Put Technology TO WORK

QUARTERLY UPDATE FY2019

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ARLINGTON
THE AMERICAN DREAM CITY

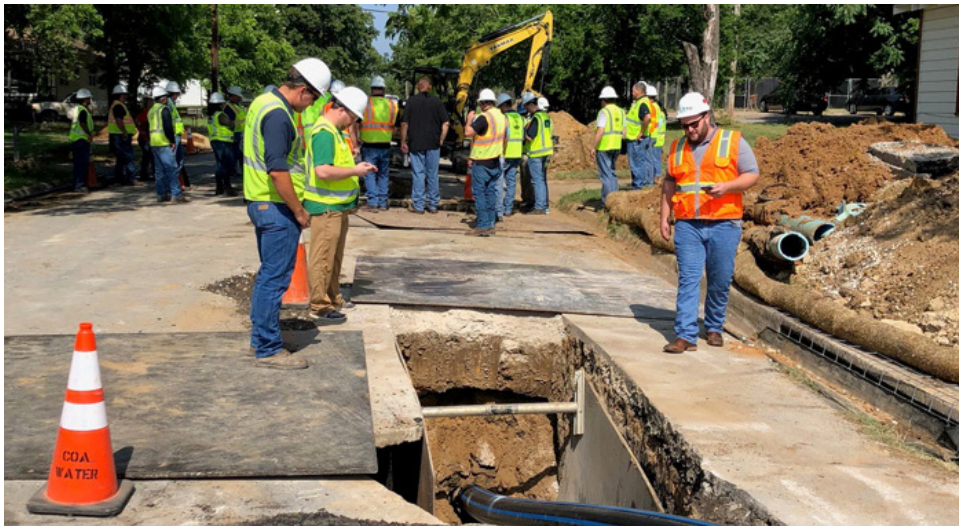
In This Issue

APD Crime Lab/Crime Scene Unit Recieves Prestigious Accreditation

After a very rigorous inspection, the Arlington Police Department's Crime Laboratory/Crime Scene Unit accreditation was renewed by the ANAB/ANSI-ASQ National Accreditation Board.

This is a renewal of one of the highest levels of forensic investigation and laboratory work in the nation.

The APD Crime Lab/Crime Scene Unit was able to attain this high level of accreditation because of the extensive commitment of resources and preparation by the management and personnel of the program. The APD Crime Lab/Crime Scene Unit in 2015 earned accreditation status in Forensic Inspection and was renewed in 2017.



Arlington Kicks Off Water Main Renewal Project Near Collins and Arkansas

During the week of September 27, an Arlington Water Utilities water main renewal project will begin and lead to the replacement of about 25,000 feet, or five miles, of aging water mains near Collins Street and Arkansas Lane.

Under a contract approved by the Arlington City Council, Murphy Pipeline Contractors will use a trenchless replacement method to install 6 to 12-inch water mains. The project involves a section of streets west

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Annual Pavement Survey to Gather Data on South Arlington Street Conditions

There's little doubt about the impact technology has on our daily lives. We see it everywhere we look — our computers, phones, cars, refrigerators, and road maintenance. Yes, even the upkeep of the roads you drive is affected by technology. During the last week in August, Arlington's Public Works and Transportation Department will continue its annual pavement survey program, which uses technology to inventory the condition of all streets within the city limits.

This project consists of contracting with a third-party vendor who operates a fleet of sophisticated data collection vehicles equipped with an array of precision instrumentation and data collection equipment. Each year the vendor collects data on one-third of the City's street. Beginning this weekend, all City streets generally bounded on the north by Green Oaks Boulevard and Bardin Road to the southern city limits will be surveyed. A survey of central Arlington was conducted in August 2017 and a survey of north Arlington is scheduled for August 2019.

"This pavement management program provides a condition inventory of every street segment in the city and tracks its maintenance history, which helps staff identify deficiencies, prioritize roadway projects, and monitor pavement performance," said Mindy Carmichael, Director of Public Works and Transportation. "By continuing to invest in technology, we have afforded ourselves the ability to make informed decisions that allow staff to optimize available resources and protect the resident's investment in the most cost-effective manner."

Updates (Continued from page 1)

of Collins Street, north of Mayfield Road, east of Brown Trail and south of Arkansas Lane. Work also will include a portion of Daniel Drive, north of Green Hill Drive and south of Mayfield Road. The map below, which was mailed to affected homeowners earlier this month, shows the streets where mains will be replaced.

2018 Water Main Replacement Project Map

The trenchless main replacement process involves pulling new water main through existing pipe instead of digging multiple trenches. It requires limited excavation, minimizing construction time and disruption to customers. Construction will move from street to street throughout the project, which is expected to last about nine months in all. The expected cost of the project is about $3 million.

