

# CORRIDORS

## NEWSLETTER

### Ohio Chapter of American Public Works Association

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## Message from Ohio APWA President, Diane Watkins



We remind you that you should make plans to come to the North American Snow Conference in Cleveland next April. Your full registration will give you admission to your choice of technical sessions, the exhibit floor and evening events. Full registration will be about \$900.

AND you can **bring your crews**. Daily passes to the exhibit floor will start at the low price of just \$25 each for the first five passes. Send more people and the per person cost will decrease. Online orders will open in mid-November at <http://ohio.apwa.net/EventDetails/20838>

**Nominations for the Excellence in Snow and Ice Control** are being accepted now until Dec 2, 2019. That's a very soon so don't delay collecting all the information about the innovations your operations have adopted to serve your community better. The 2020 awards will be presented at the Snow Conference in Cleveland. Let's be like the host country at the Olympics and have many winners.

It's too late for you to be a presenter. The Call for Presentations has closed.

BUT, you can **be a volunteer**. We will need several dozen volunteers during NASC. We'll need people to help at registration, welcome speakers, monitor technical sessions, check id's at the entrance to the exhibit floor, collect tickets at events, be guides on tours, act as hosts in the break area, and lots of other tasks. Volunteers will receive a lovely t-shirt, access to the conference, and our undying gratitude for contributing to the success of 2020 NASC.

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2020 North American Snow Conference  
April 19-22, 2020  
Cleveland, Ohio

2019 Public Works Expo  
August 30-September 2, 2020  
New Orleans, Louisiana

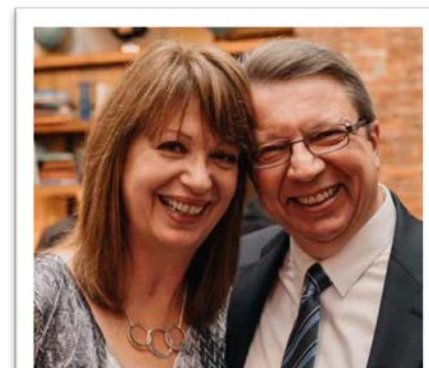
## In Memoriam – Eric Middlebrook

Eric Middlebrook, 63, of Springboro, died September 21, 2019 due to complications following surgery. Eric lived life fully, and once said that he lived with no regrets. His exuberance for life was apparent in everything that he did. He enjoyed a range of outdoor activities; fishing, hiking, camping and particularly enjoyed hunting with his pointing lab, Arlo. He also appreciated indoor activities like concerts, jazz clubs, movies, and restaurants from fine dining to greasy spoons. He was a loyal fan of the Reds and Bengals, through thin and thin, and reveled in traveling with family and friends.

Eric took great pride in his work and had many professional accomplishments. As the CEO of Hamilton's Chamber of Commerce, he worked to bring about positive changes to the city by promoting new and old businesses, lobbying for the connecting highway to I-75, and revitalizing Hamilton's Christmas decorations with white lights and wreaths. More recently, Eric worked in heavy equipment sales and was an active member of the American Public Works Association, serving on the Ohio Chapter State Board, and as President of the Southwest branch in 2016.

Eric is survived by his wife Pam, his children Ryan, Amy, Tyler, Whitney and Cydney, five grandchildren, and extensive extended family. He found great joy in the time he spent with family.

Eric had a talent for connecting with people and nurturing them. He knew how to nudge them to reach farther, try harder, and push beyond their comfort zone to become more. Everyone who knew him felt Eric was their best friend. We are deeply saddened by this untimely loss but we are so glad that he was part of our lives. He brought us so much joy.



Eric Middlebrook and Pam

## Ohio APWA's Mission

The mission of Ohio APWA is to provide an essential delivery of up-to-date information on the latest public works technologies and management trends. The Chapter shall offer its members educational programs, public service activities, symposiums, equipment shows and the chance to network with fellow members in a professional setting.



## 2020 APWA Award Nominations Now Open

APWA's Awards Program was established to recognize outstanding individuals, groups, and chapters representing the best in the public works profession. Nominations can now be submitted for the 2020 Awards program by [Clicking Here](#). We know you are doing innovative, creative work out there. It's time to step forward and be recognized. Several categories often have just a few entries which improve your chance of winning BUT you have to apply. The best submittals tell an engaging story, so you'll need some of those marketing types involved. We can assist you with your application from beginning to end. (Call now!) And have the consultants who worked with you on that project help. They want to share the recognition and applause with you!

