

CITY COUNCIL CONFERENCE MINUTES

January 24, 2017

The City Council of the City of Norman, Cleveland County, State of Oklahoma, met in a conference at 5:35 p.m. in the Municipal Building Conference Room on the 24th day of January, 2017, and notice and agenda of the meeting were posted at the Municipal Building at 201 West Gray, and the Norman Public Library at 225 North Webster 24 hours prior to the beginning of the meeting.

PRESENT: Councilmembers Allison, Castleberry, Chappel, Clark, Heiple, Hickman, Holman, Karjala, Mayor Miller

ABSENT: None

Item 1, being:

PROGRESS REPORT REGARDING THE DEVELOPMENT OF THE CITY WIDE EMERGENCY COMMUNICATION SYSTEM (FUNDED BY PUBLIC SAFETY SALES TAX II).

Major J.D. Younger, Norman Police Department, said the Public Safety Sales Tax II was approved by voters on April 1, 2014. He highlighted the project timeline as:

- Capital Project Design appropriation on July 1, 2015;
- Contract K-1415-16 for Phase I Consultant on August 12, 2014;
- Council Study Session Phase I Report on status of current communication system on March 24, 2015;
- Capital Project Construction and Materials appropriation on July 1, 2015;
- Contract K-1516-42 Phase II Consultant on September 22, 2016;
- Release of Request for Proposal (RFP) 1516-54 on March 16, 2016;
- RFP 1516-54 proposals received on June 24, 2016; and
- Consultant vendor ranking recommendation on September 14, 2016.

The City's current Emergency Communication System (ECS) has been in place since 2000 and was expected to reach its end of life in 2018, which means the system will no longer be supported (parts become obsolete/cost prohibitive).

Mr. Dean Hart, TUSA Consulting Services, said TUSA (named after owner and founder Nick Tusa) was established in 1992 and was initially involved in microwave communication networks offshore in the Gulf of Mexico. Those design techniques were adapted and applied to the public safety market so TUSA's current sole focus is Public Safety Radio Communications and safety of first responders. TUSA has been recognized by Mission Critical Magazine as one of the nation's top public safety consultants.

Mr. Hart said the City contracted with TUSA in September 2015, and the first thing TUSA did was read the Phase I Needs Assessment Report the City's original consultant, RCC Consultants, Inc. (RCC), had provided in order to understand the needs and putting that into a technical process for a vendor RFP. As part of that process, TUSA representatives visited the sites and dispatch centers including the University of Oklahoma (OU). TUSA's review is a two part process consisting of technical compliance and cost so if a system is not technically compliant, TUSA believes the cost is irrelevant.

On March 16, 2016, an RFP was issued with a mandatory pre-proposal conference on April 13, 2016, with a response due date of June 24, 2016. Four very competitive vendors responded that included Motorola Solutions; Harris Corporation; AIRBUS; and TAIT/Stoltz Telecom. Three of the vendors were technically compliant, 1) Harris Corporation, 2) AIRBUS, and 3) Motorola Solutions. Harris Corporation provided a higher level of coverage than requested and supported Phase 1 (Needs Assessment and Alternatives Analysis) and Phase 2 (propose solicitations, conduct vendor proposal evaluations, and have contract negotiations operations). Once TUSA evaluated those vendors and deemed them compliant, they opened the cost proposals.

Based on technical compliance rankings, Harris Corporation (Harris) was ranked number one followed by Motorola Solutions with AIRBUS as third. Vendor cost comparison rankings were as follows:

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|-----------------------|-----------------|
| 1. Harris Corporation | \$14,886,249.21 |
| 2. Motorola Solutions | \$18,148,807.00 |
| 3. AIRBUS | \$24,104,974.00 |

Mr. Hart said Harris' cost proposal also included maintenance for 15 years. TUSA recommended the City begin negotiations with Harris. He highlighted Harris' proposal as a six site/Phase 2/P25 Simulcast Network with redundant switch and control point; main and backup dispatch centers; microwave capability; Fire Station alerting; and 816 subscribers for public safety and public service. He said microwave connectivity gives the City its own dedicated connectivity.

