professional background that includes engagement management and employer relations. Molly is here to facilitate NASTT member interaction as well as to offer support to our Regional and Student Chapters. NASTT offers so many benefits to all our members and we want to make sure you are able to take full advantage of them. Molly is here for you. Please feel free to reach out to her with your questions or ideas.

We have so much planned for the future of NASTT and we are well equipped with a dedicated and professional staff to continue to grow and offer valuable benefits to our membership. Please join me in welcoming Jenna and Molly to the NASTT family!

Thoughts and comments from our members are always welcomed.

Sincerely,

Michael Willmets
NASTT Executive Director

NASTT Officers

Chair

Derek Potvin, PEng. — Robinson Consultants Inc.

Vice Chair

Kimberlie Staheli, Ph.D., PE. — Staheli Trenchless Consultants

Secretary

Jennifer Glynn, PE. — RMC Water and Environment

Treasurer

Dave Krywiak, PEng. — Stantec Consulting Ltd.

Immediate Past Chair

George Ragula, PE. — Public Service Electric & Gas

2014 Board of Directors

Erez Alouche, Ph.D., PEng.

Don Del Nero, PE, C.D.T.

Frank Firsching

Jamie Hannam, MBA, PEng.

Tony Hranicka, PE.

Larry Keist, Jr.

Brenda Kingsmill

Joe Lane

Jason Lueke, Ph.D., PEng.

Jeff Maier, PE.

Kevin Nagle

Cindy Preuss, PE.

Jim Rankin II

Dennis M. Walsh, PE.

Dan Willems, PEng.

NASTT Staff

Executive Director

Michael J. Willmets — mwillmets@nastt.org

Communications & Training Manager

Michelle Hill — mhill@nastt.org

Marketing Coordinator

Jenna O. Hale — jhale@nastt.org

Membership Coordinator

Molly Margosian — mmargosian@nastt.org

Benjamin Media Publishing Team

Publisher

Bernard P. Krzys

Editor

James W. Rush

Associate Editor

Andrew Farr

Lead App Designer/Graphic Designer

Deborah R. McManus

Brand Sales Manager

Dan Sisko

Conference Sales Coordinator

Brittany Maurer

Editorial and Advertising Offices



10050 Brecksville Rd.
Brecksville, OH 44141 USA
(330) 467-7588, Fax: (330) 468-2289
www.benjaminmedia.com
e-mail: info@benjaminmedia.com

Editorial: afarr@benjaminmedia.com
Advertising: bmaurer@benjaminmedia.com

Reprints

Wright's Media
Ph: (877) 652-5295
Fax: (281) 419-5712

RELINING DONE RIGHT™



Photo courtesy of Chris Wiseman from Indiana Reline.



CONTECH[®]
ENGINEERED SOLUTIONS

With over 70 years of relining experience, **Contech Engineered Solutions** provides permanent, fully structural solutions based on time-proven design methods, and we certainly don't play games with the hydraulics. Knowing pipe assessment, structural design & hydraulic analysis is what we do. The results? The right solution for your project needs - done right, on time and under budget.



CHAIR MESSAGE



Derek Potvin
NASTT Chair & International Representative



HEADED in the Right Direction

As the Chair of NASTT for the last two years I have had the privilege of seeing some wonderful growth in both the Society and the trenchless industry as a whole. My term as NASTT Chair comes to an end in December, so I would like to take this opportunity to look back at what we have accomplished together.

Training Initiatives

Training and education are core values for NASTT. In 2013, NASTT's trenchless webinar series entered its second year, and we saw record attendance at each of the three online training events. Thousands of attendees logged on to these webinars to learn about pipe bursting, directional drilling and cured-in-place pipe (CIPP) for the gas industry as well as sliplining and sewer laterals for the municipal industry.

The 2014 webinar lineup is proving to be equally impressive. In July, we featured NASTT's Carbon Calculator and in early September, we focused on cured-in-place pipe (CIPP). Be sure to tune in on Nov. 6 to learn more about condition assessment for water mains. All of NASTT's webinars offer training from top experts in the field. Attendees receive education from the convenience of their home or office, yet are able to actively participate using a Q&A platform. The webinars are a great tool for access to the latest in trenchless technology and NASTT is proud to offer them completely free of charge as a service to the trenchless industry.

NASTT's live training events have also continued to grow. We are indebted to our many Good Practices course instructors who are experts in their fields and volunteer

their time to educate the trenchless industry. In 2013, we offered 23 live training sessions across North America where we trained 850 trenchless professionals. In 2014, we already have 21 live training sessions scheduled and more are added each month. If you are interested in attending a live training event, you can view the up-to-date schedule at nastt.org/training.

Carbon Calculator

This year, we've seen the exciting launch of NASTT's Carbon Calculator. We believe this will be a substantial benefit for NASTT members while building upon the "green" initiatives of trenchless technology. The Carbon Calculator is web-based so it can be used in your office or on the jobsite. We are thrilled to be able to offer this valuable tool as a complementary benefit to NASTT members.

Strategic Plan

One of the endeavors I am most proud of during my time as NASTT Chair is our Strategic Plan. In order to continue to grow and serve the trenchless industry, NASTT embarked on a three-year Strategic Plan last summer. We began with a survey of our membership and an in-depth study

into the Society and how we can best meet our members' needs. We were very excited for this opportunity to hear from our members and grow our Society and industry. In the fall, the Strategic Plan Committee reviewed the findings and began to strategize for the coming years. The results of the study have helped us to shape our plan and focus our efforts.

Each year we will implement initiatives and programs based on our Strategic Plan and build on the foundation we have set up in 2014. In order to adequately implement these initiatives, it was important that NASTT have the required resources on hand. With that in mind, NASTT expanded its staff by hiring a dedicated Membership Coordinator this summer. Molly Margosian joined the team to grow our outreach to our Regional and Student Chapters and to be a main point of contact for our members. This development will allow our existing staff to focus on additional Strategic Plan goals including training, education and expanding NASTT's No-Dig Show.

The last two years have been a wonderful experience for me, and I thank you for allowing me the opportunity to serve you as NASTT's Chair. But my term is not yet over, and we still have a lot to do before the end of the year!

TRENCHLESS CIPP RENEWAL TECHNOLOGIES

LMK's state-of-the art technologies are installed worldwide through a large network of independent, licensed professional contractors. Contact LMK Technologies today to begin working with the industry leader in wastewater infrastructure renewal.



T-Liner 3.0

Main to Lateral Connection

- Exceeds ASTM F2561
- T-Liner[®], Shorty™, and Stubby™ One-Piece Connection Lining Systems
- Insignia™ O-Ring and Hydrohat Compression Gaskets



Lateral Lining

Lateral Lining Through a Cleanout

- 100% Trenchless
- Performance Liner[®] CIPP Lining



VAC-A-TEE Cleanout

Easy to Install Cleanout System

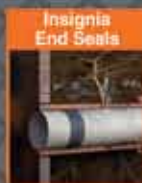
- VAC-A-TEE[®] Saddle Kits
- Minimally Invasive Installation



Sectional Lining

Inverted In-Place Mainline Sectional Repair

- ASTM F2599 Compliant
- Sectional CIPP Lining



Insignia End Seal

CIPP Compression Gasket Sealing Solutions

- Insignia End Seals
- 6 in. - 54 in. Diameters Available



CIPMH Lining

One Size Fits Most CIPP Manhole Rehabilitation

- CIPMH™ Full Depth Lining
- CIPMH Chimney Lining



Leading Cured-in-Place
Trenchless Products and Technologies
for over 20 years

Phone: (815) 433-1275 Email: info@lmktechnologies.com Web: lmktechnologies.com

EDUCATION UPDATE



Michelle Hill
NASTT Communications
& Training Manager



THEY TRIED TO MAKE ME GO TO REHAB

Trenchless professionals know the benefits of rehab — *trenchless rehabilitation*, that is.

For instance, folks came out in droves to the rehab tracks this year at NASTT's 2014 No-Dig Show. The presentations in Track 3, which focused on both sewer and water rehab, were the highest-attended sessions on Monday morning, Monday afternoon and Tuesday morning. We had a tie for our highest-attended track presentations in rehabilitation: "Design Recommendations for Performance Limits for Cured-in-Place Liner in Cast Iron Water Pipe," by Michael Brown, Ian Moore and Amir Fam from Queen's University, and "CIPP Pressure Pipe: How Do You Know What You Bought Is What You Wanted?" by Mike Davison, Sanexen/Aqua-Pipe. We also had a great turnout

for our CIPP Roundtable which was presented during the second session on Tuesday morning. These presentations and many others had more than 100 people in attendance.

We certainly can't overlook the importance of new installations in our industry. Track 2 hosting the HDD presentations dominated Tuesday afternoon and Wednesday morning. Our top-attended new installation presentation came out of the microtunneling track: "Salvaging the Lessons Learned from a Difficult Microtunneling Project," by Dr. Kimberlie Staheli and Dylan Davidson, Staheli Trenchless Consultants Inc.; Peter K. Robertson, Gregg Drilling and Testing Inc.; and Paul Vadnais, Vadnais Corp. Case studies like this presentation are a crowd favorite at NASTT's No-Dig Show, and are undoubtedly a valuable tool for our industry.

If you weren't able to make it to NASTT's No-Dig Show this year you still have an opportunity to get educated. Each paper that was presented at NASTT's 2014 No-Dig Show, and all other shows dating back to 1991, can be found in NASTT's online paper library. We have made many enhancements to this tool in the last year to make it even easier to find valuable case studies and research. You can search by using our topic drop down menu, by typing in the year the paper was presented or by entering search terms. It's that easy! Members can download as many papers as they want for free and non-members just pay a small fee for access. This incredible tool is at your fingertips at nastt.org/technicalpapers.

So don't listen to Amy Winehouse. Take the time to go to a rehab training event or download a technical paper. Your projects will thank you for it.



Mud Has Met Its Match.



MCD-1000
DRILLING FLUID CLEANING SYSTEM



FEATURING DERRICK SHAKERS!

3 Tank system with up to 1,000 U.S. gal. (3,785 L) / minute cleaning capacity

Derrick FLC-500 Linear Motion Shakers with patented Pyramid™ Screen technology: 68% better cleaning than a standard screen in the same amount of space!

Q&A

INCOMING NASTT CHAIR KIM STAHELI CHATS WITH NASTT'S TRENCHLESS TODAY ABOUT HER CAREER AND CONTINUING LEADERSHIP ROLE IN THE ASSOCIATION**Kim Staheli****Going back prior to the start of your career, can you tell us what first interested you in the construction industry/engineering?**

I have been interested in engineering since I was a little girl. I was always interested in how and why things worked — especially mechanical things. I would often take things apart just to see how and why they worked. As I went through grade school, I developed a love for math that continued to grow throughout middle and high school. Early in my life, my grandfather (or Papa as I called him) would tell me that I would make a good engineer someday. At that point I didn't even know what an engineer was supposed to do; however, I parroted

his comment and told everyone that I was going to be an engineer when I grew up.

When did your involvement in trenchless methods begin?

When I graduated from Rensselaer Polytechnic Institute with a bachelor's degree in mechanical engineering, I was hired by Hydro Group in the Ranney Division. This division constructed raw water intakes and Ranney Collector wells. At the time of my hire, the Ranney Division had just purchased a microtunneling machine — the third machine sold in the U.S. They were looking for an engineer to assist in the preparation of bids, prepare microtunneling submittals and to serve as the field engineer on microtunneling projects. This was my first introduction to trenchless technology and I began to acquire hands-on experience in microtunneling.

Briefly, can you tell us about how you formed Staheli Trenchless Consultants?

In 1995, I teamed with David Bennett and formed a consulting firm called Bennett-Staheli Engineers specializing in the design and construction inspection of new trenchless installation techniques. At that time, David and I worked for the U.S. Army Corps of Engineers at the Waterways Experiment Station where we were performing trenchless research in support of the military and civilians. The business was founded in Mississippi and later moved to the West Coast. In 2007, Dave and I decided to split the firm for a variety of reasons and I formed Staheli Trenchless Consultants (STC). Today, STC specializes in the design and construction management of trenchless technologies with an emphasis on minimizing trenchless risk.

Briefly, what types of projects is your core focus with STC?

Our core focus is the design and construction management of new pipelines using trenchless techniques. For example, we would perform a feasibility study where we would determine the right trenchless method for a project based on the level of risk that each method presented and the owner's risk tolerance level. We would then provide recommendations for geotechnical investigations that would support our findings in the preliminary feasibility study. Based on the geotechnical information, we would write a Geotechnical Baseline Report (GBR) depending on the level of complexity of the project, the trenchless method

specified and the owner's risk sharing philosophy. We would then prepare plans and specifications for the project as they pertain to the trenchless installations.

During construction, we would provide inspection services by a highly qualified trenchless engineer where records would reveal a time-in-motion study that would track all of the contractor's movements, installation times, down-time activities, etc. These documents would allow thorough evaluation should a differing site condition claim be filed.

Tell us about when you first got involved with NASTT.

My first involvement in NASTT was attending NASTT's 1995 No-Dig Show in Dallas. I attended that show while working for a microtunneling contractor and prior to joining the Corps of Engineers to perform trenchless research. I continued to attend NASTT's No-Dig Shows annually. In 1997 I joined the Program Committee for the No-Dig Show and have served on the program committee since.

During your time with NASTT, describe the growth you've seen in the organization.

NASTT has experienced significant growth over the time that I have been a member. Not only has the No-Dig Show and the membership grown, but the quality of the show and the number of active volunteers has also grown dramatically. There have also been significant changes in the way NASTT has been managed. The society has made great strides in forming committees that produce quality products. There are many publications that are currently produced by NASTT and a number of courses that are taught yearly throughout the United States and Canada. Another significant growth area has been our regional chapters. The regional chapters have continued to grow and new chapters have been formed. Many of these chapters are very active and countless volunteers give their time to planning symposiums, short courses, educational luncheons, etc. NASTT also offers student scholarships, training sessions to municipalities, the municipal and utility owners' scholarship to attend NASTT's No-Dig Show and targeted webinars.

As your term begins in the next couple months, what are you looking to achieve during your time as NASTT Chair?

NASTT recently went through a structured process where we developed a strategic plan that included a number of goals and initiatives. During my time as Chair, my goals include moving forward with initiatives that were recently developed by the Strategic Planning Committee. Some of these initiatives include ensuring that all Board activities are fair and transparent and that the membership is informed about decisions made at the Board level as well as informed about the amount of quality information available to them.

Having seen great success with the Municipal and Utility Owners Scholarship Program, I want to continue to find innovative ways to bring trenchless education to people who may not be able to travel to an event like NASTT's No-Dig Show so that we might be able to spread the word about trenchless to the Engineers and Owners who might need the technologies on their projects. The webinar series that was started two years ago has been wildly successful.

At the present, I am fortunate to work with a very strong Board that has a number of very bright, innovative people. I hope to be able to foster open communication between the Board members and encourage active discussions so that we can capitalize on the brain trust and make good decisions for the membership as we move forward.

The Industry Standard

DID YOU KNOW
YOU CAN ORDER
HUNTING PIPE ON ALL
VERMEER® & DITCH WITCH®
HDD UNITS

On any given day, Hunting drill pipe is at work on more jobsites than any other pipe on the market. Even the OEM's buy it from us. Why? Because it's the pipe that you asked for. The one your toughest jobs have proven and your operator's swear by. From raw materials to final machining, every stick of Hunting drill pipe is built to stricter standards than any other pipe in the industry.

For the best-fitting, hardest-working pipe in the business, along with the roadmaps and the tooling to make your switch seamless, see your HDD dealer today and ask for Hunting.

Toll Free: 855-867-9296 | huntingtrenchless.com

HUNTING TRENCHLESS
MADE IN THE U.S.A.

Vermeer® is a registered trademark of the Vermeer Corporation.
Ditch Witch® is a registered trademark of The Charles Machine Works, Inc.



In the Trenches

By Andrew Farr

For this month's *In the Trenches*, we decided to reach out to Frank Firsching, Dave Krywiak and Dr. Jason Lueke. Each of these three individuals has had fascinating career paths which have led them to success in the trenchless industry. All three of them are also current NASTT Board members and it's intriguing to find out how they are able to devote so much time to giving back to the industry through their contributions to NASTT. We hope you enjoy reading about these three stand-out members of our organization.



Frank Firsching Underground Solutions, Inc.

Running a multi-million dollar business is something Frank Firsching knows a thing or two about. Firsching has held a number of executive management roles with several companies throughout his career, and since 2006, has drawn on that experience to help build a major market presence for Underground Solutions, Inc., in the trenchless industry.

Today, as the executive vice president for UGSI, Firsching oversees the company's regional sales managers and coordinates all domestic and international sales activities. Although his interest in school was initially in mechanical engineering – obtaining a bachelor's in mechanical engineering from the University of Virginia – Firsching said

he's always gravitated more towards the manufacturing and construction side of engineering, rather than the design side, and became interested in running his own business at a young age.

In the early part of his career, Firsching worked for various companies such as General Electric and Deloitte & Touche doing management consulting. In 1992, he received a phone call from a friend from business school who was working at USFilter, a relatively new company that supplied large-scale filtration equipment for the municipal and industrial water industry. Firsching, who also has an MBA from the Wharton School of Business, was soon asked to join the executive team at USFilter, saying it was an opportunity he couldn't pass up.

"I thought, this is exactly what I want to do, and 'where else am I going to get this opportunity?'" he said. "Literally six months later I was the general manager running a \$25 million business, which was at times both terrifying and incredibly thrilling and exciting."



By 1999, USFilter had grown into a \$6 billion dollar public company and was bought by Veolia Water. Firsching continued to spend his time at USFilter running various facets of the business until late 2005, including executive vice president of the Process Water Group and president of the Water and Wastewater Systems Group, which was later bought by Siemens Water Technologies.

By late 2005, Firsching decided he wanted to get back to his entrepreneurial roots and eventually joined Underground Solutions, a company which, at the time, was struggling. Since then, Firsching has been an integral part of UGSI's growth, particularly in helping the company discover niche markets in trenchless construction.

"We discovered that one of the real great niches for [fusible PVC pipe] is

in long HDD projects, whereas before that, the option was steel pipe which can present challenges such as bend radius, layout and corrosion over time," he said. "We've also realized we have another great fit in the water pipe bursting market. It became apparent that utility managers really like PVC, and we discovered it was going to be a growth market for us.

"The third market trend emerging that we're realizing we fit well into is the HDD market for installing casings and conduits to carry high voltage power cables. For many reasons, [electric utilities] prefer plastic products to minimize amperage loss from high voltage power lines. Those are the three really neat markets that we've broken into."

Firsching has been involved with NASTT throughout much of his time with Underground Solutions. He

joined the Board of Directors after being approached by Chris Brahler of TT Technologies, who encouraged his involvement in the Board and No-Dig Show. This year, Underground Solutions became a platinum sponsor of the No-Dig Show and will again be a platinum sponsor for the 2015 show in Denver.

"Chris is really the main reason I discovered NASTT beyond just going to the No-Dig Show," Firsching said. "I've also ended up on a ton of committees throughout my time on the Board. It's a great way to learn about the organization and contribute on things ranging from by-laws to finances to strategic planning, Hall of Fame selection committee and the student scholarship committee. That's really been the fun part of NASTT for me is a lot of the different committee work."



THIS IS WHAT TRUST LOOKS LIKE

Michels is one of the largest and most diversified utility contractors in North America. We are a leading provider of construction services to the energy, transportation, communications, power and utility industries.



Pipeline | Horizontal Directional Drilling | Direct Pipe® | Pipe Fabrication
 Communications | Tunneling | Power | Pipe Services | Foundations



Dave Krywiak, P.Eng. Stantec Consulting Ltd.

Dave Krywiak was interested in engineering after finishing high school and says it was one of the few professions he considered getting into.

"Back in the 70s in Alberta, when you graduated civil engineering and went into consulting, you spent a couple years in the field before working in the office," he says. "That's changed a little now, just by the way the industry has gone. But I had very early exposure to construction projects."

Shortly after graduating from the University of Alberta, Krywiak joined Stantec Consulting Ltd., in 1979, and says his interest in engineering has stuck around over the years. He is currently a principal and project manager and works out of Stantec's Edmonton, Alberta office. During his time with Stantec, Krywiak has been involved in numerous trenchless projects, mainly in the areas of horizontal directional drilling (HDD), conventional tunneling and microtunneling, as well as some CIPP relining.

In this time, he has worked on notable projects for Stantec such as the St. Albert Sanitary Trunk Sewer Phase 1 microtunneling project with Michels Canada for the City of Edmonton, as well as some prominent HDD projects crossing the Athabasca River in Fort McMurray, Alberta.

Working mainly with the public sector, Krywiak says western Canada has been proactive in embracing trenchless technology in recent years. According to Krywiak, some methods such as HDD and CIPP have taken time to gain acceptance with the public sector but have gained a significant market presence due to need projects on aging infrastructure while also considering the minimal disturbances trenchless methods provide when working in urban areas.

Krywiak is the current treasurer of NASTT, currently serving on the national Board of Directors, but initially joined the association in the mid-1990s after attending some early No-Dig Shows. Shortly after that, Krywiak, along with a small group of engineers – including Rick Prentice, a NASTT Board member at the time – founded the Northwest Chapter of NASTT, which was formally inaugurated in 1997. Krywiak went on to serve on the Board for a number of terms, including a term as the Chapter Chair.

Krywiak says the Board of Directors at the national level today is very stable and that the NASTT staff and leadership have done a great job to get the society to the point where growth is consistent.

"I think one of the strong points of the society is representation across the board rather than being an engineering-focused society, or just

owners or contractors," he says. "In keeping it broad-based across all areas, I think we've kept a broad focus rather than becoming very narrow.

"Certainly the Northwest Chapter and also at the national level, when the groups get together, I think we seem to leave our competitive hats outside the door and work towards a common goal. I think we're a growth society and we've got a strong future."



