# **The Metro**



# **April 2021**

# Inside this issue:

Expo & ROADeo 2021	2
2021 Chapter Awards	3
Lake Branch Holiday Ex- travaganza	9
Lake Branch Awards Cere mony	- 10
Fox Valley Branch Awards Lunch	3 11
Suburban Branch 2021 Update	14
Southwest Branch Recap	16
My PWX Experience	18
Arlington Heights Start	s 20
MWRD Biological Treat- ment Pilot	22
Barrington Accomplishments	25
My PWX Experience	24
Northern IL Food Bank Packing Event—FVB	25
Non-Traditional Staffing	29
Village of Fox Lake Inter- connect	30
Innovations in Roadway Saffety Assessment	31
Marking Paint Recycling	32
Hustle Chicago Stair Clim	b 34
Save the Date	36

# **APWA Chicago Metro Chapter**

# **Letter from the Chapter President**

Michael Hall, Deputy Director of Public Works, Village of Schaumburg



Michael Hall Chapter President

s we step into spring and soon summer and the temperatures rise to a point that we don't

mind eating outside

again, it definitely feels like there is change in the air. As last year was filled with cancelations, postponements and frustration, this year is filled with deferrals and the hope of some level of normalcy. We have a lot planned this year including golf outings, modified programming with the Expo and certainly some celebration of awards including a new top ten winner this year...

As I referenced in my greetings from the Chapter message, APWA has announced the theme of "Stronger Together" leading into National Public Works Week. There is no point in time in which I think this slo-

gan is more appropriate than today. I have certainly leaned on many colleagues over the years and this year has been no exception. This year's executive team has been exceptional making tough decisions on the Chapter finances, leading the way in finding ways to host events like this year's EXPO, kicking off planning for PWX in 2024 and hopefully many more events as well.

In addition to the APWA executive team, I am equally as fortunate to work with an amazing team of employees at the Village of Schaumburg Engineering and Public Works Department. As I think about how we are stronger together, I cannot imagine getting through a pandemic without the hard working men and women that deliver water to our houses, clear sewer blockages, respond to storm events, keep our roads safe and maintain and improve our infrastructure.

Volume 53, Issue 1

I am committed to advancing the industry with these hard working individuals and will be working together with many of you towards accomplishing goals as outlined in our strategic plan so we can be a stronger organization. We have already established an asset management committee who will be a resource for the Chicago Metro APWA Chapter members that operate, maintain, and improve public infrastructure through advocacy, education, resource development, and member engagement in the field of asset management. This is just one of the many goals we have planned for this year.

Thank you to Jorge Cruz for putting this newsletter together, he is truly a great resource of this Chapter and thank you to all that sponsored this publication and who sponsor Chapter events. We are definitely stronger together!

Mike 🚹

# **Hope Springs Eternal Fox Valley Branch Blood Drive**

By: Karen Kase, Natural Resource Manager, Hampton, Lenzini and Renwick

The Fox Valley Branch ended up collecting 18 units of blood which were donated!!! The Fox Valley Branch Blood Drive in conjunction with Versiti Blood Centers was held at South Elgin Public Works Department.

That is a fantastic turn out!

I want to say a huge thank you to Mike Millete, Colleen Chase

and Brenda Deckert at South Elgin for their coordination! On the day of the event, Mike stayed late to get the building closed up after the last donor, and Brenda got the room all set up for us, so thank you both very much!

Thanks to everyone!

Karen 4





One of the volunteers donating blood.

## **The Metro**

# 2021 Chapter Officers

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## Southwest Branch President

Arlan Schattke Village of Plainfield aschattke@goplainfield.com

#### Suburban Branch President

Kristen Mehl Village of Roselle kmehl@roselle.il.us

# **Chapter Newsletter**

Chicago Metro Newsletter is emailed to Chicago Metro members three times per year.

The December issue is mailed.

Communications/Publicity Chair/ Newsletter Editor:

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Please update your member information at:

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To advertise in the newsletter please contact Jorge Cruz via email at <a href="mailto:cruzj@wilmette.com">cruzj@wilmette.com</a> or by phone: 847-853-7623.

# Chicago Metro Expo and ROADeo 2021

by Catherine Case, Civil & Environmental Consultants, Inc.

The APWA Chicago Metro Chapter is excited to announce that planning is underway for the 2021 Expo and Roadeo conference! With many unknowns due to the pandemic, the dates for the show are scheduled this year for **July 28 and 29, 2021**, and will once again be held at the Odeum in Villa Park. Booth sales are currently underway. There are many unique sponsorship opportunities available! Sponsor the directional arrow floor stickers, a water station, an outdoor sign, and many other options! The layout has been revamped to mostly outdoors. Now you can visit vendors without missing the ROADeo! The committee is also working on incorporating an app for participants to use during the show which will include vendor contact information, schedule of events, and more!

# **Networking**

The greatest benefit that we hear from our attendees is meeting with peers and industry partners to learn what they are up to. You can spend time meeting with vendors, spend time in the hospitality booth and learn more about APWA, and visit the exhibitors to fill up your door prize card to win great prizes! If you are not ready for the show to end, the Suburban Branch is hosting the Expo Extra Happy Hour. Sign up on the website coming soon.

# **ROADeo**

The Roadeo team promises another great show. If you have never attended the Roadeo, it is a show not to be missed. All your favorite competitions will be back in action for 2021. More details to come!





July 28 & 29, 2021

The Odeum Expo Center 1033 North Villa Ave. Villa Park, IL 60181

# **EXPO Committee**

It takes a cohesive team to put together such an extensive show and we are excited to have a vibrant committee this year. There are many sub-committees that work hard to put on the conference, and we thank everyone who has volunteered to help out! If you would like more information on how you can become a part of this awesome team, please email <a href="mailto:expo@apwachicago.net">expo@apwachicago.net</a> to request more information!

Registration is coming soon, so check out the Chapter website at <a href="http://chicago.apwa.net/">http://chicago.apwa.net/</a> for updates and sign up!

# 2021 Chapter Awards

by Dan Strahan, PE, CFM Gewalt Hamilton Associates Inc.

n Thursday, January 28, 2021 the Chicago Metro Chapter Awards Committee members, consisting of Dan Kaup, Leo Morand, Scott Rodseth, Scott Threewitt, Darren Monico, and Dan Strahan met to consider the various nominations that were received for the 2021 Chapter Awards Program.

We are happy to announce the recipients of the 2021 Chapter Awards. Congratulations to everyone involved. In lieu of an in-person awards lunch, this year the ceremony was virtual and conducted via zoom. You can watch videos of the recipients on the chapter Facebook page and YouTube channel.

# STRUC TURES - LESS THAN \$5 MILLION — Village of Romeoville

Public Works & Administration Building

The 9,000 SF building features higher insulation values in the exterior walls, an abundant amount of natural light, LED light fixtures, and recyclable wood veneer planks were specified for accent walls. All private offices contain operable windows and the building is mechanically multi-zoned to improve thermal comfort. The plan is flexible and can also easily accommodate future staff growth without the need of an immediate building addition.

CONTRACTOR - MADISON CONSTRUCTION PRIMARY CONSULTANT- ROBERT JURIS & ASSOCIATES

# STRUC TURES - \$5 TO \$25 MILLION — Village of Mundelein

Public Works & Engineering Facility

The Village of Mundelein consolidated the operations of three separate buildings to a single 21-acre property to better serve the community and help revitalize the downtown area. The project included the renovation of a 26,000 square foot office building and the Design/Build of a 4,320 SF salt storage building, a 96,000 SF Vehicle Storage and Maintenance Addition, a 25,440 SF Pre-Engineered Metal Building for Cold Storage, and 5,000 SF of concrete storage bins.

CONTRACTOR - CTS GROUP (A VEREGY COMPANY) PRIMARY CONSULTANT- CTS GROUP (A VEREGY 8.25

(Continued on page 4)



2021 Award Recipients

Public Works & Administration Building



Public Works & Engineering Facility







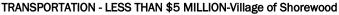
2021 Awards (Continued from page 3)

# STRUC TURES - \$25 - \$75 MILLION - City of Evanston

Robert Crown Community Center, Library, & Park

In 2017, Elk Grove Village established Elk Grove 2025, a long-range capital plan. Construction of the 84,854 square foot James Paul Petri Public Works Facility includes new offices, locker rooms, garage space for 82 vehicles and 63 pieces of equipment, training room, and a smart water station.

