April 2022

Formerly Arkansas Professional Engineer

Official Magazine of the American Council of Engineering Companies of Arkansas & the Arkansas Society of Professional Engineers

Building Arkansas

Turning a parking lot into a park

This year's ACEC/A Grand Conceptor Award winner was CEI Engineering's Railyard Park. Nate Bachelor, P.E., left, with CEI and Rogers City Engineer Lance Jobe, P.E., helped transform a boring stretch of pavement into a fouracre community gathering place that is revitalizing the downtown Rogers area. Designers incorporated railyard elements into a park that features a playground, entertainment stage, and a connection to the city's trail system. Behind them is a splash pad. 2

PM Bootcamp: Get better, or get \$ back

A PSMJ program guarantees it will make you a better project manager, with evidence to back it up. Attendees rate it an average of 4.8 out of 5 stars.

What are the 11 must-use parts of a project schedule? What are the five project budget busters? How can a project manager negotiate subcontractor agreements that benefit both sides? How do you turn your clients into evangelists for your firm? How can a project manager find issues early so they require only minor fixes before they become major problems?

Those questions will be answered at the AEC Project Management Bootcamp, a two-day seminar May 11-12 that will be offered by ACEC/Arkansas and PSMJ Resources. The event will be held at the Embassy Suites Northwest Arkansas in Rogers. The Bootcamp will be led by Chris Martersteck, AIA, LEED AP, DBIA, who has 15 years of experience with McClier, a national design-build AECOM company. The program promises to be an interactive experience. It offers a money-back guarantee and says that the more than 42,000 project managers who have participated have awarded it an average of 4.8 out of five stars.

Specific topics to be covered include:

• Taking charge of meetings to ensure you get what you need

• Getting more production out of your assistant manager

• Improving your relationships with your clients

• When to email, and when to call

Cross-selling your services

• Using your current job to generate future work

• When to begin the project planning process

• 10 critical elements of the best project management plans

• Superior scheduling

• Tips for creating a project budget

• Six vital steps project managers should use to improve cash flow

• The five numbers project managers must demand from accounting

• Managing multiple projects at once

• What to do if a project gets behind schedule or goes over budget

• And a lot more

The cost to attend is \$1,795 for ACEC/A members and \$1,895 for nonmembers. Firms receive a 25% discount for all registrations after their firm's first two. Attendees get free access to the PSMJ's Project Management Bootcamp Digital Toolbox, a \$695 value, and get one year of support via phone or email.

Register online at arkansasengineers. org, by email at info@arkansasengineers. org, or by calling 501.541.5229.

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HAPPY ANNIVERSARY BOB MYERS



We are pleased to recognize Bob Myers, P.E., for 20 years of service to Michael Baker International and for a storied career in our industry.

From serving the Arkansas Department of Transportation for 38 years to helping Michael Baker move forward with many airport and transportation projects, your vision, character and ability to inspire success is an example for all.

Michael Baker

Arkansas Offices in Little Rock, Bentonville and Jonesboro

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18 CEI Engineering Associates' Nate Bachelor, P.E., center, and Rogers City Engineer Lance Jobe, P.E., right, accept the Grand Conceptor Award from Brad Hammond, P.E., of Olsson at the Engineering Excellence Awards banquet at the Governor's Mansion March 31. The winning project was CEI's Railyard Park, a downtown development.

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Three Rivers, 12-foot channel get funds

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The Morrilton-based firm made an 89-year-old building its home. It does a variety of construction and design work, but its niche is the poultry industry.

18 *Cover / CEI's Railyard Park is grandest* concept

A downtown property in Rogers has been transformed from a parking lot and unactivated green space into a fouracre park and community gathering space. Railyard Park revitalized the area, improved the business climate, and won CEI Engineering Associates this year's Grand Conceptor Award. Our innovative approach to infrastructure helped bolster a local economy.

ROYAL TREATMENT.





We're Olsson, engineers who understand that where there's a project, there's a purpose. See how our biotech approach to treating wastewater kept the Batesville, Arkansas, economic engine humming at **olsson.com**.

EEAs – Oh, what a night!

on March 31. I had the privilege of hosting the Engineering Excellence Awards (EEA) Gala Evening at the Governor's Mansion. I had attended several EEA events, but this was the first time I was a part of the ceremony, and I had a great time. I welcomed attendees as they came through the door, and it was fun to greet the engineers, spouses, and

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Steve Pawlaczyk, P.E. ACEC/A President

other guests. I spoke with the doorman, who said he'd been working at the Governor's Mansion for 28 years. He's seen quite a variety of governors in his time. I also got to speak from the podium telling people when to sit, when to eat, and when to go home. I felt like a schoolteacher trying to lead a large classroom of rowdy kids. Once again, Brad Hammond with Olsson emceed the awards portion of the evening and did a great job – even getting a few chuckles from his dad joke and a better response to his Oscars slap remark.

Part of my job was to introduce the current ACEC/A Board. It was great to recognize these people, who over the past six years I've come to know as colleagues and friends. That's one of the great things about being a part of ACEC. While we may be competitors when it comes to finding work and talent, we come together to help further our industry and make things better for future generations. OK, enough of the sappy stuff.

I've never been a fan of the big awards programs (Emmys, Grammys, Oscars, etc.). I see those more as millionaires/ celebrities coming together to tell each other how great they are.

But the EEAs are a different breed, in my opinion. Now, one could argue that movies and music inspire people, and I get that to some extent, but those awards programs seem to be more of a popularity contest and a place for expressing certain political opinions. The EEAs, however, highlight projects in our communities that affect the daily lives of those who use them. It's also an opportunity for us to thank our clients for the work they entrust to us. This year, like previous years, there were some cool and interesting projects, but I'll let another article cover those details.

It seems that every year this event gets bigger, and this year was no exception.

We had the highest number of attendees (174) and the highest number of awards presented. This year included 24 entries. Categories not receiving entries this year were in the Surveying and Mapping Technology and Water Resources categories. Why not submit your project for next year's EEA?

In addition, ACEC/A gave out two more awards: the People's Choice Award and the Grand Conceptor. The People's Choice Award is voted on by the folks attending the EEA event. The Grand Conceptor Award goes to the project voted best by the EEA judges. Now, I must admit I had to look up the definition for the word "conceptor." While you can find just about anything with a Google search, and a definition is there, conceptor doesn't appear to be a common word, and I could only find references used by ACEC National and other ACEC member organizations to recognize their top project each year. It appears to mean the best concept. Projects that win the ACEC/A Grand Conceptor Award are also eligible for the ACEC National Grand Conceptor Award for the top engineering project in the nation. A project from Arkansas won the ACEC National top honor in 2007.

If you haven't attended an EEA gala evening, I highly recommend going. It's a fun time of fellowship and recognizing interesting projects in our field. Plus, the venue and food are excellent! I hope to see you there next year.



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Innovative engineering doesn't just win awards; it improves lives

With only seven months from our last banquet, we all gathered again at the end of March for the annual ACEC/A Engineering Excellence Awards gala. Wasn't it great to see each other face to face again at the Arkansas Governor's Mansion?

