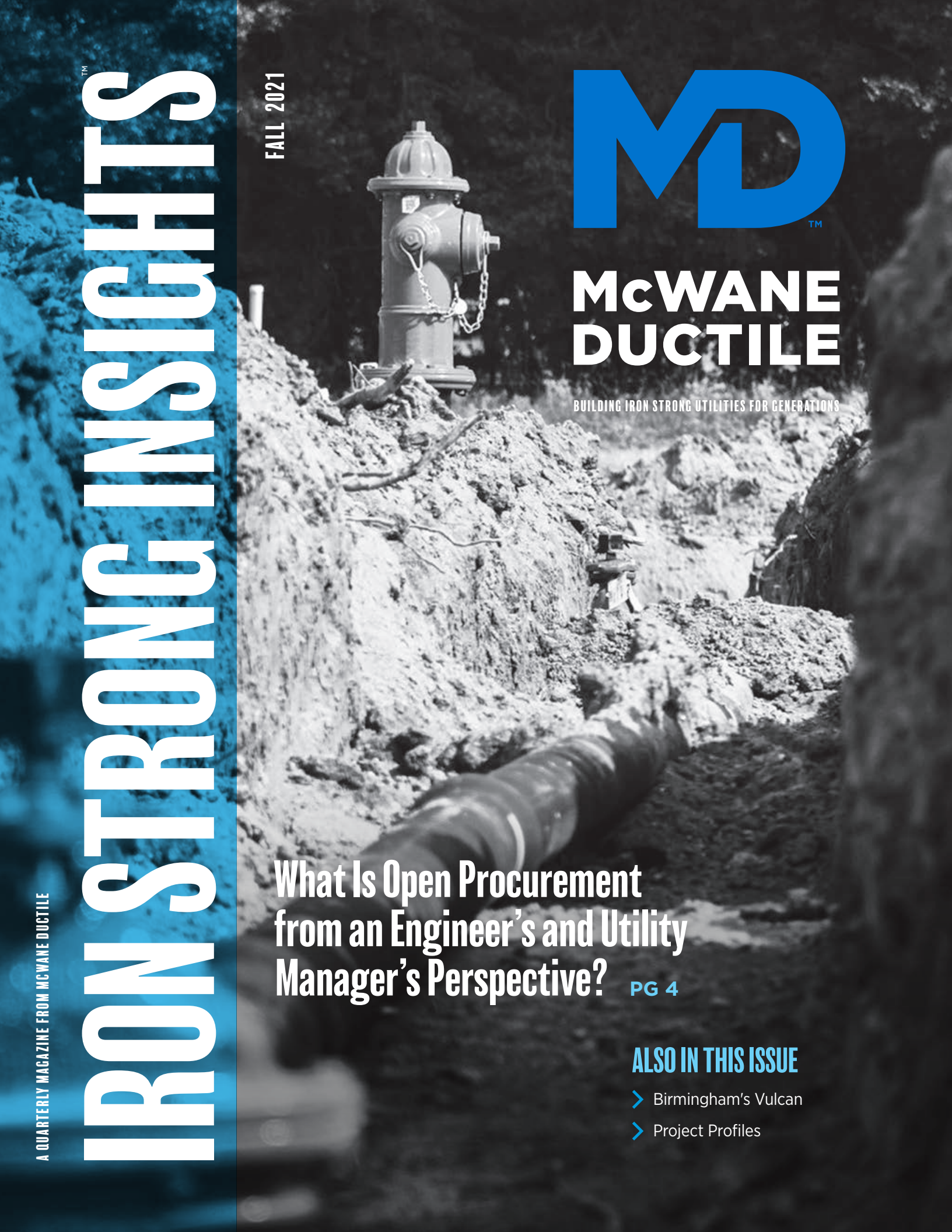
IRON STRONG INSIGHTS™

A QUARTERLY MAGAZINE FROM MCWANE DUCTILE

FALL 2021



McWANE DUCTILE

BUILDING IRON STRONG UTILITIES FOR GENERATIONS

What Is Open Procurement from an Engineer's and Utility Manager's Perspective?

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McWANE DUCTILE

Contact Us: McWaneDuctile.com

Mike Dodge, VP Sales & Marketing
Stuart Liddell, Sales Operations Manager
Andrea Kubik, Marketing Manager

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IRON STRONG INSIGHTS™

McWane Ductile has been an industry leader in the manufacture of water distribution and infrastructure products since 1921. With three U.S. foundries, McWane Ductile offers superior service while supplying Ductile iron pipe across North America and beyond, all while maintaining an unwavering commitment to safety and quality. Through continued innovation, it is our goal to meet the customer needs and industry demands of the future in order to Build Iron Strong Utilities for Generations.

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Welcome to Iron Strong Insights™

Dear Readers,

Welcome to the fall edition of Iron Strong Insights. For many of us, fall brings a distinct change of season with cooler temperatures and beautiful autumn foliage — something that I don't get to enjoy as much here in Florida. But, football, another sure sign of fall, is in full swing and thankfully back with the participation of crowds in the stadiums, something that was truly missed last year.

Unfortunately, COVID is something we must still contend with, but each month we seem to get just a bit closer to putting it in the rearview mirror. We have attended and presented live at many trade shows, but the virtual platform is still preferred in some areas.

The disruption to our daily lives and the costs that this pandemic has exacted on so many will be something that will be with us for many years to come.