CONTRACTOR - BULLEY & ANDREWS PRIMARY CONSULTANT- WOODHOUSE TINUCCI ARCHITECTS



US 52 @ River Road

The US Route 52 at River Road Intersection Improvement project provided critical capacity enhancements to one of the busiest intersections in the Village of Shorewood. Significant efforts were made to ensure the project was committed to improving capacity, enhancing public safety, increasing multimodal connectivity and establishing an iconic architecture gateway feature at the intersection.

CONTRACTOR – D CONSTRUCTION PRIMARY CONSULTANT- CHRISTOPHER B. BURKE ENGINEERING, LTD.



Main Street Streetscape

Following completion of the Route 31 (Main St.) Western Bypass in 2014, the Village created a Downtown Master Plan to revitalize the infrastructure and create an attractive place for shops, restaurants and businesses for years to come. The Main Street Streetscape Project reconstructed all underground/wet utilities, buried the overhead/dry utilities, reconstructed the pavement, and created pedestrian friendly and attractive streetscape elements.

CONTRACTOR – MARTAM CONSTRUCTION PRIMARY CONSULTANT- CHRISTOPHER B. BURKE ENGINEERING, LTD.



MDW Bridge Z-100 over the Fox River

The MDW Bridge Z-100 project provided a new railroad bridge for the Metra Milwaukee WestLine crossing of the Fox River – replacing the existing bridge and adding a second mainline crossing. The new structure yielded immediate benefits to Metra and the community by improving efficiency, flexibility, and system continuity. The project eliminated an existing Metra bottleneck at the Fox River, increased the reliability of the Milwaukee West Line service, accommodated future passenger ridership and freight operations, and allowed for better operational flexibility with a second mainline track.

CONTRACTOR - ICC GROUP PRIMARY CONSULTANT- TRANSYSTEMS

# ENVIRONMENT - LESS THAN \$5 MILLION — City of Elmhurst

Saylor/Swain/Vallette Stormwater Improvements

The City purchased four properties within a flood prone area for the purposes of creating flood storage. A pump-evacuated underground StormTrap system was constructed on those properties, and in conjunction with box culvert installed in the adjacent right-of-way areas, created over 7 acre-feet of flood storage for the neighborhood. The project provides valuable flood-reduction benefits for 94 homes located within the study area for a 100-year magnitude storm event.

CONTRACTOR – EARTHWERKS PRIMARY CONSULTANT- CHRISTOPHER B. BURKE ENGINEERING, LTD.



Robert Crown Community Center, Library, & Park



US 52 @ River Road



Main Street Streetscape



MDW Bridge Z-100 over the Fox River



Saylor/Swain/Vallette Stormwater Improvements

Page 5

## The Metro

2021 Awards (Continued from page 4)

# ENVIRONMENT - \$5 TO \$25 MILLION — Village of Lincolnwood

Lincolnwood Transmission Main

The Village of Lincolnwood experienced a number of significant rate increases imposed by its whole-sale water supplier that had placed great strain on its rate payers as well as the Village's ability to make improvements to its water system. In 2018, the Lincolnwood and the City of Evanston completed a water supply agreement that provides Lincolnwood with a lower wholesale water rate and certainty with regard to future rate increases. The cost savings were determined to be sufficient to fund construction of the necessary transmission main that connects the two systems as well as some improvements to Lincolnwood's aging water system.

CONTRACTOR - RELIABLE CONTRACTING PRIMARY CONSULTANT- CHRISTOPHER B. BURKE ENGINEERING, LTD.



**CSO** Mitigation Project

Joliet's Long Term Control Plan (LTCP), Combined Sewer Overflow Phase II and III projects utilized innovative equipment and construction techniques to cost effectively construct infrastructure to convey and treat up to 117 million gallons per day of combined sewage. Improvements included construction of a wet- weather screening structure, inlet and outlet siphon control structures, circular drop shaft, 865-foot long, 111.5-inch diameter tunnel, rectangular drop shaft with future integral wet-weather pumping station, West Side Interceptor, and wet-weather treatment facility. The project included several complex elements including construction of a tunnel below the Des Plaines River and modifications to the concrete river wall that was constructed in 1927.

CONTRACTOR - JOSEPH J. HENDERSON, INC. PRIMARY CONSULTANT- STRAND ASSOCIATES, INC.



On November 22, 2019 the City of West Chicago discovered a water main leak totaling 3600 gallons per minute. Following further investigation, the location was discovered at 700 Roosevelt Road at a location where the water main is 18' deep and just 150' from the DuPage River. The break in the main grew and ultimately it was determined that 60' of water main would require replacement. City staff worked together with the contractor with both putting in several 24 hour shifts and restoring service by December 4, 2019.

CONTRACTOR- TRI-COUNTY EXCAVATING



AWARD OF MERIT - RON STRZELECKI

Village of Niles Water & Sewer Supervisor, Ron Strzelecki, came to the rescue of a Niles resident who was down on his luck. The resident had quit his EMT job to care for his parents. His mother recently passed away and his father was in a care facility. With no income and costly medical bills, his sewer lateral became obstructed so badly that he could not use his water. When Ron learned of the resident's situation, he gave up his personal time on a Friday evening and all day Sunday to excavate and repair the sewer lateral at no cost to the resident.



RON STRZELECKI



Lincolnwood Transmission Main



**CSO Mitigation Project** 



Water Main Repair

## The Metro

2021 Awards (Continued from page 5)



CONTRACTOR OF THE YEAR BERGER EXCAVATING





EXCEPTIONAL PERFORMANCE AWARD - ADVERSITY PETER D'AGOSTINO

# CONTRACTOR OF THE YEAR - BERGER EXCAVATING

The Village of Buffalo Grove awarded a \$1.8 million Road Reconstruction and Storm Sewer Improvement Project to Berger Excavating in May of 2020. Berger handled the challenges of coordinating access for a public park's patrons, 123 residents, and commuters alike. With the added challenge of 2 adjacent simultaneous unrelated construction projects, Berger minimized these impacts through thoughtful staging, workmanship, and site cleanliness. They vigorously approached the project to finish ahead of schedule and under budget.

# PROFESSIONAL MANAGER OF THE YEAR AWARD - PUBLIC FLEET - KURT SMITH

VILLAGE OF WILMETTE

Kurt has provided exemplary service to the Village of Wilmette for over 28 years. While his daily approach is understanded, his contributions to the successes of the Engineering and Public Works Department cannot be overstated. Plan and simple, Kurt is good people, and his enduring values will leave a lasting footprint at the Village. The Fleet Maintenance garage is a better place than when he started, providing a solid foundation for the next generation to attain success.



PROFESSIONAL MANAGER OF THE YEAR AWARD – PUBLIC FLEET- KURT SMITH

# SERVICE IMPROVEMENT — ELECTRONIC PERMIT PROCESSING VILLAGE OF BARRINGTON

In 2020, the Village of Barrington successfully transitioned from hard copy permit submittals to electronic permit submittals and issuance. This transition was completed at no cost to the Village by creative utilization of existing resources. These new procedures have improved convenience and service levels for residents and contractors while also lowering Village supplies costs and significantly reducing electronic archiving processing burdens and associated administrative time and expense.

# MYRON CALKINS YOUNG LEADER OF THE YEAR AWARD - MARIE HANSEN VILLAGE OF BARRINGTON

Marie has experience in both the public and private sector, starting her career at Gewalt Hamilton Associates, Inc. before transitioning to the Village of Barrington, where she has served the last four years as the Village Engineer and later as the Director of Development Services. Marie is currently managing the Village's \$70 million CN/Route 14 grade separation project, which is in Phase 2 engineering. Marie has been active in leadership in APWA, chairing a number of committees before being elected to the executive committee as Treasurer in 2018. Following her tenure as Secretary and Vice President from 2019-2020, Marie was elected to serve as President of the Lake Branch in 2021.



MYRON CALKINS YOUNG LEADER OF THE YEAR AWARD MARIE HANSEN

# **EXCEPTIONAL PERFORMANCE AWARD - ADVERSITY — PETER D'AGOSTINO**VILLAGE OF LAKE IN THE HILLS

The past year brought a variety of challenges to public works agencies. The Village of Lake in the Hills faced additional challenges after the sudden resignation of a key member of the team. When asked to step into an interim role and lead the Public Works Department through a difficult transition, Peter rose to the challenge and excelled, despite significant obstacles. As operational staff worked from remote locations and alternated shifts, Peter played a pivotal role in ensuring that protocols were followed, that staff remained engaged to avoid a sense of isolation, and that the tools and hardware needed to maintain operations worked efficiently.

