

# CONSTRUCTION CONTRACT AUDIT

UTILITIES DEPARTMENT



**Fort  
Smith**  
ARKANSAS

JANUARY 18, 2019

PREPARED BY

**VANESSA M. JOHNSON, CPA, LLC**  
**INTERNAL AUDIT | SOX | PROCESS IMPROVEMENT**

# Vanessa M. Johnson, CPA, LLC

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January 18, 2019

The Honorable Carl Geffken  
City Administrator  
City of Fort Smith  
623 Garrison Ave, 3rd Floor  
Fort Smith, AR 72901

RE: Utility Department - Construction Contract Audit

Dear Mr. Geffken:

The Internal Audit Office contracted with Vanessa M. Johnson, CPA, LLC (VMJ CPA) to provide professional independent internal audit services. We have completed the Construction Contract Audit for the City's Utility Department.

The audit period consisted of calendar years 2015 through 2017. The attached audit report outlines the audit objectives, detailed findings, recommendations, and management's responses.

We would like to thank the Utility Department, Forsgren, CDM Smith, and Hawkins-Weir for their assistance and cooperation during the course of the audit.

Sincerely,

*Vanessa M. Johnson*

Vanessa M. Johnson, MBA, CPA, CIA  
Managing Director

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## *EXECUTIVE SUMMARY*

### *INTRODUCTION*

The Internal Audit Department of the City of Fort Smith engaged VMJ CPA to conduct an internal audit of Capital Improvement Projects (CIP) managed by the City of Fort Smith Utility Department. The internal audit focused on specific CIP projects funded via the Sales and Use Tax Bonds and Revenue Bonds under the Consent Decree to determine compliance with the City of Fort Smith's ordinances, key contractual and regulatory terms and requirements, and the effectiveness of internal controls. The audit was included in the calendar year 2017 Audit Plan and was a direct result of our Risk Assessment process conducted in 2017.

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### *BACKGROUND*

The City of Fort Smith has a population of approximately 88,000 citizens. The Utility Department's mission is to ensure the sustained delivery of quality water and wastewater services that promote health, safety, and quality of life for all customers. The City has approximately 502 miles of sewer lines, 12,000 manholes, 23 pump stations, and 2 wastewater treatment plants.

The City of Fort Smith Utility Department's largest capital expenditures are from new construction, facility upgrades, and infrastructure improvements. A single project can run into the millions of dollars, involving engineering, design, contractors, materials, and construction. The Engineering Team within the Utility Department is responsible for the design, construction, and maintenance of the City's water and wastewater infrastructure and the management of its real property. As part of the Consent Decree that lodged January 2, 2015, several projects are being designed to address the wet weather overflows that occur throughout the sanitary sewer collection system.

### **Construction Project Funding and Approval**

Every five years, the Utility Department develops the Capital Plan of prioritized capital improvement projects based on funding source projections, Consent Decree initiatives, and other high-risk areas to be addressed. Before beginning each project, the Utility Department's Engineering Team must prepare a project packet, which is routed to the Finance's Department to certify funding is available, and then sent back to the Project Manager to obtain approval from the Utility Director. Once approved, the Director's office forwards the prepared project packet to the City Clerk's Office to be added to the agenda for Board approval. If approved by the Board, a Resolution is signed and dated by the Mayor. During the project set up process the funding sources, appropriations, and contract, are set up in the financial system by the City's Finance Department and in E-builder, which is the Utility Department's contract management database). The amounts required per funding source is identified in the initial project packet submitted by the Utility's Department Engineering Team and determined based on the unit price cost estimates categorized by work type (paving, storm sewer, water main, etc.). Each funding source has its own funding stream and tracking. The Utility Director Administrator tracks appropriations for each funding source for CIP projects, including a full reconciliation of all funding source activity and reviews the activity to ensure each item utilized is appropriate for that funding source.

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## **Contractor Payments**

The Project Manager/Engineer Consultant compiles the Pay Estimates based on the Daily Construction Reports and then obtains signature approvals from Utility management. The Daily Construction Reports reflect the units completed for each Item Number from the contract schedule of values, weather conditions, and any other issues identified onsite during the construction process. The Engineer Consultant is responsible for reconciling materials used and labor for the project. These reports are reviewed with the contractor, signed by the Engineer Consultant, and submitted to the Engineering Team for review and approval. For invoice/Request for Payment (RFP) processing, Project Engineers can approve invoices up to \$750,000, except for the final pay request. All final pay requests are submitted to the Board of Directors for approval. Because the Engineer Consultant is responsible for working directly with the Contractor to ensure progress billings are accurate, the Engineering Team reviews the invoice for reasonableness by checking retainage amounts based on the percentage of the project that is completed. Once the RFP has been approved, a Request for Payment is prepared and submitted to Finance for processing. The Finance Department receives the request for payment and supporting documentation, and performs the payment audit process which includes verifying remaining funds on the contract, confirming funds availability, reviewing support documentation for accuracy, etc.

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## **AUDIT SCOPE AND OBJECTIVES**

The engagement scope covered activities and transactions occurring during calendar year 2015-2017. VMJ CPA randomly selected two CIP projects for review: a project that was completed during the audit period and a project in progress during the audit period. The projects selected for testing are listed below.

| <b>Project No.</b> | <b>Project Name</b>                       | <b>Contract Amount</b> |
|--------------------|---|------------------------|
| 10-01-C1           | Mill Crk Pump Station & EQ Tank           | \$12,930,000.00        |
| 16-10-C2           | 2015 SSA Remedial Measures Sub-Basin S008 | \$2,345,470.50         |

Our audit objectives, as refined during research and the risk assessment process occurring throughout the course of our work, were as follows:

1. Comprehensive policies and procedures for Construction Management have been established;
2. The City is in compliance with all applicable laws and regulations;
3. The City has an effective system of controls in place that assist in appropriately managing construction-related costs;
4. Construction project bids were awarded in compliance with applicable rules and regulations;
5. Changes from the initial contract award amount and the final contract price were appropriately negotiated and documented;
6. Internal controls over change orders to the contract are appropriate and adequately documented.

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7. City facilities and construction projects are adequately protected from liability by insurance and bonding programs;
  8. Information systems are reliable and timely, and accurate information is available to management and the Board; and
  9. Contractors complied with the provisions stated in the contract.