Jason Lueke, Ph.D., P.Eng. Associated Engineering

At NASTT, we talk a lot about the benefits of education and the many opportunities available to young, aspiring trenchless engineers. Of course, it's up to the students to put in the time and hard work necessary

to take full advantage of those benefits. Numerous opportunities exist, and Dr. Jason Lueke will be the first to tell you that they pay off.

"Everything I've done in my career, and every place I've gone to has been through the contacts I've made from being involved with NASTT," says Lueke, who is currently the National Practice Leader for Trenchless Services with Associated Engineering, an employee-owned, Canadian consulting firm providing services in planning, engineering, environmental science and landscape architecture

Lueke got his start in the trenchless industry after finishing his civil engineering undergraduate degree in 1997. After doing some work for a geotechnical firm, he entered a master's program at the University of Alberta, where he met his graduate advisor, Dr. Sam Ariaratnam.

Lueke recalls Ariaratnam asking him at the time if he had ever heard of pipe bursting, to which he replied, "No."

Since then, Lueke has certainly come a long way, as he currently serves on the NASTT Board of Directors; is an instructor for its Horizontal Directional Drilling, Lateral Sewer Rehabilitation, and Pipe Bursting Best Practices Courses; and has published more than 60 papers for journals and conferences on trenchless design, construction and research.

At the University of Alberta, Lueke focused his research on various trenchless practices, namely pipe bursting. At the time, he and Ariaratnam were involved in the Millstone Sanitary Truck Sewer for the City of Nanaimo, British Columbia. There, they did research on ground movements associated with pipe bursting. The Millstone project was later awarded the 1999 *Trenchless Technology* Project of the Year award for Rehabilitation.

After completing his master's program, Lueke decided to pursue a Ph.D. focusing on horizontal directional drilling.



In an agreement to fund his Ph.D., he went to work for a trenchless utility contractor, eventually landing a job at Associated Engineering a few years later.

During his first tenure with Associated Engineering, Lueke was an infrastructure engineer and trenchless discipline lead in the company's Edmonton office. He coordinated, designed, and managed various trenchless projects, including performing construction feasibility assessments and facilitating value engineering workshops, performing conceptual design studies, conducting preliminary and detailed designs, and supporting other offices with various trenchless-specific projects.

In 2009, while looking for a change of pace, Lueke accepted a position as an Assistant Professor and Senior Sustainability Scientist in the Del

E. Webb School of Construction at Arizona State University. There, he spent three-and-a-half years teaching soil mechanics and researching trenchless methods, infrastructure utility design, and buried infrastructure management.

Rejoining Associated Engineering in 2012, Lueke now has 16 years of experience in consulting, construction, education, and research focusing specifically on trenchless engineering and construction. He has presented at numerous conferences and trade shows across North America and internationally, and co-authored the NASTT Good Practices Manual for trenchless rehabilitation of lateral sewers.

Lueke has also been significantly involved in both the Northwest and Western regional chapters of NASTT. He was instrumental in bringing together the first conference the

Northwest Chapter held in Calgary while completing his Ph.D. at the University of Alberta; and later served as the chair of the Western chapter while teaching at Arizona State University.

"The education component of NASTT is huge," he said. "[Owners] have become much more educated to the point where they request trenchless solutions. It is now less about selling the technology – and more about implementing designs that incorporate trenchless methods."

Lueke's impact on the trenchless industry in North America was recognized in 2010, when he was selected by NASTT as the inaugural recipient of the Trent Ralston Award for Early Career Achievement in the field of trenchless technology.

Andrew Farr is the associate editor of NASTT's Trenchless Today.

24/7 Emergency Response

When you need to get it done, call the experts with the biggest toolbox.

Download a Sunbelt Rentals Pump & Power Services brochure today.

Sunbelt Rentals Pump & Power Services division provides innovative rental solutions for a wide range of equipment needs. With an extensive selection of pumps and highly trained specialists, we have the equipment and expertise to design and install turnkey bypass and dewatering solutions that will exceed expectations. When you need comprehensive solutions, turn to the experts at Sunbelt Rentals.

800-736-2504 | sunbeltrentals.com

SUNBELT RENTALS
PUMP & POWER SERVICES

- Large Air Compressors
- Generators and Power Distribution
- Temperature Control and Dehumidification
- Trench Shoring Equipment



NASTT's 2014

Membership Directory

In the trenchless industry, change is constant and innovation is continuous. The goals and initiatives of NASTT echo that change as the Society is always looking for new ways to promote the practice of trenchless methods and the use of trenchless technology. With that, we take great pride in ensuring our members can take full advantage of the opportunities we provide.

This year marks the fourth time we've published NASTT's Membership Directory in the fall issue of *NASTT's Trenchless Today*. The Directory can serve as a useful tool for locating names and contact information for contractors, manufacturers, professional service providers and municipal representatives who are NASTT members.

As with everything we do, our goal is to bring you the most accurate information we can. If you would like to update your listing, please contact NASTT's Membership Coordinator, Molly Margosian, at mmargosian@nastt.org and we can update your information online.

We hope you find what you need in NASTT's 2014 Membership Directory.

Sincerely,

NASTT staff





Steve Abernathy Midwest Mole Inc.
Mike Abraham Halton Region
Lilia Abron PEER Consultants, PC
Rolando Acosta Northeast Remsco Construction Inc.
Roger Adams Dehi Charter Township
Jim Agnew Inrock Drilling Inc.
Shaurov Alam
. Trenchless Technology Center, Louisiana Tech University
Hassan Al-Barqawi InfraHydro
Michael Alexander City of Thornton
Robert Allen Montgomery Water Works
Maxime Allen Nella Drilling Inc.
John Allen Public Works Commission
Mike Allen Lowndes County
Erez Allouche Trenchless Technology Center/LA Tech Univ.
Mark Amrhein SHN Consulting Engineers & Geologists
Daryn Anderson City of Roseburg
T. Mark Andraka PECO Energy Company
James Anspach Cardno
Don Arch Engineered Lining Systems
Samuel Ariaratnam Arizona State University
Josh Arnett Washington Suburban Sanitary Commission
Robert Arnold Thuro Inc.
Enrique Arreaga Rullan Ruiz Group Inc.
Alan Atalah Bowling Green State University
Parwinder Athwal City of Surrey
Mehmet Atici Independent Contractor
Robert Auber Northeast Ohio Regional Sewer District
Lindsey Austin City of Albany Public Works
Brian Avon Golder Associates Inc.
Wyatt Babcock Township of Langley
Aaron Babson Hazen and Sawyer
Muminu Badmus DC Water and Sewer Authority
Gord Baguley City of Hmaiton
Greg Baiden Laurentian University
Kevin Bainbridge Robinson Consultants Inc.
Mariana Balaban York Region
Robert Barker Frankfort Sewer Department
Caroline Barlow Murray, Smith & Associates Inc.
Graham Bateson City of Regina
Harry Baum 7.30 Inc.
Alireza Bayat University of Alberta
Steve Beckett City of Port Coquitlam
Richard Bedard City of Vernon
Daniel Behringer ExxonMobil Pipeline Company
Robert Bell O'Brien & Gere Engineers Inc.
Bob Bell City of Port Moody
Enrique Bellver Aireko Trenchless Solutions
Kathy Bemben Hatch Mott MacDonald
Robin Benoit City of Fort Saskatchewan Engineering Services
Randall Berry Harris & Associates
Rock Berube DiamondBack Sales Service and Rentals Ltd.
Steve Bian DC Water
John Bidigare Bidigare Contractors Inc.
Deirdre Blackard Gwinnett County Dept of Water
Pierre-Andre Blais Gaz Metro
John Boehm Holmes International
Raymond Boivin Plateau Geotechnical Ltd.
David Bolam Clay County Utility Authority
Richard Bomhof District of Mission Engineering & Public Works
Greg Boone City of Centralia
Marco Boscardin Boscardin Consulting Engineers Inc.
Gregory Bosch Mears Group Inc.
Jeffrey Boschert National Clay Pipe Institute
Kevin Bowbyes City of Langford
John Bowles Inversa Systems
David Boyce D. C. Connections Inc.
Andrew Braithwaite McCloskey International
Tom Brantley Leon County / EFI Global
Hunter Brantley Leon County
Robert Braun City of Greeley

Daniel Breg MWH
Chris Brejle City of Bend
Francis Brennan City Of Seattle, Fire Department
Aaron Brower City of Raleigh
Jason Brown Salt Lake City Department of Public Utilities
Mark Bruce Can Clay Corporation
Douglas Brunning TransCanada
Tom Bryski Golder Associates Ltd.
Jason Buenker Shannon and Wilson Inc.
Daniel Buonadonna CH2M HILL
Peter Burke City of Melbourne
Jack Burnam CH2M HILL
Matthew Buswell Hazen and Sawyer
David Byrd Florida Department of Transportation
Laura Cabiness City of Charleston Public Services
Lenny Caldwell Pacific Gas & Electric Company
Blair Campbell Strathcona County
Adam Campbell City of Lethbridge
Sam Cancilla RedZone Robotics Inc.
Steven Caneen Huxted Tunneling LLC
Angela Carley The Municipal Infrastructure Group Ltd.
Ed Caron Mar-Tech Underground Services Ltd.
Robert Carpenter Underground Construction
Tim Carr Mainroad South Island Contracting LP
Lori Carriero Tighe & Bond
Tim Carroll Quest Inspar LLC
Ely Cartwright City Of Portland
Chris Cerklewski City of Albany Public Works
Ronald Champion Spartanburg Water
Lyman Chang City of Lodi
Nathan Chase Kerr Wood Leidal
Guillermo Chavez Sacramento Regional County Sanitation District
Trevor Chisholm Dexter Construction
Jinsung Cho CA State Polytechnic University Pomona
Elaine Chouinard PTR Communications Inc.
Greg Christensen MPE Engineering Ltd.
Scott Christensen HDR Engineering
Alex Churchill InfoSense Inc.
Augustus Cicala East Bay Municipal Utility District
Bob Clarke ASI Group Ltd.
Robin Clysdale Stantec
Sylvain Cobello Aquarehab Inc.
Jeff Coffey DLZ, Ohio Inc.
Dan Cohen Western Slope Utilities
Aaron Cohen Arizona State University
David Congdon City Of Thornton
Paul Cooper Pipe Spy Inc.
Leif Coponen Schaaf & Wheeler
Nicholas Costa III Union Concrete and Construction Corp.
Dale Coull City of Abbotsford
Stacy Cournoyer City of Winnipeg
George Cowan Haks Engineers
Adam Crafts Wallis Engineering
Tim Crawford City of New Albany
Preston Creelman Royal Building Products
Sarah Crouse Hatch Mott MacDonald
David Crowder R.V. Anderson Associates Limited
Raul Cuellar Orange County
Mike Cunningham Golder Associates Ltd.
John Dailey SHN Consulting Engineers & Geologists
Yvonne Dake Orange County Sanitation District
Douglas Danaher Wilson & Company
Craig Danielson Danielson Incorporated
Travis Davidsavor Barr Engineering Company
Jason Daviduk City of Surrey
Deanna Davis Augusta Utilities Department
Stacey Debusschere City of Regina
George Del Rio City of Montreal
Steven Del Sole IPEX Management Inc.
Armand Delaurier AECOM
Denis Demers Aqua Data Inc.



Gregg Densmore City of Abbotsford
Henry Derr Brown and Caldwell
Todd Desjardins SafeBore Inc.
Lee Dester Copperhead Industries LLC
Carl Dicker Rettew Associates Inc.
Phillip Dieckmann URS
Peter Discusso City of Richmond
Martin Dix Orange County Sanitation District
Mike Dockrill City of Coquitlam
Ian Doherty Trenchless Design Engineering Ltd.
Steven Donovan SHN Consulting Engineers & Geologists
Robin Dornfest Brierley Associates
Brian Dorwart Brierley Associates LLC
Jackson Dove Sammamish Plateau Water & Sewer District
Mark Dowhaniuk City of Vernon
Austin Doyle City of Vancouver
Derek Dreger MMM Group Limited
Doug Drimes City of Medicine Hat
Pierre Dugre Aqua Data Inc.
Ed Durazo Harris & Associates
Mahesh Dutta Amani Engineering Inc.
Edward Dvorak Stantec Consulting
Clifford Early DuPont Co.
Andy Echeita City of Sparks
Christopher Elenbaas Stantec Consulting
Dan Ellison HDR Inc.
Scott Emerick City of Billings
Richard Engel ASI Group
Weston Engel Carollo Engineers
Jeff Enyart Geneva Pipe and Precast
Joshua Farmer Hazen and Sawyer
Calvin Farr WSSC
Conrad Felice ILF Consultants Inc.
Birger Fernandez Orange County Sanitation District
Roger Ficko Advanced Trenchless
Kieran Field Opus DaytonKnight Consultants Ltd.
John Fields Ventura Directional Drilling
Leonard Finney City of Calgary
John Fiske Pacific Gas & Electric
Keith Fitchett AECOM
Shaun Flanery Performance Pipelining Inc.
Timothy Flynn Blair, Church & Flynn Consulting Engineers Inc.
Jon Ford Kimley-Horn & Associates Inc.
Stephen Forestell City of Ottawa
Rhys Francis City of Abbotsford
Rodney Fredericks Hatch Mott MacDonald
Mark French Wachs Water Services
Carol Gagnon Contractors State License Board
Dennis Galinato Murray, Smith & Associates Inc.
Maria Ella Garcia DC Water
Randy Gardner Montgomery Water Works & Sanitary Sewer Board
Kim Garma Paragon Engineering Ltd.
Marshall Gaston Fuss & O'Neill Inc.
Brian Gastrock STEPHL ENGINEERING LLC
John Geddes Township of Langley
Tammy Gerus York Region
Marshall Gibbons AECOM Canada Inc.
Scott Gilles Terra HDD Solutions Inc.
Albert Gilmore Overnight Success Inc
Samuel Gilmore Overnight Success Inc
Michael Gipsov Washington Suburban Sanitary Commission
Jennifer Glass Greater Vancouver Regional District
Jennifer Glynn RMC Water and Environment
Gary Goff City of Port Coquitlam
Sanjiv Gokhale Vanderbilt University
Donald Gonzales Northwest Boring Company Inc.
Dave Goodbrand Tarpon Contracting
Don Gordon Pulice Construction Inc.
Joseph Graham Dibble Engineering
Michael Grantham Montgomery Water Works & Sanitary Sewer Board

Don Gravitt Gwinnett County Water Resources Stormwater Management
Dale Gray RPS
John Grennan Ward and Burke Microtunnelling Ltd.
Ravi Grewal Greater Vancouver Regional District
John Grey The Wooten Company
Roberto Guardia Shannon & Wilson Inc.
James Guenard Dartex Coatings Inc.
Dominique Guillette Aquarehab (Canada) Inc.
Donald Gunn Infratech Sewer & Water Services Inc.
Greg Gutzwiller Washington Suburban Sanitary Commission
Jenna Hale North American Society for Trenchless Technology
Donna Hancock City of Tempe
Richard Hanford Hanford Geotechnical Services
Firas Hanna Stewart Weir
Norbert Hansch Cambrian Excavators Ltd.
Richard Harada Wilson Okamoto & Associates
Jim Harding City of Durham
Glenn Harrah Terracon
Mark Harris Layne Inliner LLC
Jason Hartley City of Campbell River
Larry Hartsell Pacific Gas and Electric Company
Behnam Hashemi JMT
Tom Hayes Murphy Pipeline Contractors Inc.
Paul Headland Aldea Services LLC
Shaun Heberlein Pacific Gas & Electric Company
Nicholas Hebnes Frawner Corporation
Thomas Hebnes Frawner Corporation
Brandon Heidelberg Brown and Caldwell
Heinrich Heinz Thurber Engineering Ltd.
John Hemphill ISTT
Zeke Hendrix Doosan
Sean Henry City of Carbondale
Carl Henson City of Tulsa
Krystal Hentges Rice Lake Boring Inc.
Alejandro Hernandez City of Sarasota Utilities Department
Amy Hernandez Central Contra Costa Sanitary District
Migdalia Hernandez City of Sanford
Michael Hershelman ARCADIS
Thomas Hessler DLZ Ohio Inc.
Erik Hicks DC Water
John Hightower District of North Vancouver
Kin Hill Charleston Water Services
Michelle Hill North American Society for Trenchless Technology
Carley Hill Union Concrete and Construction Corp.
Robert Hirt Town of Cary
Timothy Hochuli City of Venice
Chris Hockett Cal Engineering & Geology Inc.
Bob Hogg Enbridge Inc.
Roy Hopen Crown Pipeline Construction
Aiden Horan Ward and Burke Microtunnelling Ltd
Greg Horn Environmental Crossings HDD
Kevan Howard Insituform Technologies
David Howell Midwest Mole Inc.
Reginald Howell DC Water
Louise Huang City of Richmond
David Hughes American Water Works Inc.
Christopher Hunt Geosyntec Consultants
Wayne Hunter Espey Consultants, Inc., dba RPS
Paul Huston Greeley & Hansen
Peter Hutchins Opus DaytonKnight Consultants Ltd.
Mark Hutchinson City of Portland-Collection Systems
Jill Hutchinson City of Portland
Moustafa Ibrahim Awad Aldea Services LLC
Dan Ifrim HMM
Colin Innes City of Price Albert
David Iseley IUPUI - Purdue School of Engineering & Technology
Les Janos Hatch Mott MacDonald Ltd.
Rick Januario CRP Products & Mfg Ltd
Adnan Javed Sarasota County
Simon Jeater Stantec Consulting

Kevin Jhingory DC Water
 Alan Johanson San Francisco Public Utilities Commission
 M Brent Johnson CDM Smith
 Alia Johnson DeKalb County Government
 Jeremy D. Johnston Clay County Utility Authority
 Ted Jones City of Aiken
 Ken Joseph City of San Leandro
 Norm Joyal Jacobs Associates
 Norman Kampbell Rehabilitation Resource Solutions, LLC
 Michael Kardash Town of Grenfell
 Khan Kashif Regional Municipality of Wood Buffalo
 Clifford Kassouf Triad Engineering & Contracting Co.
 Bruce Katz City of Lancaster
 Bob Kennedy Mar-Tech Underground Services Ltd
 Bruce Kennedy Utilities Services Branch
 Peter Kenny Pacific Gas & Electric
 Robert Kermitz England Thims & Miller
 Jeewan Khabra Fibrwrap Construction Services Ltd.
 Young Kim Seattle Public Utilities
 Eric King URS Corporation
 Eugene Klaasmeyer Klaasmeyer Construction Co.
 Tanya Klien Anta Plumbing
 Fritz Klingler FK Engineering Associates
 John Kloster MMM Group Limited
 Jerry Knight Sandy Suburban Improvement District
 Mike Kobe Brown and Caldwell
 Dennis Koellermeier City of Tigarad
 Brian Konrad NW Natural Gas
 Dan Koo IUPUI - Purdue School of Engineering
 Oleksandra Korotchuk BASF
 Hesham Kotby HAKS
 Todd Kramer CTI Engineers Inc.
 James Kriss Carollo Engineers
 Neil Kucharski Focus Corporation

John Kupskay Paragon Engineering Ltd.
 George Kurz Sewer Capacity Management
 Mark Kwilinski Mears Group
 Gary LaBella City of Thornton
 Ronald LaBelle City of New Bedford - Dept of Public Infrastructure
 Scott Laberge City of Ottawa
 Chris Lamb Utility Services Authority LCC
 Rick Landino Silver State Boring
 John Langhans MSA Professional Services Inc.
 Guy Langlois SNC Lavalin
 Martin Larkin Halton Region
 Frank Lau EPCOR Water Services Inc.
 Karl Lawrence Terein Inc.
 Jonathan Lee West Valley Sanitation District
 Christa Lee City of Tacoma
 Jenn Legg Metro Vancouver
 Stephen Leitch Hazen and Sawyer
 Luis Leon CDM Smith
 Sara Leow Barr Engineering
 Ryan Leppke Pidherneys Trucking
 Kevin Lethbridge Washington Suburban Sanitary Commission
 Kenneth Leung Paragon Engineering Ltd.
 Johnny Leverette Wade Trim
 Samuel Li City of Vancouver
 Edward Libby Woods Construction Inc.
 Tiong Liem Allied Geotechnical Engineers Inc.
 Marvin D. Liggins City of Kalamazoo
 Daniel Liotti Midwest Mole Inc.
 Brian Liotti Midwest Mole Inc.
 Ming Liu Center for Reliable Energy Systems
 Frank Lobedan Port of Oakland
 Harry Long City of Surrey
 Richard Lonn AGL Resources
 Rod Lovett Miami-Dade Water & Sewer Dept.