At McWane, we have been proudly celebrating our 100th anniversary this year. October 22, 1921, is the official date that McWane was founded in Birmingham, Alabama. Throughout the years, McWane has grown to encompass more than 30 subsidiaries, covering a vast array of business enterprises but never straying too far from its roots as an "iron strong" manufacturer. The company has a heritage that stretches back to 1904 with the participation of our founder, James Ransom (J.R.) McWane, in the design and creation of the Vulcan statue, which has been a constant in the Birmingham skyline for decades. Please see the feature on the Vulcan statue in this issue.

We also have several new hires to highlight in this edition, including Jacob King, Chris Williams and Michael McDonald. Please look at the short bios for each of them on this page and help us welcome the next generation of reps that will assist our customers in Building Iron Strong Utilities for Generations.

Stuart Liddell
Sales Operations Manager
Sales Operations Department

EMPLOYEE SPOTLIGHT

Jacob King is a graduate of the University of Southern Mississippi with a B.A. in Business Administration. He is currently the Sales Representative for Oklahoma and North Texas. Before joining McWane Ductile, Jacob was an experienced outside sales professional in the residential, commercial and industrial plumbing industries. Jacob resides in the Little Rock, Arkansas, area and enjoys hiking, fly fishing and golfing in his free time.

Chris Williams is the Sales Representative covering Missouri, Kansas, Iowa, Nebraska and South Dakota. Chris graduated from Manhattan Technical College in 1998. He comes to McWane Ductile from Mueller Water Products. During his 18-year tenure, he held multiple positions, including Distribution Sales Manager for Henry Pratt, Territory Sales Manager, and Regional Sales Director for Mueller Systems. Chris and his wife, Erin, reside in rural Paola, Kansas. They have two daughters and one son. Chris enjoys bow hunting, cooking and being outdoors.

Michael McDonald is the Sales Representative for Georgia and upstate South Carolina. Michael is a dedicated sales professional based out of the metro Atlanta area. He has spent the past 10-plus years in a technical sales capacity, emphasizing driving specifications, building relationships with contractors, and selling sustainable infrastructure solutions. He is excited to use his skills to contribute to our success in his territory. Michael likes to spend time with his family and 8-year-old daughter in his free time, enjoying all things outdoors. He is a huge football fan and has a love/hate relationship with restoring classic cars.

WHAT IS OPEN PROCUREMENT FROM AN ENGINEER'S AND UTILITY MANAGER'S PERSPECTIVE?

There is a national effort to deny engineers, utilities, municipalities, public entities, and other waterworks professionals the ability to design water, wastewater, and stormwater projects in the manner that best serves the needs of their community. This effort focuses on water system piping but could be expanded to other infrastructure materials, as well. This article contains a Q&A session conducted with a civil engineer, John Simpson, and a former utility manager, Roy Mundy, regarding Open Procurement.

QUESTION: Tell us a little about your background as an Engineer.

ANSWER — John Simpson, P.E., ENV SP, NACE CT. As a registered civil engineer, I was required to graduate from an ABET-accredited university, work under a registered engineer for four years, pass two 8-hour state-certified examinations, and continually educate myself on various topics within civil engineering. In my career, I've had the opportunity to serve as an engineer on various civil engineering projects. These projects provided a better quality of life for the public, and I am proud to have been afforded an engineer's responsibility. I am currently serving as a Regional Engineer for McWane Ductile.

ANSWER — Roy Mundy, P.E., ENV SP, ASSOC. DBIA. I have had the privilege in my water industry career to serve as both engineer and within the executive ranks for the nation's largest investor-owned water utility — the American Water System. Owning water subsidiaries across the country that serve millions of people poses many challenges in assuring that customers are provided with a safe and adequate water supply.

Throughout the three decades with American Water, I experienced many challenges in selecting proper materials for the building, construction, maintenance and repair of pipelines. I am currently serving as a Senior Regional Engineer for McWane Ductile.

QUESTION: Can you provide some background on Open Procurement?

ANSWER — Simpson: I have read about a recent legislative trend within the utility industry concerning the open procurement of materials. Open Procurement is defined as a method that requires procurements to be available to all qualified and interested bidders, be appropriately advertised, have objective qualifications criteria, and be awarded to the least-cost provider without contract negotiations.

ANSWER — Mundy: Legislative attempts have been made in several states across the country to take the decision-making expertise of engineers and operating personnel out of their hands and place it into legislative mandates. In 2014, state legislation was introduced and defeated in Indiana, Tennessee and Ohio. The legislation did not make it out of Committee in Ohio and Tennessee and could not get the votes to bring it to the Senate floor in Indiana. In 2015, state legislation was introduced in Arkansas, North Carolina, Oklahoma, and South Carolina. The legislation has yet to pass in any state.

As described in the synopsis of the Ohio bill, the purpose is "to ensure that all proven and acceptable piping materials be included in bids for water and wastewater utility service improvement projects." In these states, we have seen widespread opposition to the legislation from groups such as engineers, utilities, public entities, architects, and the business community.

QUESTION: How do you feel about Open Procurement?

ANSWER — Simpson: This sounds like a responsible approach to acquire materials or services just by reading it. However, that is before politics are involved. Several recent legislative attempts in several states across the country take

the "objective qualifications criteria" out of the hands of qualified professionals, engineers, and utility personnel by passing laws requiring material decisions on infrastructure projects based upon initial material cost.

We all understand how important money is, and everyone should make the best decisions with our limited resources. But making decisions based solely on initial material cost is not wise, especially on infrastructure projects that will serve the public for tens of years.

Initial material cost does not mean that it is the best product for a utility. One should evaluate the cost of installation, maintenance and operation, and the life cycle and sustainability of materials to understand the overall cost. Who is better to do this than an engineer? Who has spent years educating, training and evaluating all components relating to infrastructure projects or utility personnel who have spent years operating, maintaining and servicing a utility that provides essential quality of life for the public?