## **The Metro**

2021 Awards (Continued from page 6)

# TECHNICAL INNOVATION — WATER MAIN LINING CITY OF NORTHLAKE

The City of Northlake experienced a water main break at a difficult location: below a railway yard with 36 tracks situated between I-294 and a cemetery. The rehabilitation would require lining a 700' stretch of 12" pipe, which is believed to be the longest ever attempted. After careful planning, the City installed a temporary internal repair sleeve to allow for a structural liner. The excessive length of this lining process was overcome by utilizing an Aqua-pipe epoxy resin to allow for a longer installation time, while also using a more rigorous winch system to ensure the longer, heavier liner could make its way into place. The liner was installed successfully and the water main placed back into service, avoiding any impacts to railroad operations.

# TOP TEN PUBLIC WORKS LEADERS OF THE YEAR — BRIGITTE BERGER-RAISH, PE VILLAGE OF WILMETTE

For nearly 20 years, Brigitte has been an instrumental and invaluable member of the senior leadership team at the Village of Wilmette. She has served as the lead on several major Village initiatives, such as the \$18 million West Park Sanitary Storage Reservoir that reduced flooding for more than 1,300 homes. She currently manages the Village's largest public works infrastructure project ever, a \$70 million stormwater project to reduce overland flooding for thousands of Wilmette residents. Brigitte's engineering and leadership skills have made the Village of Wilmette better as an organization. She empowers staff members, develops leadership and management skills in her assistants, and works to ensure their professional development. She insists on excellence from her staff and achieves it through motivation and example.



TOP TEN PUBLIC WORKS LEADERS OF THE YEAR - BRIGITTE BERGER-RAISH, PE

Congratulations to all the 2021 award recipients!







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# Lake Branch Holiday Extravaganza

by: Marie Hansen, Director of Development Services, Village of Barrington

he Lake Branch held another very successful Holiday Extravaganza virtually on December 18th 2020.

Approximately 60 people enjoyed the festivities which were hosted on Accelevents, a virtual platform that included virtual lounges, speed networking, and a main stage! The Lake Branch has a long history hosting the Extravaganza at Mickey Finn's Brewery in Libertyville and, though we were not able to celebrate at the brewery in person, we were able to continue to support this local business as part of the event. Lake Branch worked with Mickey Finn's to coordinate beer ordering and delivery as part of the event registration and over forty 4packs of beer were ordered and delivered to party-goers before the virtual event!

One of the highlights of the afternoon was an informative session with Jason Martens. the Mickey Finn's Brewmaster. Jason discussed brewing methods, Mickey Finn's beers and answered over 20 beer and brewing related questions from our attendees! John Heinz also took over the Main Stage to award over 40 door prizes, donated by our generous Lake Branch consultants.

When not viewing and participating in the chat feature on the Main Stage, participants were able to explore virtual lounges, such as the "Santa's Magic Lounge" to toast with other Santa's Magic drinkers, "THE Buffalo Grove Room" to chat with one of numerous Buffalo Grove employees, or "The Old Boys Lounge" to catch a glimpse of Heinz and

> Friends. Speed networking was also a hit! By joining this virtual room vou were paired with another participant for a 3 minute conversation before your





Erin Pande receiving the past president plaque

time ran out and you were automatically paired with someone new!

The Branch membership also unanimously voted in the following slate of officers for 2021:

President- Marie Hansen, Village of Barrington

Vice-President- John Clark-Peralte-Clark LLC

Treasurer- Kyle Johnson, Village of Buffalo Grove

Secretary- Peter Stoehr, Manhard Consulting

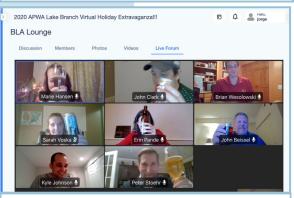
The Lake Branch sincerely thanks Erin Pande from ERA Consultants for her four years as an officer and her term as President in the challenging year of 2020, as well as Scott Pippen for his years as a Branch Director. We welcome Scott Drabicki with Clark Dietz as one of our new Directors.

The Lake Branch would like to thank all the consultants, suppliers and contractors for their generous donations.

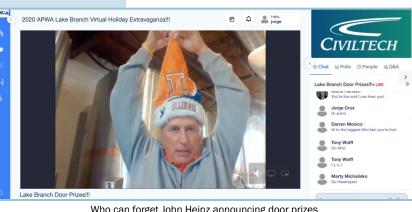
We look forward to continuing to creatively connect with our membership in 2021!



Some of the attendee at this virtual holiday gathering



A virtual toast wishing people happy holidays!



Who can forget John Heinz announcing door prizes

# **2021 APWA Lake Branch Awards Ceremony**

by: Marie Hansen, Director of Development Services, Village of Barrington

This March, the Lake Branch took an opportunity to recognize outstanding projects and individuals in the Public Works field. The Awards Committee, chaired by **Leo Morand** of Gewalt Hamilton Associates, and composed of **Brad Wood**-

bury (Lincolnshire), Bob Phillips (Deerfield), Peter Reinhofer (V3 Companies), and Matt Bartlett (Vernon Hills) reviewed award nominations and presented recommendations to the Lake Branch APWA Executive Board for ap-



proval.

11 Awards were confirmed and acknowledged at the March 2nd meeting. The award categories, winners and projects are listed below:

Award	Recipient	Project
Transportation - Less than \$5M	Village of Long Grove	Robert Parker Coffin Road
Transportation - \$5M to \$25M	Village of Libertyville	Rockland Road
Environment - Less than \$5M	Village of Barrington	Flint Creek Dreamway
Environment - \$5M to \$25M	Lake County Forest  Preserve District	North Mill Creek
Structures - Less than \$5M	Fox Waterway Agency	Shoreline Stabilization and Site Improvements
Structures - \$5M to \$25M	Village of Mundelein	Public Works and Engineering Facility
Structures - \$25M to \$75M	North Shore Gas	Grayslake Gate Station Modernization
Professional Manager of the Year – Public Fleet Category	Jerry Hemmerling	Village of Mundelein
Contractor of the Year	Berger Excavating	
Service Improvement Award	Village of Barrington	Electronic Permit Processing
Myron Calkins Young Leader of the Year	Marie Hansen	Village of Barrington

With over 50 individuals registered, the awards meeting was overflowing with support for our deserving award winners. Presentations on winning projects and words from deserving individuals provided insight into the thoughtful designs, hard work, and dedicated service of the professionals in the Public Works field. The Lake Branch was honored to help acknowledge these incredible achievements and is

looking forward to the Chapter Awards, where many of these projects and individuals will also be recognized!



# **Fox Valley Branch Awards Lunch**

by: Emma Albers, Kimley-Horn



raditionally held at the Two Brothers Roundhouse in Aurora, Illinois, this year the Fox Valley Branch celebrated its 2020 awards winners via Zoom on February 9th. The lunch included project presentations from all the award winners and highlights of individual award winners. The committee received a strong number of submittals this year, pointing to the continued outstanding work happening in public works. Even through a year where it seemed like the world came to a screeching halt, public works never stops!

This year's submissions provided a wide-range of project highlights: a roadway realignment, streetscape, bridge over the Fox River, water main repair, and lead service replacement. Additionally, two individuals were acknowledged for their outstanding dedication to the organization. Congratulations to Joe Czysczon and Peter D'Agostino!

The awards committee is cochaired by **Julie Morrison** and **Dan Kaup**. The 2020 members included **Mike Young**, **Benjamin Zeman**,



Transportation, \$5 Million to \$25 Million: Main Street Streetscape, Village of Algonquin



Transportation, Less than \$5 Million: Eola Road Realignment at US 30, City of Aurora

**Kelly Farley, Ron Rudd, Susan Quasney, Rich Babica**, and **Greg Chismark**. A big thank you to Julie, Dan, and the committee for their effort in evaluating and selecting our winners!

We hope to see you for next year's awards lunch back at the Roundhouse!