NASTT.ORG

INDIVIDUAL MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014

educate • train • research • publish

NASTT NORTH AMERICAN SOCIETY FOR TRENCHLESS TECHNOLOGY

VISIT
**THE WORLD'S LARGEST
 ONLINE TRENCHLESS LIBRARY**
 at www.nastt.org

FREE FOR MEMBERS!

nastt.org North American Society for Trenchless Technology
 7445 Morgan Rd. • Liverpool, NY 13090
 Phone: 315-409-7552



Jeff Lowe McKim & Creed Inc.
Christopher Lucie Brown and Caldwell
Scott Lundgren NW Natural
Gerard Lundquist National Grid
Danny Maas Brown and Caldwell
Marc Macdougall Emera
Chris Macey AECOM Canada Ltd.
Brian Mack BRT Construction Services
Angela Macpherson TransCanada
Leon Maday King County
Daniel Mageau SoilFreeze Inc.
James Magilton Sureway Construction
David Mahler CPH Engineers Inc.
Jeff Maier Colorado Trenchless Consulting LLC
Mariana Maldonado PS&S
Dan Maloney City of North Battleford
Trent Mandzuk City of Yorkton
Mike Marcum Roxborough Water & Sanitation District
Mike Marek IPEX Inc.
Brad Marquardt City of Wausau
Babatunde Marquis Jacobs Associates
Robert Martin CH2M HILL
Carrie Martin DC Water & Sewer Authority
Tyagu Mathialagan City of Abbotsford
David Mathy DCM Consulting Inc.
Brett Matic ShieldLiner Pressurized CIPP System
John Matthews Battelle Memorial Institute
Craig Mayman Drilling Products International
Aaron McDcin SoilFreeze Inc.
David McCallum Brannan Construction Company
Alan McCloskey Amtec Surveying Inc.
Stephen McCormick Inversa Systems
Dennis McCrindle Fibrwrap Construction Services Ltd.
Ray McCurrach Metro Vancouver (GRVD)
Jared McGinn New Brunswick Dept. of Transportation - Design
James McGoldrick PS&S
Sala McGuire The Covello Group Inc.
Peter McKay City of Ottawa
Nevin McKeown Ontario Clean Water Agency
Kathy McKune Cherry Hills Village Sanitation District
Jared McLaughlin Montgomery Water Works & Sanitary Sewer Board
Mike McMahan Oakland County Water Resources
Aaron McMullen Insituform Technologies Ltd.
Kyle McTeague Murray, Smith & Associates Inc.
Mohamed Meguid McGill University
Charles Menkhaus CME Services
Alex Merletti Merletti Construction Ltd.
Peter Merten HR Green
Patrick Meunier TransCanada Pipelines
Keith Meyer Ditesco
Phillip Michels Michels Corporation
Kendra Miers SHN Consulting Engineers & Geologists Inc.
Jason Miller Midwest Mole Inc.
Chad Millner City of Edina
Patrick Minger Minger Construction
Luke Minger Minger Construction
Sorina Mirea City of Surrey
Dorian Modjeski Cardno
Grant Moen City of Everett
Keith Moggach Royal Building Products - Pipe and Fittings Solutions
Ian Moore Queen's University
Brian Moreau CBCL Limited
Catherine Morley RJN Group
Wayne Morris Washington Suburban Sanitary Commission
Matthew Morris Brookwood Companies Inc.
Bob Morrow Mocon Corporation
Brad Morton Nelson River Construction Inc.
Gerhard Muenchmeyer Muenchmeyer Associates LLC
Tennyson Muindi Jacobs Associates

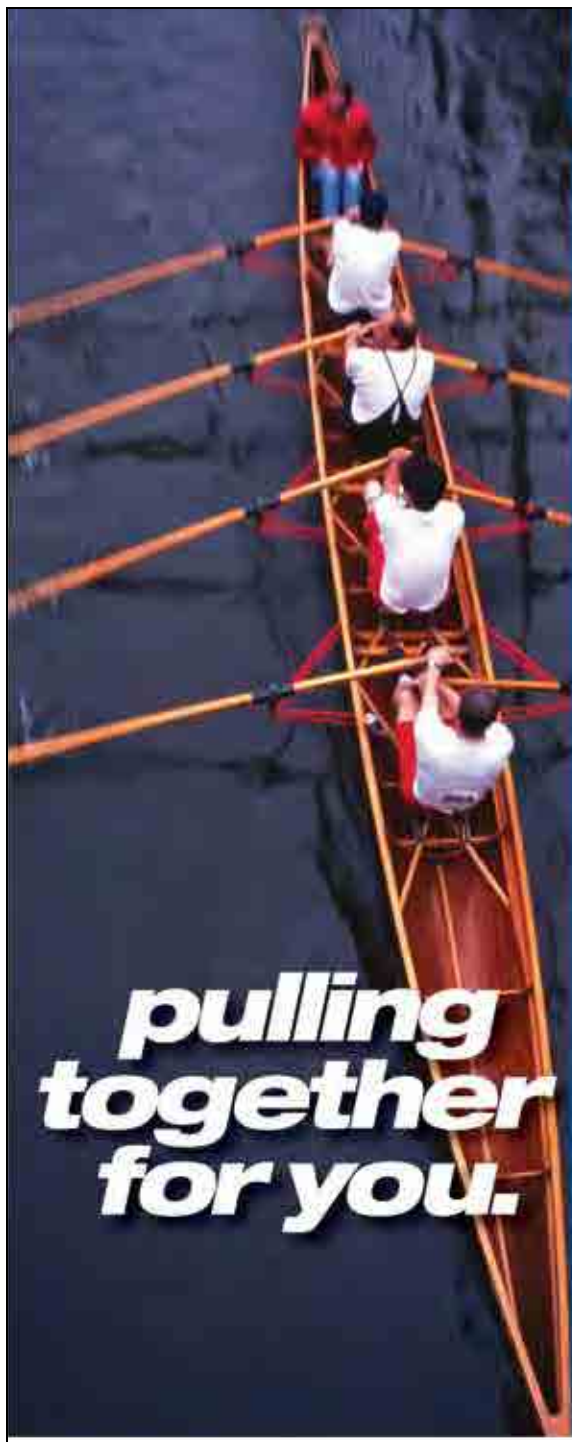
Ken Muir Sewer Technologies Inc.
Charles Munson American Pipe & Plastics Inc.
Jim Murphy UniversalPegasus International
Jeffery Murphy DLZ Corporation
Carrie Murray WorleyParsons Canada Infrastructure & Environment
Brad Murray Jacobs Associates
Albert Myles AM Utility Alternative Solutions Inc.
Nicholas Nagurney City of Virginia Beach, Dept of Public Utilities
Lauren Nagys CETCO
Mohammad Najafi University of Texas at Arlington/CUIRE
Souheil Nasr City of Everett
Vanessa Nedrick Remington Vernick & Beach Engineers
George Negas City Of London
Richard Nelson CH2M HILL
Stacey Neves City of New Westminster
John Newell No-DigTec
Dru Nielson Jacobs Associates
Jesse Nofziger Seattle Public Utilities
Jose Nolla Nogama Construction Corp.
Henry Norris PEER Consultants, P.C.
Roger Norton CDM
Swirvine Nyirenda City of Aurora
Stephen O'Connell Black & Veatch
Robert Ofori Hatch Mott MacDonald
David Ohashi Halton Region
Peter Okopny Dibble Engineering
Jared Oldroyd Bowen Collins and Associates
Dan Olson Bore Master Inc.
Greg Olson City of Albuquerque - Planning/Hydrology
Peter Oram AECOM
David O'sullivan PW Trenchless Construction Inc.
Brendan O'sullivan Murray, Smith & Associates Inc.
Ryan L. Otto City of Bloomington Public Works
Brent Packer Bowen, Collins & Associates
Richard Palmer Northeast Remsco Construction Inc.
Steve Palmer Hill Services
Albert Paquet CH2M HILL
William Parker City of San Jose
Aaron Parks Nelson Directional Boring, LLC
James Parrish Urban Contractors
Chuck Parsons Sancon Engineering Inc.
Paul Pasko SEH Inc.
Megan Pate City of Vancouver
Marek Pawlowski M.J.Pawlowski & Associates
Red Pederson Red Pederson Utilities Inc.
Peter Peduzzi Sarasota County Public Works
Genevieve Pelletier Universite Laval
Jay Perkins Brierley Associates LLC
Blake Peters McKim & Creed
Steve Peterson SEH Inc.
Vern Phillips Harris & Associates
Jason Phillips City of St. John's
Andrew Pinello Colorado Springs Utilities
Steven Piper Royal Building Products
Anna Polito City of Dollard-des-Ormeaux
H. Steve Pollack Huxted Tunneling LLC
Steve Porter Greenville Utilities Commission
Thomas Porzio Jacobs Engineering
Derek Potvin Robinson Consultants Inc.
Cindy Preuss HydroScience Engineers
Harry Price NTH Consultants Ltd
Richard Pring City of Sumter
Kari Prussen City of Tacoma
Brett Pugh CBCL Limited
Charles Pullan City of Calgary
Jon Putnam GHD Consulting Services Inc.
Brent Quilici City of Sparks
Elvis Quinones Aireco Trenchless Solutions
Carl Ragos URS Corporation
George Ragula Public Service Electric & Gas Co.
Ibrahim Rahime J.R. Paine & Associates Ltd.



Moshiur Rahman City of Yorkton
Peter Rainey Ipex Inc.
Ashley Rammeloo City of London
Owen Randall City of Fort Collins Utilities
Laura Ranger Secure CFO Solutions
Walter Ranger Secure CFO Solutions
Hardik Raval Town of Concord
Veto Ray
. Indiana University Purdue
. University Indianapolis
Philip Reeve
. J. L. Richards & Associates Limited
Greg Regier Maple Leaf Construction
Mark Reid DC Water
Karen Reynolds City of Brighton
Chris Rhoades Noland & Son Construction
Anthony Rice Golder Associates Inc.
Kevin Richmond
. DC Water & Sewer Authority
Michael Riddle RENN Underground
Dan Rites City of St. Albert
Thomas Roberts Parsons Brinckerhoff Inc
Stephen Roberts City of Lake City
Josh Robertson City Of Lake Oswego
Brent Robertson MPE Engineering Ltd.
Jonathan Robnett City of Lancaster
Michael Rocco AUI Inc.
Bruce Ropat RC Spencer Associates Inc.
Yuri Rosenberg ENSCO
Tim Ross Pure Technologies Ltd.
Robert Rousseau Gaz Metro
Camille Rubeiz Plastics Pipe Institute
George Ruchti
. Lockwood, Andrews & Newman
Joseph Ruptash Clean Harbors Exploration
Russell Russell Fairfax County
Nicholas Rystrom City of Revere
Steve Salazar Wilson & Company
Kamran Sarrami
. District Operations, Toronto Water
Taryn Sass City of Seattle
Joshua Satterfield
. Anchorage Water and Wastewater Utility
Robert Saunders Thurber Engineering Ltd.
Roy Savage City of Port Coquitlam
Wayne Sawkins City of Abbotsford
Eric Schadler
. City of Vancouver-Sewer Engineer
Jim Schill Lime Valley Advertising Inc.
Ray Schmoltdt D.R.S. Enterprises Inc.
Jeffrey Schneider Golder Associates Inc.
Jeffrey Scholl J.D. Hair & Associates Inc.
Leanne Schroyen City of Lethbridge
Alan Schwartzbeck Town of Leesburg
Chad Schwartzentruber Stantec
Jack Scott
. Cheyenne Board of Public Utilities
Giovanni Scotto
. Northeast Remsco Construction Inc.
Danno Seaton City of Sparks
Tony Seibert City of Abbotsford
Michael Seitz Pacific Gas & Electric
Gerald Seki Geolabs Inc.
Ariamalar Selvakumar USEPA
Ray Serrano Aurora Water Department
Joshua Shackelford URS Corporation
Hiren Shah
. Mueser Rutledge Consulting Engrs.
Brennan Sharma City of Surrey
Charles Sheehan
. Metropolitan District Commission

James Shelton
. Malcolm Pirnie- The Water div of Arcadis
Derek Siegel TransCanada
Benny Siljeborg Brierley Associates
Tammy Silverstone
. The Regional Municipality of York
Brandon Simons
. Trenchless Construction Services LLC
Sunil Sinha Virginia Tech University
William Skerpan Beta Group Inc.
Joanne Slazyk District of North Vancouver
Jeffrey Smaka
. City of Farmington Public Works
Rick Smith Jacobs Associates
Kevin Smith
. East Bay Municipal Utility District

Kevin Smith Spartanburg Water
Gary Smolinski OHM Advisors
Alberto Solana
. Northeast Remsco Construction Inc.
Nathan Soule Brierley Associates
Brian Spano Wilson & Company Inc.
Jason Sparks City of Lake City
Chris Spere City of Kitchener
Alison St. Clair
. Gibson-Thomas Engineering Co Inc.
Domenick A. Stanco
. Inc. Village of Garden City
Gerald Stangl DBA Technology Advisors
Gregory Stanley Wade Trim
Chad Stephen GENIVAR Ontario Inc.
Matt Steph Steph Engineering LLC



pulling together for you.

Experience the difference that Inliner offers with our high performance Network of Pipe Renewal Professionals. You'll have access to the Cured-in-Place Pipe industry's top product innovations, processes, and installation expertise for your project. Any place, any time. Inliner's network is ready.



812.723.0704
www.inliner.com





Raymond Sterling	Louisiana Tech University
Velimir Stetin	District of Maple Ridge
Dan Stevens	City of Coquitlam
Jimmy Stewart	Brenford Environmental Systems
Douglas Stewart	CH2M HILL
Kyle Stewart	DC Water
Robert Stier	Kiewit
Lucas Storey	City of Saskatoon
Nick Strater	Brierley Associates
Joseph Strauch	Gannett Fleming
Armin Stuedlein	Oregon State University
Cynthia L. Suter	Hernando County Utilities
Jason Swartz	Black & Veatch
John Swartzbaugh	Burgess & Niple Inc.
Henry Tang	Seattle City Public Utilities
Isabel Tardif	Town of Mount Royal
Gill Tardif	Nella Drilling
Jason Tart	Baltimore Sewer Service LLC
Alper Tasdemir	Stantec Consulting
Bob Taylor	Mar-Tech Underground Services Ltd.
David Taylor	CH2M HILL Canada Limited
Eniko Ten-hove	EATH GeoTopoDesign Canada Corp.
Cal Terrasas	Nada Pacific
Richard Thomasson	Arcadis
Matt Timberlake	Ted Berry Company Inc.
Fred Tingberg	Lanzo Trenchless Technology
Blair Todd	City of Vancouver
Dan Toppazzini	Utility Installation Ltd.
Stephen Torgerson	Trenchless Construction Services LLC
Shawn Tosh	RM of Springfield
Joseph Trapp	Port of Oakland
Derek Traquair	Martech Inc.
John Paul Travis	Arcadis
Frank Trinchini	City of Toronto - Toronto Water
Lawrence Triolo	AUI Inc.
Valerie Tucker	Couty of Fairfax
Zed Tura	DC Water
David Turenne	Mainroad South Island Contracting LP
Robert Turner	Turner Underground Installations Inc.
Mark Uanino	Directional TEchnologies Inc.
Paul Ubrich	Momentive Specialty Chemicals
Jim Utter	City of Altoona, Iowa
Ankit Vajpayee	PICA Corp.
Srini Vallabhaneni	CDM Smith
Jesse Vandecreek	Hubbell, Roth & Clark Inc.
Harold Vargas	Aireko Trenchless Soltions
Alex Varro	Thuro Inc.
Arthur Vaughn	MMI Utility Construction
Erika Vega-Bazan	PARSONS BRINCKERHOFF
Abe Veidmark	SSC Boring

Chandan Venkatesh	American Water
George Vernon	Mill Creek Mgmt Technologies Inc.
Paul Vierling	Hawaii Geophysical Services LLC
Eric Vieth	Strand Associates Inc.
Dennis Vogt	Nada Pacific
Jeffrey Waara	City of Ottawa
Wesley Wagner	City of Aberdeen - Aberdeen Proving Ground
Erik Waligorski	Stantec
Dennis Walsh	Woodard & Curran
Erik Ward	City of Tacoma
Ronald Wardner	The City of Red Deer
David Wasserburger	Marshfield Utilities
Scott Weaver	City of Portland
Ron Weigel	Century West Engineering Corp.
Jin Wen	City of Los Angeles-Bureau of Engineering
Wesley Wharff	Brunswick Sewer District
Wade Wheatlake	Merrick & Company
Don Wible	Nor-Cal Pipeline Services
Cynthia Wiebe	City of Winnipeg, Water and Waste Department
Daniel Williams	Self employed
Daren Williams	Virginia Beach Public Utilities Operations
Michael Willmets	North American Society for Trenchless Technology
David Willoughby	RK & K Engineers
Davin Wilson	District of Maple Ridge
Chris Windley	McKim & Creed Inc.
David Winston	Williams
Brian Wirth	City of Regina
James Withers	Rivers & Associates Inc.
James R. Wojcehowicz	City of Wauwatosa
Peter Wood	Rooter MD Plumbing
Michael Woodcock	Portland Utilities Construction Co. LLC
Hank Woodward	Town of Leesburg
Carlyle S. Workman	City of Lancaster
Jessica Wright	Washington Suburban Sanitary Commission
Donald Wroble	Raven Lining Systems
Tom Wyatt	KCI Technologies Inc.
Jamshed Yazdani	City of Lancaster
Sharon Yin	Orange County Sanitation District
Joseph Yonan	EBA_A Tetra Tech Company
Robert York	Port of Seattle
Karen York	Seattle Public Utilities
Melvin Young	Northeast Consulting Inc.
Paul Young	Associated Engineering
David Yue	Sameng Inc.
Charlie Zambito	City of Dollard-des-Ormeaux
Tarek Zayed	Concordia University
Damasio Zepeda Aragon	Central Contra Costa Sanitary District
Andrew Zimmer	MSA Professional Services
Mike Zulak	DiamondBack Sales Service and Rentals Ltd.
Kas Zurek	City of Winnipeg



LATERAL REHABILITATION | CEMENT & EPOXY
COATINGS | SONAR | LASER | HDTV

FROM THE PRIVATE LATERAL TO THE WWTP, APC HAS THE INFLOW & INFILTRATION REDUCTION SOLUTION FOR YOUR COMMUNITY!







www.AcePipe.com | 1.800.325.9372



3M

Scott Fabozzi, Bruce Birdwell, Veronica Hottenroth, Anton Jachim, Sunidh Jani, Rodney Meidel, Brett Sitter
3M Center Building 0201-3N-06
St. Paul MN 55144 USA
888-364-3577
www.3m.com



ACE PIPE CLEANING INC.

Steve Hontz, Bryan Dobson, Ray Greek, Don Uberroth, Bruce Jameson, Ryan Poertner
4000 East Truman Rd.
Kansas City MO 64127 USA
816-807-7949
www.acepipe.com



AKKERMAN INC.

Laura Anderson, Jason Holden, Maynard Akkerman, Troy Stokes, Chris Sivesind, Brad Wheeler
58256 266th St.
Brownsdale MN 55918 USA
800-533-0386
www.akkerman.com



AMERICAN AUGERS

Kelly Foos, Rob Hill, John Hoffman, Dave Hammond, Rich Prosser & Dan Sharpe
135 State Rt. 42
West Salem OH 44287 USA
419-869-1875
www.americanaugers.com

AMERICAN DUCTILE IRON PIPE

Ralph Carpenter, Woodrow Beavers, James Hogeland, David Bynon
1501 31st Ave. N
Birmingham AL 35207 USA
305-325-1965
www.acipco.com



AM-LINER EAST INC.

Mel Willett, Richard Cornelius, Mitch Coleman, Sean Merryman, Isy Giuliani
601 Jack Enders Blvd.
Berryville VA 22611 USA
540-955-9671
www.amlinereast.com



AOC LLC

Emilio Oramas, Leslie Beck, Fletcher Lindberg, Frederick Norman, Joe Simpson, Bill Moore
955 Highway 57 E
Collierville TN 38017 USA
901-854-2855
www.aoc-resins.com

AP/M PERMAFORM

William Shook, Miriam Shook, Joe Cherry, Brian Culich, Taylor Daniele, Moosa Damerichie
6250 NW Beaver Dr., Suite 1
P.O. Box 555
Johnston IA 50131 USA
515-276-9610
www.permaform.net

AQUA-PIPE/SANEXEN ENVIRONMENTAL SERVICES INC.

Michael Davison, Ben Cote, Alain Sauriol, Luc Lupien, Robert Dumais, Ron Glive
9935 Catania Ave.
Suite 200
Brossard QC J4Z 3V4 Canada
450-466-2123
www.aqua-pipe.com

ASSOCIATED ENGINEERING

Jason Lueke, Duane Strayer, Joe Tonellato, Alan Miller, Mark Belanger, Mark Dhillon, Owen Mierke, Carlie Jones, Siu Fung Ma, Nadeer Lalji
1000 Associated Engineering Plaza
10909 - Jasper Ave.
Edmonton AB T5J 5B9 Canada
780-451-7666
www.ae.ca



AVANTI INTERNATIONAL

Daniel Magill, Charlie Lerman, Don Rigby, Jessica Williams
822 Bay Star Blvd.
Webster TX 77598 USA
281-486-5600
www.avantigrout.com



AVERTEX UTILITY SOLUTIONS INC.

Bob McKee, Andy Blokker, Steve Kottelenberg, Jason Kottelenberg, James Vis
205235 County Rd. 109
Amaranth ON L9W 0T8 Canada
519-942-3030
www.avertex.ca

A SUSTAINABLE ALTERNATIVE TO OPEN-CUT CONSTRUCTION

Before Rehabilitation

After Rehabilitation

OFFERS SUCH ADVANTAGES AS:

- » Cured-in-place Pipe Rehabilitation
- » Trenchless Method
- » Minor Disruption to the Surroundings
- » Cost Efficiency
- » Reduced Greenhouse Gas Emissions

NSF **CLASSIFIED**
UL
WATER QUALITY

CALL US TODAY OR VISIT US AT:
1-800-263-7870
aqua-pipe.com



NASTT.ORG

CORPORATE MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014



AZON USA INC.

Michael Vennix, Larry McDauid
2204 Ravine Rd.
Kalamazoo MI 49004 USA
269-385-5942
www.azonintl.com



BARBCO INC.

Dave Barbera, Jenifer Barbera
315 Pekin Ave., SE
P.O. Box 30189
East Canton OH 44730 USA
800-448-8934
www.barbco.com



BAROID INDUSTRIAL DRILLING PRODUCTS (IDP)

Dave Donald, Frank Canon,
Glen Boot, Dennis Duty,
Andy Schumacher,
Tom Tibor
P.O. Box 1675
Houston TX 77251 USA
281-871-4621
www.baroididp.com



BENJAMIN MEDIA INC.

Bernard Krzys, Sharon Bueno,
James Rush, Kelly Dadich,
Dan Sisko, Brittany Maurer
10050 Brecksville Rd.
Brecksville OH 44141 USA
330-467-7588
www.benjaminmedia.com

BENNETT TRENCHLESS ENGINEERS

Dave Bennett, Karen Bennett,
Matthew Wallin, Kathryn Wallin,
Mary Neher
90 Blue Ravine Rd.
Suite 165
Folsom CA 95630 USA
916-294-0095
www.bennetttrenchless.com

BKP BEROLINA POLYESTER GMBH & CO. KG

Stefan Wittke
Heidering 28
Velten 16727 Germany
0049 3304 2088100
www.bkp-berolina.de

BOS SOLUTIONS

Andrew Pow, Michael Dykaski,
Rene Vandenbran, Ryan Pilsner,
Sloan Challand, Jessica Coomber,
Craig Massing, Rick Garland,
Jason Goss
3916 77th Ave.
Leduc AB T9E 0B6 Canada
780-913-0617
www.bos-solutions.com

BRADSHAW CONSTRUCTION CORP.

