



Infrastructure Quarterly®
4701 Northshore Drive
North Little Rock, AR 72118

Del City Wastewater Treatment Plant
Del City, Oklahoma

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Infrastructure Quarterly®
2019 Volume 11 Issue 3

102
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Director's Insight

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We all want the same thing for our communities – clean, safe, and affordable water. The challenge: Aging infrastructure and low costs for water services make necessary improvements financially difficult. One of the biggest challenges facing our industry today is communicating the real value of water to our end users – the everyday customer who expects water to always flow reliably from the tap and swirl effectively down the drain.

To assist with this problem, Garver's Water Team works closely with utilities to develop implementable, cost-effective strategies to update aging infrastructure, which often includes funding support. Our team collaborates with utilities to keep the public informed, up to date, and aware of ongoing improvements and their benefits.

In this issue you can read about our work with Del City,

Oklahoma and its aging infrastructure and equipment that hadn't been updated in over 30 years. Through Garver's creative use of funds, more than \$1.2 million was saved from the loan and applied to additional necessary facility improvements. Another example of Garver's continued investment in advancing water infrastructure can be found in Kansas, with the City of Wichita's new 120 MGD Northwest Water Treatment Plant that will replace an aging system and modernize Wichita's water supply.

At the end of the day, it isn't the technical challenges that will slow us down; it is communicating the value of what we all are working so hard to provide. When you have a water challenge, know that you are not alone; Garver is ready to help.

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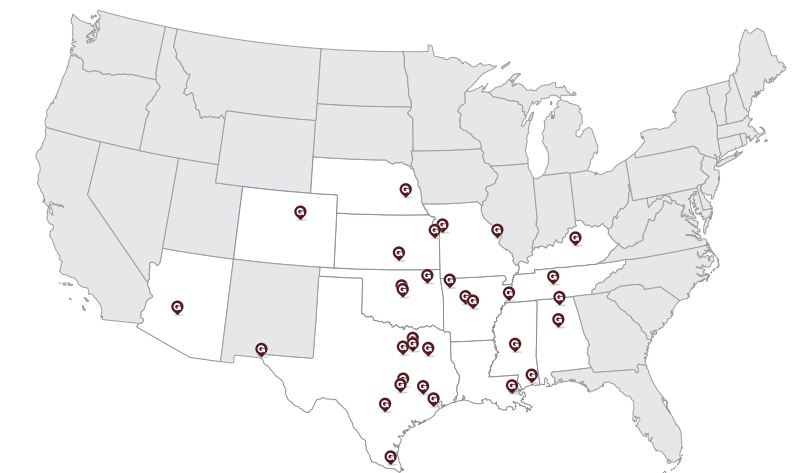
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Widening our reach

In 2019, West Texas Infrastructure Team Leader Marco Ramirez made his first pitch to the El Paso community, just like we did in six other markets over the last year. With the Garver flag now flying in El Paso and College Station, Texas; New Orleans; Biloxi and Olive Branch, Mississippi; Lincoln, Nebraska; and Oklahoma City, we're now delivering the most crucial infrastructure solutions from 33 offices in 13 states.



Biloxi, MS College Station, TX El Paso, TX Lincoln, NE New Orleans North Mississippi Oklahoma City

Engineering support for colleges and universities

ENHANCING EDUCATION FACILITIES

For more than a century, Garver has partnered with valued clients to not only deliver innovative infrastructure services, but to also uplift the communities those projects serve.

That’s why Garver’s Facilities Design Team works alongside colleges and universities to help make sure their facilities are always in peak condition. Through various on-call agreements, Garver tackles the necessary maintenance projects required to sustain positive learning environments at institutions of higher education.

“Not only are we here to help make the learning experiences as efficient as possible,” said Facilities Design Project Manager Brad Bradshaw, “but we enjoy becoming extensions of that campus community, as well.”