I look forward to this event every year not only because of

the beautiful venue but mainly because of what it stands for – recognizing excellence in the engineering industry. At this event each year, we get the opportunity to see project boards that represent the innovative projects and the respective design teams that are being recognized for their outstanding work. This isn't just an opportunity to get together with colleagues from across the state. It's a chance to truly consider what defines engineering excellence.

Some of the projects recognized might be the same concepts that have been designed thousands of times. The difference is that the process has been improved, whether it be through modified design or new innovative strategies. When selecting these projects for recognition, the judges look for projects that expand boundaries or attempt to break the status quo of how things have been designed in the past, which in the end, makes the process better. More efficient processes and innovative designs produce a better project for all stakeholders.

The idea of innovation is one that is shared among all engineering companies. The competitive nature of our industry drives innovation. Each day, we strive to provide designs and solutions that take projects to the next level. We move for-



Travis Tolley, P.E. ASPE President

ward with the common goal of improving the user experience of the designs we produce. We know that the work we produce has a much longer-lasting impact than just recognition through industry awards. We have the opportunity to impact the lives of those who live and work in the communities that our projects serve.

This is also why it is assential to cont

This is also why it is essential to continue our professional education about the design standards, improvements, and innovations across the industry. This isn't just a requirement to check off when renewing our licensure. It's an essential part of what we do. It's also important for us to take advantage of every opportunity to engage with one another and to share ideas to cultivate a collaborative and innovative culture among our group. For instance, we recently had the opportunity to gather in Hot Springs for the ASPE Annual Conference. During this event, we recognized a wonderful group of Emerging Leaders, heard from industry experts, and yet again had the opportunity to engage with one another and share ideas in person for the first time since 2019.

I'll close this month's column with a challenge. I challenge each of you to think outside of the box and look for a way to improve your day-to-day process, whether it is a more efficient method or a completely new way of thinking. This is what is going to continue to move our profession forward and improve the lives of those who benefit from our designs. We have the power to leave an innovative mark on our industry.

In the News Crafton Tull acquires B & F Engineering

The acquisition of Hot Springs-based B & F Engineering increases Crafton Tull's size to roughly 290 employees and brings together two firms with similar cultures, said Crafton Tull's president and CEO, Matt Crafton, P.E.

The addition of B & F adds more than 40 employees to Crafton Tull's roster and increases its number of office locations to nine. Crafton Tull now employs 62 engineers.

The two companies announced the acquisition in a press release Feb. 7.

Crafton Tull is one of three 100% employee-owned employee stock ownership plan (ESOP) corporations headquartered in Arkansas. Matt Crafton said employees become eligible to receive shares after working a minimum of 1,000 hours in a fiscal year.

The acquisition brings to Crafton Tull a highly regarded company with a strong surveying presence that has been headed by James Montgomery, P.S. It has worked with departments of transportation, the U.S. Army Corps of Engineers, local governments, educational institutions, and private developers and companies. It is celebrating its 50th year.

Crafton said the two companies began talking about joining forces last year. He said in its roughly 10 previous acquisitions, it has found the key to success is finding a company with a compatible culture. Crafton Tull's last acquisition occurred in 2008.

"We found with B & F, their values aligned perfectly with ours," he said. "The way they treat their employees aligns



GROWING TOGETHER. Matt Crafton, P.E., right, president and CEO of Crafton Tull, stands with James Montgomery, P.S., who has served as senior vice president of B & F Engineering and will manage the new office.

with the way we treat our employees, the way we respond to our clients. The cultures of both companies are just a really good mesh between the two. Kind of like getting married – you want to make sure that you're going to be compatible, and that's what we found with B & F is just their culture aligns perfectly with ours."

B & F Engineering will keep its name for a time before transitioning into a Crafton Tull office. Montgomery will manage operations and staff in Hot Springs.



"Joining the Crafton Tull family in our firm's 50th year of business is an exciting new chapter for us," Montgomery said in a press release. "This partnership will provide enhanced service to our clients and generate long-term growth opportunities for our employee-owners."

Crafton Tull has been contracting with B & F Engineering for more than 20 years. The two companies started working together on an I-49 connector project south of Pine Bluff in the early 2000s.

"[I] literally met James Montgomery out in the woods south of Pine Bluff," Crafton said. "We were starting that project."

The most recent shared project has been a widening to four lanes plus a turning lane of Highway 112, a north-south state highway west of I-49. Crafton Tull has been doing the design work from Springdale to Bentonville, while B & F Engineering has been doing the surveying work.

The acquisition comes at a time when engineering firms enjoy strong opportunities for business but face a shortage of engineers throughout the industry. Arkansas voters in 2020 passed a constitutional amendment permanently extending a half-cent sales tax for highways, and then last year Congress passed the \$1.2 trillion Infrastructure Investment and Jobs Act.

The Arkansas Department of Transportation has advertised for on-call surveyors, a relationship B & F has had with the department for many years.

Crafton said the company is considering other acquisitions but has "nothing really in process right now." It definitely doesn't want to stay where it is.

"A young person coming into our industry, they're going to want to be with a company that's going to allow them to grow in their career, whether it's doing newer and bigger kinds of projects or getting into the management of a company, etc.," he said. "So from our view, yes, we need to grow to provide opportunities for the younger engineers that are coming to our company."

ENGINEERING ARANSAS



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In the News (Cont'd)



Crafton Tull updating Rogers' stormwater records, manual

The City of Rogers tapped Crafton Tull in 2021 to survey and update city records of stormwater infrastructure; model and analyze the city's watersheds; and to update the city's drainage criteria manual.

Crafton Tull has been involved in this project on an ongoing basis since 1989, when Rogers determined it was necessary to establish standard criteria for developers and engineers to follow for drainage designs associated with development projects. Rogers selected the Crafton Tull and Wright Water Engineers team, which has prepared the drainage manual and subsequent updates, with other subconsultants offering study expertise. In 2008, the city again selected Crafton Tull to rewrite the drainage manual to incorporate the latest hydraulic engineering techniques used in the industry.

Crafton Tull is again working with Wright Water Engineers on the study. Phase I will document natural and constructed stormwater management infrastructure assets. Phase II will create a strategy to address stormwater infrastructure using both traditional and green components. Phase III will update



the drainage manual. This study could yield new codes and/or ordinances.

Additionally, the city's GIS database will be updated in 2022 to reflect current conditions of stormwater infrastructure. This is a comprehensive effort that will enhance protection of watersheds, primary channels and wetlands. It will support future development through documenting existing stormwater assets, creating a stormwater strategy that blends traditional and green infrastructure, and planning for the future.

Two Crafton Tull employees earn PE licenses

Crafton Tull employee-owners Caroline Gardner, P.E., and Levi Gottsponer, P.E., have passed the Principles and Practice of Engineering (PE) exam and earned their licensure.