The deadlines are:

- **December 2, 2019**, midnight Eastern Time - Excellence in Snow and Ice Control Award. **NOTE: This deadline is earlier than years past.**
- **March 3, 2020**, midnight Eastern Time - All other awards (electronic submittals only.)

If you have any questions about awards please contact Shelby Ingle, Chairman of the Awards Committee for Ohio APWA at [sringle@cmtengr.com](mailto:sringle@cmtengr.com) or contact her by phone at 937.477.4528.

### PROFESSIONAL AWARDS

- Commendation for Exemplary Service to Public Works
- Excellence in Snow and Ice Control
- Exceptional Performance Awards (6 categories)
- Management Innovation Award
- Technical Innovation Award



Sign at ODOT District 4  
You need one of these at your garage

### AWARDS

- Top 10 Public Works Leaders of the Year
- Public Works Project of the Year
- Public Works Project of the Year for Small Cities/Rural Communities (under 75,000 pop.)
- Commendation for Exemplary Service to Public Works
- Excellence in Snow and Ice Control Award
- Exceptional Performance Awards
  - Adversity, Diversity, Journalism, Journalism Chapter, Safety, Sustainability
- Management Innovation Award
- Technical Innovation Award

### MEMBERS AWARDS

- Community Involvement Award
  - Distinguished Service to Public Works Award
  - Donald C. Stone Award for Excellence in Education
  - Harry S. Swearingen Award for Outstanding Chapter Achievement and Excellence in Chapter Service
  - International Service Award
  - Professional Manager of the Year Award (9 categories)
    - Administrative Management
    - Engineering and Technology
    - Facilities and Grounds
    - Public Fleet
    - Public Rights-of-Way
    - Public Works Emergency Management
    - Solid Waste
    - Transportation
    - Water Resources
  - Myron Calkins Young Leader of the Year Award
- Ohio has a tradition of award winners. In 2019, we had three individuals recognized at PWX. 2020 can be YOUR year!



Ohio Chapter members receiving the 2020 PACE Award at PWX in Seattle

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## Letter from President Diane Watkins

Or, you can [be a sponsor](#) of the conference. Contribution levels begin at \$500, and all sponsors will be recognized.

As you know, the Tuesday night gala will be at the Rock and Roll Hall of Fame. The HOF will be inducting its Class of 2020 a few weeks after NASC. To be selected for induction, performers must receive the highest number of votes, and also greater than 50% of the votes. Around five to seven performers are inducted each year. Voting for the Class of 2020 Nominees is now happening. [Join in the fun and Vote.](#)



More information on the conference is on the National APWA website and we will provide local updates in the newsletter and on our [Ohio website](#). Please stay in touch.

Sincerely, Diane Watkins

Contact Us [APWAOhio@gmail.com](mailto:APWAOhio@gmail.com)  
Follow us on Facebook @APWAOhio  
Join us on LinkedIn  
[APWA Ohio Chapter](#)  
Visit our web page: [ohio.apwa.net](http://ohio.apwa.net)



## PWX Recap

PWX in Seattle was a huge affair! 384 exhibiting companies and 5,864 total participants, dozens of sessions, and a considerable social media footprint. In just three days, over four million timelines had seen the hashtag #PWX2019 on Twitter alone! 35 people attended the Ohio Chapter Dinner, greeting old friends and making new ones. Elsewhere in this newsletter, we have a few photos from Seattle. APWA Ohio members and vendors often are presenters at the national conferences. This year, the following people shared their expertise, knowledge and experience.