In doing so, Garver helped solve an HVAC system issue that caused damage to the library at the University of Central Arkansas in Conway; conducted an HVAC study to identify better performing systems and reduce operating costs at the University of Arkansas School of Nursing; and provided infrastructure upgrades that modernized the telecommunications system at the University of Arkansas for Medical Sciences.

Garver also partnered with UCA to design solar-powered light fixtures on the Stone Dam Creek Trail, which connects the campus with the rest of the growing community.

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CONWAY, ARKANSAS

Del City Wastewater Treatment Plant Upgrades

CREATIVE COST-SAVINGS

Officials in Del City, Oklahoma are enjoying all the benefits of an upgraded wastewater treatment plant, complete with new infrastructure for the first time in over 30 years. And thanks to Garver's Water Team, the City saved more than \$1.2 million of its Clean Water State Revolving Fund loan.

To address an aging WWTP that was having trouble meeting permit requirements, Garver designed new headworks and grit removal facilities, rehabilitated sequencing batch reactors (SBRs), replaced a sand filter unit with a new cloth filter, and implemented one of the state's first non-contact UV disinfection systems in lieu of chlorine disinfection.

"The state-of-the-art non-contact UV system provides the operations staff a safe and reliable disinfection solution with significantly less O&M while also using an existing building," said Water Implementation Leader Kyle Kruger.

Garver's recommendation to fit the upgrades into the facility's existing footprint saved City officials from having to purchase costly real estate and build new structures, and maximized existing systems by keeping the headworks system online during construction.

The \$1.24 million in cost savings allowed the City to purchase much-needed additional equipment for improved operations.

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DEL CITY, OKLAHOMA

I-35 Northeast Expansion Project for TxDOT

MULTI-DISCIPLINED COLLABORATION

At almost \$2 billion, the I-35 NEX project is one of the Texas Department of Transportation's largest. TxDOT and Garver worked together to obtain environmental clearance and a schematic design to allow design-build teams to pursue the massive project in the near future.

To put the size of the new I-35 project into perspective, it consists of more than 40 miles of elevated structure, including 12,000 beams and 1,800 total piers (with 550 straddle bents) between main lanes and frontage roads. The project included the addition of two general purpose lanes and one high occupancy vehicle (HOV) lane in each direction and direct connectors at three major interchanges.

"Not only is this a high-priority project for TxDOT, it's one of Garver's most significant projects, too," said Transportation Project Manager Nandita Kaundinya. "I'm very proud of our team for stepping up and delivering this complex project on a tight schedule."

More than 80 engineers, designers, planners, and technicians from Garver collaborated with TxDOT to deliver schematic design and environmental re-evaluation on an accelerated schedule of 18 months. The new I-35 elevated highway will increase travel efficiency from downtown San Antonio to northeast of the city, and provide mobility and safety improvements to one of the country's most vibrant metropolitan areas.

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SAN ANTONIO, TEXAS



BNA Eastside Electrical Vault Design and Relocation

FACILITATING PROGRESS

When rapid growth required the Nashville International Airport to relocate a major roadway dividing the airport, it was presented with a unique challenge considering its eastside electrical vault sat in the middle of the chosen path. Garver's Aviation and Facilities Design teams responded by not only designing a replacement vault building, but also helping the airport find a location that wouldn't interfere with future developments.

In a design-build agreement with Blakley Construction Services, Garver designed the new facility that powers the airport's east side, including Runway 2R-20L and associated taxiways. The solution helped make room for the crucial roadway construction and also allowed the project to be completed without disturbing the existing runway.

"Considering its importance to future plans, it had to be completed as fast as possible," said Senior Aviation Project Manager Ryan Patton. "Thanks to help from all parties, what could be a two-year process was finished in less than a year."

The new building not only clears the way for the needed road relocation, but also provides the airport with an upgraded vault capable of powering a runway system that requires the most reliable lighting equipment. Designed by Garver's Facilities Design Team, the vault building is durable, energy efficient, virtually maintenance-free, and aesthetically consistent with other airport buildings.

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NASHVILLE, TENNESSEE