

North Carolina Chapter News

VOLUME 35 | ISSUE 45

DECEMBER 17, 2021

IN THIS

PRESIDENTS' MESSAGE

 PARTNER FEATURE Creating Pedestrian-Friendly Streestscapes Benefits People, Planet, and Profitability WithersRavenel

DIVISION NEWS Stormwater Management Celebrating a Successful Year in Stormwater

DIVISION NEWS Technology Local UAS Leaders

Share Insights at Drone Workshop

OPPORTUNITIES TO SUPPORT PWX 2022 Charlotte, NC

IN THE COMMUNITY Young Professional Spotlight Abigail Rosendale

IN THE COMMUNITY Young Professional Committee Thanks you for your support in 2021!

ADVERTISE IN 2022! See last page for details!

President's Message



A S 2021 closes, so does my service as president of the APWA North Carolina Chapter. This year has been the second of two unusual years, and I realize that is a significant understatement. I am looking forward to serving you as past president of the chapter for 2022, and working alongside our newly-elected Executive Board, with Becky Bost serving as your 2022 president.

The beginning of 2021 was much like 2020 due to the absence of conferences and in-person meetings; however, we closed the year with three fantastic in-person conferences that were well-attended. These events provide assurances that 2022 will return to something that feels like the old normal.

We close each year with our annual leadership training and this year was no different. The training was held at the Marriott Greensboro Downtown and attendance was upwards of 50 people. Attendees included Jill Wilbeck, Chapter Relations Manager, APWA national offices; Keith Pugh, Region III APWA Director; ITRE staff; outgoing and incoming officers; and several of our new members. The training covered topics ranging from budgets to scholarships, giving new officers and new members a broad look at chapter obligations and accomplishments. I am excited for the new officers taking on their roles and I look forward to working with them in the coming year.

The new year includes many conferences at various planning stages and I am hopeful each of you can attend at least one conference. If you are only able to attend a single conference, I would encourage you to consider PWX2022, the APWA National Conference. PWX2022 will be held in Charlotte at the end of August, marking the first time the event has come to North Carolina. The national conference offers an unprecedented opportunity for many of our members.

I close with a thank you to all my APWA family for a fantastic year. We started our recovery during 2021. We will completely re-engage in 2022!

1.11

Christopher W. McGee, PE APWA-NC President

AMERICAN HIGHWAY PRODUCTS

RAISING AMERICA, ONE INCH AT A TIME

THE MOST EFFICIENT, POWERFUL **EXPANDING RISER AVAILABLE. REDUCE YOUR RESURFACING COSTS.**

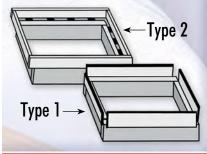
Accommodates all Diameters. 1"diametric variance. Available in heights of $\frac{3}{4}$ and up with remarkably durable construction and tremendous staying power. Simple, one-piece assembly allows for quick installation.

INCLINED RISER. Now you can RAISE & TILT the manhole cover.

PIVOTED TURNBUCKL MANHOLE RISER © ΟΝΕ ΔΔΥ SERVICE Patent Pending

CATCH BASIN RISERS

Fabricated to your specifications in America with domestic steel.



SAFETY RAMPS Save money! Eliminate claims! Protect motorists from transverse milled edges or steel utility plates.



MANHOLE SAFETY RAMP

Smooth over raised manholes during construction projects while increasing safety and saving money by re-using them over and over.



VALVE BOX RISERS Patented compression

NEW

valve box risers are expertly fabricated to your specifications.

I.D. LOCATOR Easily locate and identify utilities after paving. Pop-up design works with up to four inches of asphalt overlay.