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## ***PROCEDURES PERFORMED***

To obtain sufficient evidence to achieve audit objectives and support our conclusions, we performed the following:

### **Planning**

- Conducted kick-off meeting with Internal Audit and Utility Management;
- Developed and submitted an initial data request to obtain construction contracts, relevant City ordinances, funding requirements, City policies, processes and control documentation relevant to CIP project management;
- Reviewed City ordinances, construction contracts, and funding requirements and identified key items;
- Reviewed policies and procedures to gain understanding of processes and controls related to CIP project management
- Conducted interviews and process walkthroughs with key individuals from the engineering consulting firm and on the Utility Department's Engineering Team
- Identified key risks and controls and evaluated design of controls
- Identified potential areas for process improvements and control gaps
- Refined work plan based on risks and key ordinances/funding requirements/terms and conditions, and developed test plans
- Performed sampling of transactions within selected projects and issued data request for detailed testing

### **Fieldwork**

- Performed testing of selected projects to include verification of:
  - Compliance with key ordinances
  - Compliance with key contract terms and conditions
  - Construction project bids were awarded in compliance with applicable rules and regulations
  - Changes from the initial contract award amount and the final contract price were appropriately negotiated and documented
- Documented findings and confirmed with process owners

### **Reporting**

- Prepared a draft report to include testing results and recommendations
- Discussed draft findings with process owners and management, obtained management responses, and assessed management responses.

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## *AUDIT METHODOLOGY*

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards and in conformance with the International Standards for the Practice of Internal Auditing as promulgated by the Institute of Internal Auditors. 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.

The scope of our work did not constitute an evaluation of the overall internal control structure of the Utility Department. Management is responsible for establishing and maintaining a system of internal controls to ensure that City assets are safeguarded; financial activity is accurately reported and reliable; and management and employees are in compliance with laws, regulations, and policies and procedures. The objectives are to provide management with reasonable, but not absolute assurance that the controls are in place and effective.

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## *CONCLUSIONS AND SIGNIFICANT ISSUES*

We believe that we have obtained sufficient and appropriate evidence to adequately support the conclusions provided below as required by professional auditing standards. Each conclusion is aligned with the related Audit Objective for consistency and reference. For detailed findings, recommendations, management responses, comments and assessment of responses see the “Detailed Findings, Recommendations, Management Responses, and Assessment of Responses” section of this report.

**AUDIT OBJECTIVE 1** - Comprehensive policies and procedures for Construction Management have been established.

### **CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that there are no comprehensive policies and procedures documented for CIP construction management. (**See Finding #2**)

**AUDIT OBJECTIVE 2** - The City is in compliance with all applicable laws and regulations.

### **CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that the Utility Department is in compliance with applicable laws and regulations. No findings noted.

**AUDIT OBJECTIVE 3** - The City has an effective system of controls in place that assist in appropriately managing construction-related costs.

### **CONCLUSION**

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Based on the results of the audit procedures performed, the audit team noted that Utility Department should improve the design and operating effectiveness of internal controls to properly monitor contracts and manage related costs.

- Liquidated damages not properly calculated per contract documents. **(See Finding #8)**
- Costs for specifications removed from the project were not properly refunded. **(See Finding #10)**

**AUDIT OBJECTIVE 4** - Construction project bids were awarded in compliance with applicable rules and regulations.

**CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that project bids were awarded properly. However, there is no bid log maintained to record date/time bid received to ensure all bids considered were timely. **(See Finding #4)**

In addition, management should include additional procedures in the bid qualification process to determine if successful bidders have the capacity to complete projects timely, if that Contractor has been awarded other contracts with the City during the same period. **(See Finding #11)**

**AUDIT OBJECTIVE 5** - Changes from the initial contract award amount and the final contract price were appropriately negotiated and documented.

**CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted certain factors that contributed to the final contract price were not properly outlined in contract documents and documented throughout the course of the project.

- Substantial Completion is not adequately defined in contract documents. **(See Finding #5)**
- Weather Day Extension Requests Not Properly Approved for project 10-01-C1. **(See Finding #6)**
- Substantial completion date agreed to for project 10-01-C1 even though work was not complete. **(See Finding #7)**
- Additional costs outside the scope of project 10-01-C1 were inappropriately approved by Utility management that should have gone through the proper bid process. **(See Finding #9)**
- Costs for specifications removed from the project were not properly refunded. **(See Finding #10)**

**AUDIT OBJECTIVE 6** - Internal controls over change orders to the contract are appropriate and adequately documented.

**CONCLUSION**

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Based on the results of the audit procedures performed, the audit team noted that weather days and additional days requested for certain requests for proposals (RFPs) on change orders were not properly documented/supported.

- Weather Day Extension Requests Not Properly Approved for project 10-01-C1. (See **Finding #6**)
- Additional costs outside the scope of project 10-01-C1 were inappropriately approved by Utility management that should have gone through the proper bid process. (See **Finding #9**)
- Costs for specifications removed from the project were not properly refunded. (See **Finding #10**)

**AUDIT OBJECTIVE 7** - City facilities and construction projects are adequately protected from liability by insurance and bonding programs.

**CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that insurance is not verified for subcontractors working on projects, nor was the insurance verified for the Contractors one-year after project completion. (See **Finding #3**)

**AUDIT OBJECTIVE 8** - Information systems are reliable and timely, and accurate information is available to management and the Board.

**CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that Due to limited system capabilities and incomplete data entry, DataPerfect nor E-builder could produce complete and accurate reports of projects for the audit period. (See **Finding #1**)

**AUDIT OBJECTIVE 9** - Contractors complied with the provisions stated in the contract.

**CONCLUSION**

Based on the results of the audit procedures performed, the audit team noted that Contractors did not perform all the necessary work for the agreed on substantial completion date. (See **Finding #7**)

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**ACKNOWLEDGEMENT AND SIGNATURES**

The Audit Team would like to thank the Utility Department, Hawkins-Weir, Forsgren, and CDM Smith for their cooperation, time, and efforts throughout the course of the engagement.

*Vanessa Johnson*

Vanessa M. Johnson, MBA, CPA, CIA  
Managing Director

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***DETAILED FINDINGS, RECOMMENDATIONS, MANAGEMENT RESPONSES, AND ASSESSMENT OF RESPONSES***

**FINDING #1 – REPORTING CAPABILITIES ARE LIMITED**

**BACKGROUND:**

DataPerfect has been the legacy contract management system utilized by the Utility Department, which kept track of payment to contracts and contracts. Since the system has become outdated, E-Builder was implemented in 2017 as the new contract management database to monitor contract spend amounts, contract documents, and progress of projects. From discussions with Utility management and CDM Smith, E-builder will be implemented in phases until all features of the software are utilized to maximize efficiencies in the CIP management process.

In the planning phases of the audit, VMJ CPA requested a comprehensive listing of all projects completed during the audit period. This would consist of both Consent Decree and non-Consent Decree related projects. E-Builder nor DataPerfect was able to produce a complete and accurate listing. VMJ CPA was able to create a list based on final payments made during the audit period, resolutions issued for completed projects, and any project tracking maintained by the Utility Department.

**FINDING 1:**

Due to limited system capabilities and incomplete data entry, DataPerfect nor E-builder could produce complete and accurate reports of projects for the audit period.

**RECOMMENDATIONS:**

Since E-Builder has been implemented as the construction management tool, the Engineering team should: 1) Ensure all data migrated from the legacy DataPerfect system is complete and accurate, and 2) customize effective reports that can provide the start and completion dates of projects, and other information that provides meaningful insight to make informed decisions for projects.

