

# **AUDITOR'S REPORT**

## **PUBLIC INFRASTRUCTURE DEPARTMENT, TOLL ROAD PROGRESS APPROVAL AND INVOICE PAYMENT**



**February 28, 2014**

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**BARBARA J. SCHOTT, C.P.A.**  
**HARRIS COUNTY AUDITOR**

February 28, 2014

Mr. Arthur L. Storey, Jr. P.E.  
Executive Director, Public Infrastructure Department  
1001 Preston, 5<sup>th</sup> Floor  
Houston, Texas 77002

RE: Public Infrastructure Department, Construction Programs Division, Toll Road Progress Approval and Invoice Payment engagement for the 12 month period ended August 31, 2013.

The Audit Services Department performed procedures relative to the Public Infrastructure Department, Construction Programs Division, Toll Road Progress Approval and Invoice Payment engagement. The objective of the engagement was to evaluate controls for reviewing and approving contractor invoices and supporting documentation. Our procedures included the following:

- Tested the three current Toll Road projects to determine whether critical controls adequately ensured project progress was properly approved at the project site
- Selectively tested the supporting documentation delivered to the Construction Programs Division staff to determine whether project expenditures were properly reviewed and in compliance with procedures
- Selectively tested paid invoices to determine whether they were accurate, complete and timely recorded in the County's financial records

The engagement process included providing you with engagement and scope letters and conducting an entrance and exit conference with your personnel. The purpose of the letters and conferences were to explain the process, identify areas of concern, describe the procedures to be performed, discuss issues identified during the engagement, and solicit suggestions for resolving the issues. A draft report was provided to your personnel for review.

The enclosed Auditor's Report presents the significant issues identified during our procedures, recommendations developed in conjunction with your staff, and any actions you have taken to implement the recommendations. Less significant issues and recommendations have been verbally communicated to your staff.

Mr. Arthur L. Storey, Jr. P.E.  
Executive Director, Public Infrastructure Department

We appreciate the time and attention provided by you and your staff during this engagement.

Sincerely,



Barbara J. Schott  
County Auditor

cc: District Judges  
County Judge Ed Emmett  
Commissioners:  
    R. Jack Cagle  
    El Franco Lee  
    Jack Morman  
    Steve Radack  
Devon Anderson  
Vince Ryan  
William J. Jackson

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## OVERVIEW

The Public Infrastructure Department consists of an Executive Division, the Harris County Toll Road Authority, the Harris County Flood Control District, Architecture & Engineering, Right-of-Way, and the Construction Programs Division.

The Construction Programs Division's (CPD) goal is to maximize the value of every dollar spent by Harris County by providing Construction Management services for construction projects. CPD management defines Construction Management as a professional service that applies effective management techniques and systems to the planning, design, and construction of a project from inception to completion for the purpose of controlling time, cost and quality.

CPD provides the staff resources necessary, with the objective to continually monitor every detail of a project in an effort to deliver projects more effectively and efficiently. CPD management represented that they oversee approximately \$500 million in construction projects annually, and complete approximately 88 projects a year. CPD is comprised of five sections, which include Major Buildings, Toll Road, Quality Assurance, Contract Compliance and Road and Bridge.

## RESULTS

Based on the procedures performed during the testing of Toll Road projects, the controls relative to the progress review and approval processes in its current state need improvement to strengthen the control environment. Controls were developed over time by the Toll Road department concerning project expenditures and the invoice payment process; however, they were not consistently followed and effectively monitored. Formal written policies and procedures should be established that:

- Clearly document the activities required to perform the progress approval and invoice payment processes.
- Clearly define and enforce the activities required of Inspectors, Chief Inspectors and Field Engineers to complete the progress review and approval function for Toll Road projects.
- Identify key controls that address the required documentation, timeliness, approvals, trending, monitoring, reporting and comparisons of information.

Additionally, formal written roles and responsibilities should be developed that identify precise tasks, deliverables, and performance requirements for Inspectors, Chief Inspectors and Field Engineers. These and other matters are discussed in the attached Issues and Recommendations matrix.

## ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
<p>Formal Written Policies and Procedures</p>	<p>The Construction Programs Division (CPD) manages the Progress Approval and Invoice Payment process for the Harris County Toll Road construction projects.</p> <p>The process is comprised of key financial controls that are designed to protect the integrity of financial data, reduce the possibility of significant errors and irregularities, and assist in detecting errors timely when they do occur.</p> <p>Three key control documents are used in the process, which include the Daily Work Report, Material Delivery Ticket, and the Change Order / Change in Contract forms.</p> <p>These three control documents support management's</p>	<p>Although CPD personnel perform processes they have established over time, there were no formal written policies or procedures concerning the completion of the Daily Work Report, Material Delivery Ticket, and the Change Order / Change in Contract forms.</p> <p>Also, CPD did not have formal written roles and responsibilities that identified precise tasks, deliverables, and requirements of Inspectors, Chief Inspectors and Field Engineers to provide guidance and standards.</p> <p>This can lead to weak internal controls and accountability.</p> <p>Due to the lack of formal written policies, procedures, roles, and</p>	<p>Management should establish formal written policies and procedures that clearly identify key internal controls addressing the timeliness, accuracy and completion requirements regarding the three key control documents, which include the Daily Work Report, Material Delivery Ticket and the Change Order / Change in Contract forms.</p> <p>Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and requirements for Inspectors, Chief Inspectors and Field Engineers.</p> <p>In addition, a desk level checklist could be developed to complement</p>	<p>Development of formal written policies and procedures has begun and will be established for:</p> <p><b>Daily Work Reports</b> – estimated completion by April 4, 2014. Roll out of policy and procedures will immediately follow and be fully incorporated by July 1, 2014.</p> <p><b>Material Delivery Tickets</b> - estimated completion by May 30, 2014. Roll out of policy and procedures will immediately follow and be fully incorporated by August 1, 2014.</p> <p><b>Change in Contracts</b> – estimated completion by July 25, 2014. Roll out of policy and procedures will immediately follow and be fully incorporated by October 1, 2014.</p>

## ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
(Continued) Formal Written Policies and Procedures	<p>representations that the transactions recorded on these forms took place on the specified date (existence) and all of the transactions that occurred are recorded (completeness).</p> <p>The information recorded on these forms also supports the amounts listed on the monthly invoices, and the amounts paid to the contractors for that period.</p>	<p>responsibilities that should identify key controls, discrepancies were identified in various areas that are discussed in the observations in this audit report, to include:</p> <ul style="list-style-type: none"> <li>A. Daily Work Reports</li> <li>B. Material Delivery Tickets</li> <li>C. Change Order / Change in Contract</li> </ul>	<p>the written policies and procedures.</p>	<p>Formal written roles and responsibilities for inspectors, chief inspectors, and field engineers will be incorporated into the written policies and procedures above.</p> <p>No desk level checklist will be developed.</p>
Inconsistencies Approving Daily Work Reports	<p>Inspectors complete individual Daily Work Reports for each project, which records the progress completed that day and supports the payments made to contractors.</p>	<p>Daily Work Reports were not approved on a timely basis.</p> <p>Daily Work Reports were reviewed for each of the three Toll Road projects (total of 170). Testing identified that Daily Work Reports were completed by the Inspectors 1 to 2 days after the work was performed. However, on average, the reports were</p>	<p>Management should establish formal written policies and procedures that clearly identify key internal controls that address the timely review and approval of the Daily Work Reports.</p> <p>Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and</p>	<p>Development of formal written policies and procedures has begun and will be established for Daily Work Reports. Estimated completion by April 4, 2014. Roll out of policy and procedures will immediately follow and be fully incorporated by July 1, 2014.</p> <p>Formal written roles and responsibilities for inspectors, chief inspectors,</p>



## ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
<p>(Continued) Inconsistencies Completing and Approving Daily Work Reports</p>		<p>reviewed and approved by Chief Inspectors approximately 15 days after the work was performed.</p> <p>In addition, the amount of time taken to review and approve the Daily Work Reports was inconsistent among the three projects.</p> <p>The timely review and approval of Daily Work Reports by the Chief Inspectors is a key control which does not appear to be functioning as designed.</p> <p>Not performing timely reviews and approvals of Daily Work Reports facilitates a less reliable record of the activities performed and could contribute to inaccurate payments to contractors.</p>	<p>requirements for Inspectors, Chief Inspectors and Field Engineers as related to Daily Work Reports.</p> <p>In addition, a desk level checklist could be developed to complement the written policies and procedures.</p>	<p>and field engineers will be incorporated into the written policies and procedures.</p> <p>No desk level checklist will be developed.</p>

## ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
<p>Lack of Information on Material Delivery Tickets</p>	<p>The Material Delivery Ticket is a key control document that records the materials delivered and installed on the project site, supports the information reported on the Daily Work Report, and supports the monthly invoice for that project.</p> <p>A process has been established over time that requires contractors to submit Material Delivery Tickets for items that are weighed or measured in tons or gallons upon delivery to the project site.</p> <p>Waste or spillage should also be recorded as it occurs during the delivery and installation of materials.</p> <p>Typical industry standards, as identified by the National Ready Mixed</p>	<p>Material Delivery Tickets did not identify how much of the material was lost due to waste or spillage.</p> <p>One month of Material Delivery Tickets were reviewed for the three Toll Road Projects (total of 12), which identified 53% did not record how much of the delivery was lost due to waste or spillage.</p> <p>Not identifying, tracking and remediating waste or spillage issues can result in higher costs for the County.</p>	<p>Management should establish formal written policies and procedures that clearly identify key internal controls that address the quality and quantity of information documented on the Material Delivery Ticket.</p> <p>Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and requirements for Inspectors, Chief Inspectors and Field Engineers as related to Material Delivery Tickets.</p> <p>In addition, a desk level checklist could be developed to complement the written policies and procedures.</p>	<p>Development of formal written policies and procedures has begun and will be established for Material Delivery Tickets. Estimated completion by May 30, 2014. Roll out of policy and procedures will immediately follow and be fully incorporated by August 1, 2014.</p> <p>Formal written roles and responsibilities for inspectors, chief inspectors, and field engineers will be incorporated into the written policies and procedures.</p> <p>No desk level checklist will be developed.</p>

## ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
(Continued) Lack of Information on Material Delivery Tickets	Concrete Association (NRMCA), suggest that an allowance of approximately four to ten percent for waste, over-excavation or other causes be considered to encourage a more accurate estimate of the required materials.			

## RISK ASSESSMENT AND SUMMARY OF RECOMMENDATIONS

The risk matrix below presents the assessed level of risk or exposure identified during our procedures. Inherent risk relates to factors that because of their nature cannot be controlled or mitigated by management. Inherent risk includes factors such as legislative changes, number and dollar amount of transactions processed and/or complex nature of transactions. Control risks relate to factors that can be influenced or controlled by management. Controls such as policies and procedures, electronic or manual approvals, system security access, and separation of job responsibilities may be instituted by management in order to mitigate control risk. Control risk is assessed during the planning phase in order to establish the nature, timing, and extent of testing and at the conclusion of the engagement in order to incorporate actions taken to implement our recommendations. The overall risk considers a combination of inherent and control risks.

<b>Inherent Risk:</b>	<b>Control Risk:</b>		<b>Overall Risk:</b>
<input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low	<b>Prior to Procedures</b>	<b>After Procedures</b>	<input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low
	<b>Adequate</b>	<b>Needs Improvement</b>	
<b>Type of Procedures:</b> Audit			
<b>Purpose:</b> To evaluate controls for reviewing and approving contractor invoices, and supporting documentation.			
<b>Priority Rating:</b>	<b>Audit Recommendations:</b> Public Infrastructure Department, Construction Programs Division, Toll Road Unit		
2	Management should establish formal written policies and procedures that clearly identify key internal controls addressing the timeliness, accuracy and completion requirements regarding the three key control documents, which include the Daily Work Report, Material Delivery Ticket and the Change Order / Change in Contract forms. Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and requirements for Inspectors, Chief Inspectors and Field Engineers. In addition, a desk level checklist could be developed to complement the written policies and procedures.		
2	Management should establish formal written policies and procedures that clearly identify key internal controls that address the timely review and approval of the Daily Work Reports. Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and requirements for Inspectors, Chief Inspectors and Field Engineers as related to Daily Work Reports. In addition, a desk level checklist could be developed to complement the written policies and procedures.		

2	<p>Management should establish formal written policies and procedures that clearly identify key internal controls that address the quality and quantity of information documented on the Material Delivery Ticket. Also, management should establish formal written roles and responsibilities that identify precise tasks, deliverables, and requirements for Inspectors, Chief Inspectors and Field Engineers as related to Material Delivery Tickets. In addition, a desk level checklist could be developed to complement the written policies and procedures.</p>
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<b>Priority Rating</b>	<ol style="list-style-type: none"> <li>1. <b>Implement immediately (30 – 90 days)</b> – Serious internal control deficiencies; or recommendations to reduce costs, maximize revenues, or improve internal controls that can be easily implemented.</li> <li>2. <b>Work towards implementing (6 – 18 months)</b> – Less serious internal control deficiencies, or recommendations that can not be implemented immediately because of constraints imposed on the department (i.e., budgetary, technological constraints, etc.).</li> <li>3. <b>Implement in the future (two – three years)</b> – Recommendations that should be implemented, but that can not be implemented until significant and/or uncontrolled events occur (i.e., legislative changes, buy and install major systems, requires third party cooperation, etc.).</li> </ol>
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