ANSWER — Mundy: I could list numerous examples wherein engineering and operational professionals in the water industry, through their education, credentials, knowledge and experience, have contributed through their expertise in building water infrastructure in this country second to none. Unfortunately, we are now seeing an attempt through political means to undermine engineering professionals from doing what they do best and what is undeniably what they do to better the water industry. Clearly, these individuals work diligently to serve their clients and organizations, providing value-added recommendations regarding material selection for water systems. These recommendations go far beyond immediate costs, evaluating such parameters as sustainability, future operational costs, total life-cycle costs, maintenance costs and other factors.

QUESTION: Do you see Open Procurement as an issue in the waterworks industry?

ANSWER — Simpson: Yes. Local communities and engineers evaluate and select specific pipe or other materials based on numerous considerations, including environmental conditions at the site, the function of the material and integration with existing infrastructure. We should not adopt a one-size-fits-all, top-down mandate from the government on decisions that licensed/qualified professionals can best handle.

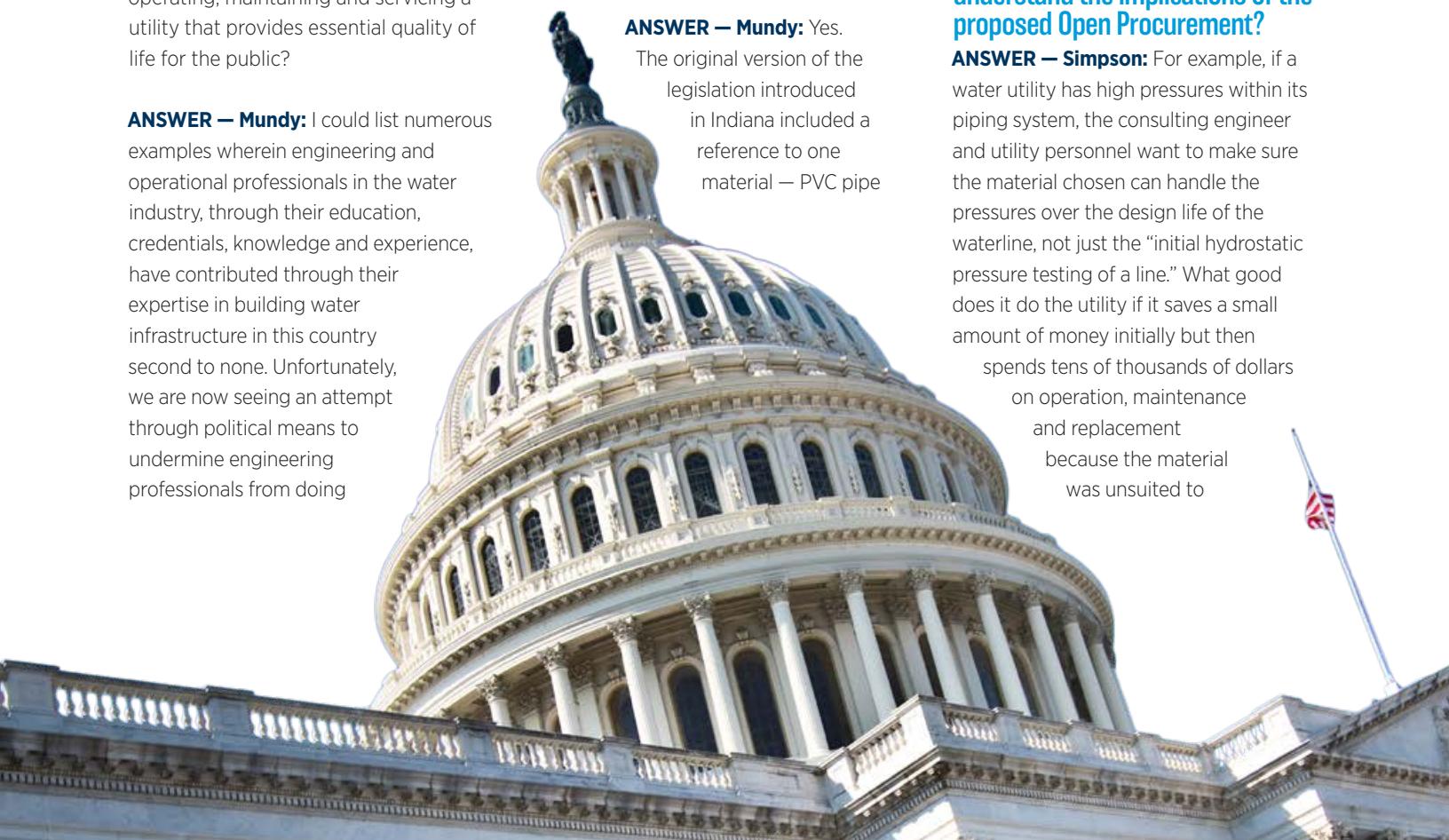
ANSWER — Mundy: Yes. The original version of the legislation introduced in Indiana included a reference to one material — PVC pipe — clearly indicating that the legislation attempts to pick winners and losers in the marketplace through government regulation.

Pipe materials, for example, are not interchangeable and are not equal — they have very different service lives, strength, operating costs, environmental considerations, safety concerns, and maintenance issues. The initial acquisition cost of a material is just one factor among many that must be considered when designing a pipeline. There are many long-term costs and other factors that determine pipe material selection.

The legislation will likely lead to a significant increase in bid protests and litigation over pipe selection on public projects, thereby wasting time and limited public resources.

