



Limited Scope Performance Audit of
Water and Sewerage Billing Software Contract
Audit No. 23-05
August 3, 2023

Report Highlights

Page(s)

- Contractual terms about account types require clarification 5



The Council
City of Shreveport

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August 3, 2023

Councilman James Green
Chairman, Shreveport City Council

Dear Councilman James Green:

Subject: Audit No. 23-05 – Limited Scope Performance Audit of Water and Sewerage Billing Software Contract

Attached please find the report mentioned above. Management comments are included in the report.

Sincerely,

A handwritten signature in blue ink that reads "Leanis L. Steward".

Leanis L. Steward, CPA, CIA
City Internal Auditor

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EXECUTIVE SUMMARY

Limited Scope Performance Audit of Water and Sewerage Billing Software Contract

Why We Did This Audit

We have completed a Limited Scope Performance Audit of Water and Sewerage Billing Software Contract. This audit was initiated because of noted exceptions identified by the external auditor. Our objectives included, but were not limited to determining the following:

- If procedures and relevant controls were designed to ensure compliance with the contract and detect any irregularities related to the type and number of accounts for billing.
- If best practices and reasonable due diligence was employed in selecting a contractor and public bid law compliance.

What We Recommended:

- Key personnel become familiar with terms of vendor contract.
- Amend the contract terms to clearly define all types of accounts.

What We Found

In 2018, the City of Shreveport's Water and Sewerage department contracted with Rostech Inc for the provision of billing services to its citizens, aiming to improve the efficiency and effectiveness of these operations. To facilitate this, the department implemented the Utility Management Billing Services (UMBS) software.

UMBS is a software solution developed by Rostech Inc specifically tailored for utility billing management. This comprehensive software encompasses diverse functionalities such as customer information management, meter reading data processing, rate calculations, invoicing, payment processing, and customer service. By utilizing UMBS, the department can streamline its billing operations, enhance accuracy, and deliver superior customer service to its customers.

During our audit, it has been determined that the guidelines pertaining to the evaluation of competitive bidding and proposal assessment procedures have been reasonably adhered to. Furthermore, invoices have been appropriately reviewed and approved prior to payment. However, we have identified certain contractual terms that require clarification, as they have proven to be ambiguous. Specifically, the terms in question are as follows:

- Active Accounts, Inactive Accounts, Closed Accounts, and To Collection Accounts.

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Introduction

A contract audit is a type of performance audit that involves the examination and evaluation of financial records, statements, and other supporting documentation related to a contract or agreement. It is conducted to ensure compliance with contractual terms, applicable laws, and regulations, and sound financial practices. The purpose of a contract audit is to provide an independent and objective assessment of the financial aspects of a contract to identify any potential risks, irregularities, or non-compliance.

Contract audits play a crucial role in ensuring transparency, accountability, and effective financial management in contractual relationships. They help protect the interests of both parties involved in the contract and ensure the proper and efficient use of resources.

In 2018, the City of Shreveport's Water and Sewerage department contracted with Rostech Inc for the provision of billing services to its citizens, aiming to improve the efficiency and effectiveness of these operations. To facilitate this, the department implemented the Utility Management Billing Services (UMBS) software. During the period from License Agreement signed on October 26, 2018, to the invoice dated October 14, 2020, Rostech was paid \$ 1,994,395.

For this audit, we focused on Water and Sewerage Billing Software Contract. Specifically, we reviewed the type and number of accounts for billing and not the functionality of the software. This report contains one finding and two recommendations. Appendix A contains the risk descriptions for the recommendation risk levels throughout the report.

The objectives of this audit included, but were not limited to determining the following:

- If procedures and relevant controls were designed to ensure compliance with the contract and detect any irregularities related to the type and number of accounts for billing.
- If best practices and reasonable due diligence was employed in selecting a contractor and public bid law compliance.



Scope and Methodology

The scope of this audit was limited to the Water and Sewerage Billing Software Contract. The period reviewed was January 2018 to May 2020. To answer our objectives, we reviewed relevant internal controls and developed audit procedures that included, but were not limited to, the following:

- Interviewed staff to understand the processes and procedures.
- Obtained contract-related invoices and compared invoices amounts with contract terms.
- Reviewed invoices for indication of proper approval for payment.
- Reviewed public bid law, proposal post-demonstration evaluation summary, and request for proposal submittal checklist to determine if best practices and reasonable due diligence was employed in selecting the contractor.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Internal Audit Office expresses appreciation to the management and personnel of the Water and Sewerage Department for their cooperation and assistance provided during the audit.





Objective: Determine if procedures and relevant controls were designed to ensure compliance with the contract and detect any irregularities related to the type and number of accounts for billing.

Finding 1: Ambiguous Contract Terms

According to the License Agreement signed on October 26, 2018, the initial terms specified that the base accounts at that time, which amounted to 68,000 accounts, would require the City to make a one-time payment to the Licensor (Rostech) totaling \$244,800 (\$3.60 per account). Each calendar year throughout this agreement, Rostech is responsible for assessing the total number of accounts. If the current account level surpasses the established base level of 68,000 accounts, Rostech is authorized to invoice the City for an additional one-time fee of \$3.60 per additional account. On September 20, 2019, additional accounts of 16,000 were purchased ($\$3.6 * 16,000 = \$57,600$).