**UTILITY DEPARTMENT’S MANAGEMENT RESPONSE:**

The only projects being imported from DataPerfect to E-Builder are active projects. None of the older closed projects will be imported. If information is needed on a completed project that is in DataPerfect, that information can be searched. However, one of the shortcomings of this program is that it is DOS based and not very dynamic. Current projects are in E-Builder and will not be entered into DataPerfect. Once the last project that is in DataPerfect is closed, the DataPerfect database will become a historical database. Customized reports that are required by the department are still

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under development for use in E-Builder. The last project is expected to be closed by the end of February 2019.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** March 2019

**ASSESSMENT OF RESPONSE:**

Management's response, as presented, sufficiently addresses the issues identified and corrective actions are appropriate. A follow-up audit will be performed after the remediation period.

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## **FINDING #2 – NO COMPREHENSIVE POLICIES AND PROCEDURES**

### **BACKGROUND:**

VMJ CPA performed walkthroughs with the Utility Department Engineering Team to gain an understanding of CIP management processes and procedures. Procedures to execute and monitor contracts are performed based on the experience and knowledge of the Engineering Team.

### **FINDING:**

The Utility Department does not have a comprehensive manual of policies and procedures to manage the construction lifecycle processes of capital improvement projects within the Department. The Department Engineering team relies on team knowledge and experience to execute and management projects, which may not consistently be performed across the team.

### **RECOMMENDATIONS:**

The Utility Department should develop a comprehensive set of policies and procedures that can help streamline the construction lifecycle and serves as a reference for current employees and onboarding new employees to ensure activities are consistently performed.

### **UTILITY DEPARTMENT'S MANAGEMENT**

#### **RESPONSE:**

The Project Management Manual (PMM) is currently under development by the Utility and CDM Smith staffs. The timeline calls for review comments to be submitted to CDM Smith by mid-January 2019. Final draft for approval by mid-March 2019 and submittal of final in May 2019. This manual will provide a common process to manage projects from cradle to grave.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

#### **ASSESSMENT OF RESPONSE:**

Management's response, as presented, sufficiently addresses the issues identified and corrective actions are appropriate.

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## **FINDING #3 – NO EVIDENCE OF INSURANCE VERIFICATION OF CONTRACTOR AND SUBCONTRACTOR**

### **BACKGROUND:**

According to Article 5- Bonds and Insurance, Section 5.4.6 of the contract documents, "...Contractor shall maintain such completed operations insurance for at least one year after final payment and furnish Owner with evidence of continuation of such insurance at final payment and one year thereafter."

According to Article 6, Section 6.11 – Concerning Subcontractors of the contract documents, "All work performed for Contractor by a Subcontractor will be pursuant to an appropriate agreement between Contractor and Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the contract documents for the benefit of Owner and Engineer and contains waiver provisions as required by paragraph 5.7. Paragraph 5.7 of the contract documents state, "Owner and Contractor waive all rights against each other and the Subcontractors and their agents and employees and against Engineer and separate contractors (if any) and their subcontractors' agents and employees, for damages caused by fire or other perils to the extent covered by insurance provided by paragraph 5.6, inclusive, or any other property insurance applicable to the work, except such rights as they may have to the proceeds of such insurance held by Owner as trustee. Contractor shall require similar written waivers from Subcontractors (in accordance with paragraph 6.11 as applicable); each such waiver will be in favor of all other parties enumerated in this paragraph 5.7.

### **FINDING:**

VMJ CPA noted during the audit that evidence of insurance documents was not maintained or verified for the Contractor one-year after project completion. In addition, evidence of insurances for Subcontractors was not verified prior to commencing work on the project. This information was also requested by the Contractor and no response received; therefore, the audit was not able to determine of the contract terms were adhered to.

### **RECOMMENDATIONS:**

The Engineering team should properly review contractor's and subcontractor's insurance coverages prior to commencement and the duration of construction projects to ensure compliance with requirements of the contract. In addition, obtaining copies of Subcontractor's executed agreements with the Prime Contractor to ensure the proper provisions are outline would be a good business practice to ensure compliance with contract documents.

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**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

The project manual includes the requirement that the Prime contractor must provide proof of insurance as part of their submittal. This is being done. The project engineer maintains this information. Subcontractors provide proof of insurance to the prime contractor, who is responsible to maintain the information.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** N/A

**ASSESSMENT OF RESPONSE:**

Management's response, as presented, does not sufficiently address the finding that evidence of insurance documents were not maintained or verified for the Prime Contractor one-year after project completion, as required by the Contract Documents. Please refer to "Reference Document 1" which can be provided by the City Auditor. The Contract Documents also state the requirements that Subcontractors must adhere to while performing work for the Prime Contractor under the contract with the City. Since this insurance information or Subcontractor agreements with the Prime Contractor have not been requested and verified to ensure the Prime Contractor follows Contract Documents regarding the use of Subcontractors, this poses a risk to the City. This is a common practice for local governments.

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## **FINDING #4 – NO BID LOG MAINTAINED TO RECORD DATE/TIME BID RECEIVED**

### **BACKGROUND:**

Once designing has been completed and approved, the Engineering Manager prepares an Advertisement for Bid to solicit for bids from Contractors to perform the work. The advertisement is placed in the local newspapers on Sundays. The Advertisement for Bids includes the date, time, and location of the public bid opening, required format the bids should be submitted, and where design specifications and project plans can be picked up. Note: Depending on the project, plans can be picked up at the Utility Department office or the Engineer's office. Bidders who pick up plans or request plans, typically are required to pay a fee and become a Registered Bidder at that time. Fees paid by contractors to obtain plans are submitted to the Utility Department Office. A Plan Holders List is maintained by either the Engineer Consultant or Utility Department Administrator (depending on the project) of the people/organizations that have picked up plans. Plans are numbered to keep track of who had which plan set. The Plan Holders list may include contractors, subcontractors, suppliers, and planning rooms that distribute plans to contractors. Their addresses and other contact information was maintained on the list also for purposes of sending out any addendums.

### **FINDING:**

There is no log or other support maintained to evidence the timely receipt of bids submitted.

### **RECOMMENDATIONS:**

A bid receipt log should be maintained to record the date and time bids were received to evidence timeliness of submissions.

### **UTILITY DEPARTMENT'S MANAGEMENT**

#### **RESPONSE:**

Current standard practice requires that bid logs are kept as part of the contract folder. A specific format for the log will be included as part of the PMM that is under development.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

#### **ASSESSMENT OF RESPONSE:**

Management's response, as presented, does not sufficiently addresses the issues identified. Based on the walkthrough provided by the Engineering Team, bid logs are not maintained to note date and time bids were received prior to Bid Opening to evidence timeliness. Please see Reference Documents 2, which can be provided by

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the City Auditor upon request. Only bid amounts are recorded by the contractor's name when bids are read aloud at the bid opening. In addition, creating a bid log to evidence timeliness of bid receipts should not take 6 months to implement. Bid logs should include: Name of Responder/Contractor, Date & Time bid was received. Method which bid was received, Name of Project, and Project Number.