RUBBER

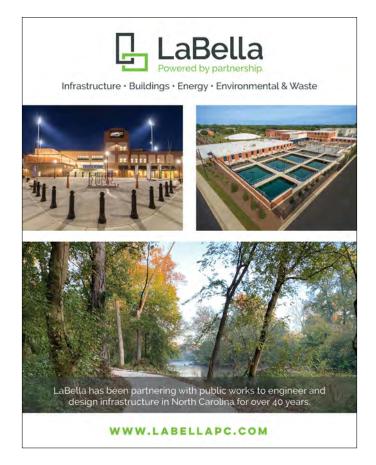
ADJUSTMENT RING

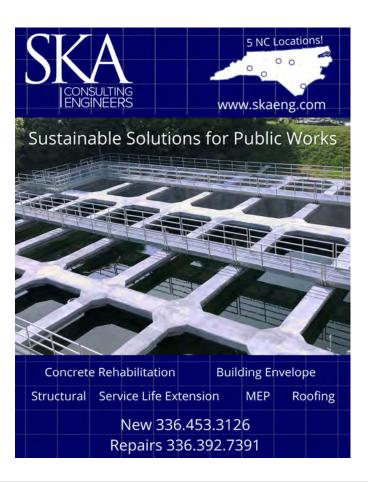
SEWER LID SEAL KIT Eliminate lid vibration characteristics and reduce moisture penetration.



PH: 888-272-2397 · FX: 330-874-3800 · WWW.AHP1.COM · 11723 STRASBURG BOLIVAR RD NW · BOLIVAR, OH







OPEN YOUR EYES TO A CREDIT UNION

At Local Government Federal Credit Union, you're not a number — you're a member.

As a not-for-profit cooperative, our mission is to improve the lives of our members. Our fees and loan rates are low and our dividends competitive to help you keep more of your money. Each member is a stakeholder in LGFCU and gets a vote to help shape our future.

6 🖸 🤟 🎯

See the difference LGFCU's financial products and services can make for you.

GET DETAILS AT LGFCU.ORG/JOIN.



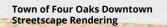


Federally insured by NCUA

PARTNER FEATURE

Creating Pedestrian-Friendly Streestscapes Benefits People, Planet, and Profitability

Written by Caitlyn Myers, Marketing Manager | WithersRavenel



andscape Architects and Urban Planners are helping create pedestrian-friendly streetscapes that balance the needs of pedestrians, cyclists, and motorists. These improved streetscapes protect travelers, enhance communities, and drive economic development.

Fayetteville Street in Raleigh is a primary example. For 30 years, the street was closed to motor vehicles. The downtown thoroughfare acted as a pedestrian mall until 2006, when it reopened to vehicle traffic amidst much celebration. Both eras reflect the idea that downtown areas exist in a binary: they either allow or prohibit cars. Today, downtown areas are evolving into a place where pedestrians, cyclists, and motorists can happily coexist as they travel and recreate. Streetscapes are a key part of bringing about this change.

A well-designed streetscape addresses four major concerns: safety, aesthetics, cultural identity, and critical infrastructure. Thinking carefully about where and how these elements intersect in a specific project opens pathways for maximizing their benefits.

A streetscape designed for safety provides everyone the ability to see and navigate their surroundings. A savvy design avoids blind corners and accidental hiding places, provides adequate lighting, and uses signage to

WithersRavenel

clearly direct visitors. Designated bicycle lanes and landscape buffers between road traffic and sidewalks can also increase safety.

In the Town of Burgaw, for example, WithersRavenel proposed a shared street concept where sidewalks and vehicular travel lanes were at the same elevation. Special paving, street trees, and planters along Courthouse Avenue create a safe place for motorists, pedestrians, and other visitors. The plantings provide shade to reduce heat island effects, and the porous paving reduces stormwater loads on existing infrastructure. These stormwater benefits are also on display at the Greensboro Downtown Greenway, part of a sustainable stormwater system.

Aesthetic considerations include getting to know the local history, ordinances around sign styles and building facades, and contextsensitive choices for construction materials. When making recommendations, WithersRavenel considers such factors as expected traffic volumes, operations and maintenance capabilities, the availability of local materials, and community branding.

For the Town of Four Oaks Downtown Streetscape Master Plan, our planners suggested shifting the curb lines to expand sidewalk areas and coordinating paver types to be used in the sidewalks and crosswalks. Street trees were proposed to help with shade and screen overhead electric lines. An oak leaf motif was and foremost involves talking to residents and local stakeholders to capture their stories and capitalize on their unique perspectives. It also includes researching historical texts, maps, and photographs.



Armed with this historical information, we consult the community with precedent images to find out their tastes for showcasing its identity. The results are woven into the streetscape

design via murals, sculptures,



also incorporated into the main intersection, a common example of the overlap between aesthetics and cultural identity. Cultural identity encompasses the past, present, and future through storytelling and public art. Uncovering and reflecting a community's identity is a collaborative process that first and interpretive signage, as well as figural or abstract imagery used on benches, trash cans, retaining walls, and light poles.

