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<sup>†</sup> Audit Committee Chair

<sup>++</sup> Audit Committee Member

# 2018 Water Lead Services Replacement Contract Audit

August 20, 2021



**City of Fort Worth  
Department of Internal Audit**

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Fort Worth, Texas 76102

**Audit Staff**

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**The 2018 Water Lead Services Replacement Contract Audit was conducted as part of the Department of Internal Audit's Fiscal Year 2021 Annual Audit Plan.**

### **Audit Objectives**

The objectives of this audit were to:

- determine whether construction projects were completed in accordance with contract terms; and,
- ensure compliance with applicable legislation.

### **Audit Scope**

Our audit included the period from bid solicitation (September 28, 2017) through completion of the final work order (November 3, 2020).

### **Opportunities for Improvement**

Compliance with prevailing wage requirements

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## **Executive Summary**

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As part of the Fiscal Year 2021 Annual Audit Plan, the Department of Internal Audit conducted an audit of the third-year renewal water lead services replacement contract. To complete work associated with this contract (City Secretary Contract No. 50061), the City of Fort Worth contracted with Tejas Commercial Construction, LLC to replace one-inch, 1.5-inch and two-inch lead water lines at Fort Worth residential and commercial properties, for an amount not to exceed \$450,000.00. M&C C-28499 indicated that the work was to consist of replacing water services that had been identified as lead water services, and that the contract was necessary to maintain quality water service by augmenting the City's efforts in removing lead services from the water system in a timely manner.

Based on our test results, we concluded that the water lead services replacement construction project was generally completed in accordance with the contract. The City paid Tejas Commercial Construction, LLC \$449,778.00 for work completed under this contract, and Tejas Commercial Construction, LLC completed the work in 410 calendar days, which was within the timeframe specified within the contract.

With the exception of Tejas Commercial Construction, LLC paying three (of 44) employees less than the prevailing wage rate, we concluded that the contractor complied with applicable legislation. The estimated penalty (due to the City) for violating prevailing wage requirements, as specified in Section 2258.023 of the Texas Government Code, is \$3,120.00. This audit finding is discussed in further detail within the [Detailed Audit Finding](#) section of this report.

It should be noted that in addition to the \$450,000.00, an additional \$50,000.00 was required for project management, material testing, and inspection. The City contracted with Terracon Consultants, Inc. to complete these additional tasks, which were related to the water lead services replacement project. Internal Audit, therefore, conducted audit testing to determine whether Terracon Consultants, Inc. complied with the contract. Based on our audit results, no exceptions were noted.

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## Background

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The Water Department’s 2018 Water Lead Services Replacement Project consisted of the replacement of existing one-inch, 1.5 inch and two-inch lead water lines (lead pipe). The initial project was advertised for bid in the Fort Worth Star-Telegram, and awarded to Tejas Commercial Construction, LLC. Tejas Commercial, a certified MBE firm, committed 8% to MBE subcontractor participation.

The Mayor and City Council approved the project on December 5, 2017 (M&C C-28499), with the option of three renewals. The City budgeted \$450,000.00, with an additional \$50,000.00 allocated to project management, material testing and inspection.

The project began in January 2018. On August 7, 2018, the Mayor and Council authorized the first of three optional contract renewals (M&C C-28777). On March 19, 2019, the Mayor and Council authorized the second contract renewal (M&C C-29064), and on August 20, 2019, the Mayor and Council authorized the third and final optional contract renewal (M&C 19-0064).



Source: City Secretary and Water Department files

The Water Lead Services Replacement Project is a work order-driven contract. As a work order-driven contract, the assigned Project Manager notifies the contractor of service locations and installations, using a work order and map. The work order specifies the replacement service type, bid item required for installation, and the amount of time to complete the work. The map depicts work locations. The Project Manager may issue one or several work orders at any given time during the course of the contract. If clusters of lead service lines are identified in a particular area, the entire water line is replaced.

Water lead service lines are replaced by either the Water Field Operations Division (during the course of normal repairs) or by the contractor (if service lines are scattered throughout the city). When the work specified within each work order is completed, inspected and deemed acceptable/in accordance with the contract, the Project Manager recommends payment of the work order. Payments to the contractor are based on the completion and inspection of individual work orders, and the quantity of bid items billed to the City (e.g., pay items). The contractor does not supervise service lines replaced by the Water Field Operations Division. The contractor is, therefore, not paid for water lead service lines replaced by City employees. Also, as specified in the contract, retainage is not withheld.

Fifty-two (52) work orders were completed during the third-year contract renewal. Tejas Commercial Construction, LLC completed 47 work orders which consisted of 86 service lines. The City’s Water Field Operations Division completed five work orders which consisted of five service lines.



## Objectives

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The objectives of this audit were to:

- determine whether construction projects were completed in accordance with contract terms; and,
- ensure compliance with applicable legislation.

## Scope

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Our audit included the period from bid solicitation (September 28, 2017) through the final work order (November 3, 2020).

## Methodology

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To achieve the audit objectives, the Department of Internal Audit performed the following:

- interviewed Water engineering and inspection staff;
- reviewed the Water Department's Capital Project Delivery and change order processes;
- reviewed general ledger transactions and project payments;
- reviewed the initial water lead services replacement contract, renewals and final pay documentation;
- recalculated vendor bid submittals to verify accuracy of bid calculations;
- reviewed project management cost estimates that the Water Department used to determine the reasonableness of contractor costs;
- verified vendor compliance with insurance requirements;
- reviewed compliance documents prepared by the Diversity and Inclusion Department;
- compared work orders to daily inspection logs;
- compared contractor specification sheets and subcontractor vendor invoices to the contract, to ensure compliance with required product types and materials;
- reviewed lab test reports for compliance with concrete strength requirements;
- performed field measurements, and compared those measurements to quantities billed to the City;
- tested wage rates paid by the contractor;
- analyzed project completion time; and,
- evaluated internal controls related to construction projects.