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## **FINDING #5 – SUBSTANTIAL COMPLETION IS NOT ADEQUATELY DEFINED IN CONTRACT DOCUMENTS**

### **BACKGROUND:**

According to the contract documents, Substantial Completion is defined as “The Work (or specified part thereof) has progressed to the point where, in the opinion of Engineer as evidenced by his definitive certificate of Substantial Completion, it is sufficiently complete, according to contract documents, so that the Work (or specified part thereof) can be utilized for the purposed for which it was intended.

### **FINDING:**

The contract document definition is ambiguous to the reader due to the lack of properly identifying when Substantial Completion occurs. This increases the risk of the City not being able to properly calculate liquidated damages for projects and hold Contractors accountable for project completion.

### **RECOMMENDATIONS:**

The contract documents should be revised to properly define when Substantial Completion occurs for each project so that all parties to the contract have a common understanding of this date and when liquidated would start to accrue.

### **UTILITY DEPARTMENT’S MANAGEMENT RESPONSE:**

The PMM development team is reviewing this and will included a clearer definition of substantial completion in the PMM.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

**ASSESSMENT OF RESPONSE:** Management’s response, as presented, does not sufficiently address the finding. Utility Management should immediately develop a more appropriate definition for contracts and doesn’t have to wait until PMM is in place. The PMM is merely the Engineering’s team documented internal processes to follow when adhering to policies, guidelines, and internal controls. The Substantial Completion definition should be adequately defined in Contract Cocoments since this document is the binding agreement with the contractor.

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## **FINDING #6 – WEATHER DAY EXTENSION REQUESTS NOT PROPERLY APPROVED**

### **BACKGROUND:**

Weather days play a critical role for Utility CIP projects when determining the timely completion of projects. Weather days are beyond the Contractor's control and should be properly taken into consideration during the planning phases of projects. When extensions for project days related to adverse weather are requested, documentation such as weather reports and daily construction reports are provided to support those adverse weather days requested.

### **FINDING:**

Thirty-two (32) weather day requests for project extension were not properly approved. There was no supporting documentation in the Engineer Consultant's records or the City's record that indicated these days were to be granted based on adverse weather days. Due to the nature of the capital improvements projects for the Utility Department, weather days are a non-controllable factor that impacts the successful completion of projects. The Contract Documents also did not specify how weather days should be calculated.

### **RECOMMENDATIONS:**

The contract documents for construction projects should be updated to properly define weather days, weather day calculation, and when weather day requests should be made. In addition, supporting documentation related to the adverse weather days should be properly documented to include impact to the critical path of projects and any other weather conditions considered (temperature, wind, etc.) and provided at the time the request is made so that it can be properly reviewed by the City.

### **UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Article 12 of the General Conditions states, "Any claim for an extension in the Contract Time shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence...". The PMM team will seek legal review of the definition to ensure it meets legal requirements. A standardized form will be developed to ensure consistency in calculating weather days.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** MAY 2019

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**ASSESSMENT OF RESPONSE:**

Management's response, as presented, does not sufficiently address the finding. Weather days were approved to be added to extend the contract time without the proper supporting documentation. Moreover, months went by before weather day extensions were requested by Contractor. Please refer to Reference Document 3 which can be provided by the City Auditor. For example, in CO #1, weather days from August 2014 were not requested until January 2015. In addition, Article 12 doesn't specify what weather days are or how they are to be calculated. Creating a form will help standardize calculation, but it needs to be clearly defined in Contract Documents. Seeking legal review of definition has no bearing on the exception and management should immediately develop a more appropriate calculation of weather days in Contract Documents and ensure appropriate documentation supports these requests for extension.

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**FINDING #7 – SUBSTANTIAL COMPLETION DATE AGREED TO EVEN THOUGH WORK WAS NOT COMPLETE**

**BACKGROUND**

Project 10-01-C1: At the December 2015 Construction Progress Meeting, it was agreed to by Owner, Engineer, and Contractor when Substantial Completion would be met. A memo was sent by Hawkins-Weir outlining the project specifications to be completed for the project to be considered Substantially Complete.

**FINDING:**

Utility management agreed to a Substantial Completion date of 6/16/16 for the project, even though the Engineer Consultant noted that work was still incomplete at that date for the project to be considered Substantial Complete based on what was defined as Substantial Complete in a memo dated December 11, 2015 from the Engineer Consultant. The items outlined in the memo were not completed until September 2, 2016. That is the date determined to be the Substantial Completion Date based on the recalculation performed by VMJ CPA.

**RECOMMENDATIONS:**

The contract documents should be revised to properly define when Substantial Completion occurs for each project so that all parties to the contract have a common understanding of this date and when liquidated would start to accrue.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

We are reviewing the definition of substantial completion as part of the PMM development. However, it's important to keep in mind that it is a tool that is best used to determine final liquidated damages (LDs), it isn't set in concrete. There are two levels of LD, one at the substantial completion point and the other at final completion. The memos mentioned are not part of the contract, so they don't hold contractual weight. In this case, substantial completion occurred when the pump station was tested. The pump station and EQ basins functioned as designed and were remotely operated by the SCADA system. It's not uncommon to have additional work still left to perform after substantial completion.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** MAY 2019

**ASSESSMENT OF RESPONSE:**

In the Contract Documents, Substantial Completion is defined as "The Work (or specified part thereof) has progressed to the point where, in the opinion of Engineer as evidenced by his definitive certificate of Substantial Completion, it is sufficiently

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complete, according to contract documents, so that the Work (or specified part thereof) can be utilized for the purposed for which it was intended. Therefore, the opinion of the Engineer outlined in the Certificate of SC would hold contractual weight. In addition, this was agreed to by all parties. See Reference Documents 4, which can be obtained from the City Auditor upon request. There was no documentation around the Engineering Team's decision to deviate from the terms in the memo and agree to a 6/16/16 SC date. Not enforcing terms to contracts impacts how taxpayer dollars are managed on these projects and increase risks to the City of contractors not properly performing and City employees not being accountable for their actions.

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## **FINDING #8 – LIQUIDATED DAMAGES NOT PROPERLY CALCULATED**

### **BACKGROUND:**

Project 10-01-C1: The liquidated damages provision in the contract documents was implemented by the City to help ensure that Contractors complete projects timely. Per the contract documents, “The Contractor agrees to Substantially Complete the entire work within 600 days thereafter, and to fully complete the project within 45 days, following Substantial Completion. The Contractor agrees to forfeit and pay, as Liquidated Damages for delay (not a penalty), the amount of \$1,000 for each consecutive calendar day thereafter that expires after the contract time specified above for Substantial Completion until the Work is Substantially Complete; and the amount of \$500 for each consecutive calendar day that expires after the time specified for Final Completion until the Work is completed and ready for final payment.”

