

BOARD OF PUBLIC WORKS AND SAFETY
MINUTES
March 19, 2019

Regular Session:

The Board of Public Works and Safety met in regular session on Tuesday, March 19, 2019 at 9:00 a.m. in the Common Council Chambers. Members present were: Gary Henriott, Cindy Murray, Norm Childress, Amy Moulton and Ron Shriner

Jacque Chosnek, 1st Deputy City Attorney, was also present.

President Henriott called the meeting to order.

The Pledge of Allegiance was given to the flag of our Country.

MINUTES

Mrs. Murray moved for approval of the minutes from the March 12, 2019 regular meeting. Mrs. Moulton seconded. Passed.

NEW BUSINESS

Lafayette Housing Authority

Amendment #1-Agreement between Lafayette Housing Consortium and Habitat for Humanity of Lafayette 2017 Project #1-Koinonia Ridge Subdivision

Valerie Oakley, Project Manager, presented to the Board and recommended approval of Amendment #1 for the Agreement between the Lafayette Housing Consortium and Habitat for Humanity of Lafayette 2017 HOME funds for Project #1-Koinonia Ridge Subdivision. The project is in the amount of \$117,000.00 which equals \$29,250 per lot for Lots 3, 4, 5 and 6 in the subdivision. Mrs. Moulton moved for approval. Mr. Childress seconded. Passed.

Parks Department

Contract with Context Design for Memorial Island Phase 3

Jon Miner, Parks Department, presented to the Board and recommended approval of a Contract with Context Design for Memorial Island Phase 3. The contract is in the amount of \$344,352.00 for construction documentation and construction phase assistance. Mr. Miner stated that construction is set to begin in November 2019 with construction lasting one year. Mrs. Murray moved for approval. Mr. Shriner seconded. Passed.

Water Works

Permission to Advertise-South 4th Street Water Main Replacement

Kerry Smith, Water Works Superintendent, presented to the Board and recommended approval of a Permission to Advertise the South 4th Street Water Main Replacement Project with locations at Woodview Court, Thise Court and Larosa Court. The advertisements will run on March 22 and March 29

with the bid opening on April 16, 2019. Mrs. Moulton moved for approval. Mr. Childress seconded. Passed.

CLAIMS

Tim Clary, Controller, presented for Board approval, Claims in the amount of \$5,431,127.43. President Henriott asked if there were any further questions and there were none. Mr. Childress moved for approval. Mrs. Murray seconded. Passed.

MISCELLANEOUS

Banner Request-Ouibache Music Festival

President Henriott presented to the Board and recommended approval of a Banner Request for the Ouibache Music Festival. The banner will be hung on Main Street from September 10-30, 2019. Mr. Shriner moved for approval. Mrs. Moulton seconded. Passed.

DEPARTMENTAL UPDATE

Information Technology

Andy Milam, IT Director, gave the following update:

The City IT department provides Information Technology services and support to 18 city departments (Mayor, LPD, LFD, multiple Parks depts., Facilities, Water, Renew, Street, Sanitation, Fleet, Traffic, Controller, Clerk, Engineering, HR, UBO, Economic Dev, Marketing/Comm) and others such as Wabash River Enhancement, State Board of Accounts when on site etc. We currently administer approximately 600 user accounts, approximately 60 servers and approximately 1,200 network connected devices.

CyberSecurity

One of our major focuses is CyberSecurity. One of our missions is to securely provide access to applications and data. Every project in IT has Security at the forefront. We view every project as an opportunity to improve security. Each and every security system will yield to an attacker if they have unlimited time, money, access, and the brainpower needed. The magic question that every IT Director wrestles with is how much security do we need? How much money, manpower, and time should be committed to security? According to the book "IT Governance: Policies and Procedures," The answer is that we only need 1 second of security. The ideal system will protect from unauthorized use for 1 second longer than the maximum limits of frustration and tenacity of the worst hacker. So how do we get to that second? The answer is a layered approach to security that looks under all the rocks, fills in all of the holes, and paves the road to remaining employed and sleeping well at night. Here are some of the layers in our security systems.

All email is filtered through a cloud provider, scanning for malicious content, and removing it before it ever hits our network. Approximately 50% of incoming mail is junk or malicious. We also scan outbound email just in case we were to have a malicious actor on the inside.