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.



## Audit Results

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The water lead services replacement project consisted of the replacement of lead water service lines throughout the Fort Worth city limits. Based on audit test results:

- surety bonds and general liability insurance, obtained by the contractor, were in compliance with the contract;
- no exceptions were noted during our review of inspector estimates, work orders, inspection logs, pay applications (invoices) and final pay documentation (green sheets); and,
- the contract was completed within budget, and within the timeframe noted within the contract.

The City paid Tejas Commercial Construction, LLC \$449,778.00, which was lower than the \$450,000.00 contract amount. The contract allowed for the project to be completed in one calendar year (365 days) or the expiration of the funding, whichever occurred last. Tejas Commercial Construction, LLC completed the work in 410 days. In this instance, the expiration of funding occurred after 365 days. Therefore, no exception was noted. Tejas Commercial Construction, LLC also met their 8% MBE goal (rounded) by paying their subcontractor a total of \$34,187.72.

Based on our review of the Tejas Commercial Construction, LLC's Certified Payroll Report, three of 44 employees were paid less than the prevailing wage rates. Tejas Commercial Construction, LLC stated the three employees were hired to assist during the summer, and that Tejas Commercial Construction, LLC did not have codes in their payroll system to indicate the employees held summer positions. City Secretary Contract No. 50061 specifies a \$60.00 penalty (due to the City) for each worker employed for each calendar day or part of the day that the worker is paid less than the prevailing wage rates. The total penalty due to the City, for the vendor's noncompliance with prevailing wage requirements, totaled \$3,120.00.

As noted in the Executive Summary, an additional \$50,000.00 was required for project management, material testing, and inspection related to the water lead services replacement project. Internal Audit, concluded that the vendor, Terracon Consultants, Inc., also complied with its contract.



## Overall Risk Evaluation

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High	Medium	Low
	<a href="#"><u>Compliance with prevailing wage requirements</u></a>	



## Detailed Audit Finding

### 1. Three of 44 employees were paid less than the prevailing wages.

Based on our review of Tejas Commercial Construction, LLC's Certified Payroll Report, which covered the period November 11, 2019 through November 8, 2020, three of 44 employees (for this project) were paid less than the prevailing wage rates. The remaining 41 employees were paid at or above the prevailing wage rates.

- One Regular Laborer was paid \$10.00 per hour, and another was paid \$9.00 per hour, although the prevailing wage rate for a Laborer position was \$10.72.
  - Test results indicate that the employee who was paid \$10.00 per hour was underpaid a total of 30.17 hours, over a four-day period. The total underpayment to this employee totaled \$21.72.
  - The other employee, who was paid \$9.00 per hour, was underpaid a total of 72.16 hours over a nine-day period. The underpayment to this employee totaled \$124.12.
- One Pipelayer was paid \$13.00 per hour, although the prevailing wage was \$13.24. Test results indicate that this employee was underpaid on 39 days, for a total of 309.09 regular and 4.84 overtime hours. The total underpayment to this employee totaled \$75.92.

Tejas Commercial Construction, LLC stated foremen were allowed to hire family members during the summer to clean trucks and mow the yard. Although the three employees were reportedly hired to assist during the summer, Tejas Commercial Construction, LLC stated they did not have codes in their payroll system to indicate summer help.

Section 6.07A of the General Conditions (City Secretary Contract No. 50061) states that the Contractor shall comply with all requirements of Chapter 2258 of the Texas Government Code, which addresses prevailing wage rates. Additionally, Section 6.07B of the General Conditions state that the penalty for not complying with the prevailing wage requirement is \$60.00 for each worker employed for each calendar day or part of the day that the worker is paid less than the prevailing wage rates. As noted in the following table, the related penalty totaled \$3,120.00.

Name	Number of Days	Penalty
Employee 1	4	\$240.00
Employee 2	9	540.00
Employee 3	39	2,340.00
<b>Total</b>	<b>52</b>	<b>\$3,120.00</b>

**Recommendation 1A:** *The Water Department Director should require that designated Water Department staff routinely review contractor reports and related documents for compliance with contract requirements.*

**Auditee's Response:** Concur. Complete in the next thirty days.

**Target Implementation Date:** September 17, 2021

**Responsibility:** Chris Harder, Water Department Director



**Applicable Department Head:** Chris Harder, Water Department Director

**Applicable Assistant City Manager:** Dana Burghdoff

**Recommendation 1B:** *The Water Department Director, in conjunction with the City Attorney, should review the General Conditions and Chapter 2258 of the Texas Government Code, and take appropriate action as required by statute.*

**Auditee's Response:** Concur. Complete in the next thirty days.

**Target Implementation Date:** September 17, 2021

**Responsibility:** Chris Harder, Water Department Director

**Applicable Department Head:** Chris Harder, Water Department Director

**Applicable Assistant City Manager:** Dana Burghdoff



## Acknowledgements

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The Department of Internal Audit would like to thank the Water Department for their cooperation and assistance during this audit.