Gardner, who works in the firm's Fayetteville office, has been with Crafton Tull



Fordnar

Gardner



Gottsponer

for seven years and has designed a variety of civil projects including utility rehab, single-family subdivisions, and multifamily, mixed-use, and commercial developments.

G ottsponer, who works in the Rogers office, has worked as a bridge engineer in the transportation department almost four years.

He has worked

mostly in designing highway bridges for ARDOT, but also works on city and county jobs.

Garver aids LR BUILD Academy

In early December 2021, the first 13 graduates of Little Rock's BUILD Academy completed their three-month program. A collaboration of many partners – notably, the city of Little Rock and Garver – the innovative business development incubator sought to cultivate a new generation of small business leaders and to provide those individuals with the necessary resources to realize their fullest potential.

Over the course of the inaugural Academy, members of the cohort heard some of Little Rock's most prominent business leaders offer their perspectives on a range of key business skills, including target marketing, operations, market and industry analysis, savings, banking, and finance, among others.

By providing the foundation for future business success, the BUILD Academy program sought not only to provide opportunities for members of the cohort, but also to boost the local economy, stimulating areas of the community that might have otherwise lacked the same opportunities.

"Little Rock's BUILD Academy is laying a foundation in every sense," said Garver Director of Transportation Jerry Holder, P.E. "The entrepreneurs and business owners who graduate from this program are the future leaders of this business community. They're not only building a better community for today, but for tomorrow."

Garver's White named a top young pro by ENR

Garver Aviation Operations Manager Adam White, P.E., was named one of ENR Texas & Louisiana's Top Young Professionals.

Selected from across Arkansas, Louisiana, Mississippi, Oklahoma, and Texas, this year's class represents a cross-section of rising stars from across the engineering industry.



White

wide, including major airports like Nashville International and Louis Armstrong New Orleans International.

He's also become a leader in Garver-Gives, the firm's corporate giving program.

"When you serve a community, you serve all aspects of a community," White said. "As engineers, we create the physical connections that bring people closer together. As people, we're serving on a more intimate level, creating connections on a smaller, though no less significant scale."

Michael Baker, **Myers celebrate 20** years in Arkansas

Although Michael Baker International has provided services in Arkansas and maintained temporary project offices here for several decades, the team that exists in the



Mvers

state today began with the hiring of Bob Myers, P.E., in 2002. Myers had previously served as an ARDOT construction engineer for 38 years, retiring as the resident engineer in the Camden office.

In July 2002, Myers was hired as a part-time employee to build relationships In the News continues on page 12

with What Sets Us Apart?

Our People Do.

White has long

in projects nation-

While not a native of the Arkansas River Valley, All three boys are now grown and have moved Their oldest son works in Little Rock, their middle son just recently moved to the Netherlands, and their youngest son lives and works in California.



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Barry K. McCormick, P.E. **Chief Financial Officer**

in Arkansas and look for opportunities to grow the firm's client base and build a local team.

Myers began building relationships with ARDOT and various other agencies, including municipal airport owners across the state. He was also instrumental in making several key strategic hires. With his help, the firm now holds oncall contracts with numerous municipal clients and Arkansas airports including the Bill & Hillary Clinton National Airport and Northwest Arkansas National Airport. It maintains design, survey, and construction services contracts with ARDOT, and has grown into one of the state's 10 largest engineering firms.

Michael Baker cuts ribbon for Bentonville office

Several representatives of the Bentonville Chamber of Commerce, leadership from Michael Baker International's Little Rock office, and local staff celebrated the official opening of Michael Baker's newest Arkansas office at 900 Southeast 5th St., Suite 20 in Bentonville.

The doors opened on Nov. 22, 2021, and the ribbon-cutting ceremony was held on Dec. 9. While "everything is on the table," according to Mike Stengel, P.E., the office executive, the team will initially focus on transportation design and construction services for ARDOT and municipal and airport clients.

Michael Baker announces hires

Michael Baker International has hired several new Arkansas design staff members.

Srishti Bhutani joined the Little Rock Bridge Design team with three years of experience as a design engineer with Larson & Toubro, a major en-



Bhutani

gineering company in India. Srishti holds a Master of Science degree in Structural Engineering from Texas A&M University and a Bachelor of Science degree in Civil Engineering from the National Institute of Technology-Kurukshetra.

Raiyan Chowd-

hury joined the

Little Rock Road-

way Design team

as a civil associate.

She earned a Mas-

ter of Science de-

gree in Engineer-

ing from Arkansas

and a Bachelor of

Nick Duplantis

is a CADD Tech-

nician holding an

Associate of Ap-

plied Science de-

gree in Computer

and Design from

the University of

Arkansas – Pulaski

Technical College,

Garret Wallace

also joined the Lit-

tle Rock team as an

intern in the Avia-

tion Department.

He is a senior at

the University of

Arkansas-Little

Rock, where he is

finishing his Bach-

elor's Degree in

Drafting

Aided

University



Chowdhury

Science degree in Civil Engineering from the Bangladesh University of Engineering and Technology.

State



Duplantis

and has two years of experience in drafting and design.



Wallace

Civil and Construction Engineering. In Bentonville, four young engineers have joined this emerging team.

Gus Williams and Jason Toney, P.E., joined the roadway design team. Williams earned his Bachelor's Degree in Civil Engineering from the University of Arkansas, Fayetteville in December 2021. Toney earned his Bachelor's Degree in Civil Engineering from Oklahoma State University in May 2018. He has three years of experience as a construction engineer with Oklahoma Department of



MICHAEL BAKER HIRES. From left are Gus Williams, Jason Toney, Isaac Puckett and Dillon Lewis.

Transportation, and passed the P.E. Exam in October 2021.

Dillon Lewis and Isaiah (Isaac) Puckett are interns, and both expect to graduate in December 2022 with a Bachelor's Degree in Civil Engineering. While they were hired as full-time interns for summer 2022, both elected to work part time with the Bentonville team this spring, working flexible hours around their school schedule. This summer, Lewis plans to intern with the Little Rock Bridge Design team, and Puckett will stay in Bentonville supporting the Roadway Design team.

Michael Baker evaluating ARDOT bridge program

As part of its commitment to improve and strengthen its statewide bridge inspection program, the Arkansas Department of Transportation has selected Michael Baker International to perform a formative evaluation of the existing program, and to support department staff in

ACEC/A AFFILIATES ACEC Business Insurance Trust ACEC Life/Health Trust American BXS Insurance, Inc. BT Environmental, Inc. Environmental Technical Sales, Inc. Forterra Insight Leadership Group Jack Tyler Engineering McGeorge Contracting O.R. Colan Associates, LLC Shupe & Associates, Inc. Springdale Water Utilities Turner Insurance

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strengthening the program's organizational structure, policies, and procedures.

The firm will provide recommendations for improving the existing program based on generally recognized industry leading practices.

Michael Baker has performed similar bridge inspection program development and evaluations for several other DOTs.

Olsson's team in Fayetteville triples in size since 2020

Olsson's Transportation team in Fayetteville has nearly tripled in size since it was formed in 2020, and it has experienced rapid growth in its client base and project workload. The team is led by Rick Herrick, P.E., who has more than 50 years of experience in the industry.