QUESTION: Can you provide some real-world examples to help us understand the implications of the proposed Open Procurement?

ANSWER — Simpson: For example, if a water utility has high pressures within its piping system, the consulting engineer and utility personnel want to make sure the material chosen can handle the pressures over the design life of the waterline, not just the "initial hydrostatic pressure testing of a line." What good does it do the utility if it saves a small amount of money initially but then spends tens of thousands of dollars on operation, maintenance and replacement because the material was unsuited to



handle the system's high water pressures? Another good analogy would be: What if a law passed that required all passenger vehicles to use one type of brake pad for the car? The owner would not have the option to pay a little more initial upfront money on higher-quality ceramic brake pads and receive better performance and longer brake life. Thus, making their overall cost of ownership much lower versus paying for brake pads twice because the initial lower-cost brake pads wear out twice as fast as the higher-quality brake pads. It just does not make any sense.

ANSWER — Mundy: For more than 30 years managing a water utility, I experienced the challenges of selecting proper materials for the building, construction, maintenance, and repair of pipelines. One such "opportunity" involved maintaining a raw water supply for one of our water systems in West Virginia.

Our existing supply, the Ohio River, had been contaminated with a large oil spill emanating from Pennsylvania. Because we could not treat the waters that contained the oil plume, an alternate raw water supply had to be constructed within a very short time.

Once again, engineering, and operating professionals rapidly addressed the issue, reviewed potential sources, and then designed the infrastructure to accommodate the needed supply until the oil spill passed our existing intake. The result — needed water for customers and fire protection — was kept intact while the oil spill passed.

Another example included engineering professionals reviewing an intensive investigation wherein numerous alternatives provided additional raw water capacity to one of our major facilities serving over 350,000 people. The expertise employed evaluated many options, including pipelines to supply treated water, access to reservoirs to supply additional raw water, additional treatment facilities to be located on a viable raw water source, all-determining the most cost-effective way for our customers to mitigate this raw water deficiency. Once again, the result was — problem solved.

QUESTION: If you were standing before legislators at this moment, what would you tell them?

ANSWER — Simpson: Any laws that take the decision away from qualified engineers or utility personnel who have been trained to understand the complexities of designing and operating a utility will, in fact, create substandard utility infrastructure in this country that future generations will be paying for, for decades. Just like this recent, unfortunate, and tragic pandemic, let the professionals and science dictate what is best for the public. Please leave local infrastructure procurement decisions to the professionals who have spent years within the utility industry and not to politics — reject Open Procurement legislation.

ANSWER — Mundy: A government mandate to utilize materials based upon a short-sighted material cost review diminishes, if not eliminates, the tremendous resource experts have provided in the past and should provide in the future. Laws requiring a utility to utilize the cheapest material available without transparently specifying the engineering and operational personnel of that utility would have the ultimate decision will potentially create substandard water infrastructure in this country, infrastructure that has already been identified as in need of replacement due to age. Let's replace that infrastructure the right way — leave it to the professionals!

In Summary

There is a national effort to deny engineers, utilities, municipalities, public entities, and other waterworks professionals the ability to design water, wastewater and stormwater projects in the manner that best serves the needs of their community.

There are concerted attempts by the plastic pipe industry and its allies at the federal, state, and local levels to introduce preferential legislation for plastic pipe. This legislation has been introduced in at least 11 states, but none have passed the bills. The efforts continue to supersede the decisions of professionals, such as yourself, in determining the appropriate pipe for your community.

We thank Roy Mundy and John Simpson for their input, and we encourage you to stand up for the right to make sound decisions in the interests of your community and be vigilant in discovering whether Open Procurement legislation is being considered in your state — support local choice. To learn more, visit **dipra.org/government-affairs/local-choice**.

A STATUE, A FAMILY, A CENTURY OF INNOVATION

For 117 years, Birmingham's iconic Vulcan statue has symbolized the spirit and industry of the city. Created in 1904 for the Louisiana Purchase Centennial Exposition, known as the St. Louis World's Fair, Vulcan was cast from minerals found in Birmingham by the Birmingham Steel and Iron Company, led by James Ransom (J.R.) McWane and W.T. Adams.

An ambitious project, created in approximately four months, the 55-foot tall, 60-ton Vulcan is not only a symbol of Birmingham's industrial spirit, but it also represents the work ethic, dedication and technical skills of all involved in its creation. And those attributes remain a key part of Birmingham today.

The process involved patterns and molds created based on designs by Giuseppi Moretti in New Jersey, that were sent to the Birmingham Steel and Iron Company to be cast in large pits in the floor of the foundry. Castings were so large and numerous that some pieces of the Vulcan required as many as 40 or 50 segmented castings, or drawbacks. The head alone was said to have required roughly 150 drawbacks because of folds, curls and complex surfaces — truly innovation ahead of its time. Many of the techniques and methods that J.R. McWane and others used remain a staple of the industry today.

For decades, the Vulcan statue endured changes in location, disassembly, reassembly, alterations and weather conditions, adding to its symbolic nature. That symbolism isn't lost on the industrial history of Birmingham. The city became the largest manufacturer of cast iron pipe in the United States.

Following the creation of the Vulcan statue, J.R. McWane founded the McWane Cast Iron Pipe Company in 1921, setting the stage for 100 years of excellence in creating critical lifeline infrastructure products. This year, the McWane family of companies observes the McWane Centennial, a time to celebrate the innovation and invention that comes with 100 years of service, dedication, skill and all who have made it possible.