### **FINDING:**

After considering the factors that impacted project completion and reviewing supporting documentation related to project delays and extension requests, we calculated liquidated damages to be \$199,500 instead of \$92,500. The impact of our calculation was mainly contributed to weather day calculations and determining when substantial completion occurred. VMJ CPA identified the Substantial Completion (SC) date as 9/2/16 based on the following: 1) Required project specifications for code compliance were not completed until 7/25/16 (installation of gas detectors in the Pump Station Wet Well). 2) In addition, curb inlets which are necessary for the pump station's hydraulic efficiency, were not finished being installed until 8/11/16. 3) According to the definition of SC outlined in the contract document, SC occurs when the work has progressed to the point where, in the opinion of the Engineer, is evidence in his definitive Certificate of SC, it is sufficiently complete in accordance with contract documents so that the work can be utilized for the purposes for which it was intended. The SC certificate dated on 7/1/16 indicated that the Engineer noted that incomplete items listed by BRB as of 6/16/16 are required by the Specifications to achieve SC on the project. Per discussions with the Engineer Consultant, the concerns were not having the permanent safety equipment in place. From reviewing the Daily Construction Reports, the tank's fall protection system was not installed until 9/2/16. There were only 2 adverse weather days from 5/27/16 to 9/2/16, which is well after the calculated SC date of 2/21/16. In Summary, there were 194 days from 2/21/16 to 9/2/16 that represent the number of days past the SC calculated date.

Based on the supporting documentation reviewed and discussions with Utility management, the identified Substantial Completion date was September 2, 2016 and the number of weather days properly supported for approval were 51 days. This would have changed the Utility Department's calculation of the SC 121 days.

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**RECOMMENDATIONS:**

Factors impacting the calculation of liquidated damages for construction projects should be adequately defined in contract documents and properly documented throughout the course of the project to support sufficiently support liquidated damage calculations due from the Contractor.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

The PMM development team will review the definition and create a standard form to assist in calculating LDs. LDs are a tool that we use to ensure a project is completed as specified. Legal review of proposed LDs is always accomplished. It is a tool used to negotiate with a contractor near the end of a contract. The calculated amount is seldom the final agreed to amount.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** MAY 2019

**ASSESSMENT OF RESPONSE:**

Management's response, as presented, does not sufficiently address the finding. Liquidated damages are not a tool but is a stipulation for compensation of late performance by the Contractor to a binding legal agreement that must be adhered to. Utility Management should ensure taxpayer's money utilized for capital projects are being appropriately monitored on projects by ensuring projects are timely completed according to Contract Documents. This is an urgent recommendation and should be implemented as soon as possible.

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**FINDING #9 –ADDITIONAL COSTS OUTSIDE THE SCOPE OF THE PROJECT WERE INAPPROPRIATELY APPROVED BY UTILITY MANAGEMENT.**

**BACKGROUND:**

Project 10-01-C1: During the course of the construction project, there are situations that arise that would prompt a change order request. These could be related to unforeseen construction issues, design changes, or additional work requested by Owner that is related to the project under construction. In order for work to be performed by the Contractor, an approval by Owner must be documented.

**FINDING:**

Request for Proposal 17-Fire protection line connections to the Port of Fort Smith and Twin Rivers Foods in the amount of \$26,328.72 were costs accounted for under project 10-01-C1 but were unrelated to construction of the Mill Creek Pump Station or Equalization Tank. After further investigation, Utility management requested the contractor to perform additional work offsite but in close proximity to the current project due to convenience of having BRB already mobilized in the area complete the work. City policy requires the proper procurement procedures to be followed when work is to be performed for the City over certain dollar amounts. This would have required Utility to solicit bids for the work to be performed and obtain the proper approvals under a separate contract.

**RECOMMENDATIONS:**

Work performed outside the scope of projects should be properly solicited to the public and City procurement procedures followed. In addition, costs not related to the project should be properly accounted for in the general ledger.

**UTILITY DEPARTMENT’S MANAGEMENT RESPONSE:**

Do not agree. A 16” waterline on Navy Road was damaged by a contractor. The water was shut off by staff so that the damaged line could be repaired. After the repair was completed, water was restored. The pressure hammer caused a leak under one of the Port Authority buildings further down Navy Road. The leak was under the building slab. Repairing this leak was not economical. The decision to run a new service line and by-pass the under-slab break was made as the quickest and most economical means of repair. Time was of the essence as Twin Rivers was shut down until the repairs were made. The solution was discussed with City Administration and it was decided to do the repair with the existing contractor who was already mobilized. Because of the concern that the leak could undercut the foundation of the building, which would cause significant expensive structural damage, making the building unusable, this action was categorized as an emergency.



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**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** N/A

**ASSESSMENT OF RESPONSE:**

As per the City Code of Ordinances Sec. 2-182 (b) (6), "All contracts where the expenditure is twenty thousand dollars (\$20,000) or more may be made with the approval of the board of directors after securing of competitive bids." In addition, Sec. 2-183 (b) states, "In the event of an emergency, the City Administrator may invite competitive bidding to be opened not less than five (5) days following the date of invitation to bid.

The work mentioned in management's response for the 16" waterline on Navy Road outlined in RFP 17 was performed during the period of May 11, 2016 through June 7, 2016. RFP was not approved until September 14, 2016. The work performed under RFP 17 was not related to the Mill Creek Pump Station or EQ Tank. The response from the Engineer Consultant stated, "Owner requested Contractor to perform additional work on fire protection lines in the Port of Fort Smith and at Twin Rivers Foods." See meeting minutes from construction progress meeting in Reference Documents 5 and 6, which can be obtained from the City Auditor upon request. Regardless of the proximity of the damaged waterline to the project BRB was working on and the convenience of having BRB repair the line, does not warrant deviation from City policies and procedures. Bids should have been properly submitted, even in the event of an emergency, as noted in the City Code of Ordinances, a separate contract executed for the work, and board approval should have been obtained. In certain cases, it is appropriate to handle things on an emergency basis; however, procedures should be properly followed when expediting the documentation and normal approval processes rather than assigning the work to a project not related to the work being performed.

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## **FINDING #10 – COSTS NOT PROPERLY REFUNDED**

### **BACKGROUND:**

Project 10-01-C1: In Change Order No 2. Request for Proposal 12 was approved to remove 3 combustible gas detectors (AE-2001-1, AE-2000-2, AE-2000-3, AE-2000-4, and AE-2000-5), from the project specifications.

Per the memorandum from CDM Smith (Design Consultant) to Owner dated December 9, 2015 “The inclusion of these gas detectors in the scope of the project was not solely based on code requirement but also as a consideration for personnel safety. Combustible gas detectors are called for in the NFPA 820 “Standard for Fire Protection in Wastewater Treatment and Collection Facilities”. The project was designed using NFPA 820, the 2012 edition. Since then, an updated 2016 edition has been issued, therefore the 2016 edition was used to determine the need for the gas detectors specifically mentioned by the Owner.