### At PWX in Seattle

**Ms. Diana W. Clonch**, D. W. Clonch LLC

- Using Liquids for Snow and Ice Control

**Ms. Eileen Petridis**, Falls Communications Cleveland

**Dr. Marcus Scherer**, Aebi Schmidt North America, Cleveland

- Road Lessons from Europe: The Science Behind Smart Salt Spreading Technologies That Lead To Safer Roads, More Efficient Fleet Performance and Less Environmental Impact

**James (Darryl) Syler**, City of Dublin

- Measuring Your Fleet, APWA's Top 10 Performance Measures
- Public Fleet Management Open Forum

**Mr. Dan Whited**, PE City of Worthington

- Complexities, Tragedies, Trials and Triumphs-A Day in the Life of One City Engineer and His 19 Million Dollar Gorilla-Worthington, Ohio's North East Gateway Project

### At North American Snow Conference in Salt Lake City

**Mr. Jerry Mitchell**, Franklin County Engineers Office

**Mr. Craig W. Berndt**, BSM/Geotab

- Three Case Studies for Highlighting the Benefits of GPS, Route Optimization and Snow Routes

**Ms. Diana W. Clonch**, D. W. Clonch LLC

- Winter Maintenance Supervisor Certificate Workshop
- Helping Agencies Help Themselves

**Ms. Diane Sue Watkins**, D. W. Clonch LLC

- Helping Agencies Help Themselves

**Mr. Martin W. Emmett**, Winter Equipment Company

- Exhibitor Solutions Theater: Cutting Edge Solutions: Blade Evaluation ROI and Your Winter Maintenance Program

## Painesville Sets a Microtunnel Length Record

*By Robin Denman, Northern Concrete Pipe, Inc.*

We are all familiar with the concept of Open-cut pipe installations. It is the most common method of installing new pipe lines or replacing existing pipe lines. Everything is done from the ground surface, but what happens when your new pipe line needs to go 25-feet below the bottom of Lake Erie?

Painesville, Ohio, is a community of 19,500 in Lake County about 25 miles northeast of Cleveland, on the shores of Lake Erie. The City of Painesville is on the threshold of completing its new raw water intake system from the lake, which included installation of the longest microtunneled pipe system in North America.

The current intake system was installed in 1957, using an intake that was 1,000 feet from shore and just 8 feet below the water surface. At such a shallow depth, it forced Painesville Water Processing Plant to filter and treat a higher amount of debris and particles than a deeper intake water line would require.

In 2015, harmful algae blooms (HAB) started to appear in Lake Erie, creating the need for a deeper raw water intake system. The City of Painesville decided to take advantage of the zero interest loan which the Ohio EPA was offering for communities facing intake issues because of HAB concerns.

The \$17 million intake project began in November of 2016 and should be activated by the spring of 2020. Burgess & Niple was the design engineering firm contracted for the project. The original design included a two-pass tunnel using rib and lagging and a 36-inch carrier pipe inside a 60-inch liner pipe, extending 3,947 feet into Lake Erie.



With over 50-years of experience specializing in the construction of open cut and tunneling of soft grounds and hard rock soils, Ric-Man Construction, Inc, based in Sterling Heights, MI, was awarded the project

As part of a Value Engineering effort, Ric-Man Construction partnered with GEI Consultants, and Hubble Roth & Clark, on the pipe design to take the project from a two-pass tunnel design, to a one-pass tunnel by installing 60-inch Reinforced Concrete Pipe using a microtunnel boring machine, (MTBM). This also provided more available water volume that will allow future expansion of their water distribution system.

MTBM's are machines built to bore through anything from soft ground including sand and clay to rock. Under the bottom of Lake Erie, Ric-Man Construction needed to bore through full-face shale, as well as a mixed face of shale, clay, limestone, sand gravel, cobbles and boulders. The MTBM was outfitted with a mixed ground-cutter, equipped with both disc cutters and carbon tipped cutting teeth to penetrate through either shale or clay, as well as limestone, sand, gravel, cobbles and boulders.

The launching platform shaft, used to push the pipe being installed, is 30-feet in diameter and 67-feet deep. Divers will be utilized to retrieve the equipment once the pipe has been microtunneled into place.

To provide the best end product, it was essential for all parties involved to work together. A reinforced concrete pipe installed by jacking, or tunneling is subjected simultaneously to axial and transverse forces. Axial loads are most critical as the pipe is compressed at both ends, which for this project was potentially up to 1,100 tons of jacking force.

Transverse loads include the soil prism above the pipe, weight of the pipe, plus the fluid weight and pressure in and around the pipe. It is imperative that the Designer of the pipe consider all anticipated loads on the pipe for the structural design of the pipe.

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## Painesville Sets a Microtunnel Length Record – *cont'd.*

Axial loads are the forces transmitted through the pipe as it is pushed through the hole tunneled in the soil. Axial strength of the pipe is mainly a function of the compressive strength of concrete and the surface area of the contact face of the pipe being advanced through the soil.