The City of Bentonville last year awarded Olsson five major roadway projects and 10 drainage projects, 12 of which



stem from a recent special election where voters overwhelmingly approved extending the city's 1-cent sales tax for improvements

All the projects

are

under

currently

contract.

Herrick

to streets, stormwater systems, and other public infrastructure.

The team is also designing street projects for other municipal clients throughout the region, including the cities of Fayetteville, Harrison, and Prairie Grove. Springdale recently selected the Olsson team for a major arterial roadway project.

Herrick said the firm relies on the Fayetteville team's expertise for help on projects throughout the Midwest. Andy Brewer, technical leader of engineering, has made major contributions in Arkansas and beyond. "The whole team is doing a fantastic job, and Andy has taken it to another level," Herrick said. "His background is in traffic and transportation planning, and he's working with transportation teams throughout the organization on projects and pursuits related to roadway design and active transportation."

Hudson joins RP Power's Industrial Sales team for AR

Taylor Hudson has accepted a new position within RP Power's Industrial Sales team for the Arkansas & Eastern Texas territory.

Prior to joining RP Power, Hudson's initial career started in the criminal justice field. After graduating with a Bachelor's Degree in Criminal Justice from the In the News continues on page 14

A holistic approach drives successful outcomes.

New federal funding opportunities can revamp transportation infrastructure across Arkansas, but securing these dollars requires strategy and planning.
 Working with a partner who understands infrastructure holistically — from planning to design and construction — leads to successful outcomes. Read the blog at burnsmcd.com/BuildingArkansasQ12022.



CREATE AMAZING

University of Southern Mississippi, he immediately started working for the North Little Rock Police Department. During his five years with the department, he was a member of the



Taylor

Special Response Team and worked in DUI enforcement.

Pursuing a different career path, Taylor obtained an additional Bachelor's Degree in Mechanical Engineering at the University of Arkansas at Little Rock. Shortly after graduating, he accepted a position with RP Power as a project manager for Oklahoma and then shifted to being the project manager for the Louisiana and Mississippi territory.

MCE recognized as bike friendly

The League of American Bicyclists recognized McClelland Consulting Engineers with a bronze level Bicycle Friendly Business award Jan. 20, earning it a place alongside more than 1,400 businesses across the country contributing to the movement to build a more bicycle friendly America.

The Bicycle Friendly Business (BFB) award recognizes an organization's contributions in accelerating the movement to build a bicycle friendly America.

MCE joins 32 new and renewing BFBs in the League's latest round of business awards and 1,471 total BFBs nationwide.

MCE receives mention in EPA's **PISCES** program

McClelland Consulting Engineers' West Fork Sewer Main to Fayetteville project recently received an Honorable Mention in the 2020 PISCES Program.

The Clean Water State Revolving Loan Fund recognizes clean water projects that



demonstrate excellence through the Performance and Innovation in the SRF Creating Environmental Success (PISCES) program.

Projects promote the Environmental Protection Agency's mission of protecting human health and the environment, and exemplify the program's innovative, flexible, and collaborative nature.

The West Fork Sewer Main to Fayetteville project included 3.3 miles of 15-inch gravity sewer pipe, a pump station, and 4.2 miles of 10-inch force main pipe running through the City of Greenland to Fayetteville's 24-inch gravity sewer line on the south side of town. The improvements also allow for gravity flow to the sewer main in the currently unsewered portion of West Fork.



McMichael

MCE announces promotions, hires

McClelland

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Rock office, Gar-

P.E., was promot-

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Bullis

Water/Wastewater Department project





Osweiler

Bakunas

Buff







Traywick

Williams

manager, and Brett Budolfson, PLA, was promoted to associate.

In the Fayetteville office, Robbie Bullis, P.E., was promoted to transportation project manager. Adam Osweiler, P.E., and Eric Anderson, P.E., were promoted to senior associates. Chris Bakunas, PLA, ASLA, and Cody Traywick, P.G., were promoted to associates.

David Buff, PLS., who has been a survey intern in MCE's Fayetteville office since May 2021, acquired his professional surveyor license in December and is now fully licensed.

MCE recently hired several individuals in its Fayetteville and Little Rock offices. Trent Williams, P.E., was hired at the Fayetteville office as a Water/Wastewater Department project manager. Aaron Musick, PLS, was hired as the Survey Department manager in the Little Rock office. David Orozco was hired by the Fayetteville office as a geotechnical drilling assistant.

Three Rivers, 12-foot channel get funds

The federal Infrastructure Investment and Jobs Act will fix one problem at the end of the Arkansas River and deepen parts of it to 12 feet

Two long-awaited Army Corps of Engineers Arkansas River projects – one that would protect the navigation route against disaster, one that would increase river transportation – are moving much closer to completion because of an infusion of federal funding.

The Corps will receive \$92.6 million through the Infrastructure Investment and Jobs Act (IIJA) as a major down payment to increase the Arkansas River's navigation channel from nine feet to 12 feet. The \$1.2 trillion IIJA was signed by President Biden into law last year.

The Corps also will receive \$109 million for the "Three Rivers" project installing permanent structures to keep the Arkansas, Mississippi and White Rivers from converging, an event that would make the Arkansas River unnavigable.

The \$109 million combined with \$149 million received for the project in fiscal year 2022 should close out the Three Rivers project, said Jay Townsend, chief public affairs officer of the Corps' Little Rock district.

The \$92.6 million will enable the first construction on deepening the Arkan-

sas River navigation channel since it last received some operations and maintenance money for that purpose in 2007. It will enable the Corps to begin dredging and modifying the dikes and revetments along the banks. Part of the mitigation plan will include the installation of fish passages to reduce the disruption to the aquatic environment.

Congress authorized deepening the channel to 12 feet in 2005 but did not appropriate funding to do so, so the project has languished since 2007. Townsend said the 50th anniversary of the founding of the McClellan-Kerr River Navigation System from Catoosa, Oklahoma, to the Mississippi River helped revive interest in the project.

Project Manager Amanda Kovak said the Corps began updating the cost and economics of the project in 2021 before the IIJA was signed into law. It has a working estimate of \$274 million for completion based on inflation, but the number could be higher. Kovak said the Corps hopes to have an updated estimate based on harder numbers that it can present to Congress by Oct. 1, the beginning of the fiscal year.

Before beginning construction, the Corps will continue the work it is already doing in its formal planning, engineering and design phase. The Corps must also complete work on the project's environmental impact as required by the National Environmental Policy Act.

Kovak said the Corps hopes to complete its supplemental NEPA assessment by June 2023.

The river's navigation channel is already 12 feet deep in many areas in Arkansas, but dredging will be required in spots, including near the Three Rivers area. Quite a bit of work will be necessary from Catoosa to Fort Smith.

Townsend said the Corps will make a strategic decision as to where to start dredging first.