Per the 2016 edition of the NFPA 820, gas detectors are required by code in the Pump Station Wet Well, meaning gas detectors AE-2000-1 and AE-2000-2 are required by code and should remain in the scope of the project.

Per the 2016 edition of the NFPA 820, gas detectors in the valve vault are not required. Although it is considered good practice to include them here, they are not required.”

### **FINDING:**

The costs for Request for Proposal (RFP) 12 -Removal of 3 combustible gas detectors were not properly refunded to the City. The deletion of gas detectors from the project specifications is not a code requirement due to high maintenance concerns. However, when this spec was removed, the contractor's labor burden, supplemental cost, builder's risk, OCP-INS, BOND-KS, and contractor's fee were not included in the refund to the City.

### **RECOMMENDATIONS:**

A review of credits/refunds due to the City should be properly performed to ensure the City receive all amounts owed.

### **UTILITY DEPARTMENT’S MANAGEMENT RESPONSE:**

Do not agree. Change order #2 to this project, clearly shows that the three detectors were deleted from the project and the costs were credited back to the project in the amount of \$3,675.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

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**ESTIMATED DATE OF COMPLETION:** N/A

**ASSESSMENT OF RESPONSE:**

Even though management disagrees, VMJ CPA confirmed with Engineer Consultant (HW) that this finding is valid and that they agree that the total refund amount due was not properly credited and an oversight on their part. Please see Reference Documents 6, which can be provided by the City Auditor upon request.

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## **FINDING #11 – PROJECT WORKED CEASED DUE TO LIMITED RESOURCES OF CONTRACTOR**

### **BACKGROUND:**

VMJ CPA scheduled an onsite visit for project 16-10-C2 for the week of July 31, 2018. VMJ CPA was informed that the crew performing work for the project were currently working on an emergency project for the City and was not available to be onsite to work on the project under audit. After further inquiry with Utility management, it was discovered that the Contractors working on project 16-10-C2 were also under another contract with City regarding emergency repairs.

### **FINDING:**

Work was ceased on project 16-10-C2 due to crews working on other City projects. At the time of the onsite visit the week of July 31, 2018, the Forgsren crew working on project 16-10-C2 were not working on the project, as they had been pulled off for another emergency project with the City, which lasted for approximately 2 weeks.

### **RECOMMENDATIONS:**

Contractors selected for projects should have enough crews/capacity to work on the project for the duration of the project. This should be part of the qualification assessment process.

### **UTILITY DEPARTMENT’S MANAGEMENT RESPONSE:**

Generally speaking, the recommendation is correct. The ability of the contractor to do the required work is one factor we use to determine if a contractor can perform and meet contract requirements. Article 6 of the General Conditions says, CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction...”. If a contractor chooses to dedicate his forces to another contract that is his prerogative. So, if the contractor chooses to do this, it doesn’t constitute a bases for claiming a time extension. However, in this specific case, non-concur with the finding. The City asked the contractor to provide the support needed to respond to an emergency at another location. The contractor responded as requested. If the contractor submits a time extension request for this two-week, staff would evaluate it, if found to be justified, it would have been approved. The decision to take this action would be documented.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** N/A

### **ASSESSMENT OF RESPONSE:**

Regardless of City asking for assistance or not, the purpose of noting this finding is to ensure projects are completed timely and contractors have the capacity to do so. The

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finding is not if the contractor is approved to take two weeks off a project. This issue was discussed with the Engineering Team's management and agreed that during the bid qualification process that contractors who are awarded multiple contracts with the City will be further evaluated to determine if the contractor has the capacity to ensure all projects awarded are completed timely.

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## **FINDING #12 – INACCURATE RECORD KEEPING OF CAPITAL PROJECTS ASSETS**

### **BACKGROUND:**

VMJ CPA scheduled an onsite visit for project 16-10-C2 for the week of July 31, 2018. VMJ CPA was informed that the crew performing work for the project were currently working on an emergency project for the City and was not available to be onsite to work on the project under audit. After further inquiry with Utility management, it was discovered that the Contractors working on project 16-10-C2 were also under another contract with City regarding emergency repairs.

### **FINDING:**

According to the Utility Department records, project 10-01-C1 for the Mill Creek Pump Station and Equalization Tank was completed on October 28, 2016 in the amount of \$13,046, 859.35. VMJ CPA obtained the general ledger records from the City's Finance Department to verify if the capital asset was properly capitalized in the general ledger and noted that only \$9,830,364.86 of the project costs had been recorded in 2016. In addition, it was also discovered during the financial audit for 2017 that all assets for the project were not capitalized in the City's general ledger records, which resulted in inaccurate financial reporting. A correcting entry was made on February 14, 2018 to reflect the remaining costs that needed to be capitalized for the Mill Creek Pump Station and Equalization Tank project.

### **RECOMMENDATIONS:**

When projects are successfully completed, costs should properly be capitalized in the general ledger fixed asset account and timely depreciated. The Engineering Team should implement a process as part of the comprehensive construction management lifecycle to verify with the City's Finance Department that project costs are timely capitalized when projects are successfully completed. This process could include created a customized Construction-In-Progress (CIP) Report that is reviewed monthly with Engineer Consultants and Project Manager to monitor the status of projects and related costs to ensure assets amounts are properly communicated to the City's Finance Department for recording to the general ledger.

### **UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

You asked for my opinion. The Finance Department receives copies of the resolutions, payment vouchers, invoices, etc. On one of the documents that we prepare and send to them, we include a block that we can check if we think it should be capitalized. We've met with the Finance Department to discuss the need to or not to capitalize a project. The final decision to capitalize or not, is up to Finance. Since it isn't our database, I don't know if we have access to do general ledger entries.

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**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** No EDC provided by management.

**ASSESSMENT OF RESPONSE:**

Management's response, as presented, does not sufficiently address the finding. The recommendation was made for Utility Management to develop an internal process to ensure fixed assets amounts are accurately and timely provided to the Finance Department at the successful completion of projects to ensure financial records are accurate.

# **EXHIBIT 1**

## **MANAGEMENT'S OFFICIAL RESPONSES**



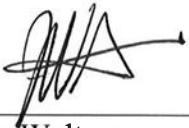
## Acknowledgement Statement

December 7, 2018

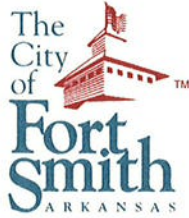
**SUBJECT: CONSTRUCTION CONTRACT AUDIT REPORT-ACKNOWLEDGEMENT  
OF MANAGEMENT RESPONSES**

I acknowledge that the management responses contained in the above referenced report are those of the Utility Department. I also understand that this document will become a part of the final audit report that will be posted on the Internal Audit's website.