Joe Czysczon, Fleet Maintenance Supervisor, City of Geneva Professional Manager of the Year Award – Public Fleet recipient



Exceptional Performance Award - Adversity: Peter D'Agostino, Administrative Services Manager, Village of Lake in the Hills

# Fox Valley Branch Awards Lunch (cont'd)

by: Emma Albers, Kimley-Horn



http://chicago.apwa.net/

# USE APWA MEMBERSHIP TO HELP YOUR COMMUNITY AND YOUR PROFESSION



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Utilize APWA's numerous **networking and mentoring opportunities** to share common goals, challenges, and solutions increasing efficiency for your organization.



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**CONTACT Dan Dinges** at **ddinges@vbartlett.org** or **630-837-0811** for more information about becoming part of the **APWA Fox Valley Branch Chapter** and getting involved in your local activities.



Disaster or Emergency Construction/Repair, Less than \$5 Million: Water Main Repair, 700 E. Roosevelt City of West Chicago



Transportation, More than \$25 Million: Metra MDW Bridge Z-100 Over the Fox River



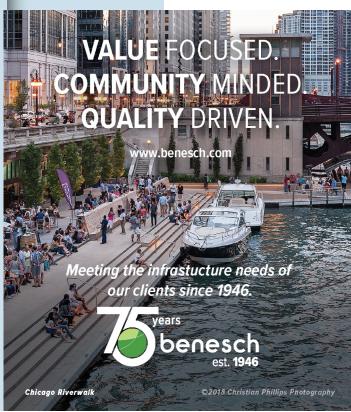
Environment – Less than \$5 Million Lead Service Line Replacement Project, Village of Montgomery

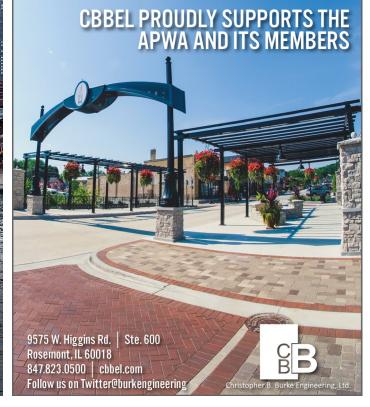


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# **Suburban Branch 2021 Update**

by Kristin L. Mehl, P.E., Assistant Director of Public Works/Village Engineer, Village of Roselle

he Suburban Branch started off 2021 by recognizing our Public Works Awards winners. Unfortunately, this year we were unable to host our annual lunch to celebrate these winners. Instead, each winner created a video about their project or individual that was shared on the Branch's YouTube Channel. This allows everyone the opportunity to continue to honor the successes of these individuals and project teams. We celebrate 7 projects, several of which will also be awarded on the Chapter level. We also recognized 3 professionals for their career achievements

including **Brigette Berger-Raish** from the Village of Wilmette who was awarded Top Ten Public Works Leader of the Year from the Suburban Branch.

# Special Thanks

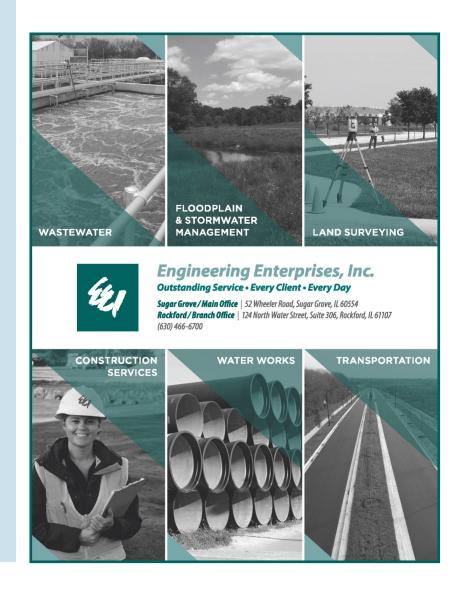
# 2021 APWA SUBURBAN BRANCH OFFICERS

Kristin Mehl, President Jeffrey Maczko, Vice President Kent Johnson, Secretary Matt Moffitt, Treasurer Mike Waldron, Past President



The Suburban Branch is excited about getting back to providing educational opportunities and social gatherings (when allowed) in 2021. We are planning for a series of education sessions covering lead services, utility locates, the impacts of 5G on public works, and permeable pavers. Look for more information as our plans develop.

Also, remember to save the date for the annual Suburban Branch Scholarship Golf Outing on Friday, August 20th!





CONSULTING ENGINEERS



BLA, Inc.











# **Southwest Branch Recap**

By: Arlan Schattke, Village of Plainfield

he Southwest Branch officers and committee members have been hard at work to keep members engaged and connected through the COVID pandemic. During the Holiday week to end the year, our **Public Outreach Committee** coordinated with a local radio station to air a Public Works appreciation announcement. The announcement was played on AM 1340 in Will County.

The past year has been full of adjustments and the Southwest Branch annual awards banquet was no exception. Typically, every January or February we host a lunch banquet to congratulate the award winners and present the awards. The pandemic version will consist of an awards showcase before each lunch event (virtual for now). The showcase allows the award winners to give a brief overview of the project and our members to appreciate their hard work. The award winners can be found on the Southwest Branch page on the Chapter website. Click here to visit the website.

The Southwest Branch is continuing to hold monthly lunch meetings virtually. On January 6th, Jake Painter and Sagar Sonar with Kimley-Horn presented on Asset Management Approach. On February 3rd, Elaine Bottomley with Will County Governmental League presented on Surface Transportation (STP) Funding Programs. On March 3rd, Barry Kent with IDOT presented on the Technology Transfer Program. We have a great lineup of lunch meeting presenters for the remainder of the year and we encourage everyone to participate. On April 7th, James Ford with the Cybersecurity and Infrastructure Security Agency will be presenting on the agency's mission and resources that are available. On May 5th, Owen Dean with Joliet and David Edgren with RJN will be presenting on Joliet sanitary sewer overflows.

The Southwest Branch has sent out advertisements for Full Time Student and Continuing Education Scholarship applications. The application deadline for those two scholarships is March 29th. We encourage our members to notify staff and interns about the great scholarship opportunities.

We look forward to some muchneeded social events on the docket for 2021. The **Southwest Branch golf outing** will be the first week of June. The YP Committee is working on an outdoor social event to once again network with colleagues and friends.







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# My 2019 PWX Experience — PWX Seattle 2019

by Kyle Johnson, Village of Buffalo Grove, IL

PWA PWX Scholarship recipients were required to submit an article describing their PWX experience. The following is one of these articles...

As someone who has sought out every opportunity to learn about public works and consider all the problems presented by this industry, PWX was the pinnacle of that experience for me. I was able to learn that on a national level our issues are not that much different than anyone else, however they were completely different at the same time. Nonetheless, the drive to seek solutions collectively is one felt through the industry as no one organization or company is unwilling to share what they learned from individual experiences with everyone. When walking the exhibition floor I could start a conversation with

any vendor and immediately find an application for the product. Then, if another PWX attendee was nearby, they would invariably join our conversation and explore similar problems and solutions with me. The size, location or function of the other organization in the conversation never mattered, there was always a shared connection.

Additionally, I appreciated the approach of the event overall to topics that would not be a primary concern of ours typically. For instance, the presentation by Jim Kwik was so incredibly insightful and helpful, but it never would have been a program I would have sought out elsewhere. Whether the presentation was tailored to that audience or not, it immediately connected with us all. Public works employees are always subject to



burnout since the job never stop coming at you and all our work is driven by reactive elements. With burnout comes a loss of focus, Jim really helped everyone see how that can occur and how to get past it.

The after-hours events were also appreciated on a personal level. I met and talked with many people from the local industry at the Chapter dinner and similar events in a different manner than our local events. Getting away from Chicago gave everyone a sense of disconnection from work, allowing us all to talk on a more personal level. It was great to learn more about the people I work with through APWA and other projects and

(Continued on page 33)



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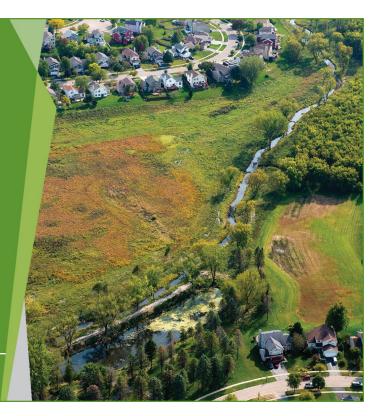
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# Arlington Heights Public Works Forestry Unit Starts "TreeU" Outreach Program

by Brian Crawford, Crew Chief in the Forestry Unit, Village of Arlington Heights

ike most communities in the northwest suburbs, Arlington Heights has lost thousands of parkway trees to the emerald ash borer (EAB) and other natural causes over the past decade. Arlington Heights capitalized on the destruction caused by EAB as an opportunity to establish a more diversified urban forest by planting over 13,000 new parkway trees, including many new and diverse species. The small Forestry Unit of nine fulltime staff within the Public Works Department was then tasked to protect this nearly \$4 million dollars investment. Forestry staff realized that proper stewardship of the new trees was going to be the key to success for the urban forest. The challenge would be how the Village would monitor and care for so many new trees, since many had higher maintenance requirements.