Lester Bradshaw, Doug Piper,
Mike Wanhatalo, Todd Brown,
Jordan Bradshaw, Eric Eisold
175 W Liberty Road
Eldersburg MD 21874 USA
410-970-8300
www.bradshawcc.com

BRANDT TRACTOR LTD.

Van Wall, Brent Danbrook,
Kevin Arro, Wes Carrington,
Mike Ladd, Rob Perrin
10630-176th St.
Edmonton AB T5S 1M2 Canada
780-484-6613
www.brandttractor.com



BTRENCHLESS

Marilee Bergstrom, Buck
Bergstrom, Chris Knott, Brenden
Tippets, Don Meyer, Dave Emm
9885 Emporia St.
Henderson CO 80640 USA
303-469-0199
www.btrenchless.com



BURNS & MCDONNELL

Jeff Heidrick, John Duvenci,
Cliff Cate
9400 Ward Pkwy
Kansas City MO 64114 USA
816-349-6769
www.burnsmcd.com



C&L WATER SOLUTIONS INC.

Chris Larson, Danny Braning,
Tracy Stenger, Christopher Jones,
Larry Larson, Chrystalla Larson
12249 Mead Way
Littleton CO 80125 USA
303-791-2521
www.clwsi.com

C.I.P.P. CORPORATION

Steve Gearhart, Robert Peccia
515 5th St.
P.O. Box 398
Hudson IA 50643 USA
888-485-2477
www.usa-cipp.com

CAPITAL SEWER SERVICES INC.

Gary Bates, Brian Ratchford, Greg
Long, Neil Murray, Jack Shaw,
Ryan Maloney, Theresa Amorim
389 Kenora Ave.
Hamilton ON L8E 2W3 Canada
905-522-0522
www.capitalsewer.com

CARDNO INC.

Dorian Modjeski, Rick Bowers,
Mark Pitchford, C. Paul Scott,
Don McCullers,
Brent D'Angelo
380 Park Place Blvd.
Suite 300
Clearwater FL 33759 USA
727-531-3505
www.cardno.com



CAROLLO ENGINEERS

Tim Taylor, Brian Clow,
Greg Gould, Anne Prudhel,
Jack Adam, John Malone,
Robert Buss, Michael Fleury
2700 Ygnacio Valley Rd.
Suite 300
Walnut Creek CA 94598 USA
925-932-1710
www.carollo.com

CCI INC.

David Dupuis, Craig Lenderbeck,
Justin Taylor, Brent Goerz,
Ed Douziech, Victor Nataly
Bay 9, 214 Grande Blvd.
Cochrane AB T4C 2G4 Canada
403-932-0560
www.ccisolutions.ca



CDM SMITH

John Schroeder, Marc Lehmann,
Jonathan Kunay, Shawn Syde,
Gina Cashion, Ian Mead
8800 Lyra Dr.
Suite 500
Columbus OH 43240 USA
614-847-8340
www.cdm.com



CETCO

Randy Strickland, Debra Bac,
Bob Oliver, Jim Piasecki, Todd
Hannehill, George Dugan, Rick
Hennessey, Michael Kleespies
2870 Forbs Ave.
Hoffman Estates IL 60192 USA
847-851-1824
www.cetco.com

CITADEL TECHNOLOGIES

Liz Larrieu, Bob Cooper
6430 S 39th West Ave.
Tulsa OK 74132 USA
918-584-2220
www.cittech.com



CLAUDE H. NIX CONSTRUCTION

Stephanie Nix-Wille, Jon Nix
1458 E So. Weber Dr.
South Weber UT 84405 USA
801-479-9000
www.chnix.com



CONESTOGA-ROVERS AND ASSOCIATES

Brad Marin, Michael Bisignani,
Robert Lannon, Gabriel Wang,
William Wheeler,
Wayne Hofstetter
651 Colby Dr.
Waterloo ON N2V1C2 Canada
519-884-0510
www.craworld.com



CONTECH ENGINEERED SOLUTIONS

Gaelyn Cunningham, Hugh Mickel
9025 Centre Pointe
West Chester OH 45069 USA
800-338-1122
www.conteches.com



CRETEX SPECIALTY PRODUCTS

Lee Haessig, Robin Wolf,
Kevin Lindner
N16 W23390 Stoneridge Dr.
Suite A
Waukesha WI 53188 USA
800-345-3764
www.cretexseals.com

**CUES INC.**

Paul Stenzler, Terri Mooney
3600 Rio Vista Ave.
Orlando FL 32805 USA
800-327-7791
www.cuesinc.com

**D.M. ROBICHAUD ASSOCIATES LTD.**

David Robichaud, Earl Brousseau,
Randy Kowal, Tom Leonard
627 Wentworth St., E
Oshawa ON L1H 3V8 Canada
905-433-1261
www.dmrobichaud.com

DANBY LLC

Linda Cassel, Mark Boyer,
Wanda Guerra, William O'Fiel,
Dan Cassel, Datta Shirodkar
8904 Fairbanks N Houston Rd.
Houston TX 77064 USA
281-598-1126
www.danbyrehab.com

DENEFF / W.R. GRACE

Roger Burris, Matt Offenberger
62 Whittemore Ave.
Cambridge MA 02140 USA
800-732-0166
www.deneff.com

**DERRICK EQUIPMENT COMPANY**

Ben Clark
15630 Export Plaza Dr.
Houston TX 77032 USA
716-683-9010
www.derrickequipment.com

DIGITAL CONTROL INC.

Siggi Finnsson, Eileen Breum,
Brian Mattson, Glenn Halstead,
Brian Keith, Mark Gallucci
19625 62nd Ave., S
Suite B-103
Kent WA 98032 USA
425-251-0701
www.digital-control.com

DILLON CONSULTING LIMITED

Doug Onishi, Jason Johnson,
Doug Hartford, Bill Nairn,
Adam Sullo
51 Breithaupt St.
Suite 200
Kitchener ON N2H 5G5 Canada
519-650-9833
www.dillon.ca

**DIRECT HORIZONTAL DRILLING**

Lon Briscoe, Rick Shipalesky,
Brian Sadoway, Dave Fisher,
Ernesto Gabuat,
Justin Hedemann, Ryan Chase
P.O. Box 4027
Spruce Grove AB T7X 3B2
Canada
780-960-6037
www.directhorizontal.com

DIRECTIONAL TECHNOLOGIES INC.

Kathy Sequino
77 North Plains Industrial Rd.
Wallingford CT 06492 USA
203-294-9200
www.directionaltech.com

DOETSCH ENVIRONMENTAL SERVICES

Joe Schotthoefer,
Sean Schotthoefer
21221 Mullin Ave.
Warren MI 48089 USA
586-755-209
www.doetschenv.com

DUDEK

Russ Bergholz, Steve Jepson,
Amanda Combs, Jeffrey Meyer,
Ed Matthews
605 Third St.
Encinitas CA 92024 USA
760-479-4101
www.dudek.com

**DUKE'S ROOT CONTROL INC.**

Lynn Heffron, Michael Hogan,
Stuart Tillery, John Fletcher
1020 W Hiawatha Blvd.
Syracuse NY 13204 USA
800-447-6687
www.dukes.com

ECHOLOGICS

Marc Bracken, Peter Studdard,
Dave Johnston,
John Marciszewski,
Anotha Thamesh, Kevin Laven
6295 Northam Dr.
Unit 1
Mississauga ON L4V 1W8
Canada
905-672-3246
www.echologics.com

ELECTRO SCAN INC.

Charles Hansen, Mark Grabowski,
Macy Grubbs, Charles Wilmut
1745 Markston Rd.
Sacramento CA 95825-4026 USA
916-779-0660
www.electroscan.com

EN-TECH CORPORATION

Gene Camali
91 Ruckman Rd.
Closter NJ 07624 USA
201-784-1034
www.en-techcorp.com

**ENVIROSIGHT LLC**

Richard Lindner, Pete Kurz, Mike
Russin, Jake Wells, Mike Vislay
111 Canfield Ave.
Unit A14
Randolph NJ 07869 USA
973-252-6700
www.envirosight.com

EVOLVED ENERGY SERVICES INC.

Joe Foster, Todd Christensen,
Chris Turner
P.O. Box 3946
Spruce Grove AB T7X 3B2
Canada
780-960-2790
www.evolvedenergy.ca

**FER-PAL INFRASTRUCTURE**

Geoff Britnell, Shaun McKaigue
169 Fenmar Dr.
Toronto ON M9L 1M6 Canada
416-742-3713
www.ferpalinfrastructure.com

FERRATEX

Gerhardt Rodenberger,
Michael Janke
20520 Unico Rd.
McKenney NJ 23872 USA
804-451-3667
www.ferratex.com

FIVE STAR PRODUCTS INC.

Steve Lupien, Robert Carlson
750 Commerce Dr.
Fairfield CT 06825 USA
203-336-7900
www.fivestarprouducts.com

**FLOWTITE PIPE**

Mike Leathers, Jeff Leblanc,
Detlev Schlorke, Eric Davidson,
Robert Capkovic, Beza Basiri
3009 N Laurel Ave.
Rialto CA 92377 USA
909-434-1888
www.flowtite.com

FORMADRAIN

Carl Marc-Aurele, Stephane
Therrien, Gerard Marc-Aurele
10121 Parkway
Montreal QC H1J 1P7 Canada
514-352-6911
www.formadrain.com

GAME TRENCHLESS CONSULTANTS

Piero Salvo, Sandra Gelly,
David Gosselin, Francois Gelly,
Eric Chavarie, Lucie Marando
5929 Transcanada
Suite 200
Montreal QC H4T 1Z6 Canada
514-747-9000
www.gameconsultants.net

GEOENGINEERS

Michelle Ramos, Galan McInnelly,
Mark Miller, Brian Ranney,
Jon Robison, Andrew Sparks,
Trevor Hoyles
3050 S Delaware
Springfield MO 65804 USA
417-831-9700
www.geoengineers.com

GHD CONSULTING ENGINEERS

Steve Hilderhoff, Greg McCorkhill,
David Kerr, Marcus Weeks
3128 Highwoods Blvd.
Suite 140
Raleigh NC 27604 USA
919-890-0600
www.ghd.com

GML COATINGS LLC

Eric McRoberts, Caleb Lindquist
10315 Technology Terrace
Lakewood Ranch FL 34211 USA
941-755-2176
www.gmlcoatings.com

GREAT LAKES TV SEAL INC.

Denice Healy, Jeffrey Healy,
Brett Healy, Greg Healy
3600 Kewaunee Rd.
Green Bay WI 54311 USA
920-863-3663
www.greatlakestvseal.com



NASTT.ORG

CORPORATE MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014



HALEY & ALDRICH

HALEY & ALDRICH INC.

Dennis Doherty, Carrie Layhee,
Mark Brownstein, Abhinav Huli,
Brad Miller
3 Bedford Farms Dr.
Bedford NH 03110 USA
603-625-5353
www.haleyaldrich.com



HAMMERHEAD TRENCHLESS EQUIPMENT

Brian Metcalf, Jason Haas,
Paul Rogers, Will LeBlanc,
Alan Goodman, John Hrabosky
1300 Capital Dr.
P.O. Box 3
Oconomowoc WI 53066 USA
281-642-6854
www.hammerheadtrenchless.com

HATCH MOTT MACDONALD

Colin Lawrence, Michael Vitale,
Rory Ball, Craig Camp, Glenn
Duyvestyn, Marc Gelinias
1400 Broadway
30th Floor
New York NY 10018 USA
212-532-4111
www.hatchmott.com

HDD BROKER INC.

Robert Martin, Rebekah Baker,
Cesar Cano, Bill Fluharty,
Ranee Martin
15205 Collier Blvd.
Suite 205
Naples FL 34119 USA
239-331-4665
www.hddbroker.com

HEITKAMP INC.

Benedict Ebner, David Ebner, John
Moody, William Markey, Clayton
Muenchmeyer, John Hohider
99 Callender Rd.
PO Box 730
Watertown CT 06795 USA
860-274-5468
www.eheitkamp.com



HERRENKNECHT TUNNELLING SYSTEM

Gerhard Lang, Julian O'Connell,
Michael Lubberger, Heike Rice
1613 132nd Ave. E
Suite 200
Summer WA 98390 USA
253-447-2302
www.herrenknecht.com

HOBAS PIPE USA

Larry Johnson, Bryant Welch
1413 E Richey Rd.
Houston TX 77073 USA
800-856-7473
www.hobaspipe.com

HOBAS QUEBEC

Philippe Fischer
602 Du Bourgogne
Rosemere QC J7A 4R7 Canada
514-574-0810
www.hobas.com

HORIZONTAL BORING & TUNNELING CO.

Brent Moore, Kenton Moore
505 S River Ave.
P.O. Box 429
Exeter NE 68351 USA
402-266-5347
www.hbtrenchless.com

HTS PIPE CONSULTANTS INC.

Tom Schultz, Rick Eastwood
420 Pickering St.
Houston TX 77091 USA
713-692-8373
www.htspipeconsultants.com



HYDROMAX

Hydromax USA
Jeffrey Griffiths, Jeff Graham
28 Brandon Road
Newport News VA 23601 USA
757-353-1521
www.hydromaxusa.com

ICON EQUIPMENT DISTRIBUTORS INC.

David Crandall
300 Ryders Lane
East Brunswick NJ 08816 USA
800-836-5011
www.icontunnelsystems.com

IDS CORPORATION NORTH AMERICA

Enrico Boi
885 Parfet St.
Unit E
Lakewood CO 80215 USA
303-232-3047
www.idscorporation.com

INFRASTRUCTURE REPAIR SYSTEMS INC.

Ron Dick, Jeff Hargrove,
Rose Higman, Bill Higman
4301 A 34th St. N
St. Petersburg FL 33714 USA
727-327-4216
www.irsinc.com

INLINER TECHNOLOGIES LLC

Geoffrey Yothers, Keith Oxner,
Larry Purlee
1468 W Hospital Rd.
Paoli IN 47454 USA
812-723-0244
www.inliner.net

INNOVATIVE PIPELINE CROSSINGS INC.

Wayne King, Alasdair Knox,
Amy Vizina, Will Duncan
Box 27, Site 23, RR8
Calgary AB T2J 2T9 Canada
403-650-9069
www.ipipecrossings.com

INSITUFORM TECHNOLOGIES LLC

Lynn Osborn, Ken Foster, Andrew
Foster, George Bontus, Eugene
Zaltsman, Abu Abraham
17988 Edison Ave.
Chesterfield MO 63005 USA
636-530-8000
www.insituform.com



INTERPLASTIC CORP.

Kaleel Rahaim, Jason Schiro,
Steve Wetzel
11014 Acanthus Ln.
Houston TX 77095 USA
281-687-8617
www.interplastic.com



IPEX INC.

Richard St. Aubin, Glenn Hume,
Rodney Johnston, Steven Del
Sole, Jeff Phillips, Rick Lorincz
2441 Royal Windsor Drive
Mississauga ON L5J 4C7 Canada
905-403-0264
www.ipexinc.com

IVIS INC.

Dolores Eaton, Matt Peddle,
Don Zaborski, Greg Spencer,
Chris Catapangan, Greg Valentine
16908 128A Ave.
Edmonton AB T5V 1K7 Canada
780-476-2626
www.ivisinc.com



JACOBS ASSOCIATES

Glenn Boyce, Mark Havekost,
Stephen Klein, Joe Schrank,
Rob Kahl, Rusty Arend
484 N Wiget Ln.
Walnut Creek CA 94598 USA
925-945-0677
www.jacobssf.com

JACOBS ENGINEERING GROUP

James Chae, Thomas Meinhart,
William Rice, Kurt Bettger,
Eric Schey, Jill Crockett, Peter
McGovern, Andrew Burse, Phil
Lanergan, Nathan Worker, John
Caulfield, Mike Persyn, Colin
Sessions, Behrouz Tehrani,
Wayne Warburton, Grant Mistryer
600 108th Ave., NE
Suite 700
Bellevue WA 98004 USA
425-452-8000
www.jacobs.com

JAMES W. FOWLER CO.

John Fowler, Jonathan Wallace,
Phil Hollingsworth, Scott Thibert,
Jeff Anderson
PO Box 489
Dallas OR 97338 USA
503-623-5373
www.jwfowler.com



JET-LUBE INC.

Joe Large, Mike Melancon
4849 Homestead Rd.
Suite 232
Houston TX 77028 USA
713-670-5700
www.jetlube.com



KAMLOOPS AUGERING & BORING LTD.

Malcolm Bachand,
Harry Dickinson, Richard
Bachand, Shawn Gaunt
10085 Dallas Dr.
Kamloops BC V2C 6T4 Canada
250-573-7814
www.kamloopsaugering.com

KENNEDY/JENKS CONSULTANTS INC.

Al Shewey, Brad Moore, Mark
Minkowski, Kathy Fretwell, Tim
Williams, Kathy Haynes
840 Grier Dr.
Suite 300
Las Vegas NV 89119 USA
702-270-3610
www.kennedyjenks.com



KERNEOS INC.

Joseph Talley, Greg Wallace,
Michael Spradling
1316 Priority Ln.
Chesapeake VA 23324 USA
757-284-3200
www.kerneos.com

**KLEINFELDER**

John Struzziery, James Beideman, Romeo Shipley, Kenneth Sorensen, Gus O'Leary, Barry Archambault
215 First St.
Suite 320
Cambridge MA 02142 USA
617-498-4685
www.kleinfelder.com

KPFF CONSULTING ENGINEERS

Brian Raji, Michael Puhlmann, Karen Ratliff
2800 N Central Ave.
Suite 1010
Phoenix AZ 85004 USA
602-264-1010
www.kpff.com

**LANEY DIRECTIONAL DRILLING CO.**

Grady Bell, Alan Snider, Dennis Rodriguez, Kevin Fox, Paul Greenwell, Jwala Sharma
2031 Humble Place Dr.
Unit 100
Humble TX 77338 USA
281-540-6615
www.laneydrilling.com

LIQUI-FORCE SERVICES (ONTARIO) INC.

Mike Near, Kim M. Lewis, Max Gowdy, Kim K. Lewis, Chris Lewis, John Thompson, Darcy Warren
2015 Spinks Dr.
RR #2
Kingsville ON N9Y 2E5 Canada
519-322-4600
www.liquiforce.com

**LMK TECHNOLOGIES**

Larry Kiest, Rick Gage, Greg Norgaard, Amana Arayan, Julie Keith, Mike Czipar
1779 Chessie Ln.
Ottawa IL 61350 USA
815-433-1275
www.lmktechnologies.com

LOGIBALL INC.

Marc Anctil, Guy Richard
440 Papin St.
Quebec City QC G1P 3T9 Canada
800-246-5988
www.logiball.com

LOWE CONSTRUCTION CO.

Scott Bazinet, Tim Mattice
2535 Bader Rd.
Horton MI 49246 USA
517-529-9406
www.lowecon.net

MCCLOSKEY INTERNATIONAL

Andrew Braithwaite, Julie Andras, John O'Neill, Damian McCabe, Gary Guthrie, Paul King
1 McCloskey Rd.
Keene ON K9J 0G6 Canada
705-341-3909
www.mccloskeyinternational.com

**MCLAUGHLIN BORING SYSTEMS**

Dave Gasmovic, Philip Heath, Jeff Wage, Tim Hedrick
2006 Perimeter Rd.
Greenville SC 29605 USA
800-435-9340
www.mightymole.com

**MEARS GROUP INC.**

Shiv Kumar, Ron Halderman, Neil Smith, Jim Williams, Jim Nelson, Mark Kwilinski, Steve Meaders
2800 Post Oak Blvd.
Suite 3010
Houston TX 77056 USA
281-448-2488
www.mears.net

MELFRED-BORZALL INC.

Dick Melsheimer, Peter Melsheimer, Eric Melsheimer
2712 Airpark Dr.
Santa Maria CA 93455 USA
805-739-0118
www.melfredborzall.com

MERSINO

Gino Mersino, Bud Nichols, John Sybrant
10162 E. Coldwater
Davison MI 48423 USA
866-360-7867
www.globalpump.com

**MICHELS CORPORATION**

Michelle Trapp, Jim Kabat, Pat Herzog, Joe Hockberger, Tim McGuire, Ray Post
817 W Main St.
P.O. Box 128
Brownsville WI 53006 USA
920-583-3132
www.michels.us

MICROTUNNELING INC.

Timothy Coss, Rachapit Dejthai, Scott Schendorf
P.O. Box 7367
Boulder CO 80306 USA
303-444-2650
www.microtunneling.com

**MILLER PIPELINE CORPORATION**

Chris Schuler, Ralph Miller, Kevin Miller, Butch Lanaville, Jeff Newman
8850 Crawfordsville Rd.
P.O. Box 34141
Indianapolis IN 46234 USA
317-293-0278
www.millerpipeline.com

MILLIKEN INFRASTRUCTURE SOLUTIONS

John Hepfinger, Dave Keaffaber, Scott Navia, Joe Royer, Kevin Weir
1300 Brownwood Ave.
LaGrange GA 30240 USA
706-880-5054
www.infrastructure.milliken.com

MTI EQUIPMENT

Shawn Hendricks, Bill Hendricks
830 South River Rd.
Englewood FL 34223 USA
941-474-6789
www.mtiequip.com

**NATIONAL LINER**

Scott Roth
11767 Katy Freeway
Suite 490
Houston TX 77079 USA
800-547-1235
www.nationalliner.com

NATIONAL WATER MAIN CLEANING COMPANY

Dennis Sullivan, Salvatore Perri, Jim Lounsbery, Hercules Anastasiadis, Joseph Perone
25 Marshall St.
Canton MA 02021 USA
800-422-0815
www.nwmcc-bos.com

NEPTUNE CORING

Ben Campbell, Mitchell Campbell, Lars-Erik Larsen
21521 - 112 Ave.
Edmonton AB T5S 2T8 Canada
780-486-4050
www.neptunecoring.ca



NASTT.ORG

CORPORATE MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014

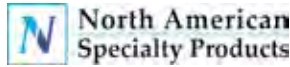


NEPTUNE RESEARCH INC.