The required axial force varies greatly and to determine it, the installer and pipe designer must carefully estimate the axial loads transmitted through the pipeline based on factors such as pipe diameter, length of the pipeline, soil friction and the type of lubricant being used.



GEI Consultants worked with Ric-Man Construction to develop anticipated jacking forces on the reinforced concrete pipe. Based on over 60-years of experience manufacturing precast concrete products, including many successful long tunneling and jacking projects, Northern Concrete Pipe was selected to be the manufacturer of the tunnel pipe for this project. Northern Concrete Pipe produced 10-foot reinforced concrete pipe sections, with C-Wall forms. To provide the most compression surface and contact area between adjoining pipe and to resist the shear forces generated in joints of the pipe during jacking operations, a 3/8" thick x 9-inch long steel bell band was used as the bell of the pipe. A round O-ring gasket in a confined groove meeting ASTM C-361, was designed by Press Seal Corporation and used to meet the 50 psi joint test requirements. The Project Management and Inspection was performed by the Mannik Smith Group.

A 3/4-inch marine grade plywood joint packer was used as a cushion material between the end surfaces of the joints to prevent stress concentrations during the tunneling operation. This joint cushion distributed the axial force preventing point loads on the joint and minimized potential joint damage.

For a long pipeline, the frictional forces between the jacking pipes and the soil can be high. When the jacking forces required exceeds the capacity of the main jacking system, intermediate jacking stations (IJS) can be utilized to reduce the forces required to advance the pipe. Due to the length of the pipeline, it was decided that 7 intermediate jacking stations should be installed. IJS's can allow shorter runs of pipe to be advanced forward independent of the rest of the installed pipeline. Spaced evenly throughout the length of the pipeline, IJS's are able to be activated to move shorter segments of the pipeline forward independently if such an operation becomes necessary. After the jacking operation is complete, the cylinders in the IJS's are removed. Ultimately, only 6 IJS were installed in the tunnel, and it was not necessary to engage any of them during the jacking process, because the jacking forces only reached approximately 350 tons out of 1,100 tons of allowable force.



Ric-Man's average installation rate was 5 sections of pipe per day. Now that the main line is installed, a prefabricated 90-degree pipe bend will be added at the end of the intake pipe along with a riser pipe that will be extended about 5-feet above the lake bottom. Soon, divers will retrieve the MTBM from 13' below the bottom of Lake Erie.

This project would not be possible without the collaborative efforts of all parties involved. When the final project is completed in the Spring of 2020, the City of Painesville will have a new raw water intake system that will supply the city's water needs for years to come. Ric-Man Construction has installed the longest microtunnel project in North America and Northern Concrete Pipe supplied the reinforced concrete pipe for the longest 60-inch microtunnel project in the world.