McWane Chairman Phillip McWane, great-grandson of J.R. McWane, admits that the McWane company we know today and its impact on Birmingham's industrial scene might not exist were it not for Vulcan. And even though the casting of Vulcan, and subsequent financial hardships that occurred as a result, drove the Birmingham Steel and Iron Company into bankruptcy, J.R. McWane remained an innovator in the industry, serving as vice president and then president of American Cast Iron Pipe Co. until he founded McWane, which now consists of 12 foundries and 34 total manufacturing facilities across eight countries, all headquartered in Birmingham.

And through the years, the McWanes have continued their commitment to Vulcan and all it represents through restoration and maintenance of the century-old statue that sits atop Red Mountain.

Vulcan may have started as a mythological god of fire, a patron figure of the forge, but today it stands tall, representing more than 100 years of excellence and innovation in Birmingham's industrial landscape.

GENERATIONS 100 OF EXCELLENCE

Visit McWane.com/100 to join McWane in its Centennial Celebration. You'll find a video, 100 facts, team member stories and more!

For Generations

For McWane, October 2021 marks 100 years of improving the state of the art. This year, and each year before, we have enjoyed celebrating the people and communities who embody the heart of our company and make **generations of excellence** possible. From shore to shore and across oceans, we owe our past, present and future success to the support of our team members, communities and partners in innovation.

GENERATIONS 100 OF EXCELLENCE

Celebrating 100 Years — October 22, 2021

McWane.com/100

McWane Family of Companies

DUCTILE IRON PIPE DIVISION
McWane Ductile – New Jersey
Canada Pipe Company
McWane Ductile – Ohio
McWane Ductile – Utah
McWane Poles

INTERNATIONAL SALES & TRADING
McWane Global
McWane International
McWane India

WATERWORKS VALVES & FIRE HYDRANTS
Alabama Dynamics
Clow Canada
Clow Valve
Kennedy Valve
M&H Valve
MPI
Waterman

WATERWORKS FITTINGS
Tyler/Union Foundry
Tyler Xianxian

SOIL PIPE, SOIL FITTINGS & COUPLINGS
AB&I Foundry
Anaco
Bibby-Ste-Croix
Fonderie Laperle
Tyler Pipe
Tyler Coupling
WADE

PROPANE & COMPRESSED AIR TANKS
Manchester Tank & Equipment Company
MTE Cemcogas, SA

FIRE EXTINGUISHERS & FIRE SUPPRESSION
Amerex
Janus

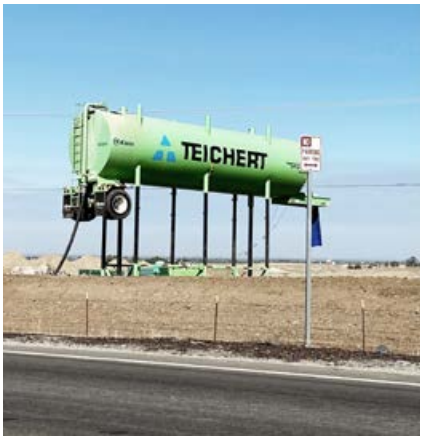
TECHNOLOGY
Futurecom Systems Group
Synapse Wireless
Nighthawk
Zinwave

PROJECT PROFILES

West

PROJECT PROFILE

Tracy Hills is a 5,400-acre, 4,700-unit master-planned community located 45 minutes away from the East Bay near the foothills of Tracy, California. The site is easily accessible to I-580 and I-205 as well as to rail service into Silicon Valley. Tracy Hills is a high-quality, affordable and amenitized community, and there's strong demand for it. The availability of McWane Ductile iron pipe has enabled this development to meet the continued demand for the infrastructure needs. Our specified zinc-coated material not only allowed the project to keep up with the increased demand of home sales, but also provides a clear path for the acquisition and finishing of the remaining lots needed within Tracy Hills. Teichert Construction and Core & Main Manteca have been pleased with the schedule of material we have been providing and continue to be good partners to work with.



Sales Region: West
Sales Representative: Bill Kleczka
Project Location: Tracy, CA
Project Owner/Utility: Integral Communities / Lennar Corporation
Project Engineer: Ruggeri - Jensen - Azar and Associates
Project Contractor: Teichert Construction
Project Distributor: Core & Main Manteca

Types of Ductile iron pipe used on the project:

DIAMETER	JOINT	CLASS	FOOTAGE
6″	Tyton®	50	900
8″	Tyton®	50	11,500
12″	Tyton®	50	2,100
16″	Tyton®	50	2,000

The City of Dubuque, Iowa, had an emergency watermain replacement project and needed Ductile iron pipe to keep multiple manufacturing companies supplied with water and allow their three shifts to continue to operate.

"Even with the supply chain issues that we are all dealing with, a phone call to Senior Sales Representative Dan Flaig with McWane Ductile got things rolling quickly," said Ed Erschen, VP with J&R Supply, Inc. "McWane Ductile's employees accepted the challenge and had the Ductile iron pipe on the job site when Horsfield Construction needed it. The 30-year relationship between J&R Supply, Inc. and McWane Ductile came into play and allowed us to meet the expectations of the City of Dubuque; the engineer, Gus Psihoyos; and his staff. Thank you to everyone that made this happen," said Erschen.

Sales Region: Midwest
Sales Representative: Dan Flaig
Project Location: Dubuque, IA
Project Owner/Utility: City of Dubuque
Project Engineer: City of Dubuque — Engineering Department
Project Contractor: Horsfield Construction
Project Distributor: J&R Supply, Inc.