Once data hits our network, our Palo Alto next generation firewall is scanning packets looking for and blocking malicious traffic. It's a firewall, intrusion detection & prevention device, anti-malware device and anti-virus protection all in one appliance. It performs deep packet inspection and also examines the address of websites that users visit to prevent them from obtaining malicious content.

Each end point device or computer has anti-virus software loaded and running. The software is updated daily as new threats emerge all the time.

Operating systems are patched monthly when Microsoft releases updates which often fix exploits that have been revealed.

One of the smartest moves we've made in the battle of anti-virus and anti-malware is implementing a Microsoft tool called App locker that literally examines any software that attempts to run on a pc or server. If the software that is attempting to run isn't on an approved list, it won't run. It's incredibly effective and is similar to the technology that Apple uses to keep its devices virus free. Most Windows Enterprise customers don't use it because it can be time consuming to administer, however my team member Tom Melville has done a fantastic job managing it efficiently. This tool has prevented malware and Ransomware from running in our environment.

Penetration testing is another tool in our toolbox. The bad guys use hacking software that is readily available on the Internet. They typically are not Windows based and instead use the Linux operating system. We utilize that same hacking software to test our systems from outside the firewall to ensure that ports that shouldn't be open are closed. The tools also look for common exploits such as vulnerabilities in public facing web services or SQL servers. We patch and plug as appropriate.

We also began requiring CyberLiability insurance for vendors who need remote access to our network.

There are a variety of vendors who provide support on different systems such as Water and Renew Supervisory Control and Data Acquisition (SCADA) systems. We worked with our agent to come up with the required policy limits and language, which made vendors realize if their access resulted in a data breach, they become financially responsible for it. Many security breaches in the news have occurred when third party vendors have remote access, so we feel this is an important tool and conversation starter.

In early 2018 we implemented a Security awareness training campaign to train every end user and make them human firewalls. This campaign started with a fake phishing email to measure our organizational risk. It revealed that 24% of our users were prone to falling for phishing scams. After requiring every computer user to complete a 45 minute Security Awareness Training session online, we sent another test. This test was too tantalizing as it offered a link to see next year's employee raises. It didn't go well with 37.6% of users clicking the link. We sent users back to school and conducted two additional training sessions. Our third phishing test showed much progress with less than 1% of users clicking the link. We will continue the security awareness training indefinitely.

HyperConverged technology is the process of combining Servers, storage and network into single devices nodes, and then connecting those nodes together as a cluster. This provides high performance computing and reliability. We implemented HyperConverged technology in our City hall data center in 2017 and we eliminated an entire six foot rack of equipment. In addition to the reduced footprint and less rack space, we enjoy reduced power consumption, reduced cooling needs and improved performance. In 2018 we did the same thing at our Disaster Recovery site and have the systems replicating data. We were early adopters of hyper-converged technology, and it is taking over the datacenter industry.

LPD Podcast

Occasionally our team gets to do things outside of the normal IT realm. Alan Schwab and Tom Melville have been helping produce the LPD podcast "Inside the Squad" in house. They do a good job in a tech support role, and it is fun for them. Audio production and recording isn't automatically in an IT person's wheelhouse, but these guys own it. The entire podcast team was featured in the March 2019 edition of The Municipal magazine. A copy is provided for you.

Munis

Our digital transformation began in 2014 when we starting the implementation of the Tyler Munis ERP system. As a reminder we first launched the Finance module, then HR/Payroll, Engineering Permits & Code Enforcement, and last but not least Utility billing. While not perfect, this off the shelf software solution has taken the City to an entirely different level of transparency, functionality and improved work flow. The IT department has driven the Munis selection and implementation projects from the beginning. Utility billing customers can now interact with their account online, pay online, see consumption history,

billing history, and we have the ability for bills to be emailed. Amy Douglas and her team in UBO take an ownership approach to using the software and it shows.

Employees have an interactive portal where they can view payroll information, history as well as change their W4 withholdings, or address without paper forms.

Citizens can apply for building permits online, and we're working though some final decisions surrounding online payments for permits. Once complete we will be able to save citizens trips to City hall to start the permit process. Jason Kaminsky in Engineering deserves kudos for his work with online permits. There are several mini modules or features within the larger modules that we're still working to complete. Specifically we have a work order module to stand up for several departments, and a Fleet maintenance module.