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ACEC/A Member Spotlight Crow Group's HQ a signature project

The Morrilton-based firm made an 89-year-old building its home. It does a variety of construction and design work, but its niche is the poultry industry.

One of the Crow Group's most impressive projects is its own headquarters.

The Morrilton-based design and construction company purchased its headquarters, built in 1929, in 2018. The headquarters was originally a Coca-Cola bottling plant that became the site of the Morrilton Walmart No. 8, which was used for testing retail concepts. It most recently was the site of the Morrilton City Hall and the Morrilton Police Department. Crow worked with the National Park Service Historic Preservation Department through the Historic Tax Credit Program to preserve and modernize the facility.

While Crow used an outside architect because of the project's historic nature, it did its own planning, design and construction management, said John Doyle, P.E., associate DBIA, project manager.

The company itself has a long history. It was originally a family-run paving company until Mike Miller bought it and hired Brian Rohlman, P.E., to run it. Crow began growing and branding itself around its construction services.

Now it's mostly a construction company with a little less than 100 employees. It has an engineering division with four professional engineers and an engineer intern.

Miller had been in the poultry business when he bought the company, and poultry industry clients are some of its most important ones. Those include Tyson Foods, Wayne Farms, and Simmons Foods. One of the Tyson projects was to design an upgrade to a wastewater facility in Vicksburg, Mississippi. For Wayne Farms, Crow Group provided services for a 5 million gallon sludge lagoon wastewater plant.

"There seems to be a small handful of engineering firms across the Southeast that do a lot of work in the poultry industry, and it has been something that we've







been able to crack into and have some success with. ... It's definitely the majority of our design work now is with poultry processors," Doyle said.

In addition to poultry, other areas include general water and wastewater. The company has done work for a local paper mill and has done municipal work in Morrilton, as well as several site developments. A project for Conway County Regional Water increased water pressure. **BEFORE AND AFTER.** Pictured are Crow Group's current lobby and its condition before it was remodeled. The facility was built in 1929 and served as a Coca-Cola bottling plant. Left, a \$10 million upgrade to Hope Water & Light's water treatment plant.

The company recently opened an office in Northwest Arkansas.

When Doyle joined the company in 2018, it had recently won a \$10 million project to upgrade Hope Water and Light's water treatment plant.

Doyle said the firm's design and construction experts collaborate on projects. The company celebrates its successes by ringing a bid bell located in its estimating room, known as the "war room."

"It's loud, Rohlman said. "Everybody starts to congregate then, and everybody wants to know what we won."



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GRAND CONCEPT. Railyard Park in Rogers has helped revitalize a downtown area by repurposing a parking lot and unactivated green space. Its features include, top left, Butterfield Stage; left to bottom center, a children's play area and splash pad; and right, a plaza that is home to food trucks and a farmers' market. The park is intersected by a railroad and features a railroad theme. Pictured below are Lance Jobe, P.E., Rogers city engineer, left, and Nate Bachelor, P.E., the project manager with CEI Engineering Associates.

CEI's Railyard Park is grandest concept

Rogers attraction wins top Engineering Excellence Award before a standing room only crowd at the Governor's Mansion

A downtown property in Rogers has been transformed from a parking lot and unactivated green space into a four-acre park and community gathering space. Railyard Park revitalized the area, improved the business climate, and won CEI Engineering Associates this year's Grand Conceptor Award.

Railyard Park took home the award at the ACEC/A's Engineering Excellence Awards banquet at the Governor's Mansion March 31. The Grand Conceptor Award is selected by a committee that reviews the category winners. The project was also the winner in Category I: Special Projects, Large Projects.

The EEA banquet drew a large number of entrants and a standing room only crowd of 174.



That part of the Rogers downtown area, previously known as Frisco Park, didn't offer much besides an old pavilion with limited space that faced west so that musical performers were looking into the sun.

"This used to be basically an unprogrammed green space and a parking lot," said CEI's Nate Bachelor, P.E., the project manager and now a department manager. "It was lackluster. It didn't have a lot of use or function other than for parking."

But all of that would change after Rogers – along with Fayetteville, Springdale and Bentonville – received grants in late 2017 from the Walton Family Foundation's Northwest Arkansas Design Excellence Program to enhance their downtown areas. In Rogers, the grant paid for the design, while the city paid for construction. The total cost was \$11,135,000.

The city hired Ross Barney Architects out of Chicago, designer of the Chicago Riverwalk, which met with residents to learn what they wanted in a park. CEI Engineering provided surveying, conceptual design, construction documentation, permitting, construction administration and construction observation services.

Covering four acres, Railyard Park features a plaza with overhead shade cloths and picnic tables set on rails. Fitted with in-ground electric services, it is home to food trucks and to a farmers' market during warm weather months. It has pervious paving to reduce stormwater runoff. Nearby is a splash pad with three water towers, allowing young people to get wet from above or from riser jets below. Playground equipment is set on a rubberized play mat. The new Butterfield Stage on the park's south side can accommodate 1,500 standing audience members.

The park pays homage to Rogers' heritage as a railroad community that got its start as a locomotive water stop. One of the main pieces of playground equipment is framed by a gantry crane, while the design of the playground's rubberized flooring evokes railroad tracks. The splash pad water towers evoke towers used for locomotives. Artists painted these with brightly colored, vibrant designs. Restrooms were constructed using repurposed shipping containers. A circular feature in the plaza's center resembles a railyard roundtable. Lance Jobe, P.E., city engineer, said most of the city's development has been along the interstate. The downtown building owners took care of their properties, but the area wasn't growing.

"You see more cars downtown now than you did before," he said. "You see businesses opening up. We've had a lot of development proposals coming in. ... There's a lot more activity now, and I think it's in large part due to the fact that they know the city's willing to invest money down here."

Bachelor and his CEI team had to overcome a number of engineering challenges. An active railroad bisects the park, so a gated fence was added as a safety measure. Because the park is in the downtown area, the infrastructure is dated, and much was not known about it. The park interacts with the Railyard Loop trail, which ties into the Razorback Greenway trail system throughout the Northwest Arkansas region. Timing and sequencing were critical. The streets had to be closed strategically, and disruptions to businesses – already challenged by the pandemic – had to be minimized. A caboose on one end of the park was transported by crane to the other side.

"That was an interesting feat," Bachelor said. "Not every day you have to coordinate moving of a train car."

McClelland Consulting Engineers (MCE) was the other big winner at the Engineering Excellence Awards. It took home the People's Choice Award sponsored by BXS Insurance for its Princeton Montclaire Drainage Improvements project for the City of Benton. The People's Choice Award is given to the project that receives the most votes among event attendees. The project also won in Category E: Environmental, Large Project.

The Princeton Montclaire Drainage project made improvements along a drainage ditch running 2,100 linear feet. MCE provided boundary surveys, easements, design, environmental documen-*Continued on next page*



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CATEGORY A: STUDIES, RESEARCH, AND CONSULTING ENGINEERING SERVICES, SMALL PROJECT. The winner was FTN Associates for the Downtown Bentonville Master Drainage Analysis. Pictured are FTN's Kale Farmer, P.E., and Stephanie Farmer.