Sincerely,

A handwritten signature in black ink, appearing to be 'JW', with a horizontal line extending to the right from the end of the signature.

Jerry Walters  
Utility Department



**FINDING 1:**

Due to limited system capabilities and incomplete data entry, DataPerfect nor E-builder could produce complete and accurate reports of projects for the audit period.

**RECOMMENDATIONS:**

Since E-Builder has been implemented as the construction management tool, the Engineering team should: 1) Ensure all data migrated from the legacy DataPerfect system is complete and accurate, and 2) customize effective reports that can provide the start and completion dates of projects, and other information that provides meaningful insight to make informed decisions for projects.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

One of the requirements of the Consent Decree was to select a project management program to track all CD related projects. After investigating the programs on the market, the staff selected E-Builder. Prior to that time, the staff has been using DataPerfect. DataPerfect is an old DOS based program that is becoming more and more difficult to operate and maintain. When the new Director of Utilities arrived, it was decided to use E-Builder for all projects. Projects that were in DataPerfect will remain in that program. After the last project in that program is completed, estimated for February 2019, DataPerfect will become a historical database. No project information will be migrated from DataPerfect to E-Builder. If project information is needed on a completed project that is in DataPerfect, that information can be searched. As of the activation date for E-Builder all projects have been input and tracked through E-Builder. Customized reports that are required by the department are still under development for use in E-Builder. E-Builder is developing a series of reports that are required to track funds expenditures on projects. The key report in this series is the spend down report which is used to track bond related expenditures. The other reports will back up this main report. Presently, there are 3 or 4 project status reports used by the Department. These reports will be consolidated into one overarching report. The report will show such things as project number and title, percentage complete for design and then construction, total estimated cost, notice-to-proceed date, estimated completion date, etc. The team's efforts are on schedule for a March 31, 2019 roll out.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** March 2019

**FINDING 2:**

The Utility Department does not have a comprehensive manual of policies and procedures to manage the construction lifecycle processes of capital improvement projects within the Department. The Department Engineering team relies on team knowledge and experience to execute and management projects, which may not consistently be performed across the team.

**RECOMMENDATIONS:**

The Utility Department should develop a comprehensive set of policies and procedures that can help streamline the construction lifecycle and serves as a reference for current employees and onboarding new employees to ensure activities are consistently performed.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

The Project Management Manual (PMM) is currently under development by the Utility and CDM Smith staffs. The timeline calls for review comments to be submitted to CDM Smith by mid-January 2019. Final draft for approval by mid-March 2019 and submittal of final in May 2019. This manual will provide a common process to manage projects from cradle to grave.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**Estimated Date of Completion:** May 2019

**FINDING 3:**

VMJ CPA noted during the audit that insurance documents were not maintained or verified for the Contractor one-year after project completion. In addition, insurances for Subcontractors were not verified prior to commencing work on the project.

**RECOMMENDATIONS:**

The Engineering team should properly review contractor's and subcontractor's insurance coverages prior to commencement and the duration of construction projects to ensure compliance with requirements of the contract. In addition,

obtaining copies of Subcontractor's executed agreements with the Prime Contractor to ensure the proper provisions are outline would be a good business practice to ensure compliance with contract documents.

**UTILITY DEPARTMENT'S MANAGEMENT**

**RESPONSE:**

The project manual includes the requirement that the Prime contractor must provide proof of insurance as part of their submittal. This is being done. The project engineer maintains this information. Subcontractors provide proof of insurance to the prime contractor, who is responsible to maintain the information. The City project manager will verify the insurance documents have been provided and are current.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**Estimated Date of Completion:** May 2019

**FINDING 4:**

Bid receipt logs are not maintained to evidence the timely receipt of bids submitted.

**RECOMMENDATIONS:**

A bid receipt log should be maintained to record the date and time bids were received to evidence timeliness of submissions.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Current standard practice requires that bid logs are kept as part of the contract folder. The requirement to note this information on the bid log and a specific format for the log will be included as part of the PMM that is under development.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

**FINDING 5:**

The contract document definition is ambiguous to the reader due to the lack of properly identifying when Substantial Completion occurs. This increases the risk of the City not being able to properly calculate liquidated damages for projects and hold Contractors accountable for project completion.

**RECOMMENDATIONS:**

The contract documents should be revised to properly define when Substantial Completion occurs for each project so that all parties to the contract have a common understanding of this date and when liquidated would start to accrue.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

The PMM development team is reviewing this and will include a clearer definition of substantial completion in the PMM. The revised standardize language will be used in all contracts.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

**FINDING 6:**

Thirty-two (32) weather day requests for project extension were not properly approved. There was no supporting documentation in the Engineer Consultant's records or the City's record that indicated these days were to be granted based on adverse weather days. Due to the nature of the capital improvements projects for the Utility Department, weather days is a non-controllable factor that impacts the successful completion of projects. The contract documents also did not specify how weather days should be calculated and when the request should be made for adverse weather days.

**RECOMMENDATIONS:**

The contract documents for construction projects should be updated to properly define weather days, weather day calculation, and when weather day requests should be made. In addition, supporting documentation related to the adverse weather days should be properly documented to include impact to the critical path of projects and any other weather conditions considered (temperature, wind, etc.) and provided at the time the request is made so that it can be properly reviewed by the City.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Article 12 of the General Conditions states, "Any claim for an extension in the Contract Time shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence...". The PMM team will seek legal review of the definition to

ensure it meets legal requirements. A standardized form will be developed to ensure consistency in calculating weather days. The revised standardize language will be used in all contracts.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

**FINDING 7:**

Utility management agreed to a Substantial Completion date of 6/16/16 for the project, even though the Engineer Consultant noted that work was still incomplete at that date for the project to be considered Substantial Complete based on what was defined as Substantial Complete in a memo dated December 11, 2015 from the Engineer Consultant. The items outlined in the memo were not completed until September 2, 2016. That is the date determined to be the Substantial Completion Date based on the recalculation performed by VMJ CPA.