IOT Internet of Things

It's the concept of everything, every system, every device being connected and communicating. We have watched many systems evolve and converge on our network. The new City hall HVAC system is network connected allowing Jason and his team remote access from anywhere. Jason can turn up the heat in this room right now from his mobile device.

The City traffic control system is another example of connected systems on our network. Our Engineering and Traffic departments working with a consultant have provided Smart Traffic solutions to Lafayette citizens since 2010. We don't have anything to do with it except provide the reliable fiber optic network and data switches that allow controllers to communicate, and supporting the servers running the software. Our outdoor Wi-Fi helps people stay connected when downtown or in our City parks. The Wi-Fi network rides on the same fiber network as the traffic system, and in the last year, we have upgraded all of the radios to the latest and greatest hardware. Some of these were done as part of the Main street streetscape. We do that because we're going through the motions of taking them down and putting them back up, so we replace the older camera and Wi-Fi technology while we're at it. We also upgraded all of the outdoor Wi-Fi at Columbian Park and are working with the architects to ensure the new Loeb stadium, and the new Marq promenade is blanketed with coverage. We partnered with Purdue and our Internet Service Provider to broadcast the Purdue Air Link (PAL) network on our wireless system. That allows Purdue faculty, staff and students the ability to access their Purdue resources as if they were on campus. That partnership project got the attention of Government Technology, and in late 2017 our IT department won a Best of Indiana award for "Best Application Serving the Public." The security camera system continues to grow and evolve. We have 132 cameras City wide with plans to add more in the upcoming Streetscape project. Our camera system was featured in State Tech magazine Fall 2018 edition. A copy has been provided.

TPAR

We are currently in the process of working with Parks and Tyler to stand up new Tyler Parks and Rec software. This software was a newer acquisition for Tyler, and we have hit some pain points. The Parks department has been working very hard to overcome the obstacles and do the required testing. Once implemented, the software will provide more online services for citizens, such as the ability to reserve shelters, sign up for zoo education programs and the many offerings at McAllister Recreation Center.

Data Protection

Later this year we will replace our data center backup system. We currently have a 5 year old system that DE duplicates data during backup, and replicates to our DR site. So that is literally a backup of the backup. Vendors price the maintenance renewals of these systems so that after 5 years, it's more cost effective to replace them than renew them. The backup solutions, like everything else, are evolving at light speed. We will work with several vendors to vet different products and pricing to determine the best fit for our environment. The good news is there are some newer solutions that appear to be less costly than what we have purchased in the past. Our goal is to make a product selection in July, implement in September so that we can retire the existing solution when support ends in November.

Executime

Tyler technologies has acquired an advanced time and attendance system called Executime which we plan to license. Our existing time clocks and time and attendance software is over 15 years old and lacking some features that we want. Executime has tight integration into our Munis HR & payroll modules and will streamline many processes such as requesting, approving and tracking time off. We start the Executime project this month.

Paymentus

We had the pleasure of helping our utility departments select a solution that offers the ability to pay by phone. Paymentus does that and much more. It has the ability to contact customers before they get disconnected for non-payment, and does so via email, text or phone call. Utility billing anticipates this will save multiple truck rolls for disconnection and subsequent reconnection of service. We look forward to working with Utility billing and Paymentus on the integration into Munis.

Columbian Park Fiber Optic Cable Overhaul

With several new projects in Columbian Park came the need to evaluate the existing fiber plant. We have determined the existing cable which has been piecemealed over time, isn't conducive to connecting the new buildings. We're consulting with Wintek to install a new fiber optic backbone through the park that will better accommodate existing and new buildings such as Loeb stadium and the penguin exhibit.

As you can see, we have the privilege of working with every City department, as everything we do involves technology. We do our best to learn what's new and demystify technology to help departments be productive and allow them to serve our citizens effectively.

Mr. Milam answered questions from the Board.

Time: 9:30 a.m.

BOARD OF PUBLIC WORKS AND SAFETY

Gary Henriott s/s

President

ATTEST: Mindy Miller s/s

Mindy Miller, 1st Deputy Clerk

Minutes written by Mindy Miller, 1st Deputy Clerk

*A digital audio recording of this meeting is available in the Lafayette City Clerk's Office or online at <http://www.lafayette.in.gov/agendacenter>.

**A list of all permits issued for the preceding week is available at <http://www.lafayette.in.gov/DocumentCenter/Index/375>