Kids trying to guess how high the truck can go

Forestry staff knew that the new trees were going to be the future of Arlington Heights, maybe it would be best to use young school-aged kids to help care for these trees, as they would grow up together. This idea led to the start of the

program that is now called **Tree University** or **TreeU**. The thought behind this program was if the Forestry staff could get the students genuinely interested and engaged, we believe the parents would also get involved.

The Forestry Unit started with a **TreeU** Mission Statement: To be a positive community outreach program or mechanism that educates our current and future residents on the benefit of trees and the importance of proper tree care; a way to work with educators to focus on current forestry related topics that are relevant to their students' curriculum.



Kids had fun checking out the inside of the log

After the mission statement was written and ideas shared with the Village Manager and the Village Board members, Forestry staff reached out to the local schools within Arlington Heights. As with many successful programs that start small, TreeU began with only two grade schools the first year.

The first **TreeU** school visit was with some of the young-



Jeremy teaching the kids what EAB does to ash wood

est school-aged kids, 1st and 2nd graders. With the Forestry staff not having any teaching experience and not knowing how long they were going to be able to hold the attention of these students, the staff decided to set up four different stations for the kids to visit and spend 5-10 minutes learning a specific tree care related topic. The first station taught the kids all about emerald ash borer and how ash trees could be treated to save them. The second station discussed basic tree biology with the kids. The last two stations, and maybe the most exciting stations, were demonstrations of the Forestry Unit's aerial lift truck, log loading truck, and one of the large (Continued on page 28)



Steve gets the high-5 from one of his interested students



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# Metropolitan Water Reclamation District of Greater Chicago

# Press Release

Allison Fore

Public and Intergovernmental Affairs Officer 312.751.6626 allison.fore@mwrd.org 100 East Erie Street, Chicago, Illinois 60611

# MWRD develops reactor to intensify biological treatment Pilot scale study seeks to treat more water with less infrastructure

onceived and developed by an environmental scientist, crafted together by talented sheet metal workers, and completed by expert pipefitters, the bright minds at one of the world's largest wastewater treatment plants are reinventing the way water is transformed in aeration tanks for the Metropolitan Water Reclamation District of Greater Chicago (MWRD).

As biological phosphorus removal becomes a growing staple of wastewater treatment for the MWRD, the infrastructure and technology must also adapt to accommodate this additional process. Biological phosphorus removal requires more capacity than conventional biological treatment, and the challenge is creating this capacity without having to build completely new aeration tanks at facilities like Stickney Water Reclamation Plant (WRP), designed to handle up to 1.44 billion gallons in a day.

In response. resourceful MWRD staff designed an experimental first-of-its-kind system to intensify the biological treatment of wastewater to provide a range of benefits including treating larger flows with less infrastructure. The design aims to improve solids settling by adding a "high-rate settling tank," retaining more of the active microorganisms responsible for cleaning the water and collecting nutrients in the existing aeration tanks.

"Our water reclamation plants are a unique blend of cutting-edge laboratory research and skilled tradesmen and women all working together to better our water environment," said MWRD President Kari K. Steele. "We salute our staff for their research and development that can pave the way to groundbreaking science and savings for our taxpayers."

Surrounded by sprawling tanks and massive treatment systems, the 350-gallon tank appears a small find tucked away in a nondescript gatehouse at Stickney WRP. But the pilot scale system could unlock remarkable potential in biological stages of wastewater treatment. In this important stage, after wastewater is filtered through primary treatment, the water enters aeration tanks that receive pumped air much like an enormous aquarium air diffuser. There, a carefully maintained population of microorganisms use oxygen from the air to break down the remaining suspended solids and remove soluble organics, phosphorus, and ammonia through nitrification.

Once tied into the MWRD's aeration battery at Stickney WRP, MWRD scientists will analyze whether adding the high-rate settling tank can

improve and expedite the settling of solids. The experimental system is expected to be able to treat wastewater in as little as three hours, compared with the conventional process that takes a minimum of four and a half.

The MWRD recovers sources, like phosphorus and other nutrients and returns them for valuable reuse opportunities, but also does so with the intention of protecting downstream water quality from harmful algal growth caused by excess nutrients in the water. In 2016, the MWRD opened the world's largest wastewater phosphorus recovery facility at Stickney WRP. Through a side stream application process, the facility recovers phosphorus and ammonia in the form of a slowrelease. environmentally friendly fertilizer. Removing phosphorus from the water and returning it to farmers and other agricultural producers represents a significant shift in the wastewater industry from treatment to recovery for reuse. Phosphorus is critically important because it is a nonrenewable resource which is essential for life, and too much of it ends up in the waterways. It is estimated that there are fewer than 100 years of phosphorus reserves remaining worldwide.

(Continued on page 23)

MWRD (Continued from page 22)

"This system will allow us to clean more water with less infrastructure," said MWRD Commissioner Mariyana Spyropoulos. "It is this innovative design that will help us recover more nutrient resources and help protect the water environment locally and as far away as the Gulf of Mexico. These developments could make a huge impact."

Scientists will monitor the pilot reactor for improved solids settling, ammonia removal, phosphorus removal, and the removal of biochemical oxygen demand (BOD). The BOD indicates the amount of organic pollution in wastewater. It captures the degree of pollution by measuring the amount of dissolved oxygen that must be present in water for micro-

organisms to break down organic matter in the water at a certain temperature over time.

The MWRD will test the system by pushing higher flows. If successful, the MWRD could consider implementing similar technology on larger scales at

several of its WRPs. To hear more from MWRD scientists and tradesmen who developed the project, visit the MWRD's YouTube channel at youtube.com/watch? v=qt3yUi7LPCU.



MWRD staff have designed an experimental 350-gallon tank system that could unlock remarkable potential in the biological stages of wastewater treatment to treat larger flows with less infrastructure.

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# **Barrington Celebrates Accomplishments**

by Marie Hansen, P.E., CFM — Director of Development Services, Village of Barrington

ollowing the challenges of 2020, the Village of Barrington is thrilled to be able to celebrate successful project and process improvements that will positively impact the health and efficiency of the Village moving forward!

Recently named 2021 Lake Branch Project of the Year in the Environment, Less than \$5 Million category, the Flint Creek Dreamway was originally identified as a critical area in the Flint Creek Watershedbased plan. As a result of wonderful coordination efforts by members of the Flint Creek



rington





Park District and Barrington School District, an IEPA 319 Grant was awarded to design, permit and construct a restoration project over 3200 linear feet of the Flint Creek corridor.

A team at Applied Ecological Services, led by Steve Zimmerman, worked with the Village's Public Works Department, led by Director Jeremie Lukowicz, to streamline the project by implementing a design-build process. In order to restore highly eroded streambanks and degraded riparian areas, the work included installation of stone toe, 23 riffles and ecological restoration of riparian areas in order to improve both water quality and habitat.



Dreamway Project Extents

Invasive species were also removed along the streambanks and restored with native plantings. The Village, Park District and School District coordinated agreements to ensure ongoing ecological maintenance and monitoring of the restored creek section.

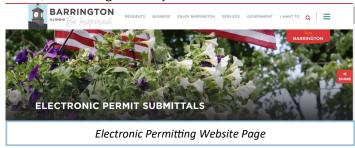
As the Dreamway Trail is in close proximity to these creek improvements, educational signage was installed at thoughtful locations along the path to share information with trail users regarding the restoration work. These signs share the importance of native species and their positive impacts to water quality and habitat and include photos and information for reference. In addition to the APWA accolades, this project won a Governor's Hometown Award and is a Finalist for the Governor's Cup!