"In Whiteville, the historical identity of the downtown area has been one of railroad activity and small business success stories," noted Sean Martin, former Economic Development Planner at the City of Whiteville and current Town Administrator of the Town of White Lake. "Through the streetscape project, downtown Whiteville is able to highlight the historical cultural identity of the area while providing improvements to the area to recreate the downtown square once observed as Vineland Station."

Finally, streetscapes incorporate critical infrastructure, which offer opportunities for sustainable design. Stormwater control measures, for instance, may incorporate green infrastructure principles. Because half of downtown Whiteville is in a floodplain, WithersRavenel proposed streetscape infrastructure to help alleviate recurring flooding. Other sustainable solutions include solar-powered lighting, reclaimed materials, cool roofs and cool pavements, and accommodations for public transit and cyclists.

Harmonizing safety, aesthetics, cultural identity, and critical infrastructure make streetscapes that feel safe and welcoming to pedestrians, cyclists, and motorists. They encourage visitors to park farther away—or ditch their cars



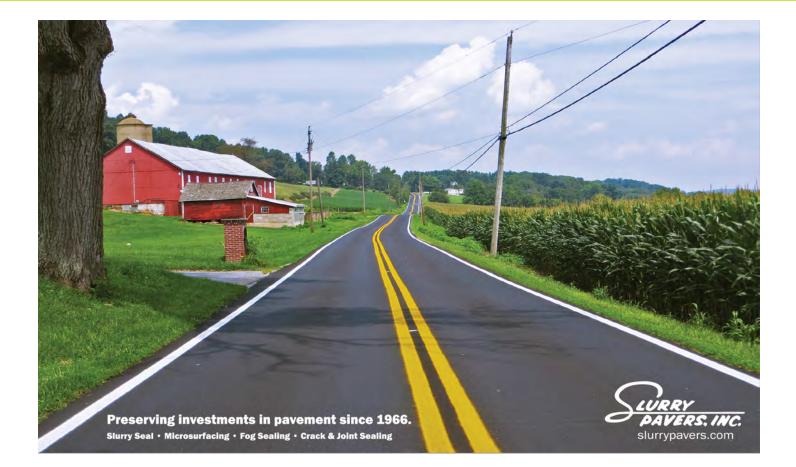
entirely—and explore downtown on foot. This leads to more traffic at shops, restaurants, and galleries. For this reason, streetscapes are excellent economic drivers.

Mr. Martin agrees:

"An enjoyable walk downtown invites the public to shop local, observe the natural beauty of the area, and make a new friend or catch up with a neighbor. The economic impact of the [Whiteville] streetscape plan is evident as the revitalization continues in the downtown area through the addition, retention, and expansion of small business and mixed-use residential projects."

Because streetscapes incorporate form as well as function and rely heavily on stakeholder involvement, they can also act as vehicles to gain support for less exciting projects like utility replacements. It can be challenging to secure community buy-in for replacing aging water or sewer lines on a busy street; it is a lot easier to fold a utility replacement or upgrade into a streetscape project where that same road disturbance will become an attractive downtown promenade. The biggest hurdle to creating streetscapes is often the large price tag. This is often overcome by planning a streetscape project to be completed in phases over multiple years as funding becomes available. Fortunately, this puts municipalities in a position to partner with other agencies, including the NCDOT, and funding sources such as the U.S. Department of Housing and Urban Development, U.S. Department of Agriculture, and North Carolina Department of Commerce.

WithersRavenel has planners, landscape architects, and funding specialists to take your pedestrianfriendly streetscapes from concepts to concrete. By working collaboratively with municipalities, citizens, and other stakeholders, they create urban environments that strike a balance between the built and natural landscape while encouraging businesses and communities to flourish.



Partnering to shape the best results for your community.



🚫 Water & Wastewater

- 🥙 🕅 Civil Engineering
- 🖉 Water Resources
- 🗟 Solid Waste
- Electrical Engineering
- Mechanical, Electrical,
 & Plumbing
- Survey & Construction
- Land Planning & Recreation
- 🏽 Environmental
- Consulting Services

Shaping Communities Together

844.448.4333 mcgillassociates.com



NC Land + Water Fund METHODIST UNIVERSITY Golden Leaf Foundation Grant **TOWN OF CHADBOURN**

WE KNOW FUNDING

we are experienced in helping our clients acquire + utilize grant funding to complete their project goals

McAdams

TOWN OF HUNTERSVILLE Water Resources Development Grant CITY OF FAYETTEVILLE NCDA+CS Grant



DIVISION NEWS

Stormwater Management Division Celebrating a Successful Year in Stormwater

Submitted by Jaclyn Stannard, Stormwater Program Administrator | Town of Garner



This year's APWA-NC Stormwater Management Division conference held in Asheville was a huge success! The annual conference was Sept. 26-28 and had great in-person attendance as well as virtual participation amid the ever-changing pandemic climate. Stormwater professionals around the state were glad to gather together for face-to-face time after nearly two years apart.