Photos by Gino D'Agostini, Ric-Man Construction

# Calendar of Upcoming Events

- Nov 1 Northwest Section Operator Education Day, Bowling Green [www.ohiowea.org](http://www.ohiowea.org)
- Nov 5 NAFA Great Lakes and Tri-State Fall Education Seminar, Perrysburg, <https://events.eventzilla.net/e/copy-of-great-lakes-and-tristate-fall-education-seminar-2138762277>
- Nov 5 Snow & Ice Control, Columbus, <https://ltap.enrollware.com/schedule>
- Nov 7 ASCE Fall Seminar 2018, Dayton [Click Here](#)
- Nov 7 Taking Root - Energy Saving Tree Program and Tree Selection for Overhead Power Lines, [Hamilton](#)
- Nov 12 NE Fall Concrete Seminar, Cleveland <https://www.ohioconcrete.org/2019-fall-concrete-seminars/>
- Nov 13 Ohio River Valley Soils Seminar Lexington <http://www.kgeg.org/ORVSS>
- Nov 13 SW Fall Concrete Seminar, Cincinnati <https://www.ohioconcrete.org/2019-fall-concrete-seminars/>
- Nov 14 NW Fall Concrete Seminar, Perrysburg <https://www.ohioconcrete.org/2019-fall-concrete-seminars/>
- Nov 19 Central/SE Fall Concrete Seminar, Columbus <https://www.ohioconcrete.org/2019-fall-concrete-seminars>
- Nov 20 Tree Roots - The Real Story, Springfield <https://ohiochapterisa.org/aws/OCISA/pt/sp/events>
- NOV 21 SW BRANCH: PW IMPACTS OF THE 2019 DAYTON TORNADO, Hamilton [www.ohio.apwa.net](http://www.ohio.apwa.net)
- Dec 3 NE Fall Concrete Seminar, Akron <https://www.ohioconcrete.org/2019-fall-concrete-seminars/>
- DEC 3 SW BRANCH HOLIDAY LUNCHEON, Centerville [www.ohio.apwa.net](http://www.ohio.apwa.net)
- Dec 5 COAPWA DEVELOPING EMOTIONAL INTELLIGENCE COMPETENCIES, Columbus [www.ohio.apwa.net](http://www.ohio.apwa.net)
- Dec 4-6 CEO/CCAO Conference Columbus <https://ccao.org/events/2019-ccao-ceao-winter-conference/>
- DEC 11 OHIO CHAPTER BOARD MEETING COLUMBUS [www.ohio.apwa.net](http://www.ohio.apwa.net)
- Dec 16-17 Certified Stormwater Inspector - MS4 Training, Cleveland [www.NPDES.com](http://www.NPDES.com)
- Jan 9 Ohio Pesticide Recertification Conference, Dayton <https://pested.osu.edu/events>
- Jan 24 Ohio Pesticide Recertification Conference, Sandusky <https://pested.osu.edu/events>
- Feb 5 Ohio Asphalt Paving Conference, Columbus <http://www.flexiblepavements.org/calendar>
- Feb 5-Feb 8 OTA Winter Conference & Trade Show, Columbus <https://ohiotownships.org/annual-winter-conference>
- Feb 6 2020 Tri-State Green Industry Conference, Sharonville [Click Here](#)
- Feb 12 Ohio Pesticide Recertification Conference, Akron <https://pested.osu.edu/events>
- Feb 16-22 Engineers Week <http://discovere.org/our-programs/engineers-week>
- Feb 25-27 Ohio Tree Care Conference, Dayton <https://ohiochapterisa.org/aws/OCISA/pt/sp/events>
- Feb 27 Ohio Pesticide Recertification Conference, Columbus <https://pested.osu.edu/events>
- Apr 19-22 2020 NORTH AMERICAN SNOW CONFERENCE, Cleveland <https://snow.apwa.net/>
- Sep 27-Oct 2, 2020 OHIO PUBLIC SERVICE INSTITUTE

## Welcome New Members

The following people have recently joined APWA.

- |  |  |
|--|--|
| Ms. Michele Beko, City of Lorain                           | Mr. David Mack, City of Tipp City                          |
| Mr. Charles D. Brandon, The Ohio State University          | Mr. Jamey Marcum, County Engineers Association of OH       |
| Mr. Scott Brown, Ohio Department of Transportation         | Mr. Travis T. Morris, The Ohio State University            |
| Mr. W Fritz Crosier, County Engineers Association of OH    | Ms. Emily Morrison, Ohio Department of Transportation      |
| Mr. R Kyle Cross, County Engineers Association of OH       | Mr. Gregory Perkins, City of West Carrollton               |
| Mr. Joe Curran, Peterbilt Motors Company                   | Mr. Mike Pittinger, County Engineers Association of OH     |
| Mr. Richard F. Daily, The Ohio State University            | Mr. Bob Rhyne, Company Wrench                              |
| Mr. Clay Durham, Company Wrench                            | Mr. Todd Roth, County Engineers Association of OH          |
| Mr. Jeremy P. Evans, County Engineers Association of OH    | Mr. Douglas E. Royer, County Engineers Association of OH   |
| Mr. Christopher Fauber, County Engineers Association of OH | Mr. Stephen M. Schneider, The Ohio State University        |
| Mr. Roger Hamilton, The Ohio State University              | Mr. Larry Stimpert, The Ohio State University              |
| Mr. Brian Scott Hoover, Ohio Department of Transportation  | Mr. Michael A. Stormer, County Engineers Association of OH |
| Mr. Ron M. Kaufman, The Ohio State University              |  |

# 2019 PWX Photo Album

5,864 total participants, 384 exhibiting companies, dozens of technical sessions, live demonstrations on the floor, exciting tours, and plenty of time to learn and network.