"Customer satisfaction is a top consideration with our department and trenchless methods create more efficient and aesthetically pleasing projects. Residents get the benefit of new water mains without having contractors working in front of their homes for weeks at a time," Arlington Water Utilities Senior Engineer Jessie Allen said.

Arlington Water is responsible for 1,425 miles of public water main. The City's capital improvement program strives to target high maintenance water mains, efficiently spend residents' dollars, and reduce construction time and customer impact.

The sections of main to be replaced in the project starting this week were chosen because of a history of breaks. Most of the mains being replaced were installed in the early to mid-1970s. The new HDPE (high-density polyethylene) pipes being installed are flexible and non-corrosive. They are designed to last 100-plus years, reducing maintenance and repair costs that are eventually passed along to residents.

Water service interruptions are not expected throughout the project. However, if interruptions become necessary, residents will be notified door-to-door, in advance for planned outages and as quickly as possible for emergency outages. Regular updates about water outages can be found at www.arlingtontx.gov/wateroutages.

For more information, visit the Water and Sewer Projects page at www.arlingtontx.gov/waterconstruction or email questions to waterconstruction@arlingtontx.gov.

Highlights

UTA Researchers Patent Technology for Smart Seat Cushion, Adaptable Prosthetics

The University of Texas at Arlington has patented a smart seat cushion that uses changes in air pressure to redistribute body weight and help prevent the painful ulcers caused by sitting for long periods of time in a wheelchair.

The same technology can be used to create prosthetic liners that adapt their shape to accommodate changes in body volume during the day and maintain a comfortable fit for the prosthesis. Poor prosthetic fit can cause skin damage and create sores in the residual limb of the wearer.

"Pressure ulcers caused by long periods of sitting without relieving pressure at boney regions such as the tailbone, frequently occur in people who spend significant amount of time on wheelchairs. In the case of prosthesis users, poor fitting of the prosthesis leads to pressure injuries for amputees that can severely affect their daily life," said Muthu Wijesundara, co-inventor of the technology and chief research scientist at UTA's Research Institute or UTARI.

"Our technology improves on existing solutions by including real-time pressure monitoring and automated pressure modulation capabilities to help combat the formation of pressure ulcers or sores."

Cloud 9 Perception Dreaming Big as Pioneer in Robotics Automation

Cloud 9 Perception Dreaming Big as Pioneer in Robotics Automation

The dream of UT Arlington graduates James Staud and Christopher McMurrough of starting up Cloud 9 Perception began in a garage right here in The American Dream City. Today, the company has quickly progressed and expanded to a large office space, along with a full team of engineers and developers to help companies streamline complex workflows with 3D vision technology.

"There's so much growth and so much potential here," McMurrough said. "It is a great place to start a business and a great place to live and work."

Staud and McMurrough have been working on automation and robotics since 2005. The duo continues to put technology to work by developing machine vision solutions for industrial environments. These large-scale robotics are able to move materials around, performing actions like unloading items from a truck, moving things from a conveyor belt, or adding items to shelves inside a store.

McMurrough received his B.S., M.S., and Ph.D. degrees in Computer Engineering from The University of Texas at Arlington in 2008, 2010, and 2013. He is a Senior Lecturer at the school, helping to foster the creativity and develop the dreams of students looking to work in his current industry.

"The American Dream to me is to be able to do whatever it is that you love to do," McMurrough said. "I'm definitely living that here in Arlington with this company and also being able to educate people down the street at UTA."

For more information about Cloud 9 Perception, please visit www.cloud9perception.com or call (817) 381-9233.

FY19 PTW BUDGET *by the Numbers*

$100,000
CYBER SECURITY UPGRADES

$980,000
PUBLIC SAFETY TECHNOLOGY

City Releases Interactive Street Tracker Map

The City of has launched a street tracker tool to help our residents locate roadway projects and track their progress.

This tool integrates live data from Cartegraph and our RWD (roadway/water/drainage) and E-builder systems and allows anyone to type in an address, set a buffer, and view information on all city water or street projects in that area. And it is up-to-date, all the time.

Through a cross-departmental collaboration, the Office of Strategic Initiatives created an interactive Street Tracker map, where residents can learn about water, drainage and roadway projects. This data tool is optimized for mobile device use.

"What makes this tool innovative is that the project information in the map is live to City systems. Therefore any update to project status is then updated in Street Tracker so residents have the most up to date information readily available.", said Elaine Dennehy, Research & Analytics Manager.

Check out a what What Works City has to say about the new app. Visit http://www.arlington-tx.gov/streetconstructionprojects/ to try it for yourself.