



**City of Broken Arrow**  
**Minutes**  
**Broken Arrow Municipal Authority**

City Hall  
220 S 1st Street  
Broken Arrow OK  
74012

*Chairman Craig Thurmond*  
*Vice-Chair Scott Eudey*  
*Trustee Mike Lester*  
*Trustee Johnnie Parks*  
*Trustee Debra Wimpee*

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**Monday, June 5, 2017**

**Council Chambers**

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**1. Call to Order**

Chairman Craig Thurmond called the meeting to order at approximately 7:35 p.m.

**2. Roll Call**

**Present: 5 -** Debra Wimpee, Johnnie Parks, Mike Lester, Scott Eudey, Craig Thurmond

**3. Consideration of Consent Agenda**

Chairman Thurmond asked if there were any items to remove from the Consent Agenda. There being none, he asked for a motion.

MOTION: A motion was made by Mike Lester, seconded by Scott Eudey.

**Move to approve the Consent Agenda as presented**

The motion carried by the following vote:

**Aye: 5 -** Debra Wimpee, Johnnie Parks, Mike Lester, Scott Eudey, Craig Thurmond

- A. 17-1677 Approval of Broken Arrow Municipal Authority Meeting Minutes of May 16, 2017**
- B. 17-2261 Acknowledgement of Submittal of the March through May 2017 Pretreatment Report to the Regional Metropolitan Utility Authority (RMUA)**
- C. 17-2227 Acknowledgement of receipt of Oklahoma Department of Environmental Quality (ODEQ) Permit No. WL000072170156 for construction of Water Distribution Storage Tanks Mixing Systems at Tiger Hill and Battle Creek (Project No. 175432)**
- D. 17-2244 Approval and authorization to execute a Service and Operation Agreement between the Broken Arrow Municipal Authority and the Metropolitan Environmental Trust (M.e.t.) for operation of the Broken Arrow Recycle Center and for services related to Household Hazardous Waste Collection**
- E. 16-1563 Approval of the Broken Arrow Municipal Authority Claims List for June 05, 2017**

**4. Consideration of Items Removed from Consent Agenda**

There were no items removed from the Consent Agenda. No action was required or taken.

**5. Public Hearings, Appeals, Presentations, Recognitions, Awards**

There were no public hearings, appeals, presentations, recognitions or awards.

**6. General Authority Business**

- A. 17-2246 Consideration, discussion, and possible approval to execute a Routeware Master Sales and License Agreement with Routeware, Inc. for routing and navigation system hardware, software and support services for the Sanitation Division**

Lee Zirk, General Services Director, stated that he was there to request approval of purchase of a routing and navigation system for the Sanitation Division. There was general agreement that Sanitation staff was doing an exceptional job by way of knowledge acquired through operating the routes for many years. Nevertheless, it was expected that acquiring such a tool would increase the Division's efficiency and help pave the way for potential expansion of services to include include recycling. Mr. Zirk added that benefits of the Routeware were listed in the fact accompanying the item.

Mr. Zirk recalled that the Department requested proposals from 12 vendors, receiving 2 proposals back. Both proposals received were very good. Staff was recommending that the City go with the lower bid from Routeware.

A PowerPoint presentation put together by Mr. Zirk was given. In business 18 years, Routeware focused exclusively on the waste hauling industry. Routeware had done business with New Solutions, the contractor for the City of Tulsa, and Division staff witnessed their Routeware software being used. The product received good feedback from suppliers. It was made in America and was being utilized in such major cities as Chicago, Denver, Minneapolis and San Francisco.

Mr. Zirk illustrated the main features of the system, which would afford workers the ability to take photos and videos in the event they encountered some unusual or other thing they would like to document. The truck-monitoring and truck-alert feature allowed Managers to view remotely what was happening within the trucks, including speed and idling time. For the driver, it provided mapping and turn-by-turn directions of the route, if needed. Mapped route comparisons also enabled Supervisors and Managers to manage routes more effectively.

Slides showing what the equipment looked like were shown. The hardware included a Windows Tablet that would be mounted inside the cab. Also included in the on-board computer package was back-office software allowing Managers to send drivers Instant Messages. The Regular Schedule Route Screen which the driver would view, allowed him to document when he picked up at an address or skipped it because the trash wasn't out, etc. The camera feature would improve customer service in that photos eliminated doubt about what Sanitation crews were doing, helping to protect them. Photos could be readily e-mailed to inquiring/complaining customers or attached to their statements. Hitting the navigation tab on the Mapping Screen, drivers could view where their pick-ups were by street name, zooming in and out, if they so wished.

Another benefit of the Route software was the capability for drivers to input special charges for extra pick-ups, which would then go to Customer Service and Billing, automatically.