As per the Contract Service Agreement signed on October 26, 2018, Rostech will provide resources for the entire duration of the services outlined in the agreement. The charges associated with the services rendered under this agreement should not exceed the amount of \$ 1,004,500. These charges encompass various milestone payments related to activities such as the installation of the base UMBS (Utility Management and Billing Services) application, data transfer from the previous system to the UMBS software, user training, and additional related services. Over time actual manpower hours exceeded the budgeted manpower hours, which led to an amendment with the amount of \$ 494,835.

The Maintenance Service Agreement signed on July 24, 2020, states that Rostech will provide the City with the services and software. The fees are based on the current account level for the software, actual hours worked for the billing services, and on-site visits. The fee is determined by multiplying the current number by \$ 1.33 per account for the software. The services provided should not exceed the amount of \$ 68,400 quarterly.

During the period from License Agreement signed on October 26, 2018 to the invoice dated October 14, 2020, Rostech was paid the total amount of \$ 1,994,395, which is illustrated below:



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Total Amount Paid to Rostech from Oct. 26, 2018, to Oct. 14, 2020.	
Contracts/Account Purchased/Amendments	Amount
License Agreement (Oct. 26, 2018)	\$ 244,800
Additional Accounts Purchased	\$ 57,600
Contract Service Agreement (Oct. 26, 2018)	\$ 1,004,500
Amendment 2	\$ 494,835
Maintenance Service Agreement (July 24, 2020)	\$ 192,660
Total Amount	\$ 1,994,395

Sources: License, Contract Services, and Maintenance Services Agreement and Invoices

Based on the UMBS software, there are four types of accounts: Active, Inactive, Closed, and To Collection. However, according to the License agreement contract, there are only two types of accounts: Active and Inactive. Inactive accounts are defined in the contract as accounts with a zero balance, which aligns with the UMBS software.

Therefore, accounts in UMBS that have a non-zero balance are considered active accounts in the contract. This includes accounts that are closed or in the process of being sent to collections, if they have a non-zero balance.

As of October 22, 2021, the number of active accounts in UMBS is 66,928, closed accounts are 20,499, and accounts in the process of being sent to collections are 10,185, totaling 97,612. However, the contractor purchased an additional 16,000 accounts, bringing the new total of active accounts to 84,000 (base account of 68,000 plus the purchased additional accounts of 16,000). This is illustrated in the chart below:

UMBS vs License Agreement				
Description	UMBS		License Agreement	
Account Types	Active, Inactive, Closed, and To Collection		Active and Inactive	
Number of Accounts	Active	66,928	Base Account	68,000
	Inactive	123,678	Additional Accts Purchased (Per Sept. 20, 2019, invoice)	16,000
	Closed	20,499	Total	84,000
	To Collection	10,185		*
	Active+Closed+To Collection =	97,612		
Active + To Collection =	77,113			

Sources: UMBS, License Agreement, and Invoices

*Currently city pays for 84,000 total active accounts



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The differences between the UMBS software account types and the contract definition of active and inactive accounts have created confusion for the management team and invoice approval personnel. It is difficult for them to determine which accounts are active and which are inactive, causing potential delays and errors in the invoicing process. Therefore, it is important to clarify the definition of active and inactive accounts in the context of the contract to ensure a smooth and efficient workflow.

Based on interviews and discussions with management, we determined that management is not fully aware of the key operational terms of the contract. As a result, personnel are approving invoices for payment to the vendor without knowing if the charges are reasonable and appropriate relative to the contract terms.

Recommendation 1:

Department Head should require that other key personnel become familiar with the terms of vendor contracts. **Risk: Medium**

Recommendation 2:

Management should amend contract terms to clearly define all account types including Closed and To Collection Accounts. **Risk: Medium**

Management Response:

Recommendation 1: Key personnel is familiar with the terms of this vendor contract as it relates to invoicing based on account licensing. For purposes of invoicing all non-zero balance accounts are considered active and subject to a licensing fee. Rostech is working with personnel to convert the number of closed accounts to inactive accounts, in an effort to get the active account totals within range of what is stated in the License Agreement.

Due Date: Less Than 6 Months

Recommendation 2: We concur and will carefully analyze the specific contract terms in question and revise them to ensure clarity and minimize ambiguity. This will help prevent potential misunderstandings and ensure smoother contract execution in the future.

We will work with Rostech to clarify all definitions of accounts as they pertain to the Utility Management Billing System (UMBS). The contract should clearly identify all account types and those account types should be properly shown on the invoice as well. Active Accounts, Inactive Accounts, Closed Accounts, and To Collection Accounts

Due Date: Less Than 6 Months



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May 17, 2023

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Promo Jaishi

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Associate Auditor

Approved by:

Leanis L. Steward

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City Internal Auditor

pj:ts

c: City Council
Clerk of Council
Mayor
Chief Administrative Officer
Carr Riggs and Ingram
City Attorney
Director of Water and Sewerage Department



Appendix A: Findings Risk Ranking Criteria

The chart below summarizes our evaluation of risk for the recommendations outlined in the report. Each recommendation was assessed at a high, medium, or low risk level based on a qualitative assessment of exposure and/or corrective action priority.

Risk Levels	Risk Description
High Risk	Represents a significant level of risk exposure to city assets, public safety, or achievement of objectives or mission. Corrective action should have the highest priority.
Medium Risk	Represents a moderate level of risk exposure to the city from extensive operating inefficiencies or high-level non-compliance issues. Corrective action should occur expeditiously.
Low Risk	Represents a minimal level of risk exposure to the city from inefficiencies or low-level non-compliance issues. Corrective action should occur as appropriate.