Contract negotiations took place in October and December 2016, and negotiations included Norman owning the communication tower sites rather than leasing sites; guyed towers (a tower structure which consists of a free-standing base, in most cases of concrete or of lattice steel with a guyed mast on the top); two self-supporting towers (a tower that is typically a three or four sided lattice type structure made from solid rod, pipe, or angle); two additional channels for the Norman Partners of OU and Cleveland County; interconnectivity between Norman and Oklahoma City; and 954 subscribers for public safety and public service.

Contract negotiation costs with Harris are as follows:

Subject	Final Negotiation	RFP Proposal
Infrastructure Equipment with Preventive Maintenance, Engineering, and Installation Services	\$14,182,276.59	\$11,162,258.69
Subscribers and Services	\$ 4,412,405.26	\$ 3,675,566.50
Infrastructure Discount	(\$ 2,491,775.63)	(\$ 2,492,775.63)
Subscriber Discount	(\$ 2,198,849.50)	(\$ 2,199,849.50)
Initial Contract	\$ 13,703,056.72	\$10,146,200.06
Yearly Maintenance 2 to 5 years (annually)	\$ 267,945.50	\$ 233,755.63
Yearly Maintenance 6 to 15 years (annually)	\$ 379,018.75	\$ 432,332.10
Additional Costs	None	None

TUSA recommends a 10% construction contingency fee for Norman (\$902,362) for unknowns and construction responsibilities. Other requirements include the City of Norman providing soil studies, electrical connection to 50' of the site, and natural gas connection to 50' of the site.

Mr. Hart said TUSA will work with the City to assist in implementation of the network that involves the detailed design review; construction; staging of radio and microwave; system acceptance; coverage acceptance (the main purpose of the system); and final acceptance of the system.

Mayor Miller said RCC was the initial consultant on the project and now TUSA is the consultant, what happened that caused the change in consultants? Major Younger said Phase I of the project was an analysis, assessment, and identification of needs for the current system with a recommendation on how to meet those needs. The City contracted with RCC to conduct Phase I and provide a report to Council on their findings. After that report was completed, RCC entered into bankruptcy so the City severed ties at that time to avoid any unknowns and contracted with TUSA for Phase 2. Mr. Hart said TUSA was already working with Oklahoma City on their communication system which benefited the City of Norman.

Councilmember Castleberry asked for more information on the electrical and gas connections. He asked are these for sites where towers are not currently located and Mr. Hart said yes, the City will be building six new sites and will need electrical and gas services. Councilmember Castleberry asked why there is such a big cost difference in the initial bids and Mr. Hart said one of the unique things about Harris is their guarantee in writing of more coverage than requested and the other vendors would not guarantee that in writing. Mr. Hart said there was about a \$1 million price difference in the system price because Harris has a different way of doing things with software versus hardware. He said hardware costs more money, takes up space on sites, and requires more air conditioning, more battery power, more battery backup, etc. There was a \$3 million difference in service because anytime there are more parts to maintain there will be more costs.

Councilmember Castleberry asked if Harris is a well-established company or a start-up company and Mr. Hart said if you look at the percentages, Motorola Solutions is number one and Harris Corporation is number two in the industry; however, Harris Corporation is striving to be number one.

Councilmember Hickman asked Mr. Hart to describe how the communication towers will work in layman's terms and Mr. Hart said the key is that it is a public safety grade radio network not only dedicated to the City of Norman and its partners, but also providing interoperable communications with Cleveland and Oklahoma Counties as well as other P25 users. Public safety grade means that when everything else quits working, this system will keep working. The system is built around the mentality that police and fire need to be able to do their jobs at all times. The microwave system has reliability and redundancy built in so it will still be on air when cell phone systems may not be working due to tornadoes or other natural disasters.

Councilmember Hickman asked how the system keeps other people from using it and Mr. Hart said there are security measures in the programming and the City effectively holds the key to that and will be the ones to say who can join the system. There is also built-in encryption so there can be no eavesdropping.