Tammy Bomia
3875 Fiscal Ct.
Suite 100
Riviera Beach FL 33404 USA
561-683-6992
www.neptuneresearch.com

NEXT GENERATION POWER

Engineering Inc.
Gino Kennedy
1732 St. Johns Bluff Rd S.
Jacksonville FL 32246 USA
904-642-8555
www.nextgenerationpower.com



NORTH AMERICAN SPECIALTY PRODUCTS

Sharon Bellino, Steven Gross,
Jon Zelinsky, Mark Dasilva,
Robert Eads
993 Old Eagle School Rd.
Suite 416
Wayne PA 19087 USA
484-253-4520
www.certa-lok.com

NORTHWEST PIPE CO.

Jennifer Anderson, Russ Lascink,
Eric Stokes
5721 SE Columbia Way
Suite 200
Vancouver WA 98661 USA
360-397-6317
www.nwpipe.com



NOZZTEQ INC.

Scott Paquet, Tony DeCarlo,
Josh Ballum, Kyle Comegys
1497 Main Street #354
Dunedin FL 34698 USA
866-620-5915
www.nozzteq.com

OWEN EQUIPMENT COMPANY

Kitty Scott, Si Norris, Jim Brown,
Ed Hodges, Dave Armstrong,
Earl A. Rose
13101 NE Whitaker Way
Portland OR 97230 USA
800-992-3656
www.owenequipment.com

OXFORD PLASTICS

David Sardinha
101 Dexter Rd.
East Providence RI 02914 USA
401-709-4047
www.oxfordplasticsusa.com



PACIFIC BORING INC.

David Cline, John Iles,
Steve Gallyer, James Gardner,
Brad Gardner, Ryan Sullivan
1985 W Mountain View Ave.
P.O. Box 727
Caruthers CA 93609 USA
559-864-9444
www.pacificboring.com



PERMA-LINER INDUSTRIES LLC

Jerry D'Hulster, Travis Bohm,
Morgan Trouard, Rob Larsen,
Dave Groth, John Yergey
13000 Automobile Blvd.
Suite 300
Clearwater FL 33762 USA
727-507-9749
www.perma-liner.com

PICA CORPORATION

Dave Russell, Ed Brain, Ad
Shatat, Chris Garrett, Bill Jappy
4909 75 Ave.
Edmonton AB T6B 2S3 Canada
780-468-6800
www.russelltech.com

PIM CORPORATION

Robert Torielli, Belman A. Salazar,
Dennis Torielli, John Torielli,
Rea Kolski, Patrick Green
201 Circle Drive North
Suite 106
Piscataway NJ 08854 USA
732-469-6224
www.pimcorp.com

PINNACLE CONSTRUCTION & DIRECTIONAL BORING INC.

Erik Carlson, Michael Harrawood,
Scott Lyman
P.O. Box 51505
Summerville SC 29485 USA
843-873-1012
www.pc-db.com

PIPEFLO CONTRACTING CORP.

Julia Noble
111 Frid St.
Hamilton ON L8P 4M3 Canada
905-572-7767
www.pipeflo.ca

PIPELINING TECHNOLOGIES INC.

Michael Wilson
1616 N. Florida Mango Rd.
Suite C-11
West Palm Beach FL 33409 USA
561-853-5463
www.pipeltd.com

PIPEMEDIC BY QUAKEWRAP INC.

Mo Ehsani, Sarah Longenecker,
Tyler Adams, Josh Ahumada,
Dan Barnett
2055 E 17th St.
Tucson AZ 85719 USA
520-791-7000
www.pipemedic.com

PRECISE CROSSINGS LTD.

Ken Shipalesky, Craig Nernberg,
Gerald Chase
350 Saskatchewan Ave.
P.O. Box 3852
Spruce Grove AB T7X3B1 Canada
780-962-6882
www.precisecrossings.com

PRIME HORIZONTAL LTD.

John Teer, Thomas Teer, Simon
Kench, Julian Finch, Luke Bender
1302 Golf Blvd.
New Iberia LA 70560 USA
337-359-9061
www.primehorizontal.com



PRIME RESINS INC.

Michael Vargo, Donnie Brown,
Scott Kelly, Dave Barton, Adam
Goldstone, Kevin Anthony
2291 Plunkett Rd.
Conyers GA 30012 USA
770-388-0626
www.primeresins.com

PROSHOT CONCRETE INC.

Donnie Barnes, Albert Pugliese,
Tony McDougle, Bill Morris,
Connie Dill, Pat Mooney
4158 Musgrove Drive
P.O. Box 1636
Florence AL 35630 USA
800-633-3141
www.proshotconcrete.com



PURE TECHNOLOGIES INC.

Mark Holley, John Elliott, Michael
Higgins, Peter Paulson, Myron
Shenkiryk & Mike Wrigglesworth
8920 State Rt. 108
Suite D
Columbia MD 21045 USA
443-766-7873
www.puretechltd.com



QUADEX / INTERFIT

Stewart Nance, James Dugger,
Casey Kane, Jordan Wisener,
Sam Wisener
4801 Crystal Hill Rd.
North Little Rock AR 72118 USA
501-758-8628
www.quadexonline.com



QUEST INSPAR LLC

Tim Carroll, Scott Wise,
William Lepola, Don Sims,
Kent Weisenberg
410 Pierce St
Houston TX 77002 USA
713-391-8660
www.questinspar.com



RAEDLINGER PRIMUS LINE INC.

Ivan Zubiaga
112 South Tryon St.
Suite 1130
Charlotte NC 28284 USA
704-771-3902
www.primusline.com



RAIN FOR RENT

John Lake, Cam Could,
Mike Haley, Anna Porter,
Paul Reilly, Jerry Williams
P.O. Box 2248
Bakersfield CA 93303 USA
661-399-9124
www.rainforrent.com

RAPIDVIEW LLC

Rex Robison, David Daake,
Guy Leslie, Andy Melton,
Kris Robison, Matthew Sutton
1828 West Oslen Rd.
Rochester IN 46975 USA
574-224-8953
www.rapidview.com

RAUSCH ELECTRONICS USA LLC

Rudy Ellgass, Norman Urschel,
Mike Coons, Tammy Heinbaugh
4757 Innovation Way
Chambersburg PA 17201 USA
717-709-1005
www.rauschusa.com

RAVEN LINING SYSTEMS

Rob Pawlak, DJ Wroble,
Mitch Lipford, Jeff Croll,
Pete Tortorici, John McGill,
Philip Topek
13105 E 61st St.
Suite A
Broken Arrow OK 74012 USA
800-324-2810
www.ravenlining.com



RELINE AMERICA INC.
 Michael Burkhard, Jeff van Huet,
 Rob Fields, Jake Pierce &
 Bridget Moritz
 116 Battleground Ave.
 Saltville VA 24370 USA
 276-496-4000
www.relineamerica.com



RS TECHNICAL SERVICES INC.
 Rod Sutliff, Juan Torres,
 Adam Baker, Chris Remillard,
 Bob Greiner, Kelli Loux
 1327 Clegg St.
 Petaluma CA 94954 USA
 707-778-1974
www.rstechserv.com



RS TECHNIK / RS LINING SYSTEMS
 Joanne Carroll, David Kozman,
 Steve Wierchowski
 P.O. Box 3745
 Cary NC 27519 USA
 918-527-8975
www.rstechnik.us

S&B TECHNICAL PRODUCTS
 John Filer, Sue Richardson,
 Keith Steinbruck
 1300 E Berry St.
 Fort Worth TX 76119 USA
 817-923-3344
www.sbtechprod.com

SAERTEX MULTICOM LP
 Mark Hallett, Mark McClymonds
 156 Diggins Rd.
 Hyde Park VT 05655 USA
 317-464-9717
www.saertex-multicom.de



SAK CONSTRUCTION LLC
 Charlie Kuhnmuensch,
 Joe Feuerborn, Steve Hirtz,
 Joe Lane, Jerry Shaw,
 Casey Smith, Cory Street
 864 Hoff Rd.
 O'Fallon MO 63366 USA
 636-379-2350
www.sakcon.com

SCS CONSULTING GROUP LTD
 Blair Seeley, Malcolm Catto,
 Paul Gioacchini, Jamie Pyatt,
 Doug Woo, Phil Sheridan
 30 Centurian Dr.
 Suite 100
 Markham ON L5R 8B8 Canada
 905-475-1900
www.scsconsultinggroup.com



SEKISUI SPR AMERICAS
 Steve Martin, Mark Lucas,
 Jay Keating, Drew Leazer,
 Steve Leffler, George Gerz
 501 N. El Camino Real
 Suite 224
 San Clemente CA 92672 USA
 949-366-4165
www.sekisuinorditube.com



SOURCE 1 ENVIRONMENTAL
 Jeff Urbanski, Steve Kerby,
 Chad Miller, Mike Moore,
 Mike Warner
 422 W. Rising St.
 Davison MI 48423 USA
 810-412-4740
www.s1eonline.com

SPECTRASHIELD LINER SYSTEMS
 Robert Klopfenstein, Sims Rhyne,
 Bill Goodman
 P.O. Box 24354
 Jacksonville FL 32241 USA
 904-419-4889
www.ccispectrum.com

SPRAYROQ INC.
 Jerry Gordon, Rocky Capehart,
 Chris Pio, Chip Johnson,
 Steve Loudermilk
 248 Cahaba Valley Parkway
 Pelham AL 35124 USA
 205-957-0020
www.sprayroq.com



STAHELI TRENCHLESS CONSULTANTS
 Kimberlie Staheli, Matthew Pease,
 Chris Price, Laura Wetter,
 Brad Moore, Joel Staheli,
 Matthew Olson, Dylan Davidson,
 Dave Pease
 5405 – 196th Street SW
 Lynnwood WA 98036 USA
 425-205-4930
www.stahelitrenchless.com

Depend on Premier Drill Pipe

Your HDD connection

7401 Mesa Drive
 Houston, TX 77028
 Email:
sales@premierdrillpipe.com
 Web site:
www.premierdrillpipe.com
 Phone: (713) 337-8470
 Toll free: (800) 390-2752

PREMIER DRILL PIPE LTD.
 A Tejas Tubular Products Company

™ Premier HDD Drill Pipe and the Premier logo are marks of Tejas Tubular Products, Inc.



NASTT.ORG

CORPORATE MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014



STANTEC CONSULTING LTD.

Dave Krywiak, Ken Matthews, Greg Tippett, Fred Duberow, Victor Olson, Neil Woodroffe, Luke Murry, Noel Guercio, Hartley Katz, Gerald Bauer, Juan Morales, Mark Hudak, Todd Simenson, Stephan Weninger, Don Del Nero, Francis Rozsa, Don Silar, Ed Thomas, Joe B 10160 - 112 St. Edmonton AB T5K 2L6 Canada 780-917-7101 www.stantec.com



SUNBELT RENTALS

Carrie Gordon, Ladd Gould, Mike Rosbrook, Brant Williams 2341 Deerfield Dr. Fort Mill SC 29715 USA 803-578-5418 www.sunbeltrentals.com



TEJAS TUBULAR PRODUCTS INC.

Earl Warren, Ray Tejada, Logan Glines, Darrell Ballinger, Max Tejada 8526 Green River Dr. Houston TX 77028 USA 281-822-3408 www.tejastubular.com

TERRE HILL COMPOSITES INC.

Bob Fisher, Bill Oberti 400 W Main St. Suite 105 Ephrata PA 17522 USA 717-738-9164 www.thcomposites.com



THE CHARLES MACHINE WORKS/DITCH WITCH

Scott Smith, Paul Ebersole, John Bieberdorf, Larry Kindschi, Vikki Beier, Jeri Lamerton 1959 W Fir Ave. P.O. Box 66 Perry OK 73077 USA 580-336-4402 www.ditchwitch.com

THE CROSSING COMPANY

Ryan Maclean, Ryan Bowhay, Neil Swope, Gerald Beaudoin, Manley Osbak, Ben Armstrong 1807 8th St. Nisku AB T9E 7S8 Canada 780-955-5051 www.thecrossingcompany.com



THE TORO COMPANY

Joshua Beddow, Butch Greeninger, Gaylord Richey, Denny Glasco, Neil Borenstein, Tom Lewis 8111 Lyndale Ave. S Bloomington MN 55420 USA 952-948-4197 www.toro.com



TRIC TOOLS INC.

Michael Lien, Gregg Abbott, John Rafferty, R. Ward Carter, Robert Ding 1350 S. Loop Rd. Alameda CA 94502 USA 510-865-8742 www.trictrenchless.com

TRI-STATE UTILITIES

John Saintsing, Joseph McSweeney, Jonathan Thomas, Andy McSweeney, Craig Welsh, Connor Mathis 2111 Smith Ave. Chesapeake VA 23320 USA 757-366-9505 www.tristateutilities.com



TRY TEK MACHINE WORKS INC.

Dennis Burger, Brooks Cutright 250 N. Main St Jacobus PA 17407 USA 717-428-1477 www.trytek.com



TT TECHNOLOGIES INC.

Chris Brahler, David Holcomb, Kevin Nagle, Collins Orton, Eddie Ward 2020 E New York St. Aurora IL 60504 USA 630-851-8200 www.tttechnologies.com

Trenchless TECHNOLOGY

Webinar 2014 Educational Series

NASTT'S CARBON CALCULATOR

Watch this archived webinar online.



CURED-IN-PLACE-PIPE (CIPP)

Watch this archived webinar online.



CONDITION ASSESSMENT FOR WATERMAINS

Date/Time:
Thursday, November 6
2:00 PM EST



Go to www.trenchlessonline.com/index/webinars

Cost: FREE

Presented by



Produced by





TURN-KEY TUNNELING INC.

Joel Froehlich, Mark Kammer,
Brian Froehlich, Shannon Stone,
Jackie Obednikovski
1247 Stimmel Rd.
Columbus OH 43223 USA
614-275-4832
www.tunnelit.net

UGI UTILITIES INC.

Eric Swartley, Allen Fowler,
Frank Bennett, Dave Amory,
Mark Connors, Hans Bell
1301 AIP Drive
Middletown PA 17057 USA
717-255-4357
www.ugi.com

ULC ROBOTICS INC.

Gregory Penza, Robert Kodadek,
Nathan King
55 Corbin Ave.
Bay Shore NY 11706 USA
631-667-9200
www.ulcrobotics.com

UNDERGROUND SOLUTIONS INC.

Bo Botteicher, Frank Firsching,
Tom Marti, Gloria Rock,
Marty Scanlan, Bob Walker
2 South Ivy St.
Denver CO 80224 USA
303-521-2618
www.undergroundssolutions.com

UNDERGROUND TOOLS INC.

Mike Burns, Al Chancellor
6680 Hodgson Rd.
Lino Lakes MN 55014 USA
651-255-1873
www.undergroundtools.com

UNITED CITY GROUP

Valeri Volkov
2655 Ulmerton Rd., #209
Clearwater FL 33762 USA
727-492-6587
www.unitedcitygroup.com

UNIVERSAL HDD

Alexander Murovanny,
Michael Fry
1221 Flex Court
Lake Zurich IL 60047 USA
847-955-0050
www.unihdd.com

URBAN SYSTEMS LTD.

Jacob Scissons, Keith Fransson,
Jeremy Nutma, Wade Turner,
Jan Korinek, Scott Shepherd,
Mark Hall, Peter Mandzuik,
Mohammed Elenany,
Jared Halter
550 - 1090 Homer St.
Vancouver BC V6B 2W9 Canada
604-235-1701
www.urbansystems.ca



VAC-TRON EQUIPMENT LLC

Don Buckner, Misty Buckner,
Brian Showley, Robbie Glenn,
Tim Ross, Nancy Gines
27137 Hwy 33
Okahumpka FL 34762 USA
352-728-2222
www.vactron.com

VAPOROOTER

Hunter Dance, Justin Fearn,
Bill Fuller, Slade Baker
1550 E Old 210 Hwy.
Liberty MO 64068 USA
816-506-2848
www.vaporooter.com



EQUIPPED TO DO MORE.

VERMEER CORP.

Jim Rankin, David Wisniewski,
Tony Briggs, Ryan Erger,
John Milligan, Ashley Rolffs
1210 Vermeer Rd., E
P.O. Box 200
Pella IA 50219 USA
641-628-3141
www.vermeer.com



WARREN ENVIRONMENTAL INC.

Danny Warren, Greg Swartz,
Phil Warren, Max Silva
P.O. Box 1206
Carver MA 02330 USA
508-947-8539
www.warrenenviro.com



WYO-BEN INC.

Stewart Krause, Tyson Smith,
John Wornom
1345 Discovery Dr.
Billings MT 59102 USA
406-652-6351
www.wyoben.com

XYLEM DEWATERING SOLUTIONS INC.

Laura Gibson, Michael Delzingaro,
Will Buddin, David Higgs,
Todd Hoffman, Gregg Leslie
P.O. Box 191
Bridgeport NJ 08014 USA
856-467-3636
www.godwinpumps.com



NASTT.ORG

CORPORATE MEMBERS

NASTT'S TRENCHLESS TODAY | FALL 2014

Global Asset Management Engineering
TRENCHLESS CONSULTANTS

Tel: 1-855-660-GAME (4263)
Fax: 1-855-550-GAME (4263)
info@gameconsultants.net
www.gameconsultants.net

WATERMAIN CONDITION ASSESSMENT TOOLS OF ALL MATERIALS:
JD7 PIPESCAN+™: FULL DIMENSIONAL WALL THICKNESS MEASUREMENT
JD7 INVESTIGATOR+™ AND JD7 LDS1000™: CCTV AND LEAK DETECTION

RAEDLINGER PRIMUS LINE

Trenchless rehabilitation of pressure pipes

Benefit with Raedlinger Primus Line from:

- ▶ Cost savings of up to 40 %
- ▶ Long insertion lengths of up to 6,500 ft.
- ▶ Ability to negotiate bends of up to 45 degrees
- ▶ Quick rehabilitation with fast-to-install connectors
- ▶ Small construction sites with low intervention in the environment

Raedlinger Primus Line, Inc.
112 South Tryon Street, Suite 1130
Charlotte, North Carolina 28284
Phone: +1 - 704 - 771 3902
info@primusline.com

www.primusline.com



**ALLEGANY COUNTY DEPT.
PUBLIC WORKS**

Mark Yoder
701 Kelly Rd.
Suite 300
Cumberland MD 21502 USA
301-777-5942
www.alleganyco.com

**BOSTON WATER & SEWER
COMMISSION**

Irene McSweeney, John Sullivan
980 Harrison Ave.
Roxbury MA 02119 USA
617-989-7447
www.bwsc.org

**CARMEL AREA WASTEWATER
DISTRICT**

Drew Lander, Daryl Lauer
P.O. Box 221428
Carmel CA 93922 USA
831-624-1248
www.cawd.org

**CENTRAL CONTRA COSTA
SANITARY DISTRICT**

Alexandr Mestetsky, Mark
Wenslawski, William Grant, Nancy
Molina
5019 Imhoff Pl.
Martinez CA 94553 USA
925-228-9500
www.centalsan.org

CITIZENS ENERGY GROUP

Debarati Bardhan, John Trypus,
Michael Miller, Olivia Hawbaker
2150 Dr. Martin Luther King Jr. St.
Indianapolis IN 46202 USA
317-431-3296
www.citizensenergygroup.com

CITY OF BARRIE

Chris Harper, Kelly Oakley, Geoff
Mitchinson, Leonard Borgdorff
70 Collier St.
P.O. Box 400
Barrie ON L4M 4T5 Canada
705-726-4242
www.barrie.ca

CITY OF BEND

Jason Suhr, Reese Moody, Brice
Blackwelder, Chris Mosher, Kelly
Ristoff
575 NE 15th St.
Bend OR 97701 USA
541-317-3053
www.bend.or.us

CITY OF BURNABY

Bill Lowrie, Ron Weismiller, Tony
Kovacevic, Tony Chapman
5780 Laurel St.
Burnaby BC V5G 1N3 Canada
604-294-7073
www.burnaby.ca

CITY OF CALGARY

Bill Boyes, Lee Dupras, Tanner
Fellinger, Mike Luck, Randy Girling,
Scott Eagleson, Joan Clark, Edgar
Vargas, Dwight Kentel, Charles
Pullan
Box 2100 Stn. M.
Suite 403
Calgary AB T2P 2M5 Canada
403-268-1233
www.calgary.ca

CITY OF CARLSBAD

Terry Smith, Mark Biskup, Sherry
Howard, David Ahles
1635 Faraday Ave.
Carlsbad CA 92008 USA
760-602-2765
www.carlsbadca.gov

CITY OF CASSELBERRY

Edward Ambler, Mark Gisclar, Kelly
Brock, David Lankford
95 Triplet Lake Dr.
Casselberry FL 32707 USA
407-262-7725
www.casselberry.org

CITY OF CLEVELAND

Rachid Zoghaib
12302 Kirby Ave.
Cleveland OH 44018 USA
216-664-2750

CITY OF EDMONTON

Albert Kwan, Siri Fernando, Michael
Kan, Minnan Liu, Darwin Smith,
Chris Ward, Frank Fechner, Todd
Yuzda, Frank Policicchio, Arbind
Mainali, Ray Davies, James Tan
14323 115th Ave.
Edmonton AB T5M 3B8 Canada
780-496-7902
www.edmonton.ca

CITY OF EDMONTON

John Cairns, Binod Rajbhandari,
Jonathon Medurecan, Raf
Tenderenda, Harry Abbink,
Xiaojian Mao, Jagdish Tailor,
Eduardo JaraMillo, Arjun Aryal,
Bernie Canlas, Shiva Shankar, Eric
Magtoto, Emilia Rojas, Diana Lu
14323 115th Ave.
Edmonton AB T5M 3B8 Canada
780-496-7902
www.edmonton.ca