This year's H. Rooney Malcom Stormwater Professional of the Year award was awarded to Dr. Bill Hunt, a William Neal Reynolds Distinguished University Professor and Extension Specialist at North Carolina State University. Bill was surrounded by many of his former students who were in attendance at the conference in various roles within the stormwater field across the state.

Other highlights of the conference included a lively social, along with workshops and discussions on topics ranging from sustainability and climate change, to watershed planning and program management.



The conference wrapped up with a panel discussion that featured several different-sized municipalities from throughout the state speaking about their perspectives on increasing drainage issues. The 2021 APWA Stormwater Management Division conference was a huge success thanks to hard work by the Stormwater Management Division board and other key members of the APWA team.

A huge shout-out and big thank you to Kate Davison from ITRE. Kate has helped the board with several successful virtual education sessions while also providing all the general sessions of the stormwater conference on a virtual platform. The Stormwater Division looks forward to planning its 2022 annual conference in Winston-Salem next year.

DECEMBER 2021

DIVISION NEWS

Technology Division Drone Workshop Brings Local UAS Leaders Together

Submitted by Jason McMahon, GISP, FAA Drone Pilot



The Technology Board of the APWA-NC Chapter hosted a public drone workshop October 27 at Dix Park in Raleigh. The event featured presentations by various technical experts in the field of Unmanned Aircraft Systems (UAS) as they reviewed the exciting project work being conducted in a variety of applications around North Carolina and beyond.

Roughly 50 attendees gathered at the Greg Poole, Jr. All Faiths Chapel at Dix Park for the half-day event, which featured five presentations and static technology demos followed by a catered box lunch.

Ravi Soneja, CMT-LiDAR with Ayres Associates, Inc. (who were also an event sponsor), kicked off the morning presentation session with a thorough overview of LiDAR technology and the various applications with regards to public works projects. Seth Swaim, PLS, GISP, FAA Part 107 Pilot with WithersRavenel, followed by continuing a deeper dive into project work examples where drones have combined both aerial and terrestrial LiDAR and imagery to create immersive models used for visualization, analysis, and feature extraction.

After a short break, Scott Currin with Air Vision LLC provided the audience with a primer on impending changes to the FAA's drone regulations, specifically with regard to remote identification of drones and operation of drones over people. Switching gears to the world of cutting-edge research, Thomas Zajkowski of NC State's ITRE provided a sweeping survey of the exciting work his team is doing to push the boundaries of unmanned flight while helping to develop the future high-tech infrastructure that will allow drones to safely and effectively proliferate as a part of our society. Finally, Matt Nanney GISP, RPA with AECOM, reviewed important lessons learned from his extensive and diverse background in mobile data collection and the application of drone technologies to enhance environmental monitoring activities.

Following the presentation sessions, attendees were able to mingle with the presenters and each other while engaging with various static technology displays featuring some of the latest and greatest drone models taking the survey world by storm. While not officially part of the APWA event, the WithersRavenel survey team demonstrated some of their drone technologies in the nearby flying field, capping off the day of activities with exhilarating flight demos of the WingtraOne and DJI Matrice drones used heavily in their survey work.

All said and done, the 2021 Drone Workshop was a successful and much-anticipated event after almost a year and a half of postponement due to the pandemic. The opportunity to meet, see, and listen in-person allowed attendees to engage with the technology on a level not possible through virtual spaces. The Technology Board would like to extend gratitude to all those who presented and attended in order to make this event possible. A special thank you to the City of Raleigh Department of Parks, Recreation and Cultural Resources for generously hosting the event, Ayres Associates, Inc. for sponsoring the event, and Smith Gardner, Inc. for providing lunches to all those in attendance.