CATEGORY A: STUDIES, RESEARCH, AND CONSULTING ENGINEERING SERVICES, LARGE PROJECT. The winner was Garver for the Wastewater Treatment Plant Conceptual Engineering Report for the Northwest Arkansas Conservation Authority. From left are Rusty Tate, P.E. Garver; Heath Ward, Springdale Water Utilities; Chris Buntin, P.E., Garver; Rick Pulvirenti, P.E., Springdale Water Utilities; and Mike Neil, Northwest Arkansas Conservation Authority.





CATEGORY B: BUILDING/TECHNOLOGY SYSTEMS, LARGE PROJECT. The winner was Garver for NAVAID Improve-Holland, P.E., Garver.

CATEGORY C: STRUCTURAL SYSTEMS, LARGE PROJECT. The winner was Michael Baker International for the Hernando de Soto Bridge Emergency Repairs for the Arkansas Department of Transportation. Front row, left to right are Scott Thornsberry, P.E., Amanda Furr, P.E., and Megan ments for the Bill and Hillary Clinton National Airport in Lit- Land, Michael Baker; Rick Ellis, Arkansas Department of Transportation; tle Rock. From left are Eric Farmer, P.E, and Mary Fair, P.E., and Fred Harper, P.E., Michael Baker. Back row are Rick Ellis, AFCO; Hus-Garver; Tom Clarke, P.E., Clinton National Airport; and Nick sam Saleem, Ph.D., P.E., Jim Beatty, P.E., and Ethan Baker, P.E., Michael Baker; and Kevin Reynolds, AFCO Steel.

tation, construction administration, and construction observation services.

The first phase consisted of clearing out obstructions, including removing dead trees and collapsed concrete walls. MCE prepared a boundary survey to locate the existing drainage easement and helped prepare temporary construction easements and short-term activity authorization from the Division of Environmental Quality.

The second phase consisted of stabilizing the slopes by constructing Redi-Rock gravity block retaining walls. It also included topographic survey services, permanent easement preparation, geotechnical investigations, environmental mitigation and corps permitting, and engineering design that included hydraulics and drainage analysis. MCE continued the project downstream by dredging the existing ditch approximately 1,000 feet and worked closely with Benton Utilities to ensure that existing water and sewer lines were protected.

The category included one Honor Award winner, FTN Associates, for the DAMCO Inc. Waste Tire Disposal Facility project for the Arkansas Department of Energy and Environment - Office of Land Resources.

Other category winners were as follows.

• Category A: Studies, Research, and **Consulting Engineering Services, Small** Project - FTN Associates, for the Downtown Bentonville Master Drainage Analysis for the City of Bentonville.

Downtown Bentonville is growing, and once-hidden drainage issues must be resolved to move forward with the drainage bond program approved by vot-



PEOPLE'S CHOICE AWARD. Selected by banquet attendees, the winner was McClelland Consulting Engineers (MCE) for the Princeton Montclaire Drainage Improvements project for the City of Benton. The project also won in Category E: Environmental, Large Project. Pictured from left are Robbie Bullis, P.E., and Jay Whisker, P.E., MCE; Mayor Tom Farmer and John Richey with the City of Benton; and Maneesh Krishnan, P.E., MCE.

ers in 2021. The city selected FTN for the Downtown Master Drainage Analysis to evaluate drainage patterns and recommend improvements to mitigate flooding.

FTN's 1-D subsurface and 2-D surface model provided a realistic and broad view of the flow throughout the watershed to gain a deeper understanding of the existing problems. The firm followed up with conceptual improvements to mitigate drainage issues. FTN's modeling can be placed on a map, GIS/website, or posted as animation to provide stakeholders with an easy-to-understand presentation of existing issues and potential improvements.

As a result of FTN's model and recommendations, the city identified several projects in this study area to move forward with design and construction.

• Category A: Studies, Research, and Consulting Engineering Services, Large Project – Garver, for the Wastewater Continued on next page

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CATEGORY E: ENVIRONMENTAL, SMALL PROJECT. The winner was FTN Associates for the Closure of the Highlands Disposal Area for the Bella Vista Village Property Owners Association. Pictured from left are FTN's Nick Schoggin, P.E., and Mark Koch.



CATEGORY E: ENVIRONMENTAL, LARGE PROJECT. FTN Associates won the Honor Award for the DAMCO Inc. Waste Tire Disposal Facility project for the Arkansas Department of Energy and Environment. From left are Jeremy Brooks, P.E., FTN, and Alexander Kreps, P.E., Arkansas Department of Energy & Environment.



CATEGORY F: WATER AND WASTEWATER, LARGE PROJECT. The winner was CWB Engineers for the Eden Isle Pump Station and Force Main project for the Eden Isle Corporation. Pictured from left are Gary Redd, Eden Isle; and Clint Bell, P.E., Kelli Gregory, and Jimmy Gray, CWB Engineers.

Treatment Plant Conceptual Engineering Report for the Northwest Arkansas Conservation Authority.

Northwest Arkansas' population is projected to double in the next 25 years, and the Northwest Arkansas Conservation Authority's wastewater treatment plant's capacity needed to be expanded to accommodate future needs. In May 2019, NACA hired Garver to develop the conceptual design to provide adequate treatment capacity. The capital improvements included modifying, refurbishing, and expanding existing facilities to increase liquid treatment process capacity from 3.6 to 7.2 million gallons per day.

Garver also evaluated a variety of existing processes and equipment, including the liquid alum storage, chemical feed pump and electrical system capacities and possible standby power generation for new facilities. The evaluation also looked at alternatives to remove nutrients more effectively and meet stringent phosphorous limits. Finally, Garver developed and calibrated a process model to help with this evaluation, verified the existing plant biological treatment, identified biological volumes necessary for the planned capacity expansion, and determined the capability of existing processes to meet future nutrient limits.

• Category B: Building/Technology Systems, Large Project – Garver, for NAVAID Improvements for the Bill and Hillary Clinton National Airport in Little Rock.

Garver provided engineering and construction services to install four new FAA-owned and maintained LED precision approach path indicator systems at the Bill and Hillary Clinton National Airport. Garver's work included surveying, math modeling, and verifying calculations per FAA order requirements. This included checking for obstructions to both the obstacle and the light signal clearance surfaces, power distribution and control rack design, review of FAA standard drawings and specifications, and coordinating and bidding Airport Improvement Program-funded and non-AIP funded work.

Garver coordinated with the FAA for equipment procurement, reviewing FAA memorandums of agreement for their work and services, construction administration and observation, submittal reviews, punch list reviews, and coordination with the FAA flight inspection team for final system commissioning.

• Category C: Structural Systems, Large Project – Michael Baker International, for the Hernando de Soto Bridge Emergency Repairs for the Arkansas Department of Transportation.