CITY OF EUGENE

Patrick Cox, David Starns, Rob
Hallet, Kevin Farthing
99 E Broadway
Suite 400
Eugene OR 97401 USA
541-682-5291
www.eugene-or.gov

CITY OF GRESHAM

Jeremy Provenzola, Andrew Thorne,
Jeff Loftin, James Montgomery
1333 NW Eastman Pkwy
Gresham OR 97030 USA
503-618-2629
www.GreshamOregon.gov

CITY OF HAMILTON

Erika Waite, Gary Moore,
Christopher Gainham, Michael
Zantingh
77 James St. North
Suite 320
Hamilton ON L8R 2K3 Canada
905-546-2424
www.hamilton.ca

CITY OF LEDUC

Kevin Cole, Ryan Graham, Shawn
Tooth
#1 Alexandra Park
Leduc AB T9E 4C4 Canada
780-980-7190
www.leduc.ca

CITY OF LOS ANGELES

Edward Arrington, Brad Jensen,
Harshad Shah
1149 S. Broadway
Suite 630
Los Angeles CA 90015 USA
213-485-1694
www.lacity.org

CITY OF MARKHAM

Ernie Ting, Alex Chiu
101 Town Centre Blvd.
Markham ON L3R 9W3 Canada
905-477-7000
www.markham.ca

CITY OF MEDICINE HAT

Evan Laternas, Brian Graham, Allen
Pribyl, Dayna Livingston
2190 Brier Park Place NW
Medicine Hat AB T1C 1S6 Canada
403-502-8035
www.medicinehat.ca

**CITY OF NY DEPARTMENT OF
DESIGN + CONSTRUCTION**

Dino Ng, Eric Macfarlane, Gurdip
Saini, Mohsen Zargarelahi
30-30 Thomson Ave.
Long Island City NY 11101 USA
718-391-2043
www.ddc.nyc.gov

CITY OF OTTAWA

Wayne Newell, Birgitte Alting-Mees,
Matthew Strampel, Richard Holder
100 Constellation Crescent
6th Floor
Ottawa ON K2G 6J8 Canada
613-580-2424
www.ottawa.ca

CITY OF PORT COQUITLAM

Steve Brown
2580 Shaughnessy St.
Port Coquitlam BC V3C 2A8 Canada
604-927-5482
www.portcoquitlam.ca

**CITY OF PORTLAND, BUREAU OF
ENVIRONMENTAL SERVICES**

Gary Irwin, Stephen Hawkins,
Randy Hess, Don Wolsborn
1120 SW 5th Ave.
Rm 1000
Portland OR 97204 USA
503-823-7062
www.portlandOR.gov

CITY OF REGINA

Jay Overend, Eden Jukes,
Amir Agha, Garret Ruiters, Bob
Youlyahshiev
2476 Victoria Ave.
Regina SK S4P 3C8 Canada
306-777-7000
www.regina.ca

CITY OF RICHMOND

Roger Keating, Jamie Villaluz, Mile
Racic, Milton Chan
6911 No. 3 Road
Richmond BC V6Y 2C1 Canada
604-276-4014
www.richmond.ca

**CITY OF SARASOTA UTILITIES
DEPARTMENT**

Steve Topovski, Mitt Tidwell,
Michael Crumpton, Richard Meier,
Wesley Woodard
1750 12th St.
Sarasota FL 34236 USA
941-329-6184
www.sarasota.us

CITY OF SASKATOON

Dan Willems, Tom Dehod, W.C.
Sexsmith, Stephen Wood
222-3rd Ave., N
Saskatoon SK S7K 0S5 Canada
306-975-2466
www.saskatoon.ca

CITY OF ST. ALBERT

Tracy Allen, Greg Grueber, Eduardo
Sosa, Brandi Deuchkoff
5 St. Anne St.
St. Albert AB T8N 3Z9 Canada
780-459-1753
www.st.albert.ca

CITY OF ST. JOHNS

Scott Winsor, Mark White,
John Barry
P.O. Box 908
St. Johns NL A1C 5M2 Canada
709-576-8062
www.stjohns.ca

CITY OF VICTORIA

Carla Coghlan, Pete Neff,
Derk Wevers, Jas Paul
1 Centennial Square
Victoria BC V8W 1P6 Canada
250-361-0530
www.victoria.ca

**CITY OF VISTA/BUENA
SANITATION DISTRICT**

Tony White, Elmer Alex
200 Civic Center Dr.
Vista CA 92084 USA
760-726-1340
www.cityofvista.com

CITY OF WESTMINSTER

Robert Booze, Rich Shinley, Roger
Harshman, Dan Shjandemaar
6575 W. 88th Ave.
Westminster CO 80031 USA
303-658-2532
www.cityofwestminster.us



CITY OF WINDSOR

Ian Day
2545 Pillette Road
Windsor ON N8T 1P9 Canada
519-818-8461
www.windsor.ca

CLEAN WATER SERVICES

Andrew Braun, Joe Amerson,
Joe Dvorak, Gabe Sohler
2550 SW Hillsboro Highway
Hillsboro OR 97123 USA
503-681-3615
www.cleanwaterservices.org

CLEMSON UNIVERSITY

Kalyan Piratla
Glenn Department of Civil
Engineering
Clemson SC 29634 USA
864-656-3324
www.clemson.edu/ce/people/faculty/piratla.html

COLORADO SPRINGS UTILITIES

Holly Link, Dan Derksen, Tara
McGowan, Dan Tippi
1521 Hancock Expressway
MC 1821
CO Springs CO 80947 USA
719-668-4733
www.csu.org

CON EDISON

Tony Hranicka, Anthony Mancino,
John Ciallella, Rick Trieste
4 Irving Pl.
New York NY 10003 USA
212-460-2758
www.coned.com

CORPORATION OF DELTA

Dale Ayers, Trent Reid, Terry Cheng
4500 Clarence Taylor Crescent
Delta BC V4K 3E2 Canada
604-946-4141
www.delta.ca

**COUNTY OF SANTA CRUZ
SANITATION DISTRICT**

Rachel Lather, Beatriz Barranco,
John Swenson, Shaun Deyhim
701 Ocean St.
Room 410
Santa Cruz CA 95060 USA
831-454-2637
www.santa_cruz.us

DISTRICT OF NORTH VANCOUVER

Shaun Carroll, John Hightower,
Femida Hudda-Musani, Marco
Cusano
355 West Queens Road
N. Vancouver BC V7N 4N5 Canada
604-990-3862
www.dnv.org

DISTRICT OF SAANICH

Peter Kelly, Jeff Butcher,
Robert McFarland & Sean Elliott
770 Vernon Ave.
Victoria BC V8X 2W7 Canada
250-475-1775
www.saanich.ca

**FIRST UTILITY DISTRICT OF
KNOX CO.**

Patrick Spangler
122 Durwood Rd.
Knoxville TN 37931 USA
865-966-9741
www.fudknox.org

HALIFAX WATER

Susheel Arora, Jamie Hannam,
Cedric Williams, Sheldon Parsons,
Ken Macdonald, Danny Patey,
Thoren Pelley, Shawn Rowe
450 Cowie Hill Rd.
P.O. Box 8388, Stn. A
Halifax NS B3K 5M1 Canada
902-490-6254
www.halifax.ca

**JOINT MEETING OF ESSEX &
UNION COUNTIES**

James Paluch, Robert Surman,
Marcelo Kofman
500 South First St.
Elizabeth NJ 07202 USA
908-353-1313
www.jmeuc.com

**LONG BEACH WATER
DEPARTMENT**

Robert Verceles, Edward Mendoza,
Richard Robillard, Jinny Huang
Engineering Bureau
1800 E. Wardlow Road
Long Beach CA 90807 USA
562-570-2329
www.long_beach.us

**LOS ANGELES COUNTY DEPT OF
PUBLIC WORKS**

Robert Swartz, Fernando Villaluna,
Martin Moreno, Eric Liu
900 S. Fremont Ave.
Alhambra CA 91803 USA
626-300-3379
www.alhambra.us

**METRO WASTEWATER
RECLAMATION DISTRICT**

Bob Neal, Marc Flatt, Jon Wicke
6450 York St.
Denver CO 80229 USA
303-286-3285
www.metrowastewater.com

**METROPOLITAN WATER
RECLAMATION DISTRICT**

Kevin Fitzpatrick, Carmen Scalise,
Joanna Jacobs, Fredrick Wu
111 E Erie St.
Chicago IL 60611 USA
312-751-3163
www.mwrd.org

**MOHAWK VALLEY WATER
AUTHORITY**

Richard Goodney, Joseph Gazzal,
Christopher Carmody
1 Kennedy Plaza
3rd Floor
Utica NY 13502 USA
315-792-0320
www.utica.us

MOUNT PLEASANT WATERWORKS

David Niesse, Dan Darby,
Wayne Lee, Gary Poretto
1619 Rifle Range Rd.
Mount Pleasant SC 29464 USA
843-884-9626
www.mount_pleasant.us

**MURFREESBORO WATER AND
SEWER DEPT**

Valerie Smith, Keith Carpenter,
Donald Hughes, Jim Stacey
220 NW Broad St.
Murfreesboro TN 37130 USA
615-848-3200
www.murfreesborotn.gov

NIAGARA REGION

Kyle Moate, Greg Epp, Glenn Fulton,
Michelle Moore
3501 Schmon Pkwy
P.O. Box 1042
Thorold ON L2V 4T7 Canada
905-685-4225
www.niagararegion.ca

PENN STATE UNIVERSITY

Joseph Swanderski, Dan Rudy,
Gene Shields
501 University Dr.
Wastewater Treatment Plant
State College PA 16801 USA
814-863-2340
www.state_college.us

**PINELLAS COUNTY DEPARTMENT
OF ENVIRONMENT &
INFRASTRUCTURE**

Dennis Simpson
14 South Fort Harrison Ave.
6th Floor
Clearwater FL 33756 USA
727-464-4223
www.clearwater.us

REGION OF HALTON

John Duong, Mark Bajor,
Brenda Kingsmill, Rick Ranalli,
Nick Rewa
1151 Bronte Rd.
Oakville ON L6M 3L1 Canada
866-442-5866
www.halton.ca

SANITATION DISTRICT NO. 1

Christopher Novak, Kyle Boyle,
Rich McGillis, Robert Wilson
1045 Eaton Dr.
Ft. Wright KY 41017 USA
859-578-6885
www.sd1.org

SEATTLE PUBLIC UTILITIES

Aziz Alfi, Pat Lee, Joseph Herold,
Jim Wilke
700 5th Avenue # 4900
P.O. Box 34018
Seattle WA 34018 USA
206-386-1834
www.seattle.us

**SOUTH COAST WATER
DISTRICT**

Joe McDivitt
31592 West St.
Laguna Beach CA 92651 USA
949-499-4555
www.scwd.org

**SOUTHWEST SUBURBAN
SEWER DISTRICT**

Bill Tracy, Ronald Hall
431 SW Ambaum Blvd.
Burien WA 98166 USA
206-244-9575
www.burien.us

STANTEC

Joe Linseman
200-835 Paramount Dr.
Stoney Creek ON L8J 0B4 Canada
905-381-3282
www.stoney_creek.ca

TACOMA WATER

Michael Washington, Michel
Peloquin, Prabhat Karna, Stuart
Vaughan
3628 S. 35th St.
Tacoma WA 98409 USA
253-502-8862
www.tacoma.us

UNION SANITARY DISTRICT

Sami Ghossain, Rollie Arbolante,
Raymond Chau, Chris Elliott
5072 Benson Rd.
Union City CA 94587 USA
510-477-7600
www.unionsanitary.com

**WASHINGTON SUBURBAN
SANITARY COMMISSION**

Gary Gumm, Mike Trail,
Marcia Tucker, Ross Beschner,
Daniel Hamilton
14501 Sweitzer Ln.
Laurel MD 20707 USA
301-206-8555
www.wsscwater.com

**WATERFORD TOWNSHIP DEPT.
OF PUBLIC WORKS**

William Fritz, Dave McKee,
Scott McGrady, Frank Fisher
5240 Civic Center Dr.
Waterford MI 48329 USA
248-618-7456
www.twp.waterford.mi.us/departments/public-works.aspx

**WEST VALLEY SANITATION
DISTRICT**

Alan Kam, Jorge Picado,
Kevin Hatchet
100 E Sunnyoaks Ave.
Campbell CA 95008 USA
408-378-2407
www.westvalleysan.org

YORK COUNTY

Michael Elam, Mark Swilley,
Kevin Campbell, Brian Woodward
P.O. Box 532
Yorktown VA 23690 USA
757-890-3763
www.yorkcounty.gov

YORK REGION

Frank Badinski, Ian King,
Alex Belcota, Kevin Rustan
380 Bayview Pkwy
Newmarket ON L3Y 4W3 Canada
877-464-9675
www.york.ca

NASTT'S EYE ON THE INDUSTRY...

AMERICAN Cast Iron Pipe Co.

Pasco County, Florida – HDD

Pasco County Utilities recently tied a record for the longest pullback — or length of pipeline pulled underground — on an installation with AMERICAN Ductile Iron Pipe's 36-in. Flex-Ring pipe. That installation, which went under wetlands, was 1,640 ft in length. The record-tying HDD installation in Pasco County was one of three executed under more than 4,000 ft of wetlands during construction of the North Central Reclaimed Water Transmission Main. The other two HDD installations also used AMERICAN Flex-Ring 36-in. ductile iron pipe and saw pullbacks of 1,140 ft and 1,340 ft.



Pasco County is a longtime user of AMERICAN ductile iron pipe and has used it several times on previous HDD pipeline construction jobs. The utility gained experience by initially doing shorter HDD jobs with smaller diameter pipe before taking on larger HDD installations involving 36-in. diameter pipe. One of those was in 2006 in which the pullback was 940 ft.

Miller Pipeline Corp.

City of Sarasota, Florida – CIPP

Miller Pipeline was recently contracted by the City of Sarasota to line approximately 1,500 lf of 30-in. sewer mainline using CIPP liner. The liner was 15 mm in thickness. With that thickness of liner, the "dimples" which are usually visible to delineate the service laterals when using thinner liners were not very noticeable if even visible at all. Knowing the CIPP process is all temperature based, it was decided to use a city-owned thermography gun to see if it would pick up the difference in temperatures between the liner and where the laterals were located. The contractor had a second man go in the pipe to scan the pipe surface. The thermography worked perfectly and greatly reduced the amount of time it took the contractor to locate the laterals.

Plastics Pipe Institute

York County, South Carolina – HDD

To plan for future population growth, York County, S.C., decided to install a new, large diameter, six-mile long water main, part of which was run under the Catawba River. The project included a 913-ft run of HDPE pipe 30 ft below the river bed, entry and exit angles of 12

degrees, and a single, 24 degree sag bend at a radius of 1,500 ft. The design provided a minimum depth of cover of 30 ft from top of bank to top of bank using an assumed depth of the river bed. Steel pipe was also considered for its high tensile strength and operating pressure capability, but was ruled out due to high cost of corrosion protection and longer installation requirements due to the higher bending radius. The PE 4710 pipe provided flexibility for the HDD operation plus corrosion resistance and the 200 psi rating to meet the water pressure requirements.



The HDD installation beneath the Catawba River was completed in April 2013. The HDD contractor worked a schedule of 10 hours per day seven days a week for the first three weeks and then shifted to a 24-hour schedule. The contractor operated an HDD rig with a pull-back capacity of 500,000 lbs, a torque capacity of 48,000 ft-lbs, and a footprint of 100 x 50 ft. The pilot hole was successful and stayed within the required design tolerances. The pilot hole was performed with a 12-in. drill bit and exited three feet short and two feet to the left of the designed exit point. Reaming passes were made with 24-, 28-, 32-, 40- and 48-in. reamers. The pull back of the pipe was made in approximately eight hours with no issues.

PICA Corp.

Mount Pleasant, South Carolina – Condition Assessment

Mount Pleasant Waterworks (MPW), the water and wastewater service provider of Mount Pleasant, S.C., was presented with a complicated problem: underground force mains in unknown conditions.



The utility decided to hire PICA Corp. to tackle a 16-in. force main that had experienced a few failures in the previous five years. The force main

...OUR MEMBERS IN ACTION

consisted of 4,200 ft of cement lined, ductile iron pipe, starting near a local pump station and ending a few thousand feet short of a treatment plant. Ultimately, MPW, Brown & Caldwell and PICA decided to divide the pipeline into two sections and inspect each by using winches to pull PICA's 16-in. SeeSnake tool through the line. The fieldwork took place in spring 2012 and the results were a bit surprising to everyone.

Based on the SeeSnake data, MPW was able to forgo the replacement of any of the downstream 3,700 ft of pipe that recorded little corrosion. MPW estimates savings of \$2 million based on deferred pipe replacement and proactive condition assessment.

Rain for Rent

Alabama – Bypass Pumping

Rain for Rent was called in to provide bypass pumping services on a rehabilitation project in Alabama that included relining 750 ft of trunk sewer with a cured-in-place liner that ran the complete length of the pipe. The main bypass required 2.7 million gallons a day (MGD) for peak dry flows and 11 MGD for peak wet weather conditions. A second bypass was necessary for a 12-in. force main that entered the trunk line in the section that was to be rehabbed. It handled flows of 0.5 MGD for normal conditions and 3.5 MGD for wet conditions. The 1,200-ft bypass included six intersection crossings during the quick one week project.



Rain for Rent has a long, successful history of working on dozens of pumping projects over the past several years. A nationwide company with locations supporting all 50 U.S. states and Canada, Rain for Rent has worked in Alabama since 2003, specializing in bypass pumping, filtration projects and liquid storage.

North American Specialty Products; TT Technologies; Digital Control, Inc.

Moorhead, Minnesota – Static Pipe Bursting

Last year, Moorhead Public Service, the water utility of Moorhead, Minn., opted to replace a 360-ft section of aging 6-in. cast iron water main that had experienced several breaks over the past few years. Due to high traffic and limited workspace in the busy retail area in which the water main was located, it was agreed that static pipe bursting with its minimal disturbance would be the best way to complete the main replacement. The region's corrosive soils and previous problems with cast iron and ductile iron pipe mandated the specification of a thermoplastic pipe for corrosion resistance. A TT Technologies GrundoBurst 800G static pipe bursting system was used.



Upon the recommendation of pipe distributor DCMC Sales Inc., the project team agreed to try a new product from North American Specialty Products LLC (NASP) — Certa-Lok C900/RJIB Restrained Joint Integral Bell PVC Pipe.

NASP also offered onsite support services for the installation and recommended using a TensiTrak Pullback and Pressure Monitoring System from Digital Control, Inc. A device that is connected to the drill-head and the new pipe, TensiTrak is used during the pullback process to measure the pull force and annular mud pressure on the pipe to help identify any problems before they occur.

HammerHead Trenchless Equipment

Jacksonville, Florida – Pneumatic Piercing

D&D Gas, based in Jacksonville, Fla., recently began researching new pneumatic piercing tools, studying how easily the tools could be taken apart for maintenance and repair. According to the city, a HammerHead Mole from Ditch Witch of Northern Florida was chosen for its serviceability and ease of use.

D&D Gas typically installs 3/4-in. polyethylene (PE) gas pipe and occasionally 1 1/4-in. PE. The company sometimes must install the line through a sleeve of 2-in. casing. So Ditch Witch's Travis Bullard set D&D Gas up with a 2 1/2-in. HammerHead Replaceable Head Power Port Mole.

Of the more than 250 service installations the companies perform in a year, as many as 50 will have site conditions that require the Mole. In the ground conditions D&D Gas typically works in, aiming is not a problem. D&D says it has encountered no issues at all since buying the Mole, adding that in addition to its durability, they "get a lot of confidence" from both Ditch Witch's and HammerHead's product support.

WANT TO SEE YOUR PROJECT HERE?

Please send a 100-word write-up and high-resolution photo to associate editor Andrew Farr at afarr@benjaminmedia.com or NASTT Communications and Training Manager Michelle Hill at mhill@nastt.org with the subject line "Eye on the Industry."

NASTT CHAPTER NEWS

British Columbia



The British Columbia Chapter has developed an online carbon calculator to identify the reduction in greenhouse gases that can be realized using trenchless technology. The Carbon Calculator developed by the BC Chapter is the basis for a more sophisticated calculator being developed in conjunction with NYSEARCH, the research and development arm of several dozen gas companies across North America. Broad estimates of emission reductions by using trenchless technologies are provided based on industry averages. Upgrades included increasing the number of project activities to 11 trenchless methods, allowing registered users to store scenarios enabling them to rework and share their calculations, and preparing summary reports that can be shared with colleagues and funders. For more information on chapter events and activities, please visit www.nastt-bc.org.

Great Lakes, St. Lawrence & Atlantic



The Great Lakes, St. Lawrence & Atlantic Chapter of NASTT encourages and facilitates the science and practice of trenchless technology for the public benefit. The Chapter achieves this by fostering education and research and acting as a catalyst for technological and process change. For more information on GLSLA upcoming events and training sessions, please visit the website at www.glsla.ca.

Mid Atlantic



The Mid Atlantic Chapter had its Annual Membership and Board of Directors meeting at NASTT's No-Dig Show in Orlando, Fla., on April 13. At the meeting, the new Board Members were installed and Chapter Officers were elected.

MASTT conducted the "Trenchless Technology, SSES and Buried Asset Management" seminar, June 25-26, at the Omni Hotel Downtown in Richmond, Va. The guest presenter was Susan Hamilton, Operations Manager of the Department of Utilities for the City of Richmond Va., with the presentation, "Richmond's Trenchless Program." The seminar was successful with an attendance of local contractors, engineers and municipal employees who networked and learned about trenchless technology. The seminar offered nine PDHs with a certificate for attendance completion.