**RECOMMENDATIONS:**

The contract documents should be revised to properly define when Substantial Completion occurs for each project so that all parties to the contract have a common understanding of this date and when liquidated would start to accrue.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE**

We are reviewing the definition of substantial completion as part of the PMM development completion. The revised definition will be used in all contracts. In this particular case, substantial completion occurred when the pump station was tested. The pump station and EQ basins functioned as designed and were remotely operated by the SCADA system. It's not uncommon to have additional work still left to perform after substantial completion.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**Estimated Date of Completion:** May 2019

**FINDING 8:**

After considering the factors that impacted project completion and reviewing supporting documentation related to project delays and extension requests, we calculated liquidated damages to be \$199,500 instead of \$92,500. The impact of our calculation was mainly contributed to weather day calculations and

determining when substantial completion occurred. VMJ CPA identified the Substantial Completion (SC) date as 9/2/16 based on the following: 1) Required project specifications for code compliance were not completed until 7/25/16 (installation of gas detectors in the Pump Station Wet Well). 2) In addition, curb inlets which are necessary for the pump station's hydraulic efficiency, were not finished being installed until 8/11/16. 3) According to the definition of SC outlined in the contract document, SC occurs when the work has progressed to the point where, in the opinion of the Engineer, is evidence in his definitive Certificate of SC, it is sufficiently complete in accordance with contract documents so that the work can be utilized for the purposes for which it was intended. The SC certificate dated on 7/1/16 indicated that the Engineer noted that incomplete items listed by BRB as of 6/16/16 are required by the Specifications to achieve SC on the project. Per discussions with the Engineer Consultant, the concerns were not having the permanent safety equipment in place. From reviewing the Daily Construction Reports, the tank's fall protection system was not installed until 9/2/16. There were only 2 adverse weather days from 5/27/16 to 9/2/16, which is well after the calculated SC date of 2/21/16. In Summary, there were 194 days from 2/21/16 to 9/2/16 that represent the number of days past the SC calculated date.

Based on the supporting documentation reviewed and discussions with Utility management, the identified Substantial Completion date was September 2, 2016 and the number of weather days properly supported for approval were 51 days. This would have changed the Utility Department's calculation of the SC 121 days.

#### **RECOMMENDATIONS:**

Factors impacting the calculation of liquidated damages for construction projects should be adequately defined in contract documents and properly documented throughout the course of the project to support sufficiently support liquidated damage calculations due from the Contractor.

#### **UTILITY DEPARTMENT'S MANAGEMENT Response:**

The PMM development team will review the definition and create a standard form to assist in calculating LDs. LDs are a tool that we use to ensure a project is completed as specified. Legal review of proposed LDs is always accomplished. It is a tool used to negotiate with a contractor near the end of a contract. The calculated amount is seldom the final agreed to amount. Even so, it's essential that a written record of the calculation and adjustments be kept as part of the record.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** May 2019

**FINDING 9:**

Request for Proposal 17-Fire protection line connections to the Port of Fort Smith and Twin Rivers Foods in the amount of \$26,328.72 were costs accounted for under project 10-01-C1 but were unrelated to construction of the Mill Creek Pump Station or Equalization Tank. After further investigation, Utility management requested the contractor to perform additional work offsite but in close proximity to the current project due to convenience of having BRB already mobilized in the area complete the work. City policy requires the proper procurement procedures to be followed when work is to be performed for the City over certain dollar amounts. This would have required Utility to solicit bids for the work to be performed and obtain the proper approvals under a separate contract.

**RECOMMENDATIONS:**

Work performed outside the scope of projects should be properly solicited to the public and City procurement procedures followed. In addition, costs not related to the project should be properly accounted for in the general ledger.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Do not agree. A 16" waterline on Navy Road was damaged by a contractor. The water was shut off by staff so that the damaged line could be repaired. After the repair was completed, water was restored. The pressure hammer caused a leak under one of the Port Authority buildings further down Navy Road. The leak was under the building slab. Repairing this leak was not economical. The decision to run a new service line and by-pass the under slab break was made as the quickest and most economical means of repair. Time was of the essence as Twin Rivers was shut down until the repairs were made. The solution was discussed with City Administration and it was decided to do the repair with the existing contractor who was already mobilized. Because of the concern that the leak could undercut the foundation of the building, which would cause significant expensive structural damage, making the building unusable, this action was categorized as an emergency. This again illustrates the need to document decisions and follow established policies..

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** N/A



**FINDING 10:**

The costs for Request for Proposal (RFP) 12 -Removal of 3 combustible gas detectors were not properly refunded to the City. The deletion of gas detectors from the project specifications is not a code requirement due to high maintenance concerns. However, when this spec was removed, the contractor's labor burden, supplemental cost, builder's risk, OCP-INS, BOND-KS, and contractor's fee were not included in the refund to the City.

**RECOMMENDATIONS:**

A review of credits/refunds due to the City should be properly performed to ensure the City receive all amounts owed.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Change order #2 to this project, clearly shows that the three detectors were deleted from the project and the costs were credited back to the project in the amount of \$3,675. Additions to the contract always contains time and materials, deductions are treated the same way. Staff and consultants will be reminded of the need to verify all cost changes to include time and materials.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** MAR 2019

**FINDING 11:**

Work was ceased on project 16-10-C2 due to crews working on other City projects. At the time of the onsite visit the week of July 31, 2018, the Forsgren crew working on project 16-10-C2 were not working on the project, as they had been pulled off for another emergency project with the City, which lasted for approximately 2 weeks.

**RECOMMENDATIONS:**

Contractors selected for projects should have enough crews/capacity to work on the project for the duration of the project. This should be part of the qualification assessment process.

**UTILITY DEPARTMENT'S MANAGEMENT RESPONSE:**

Generally speaking, the recommendation is correct. The ability of the contractor to do the required work is one factor we use to determine if a contractor can

perform and meet contract requirements. Article 6 of the General Conditions says, CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction...". If a contractor chooses to dedicate his forces to another contract that is his prerogative. So, if the contractor chooses to do this, it doesn't constitute a bases for claiming a time extension. However, in this specific case, non-concur with the finding. The City asked the contractor to provide the support needed to respond to an emergency at another location. The contractor responded as requested. If the contractor submits a time extension request for this two weeks, staff would evaluate it, if found to be justified, it would have been approved. The decision to take this action would be documented.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:** MAY 201

**FINDING 12:**

According to the Utilities Department records, project 10-01-C1 for the Mill Creek Pump Station and Equalization Tank was completed on October 28, 2016 in the amount of \$13,046, 859.35. VMJ CPA obtained the general ledger records from the City's Finance Department to verify if the capital asset was properly capitalized in the general ledger and noted that only \$9,830,364.86 of the project costs had been recorded in 2016. In addition, it was also discovered during the financial audit for 2017 that all assets for the project were not capitalized in the City's general ledger records, which resulted inaccurate financial reporting. A correcting entry was made on February 14, 2018 to reflect the remaining costs that needed to be capitalized for the Mill Creek Pump Station and Equalization Tank project.

**RECOMMENDATIONS:**

When projects are successfully completed, costs should properly be capitalized in the general ledger fixed asset account and timely depreciated. The Engineering Team should implement a process as part of the comprehensive construction management lifecycle to verify with the City's Finance Department that project costs are timely capitalized when projects are successfully completed.

**Utility Department's Management Response:** You asked for my opinion. The Finance Department receives copies of the Resolutions, payment vouchers, invoices, etc. On one of the documents that we prepare and send to them, we include a block that we can check if we think it should be capitalized. We've met with the Finance Department to discuss the need to or not to

capitalize a project. The final decision to capitalize or not, is up to Finance. Since it isn't our database, I don't know if we have access to do the ledger entries.

**RESPONSIBLE PARTY:** Jerry Walters, Director Utility

**ESTIMATED DATE OF COMPLETION:**