On May 11, 2021, inspectors from Michael Baker International were conducting a routine inspection of the upper portions of the Hernando de Soto Bridge when a fracture was observed in the tie girder of the arch's primary navigation span. The inspectors immediately contacted ARDOT, Tennessee Department of Transportation (TDOT) and local authorities to shut down all traffic across and under the bridge.

Initially, the extent of the damage was unknown. The Michael Baker team used unmanned aerial systems to rapidly scan the rest of the structure. No additional damage was observed, and plans for repair moved swiftly into design and construction.

Under TDOT, a three-phase plan was devised with Michael Baker as lead designer. Phase 1 consisted of designing and installing temporary stabilization plating. Phase 2 used post tensioning to



CATEGORY F: WATER AND WASTEWATER, LARGE PROJECT. McClelland Consulting Engineers received an Honor Award for the Pea Ridge Wastewater Treatment Plant. From left are Daniel Barnes, P.E., Adam Triche, P.E., and Nick Batker, P.E., McClelland; and Jake Wagner and Ken Hayes, Pea Ridge.

reduce tie stresses and bolt repairs over the fracture across 150 feet of its length. Phase 3 addressed additional defects noted in the tie during inspection. The bridge was reopened to vehicular traffic 83 days after the fracture was initially discovered.

• Category E: Environmental, Small Project – FTN Associates, for the Closure of the Highlands Disposal Area for the Bella Vista Village Property Owners Association.

The Bella Vista Property Owners Association highlands disposal area in northern Benton County was used for tree and stump waste when properties in the community were cleared for development. In 2018, the Division of Environmental Quality determined that the disposal activities could require a solid waste permit. The BVPOA agreed to close the site to satisfy Arkansas Regulation No. 22.

The final cover system design required by the regulation consists of a minimum of 18-inch compacted clay liner layer and 6-inch erosion/vegetation layer. All soils would have to be purchased and hauled to the site. Soils testing and critical quality attributes monitoring added to the cost, and the time required to haul the soils was also considerable. FTN received DEQ approval to use a geosynthetic clay liner (GCL) in lieu of the 18-inch clay liner layer. The GCL reduced the construction time, soil testing, and critical quality attributes monitoring cost. It also reduced the burden on the BVPOA, which was serving as the construction contractor. FTN's innovative use of GCL resulted in a successful project that protects human health and the environment.

• Category F: Water and Wastewater, Large Project – CWB Engineers, for the Eden Isle Pump Station and Force Main project for the Eden Isle Corporation.

Environmental impacts drive many engineering projects. The Eden Isle wastewater treatment plant was experiencing untreated overflows that discharged into Greers Ferry Lake, causing ongoing maintenance and environmental compliance issues. CWB Engineers was selected to evaluate options for improving the plant, which included project development, public approval, financing, legal, regulatory approval, easement negotiation, municipal agreements, and construction management.



CATEGORY F: WA-TER AND WASTE-WATER, LARGE PROJECT. Crist Engineers received an Honor Award for the **Biosolids Process**ing Improvements project for Paragould Light Water & Cable. From left are Craig Johnson, P.E., Crist Engineers and David Romine, Paragould Light Water & Cable.

The collection system and pump station solution are anticipated to serve the needs of the Eden Isle community for at least the next 20 years at a significant cost savings compared to the treatment plant. The project also eliminated a National Pollutant Discharge Elimination System discharge into Greers Ferry Lake, which improves water quality in the lake and surrounding community. This project demonstrates the importance of a coordinated stakeholder approach to design.

The category included four Honor Awards: Crist Engineers, for the Biosolids Processing Improvements project for Paragould Light Water & Cable; McClelland Consulting Engineers, *Continued on next page*



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CATEGORY F: WATER AND WASTEWATER, LARGE PROJECT. Halff Associates received an Honor Award for the Water Supply and Treatment System Improvements for the Sardis Water Association, PWA. From left are Lewis Jordan, Sally Horsey, Brian Vines, P.E., and Julian Brown, Halff; Roger Moren, Sardis; James Arbuckle, P.E., Halff; Phil Shupe, Shupe and Associates; Mike Marlar, P.E.; Halff; Will Moren, and Rhonda Marlar.

CATEGORY TRANSPORTA-TION. SMALL PROJECT. The winner was Crafton Tull for the Two **Rivers Park Trail** Improvements for Pulaski County. From left are Austin Paul and Dave

Roberts,

Crafton Tull.





CATEGORY H: TRANSPORTATION. LARGE PROJECT. The winner was Garver for the Little Rock Port Authority Growth Initiative. From left are Bryan Day, Port of Little Rock; Charles Cullen, P.E., Todd Mueller, P.E., John Ruddell, P.E., and John Cantabery, P.E., Garver; and James Firestone, Port of Little Rock.

for the Pea Ridge Wastewater Treatment Plant for the City of Pea Ridge; Garver, for the City Corp – Industrial Area Tank project for the Russellville City Corporation; and Halff Associates, for the Water Supply and Treatment System Improvements for the Sardis Water Association, PWA.

• Category H: Transportation, Small Project - Crafton Tull, for the Two Rivers Park Trail Improvements for Pulaski County.

The existing trailhead configuration caused traffic conflicts between user groups. Pulaski County hired Crafton Tull to enhance safety for all users by redesigning a trailhead to feature dedicated paths for bike and foot traffic, a traffic calming circle, and added parking. For pedestrians, a new 8-foot concrete path connects the existing asphalt trail to a parking lot across Two Rivers Park Road. The new path is marked with a "Pedestrian Only" sign and passes through a plaza, which serves as a traffic calming circle and reduces on-path gathering. For cyclists, a new 12-foot asphalt bikeway with dashed centerline striping curves away from the pedestrian area, allowing riders to continue on the trail without reducing speeds. The bikeway connects to the existing restroom facility and continues north to a renovated parking lot.

The improved trailhead serves as a gateway into Two Rivers Park and connects to the popular Arkansas River Trail. The safety improvements at Two Rivers Park Trail ensure a wide variety of users can safely access and enjoy one of central Arkansas' most cherished outdoor destinations.

• Category H: Transportation, Large **Project – Garver,** for the Little Rock Port Authority Growth Initiative.

The Little Rock Port Authority (LRPA) continues to grow, with increased need for more adequate facilities. Garver provided services to assist the LRPA with the planning, grant application, environmental work, design, and construction inspection and bidding of the Growth Initiative project.

Garver's early stages included developing conceptual plans and cost estimates that would eventually be the basis of a successful Transportation Investment Generating Economic Recovery (TIGER)



CATEGORY H: TRANSPORTATION, LARGE PROJECT. McClelland Consulting Engineers received an Honor Award for the Pine Bluff Regional Airport Taxiway Relocation. From left are Mitch Rose, MCE; Doug Hale, Pine Bluff Regional Airport; and Alex Smith, P.E., MCE.

grant application. Once the LRPA was awarded the grant, Garver provided environmental services to develop the required environmental assessment document.