At the time of this issue's publication, MASTT had a "Trenchless Technology, SSES and Buried Asset Management" seminar planned for August 13-14 in Pittsburgh, Pa., at the Wyndham Grand Pittsburgh Downtown Hotel. Scheduled as the guest presenters were Robert Christian, PE., Director, Pittsburgh Water and Sewer Authority, and David Troianos, PE., Project Engineer, Chester Engineers. The presentation was "Pittsburgh's Trenchless Program."

Please go to www.mastt.org/proposed_seminar.html to view MASTT's 2014 Proposed Seminar

Schedule. Seminar locations and dates will be updated as the seminar dates, venues and programs are finalized. To participate in any MASTT seminars, please go to www.mastt.org for more information.

MASTT plans to publish its inaugural annual issue of the *Mid Atlantic Journal of Trenchless Technology 2014* in December. The Journal will have numerous Mid Atlantic project articles, messages and advertisements. After the mail out, the journal can be seen online at www.mastt.org.

Midwest



The Midwest Chapter had its Annual Membership and Board of Directors meeting at NASTT's No-Dig Show in Orlando, Fla., on April 13. At the meeting, the new Board Members were installed and Chapter Officers were elected.

MSTT conducted the "Trenchless Technology, SSES and Buried Asset Management" seminar on May 21-22 at the Treasure Island Resort & Casino in Red Wing, Minn. (Minneapolis-St. Paul). The guest presenter was Rex Huttes, PE., Principal Engineer of Metropolitan Council Environmental Services (MCES), Eagan, Minn. The seminar was successful with an attendance of local contractors, engineers and municipal employees who networked and learned about trenchless technology. The seminar offered 12 PDHs with a certificate for attendance completion.

In September, MSTT plans to publish and distribute the annual issue of the *Midwest Journal of Trenchless Technology 2014*. This will be the second issue and the Journal will have numerous Midwest project articles, messages and advertisements. After the mail out, the Journal can be seen online at www.mstt.org.

The MSTT seminar "Trenchless Technology, SSES and Buried Asset Management" that is planned for Louisville, Ky., in September will be moved to October due to conflicts with other shows and events recently scheduled. Please go to www.mstt.org/proposed_seminar.html to view MSTT's 2014 Proposed Seminar Schedule. Seminar locations and dates will be updated as programs are finalized. To participate in any MSTT seminar, please go to www.mstt.org for more information.

Pacific Northwest



Congratulations to our Past Chair, Laura Wetter, for receiving NASTT's Trent Ralston Award for Young Trenchless Achievement. Laura was recognized at the 2014 No-Dig Show for her valuable contributions to the trenchless technology industry. Her accomplishments are a direct result of steadfast dedication to excellence and service to our industry. Laura's work will once again be apparent with the publication of our annual trenchless magazine at the end of the year featuring regional design and construction projects.

The PNW Chapter is currently planning the 2015 PNW Trenchless Symposium. Efforts are spearheaded by Chris Sivesind for our biennial



symposium which continues to grow in attendance and scope. Keep abreast of current plans and updates by visiting our PNW Chapter website at www.pnwnastt.org.



Laura Wetter receives NASTT's Trent Ralston Award for Young Trenchless Achievement at the 2014 No-Dig Show in April.

Northwest



The Northwest Chapter is continuing to actively plan events throughout the Chapter. In addition to our technical lunches in both Edmonton and Calgary that are starting up again in September, we also have two Chapter-wide events planned for the remainder of the year.

The first event will be the NASTT New Installations Good Practices Short Course held at Wanuskewin Heritage Park in Saskatoon, Saskatchewan on Oct. 7. The course instructors are Don Del Nero of Stantec and Kim Staheli of Staheli Trenchless Consultants. For further information, please visit our website at www.nastt-nw.com.

The second event is the 2014 Northwest Trenchless Conference in Edmonton, Alberta, on Nov. 13-14 at the Fantasyland Hotel. This conference will be presented in conjunction with the Tunneling Association of Canada. This will be the 18th annual presentation of this event and will include a conference and tradeshow on Nov. 13 and the NASTT Pipe Bursting Good Practices Short Course on Nov. 14. The instructors for the course are Collins Orton of TT Technologies Inc., and Dr. Jason Lueke of Associated Engineering. If you are interested in either contributing as a technical presenter, participating in the tradeshow, attending as a delegate or just wish to learn more about the conference, please visit the Northwest Trenchless Conference page on our website.

In conjunction with the conference, the Chapter will also be presenting the 2014 Northwest Trenchless Project of the Year. Applications are now being accepted. The application deadline is Aug. 29, 2014. For further information regarding the Project of the Year award, please visit our website.

The Chapter has benefited from the many events we have hosted, and from this we have been able to contribute to several programs throughout the trenchless community. So far this year we have contributed \$5,000 to the sponsorship of the NASTT Municipal Scholarship Welcoming Event at No-Dig.

Rocky Mountain



The Rocky Mountain Chapter of the NASTT works to promote the education and implementation of trenchless technology for the public interest throughout the states of Colorado, Utah and Wyoming. The mission of the Chapter is to advance the goals of NASTT at the national level, increasing education and awareness of tunneling and trenchless technologies for rehabilitation of existing pipelines and construction of new pipelines. The Chapter plans to join forces with other industry organizations – AWWA, JTAC, ASCE, AEG, and CAGE – to further promote the Chapter's goals of raising awareness of trenchless technology on a local level.

The Rocky Mountain Chapter is proud to announce that we will be hosting the 2015 NASTT No-Dig Show here in Denver! This will be an excellent opportunity to showcase the trenchless technology expertise of our members. For more information, visit the chapter website at www.rmnaastt.org.

Southeast



The Southeast Chapter published the inaugural annual issue of the *Southeast Journal of Trenchless Technology 2014* in March, which featured numerous articles about what is happening with trenchless technology in the Southeast including projects, designs, case studies, techniques, equipment theory and methods. Please go to www.sestt.org to view the journal.

SESTT had its Annual Membership and Board of Directors meeting at NASTT's No-Dig Show in Orlando, Fla., on April 13. At the meeting, the new Board Members were installed and Chapter Officers were elected.

SESTT conducted the seminar "Trenchless Technology, SSES and Buried Asset Management" on March 26 at the Baton Rouge Marriott. The guest presenter was Amy Schulze, P.E., of the Department of Public Works, Special Projects for the City of Baton Rouge and Parish of East Baton Rouge. The presentation was entitled "The Baton Rouge SSO Program." The seminar was successful with an attendance of local contractors, engineers and municipal employees who networked and learned about trenchless technology. The seminar offered seven PDHs with a certificate for attendance completion.

The SESTT seminar "Trenchless Technology, SSES and Buried Asset Management" that is planned for late October 2014 in Jacksonville Fla. will be moved to December due to conflicts with other shows and events that were recently scheduled.

Please go to www.sestt.org/proposed_seminar.html to view the SESTT 2014 Proposed Seminar Schedule. Seminar locations and dates will be updated as programs are finalized. To participate in any SESTT seminar, please go to www.sestt.org for more information.

Western



The Western Chapter most recently held its annual Western Regional No-Dig Conference and Exhibition in October 2013 in Honolulu, Hawaii. More information on the chapter and upcoming events can be found on the website at www.westt.org.

**NASTT'S TRENCHLESS TODAY
Wants To Hear From You!**

If you're involved with one of NASTT's nine regional chapters, we want to hear about all your events and activities. Send write-ups to associate editor, Andrew Farr at afarr@benjaminmedia.com.



NASTT has a network of nine regional chapters throughout the United States and Canada. With a single NASTT membership, you're automatically enrolled in the national organization, the international organization (ISTT) and also in your regional chapter. Regional chapters offer valuable educational and networking opportunities in your local area. Share your ideas, network with colleagues and find solutions to your everyday challenges.



Northwest

The Northwest Chapter was established in 1988 by members in the Canadian provinces of Alberta and British Columbia, Canada, and in Washington state. In 2009, the Chapter adjusted the geographic area to include the members in the provinces of Manitoba and Saskatchewan, Canada.

Chapter Contact
Alan Miller, Chair
E-mail: amiller@nastt-nw.com
Website: www.nastt-nw.com

Elected Officers
Chair - Alan Miller
Vice Chair - vacant
Secretary - Ben Campbell
Treasurer - Keith Moggach



British Columbia

The British Columbia (NASTT-BC) Chapter was established in 2005 by members in the province of British Columbia, Canada.

Chapter Contact
David O'Sullivan, Chair
Phone: (604)-580-0446
E-mail: david@pwtrenchless.com
Website: www.nastt-bc.org

Elected Officers
Chair - David O'Sullivan
Vice Chair - Rod Loewen
Secretary - vacant
Treasurer - Kieran Field



Pacific Northwest

The Pacific Northwest Chapter was established in 2009 by members in the states of Alaska, Idaho, Oregon and Washington.

Chapter Contact
Christopher Price, Chair
Phone: (425)-205-4930

Elected Officers
Chair - Christopher Price
Vice Chair - Chris Sivesind
Secretary - Matthew Pease
Treasurer - Richard Hanford



Great Lakes, St. Lawrence & Atlantic

The Great Lakes, St. Lawrence & Atlantic (GLSLA) Chapter was established in 1995 and represents the Eastern Canadian perspective of the trenchless technology marketplace. GLSLA members are from Ontario, Quebec and the four Atlantic provinces.

Chapter Contact
Kevin Bainbridge, Chair
Phone: (905) 304-0080
E-mail: kbainbridge@rcii.com
Website: www.nasttglsl.on.ca

Elected Officers
Chair - Kevin Bainbridge
Vice Chair - Frank Badinski
Secretary - Gerald Bauer
Treasurer - Derek Potvin



Rocky Mountain

The Rocky Mountain Chapter was established in 2009 by members in the states of Colorado, Utah and Wyoming.

Chapter Contact
Al Paquet, Chair
E-mail: al.paquet@ch2m.com
Website: www.rmnaastt.org

Elected Officers
Chair - Al Paquet
Vice Chair - Bo Botteicher
Secretary - Andrew Lockman
Treasurer - Ken Matthews



Mid Atlantic

The Mid Atlantic (MASTT) Chapter was established in 2004 by members from the states of Delaware, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia and the District of Columbia.

Chapter Contact
Richard Thomasson, Chair
Phone: (703) 842-5621
E-mail: rthomasson@pirnie.com
Website: www.mastt.org

Elected Officers
Chair - Richard Thomasson
Vice Chair - Michael Delzingaro
Secretary - Dennis Walsh
Treasurer - Tom Wyatt



Southeast

The Southeast (SESTT) Chapter was established in 2001 to serve the members of NASTT from Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Puerto Rico.

Chapter Contact
Jerry Trevino, Chair
Phone: (877) 462-6465
E-mail: jerry@mechanicaljobbers.com
Website www.sestt.org

Elected Officers
Chair - Jerry Trevino
Vice Chair - Ed Paradis
Secretary - J. Chris Ford
Treasurer - Kelly Derr



Midwest

The Midwest (MSTT) Chapter was established in 1998 to promote trenchless technology education and development for public benefit in Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Ohio and Wisconsin.

Chapter Contact
Jeff Boschert, Chair
Phone: (314) 229-3789
E-mail: jeffboschert@yahoo.com
Website: www.mstt.org

Elected Officers
Chair - Jeff Boschert
Vice Chair - Larry Kiest, Jr.
Secretary - Randy Fries
Treasurer - Bill Shook



Western

The Western (WESTT) Chapter was established in 2003 by members from the states of Arizona, California, New Mexico, Nevada and Hawaii.

Chapter Contact
Craig Camp, Chair
Phone: (619) 858-1595
E-mail: craig.camp@hatchmott.com
Website www.westt.org

Elected Officers
Chair - Craig Camp
Vice Chair - Cindy Preuss
Secretary - Cory Street
Treasurer - Matt Wallin



March 16
2015

NASTT's 14th Annual Educational Fund Auction & Reception



Cowabunga dude! It's time for NASTT's fundraising social event of the year – the 14th annual Educational Fund Auction and Reception! Since 2002, NASTT has raised over \$750,000 to support our educational initiatives. Due to your *awesome* generosity, NASTT is able to sponsor students' attendance at the No-Dig Show, award scholarships and provide targeted training courses to the membership at-large.

**HAWAIIAN
VACATION
RAFFLE**

**'80s SKI THEME
COSTUME CONTEST**

50/50 RAFFLE

LIVE & SILENT AUCTIONS

For more information
about the auction visit:

nastt.org/auction

NASTT Student chapters are involved in a number of activities throughout the academic year including field trips, seminars and fundraisers. Members of student chapters also attend and participate in NASTT's No-Dig Show where they present trenchless research posters, participate in competitions and provide event support

monitoring the technical paper sessions. There are many benefits for students who belong to a NASTT student chapter – scholarships, networking opportunities, education and career opportunities to name a few. To learn more about NASTT's student chapters, visit www.nastt.org/student_chapters.



Arizona State University

Tempe, Arizona

Advisor: Dr. Samuel T. Ariaratnam

E-mail: samuel.ariaratnam@asu.edu



Trenchless Technology Center/ Louisiana Tech University

Ruston, Louisiana

Advisor: Dr. Erez Allouche

E-mail: allouche@latech.edu



Bowling Green State University

Bowling Green, Ohio

Advisor: Dr. Alan Atalah

E-mail: aatalah@bgnnet.bgsu.edu



McGill University

Montreal, Quebec

Advisor: Dr. Mohamad A. Meguid

E-mail: mohamed.meguid@mcgill.ca



California State Polytechnic University, Pomona

Pomona, California

Advisor: Dr. Jinsung Cho

E-mail: jinsungcho@csupomona.edu



Queen's University

Kingston, Ontario

Advisor: Dr. Ian D. Moore

E-mail: moore@civil.queensu.ca



Clemson University

Clemson, South Carolina

Advisor: Dr. Kalyan Piratla

E-mail: kpiratl@clemson.edu



CUIRE/University of Texas at Arlington

Arlington, Texas

Advisor: Dr. Mo Najafi

E-mail: najafi@uta.edu



Concordia University

Montreal, Quebec

Advisor: Dr. Tarek Zayed

E-mail: zayed@bcee.concordia.ca



Vanderbilt University

Nashville, Tennessee

Advisor: Dr. Sanjiv Gokhale

E-mail: s.gokhale@vanderbilt.edu



Indiana University - Purdue University Indianapolis

Indianapolis, Indiana

Advisor: Dr. Dae-Hyun (Dan) Koo, P.E.

E-mail: dankoo@iupui.edu



Virginia Tech University

Blacksburg, Virginia

Advisor: Dr. Sunil Sinha

E-mail: ssinha@vt.edu



Laval University

Quebec City, Quebec

Advisor: Dr. Geneviève Pelletier, ing.

E-mail: Genevieve.Pelletier@sci.ulaval.ca



University of Alberta

Edmonton, Alberta

Advisor: Dr. Alieza Bayat

E-mail: abayat@ualberta.ca



NORTH AMERICAN SOCIETY FOR
TRENCHLESS TECHNOLOGY



NASTT'S 2015 NO-DIG SHOW MUNICIPAL & PUBLIC UTILITY SCHOLARSHIP PROGRAM

Apply today for complimentary registration and hotel accommodations!

NASTT's 2015 No-Dig Show Municipal & Public Utility Scholarship Program has been established to provide education and training for North American municipalities, government agencies and utility owners who have limited or no travel funds due to economic challenges. Selected applicants will be awarded **full conference registration** to NASTT's 2015 No-Dig Show in Denver, Colorado from March 16-18. One day conference registrations will also be available. Registration will include full access to all exhibits and technical paper sessions. Selected applicants will also be eligible to receive **overnight accommodations**. Selection will be based on responses to the application as well as need.

**Application deadline:
October 31, 2014**



To apply, visit
nastt.org/municipalscholarship

North American Society for Trenchless Technology
7445 Morgan Rd. • Liverpool, NY 13090
Phone: 315-409-7552



SPECIALY SELECTED FROM NASTT'S ONLINE LIBRARY



NASTT OUTSTANDING TECHNICAL PAPERS

APPLICABILITY OF NESHAP TO REHABILITATING ASBESTOS CEMENT PIPELINES

Bill Thomas, Ph.D.

Killebrew, Inc., Lakeland, Fla.

Edward Alan Ambler, P.E., LEED AP

City of Casselberry, Fla.

The United States is currently facing significant deficits in Drinking Water and Clean Water infrastructure operation, maintenance and capital costs. A significant amount of the existing infrastructure is asbestos-cement (AC) pipe and rehabilitation of the pipe is restricted by regulations that are almost 30 years old and do not account for advancement in new technology. AC pipe is considered to be a Category II non-friable asbestos-containing material according to the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Rehabilitating buried AC pipelines is subject to NESHAP. According to regulators, if the pipe is crumbled, pulverized or reduced to powder and the length is at least 260 linear feet (lf), it falls under NESHAP. However, NESHAP does not address pipe bursting or any other rehabilitation method other than direct removal and does not include clear requirements for rehabilitating buried AC pipelines in public rights-of-way. There has been much technological advancement since NESHAP was issued. Recently, Killebrew, Inc., arranged for industry members to travel to Washington, D.C. in order to meet with U.S. Environmental Protection Agency (EPA) staff for the purpose of discussing NESHAP and its applicability to rehabilitating buried AC pipelines using pipe bursting technology.

This paper presents: (1) The technological advancements in industry practices and NESHAP requirements for rehabilitating buried AC pipelines, (2) Recent communications with EPA and industry representatives, and (3) Plans for the development of an EPA Administrator Approved Alternate, as provided for in NESHAP that specifically addresses rehabilitating buried AC pipelines via pipe bursting.

ASBESTOS CEMENT PIPE

Asbestos, a naturally occurring mineral fiber, was used extensively in many building materials prior to the adoption of NESHAP. Its properties, such as fire and chemical resistant, flexible, high strength, long and thin fibrous shape, made it a desirable component for the manufacturing of many construction materials, including insulation, roofing shingles, floor and ceiling tiles, paper products, brake pads, gaskets and pipe. Asbestos cement (AC) pipe was manufactured using Portland cement, water, silica or silica-containing materials and asbestos fibers. AC pipe was well suited for utility systems and was widely used for drinking water, wastewater and stormwater pipelines from the 1940s through the

1960s – a time that corresponded with significant investment in utility infrastructure in the United States.

Under the Clean Air Act (CAA), the U.S. EPA developed the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations. Asbestos, considered a hazardous air pollutant, became federally regulated in 1973 when the NESHAP (40 CFR 61, Subpart M) was promulgated. NESHAP addresses milling, manufacturing and fabricating operations, demolition and renovation activities, waste disposal issues, active and inactive waste disposal sites and asbestos conversion processes. After adoption of NESHAP, asbestos fiber content in pipe was reduced from a maximum of 20 percent down to less than 0.2 percent. Manufacturing and installation of AC pipe in the U.S. ceased shortly thereafter.

While it is difficult to accurately measure how much AC pipe remains in the ground and what condition it is in, there is an estimated 630,000 miles of AC pipe in the United States and Canada. However, it is clear that much of this pipe is reaching the end of its service life and requires maintenance and replacement. The rehabilitation of AC pipe needs to be addressed immediately.

According to EPA reports, the total 20-year deficit of Clean Water and Drinking Water O&M and Capital costs could be as high as \$1.168 trillion. Rehabilitation of the estimated 630,000 miles of AC pipe in the U.S. and Canada potentially could cost both countries upwards of \$332 billion assuming a moderately conservative price of \$100 per lf. A significant amount of the funding gap can be attributed to maintenance and replacement of AC pipe. Life cycle cost analysis illustrates that maintenance costs rise as the AC pipe ages and there is an optimal replacement time.

In 2010, the EPA published a document on Aging Water Infrastructure Research which reflected a focus to utilize Science and Innovation to breach the funding gap for Clean Water and Drinking Water. This document outlines research into key project areas, one of which is system rehabilitation. It appears the EPA has delegated administration and enforcement of asbestos regulations to many of the individual states. The states of Nevada, Arizona, New Mexico, and Florida allow pipe bursting of AC pipelines. Oregon requires all AC pipe to be removed if exposed for any reason and requires specially licensed contractors for any work on AC pipelines. California does not allow pipe bursting or any activity that will break the AC pipeline.

PIPE BURSTING

Pipe bursting is an industry proven technology for trenchless replacement of existing underground conduit systems, such as water, sewer and gas. The existing pipe is replaced in situ with a new pipe of the same size or larger. Pipe bursting is typically performed using one of two methods: pneumatic or static pull. In either case, the existing pipe



is fractured and displaced outward while the new pipe is pulled into place along the existing pipe alignment. Fracturing the existing pipe is accomplished by pulling a conical-shaped head, also called a bursting head, through the existing pipe that has a slightly larger outside diameter than the inside diameter of the existing pipe. The new pipe is attached to the back of the bursting head so that it is simultaneously installed as the bursting head is pulled through the existing pipe (ASCE, 2006).

While pipe bursting is trenchless, it does require some excavation work. Excavations typically include: pipe insertion pit, machine pit and service connection pits. The pipe insertion pit is constructed to allow the new pipe to transition from above-ground to below ground at the same elevation and alignment as the existing pipe to be pipe burst. The machine pit is constructed for the pipe bursting machine to be placed and/or for retrieval of the bursting head. Service connection pits are constructed to reinstate service laterals to the main after pipe bursting the main is completed.

A pneumatic pipe bursting system uses a constant tension winch and a cable to pull on the nose of the bursting head and an air-operated hammer inside the bursting head. The air-operated hammer provides forward force, (much like driving a nail with a hammer), and the constant tension winch keeps the bursting head against the existing pipe and maintains the path of the bursting operation. Air is delivered to the air-operated hammer by way of an airline that is placed inside the new pipe and also to an air compressor that is above ground near the pipe insertion pit.

A static pull pipe bursting system uses a rod string to connect to the nose of the bursting head and a hydraulically operated machine (bursting machine) to pull the rod string, bursting head and new pipe through the existing pipe alignment. Forward force is provided by the bursting machine. There is no air compressor or airline passing through the new pipe.