Awarded both the 2021 Lake Branch and Chicago Metro Chapter Service Improvement Award, the Village's newly

implemented Electronic Permit Processing procedures have resulted in significant improvements in efficiency and convenience. The Village of Barrington Development Services Department historically processed building and construction permits in hard copy only. All permits required in-person drop off, pickup and payment at Village Hall during working hours. These processes were sufficient for consistent and systematic permit processing, but limited access to files and concurrent reviews and created document scanning, archiving and paper storage burdens for the Village.

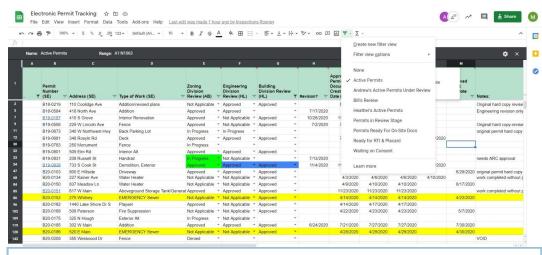
Following a transition to building and plumbing consultants in January 2020 and COVID telework response in March 2020, the Development Services team was challenged with how to maintain permit processing for Village staff and consultant reviewers remotely. While there are a num-

(Continued on page 26)



## The Metro

Page 26



Electronic Permit Tracking Spreadsheet

Barrington (Continued from page 25)

ber of software and website solutions for electronic permit submittal, review, and issuance, budgetary and implementation timeline constraints required a more creative, internal solution.

Utilizing the Village's google-

suite multi-user editing features, Development Services staff outlined normal permit processing procedures, made real-time suggestions for electronic processing options and worked to make edits and draft an electronic permitting processing procedure document as a team. In order to assist residents and contractors in submitting complete permit packages, required documents for common permit types were defined and listed on the Village's website and, once submitted, rather than being issued a paper folder the PDF documents are filed under their issued permit number in the Village's secure google cloud.

As reviews had previously been triggered by physically passing paper documents around

the office, the new permitting process had to include a way to identify where the permit was in the review process and when it was ready for a subsequent review. Development Services staff developed a shared google spreadsheet with a row for each permit and a column for each review status. This shared google sheet has been iteratively updated following weekly staff meeting suggestions and now incorporates filters showing each reviewer's active permits, links directly to the permit documents, designations for emerrepair gency permits, timestamps on updates and the ability to archive permit rows which have been approved and issued. This spreadsheet provides the added benefit of allowing staff and supervisors to quickly view permit workload and identify workflow issues.

Transition to electronic permit files has reduced folder, paper and supplies needs and streamlined electronic archiving processes, significantly reducing administrative scanning and cataloging burden and improving accessibility to these documents. By utilizing

(Continued on page 33)













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#### The Metro

TreeU Outreach (Cont'd from page 20)

woodchippers. At the end of the program, each student was given a tree sapling to plant in their own yard and become a steward of the urban forest.

Since 2016, over

2,000 children

have

participated in

**TreeU** 

Since its creation, Forestry staff has made small changes to the TreeU program tailoring stations slightly depending on the age of the students. Forestry staff have added new stations such as a tree identification station where kids are shown laminated leaves from several different species of trees to identify, and they can also make colorful leaf rubbings with crayons. An interactive tree climbing demonstration station was also added to the program. Not only does this station give students a chance to see what it takes to climb a tree safely, but it also talks about the different reasons why arborists climb a tree.

It is hard to measure how

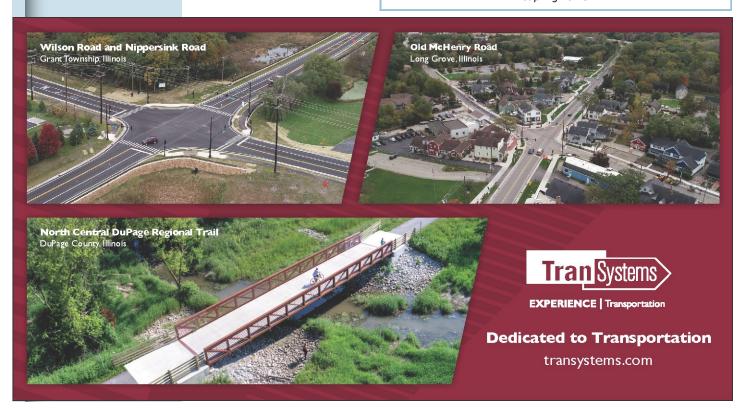
much **TreeU** has helped foster the stewardship of Arlington Heights' urban forest. Since 2016, over 2,000 children have participated in **TreeU** programs. Hopefully, TreeU has sparked an interest in tree care amongst a fraction of these kids. One thing is for sure, more and more residents in Arlington Heights are actively watering and caring for the 13,000 newly planted parkway

trees. The Village has seen lower tree mortality rates since the inception of TreeU, which has helped establish a sustainable and thriving urban forest for Arlington Heights.

If you have any questions, please contact me at <a href="mailto:bcraw-ford@vah.com">bcraw-ford@vah.com</a> Crew Chief in the Forestry Unit



After helping to plant a tree in the parkway the kids got to take a sapling home



# **CONSIDER NON-TRADITIONAL STAFFING MODELS**

By: Mike Earl, Senior Vice President, GovHR/GovTemps

There are many reasons for communities to use non-traditional staffing models. To name a few, these include cost savings, expert assistance, and scheduling flexibility. Following are examples of how non-traditional staffing may be applied in your organization.

Short-Term/Interim Assignments - When Department Directors, Superintendents, or other staff members retire, take another job or otherwise out of the office for an extended time, it is not always possible to fill the staffing void with an internal staffer. Existing staff are typically quite busy themselves. Taking on more work responsibilities is not always possible for an extended period. For these reasons, bringing on a temporary employee from outside the organization to assist for a few months is an option for many communities.

Seasonal Staffing Demands -During the warm weather months, infrastructure projects are getting started, home improvements are underway, and staffers at City Hall are fielding more property maintenance complaints. The work performed by Engineers, Inspectors, Plan Review Technicians, etc. becomes more stressful. Many agencies are not always optimally staffed to address the increased seasonal demand. Whether in a full-time or parttime capacity, temporary employees can help fill the void.

<u>Project Work</u> – A project needs attention, but staff can't get to it because of time constraints or lack of expertise. Examples include crafting a plan to address ageing water meters, developing a Capital Improvement Program, reviewing and updating building and zoning codes, and reviewing department policies

and procedures. practices. Skilled temporary employees are available to assist with project work.

Coach/Mentor – Some smaller agencies just don't have the resources to afford paying competitive salaries for Department Head, Superintendent or other professional staff positions. Rather, they elect to hire a less experienced person at a lower salary with the expectation that they will grow into the job. To help ensure success, some agencies have brough in a retired local government official (former City Administrator or Director of Public Works) is brought in to help guide the new employee with the development of technical or leadership skills. Coaching/mentoring assignments can be on a fixed time basis or as needed.

Temp-to-Hire - In cases where the agency doesn't have the expertise, time or the HR resources, a temp-to-hire (TTH) approach can be used. Under this option, a firm will solicit, vet and present the agency with top tier candidates. The local government will then interview candidates and ultimately identify a person it feels is best suited to serve in a temporary capacity (usually at least three months) and "audition" for the permanent position. At the end of the term, the agency will decide if it desires to extend an offer of full-time employment.

Outsourcing – Troubled with the high cost of municipal benefits - notably health insurance and pension expense obligations - many agencies have opted for a permanent outsourced staffing option. These arrangements – full-time or part-time - can be applied to many different positions and have including administrative support personnel, City Administrators, PW Directors,

Superintendents, Engineers, and HR professionals.

# Who Are the Temporary Employees?

The employees come from a wide range of sources. These include retired local government workers who still want to work while continuing to receive their pension, people who are between jobs, and others who want to work for a local government and contribute. These employees are open to flexible work arrangements on a limited or seasonal basis.

# **Choosing the Right Firm**

Firms focused on local government know where to go to recruit and vet workers who are well suited for the challenging and customer service focused positions in local government. An established local government staffing firm should serve as a clearing house for candidates who are looking for a fulltime, part-time, or temporary positions in the area, or who can perform the work remotely from an off-site location. Interested communities who need to fill a temporary or permanent position should be able to contact the firm to inquire of candidates available for temporary, temp-to-hire, or outsourced assignment.