Types of Ductile iron pipe used on the project:

DIAMETER	JOINT	CLASS	FOOTAGE
6"	Tyton®	52	600
8"	Tyton®	52	700
12"	Tyton®	52	4,700

PROJECT PROFILE

Midwest

South

PROJECT PROFILE

Adams Construction & Associates, Inc., an Auburn, Alabama-based sitework and utilities contractor, is conducting the sitework, including the water and sewer for Drake's Landing Phase 1, a Hughston Homes development. For nearly 50 years, Hughston Homes has been a premier home builder in Alabama, Georgia and Tennessee based out of Fortson, Georgia.

This project is located in Opelika, AL, and comprises the first 63-lots of this multiphase residential subdivision. Consolidated Pipe & Supply in Auburn has supplied all 3,200 feet of 6-inch Class 350 and 260 feet of 8-inch Class 350 Ductile iron pipe for the project. This new water main will provide water distribution and fire protection for this and subsequent subdivision phases.

Brian Lee, the Project Manager and Principal Engineer for Adams Construction, plays a key role in this and similar projects in the Auburn/Opelika area.

"We've experienced a few obstacles, but nothing that our team can't handle. We had to work around a large fiber optic data line that ran directly through the middle of the site. We've also experienced excessive rainfall, which has hammered our area. Opelika has recorded 80 percent of its average yearly rainfall before the end of August 2021," said Brian Lee.

"The crews have persevered, and despite the setbacks, to date, Adams Construction has installed 19,780 linear feet of 8-inch, 6-inch, and 4-inch McWane Ductile iron pipe to provide water distribution within newly constructed residential subdivisions in the Auburn-Opelika area over just this past year," said Lee. More information about their company is available at **acaiconstruction.com.**

Sales Region: South
Sales Representative: Doug Clark
Project Location: Opelika, AL
Project Owner/Utility: Opelika Utilities
Project Engineer: Bolt Engineering Inc
Project Contractor: Adams Construction
Project Distributor: Consolidated Pipe and Supply

Types of Ductile iron pipe used on the project:

DIAMETER	JOINT	CLASS	FOOTAGE
6"	Tyton®	350	3,200
8"	Tyton®	350	260

Sales Region: Northeast
Sales Representative: Todd Soady
Project Location: Virginia
Project Owner/Utility: Hampton Roads Sanitation District (HRSD)
Project Engineer: WRA
Project Contractor: Tidewater Utility
Project Distributor: Water Works Supply Chesapeake Virginia Branch

Types of Ductile iron pipe used on the project:

DIAMETER	JOINT	CLASS	FOOTAGE
36″	Tyton® and TR Flex	51/53	8,000

Hampton Roads Sanitation District (HRSD) is replacing a failing reinforced concrete pipe sewer line in a very corrosive application. The new Ductile iron pipeline is an 8,000-foot, 36-inch Tyton®/ TR Flex®, Protecto 401™-lined lay schedule project with multiple sections of welded plates applied at the McWane Ductile foundry to field-apply jumpers for cathodic protection. The entire project is also bagged with V-Bio® Enhanced Polyethylene Encasement. The project also includes Tyler Union fittings. Tyler Union is a sister company to McWane Ductile.

McWane Ductile's team worked with Tidewater Utility to break the project into three separate priority sections for the lay schedule to be manufactured and delivered. McWane Ductile's team devised a color scheme to align each specific piece with the stations on the drawing. When Tidewater Utility found the following piece required for the lay schedule puzzle, it would be readily identifiable by the color codes on the bell.

PROJECT PROFILE

Northeast

DEAR DITCH DOCTOR,

Out here in the western United States, we wind up with a lot of pipelines installed up or down serious hills, dare I say mountains as well? We are good at the construction part, yet time after time we struggle with getting a satisfactory post-installation hydrostatic test on the pipeline, especially with inclined installations. Often the pipeline drops anywhere from 20 to 50 psi on the gauge and can do that several times or more until we take some sort of drastic redo/restart on the test procedures.

Rarely is there ever a true leak involved; we just seem to "battle the gauge" with repetitive pumping, draining, refilling, blow-offs, and other stuff until somehow — wham! — it passes. Often the pipeline drops anywhere from 20 to 50 psi, far more than the 5 psi allowed by the AWWA standards, so we never even get the opportunity to check for "recovery allowance," i.e., part 2 of the AWWA hydrotest. Is there a TRICK I'm missing, or is it just that TREATS don't exist in this line of work?