Pipe bursting is typically accomplished on existing pipe systems that range in size from 2-in. to 36-in. in diameter. Although larger diameter pipe bursting has been completed, it is less common. Lengths most common for a pipe burst run is typically 200 to 400 ft, however, longer and shorter lengths can be performed without problems when properly planned. Actual lengths of bursts are determined when planning and estimating a pipe bursting project. Pits are strategically planned to be located at or near manholes in gravity systems and fittings, valves, or service connections for pressure systems.

Almost any underground pipe system can be a candidate for pipe bursting; including potable water, reclaimed water, sanitary sewer, stormwater, gas or telecommunications. Existing pipe materials that are best suited for pipe bursting include vitrified clay, AC, cast iron, and non-reinforced concrete. Other materials that can be burst, but are less common, include polyvinyl chloride (PVC), ductile iron, or high density polyethylene (HDPE). The more brittle a material is, the easier it can be pipe burst. Pliable materials like PVC, HDPE and ductile iron are cut or sliced more so than fractured. Pipes that are not recommended for pipe bursting include any corrugated material, such as corrugated metal and corrugated plastic. Corrugated pipes tend to collapse or telescope down on themselves due to not having the longitudinal strength to withstand the forces acting upon it during the pipe bursting operation.

Jobsite conditions most cost effective for pipe bursting are urban settings that contain roadways, drainage systems, and other existing utilities that would prevent or inhibit conventional open-cut installation of a new pipe system. The environmental benefits are often overlooked but are some of the benefits most recognized by the residents and

customers. When planning a pipe bursting project, bypassing of flow and service interruption must be considered. This is because the existing pipe system must be taken out of service for the pipe bursting operation. In gravity systems, bypass pumping can be accomplished from manhole to manhole. In pressure systems, valves or other isolation methods (line stops or squeeze-offs) can be utilized to interrupt the flow long enough to isolate a segment of existing pipe for pipe bursting.



Bursting minimizes the amount of excavation on rehab projects versus traditional open cut methods. Impacts to developed neighborhoods and commercial areas with established landscaping are often minimized.

A very attractive attribute of pipe bursting is that it requires minimal engineering design work to be done. Record drawings or geographical information system (GIS) database drawings are the best information for designing and planning a pipe bursting project because the existing pipe route is utilized for constructing the new system.

The use of pipe bursting to replace aging AC potable water distribution pipe was recently approved by the Drinking Water State Revolving Fund Program (DWSRF) as a qualified Green Project Reserve project at the City of Casselberry in Florida. The project was provided grant funding through the American Recovery and Reinvestment Act (ARRA) and has successfully rehabilitated AC pipe using pipe bursting while meeting all NESHAP criteria. Industry representatives worked very closely with the Florida Department of Environmental Protection (FDEP) and EPA representatives to determine how NESHAP applies to pipe bursting of AC pipe and how to comply with these requirements. Much of the difficulty with applying NESHAP requirements to pipe bursting was NESHAP's focus on above ground construction. Pipe bursting is a new technology that was not available for consideration at the time NESHAP was written.

NESHAP

The National Emissions Standards for Hazardous Air Pollutants (NESHAP) provides for the distinction of asbestos-containing material (ACM), using terms such as friable, non-friable, Category I, Category II, and Regulated Asbestos Containing Material (RACM). Friable ACM is defined as any material containing more than one percent (1 percent) asbestos as determined using the method specified in Appendix A,



Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. In contrast, non-friable ACM is any material containing more than 1 percent asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, PLM, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

The EPA defines two categories of non-friable ACM, Category I and Category II non-friable ACM. Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than 1 percent asbestos as determined using PLM according to the method specified in Appendix A, Subpart F, 40 CFR Part 763 (Sec. 61.141). Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than 1 percent asbestos as determined using PLM according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure (Sec. 61.141).

The EPA defines RACM to be: (A) friable asbestos material, (B) Category I non-friable ACM that has become friable, (C) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (D) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

According to an EPA 2011 guidance document prepared by Alliance Technologies, Inc., if Category II non-friable ACM has not crumbled, been pulverized or reduced to powder and will not become so during the course of demolition/renovation operations, it is considered non-friable and therefore is not subject to NESHAP. However, if during the demolition or renovation activity it becomes crumbled, pulverized or reduced to powder, it becomes RACM and is subject to the NESHAP.

NESHAP provides exemptions from its regulations based on the quantity of ACM. For AC pipe, the quantity threshold is 260 lf regardless of diameter, in one calendar year. Other exemptions from NESHAP or clarifications of its requirements for AC pipe have been provided by interpretive letters in response to questions posed to EPA. These exemptions and clarifications are representative of EPA's opinion of the applicability of NESHAP to various types of work on buried AC pipelines.

MINIMIZED FUTURE EXPOSURE

Industry representatives maintain that the AC pipe fragments that remain after a pipe bursting project are not RACM. It is highly unlikely that these AC fragments would become friable over time. If future excavations uncover the AC fragments, they are typically caked in moist soil and the fibers are not likely to go airborne. The rehabilitated pipe alignments are typically under streets and/or in public right-of-way and are not typically disturbed except by authorized personnel working in the vicinity.

There has been much debate as to the pipe bursting process turning the existing non-friable Type I AC pipe into friable Type II RACM. All of the rehabilitation activities, except what portions of pipe are exposed at pits, occur underground. The segments of fragmented AC pipe remain within a few inches of the soil material surrounding the new pipe. Future exposure of the general public to the burst AC pipe for lengths greater than the 260 lf already stated in NESHAP will be solely limited to rehabilitation work along the new pipeline. Homeowners that wish to install new landscaping or work above the new pipeline will have minimal exposure to the burst

AC pipe because they are not likely to physically expose over 260 lf of the pipe. Homeowners will also not likely be digging as deep as the typical 3 ft of cover over the pipe burst AC pipe. Other utilities that will perform work in this area will likely expose limited areas associated with only crossing the new pipe and will not expose over 260 lf of the pipe.

CURRENT NESHAP COMPLIANCE PROCEDURES

While debate continues as to the applicability of NESHAP to pipe bursting buried AC pipelines, a working procedure has been developed in Florida that regulators and industry members (municipalities, engineers and contractors) are utilizing. This procedure complies with each element of NESHAP (40 CFR part 61, subpart M (61.140-61.157)) and is briefly described below.

FILE A NOTICE TO EPA OR ITS DESIGNEE (61.145(B))

NESHAP specifies salient information that must be included on the notice. FDEP has available DEP form 62-257.900(1) that requires this information. The form is a one-page form that has to be signed only by the utility owner.

PROVIDE FOR EMISSION CONTROL DURING RENOVATION AND DISPOSAL (61.145(C) / 61.150)

There can be no visible emissions from the work [pipe bursting] per 61.150(a). With pipe bursting, this can be easily accomplished because the AC pipe is wetted within any excavation, cutting is accomplished using non-power saw tools (chain cutter, handsaw). Segments of AC pipe that are removed from an excavation are wrapped in plastic, sealed leak-tight, taped, and placed into a dumpster for shipment by an asbestos transporter.

A negative exposure assessment (NEA) was performed for the City of Casselberry project approved by the DWSRF program for ARRA grant funding. American Compliance Technologies determined (the) observed time weighted averages for the sampled employees performing representative work activities for pipe bursting operations along Benedict Way in Casselberry, Fla., from March 21-23, 2011 were below the OSHA PEL of 0.1 f/cc (ACT, 2011). Numerous contractors and municipalities have conducted NEAs on AC pipe bursting projects. To date, none of these assessments have shown any asbestos fiber release within a work site. The pipe bursting process minimizes risk of exposure to workers that are rehabilitating the pipe because the majority of the rehabilitation occurs underground.

COMPLY WITH INACTIVE / ACTIVE WASTE DISPOSAL SITE REQUIREMENTS (61.151 / 61.154)

NESHAP provides for disposing of RACM on the site of the demolition or renovation work, or the RACM can be disposed of at a waste disposal site. Currently, for pipe bursting projects, regulators interpret NESHAP such that the work site is considered a waste disposal site. Numerous options are provided in NESHAP to prevent asbestos exposure. These options include: no visible emissions from the site, fencing and posting signs around the site, have a natural barrier (cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains) around the site, or cover the RACM with two feet of compacted non-asbestos containing material. With pipe bursting, the two feet of cover is virtually always provided because the pipe bursting is performed on a buried AC pipeline. Also, no emissions from the work have been detected on pipe bursting projects.



COMPLY WITH INACTIVE WASTE DISPOSAL SITE DEED NOTATION AND ALTERNATIVE (61.151(E))

NESHAP requires that a notation to the deed of a facility property be recorded within sixty days of a waste disposal site becoming inactive. A site is deemed inactive when disposal of RACM is completed. Applying this to pipe bursting projects, a site is deemed inactive when the project is completed.

CONFLICT BETWEEN DEED NOTATION REQUIREMENT AND PUBLIC RIGHT-OF-WAY

It appears possible the drafters of NESHAP made the presumption that the facility property will have a single deed associated with the site, that the property would be deeded and that the property is transferable. In contrast, a public land right-of-way does not have a deed, can transect public and private properties and the municipality or county is not the fee title owner of right-of-way and cannot record notices directly on a fee title of right-of-way. Utility providers have installed a significant amount of AC pipe within the public right-of-way to provide utility services to the public. The deed notation and general compliance requirements have been a significant deterrent to many utility providers that would have been rehabilitating the AC pipe.

ADMINISTRATOR APPROVED ALTERNATE

In November 2010, industry representatives (including members of Killebrew, Inc.) met with EPA staff to discuss the applicability of NESHAP to pipe bursting AC pipelines and to develop a reasonable, practical solution to the deed notation issue. EPA staff acknowledged potential difficulty in applying NESHAP Deed Notation requirements to AC pipe bursting within public right-of-ways. However, when presented with a video of several physical demonstrations of pipe bursting that clearly displayed the minimal environmental impacts of pipe bursting over traditional open cut replacement methods, EPA staff expressed a positive attitude towards pipe bursting. The meeting concluded with Charlie Garlow of the EPA suggesting that Industry develop an "Administrator Approved Alternate" for all to follow.

An Administrator Approved Alternate is intended to allow the EPA Administrator and staff to approve alternate technology or practices without having to modify NESHAP, which is federally codified. Industry members that have been following the pipe bursting of AC pipe issue are pleased with the opportunity to pursue an Administrator Approved Alternate and are working toward this objective. However, at this time, there does not appear to be any guidance documents or previous examples of an EPA Administrator Approved Alternate to reference. According to Garlow, an Administrator Approved Alternate has not been developed for any technology or practice to date. An AC Pipe Bursting Task Force has been assembled to develop this document.

The Administrator Approved Alternate and it is intended to provide procedures for working with buried AC pipelines. The exemptions and clarifications listed early will be included so that one, comprehensive document, specific to buried AC pipelines, will be available for use nationwide and that any type of work on buried AC pipelines will be uniformly practiced and regulated, regardless of which State the work may be located in. Collaborative efforts among industry members have

been on-going since November 2010 to draft the Administrator Approved Alternate. Once the first draft is prepared, it will be submitted to EPA's Washington, D.C. office for review and consideration. In the meantime, to satisfy the deed notation requirement, a notice is being recorded to public records that contain all required information for ongoing projects in the State of Florida.

EPA's Office of Research and Development (ORD) has set a goal to generate the science and engineering needed to improve and evaluate promising innovative technologies and techniques that will reduce the cost and improve the effectiveness of operation, maintenance and replacement of aging and falling drinking water and wastewater treatment and conveyance systems. Existing technologies need to be applied in unconventional ways. Emerging technologies and innovative thinking will be at the forefront of creating a powerful, secure, cost-effective, and reliable water infrastructure. Industry believes application of pipe bursting for AC pipe is a prime example of an emerging technology that should be approved and utilized to mitigate the accelerating costs of AC pipe replacement.

FDEP SUPPORTS PIPE BURSTING AC PIPELINES

The Florida Department of Environmental Protection (FDEP) has provided support of the pipe bursting process and believes it is environmentally and economically superior to removing existing AC pipe. FDEP believes pipe bursting is more economically feasible than the traditional method of removing and land filling the old AC pipes. On April 27, 2011, Herschel T. Vinyard, Jr., Secretary of the FDEP, sent a letter to Gwendolyn Keyes Fleming, Regional Administrator of EPA Region 4 Office – Atlanta, Ga., requesting assistance to finalize EPA's position and interpretation of pipe bursting AC pipelines.

CONCLUSIONS

More than 630,000 miles of buried AC pipelines remain in use across the United States and Canada. All of this underground piping has reached, or is quickly approaching, the end of its useful life. Replacement or rehabilitation is imminent. Pipe bursting is a proven technology that is environmentally, socially and economically beneficial and is approved by numerous states, including Florida. Utility providers need to be able to utilize a wide array of technologies, including pipe bursting, to be able to recapitalize their assets.

Application of pipe bursting for rehabilitation of existing AC pipe meets the goals set forth by EPA's ORD to reduce the cost of rehabilitation and replacement of existing infrastructure through new and innovative technology. Unfortunately, application of this new and innovative technology is severely limited through rules and regulations that are almost 40 years old. It is clear these rules and regulations require updating to properly account for technology that has developed since the promulgation of the rule. Controversy still exists regarding the applicability and interpretation of NESHAP for buried underground AC pipelines. Efforts to develop the Administrator Approved Alternate will rectify these matters and develop uniform procedures for use nationwide by industry and regulators.



This paper was edited for style and space for publication in *NASTT's Trenchless Today*. To view the full version of Paper TA-T3-01, please visit nastt.org/technicalpapers.



CALENDAR

August

12
NASTT's Pipe Bursting Good Practices Course
 Hosted by Pipe Users Group (PUG)
 Martinez, California
Contact Info:
 Michelle Hill
 Email: mhill@nastt.org
 Web: nastt.org/calendar

26
NASTT's CIPP Good Practices Course
 Hosted by LMK Technologies
 Ottawa, Illinois
Contact Info:
 Michelle Hill
 Email: mhill@nastt.org
 Web: nastt.org/calendar

September

10
NASTT's Complimentary CIPP Webinar
Contact Info:
 Vicki Losh
 Phone: (330) 467-7588
 Email: vlosh@benjaminmedia.com
 Web: nastt.org/webinars

October

6 & 7
10th Annual Western Regional No-Dig Conference & Exhibition
 Albuquerque, New Mexico
Contact Info:
 Craig Camp
 Email: Craig.Camp@HatchMott.com
 Web: westt.org

7
NASTT's New Installations Good Practices Course
 Hosted by NASTT's Northwest Chapter
 Saskatoon, Saskatchewan
Contact Info:
 Dan Willems
 Email: dan.willems@saskatoon.ca
 Web: nastt-nw.com

November

6
NASTT's Complimentary Condition Assessment Webinar
 Vicki Losh
 Phone: (330) 467-7588
 Email: vlosh@benjaminmedia.com
 Web: nastt.org/webinars

13
2014 Northwest Trenchless Conference
 Edmonton, Alberta
Contact Info:
 Alan Miller
 Email: millera@ae.ca
 Web: nastt-nw.com

14
NASTT's Pipe Bursting Good Practices Course
 In conjunction with the 2014 Northwest Trenchless Conference
 Edmonton, Alberta
Contact Info:
 Alan Miller
 Email: millera@ae.ca
 Web: nastt-nw.com

Future NASTT's No-Dig Shows



March 15-19, 2015
NASTT's 2015 No-Dig Show
 Colorado Convention Center
 Denver, Colorado



March 20-24, 2016
NASTT's 2016 No-Dig Show
 Gaylord Texan
 Dallas, Texas

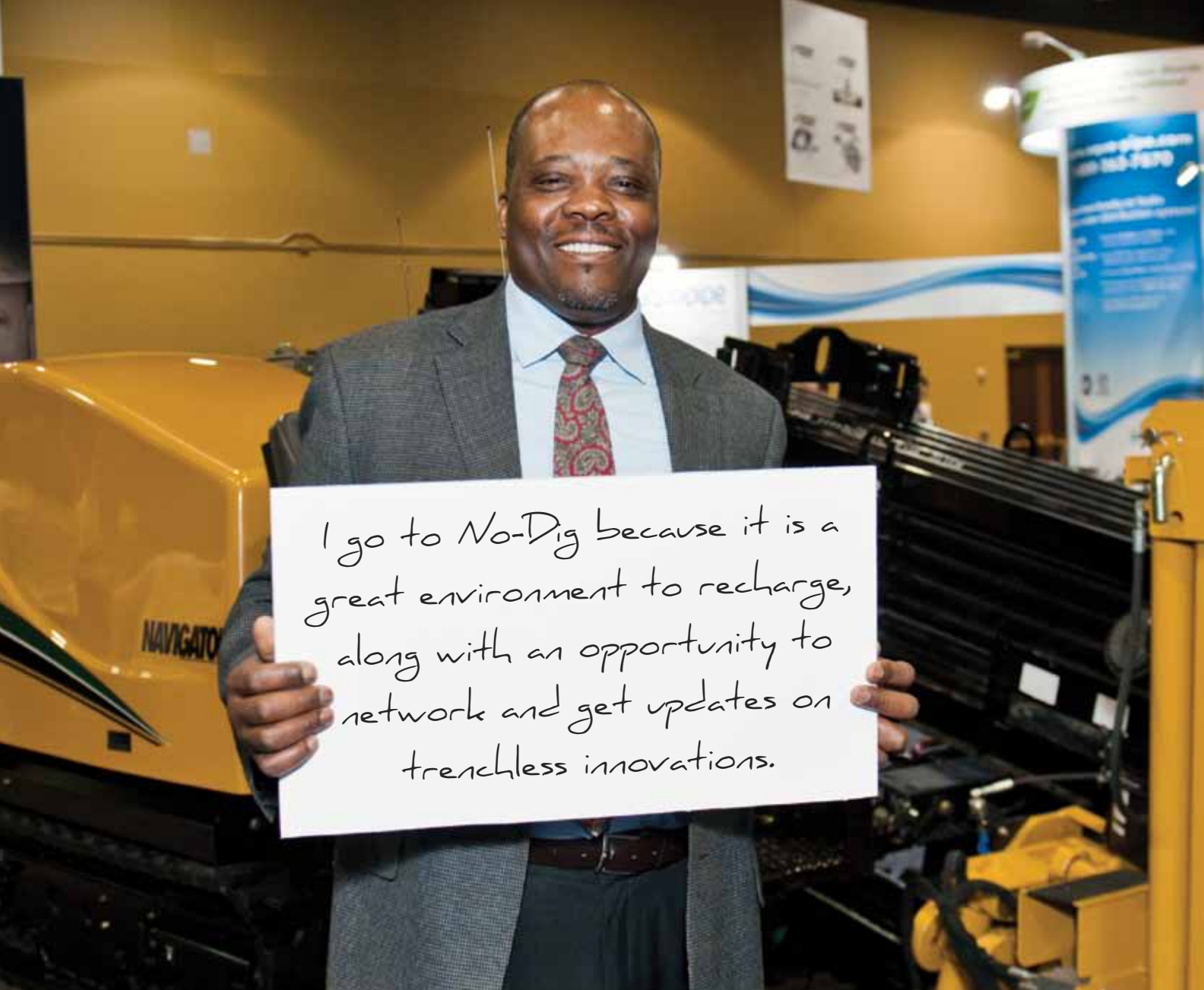


April 9-13, 2017
NASTT's 2017 No-Dig Show
 Gaylord National
 Washington, D.C.

ADVERTISERS INDEX

Advertiser	Page #
Ace Pipe Cleaning, Inc.	22
American Augers	9
Applied Felts, Inc.	Back Cover
Contech Engineered Solutions LLC.....	5
GAME Trenchless Consultants.....	31
Hunting Trenchless.....	11
Inliner Technologies	21
LMK Technologies	7
Michels Corp.....	13

Advertiser	Page #
NASTT's 14th Annual Educational Fund Auction and Reception	39
NASTT's Municipal Scholarship Program	41
NASTT's Trenchless Library.....	19
NASTT's Webinars.....	30
Premier Drill Pipe.....	29
Raedlinger Primus Line	31
Robinson Consultants	27
Sanexen/ Aqua-Pipe.....	23
Sunbelt Rentals.....	15
TT Technologies	2



I go to No-Dig because it is a great environment to recharge, along with an opportunity to network and get updates on trenchless innovations.

NASTT's 2015 No-Dig Show **March 15-19** **Colorado Convention Center - Denver, Colorado**



- Technical Papers
- Industry Exhibits
- Innovations
- Networking Events

There's no substitute for NASTT's No-Dig Show when it comes to staying in touch and informed! Ask Babs Marquis, he knows he can get valuable face-to-face time with like-minded professionals and customers, as well as find all the latest trenchless technologies under one roof at NASTT's No-Dig Show. Grow your network of business connections and stay abreast of the latest trenchless developments at NASTT's 2015 No-Dig Show!

Pictured above: Babs Marquis, Construction Manager, Jacobs Associates, Burlington, MA

 REGISTER to attend NASTT's 2015 No-Dig Show in Denver, Colorado.
nodigshow.com

LEADING THE WORLD OF CIPP IS IN OUR FIBER.



100 YEARS
1881-2021
14 FEBRUARY

Everything we do at Applied Felts — from maintaining full control of our raw materials to helping ensure every felt liner we make is successfully installed — makes us the global leader in supplying the world's finest CIPP liners. It's who we are because Applied Felts was there from the beginning, helping take the first innovative steps to invent the CIPP process over 40 years ago. Now we are taking the next big leap by introducing our latest innovation, AquaCure PS®. This breakthrough liner provides the most innovative CIPP custom solutions for your pressure pipe applications. Our exclusive technology fully integrates and blends state-of-the-art strength with millions of feet of proven results to provide the highest quality liners for pressure sewer and non-potable water applications. AquaCure PS is just one more reason customers from Singapore to San Francisco depend on us year after year. They know what we're made of.



APPLIED FELTS

YOUR SUCCESS IS OUR SUCCESS

VISIT US AT WEF BOOTH #3017

appliedfelts.com

US: 276.656.1904

UK: 44.1924.200535



AquaCure PS®