Mr. Jason LaForge, Oklahoma Area Sales Manager for Harris Corporation, said Harris is an \$8 billion per year organization and the primary communication provider for the Department of Defense. He said the communication system is durable and durability is important because when firefighters go into a burning building they want their radio to work, their radio is their lifeline. Harris installed the Oklahoma City network and that network consists of the Cities of Yukon, Mustang, Warr Acres, and Bethany; Will Rogers Airport; Oklahoma Community Christian College; and Oklahoma Housing Authority. All of these entities operate on the network for public safety communication. Harris also provides the Broken

Arrow network consisting of the Cities of Jenks; Bixby; and Glenpool; Waggoner County; and Rogers County.

Mr. LaForge described the radios as a multi-band radio that can be connected to a cellular network. He said responders will be able to listen to the radio system and broadcast back to the system through a cell phone app even outside of the systems coverage range. He said this radio is cutting edge and leads the industry in technology.

Councilmember Karjala asked how long the system is intended to last and Mr. LaForge said 15 to 20 years, but the maintenance, which is the key, has hardware and software upgrades throughout the life cycle to keep the network portion of the system current. Councilmember Castleberry said, theoretically, in ten years the City would need new equipment so would that be included in the maintenance upgrades and Mr. LaForge said yes.

Councilmember Castleberry asked what this system does that the current system does not do and Mr. LaForge said coverage is the largest piece as well as more capacity. The coverage difference is huge in terms of growth of the City. Major Younger said the current system is not designed to provide the coverage needed in east Norman and during a wildfire last year, personnel had to drive to each location for status updates because the radios were not connecting. He said in 2008, the current system needed \$1.6 million in capacity upgrades at which time the City partnered with the State of Oklahoma to obtain those upgrades. One of the results of that partnership was the loss of autonomy on the current system so the current system's brain that controls everything is located in Tulsa. Since Norman is on the Oklahoma Wireless Network, everyone on that network has the same access to the system. When Norman has a natural disaster and there is an influx of users of the system then the City of Norman does not have the technical ability to limit the number of users to ensure Norman's first responders can talk to each other and not have to wait in line. The new system will allow the City to scale users and make decisions regarding who uses the system based on the circumstances.

Councilmember Chappel said the northeast and southeast corners will now be covered effectively, correct? Major Younger said that is correct, dramatic coverage increases will be seen.

Councilmember Clark asked if something happened to the current system in Tulsa, could that affect Norman? Mr. LaForge said yes because the City currently uses landline T1 connectivity between the Dispatch Center and the sites to Tulsa, which has not been reliable. Also, the current system is proprietary so there are limited options in purchasing radios, parts, infrastructure, etc.

Councilmember Holman said the Public Safety Oversight Committee anticipated a cost between \$15 and \$20 million so \$13 million is a good number. The selling point for him on a new communication system is the fact that police officers in rural areas have unreliable or no radio contact. The thought of being in some of those rural areas without any communication for backup is pretty frightening.

Mayor Miller said an airport along the east coast recently had a massive grounding of airplanes due to a software glitch. Many people were surprised there was no backup for the software and asked about the backup for the software portion of the communication system. Mr. LaForge said there are three levels of redundancy that includes a redundancy switch (the brains of the system controlling it), a simulcast system (all six site area simulcast at the same time), and a microwave ring (if something happens to a site, it reverses its route to give reliability). He said the RFP asked for details on what would happen if a site went down or a switch went down. He said a pretty catastrophic event would have to happen to lose the radio system.

Councilmember Hickman asked if the infrastructure will have the capability to handle data such as text messages or pictures. Mr. LaForge said the system is data capable, it can handle Global Positioning System (GPS) locations, and it can handle text messaging; however, that is an expensive option. He said the system's main purpose is voice communications, but it can handle limited mobile data. He said it does not have the bandwidth of a cell system; it has the bandwidth to handle limited and chosen public safety type applications.

Councilmember Hickman said any time a system is rated to military specifications, it becomes more expensive because the reliability and dependability standard is higher. He likes the fact that the communication system has the high specifications of military ratings and believes the cost is reasonable.

Items submitted for the record

1. PowerPoint presentation entitled, "City of Norman Emergency Communications System Replacement Project," dated January 24, 2017

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The meeting adjourned at 6:15 p.m.

ATTEST:

City Clerk

Mayor