Sincerely,
Harried Halloween in Hayden, CO

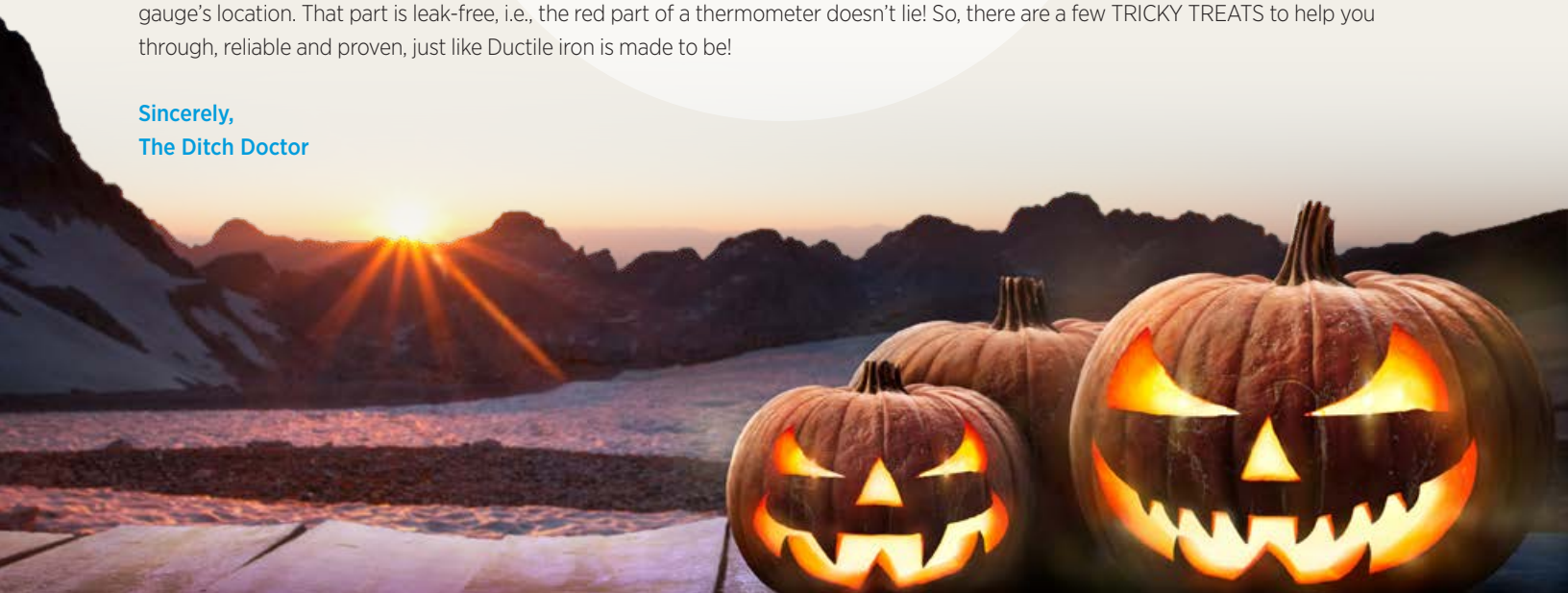
DEAR HARRIED,

Glad to hear of your experienced confidence in constructing things! Let me try to help you with things you're suffering past that. First rule of success in hydrostatic testing of Ductile iron pipelines is operating in strict adherence to a few basic rules: (1) Fill from the lowest point, bleed air from the highest point. Not close to each, but at each location. (2) Fill slow, and let it blow. Filling too fast (turbulent flow) or not having an appropriately sized air-release mechanism at the high end virtually guarantees you will trap air pockets within the pipeline, even if it's laid "flat and straight." (3) Never fill from the high side. That is a guaranteed air-trapping invite, and often creates hardships far beyond the norm that we'd have to cover in a different discussion. (4) Losing more than 5 psi is not the end of it all. While this would disqualify you from "passing the test," it offers you no insight as to what's really going on. For that you need to go diagnostic, and there's an easy way to do that. A simple Google search for "McWane Double Bump" will put you on the right path. You'll even find a handy tip sheet and data tracking form there.

Lastly, and certainly on all inclined installations, it is wildly helpful to place a pressure gauge at both the low point (from where you're pumping) and the high point (where you're blowing air out of the pipeline). Doing so, and knowing the relationship of a water column vs. pressure created (0.433 psi per vertical foot of water), you can compare the pressure values top and bottom to gauge if the pipeline is hydraulically tight despite the pressure drop experienced.

Much like a balloon will not stay inflated if it has even a microscopic pinhole, or a thermometer won't stay red if there's a hole in the tube, a pipeline with a true leak — especially an inclined one — will typically drop to zero pressure in as short a period as an overnight sit. If it stays at let's say 64 psi overnight, then at least we know there's no need to check for leaks below an elevation of 148 feet above the lower gauge's location. That part is leak-free, i.e., the red part of a thermometer doesn't lie! So, there are a few TRICKY TREATS to help you through, reliable and proven, just like Ductile iron is made to be!

Sincerely,
The Ditch Doctor



MIKE DODGE, VP SALES & MARKETING

SALES REPRESENTATIVES

EAST SALES TEAM

GENERAL SALES

Craig Spitzer, General Sales Manager
Cell: 908-878-0822
craig.spitzer@mcwaneductile.com

Kelly Bray, Inside Sales Manager
Office: 908-878-0837
kelly.bray@mcwaneductile.com

NEW JERSEY, DELAWARE, NEW YORK CITY

Gary Kurtz, Senior Sales Representative
Cell: 908-235-6001
gary.kurtz@mcwaneductile.com

NEW ENGLAND

Jeff Houser, Senior Sales Representative
Cell: 518-275-1780
jeff.houser@mcwaneductile.com

NEW YORK

Mike Palermo, Senior Sales Representative
Cell: 585-737-0456
mike.palermo@mcwaneductile.com

CENTRAL & EASTERN PENNSYLVANIA

Bob Hartzel, Senior Sales Representative
Cell: 717-571-5683
bob.hartzel@mcwaneductile.com

MARYLAND & WESTERN PENNSYLVANIA

Ben Leonard, Sales Representative
Cell: 908-442-5241
benjamin.leonard@mcwaneductile.com

NORTH CAROLINA

Dwayne Shelton, Senior Sales Representative
Cell: 336-682-6187
dwayne.shelton@mcwaneductile.com

VIRGINIA

Todd Soady, Sales Representative
Office: 757-262-6174
todd.soady@mcwaneductile.com

MIDWEST SALES TEAM

GENERAL SALES

Scott Frank, General Sales Manager
Office: 740-622-6651
Cell: 740-202-3094
scott.frank@mcwaneductile.com

Dave Bursh, Inside Sales Manager
Office: 740-291-1064
dave.bursh@mcwaneductile.com