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The Metro

# **Village of Fox Lake Interconnect Phase 2 Project**

By: Mark Dupree, GISP, Manager of GIS Services, Trotter and Associates, Inc.

connect Phase 2 project Village of Fox Lake (population 10,700) is located 55 miles northwest of downtown Chicago and 20 miles west of Waukegan, Illinois. Fox Lake is located in Lake and McHenry counties. The Village is located on the South Shore of Pistakee Lake, Nippersink Lake, and Fox Lake, three connected water bodies that form part of the Chain O'Lakes system. The Village of Fox Lake has a total area of 9.942 square miles of which around 20% is water.

illage of Fox Lake Inter-

The Village of Fox Lake Interconnect Phase 2 project is a 10.7million-dollar project consisting of 15,000 lineal feet of 16-inch water main, 10,000 lineal feet of 24-inch sanitary sewer, 5,000 lineal feet of 8-inch force main. The project is adjacent to Nippersink Lake and has approximately 2,500 lineal feet of wetlands and open water crossings. The need to provide transmission mains to interconnect the independent water systems will improve operational efficiencies in the North System and achieve Code compliant fire suppression capabilities in the north.

The Village operates two separated water distribution and wastewater collection systems serving the service areas, the South and North Systems. The South and North Systems (both water and wastewater) are not physically interconnected and currently operate completely independent of each other.

Water service is provided to both residential and nonresidential customers. Combined, the North and South Water Systems serve a total population equivalent (PE) of approximately 12,851 PE.

Sanitary sewer service is provided to both residential and non-

residential customers within the Village limits, and to areas outside the corporate boundaries. Combined the North and South Wastewater Systems currently serve a total of approximately 15.156 PE.

Wastewater treatment facilities are located in both the North and South Wastewater Systems. The Northwest Regional Water Reclamation Facility is centrally located in the South System, and currently has excess operating capacity. The North System has a limited operating capacity and is not designed to meet current and future regulatory compliance requirements. The future potential for more stringent limits on phosphorus, along with potential limits on nitrogen, temperature, and chlorides all indicate that continued reliance on the North System WWTP is not a reliable long-term strategy for meeting wastewater treatment needs in the North System. Additionally, the condition assessment performed on the mechanical and structural components of the WWTP indicate that the facility's infrastructure is in poor

condition and that much of the existing equipment has exceeded or is at the end of its useful service life.

Page 30

The installation of the two utility pipelines (wastewater force main and transmission water main) requires coordination with and permitting by the Lake County Division of Transportation (LCDOT), US Army Corps of Engineers, IDNR, Wisconsin Southern Railroad, Lake County SMC and other regulatory agencies. Other utilities such as natural gas, overhead electric, water mains and sanitary sewers within the ROW were also evaluated for constructability. Because the proposed and existing water and wastewater pipelines must meet IEPA specified separation requirements, the options available for pipeline alignments were limited along the project route.

There are several challenges with the construction of the Interconnect Phase 2. The extreme topography found along either side of Grass Lake Road generally does not exist along the majority of the length of

(Continued on page 33)



The Village of Fox Lake Interconnect Phase 2 project is a 10.7-million -dollar project

# **Innovations in Roadway Safety Assessment**

By: Nathan Kebede, P.E., Chief Operating Officer at ARRB Systems

recent publication by the American Society of Civil Engineers (ASCE) noted that over 36,000 individuals lost their lives on American roads in 2019. The Illinois Department of Transportation (IDOT) reports that there already have been over 170 fatalities on Illinois roads between January and March 2021. Many in the industry believe that a significant portion of the fatalities can be attributed to roadway features such as lane width, pavement markings, shoulder design, and pavement friction. The increasing availability of vehicle safety features, including assisted driving features, will help reduce accidents and fatalities attributed to driver error; however, better implementation and maintenance of roadway design and safety features will play a prominent role in reducing accidents and deaths on our roads.

While most Public Works agencies are proactive in implementing roadway design and safety features, many do not have the capability to gather comprehensive performance data to audit the safety condition of their roadway network objectively; furthermore, almost no Public Works agency has had access to tools that can efficiently and economically gather a complete data set of their roadway's safety features. With this in mind, ARRB Systems has developed and introduced the Intelligent Safety Assessment Vehicle (iSAVe) to assist Public Works and transportation agencies make their roads safer.

Intelligent Safety Assessment Vehicle (iSAVe) by ARRB Systems

The iSAVe combines the capability to collect and inspect all aspects of roadway safety within one system. It has been suc-



Intelligent Safety Assessment Vehicle (iSAVe) by ARRB Systems

cessfully used in countries such as Australia and South Africa. What sets the iSAVe apart is its capability to integrate and synchronize various inspection technologies. The iSAVe is fitted with a 3,000-gallon water tank and continuous friction measuring wheels in both wheel paths to continuously measure wet skid resistance for up to 90 miles at a time. The iSAVe is also fitted with Laser Rut Measurement Systems (LRMS) capable of capturing a continuous full lane transverse profile and identifying rutting, which can lead to aquaplaning. The iSAVe's laser profiler measures continuous longitudinal profile, which can be used to calculate the International Roughness Index (IRI) and identify rough spots on the road. The iSAVe is also fitted with 4K right-of-way cameras that are geo-referenced and scaled for measurement. These images can be used to accurately identify and inventory safety features such as roadway signs, pavement markings, rumble strips, etc. The differentially corrected GPS and inertial navigational system of the iSAVe allow it to precisely measure roadway geometrics and report roadway grade, cross-slope, horizontal curvature, and vertical curvature. This sophisticated navigational system also ensures that all other data collected by the iSAVe are spatially synchronized and tagged with latitude, longitude, and elevation data.

The iSAVe can gather data on 180 miles to 360 miles of roadway per day. All collected data are analyzed and available for use within 5-days after testing is complete. The technological advancements in data collection and automated data processing of the iSAVe enable most Public Works agencies to get a complete picture of their roadway safety in less than a couple of weeks; furthermore, Public Works agencies will no longer have to incur traffic control expenses because the iSAVe works at traffic speeds.

Using the iSAVe, Public Works agencies can efficiently and economically determine how safe their roads are for the traveling public. They can also proactively work towards preparing the streets in their jurisdiction for the imminent arrival of autonomous vehicles. The gathered data's continuous nature enables agencies to understand their roadway safety features without settling for data sets collected on short samples. The iSAVe makes safety inspections fast, accurate, affordable, and accessible for all agencies. As semi-autonomous and fully self-

(Continued on page 33)

The iSAVe can gather data on 180 miles to 360 miles of roadway per day.

# Bringing marking paint and other aerosol product recycling to the construction and locating industry

By: Kathryn (Kresic) Gordon, CEO of Municipal Marking Distributors and President of Flat Can Recycling

In 2021, we all know that recycling is important, yet it's still a rarity for aerosol products to be routed through the appropriate channels for proper recycling. Even products dropped off at municipal hazardous waste facilities typically end up in landfill or being incinerated.

Residual liquid and gas remain inside "empty" and "RCRA empty" aerosol cans. The time it takes for these residual substances to break down varies depending on what the product is for. As one example, watersoluble paint (typical in marking/locating paint cans)—which is a base of alkyd and acrylics or polyvinyls-takes 13 years to degrade. In landfill, these residual substances are hazardous when they leach into the soil and groundwater surrounding residential communities and natural habitats.

The steel cans themselves, made of lacquered tinplate, last for 50 years. Caps and spray tips made of high density polyethylene (or HDPE) don't break down for 100.

While incineration of hazardous materials is often presented as a more environmentallyviable option, even technologically advanced incinerators release pollutants that contaminate air, soil and water. A quarter of incinerated material remains as ash in landfill, where it can release pollutants into groundwater and rivers.

This is a problem on a massive scale. The Household & Commercial Products Association (HCPA) estimates that 3.75 billion aerosol cans were filled in the United States in 2016. And, according to the EPA, aerosol cans account for about 40% of retail items handled as hazardous waste at large retail facilities.