THE FP5 IS ELECTRIC











OPPORTUNITIES TO SUPPORT

PWX 2022 Conference Charlotte Convention Center

AUGUST 28-31 2022

GET EXPOSURE WHERE IT MATTERS!

On behalf of the American Public Works Association - North Carolina Chapter, we thank you for the support you have provided to the public works programs that has made our state and region the envy of many. You are a key member in our APWA-NC Chapter, so we are contacting you to ask for your financial support as we prepare to host APWA 2022 PWX, "The Best Show in Public Works", with approximately 80,000 net square feet of exhibit space and nearly 6,000 of our fellow public works colleagues from North America and beyond, right here in Charlotte! This is an amazing honor and opportunity for our local members and our region.

We are hosting PWX 2022 here in Charlotte because of partners like YOU! Our chapter, and the entire state of North Carolina, have some of the best private companies that support Public Works ANYWHERE in the nation. On behalf of the entire APWA-NC Chapter, we thank you in advance for your support that will allow us to achieve the very best PWX ever on August 28-31, 2022.

Our <u>Sponsorship Packet</u> highlights our local partner program and summarizes the different levels of partnership and benefits that you will receive for being a PWX 2022 local partner.

Your support for the APWA-NC Chapter and PWX 2022 is so important. For partnering contact information, please reach out to:

Cameron Patterson, *Fundraising Co-Chairperson* cpatterson@withersravenel.com | (919) 868-8027

Jennifer Smith, *Fundraising Co-Chairperson* jennifer.smith@charlottenc.gov | (704) 336-7924

CLICK HERE TO REGISTER!

Ask about partnership levels!

Thank You To Our Partners! CARDINAL PARTNER Carolina Industrial auipment Inc. DOGWOOD PARTNERS **AECOM** Delivering a better world **BOLTON** & MENK Group **Dude Solutions** WithersRavenel Our People, Your Success, SCUPPERNONG PARTNERS Hazen

IN THE COMMUNITY

Young Professional Spotlight Abigail Rosendale

Submitted by APWA-NC Young Professional Committee

GET TO KNOW ABIGAIL!

- **CAREER:** Stormwater Specialist II at the City of High Point
- INDUSTRY SECTOR: Stormwater Management
- APWA-NC MEMBER SINCE
 2020



Originally from Greensboro, North Carolina, Abigail received her Bachelor of Science with a Major in Environmental Studies and a Concentration in Ecology and Environmental Biology from UNC Asheville. Abigail worked as a Water Quality Intern with the City of Greensboro before being hired on full-time as a Stormwater Specialist with the City of High Point in September of 2019.

In Her Own Words

"I chose to study the environment without a direct intention of what I wanted to do with my degree. My program introduced me to many fields and opportunities within the environmental sector and I was fortunate to gain hands-on experience in a place as beautiful and biodiverse as Western North Carolina. Working as an intern with the Environmental Quality Institute in Black Mountain, NC opened the door to a Water Quality Internship with the City of Greensboro, where I was exposed to the world of stormwater for the first time.

"My journey with stormwater continued when I was hired as a Stormwater Specialist at the City of High Point. At High Point, I am surrounded by a team of like-minded, civically-engaged individuals. I am continually surprised by the vastness of the field of stormwater and the breadth of public works. Although the urban streams of High Point may not be as pristine as the mountain streams of WNC where I studied, I prefer supporting an urban community and mitigating water pollution where it is most needed. I enjoy how connected the public and private sectors are to support a common goal and the many opportunities for continuing education in this field."

Looking Forward

Abigail is looking forward to learning and growing in her position and continuing to make connections both at the City of High Point and within the public works sector. She is also excited to develop new student engagement programing for the APWA-NC Young Professionals Committee.

A Little Advice

"Jump on any and every opportunity to invest in yourself, do not be afraid to ask for help, and be confident in yourself because you know more than you think you know."

Mentor

Kelsie Burgess and Robbie Baker

Outside of Work

Abigail currently resides in Winston-Salem with her partner, William, and black cat, Basil. She enjoys cooking, traveling, and ignoring the needs of her many houseplants. Abigail is also a fan of most casual outdoor activities such as hiking, camping, and gardening. The photo is of Abigail and William during a trip to the beach this past summer.

For more information on how to get involved, contact YPNC Chair Kaylyn Forte, PE, at forte@mcadamsco.com.

IN THE COMMUNITY

Young Professional Committee Thank you for your support this year!