ILLINOIS

Dan Flaig, Senior Sales Representative
Cell: 815-353-4607
dan.flaig@mcwaneductile.com

KENTUCKY, SOUTHERN INDIANA & SOUTHWESTERN OHIO

Austin Joannes, Sales Representative
Cell: 803-626-6555
austin.joannes@mcwaneductile.com

MICHIGAN, NORTHERN INDIANA & NORTHWESTERN OHIO

Kevin Christian, Sales Representative
Cell: 734-223-5632
kevin.christian@mcwaneductile.com

NEBRASKA, KANSAS, MISSOURI, IOWA, SOUTHERN ILLINOIS & SOUTH DAKOTA

Chris Williams, Sales Representative
Cell: 913-302-8899
chris.williams@mcwaneductile.com

CENTRAL & NORTHEAST OHIO & WEST VIRGINIA

Clinton (CJ) Fowler, Sales Representative
Cell: 330-260-9292
clinton.fowler@mcwaneductile.com

WISCONSIN, MINNESOTA, NORTH DAKOTA

Shawn Smith, Sales Representative
Cell: 608-440-0667
shawn.smith@mcwaneductile.com

CANADA SALES TEAM

Steve Philpott, National Sales Manager
Cell: 709-728-8760
steve.philpott@canadapipe.com

ONTARIO

Greg Principi, National Product Engineer
Office: 905-974-3026
Cell: 289-244-6415
greg.principi@canadapipe.com

ATLANTIC

Martin Phinney, National Product Engineer
Cell: 506-961-9229
martin.phinney@canadapipe.com

QUEBEC

David Rouleau, Sales Representative
Cell: 413-223-6882
david.rouleau@canadapipe.com

WESTERN CANADA

Brent Williamson, Sales Representative
Office: 604-737-1279
Cell: 604-360-0960
brent.williamson@canadapipe.com

SOUTH SALES TEAM

GENERAL SALES

Dusty Henderson, General Sales Manager
Cell: 615-418-0741
dustin.henderson@mcwaneductile.com

WESTERN CAROLINA & GEORGIA

Michael McDonald, Sales Representative
Cell: 770-281-6205
michael.mcdonald@mcwaneductile.com

ARKANSAS, OKLAHOMA & NORTH TEXAS

Jacob King, Sales Representative
Cell: 501-366-0073
jacob.king@mcwaneductile.com

FLORIDA (Except Panhandle) & EASTERN SOUTH CAROLINA

Gary Gula, Sales Representative
Cell: 239-989-6298
gary.gula@mcwaneductile.com

ALABAMA, LOUISIANA, FLORIDA (Panhandle only) & TENNESSEE (Memphis only)

Doug Clark, Sales Representative
Cell: 662-341-0205
doug.clark@mcwaneductile.com

TENNESSEE & NORTH GEORGIA

Josh Baker, Sales Representative
Cell: 615-975-0806
josh.baker@mcwaneductile.com

TEXAS (Except El Paso & North Texas)

Scott Rhorick, Sales Representative
Cell: 254-317-8455
scott.rhorick@mcwaneductile.com

WEST SALES TEAM

GENERAL SALES

Nick Koncar, General Sales Manager
Office: 801-623-4256
Cell: 801-864-5544
nick.koncar@mcwaneductile.com

Kim Christensen, Inside Sales Manager
Office: 801-623-4254
kim.christensen@mcwaneductile.com

ARIZONA, NEW MEXICO, LAS VEGAS, NV & EL PASO, TX

Wes Cassiere, Senior Sales Representative
Cell: 480-280-5424
wes.cassiere@mcwaneductile.com

SOUTHERN CALIFORNIA

Carolyn Lopez, Senior Sales Representative
Cell: 951-310-6444
carolyn.lopez@mcwaneductile.com

NORTHERN CALIFORNIA & NEVADA

Bil Kleczka, Sales Representative
Cell: 559-401-9006
bill.kleczka@mcwaneductile.com

UTAH & COLORADO

Aaron Loosli, Sales Representative
Cell: 385-208-7352
aaron.loosli@mcwaneductile.com

WEST WASHINGTON, ALASKA & HAWAII

Jason Harrison, Senior Sales Representative
Cell: 425-681-1394
jason.harrison@mcwaneductile.com

OREGON

Carrie Stephens, Sales Representative
Cell: 503-577-4177
carrie.stephens@mcwaneductile.com

WASHINGTON, IDAHO, WYOMING, MONTANA

David Bridge, Sales Representative
Cell: 951-520-6416
david.bridge@mcwaneductile.com

SALES OPERATIONS

Stuart Liddell, Sales Operations Manager
Cell: 352-208-5709
stuart.liddell@mcwaneductile.com

Jeff Henderson, National Account Manager
Cell: 614-404-4909
jeff.henderson@mcwaneductile.com

Jerry Regula, National Product Engineer
Cell: 740-294-7899
jerry.regula@mcwaneductile.com

Ken Rickvalsky, National Product Engineer
Cell: 609-290-7701
ken.rickvalsky@mcwaneductile.com

Roy Mundy, Senior Regional Engineer
Cell: 859-361-8585
Fax: 859-273-4799
roy.mundy@mcwaneductile.com

John Johnson, Regional Engineer
Cell: 951-813-9589
john.johnson@mcwaneductile.com

John Simpson, Regional Engineer
Cell: 865-256-2541
john.simpson@mcwaneductile.com

Cory Humphreys, Technical Services Specialist
Office: 740-291-1046
cory.humphreys@mcwaneductile.com

Andrea Kubik, Marketing Manager
Office: 740-202-7352
andrea.kubik@mcwaneductile.com

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