The project was divided into two phases to save LRPA money. The first phase included approximately 6,000 linear feet of new railroad storage track along the Arkansas River and Slackwater Harbor area. The second phase included constructing a new open cell dock and mooring facilities on the Slackwater Harbor, approximately 2,200 feet of railroad track, 1,700 feet of new roadway to access the new dock, a 30,000-square-foot warehouse, a scale house, truck scales, and conveyor equipment. During each phase, Garver obtained each unique set of federal, state, and local permits. Throughout the entire project, Garver collaborated with the LRPA to verify goals and design expectations.

The category included two Honor Awards: McClelland Consulting Engineers, for the Pine Bluff Regional Airport Taxiway Relocation; and Crafton Tull, for the Port of Little Rock Infrastructure Improvements for Pulaski County and the City of Little Rock.

• Category I: Special Projects, Large Project. CEI Engineering Associates' Railyard Park was the category winner. The category had four Honor Award recipients: PMI, for the Adams Field WRF 72" Outfall Repair Project for the Little Rock Water Reclamation Authority; B & F Engineering, for the Majestic Park Baseball Complex for Visit Hot Springs; Crist Engineers, for the Sanderson Dam Bridge for the City of Hot Springs Utilities Department; and McClelland Consulting Engineers, for the Saracen Casino Resort (Including Annex), Phase I project for the Quapaw Tribe – Brock Eubanks.

• Category J: Small Projects – Michael Baker International, for the Jonesboro Municipal Airport Emergency Lighting and Signage Project.

On March 28, 2020, a large EF3 tornado with wind speeds upward of 140 mph ripped through Jonesboro, leaving a trail of destruction in its path. The tornado caused \$300 million in damage, with the Jonesboro Municipal Airport taking on some of the most severe devastation. More than 60 aircraft were damaged, as well as the airport terminal building, multiple hangars,

CATEGORY I: SPECIAL PROJECTS, LARGE PROJECT. Crist Engineers, below, received an Honor Award for the Sanderson Dam Bridge for the City of Hot Springs Utilities Department. From left are Gary Carnahan, P.E., Hot Springs; John Keckler and Matt Dunn, P.E., Crist Engineers; Mark Ramm; and Todd Piller, P.E., Hot Springs.



the airport's on-location fire station, and other facilities and equipment.

One area of concern was the lighting and signage system, which sustained damages to approximately one-third of its above-ground lights and sign fixtures. Michael Baker International, a partner of the airport for more than a decade, was the lead designer for this project, which included complete replace-*Continued on next page*

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CATEGORY I: SPECIAL PROJECTS, LARGE PROJECT. McClelland Consulting Engineers received an Honor Award for the Saracen Casino Resort Phase I project for the Quapaw Tribe. From left are Mitch Rose, Adam Osweiler, Adam Triche, P.E., McClelland; Carlton Saffa, Saracen; and Byron Hicks, P.E., Dan Beranek, P.E., Maneesh Krishnan, P.E., and Robbie Bullis, P.E., McClelland.



CATEGORY J: SMALL PROJECT. The winner was Michael Baker International for the Jonesboro Municipal Airport Emergency Lighting and Signage Project. From left are Matt Wallis, Matthew Roddy, Robert Farrar, and Mike Stengel, P.E., Michael Baker International; and George Jackson, Jonesboro Municipal Airport.



CATEGORY K: ENERGY, LARGE PROJECT. The winner was McClelland Consulting Engineers for the CRT Runway Lighting Reconstruction project for the Crossett Municipal Airport. From left are Mitch Rose, McClelland; Todd Freeman, Crossett Municipal Airport; Crossett Mayor Crystal Marshall; and Bailey Carr and Matthew Vinyard, P.E., McClelland.

ment of the entire airfield lighting and signage system and related components. With the airport's total cost of damage exceeding its insurance coverage, Michael Baker worked with the airport and FAA to secure 100% funding. The firm was also involved in repairing the airport's hangars and fire station.

• Category K: Energy, Small Project – McClelland Consulting Engineers, for the CRT Runway Lighting Reconstruction project for the Crossett Municipal Airport.

The reconstruction project provided the airport with a safe and reliable lighting system. As a result of this project, airport users can now feel a sense of safety flying into the airport at night or on lower visibility days and be confident the new system will be operational.

MCE and Brown Engineers provided engineering services that included preliminary engineering, report writing, grant application writing and administration, engineering design, bidding and awarding services, and construction observation. The construction portion included removing the existing runway and taxiway incandescent fixtures and the associated direct buried cable, followed by the installation of a new LED system. The new LED lights are more energy efficient, cost effective, and have a longer lifespan than the old incandescent light fixtures.

The airport received its brand-new LED lighting system nearly two years earlier than expected, with 100% funding from the FAA. Constructing the project was swift and had minimum impacts on the airport's air traffic operations. The airport also now pays 25% less each month on its electric bill because of the new energy-efficient system.

• Category K: Energy, Large Project – Bernhard, for the University of Arkansas for Medical Sciences Energy Project.

Like many academic health centers, University of Arkansas for Medical Sciences is facing a perfect storm of declining and capped health care reimbursements, declining state support for higher education, and ever-increasing costs. UAMS was given approval for a \$150 million energy savings performance contract to be administered through the Arkansas Energy Performance Contracting program and implemented by Bernhard.



CATEGORY K: ENERGY, LARGE PROJECT. The winner was Bernhard for the University of Arkansas for Medical Sciences Energy Project. Pictured are, front row, Kenny Hiegel and Joe Wolf, Bernhard; Michael Connery, UAMS; Juno Guedry, P.E., Bernhard; Ian Hadden, P.E., UAMS; and Blake Helms. Second row, Michael Thompson and Tim Staley, P.E., Bernhard; George McFerron, UAMS; Larry Kirchner, Kirchner Architecture; and Brandon Cole, Bernhard. Third row, Austin Miller, P.E., Chris Galloway, P.E., and Estevan Padilla, P.E., Bernhard. Top row, Gregory Coffin, Bernhard; and Ben Kuddes, P.E., Development Consultants.

The project is the largest energy savings project in the state of Arkansas, the largest in the academic and healthcare sector, and one of the largest in the United States. By leveraging guaranteed capital and operating cost savings, UAMS can address \$116 million in critical and other deferred maintenance needs and implement \$34 million in incremental energy efficiency measures.

This project included controls upgrades, retrofitting lighting, campuswide metering, new generator plant, upgrading essential electrical systems and infrastructure, and upgrading lab controls, mechanical equipment, plants and systems. The project provides UAMS a guaranteed positive annual cash flow of \$4.8 million per year average savings over the term of the agreement, provides 100% back-up power to the entire campus, and funds upgrades to Pine and Cedar Boulevard that will create 300 additional parking spaces immediately adjacent to the campus.



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Beyond the design

Garver's Jerry Holder knows dedication goes beyond transportation infrastructure. It's about creating lasting connections in all of those communities where we live and work. As an Arkansas native leading an Arkansas-based team of engineers to build a foundation for future growth in The Natural State, Jerry knows the roads, bridges, and thoroughfares ahead have never looked so good.

Jerry Holder, PE | Director of Transportation