Submitted by APWA-NC Young Professional Committee

Pictured is the APWA-NC Stormwater Committee at the 2021 Stormwater Division conference in Asheville.

the season to gather together and reflect on all we've accomplished this year! The APWA-NC Young Professional Committee did exactly that by hosting a "Come Out and Meet Your YPs" Mixer at Bourbon Bowl in Downtown Greensboro on Dec. 2. This event occurred after the APWA Leadership training concluded nearby. After a year full of many virtual events and engagement opportunities such as trivia lunches, monthly meetings, and even a virtual escape room, it was truly a gift to be able to come together in person and connect with one another again. The Young Professional Committee was very thankful for all of the partners who made this opportunity possible and are looking forward to 2022 including many more in-person events.









GET EARLY ACCESS TO YOUR DIRECT DEPOSIT

The **Civic Bonus Checking Account** delivers for local government employees. Access direct deposits up to 3 days earlier⁺ with our Early Deposit feature and unlock competitive dividends with your spending. There are even more ways we can help your funds go further.

No ATM Fees Get unlimited ATM fee reimbursements^



Deposit Checks

Use the Civic app to deposit checks with a quick photo*

Win a Tesla

Earn 1 entry per month with at least 10 purchases[‡]

Visit CivicFCU.org to get started.

⁶ Fees applicable to any ATM network will be charged to member account and then refunded to the same account by Civic within two business days. Reimbursed funds will be available for use following the credit union's nightly batch processing.
⁸ Data fees may apply. Please chack with your service provider.
⁹ Early access to direct deposit funds depends on the timing of the payer's submission of deposits. We generally post such deposits on the day they are received which may be up to three days earlier than the payer's scheduled payment date.
¹ No purchase necessary. Visit civic/cuorg/disclosures to see official contest rules.

Federally insured by NCUA

civic

CHAPTER CONTACTS

APWA-NC 2021 OFFICERS

President Christopher W. McGee City of Raleigh christopher.mcgee@raleighnc.gov

Vice President Mae Bryant City of Charlotte Mae.Bryant@charlottenc.gov

Alternate Delegate James B. Martin, PE NC State University/ITRE jbm@ncsu.edu *President-Elect* Rebecca L. Bost LaBella Associates, PC rbost@labellapc.com

Treasurer Dale James City of Greensboro jamesstephend@bellsouth.net Past President Robby D. Stone, PE City of High Point robby.stone@highpointnc.gov

Delegate Jeffery P. Brown, PE Cumberland County jbrown@co.cumberland.nc.us

APWA-NC 2021 DIVISION PRESIDENTS

Equipment Services Steve Huss City of Gastonia steveh@cityofgastonia.com

Streets Shane Parker Summit Design and Engineering Services shane.parker@summitde.net Facilities and Grounds Mark Hale Town of Garner mhale@garnernc.gov

Stormwater Jacklyn Stannard Town of Garner jstannard@garnernc.gov Leadership & Management Keith Garbrick LaBella Associates, PC kgarbrick@labellapc.com

Solid Waste Andrew Martin Orange County Solid Waste Management amartin@orangecountync.gov

CLIENT-CENTERED DESIGN AND ENGINEERING SERVICES

Architecture // Planning // Surveying and Geomatics // Civil Engineering // Construction Materials Testing and Special Inspections // Construction Engineering and Inspection // Geotechnical Engineering // Industrial Coatings // Structural Engineering // Maintenance Management // ITS/Traffic Engineering // Construction Management



919.732.3883 www.summitde.net



Want to be in the next issue?

NEWSLETTER SUBMISSION DATES

Each technical division is responsible for submitting at least one article per newsletter. Content of the article is very flexible. Suggestions include trends in your industry, information about your division conference, or simply projects in your area. This is your chance to get creative while educating others about what is happening in your division.

Our first of four issues in 2022 will be published in March. Ads are due by February 14, 2022. Remaining deadlines for the year are May 15, August 15, and November 15. More information about ad sizes and prices will be released at the beginning of the year!

Please email Bri Labbate at blabbate@withersravenel.com if you have any questions or if would like to place an ad in 2022!



The American Public Works Association is dedicated to education in the related areas of public works. We help our members, the public, and policy makers work together to provide the public works services needed to keep our communities operating smoothly and safely in concert with the latest environmental and public health standards. Through the national association and our 63 chapters in the US and Canada, we offer a comprehensive array of services to meet this educational mission.