Behind the scenes in the Control Center, Supervisors and Management could avail themselves of many different tabs and tools to help improve efficiency of operations with respect to the drivers in the field. One tab provided a "breadcrumb trail," enabling them to see how a driver drove his route and record his actions inside the truck, if they wished. Another tab provided information with regard to idle events for each truck. There were over 1,000 standard statistical tables and charts accessible in the database as, for example, Trend Idle Time Per Month, Total Speed Events and Distance. Over time, the Division would figure out which reports would be of use to it and begin recording and compiling data for later analysis.

Summarizing the advantage gained in using the Routeware software, Mr. Zirk reiterated that electronic routing in On Board Computer would assist drivers and crews in maximizing route efficiency. He pointed out that routing procedures for both new and seasoned drivers would improve through driver interface, real-time GPS and route maps. It would also be

of help to drivers covering a route that was new to them. Other benefits were service verification, visibility of routes and truck in real time, and data reports that could be used to improve their organizational functions, going forward. Finally, the software could be applied to additional services, as, for example, snow plowing. It could also be installed in other utility vehicles.

Mr. Zirk ended his presentation by recapping benefits and features of the Routeware system. Meeting Department goals of increased employee productivity and greater efficiency would be made possible. Routes would be easier to run and to learn. Dispatchers would gain awareness and control of what was going on and helper routes would be simplified and negotiated more speedily. For Supervisors and Managers, improved documentation of service would facilitate faster starts and provide actionable data for coaching drivers. From a technological viewpoint, the system incorporated familiar technologies that were easy to deploy. Lastly, pictures and GPS tracking would defend the Division and help keep customer service at a high level by documenting activities. Councilman Lester inquired if every “skip,” or instance where no trash was put out for collection, would be photographed. Mr. Zirk replied that they would photograph the ones with whom they were familiar as problem customers, primarily. Councilwoman Wimpee asked whether the Division currently did daily reports. Mr. Zirk replied that they did do handwritten reports on paper.

Councilman Lester asked if the Routeware system would lead the Department to add new routes to already-established ones. Mr. Zirk explained that in the past, Sanitation had adopted a team-based approach, with several trucks working a particular area. Recently, in preparation for the new hardware and software, they had re-divided all the routes into individual routes for each truck. Drivers and crews were preparing to take on their own separate areas. However, it would all change if, in the future, other services were added. Having the Routeware tool at their fingertips would make any transition much easier by facilitating set-up of new routes.

Vice-Mayor Eudey asked if the system would make the jobs of Sanitation employees easier. Mr. Zirk replied that initially it would make their jobs a little tougher, but in the end it would empower and enable them to perform better. There would be a learning curve, but it was preferable that the program get going soon so that it would be easier to take on future changes.

Councilman Lester asked whether the experience had been that the equipment was durable enough to withstand a truck environment and rigors of the road. Mr. Zirk replied in the affirmative, explaining that the proposal required military-grade, tough books for that application. Mr. Zirk also confirmed to Councilman Lester that service, repair and IT support were covered under the contract. The initial term of the contract was three years, and it could be renewed on annual basis thereafter. Councilman Lester inquired whether the price given was for a three-year period or if it were an annual fee. Mr. Zirk explained that the price reflected purchase of the equipment and installation. There would be monthly fees for license, support, and so forth.

Vice-Mayor asked what would happen if one of the computers were damaged. Mr. Zirk pointed out that the tablet in the truck was not a very expensive item. What was expensive was the software running it and the Cloud-based design behind it. The manufacturer was responsible for maintenance of that. Tablets had a limited lifespan and they would need to be replaced by the City at some point. Councilman Lester observed that it was housed in a ruggedized case. Mr. Zirk added that Sanitation would be outfitting every truck on all 14 routes, plus two bulk waste trucks and the spare trucks.

MOTION: A motion was made by Mike Lester, seconded by Debra Wimpee.

**Move to approve the Agreement between the Broken Arrow Municipal Authority and Routeware Inc. for the Routing and Navigation System hardware, software, and support services and authorize its execution**

The motion carried by the following vote:

**Aye: 5 -**

Debra Wimpee, Johnnie Parks, Mike Lester, Scott Eudey, Craig Thurmond

**7. Executive Session**

There was no Executive Session.

**8. Adjournment**

The meeting adjourned at approximately 7:51 p.m.

MOTION: A motion was made by Johnnie Parks, seconded by Scott Eudey.

**Move to adjourn**

The motion carried by the following vote:

**Aye: 5 -**

Debra Wimpee, Johnnie Parks, Mike Lester, Scott Eudey, Craig Thurmond

Attest:

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Chairman

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Secretary