Fortunately, the United States is increasingly recognizing that

#### THE AEROSOL RECYCLING STORY

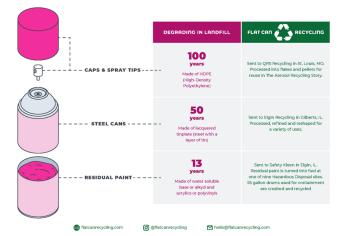


Image credit: Solid Digital

proper disposal of all kinds of hazardous waste is vital. In December 2019, the EPA added hazardous waste aerosol cans to the universal waste program under the Federal Resource Conservation and Recovery Act (RCRA) regulations

So knowing all this, why do our aerosols end up in landfill or incinerated? Waste disposal companies are usually well-intentioned and doing their best. The trick is that there are few regulations in place to help them properly route aerosol products for recycling. Aerosols can't be recycled like other common metal items until they're properly emptied of their contents and disassembled. This process is time-consuming, messy, and costly - hardly anybody wants to take on this responsibility.

I've been working in construction supply goods (specifically aerosol marking paint that marks underground infrastructure) for 18 years as CEO of Municipal Marking Distributors (MMD). Shortly after beginning this work, my family and I became troubled by what I've outlined above.

In 2010, I launched Flat Can Recycling as a spin-off project of MMD with the goal of closing the loop on the product life cycle of marking paint. When we began, we did a great deal of learning by failing. We spoke with leaders in disposal and recycling and worked hard to create a system to disassemble and recycle each component of aerosols, including the residual contents with the help

(Continued on page 33)



Kathryn Gordon, CEO of Municipal Marking Distributors and President of Flat Can Recycling Image credit: Amy Dabe, Flat Can Recycling

Interconnect (Continued from page 30)

pipeline along State Park Road. The exceptions exist along the west side of the road, reaches where access is limited for utilitv construction. Therefore. alignment of the pipelines along the east side of State Park Road was selected due to the limited variation of topography, vegetation, and accessibility. Additionally, there are fewer residential properties along the east side of State Park Road where access points must be maintained during construction.

Coordination with regulatory agencies throughout the design, bidding, and construction phases as well as adjacent utility companies have been essential for a successful project. The project is currently under construction and is expected to be completed in the fall of this year.

Mark Dupree, GISP, Manager of GIS Services

Roadway Safety (Cont'd from page 31)

driving vehicles continue to gain popularity, maintaining our roads' safety features will be a top priority because these vehicles depend on roadway safety design features such as pavement friction, lane markings, and signs to navigate our roads safely. Armed with data from the iSAVe, Public Works agencies can now face these safety demands head-on.

PWX 2019 (Continued from page 18)

get a chance to see how similar our families, hobbies and backgrounds are.

I cannot thank the APWA Chicago Metro Chapter Scholarship Committee enough for selecting me for this opportunity. The effort put forth by APWA members, both collectively and individually, toward sharing industry knowledge, teach-

ing the next generation and facilitating professional growth cannot be understated. This organization is incredible in every endeavor it takes on and I'm proud to be a part of it.

Barrington (Continued from page 26)

existing resources, the thoughtful creation of these procedures and tracking mechanisms required zero-investment and has created significant cost and time savings to the Village for years to come, while also increasing the Village's level of service.

The Village is so proud of these award winning achievements and looks forward to enjoying their continued benefits as we look towards a brighter 2022!

Marking Paint (Cont'd from page 32)

of our partners. After nearly a decade of fine-tuning through a pilot program, Flat Can Recycling launched as a full-fledged business in 2020.

Today, we're a planet-driven company and a closed-loop processor committed to transparency and making aerosol product recycling accessible. And this year, we expanded our recycling offering from marking paint to all aerosol products (ranging from spray paint, to hair spray, to insecticide—you name it).

We partner with municipalities in the Midwest looking to take a bold stance on the responsible disposal of hazardous waste generated by their public



Caps and spray tips made of HDPE take 100 years to break down in landfill

Image credit: Amy Dabe, Flat Can Recycling

works department (in particular, the use of marking paint used on locating and construction jobs). We equip public works departments—as well as retailers and construction com-

panies—with everything they need to operate as a drop spot for aerosol product recycling.

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Landfills and burning waste should always be the last resort. Luckily, disposal has changed and we now have a better system and new solutions to route this waste to proper channels. It's time to take care of our planet, evolve disposal practices, and change behavior.

To learn more about MMD or Flat Can Recycling, please visit mmdsales.com and flatcanrecycling.com or email hello@flatcanrecycling.com.

# **Hustle Chicago APWA Climbers**

The Chicago APWA Climbers did it again! This time, the climb had to be held outdoors at iconic Soldier Field.

The "APWA Climbers", consisting of Jackie Dearborn (team captain), Karol Giokas, Mike Reynolds, Dawn Wick, Eric Rose, James Yuratovac, Leonardo Velazquez and Mason Dearborn, raised a total of \$5,485 for the Respiratory Health Association. Congrats for completing the climb and supporting a good cause.

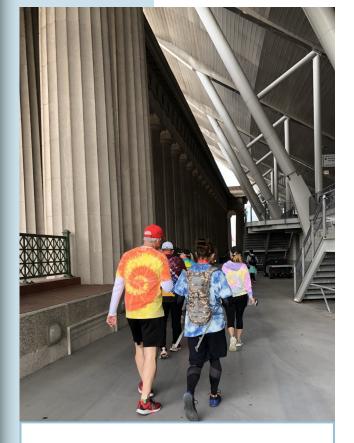
If you'd like to participate next year, contact Jackie or be on the look out for Chapter emails!



Team picture with masks!

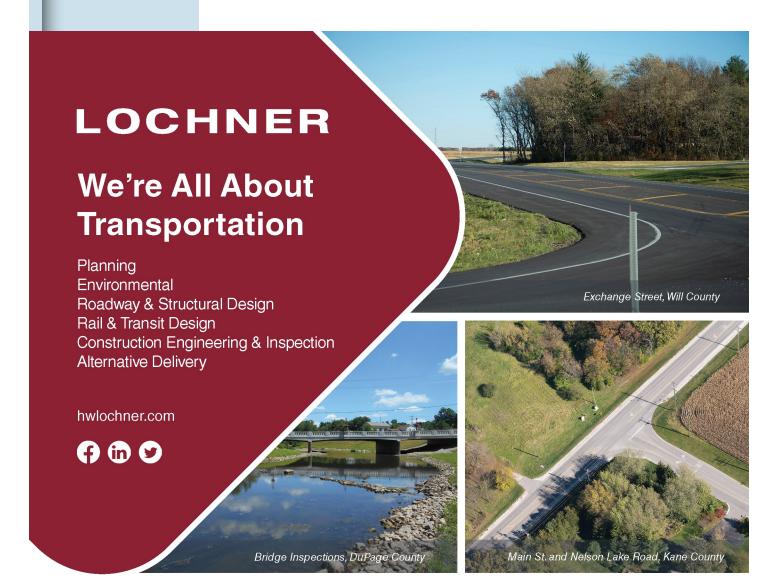


Shown L-R: James Yuratovac, Mason Dearborn, Jackie Dearborn (team captain), Eric Rose, Karol Giokas, Mike Reynolds, Dawn Wick, Leonardo Velazquez



Heading home after the climb.







Ken Desmaretz, PE kdesmaretz@hwlochner.com 312.735.1820 John P. Kos, PE jkos@hwlochner.com 312.994.9767 Alan Hasler, PE ahasler@hwlochner.com 630.210.6924



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and let us know what you think!

May 6, City Branch - May PDH Series @ CCDOTH: Integrated Retaining Wall Solu-

May 6, Suburban Branch- Webinar: Utility Coordination and Relocation on Major Public Infrastructure Projects and Sub-Surface Utility (SUE) Locating May 25, Volunteer Event -- Northern Illinois Food Bank

Jun 8, Southwest Branch Golf Outing Jun 24, Chapter Golf Outing

Aug 20, Suburban Branch Scholarship Golf Outing

# IPSI Dates!

Spring 2022 - April 24-29 Fall 2022 - October 2-7

Get updates: http://www.ilpsi.org/

# **IL Roads Scholar Dates**

Aug 23-27, 2021

# MAPSI

MAPSI - http://themapsi.org/

To register or see more events, visit the Chapter website at <a href="http://chicago.apwa.net/">http://chicago.apwa.net/</a>

# APWA 2021 Top Ten Public Works Leader

Congratulations to Brigitte Berger-Raish, for being awarded the APWA 2021 Top Ten Public Works Leader Award! She joins a group of individuals that are dedicated to public works!



TOP TEN PUBLIC WORKS LEADERS OF THE YEAR — BRIGITTE BERGER-RAISH, PE

Visit the Chapter Facebook page, Twitter account and/or YouTube Channel to see more Chapter and Branch activity.